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« ITALY - JAPAN : A COMPARISON BETWEEN THEIR ECONOMIES BY ECONOMIST AND OPERATORS OF THE TWO COUNTRIES » -

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"ITALY-JAPAN: A COMPARISON BETWEEN THEIR ECONOMIES BY ECONOMISTS
AND OPERATORS OF THE TWO COUNTRIES"

Banca Commerciale Italiana, Roma, 16-18/X/1979

- (1) programma e lista dei partecipanti
- (2) Basilico (Fincantieri): "The Japanese and the Italian shipbuilding industries: a different role in the period of growth and during the present crisis"
- (3) Casadio, Gian Paolo: "Experiences and proposals by Italian companies operating particularly in the Emilia-Romagna region"
- (4) Gasparini, Innocenzo: "Some proposals regarding economic cooperation between E. E. C. and Japan in emerging countries"
- (5) Honda, Soichiro: "Automobile and energy"
- (6) Horie, Shigeo: "Financial and economic cooperation between Japan and Italy"
- (7) Imazato, Hiroki: "The Japanese economy in the 1980's"
- (8) Mazzanti: "Confronto tra Italia e Giappone: evoluzione storica e situazione attuale"
- (9) Medici, Giuseppe: "The chemical industry in Japan and Italy: structural aspects, trends in evolution, opportunities of cooperation"
- (10) Nakamura, Takafusa: "Domestic policy exchange rate and balance of payment in Japan"
- (11) Onida, Fabrizio: "Japan and Italy: old and newly emerging roles in the international division of labour"
- (12) Onoe, Hisao: "The process of economic policy-making: the case of Japan"
- (13) Tamaru, Hideharu: "Japan as a consumer market"
- (14) Supplementary materials to the speech by Hideharu Tamaru"
- (15) Tsuru, Shigeto: "Energy policy and environmental considerations: the case of Japan"
- (16) Valtorta, Marino: "Electricity development in Japan and Italy: common features and possible strategies"
- (17) Viezzoli, Franco: "Considerations on the opportunities for industrial cooperation between Italy and Japan"
- (18) Yoshimura, Kanbei: "Japanese capital market"

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**«ITALY — JAPAN: A COMPARISON BETWEEN
THEIR ECONOMIES BY ECONOMISTS AND
OPERATORS OF THE TWO COUNTRIES»**

A symposium organised by the
BANCA COMMERCIALE ITALIANA
in Rome, at the Grand Hotel, from
16 up to and through 18 October, 1979

— P R O G R A M M E —

- h 15,30 Mr. Nicola Tufarelli
Managing Director of Fiat,
Turin «International situation and domestic
problem which condition Japan and Italy
policy»
- h 15,45 Prof. Shigeto Tsuru
Editorial Advisor of the
Asahi Shinbun, Tokyo «Energy problems in Japan»
Honorary Professor of
Hitotsubashi Univ., Tokyo
- h 16,00 Prof. Marino Valtorta
General Manager «Electricity development in Japan and Italy:
Ente Nazionale Energia Elettrica/ENEL common features and possible strategies»
Rome
- h 16,15 Panel
- h 16,45 End of the first day working session
- h 20,45 Dinner given by B.C.I. Chairman, Mr. I.
Monti, in honour of the Japanese and Italian
lecturers (Rome, «B.C.I. Rappresentanza»,
Palazzo Colonna, Piazza SS. Apostoli, 66)

- h 15,30 Mr. Yoshinori Maeda
Chairman of the Japan-Italy Association
former President of NHK (Japan
Broadcasting Corp.), Tokyo «Economic relations of Japan and Italy in
the past and expected future developments»
- h 15,45 Prof. Fabrizio Onida
Bocconi University
Milan «Italy and Japan's old and newly emerging
rôle in the international division of labour»
- h 16,00 Prof. Paolo Sylos Labini
Rome University «Prices, costs and profits in manufacturing
industry: Italy and Japan»
- h 16,15 Panel
- h 16,45 End of the second day working-session
- h 20,30 Dinner given by E.N.I. Chairman,
Mr. Giorgio Mazzanti, in honour
of the Japanese and Italian lecturers
(Rome, the Grand Hotel)

18 October

PROBLEMS IN BANKING, MONEY AND FINANCE

- h 15,15 Mr. Giovanni Magnifico
Economic Adviser
Bank of Italy
Rome «Domestic policy, exchange rate and balance of payments in Italy»
- h 15,30 Prof. Mario Monti
University of Turin and
Bocconi University, Milan «Banking intermediation and financial structure: some considerations on the Italian and Japanese cases»
- h 15,45 Prof. Takafusa Nakamura
Professor of the Tokyo University
Director General
Economic Research Institute
Economic Planning Agency
Tokyo «Domestic policy, exchange rate and balance of payments in Japan»
- h 16,00 Mr. Kiichiro Okano
Deputy Chairman of the
Japan/Italy Association
Tokyo «The effect on the management of Japanese banking caused by the mass issue of Government bonds»
- h 16,15 Mr. Kanbei Yoshimura
President of the
Long Term Credit Bank
of Japan Ltd.
Tokyo «Japanese capital market»
- h 16,30 Panel
- h 17,30 Closing address by a representative of the
Japanese party and B.C.I. Chairman
- h 19,30 Cocktail party given by I.R.I. Chairman,
21,30 Mr. P. Sette, in honour of the Japanese and
Italian lecturers (Rome, the Grand Hotel)

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- Working language: English - Simultaneous interpretation provided
 - During the symposium period a «Symposium Secretariat» will be functioning at the Grand Hotel from Monday 15 October up to and through Saturday 20. Tel. (06) 47.09
 - The participation to the lunches is open to the public attending the symposium works. For the participation to the dinners of 16 and 17 October and to the cocktail party of 18 October personal invitations will be issued.

18 October

**PROBLEMS OF THE INDUSTRY AND
PRODUCTION SECTOR IN GENERAL**

Chairman:

Prof. Shigeto Tsuru

Editorial Counsellor of the Asahi Shinbun

- h 9,30 Mr. Guido Carli
Chairman of the Confederazione Generale
dell'Industria Italiana/Confindustria
Rome «Italy and Japan within the framework of
international relations»
-
- h 9,45 Prof. Takafusa Nakamura
Professor of the Tokyo University
Director General
Economic Research Institute
Economic Planning Agency
Tokyo «Domestic policy, exchange rate and balance
of payments in Japan»
- h 10,00 Mr. Franco Viezzoli
Chairman of the Finmeccanica
Rome «Some considerations on the opportunities
of industrial cooperation between Italy and
Japan»
- h 10,15 Panel
- h 10,45 Coffee - break
- h 11,00 Mr. Kiichiro Okano
Deputy Chairman of the
Japan/Italy Association
Tokyo «The effect on the management of Japanese
banking caused by the mass issue of
Government bonds»
-
- h 11,15 Mr. Hisaaki Izawa
Director Research Dept.
Japan Development Bank
Tokyo «Comparison between public enterprises in
Japan and Italy»
- h 11,30 Panel
- h 12,00 Lunch

18 October

PROBLEMS IN BANKING, MONEY AND FINANCE

- h 15,15 Mr. Giovanni Magnifico
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THE JAPANESE AND THE ITALIAN SHIPBUILDING INDUSTRIES : A DIFFERENT
ROLE IN THE PERIOD OF GROWTH AND DURING THE PRESENT CRISIS

First of all, I wish to say how thankful I am for having been given the opportunity to outline the problems of the shipbuilding industry - that I have the honour of representing here as President of Fincantieri - in front of such a qualified audience.

As you know, Fincantieri - Società Finanziaria Cantieri Navali, which was founded in 1959 in order to face in an organic way the problems arising from the restructuring of the IRI shipbuilding sector, covers today about 90% of the national industry.

I would like now to outline the situation characterizing our sector at world level. For the past five years the shipbuilding industry has been going through an unprecedented crisis for duration and intensity : it is enough to remark that in the presence of a world production capacity estimated at 30-35 million gross register tons, the level of the orders received in the last three years was of 11-13 million gross registered tons. Consequently, such a thin flow of orders led to a progressive erosion of the work load up to the present level of 25 million gross register tons, which is sufficient to ensure work to the shipyards for less than one year.

In order to fully understand the present situation, I think it is necessary to go back to the past, outlining the role played respectively by the Japanese shipbuilding industry and by the Italian and European ones.

We can single out two periods : the first, from the post-war

period to the beginning of the 70s, even through times of often deep depression, could represent the expansion stage for the shipbuilding industry; the second, still lasting, is characterized by a strikingly critical situation.

In order to give a general evaluation of the first period we can consider that between 1949 and 1975 the world fleet quadrupled. In the same period the international shipbuilding industry produced about 350 million gross register tons, of which 140 millions produced by Japan, and 12 by Italy. This represents a contribution of respectively 40 and 3%. The development of the world merchant fleet was made possible by a prolonged expansion of the international economy. This growth, as seen today, appears to have been intense and regular from the point of view of both production and international trade, in a system where prices, exchanges and balances of payments were reasonably steady.

The massive use of oil seen as a cheap energy source and also mistaken for an inexhaustible one fed the extraordinary development of the tankers fleet, which was also owed to exceptional events, such as the closing down of the Suez Canal in the mid-sixties.

In order to complete the outline of the causes that concurred to the development of the world fleet it must be mentioned that toward the end of the period under examination (beginning of the 70s) an important role was played by speculative factors connected with the high costs of freight and with the forecast of a revaluation of the yen.

All this, as it is well known, contributed to determine the present situation of overcapacity of the shipbuilding industry which is the origin of all the troubles in this sector.

In Japan the shipbuilding industry obtained the first important results towards the middle of the 50s, at the time of the Suez crisis. In 1956, as a matter of fact, Japan outnumbered in terms of ships completed England that held the supremacy by tradition. However, at the beginning of the 60s Western Europe still held 70% of the world market, while Japan had a share of about 20%. Nevertheless, already by 1963 the ratio was respectively of 62 and 26%, and in 1965 it became of 50 and 42%. Therefore the Japanese shipbuilding industry boomed in the period 1963-1965, reaching at its peak in 1974 a share of about 52% of the world production.

Also relevant is the fact that from 1950 to 1975 63% of the Japanese production was directed toward export.

It must be said that various factors weighed considerably on the development of the Japanese shipbuilding industry, such as : a definite political will expressed through suitable development plans for the shipbuilding industry and through the adoption of a series of measures aimed to encouraging the export of ships; the necessity of acquiring valuable currency in order to buy raw materials; the low cost of labour.

Also important was a number of often very advanced initiatives, in the field of both work organization and technology, that allowed the Japanese shipbuilding industry to run ahead of competitors as, for instance, in the case of larger ships.

As for the Italian shipbuilding industry, it took part to the common initial growth up to the balance of internal requirements. In terms of participation to the world market, the peak was reached in 1958 with 6%, but then it decreased toward more moderate figures, and it settled, from the middle of the 60s onward, around 3%. In that period, the Italian

industry went through a complex and continuous modernization and rationalization aimed to update ways and means of production. Of particular importance was, from 1966 on, the carrying out of the restructuring plan known as "Caron Plan", based on the concentration and specialization of the production, and on the total or partial closing down or reorganization of the less productive units.

It must be said that already in 1965 the Italian shipbuilding industry appeared greatly shranked compared to 1955, having gone from 12 to 9 shipyards and from 35 thousand to 21 thousand employees. All these initiatives were therefore aimed more to the rationalization of the production than to its increase. It must be added also that the Italian shipbuilding industry was structured mainly according to the requirements of the national shipowners. To this regard it is enough to consider that the export-bound production covered an average of 10-20% of the total one.

From this outline it appears evident that during the expansion period of the world shipbuilding the Japanese and Italian industries followed completely different strategies : while the first aimed to develop its position the second endeavored to keep its own.

Toward the end of the period taken into account, the world economy was going toward a recession which became dramatic when the energy problem burst out in 1973. In this context, in 1974 the world shipbuilding industry entered a crisis that, by today's opinion, affected its very structure.

At the beginning of this report, I gave some data in order to evaluate the situation. I would like to add now that from the moment of the activity-peak to the first months of 1979 the world annual output

and the Japanese one fell respectively by 50 and by 64%. It must be said that the outburst of the energy crisis worsened a situation already jeopardized because of the before mentioned abnormal development of the shipbuilding capacity.

The oil crisis affected specifically the shipbuilding industry, as 50% of the world fleet is made up of tankers. Also, it must be considered that the expansion of the production capacities was caused essentially by the building of large tankers. Even in prospect, the passage from an "oil age" to a future of diversified energy sources contributed to postpone the balance of the market.

As the crisis set in, it appeared evident that the forces operating on the market would not be sufficiently strong to ensure a new balance between offer and demand. Therefore Europe and Japan began a two-tiers dialogue involving the respective associations, i.e. the Association of West European Shipbuilders (AWES) and the Shipbuilders Association of Japan (SAJ), and the two governments within a special OECD working group. Aim of the negotiations was to arrive at a more adequate sharing of the world market.

However, we must admit that the attempt to achieve a fair agreement among the large productive areas, so that the pressure on the market could be reduced and the times of the crisis shortened, proved to be unattainable, due also to the growing role of the new shipbuilding countries such as South Korea, Brasil, Taiwan, Singapore, and probably soon also Mexico and Argentina. Some of these shipbuilding initiatives in the developing countries, often supported by Japanese financing and technology, have somehow been slowed down by the present difficult economical moment, but there is no doubt that the expansion trend

is destined to continue. It must be said that as a matter of fact the shipbuilding industry - in which the labour factor is predominant and the technology consolidated - represents for its characteristics one of the first steps of the developing countries towards industrialization.

These countries, in particular the South-Eastern ones, have played in the course of recent years an ever more important role in the field of the ship market at international level. As their requirements in terms of national traffic are not relevant, they must focus essentially on export. Today already the quotations made by these countries, mainly owing to the very low incidence of labour costs, are a fixed reference for the world market which Europe cannot compete with because of the levels of European costs; even Japan is now beginning to suffer from this and it will suffer more from it in the future.

On the other hand, the size of the crisis of the world shipbuilding industry is such to compel Japan to try and curb its production capacity, and that is, the same target that its European counterpart wanted to achieve in order to sign an agreement. Recently, as a matter of fact, upon specific recommendation of the Japanese Government, the Japanese industry decided to reduce its production capacity by 35-40%. If we take into account the diversification of the large Japanese companies, we can say that such a target can be achieved in the medium run with less troubles from a socio-economical point of view than a similar target will cause to the EEC countries.

The European Economic Community, worried by the consequences of the present crisis on unemployment and on depressed areas, tried, and is still trying, to find a solution to the problems of the EEC shipbuilding. The EEC Commission not only voted a Directive that, subordinately to

restructuring measures, recognizes and tends to coordinate the aids to this sector, but also has been trying for some time to agree upon an overall strategy. A first attempt in this direction was the project called "Davignon Plan". Aside from any other consideration, we must at least acknowledge that this initiative succeeded in quantifying the effects of the present crisis on the EEC shipbuilding industry.

In September 1978 the Council of the EEC Ministers, after a heated debate, approved a resolution of a provisional character. The Commission was appointed to examine thoroughly the problems of the sector, as it was acknowledged necessary to adjust the sector according to the importance of the EEC maritime traffic. In fact, a concrete political decision was postponed.

Following this line, and with the cooperation of the shipowners and shipbuilders, the competent EEC departments have recently drawn a "scrap and build" scheme aiming at shortening - through a subsidized renewal of the fleet - the time necessary to bring the market into balance again. This system - experimentally - provides for a financial aid on condition that the tonnage scrapped be twice the tonnage newly built. The results of this initiative appear uncertain, as there are still divergencies among member countries.

If on one side the carrying out of the initiatives aiming at giving internationally agreed upon answers to the problems of the sector appears very far, on the other the deteriorating process of the world ship building industry continues.

It is true that at the end of 1978 and during the first half of 1979 some slight signs of a normalization of the maritime activities were recorded, but they were not constant. In any case, it is still very

difficult to forecast when the market will be balanced again, and various international organizations confirm this difficulty. However, it is certain that the course of the crisis will involve great changes in the world shipbuilding industry. Even the general economical context leads to a certainly not optimistic view of the future, especially considering that the outcome of the present energy crisis is not predictable today.

All over the world it was recently intensified, at a national level, the research of solutions to the problems of the shipbuilding industry. These problems leave less and less room to interventions of a merely industrial kind. Almost everywhere plans for the rationalization of the industry are being carried out or drawn, accompanied by consistent financial measures. To this regard it must be remarked that in many countries of old shipbuilding tradition it has been proving necessary to reduce drastically both the employment and the capacities. We must also underline an aspect that recently became relevant : the traditional support is not sufficient any more and various Governments are becoming directly involved in the running of this sector.

To summarize, even taking into account all the above mentioned uncertain factors, we can reasonably suppose that around 1985 the market will be in a situation of substantial balance. The future structure of the world shipbuilding industry will have to be dimensioned in order to meet the need of renewal of the existing fleet, and will have to be able to absorb a moderate development of the market. This adjustment, already in progress, will involve inevitable sacrifices, mainly for the traditional shipbuilding countries. For the latter, this process is destined to continue considering the reallocation of a series of industrial activities, such as shipbuilding, to new industrial countries. The industrialized coun

tries will have to carry out a careful re-distribution of the capacities towards the new industrial countries in the less painful ways and means for the international collectivity.

It is evident that this situation will affect more the countries that have developed their shipbuilding industry in order to dominate the export market. Japan itself in the past encouraged the tendency towards the reallocation of the shipbuilding industry, driven by the evolution of its economy and with the target of destining the related industries upstream and the know-how for the export. For this very reason, however, Japan, being faced with the competition of the new shipbuilding industries, will be forced in future to give up the role of main exporter of ships and to limit itself to produce mainly for the domestic market, with a resulting reduction in capacity.

The situation is different for the countries that, like Italy, have always destined their own shipbuilding industry to the requirements of the domestic market. Italy, however, will have to assess which productive levels will be in line with the development forecasts of the national fleet, taking into account the general socio-economical interests of the country.

Let me now outline the relationship established in the past between Italy and Japan in the field of the shipbuilding industry.

Toward the middle of the 60s it was evident that the shipbuilding industry in Japan had made noticeable steps forward both in the field of technology and in the organization of the production. Meanwhile, as we said before, the IRI shipbuilding industry was engaged in a considerable effort toward the reorganization and the renewal of its structures. In this context must be seen the cooperative relationship that began among Italcantieri of Trieste, the Breda shipyard of Venice - both belonging

to the Fincantieri group (1) - and the Japanese companies like Nissho Iwai, Kobe Steel, but mainly Ishikawajima Harima Heavy Industries (IHI).

From 1967 up to the middle of the 70s these relationships resulted in : a continuous flow of technicians between the two countries, the exchange of know-how, and the signing of some important deals in order to contribute to the improvement of the lay-outs and of the work organization in some Italian shipyards.

Towards the end of that period it was also decided the creation of a General Technical Committee. This fact marked in a certain way an evolution in the relationship between Italcantieri and IHI. The Committee was to meet twice a year, once in Japan and once in Italy. It had a joint composition and was based on the intention to attain a vast cooperation even in the new sectors of the shipbuilding technique. If before the appointment of the Committee the cooperation was of a unidirectional kind, i.e. from Japan to Italy, from that moment on it tended to become more balanced through the seeking of results to be attained by means of a common contribution.

In that same period, however, the dramatic size of an unprecedented crisis made it necessary to destine all the resources to survival.

The cooperation between the Japanese and Italian shipbuilding industries was in the past of a mainly technical character, and it could not be otherwise, if we consider the characteristics both of the market and of the different strategies that we outlined before.

If we try to single out concrete trends for a future collaboration in the field of shipbuilding between Japan and Italy on an industrial level, first of all we can think of a joint activity in the field of research. Even if ships are not susceptible of great technological innova

(1) The Breda Shipyard at the time of the establishment of relationships with the Japanese industry did not belong to Fincantieri.

tions, possibilities of improvement are predictable both in the field of fitting and auxiliary machinery and in order to best develop the possibilities of energy saving.

These initiatives could be carried out through the respective national associations of shipbuilders. For the Fincantieri Group in particular, we could suggest the renewal of the activity of the Committee that, as we said before, was once formed between Italcantieri and IHI.

In the commercial field, we could explore the possibility of setting up joint-ventures between Japan and Italy, especially for what concerns alternative productions. Moreover, there certainly exists a real opportunity to collaborate in the production of Diesel engines, taking in to account in particular the brilliant results recently achieved by Grandi Motori Trieste.

In my opinion, however, there is a unique opportunity for an effective cooperation between Italy, taken in its European context, and Japan in participating through conscious behaviours to the attempt to overcome the present crisis. It is a matter of pursuing common interests that today, and mainly in the future, put Japan on the same side of the European countries in the pursuit of an agreement on the sharing of work. This does not mean that at the same time the existing needs of the new industrial countries would be disregarded.

In the field of shipbuilding, it is evident that the old industrial countries will not be able to hold the positions achieved in the past. However, it will be impossible for them to give up industrial structures that are extremely necessary, for strategical and economical reasons, to manufacturing countries that depend essentially on sea-ways for their world exchanges.

Finally, I would like to say that from the uncertainty of the future one thing only stands out clearly : it is absolutely necessary to avoid the repetition of mistakes made in the past.

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EXPERIENCES AND PROPOSALS BY ITALIAN
COMPANIES OPERATING PARTICULARLY IN
THE EMILIA-ROMAGNA REGION

by

Prof. Gian Paolo Casadio
Professor of international
economic organization
Institute of Economics
Bologna University

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- Ugo Sardelli, director of the Bologna branch of Banca Commerciale Italiana (who helped to identify the Italian companies operating with Japanese partners.);
- Dino Rossi, a student of mine, who carried out - with competence and accuracy - most of the interviews with the companies listed in the Appendix.

Needless to say any omission or inaccuracies that may have occurred are due entirely to the author.

1. SWITCH FROM EXPORTING TO INDUSTRIAL COOPERATION

The explosive growth rate of Japanese exports to the EEC markets has been built up on the base of direct exports. The Japanese industries choose to concentrate on delivering the complete package of export goods straight from their own factories to the European consumer, thus enabling the Japanese management to retain control over production and to improve operating efficiencies and quality. A large output, moreover, led to manufacturing economies and that, in turn, produced the competitive pricing which gave Japanese goods such a strong marketing edge.¹

In the last few years, however, Japan has faced increasing criticism on its direct export to the EEC markets. The EEC vice-president responsible for foreign relations, Mr. Haferkamp - addressing the Euro-Japanese symposium² organized by the " Financial Times " in Brussels on 3rd and 4th May 1979 - declared that the EEC deficit with Japan has reached a " political-psychological limit " and the European Commission's departments in a report drawn up in March 1979 have envisaged imposing retaliatory curbs on " selected " Japanese exports (with cars and electronic goods being the prime candidates).³

The " anti-Japanese crusade " on commercial questions, however, is considered unfair by the Japanese industrialists who consider European exporters themselves responsible for their difficulties on the Japanese market (since - as stressed, for instance, at the " European Management Symposium " held in Davos in February 1978 by the Mitsubishi firm's European representative, Mr. Kawasaki - they do not

try to adjust to it, do not learn the language, have lost desire to work and are less efficient than their Asian competitors). Thus, if these attacks are not stopped, " Japan could become even more nationalistic and abandon its trade relations with the free world, or even change its foreign policy".⁴

In these circumstances both sides should avoid any " explosive developments ", notably by fostering industrial cooperation as well as encouraging investments, especially in joint companies and as regards the transfer of technology. In fact, if Japan were to have a substantial share in the Community's manufacturing industry, it would automatically have an interest in avoiding some of the aspects of present friction. On the other hand, sustained success of the Japanese on export markets is not possible unless the Japanese market opens up, and this, in turn, is not possible without a consensus on the part of Japan's major producers. For example, only through a consensus on the part of Japanese producers of electronic products could Community producers have any broad access to the Japanese market.⁵

2. THE ATTRACTIONS OF INDUSTRIAL COOPERATION

There are fundamental advantages in a permanent and wide-ranging industrial cooperation (which must not turn into cartels) between Italy and Japan.

Japanese corporations - by making joint ventures with Italian partners, buying into established Italian companies or simply start technical and commercial exchange agreements - can, first of all,

reduce trade frictions. This is a rather important element at times when neoprotectionism seems bound to spread. Such an orientation is reinforced by the rise in Japanese production costs and the reduced price competitiveness of Japanese industry following the yen revaluation.

Another major goal (since Italy still imposes discriminatory import quota restrictions on thirty-five Japanese products)⁶ is to enter the Italian market by-passing import controls. Japanese corporations, moreover, can get close to the other European markets (thus improving product planning) and develop common ventures in the markets of third countries (i.e. China, Brazil, the Middle East) as well as in pioneering fields (i. e. solar energy, coal liquefaction, new aircraft, data processing, ocean development, robots, synthetic materials).⁷

The attractions for the Italian companies are even more substantial. In addition to internationalize their activities (within the framework of an industrial system endowed with great flexibility and with spare cash financial resources) the Italian companies can: (a) preserve or increase employment (by restoring competitiveness to specific sectors such as, for instance, consumer electronics where Italy has to meet the challenges of the European multinationals); (b) get access to high-technology and know how (notably for semiconductors, machinery using electronic circuitry, computers and more advanced consumer electronics goods like video tape recorders)⁸; (c) acquire a higher regard for quality control (for which the Japanese enjoy an extremely high reputation); (d) enter new sectors of the

traditional market (since Japanese marketing and production organisations are equipped to spot and exploit swiftly marketing opportunities).

Manufacturing tie-ups between Italy and Japanese manufacturers are, furtherly, favoured by the necessity (for Japanese corporations operating in Italy) to dispose of a local partner to tackle relations with the work force and the trade unions, to face the language barrier, to by-pass the intricacies of the burocracy, etc. In fact, the intention of the Japanese partner is - in general- limited to take a fraction of the joint-manufacturing venture, thus maintaining permanent association ties with the Italian partner.

Japanese corporations, moreover- since they succeed in making people feel they belong and partecipate fully to an enterprise - might be of help in letting emerge in Italy a " new consensus" between labour and management by encouraging (notably in joint-ventures with small- and-medium sized Italian firms) the " team spirit" and the sense of " togetherness " as well as by fostering sectoral co-ordination (among enterprises, universities, governmental and banking circles).

Last but not least, the Japanese corporations offer the great advantage of giving full priority to the attainment of production and employment targets having a knack for creating a mass market where once there was none as well as seeing common ventures as symbols of a long-term relationship -- not as instruments for short term profits (as is the strategy of the multinationals).

No doubt some rivals groups regard the manufacturing tie-ups between Italy and Japanese manufacturers as a Trojan horse through which the Japanese will step up their assault on the Italian and

European markets. But the notion that the Italians should continue to protect their own market and band together with the other Europeans to keep the Japanese out⁹ is neither feasible nor realistic.¹⁰ In spite of all devices of protection the Japanese industry will remain a very substantial force, so that their direct participation in the Italian industry should be encouraged if we want to maintain a competitive industrial economy. Import controls, on the other hand, are of difficult implementation. They favour a prosperous black market (fed by massive smuggling) and paradoxically lead to the protection of the ... multinationals (as, for instance, in the case of the consumer electronics industry in which the German and Dutch giant corporations - besides dominating the market - are the main recipients of " triangular " arrangements by-passing Italian import controls).¹¹

3.- JAPANESE INDUSTRIAL INVESTMENTS IN EUROPE

During the 1978 financial year which ended in March 1979 Japanese direct investment abroad reached the new record of 4,498 million dollars, far exceeding the record of 3,494 million dollars of the 1973 financial year and the amount of 2,806 million dollars of the 1977 financial year. According to the Finance Minister, the high investment level is due to continue with a growing share in manufacturing (which by 1985 should represent 34 per cent of the total as against 28 per cent in 1978).¹²

In particular, by 1985 Japanese direct investment should attain, on the whole, 81 billion dollars (as against 19.4 billion dollars at the end of March 1977). Of these a growing amount will go to the U.S.A. (which during the 1978 financial year ousted Asia as the biggest Japanese investment area) and to Western Europe (which

at present absorbs 14.7 per cent of the total)¹³, notably to Ireland^{I4} (which has a comprehensive package of incentives, including tax relief, cash grants and loan guarantees) and the developing regions of the United Kingdom --Wales, Northern England and Scotland (where, after Sony and Matsushita, Toshiba made an agreement with Rank Industries for TV manufacture ; Hitachi with General Electric Co. to make TV sets and music centres; Honda with Britain Leyland for a new car of Japanese design; Mitsubishi Heavy Industries -Kawasaki and I.H.I. with Rolls-Royce for a new jet engine; Mitsubishi Motors with its distributor " Colt Cars" to make commercial vehicles in South Wales).

An effort is also being developed in the other EEC countries.^{I5} Thus, in Belgium, Honda SA produces at Aalst (Brussels) a motor-plus-pedal operated scooter (" Comino Moped"), Pioneer hi-fi equipment in a plant outside Brussels, Matsushita Battery Corporation dry batteries (in joint venture with Philips) at Tessenderlo in the heart of the Flemish speaking area, Tezuka Kosan Co. (in joint venture with George Co.) the design and installation of units for processing waste. In the German Federal Republic Wega Radio is the Stuttgart-based audio and TV manufacturer acquired by Sony in 1975, while Varta Batterie AG (Hannover) distributes - and later on will manufacture - lithium/ manganese dioxide batteries developed by Sanyo. In Holland Asahi Chemical Industries made an agreement with Akzo to produce 280,000 tons a year of caustic soda near Amsterdam by mid-1982. Mitsui Petrochemical Industries has, in addition, a plant with Akzo in Belgium to produce dicumyl peroxide. In France , besides Ajino -moto of Japan and the Belgian interests of Baron Coppée making lysine near Amiens, the Akai group is negotiating with the French family group Paillot the marketing of hi-fi equipment and the possible production (either in

Germany or France) of radio amplifiers (which will attain more than a million units a month).

Also in other European countries (Austria, Spain, Jugoslavia, Sweden and Finland) the Japanese industry is in the process of taking up local partners. In Spain, in particular, Otsuka Pharmaceutical has taken over Laboratorios Miquel (Barcelona) - the first taken over of a European manufacturer of pharmaceutical products -, Nippon Piston Ring has concluded an agreement with Techaoto SA (permitting an initial monthly production rate of rings for cars of 200,000 to 250,000 units) and the Toyota group is envisaging to establish a 300,000 cars a year factory.

Some Japanese groups, moreover, have made agreements with European companies to operate, at the same time, in several European markets and even outside Europe. Thus, for example, Victor Co. of Japan (in joint venture with U.J. Fitzman) is marketing hi-fi Victor equipment and colour TV sets in the German market and in other European countries; and Sakai Chemical Industry Co. (in collaboration with the French firm "Fimex SA ") manufactures and sells Baritop in France, the U.S.A. and Finland.

4.- JAPANESE INDUSTRIAL INVESTMENT IN ITALY (Results of a survey carried out with fifty Italian companies operating with Japanese partners)

In Italy Japan's manufacturing investment is still limited to a few companies such as SANYO (for the production, with EMERSON S.p.A., of colour TV and hi-fi), HONDA ITALIA- IAP INDUSTRIALE (for the production at Atesa, Chieti - of the motorcycle " Honda I25 Italia"), YOSHIDA ITALIA (for the production at Prarolo, Vercelli and at Campolongo, Ascoli Piceno, of zip fasteners), TORAY (synthetic leather), TEIJIN (

polyester fibers), PRODECO (for the production of a liquid to purify water) in which the ENI group firm ANIC has a majority participation).

There is ,therefore, considerable room for expansion of manufacturing facilities in Italy, notably in the new sectors { such as, for example, the joint-development of pilot plants of tuna fishing in Sicily¹⁷, the planning of a new generation of civil aircraft, the production of solar energy plants (for which Italy is endowed with a more advanced technology),etc.¹⁸

The basis for industrial ventures between Italy and Japan are, in addition, increasingly being fostered by a growing number of technical and commercial cooperative agreements. Thus, in particular, ZANUSSI (which is trying to strengthen its position on the European market) and HITACHI (which provides its technical know how) have signed an agreement in the electrical/ electronics engineering field (television sets, stereo equipment, refrigerators, washing machines, etc.):

Ishikawajima- Harima Heavy Industry is cooperating with the shipbuilding yards of Monfalcone (Venice) and MITSUBISHI Co. has reached an agreement with Lanerossi S.p.A. (State-owned ENI group) on extending sales of Lanerossi textile products through Mitsubishi's distribution network.

Quite useful is also the exchange of technical and scientific information, for example, in the field of high-frequency telecommunication within the framework of experimental programmes carried out with the " Sirio " satellite and with the Japanese C. S. (launched successfully last December).

As to the future of industrial cooperation the interviews we have had directly with about fifty Italian companies listed in the Appendix (mainly small-and-medium sized) underline the following major points:

1st - only a few companies at the moment seem interested in grasping fully the advantages of joint-ventures including reciprocal benefits especially in the form of developing two-way trade in manufactured goods (as is done, for instance, by the DURST Co. which buys optical instruments from ASAHI PENTAX in return for distribution, by the same Japanese corporation, of its own products in Japan) as well as restoring competitiveness to viable small-and-medium sized firms (as is done, for instance, by EMERSON S.p.A. which- being associated with SANYO- can now face the competition of the European multinationals and even start adopting pioneering technology)¹⁹;

2nd - the majority of the Italian firms seem, instead, skeptical of consistent forms of industrial cooperation with Japanese industry (which is seen as a competitor in all markets), because of : (a) the lack of experience/ communication/ information; (b) the fear that their own technology might be imitated and, later on, perfected alone by the Japanese (since it would appear that they do not respect patents factory marks and other rights of private inventiveness); (c) the hesitancy of the Japanese themselves mainly for psychological reasons (relations with the trade unions, strikes, etc.); (d) too long negotiations.

3rd - the majority of the Italian firms already operating with Japanese partners, however, aware of the growing difficulties in importing Japanese products²⁰ (high costs of transportation, losses incurred in Italian ports and customs and increasingly systematic assessment of origin, full priority - in the concession of trade licences - to the most important enterprises leaving small firms

with small quantities) view with favour : (a) the establishment of commercial ties (notably with those Japanese corporations which, by producing in ldc's, operate at lower costs); (b) the setting^{uv}_A of joint-marketing ventures (to improve competitiveness in Europe and third countries' markets); (c) the production in Italy with Japanese licence agreements; (d) the building in Italy of more locally-made components (once the Japanese manufacture their products in the country).

4th - several small-and-medium sized firms, in addition to seeking a Japanese partner, would like (notably by means of frequent contacts) to establish direct links with their equivalent in Japan (instead of passing through the tradings) for a mutually useful exchange of experiences to create a mutual sense of confidence and face together marketing problems with reciprocal information advantages.

5th - some other firms would also like to see the establishment of a joint consultative committee (including qualified governmental officers) to study ways of developing " co-prosperity" industrial and commercial ties as well as to prevent clashes (such as those, for instance, which occurred between Yoshida Italia and the Italian Association of Zip Fasteners²¹ as well as between Nippo Electric Co. and STS in Greenland²²).

5.- FOREIGN INDUSTRIAL INVESTMENTS IN JAPAN

Apart from four sectors (industries linked to agriculture; fishing, forestry and mining; the petroleum industry; leather and leather working) direct foreign investments of capital are completely unrestricted in Japan. The governments' liberalization programme begun in 1967, a time when foreign holdings could in no way exceed a ceiling of 50 per cent of company capital. In May 1973, in accordance with the directives of the OECD, the government scrapped this ceiling for some industrial sectors and authorized holdings of more than 50 per cent. From 1975 onwards, moreover, it is possible to set up undertakings in Japan fully financed by foreign capital.

The major results expected by Tokyo from this liberalization are:

(a) access to advanced technological know how; (b) greater competition with Japanese enterprises; (c) reorganization of certain industrial branches (not yet very structured); (d) reduction of trade imbalance.

The overriding attractions of Japan to foreign investors, instead, are:

(a) the consumer market potential (notably for top quality products, the Japanese consumer being -probably- the most quality conscious in the world); (b) the access to the sales and distribution networks of the Japanese partner (by-passing the complex and costly Japanese distribution system); (c) the necessity of easing the way through bureaucratic and administrative obstacles ²³ as well as being saved by the trouble of having to hire labour directly from the open market; (d) the undertaking of industrial projects as well as of exports to third markets (such as modernizing China's industry, establishing oil joint-ventures with Saudi Arabia and other oil producing nations) through Japan's leading trading corporations (which routinely engage in large-scale business with third countries).

Thus, around 5,000 foreign corporations are now operating in Japan

and an increasing number of new entries are expected, notably by means of joint-ventures tie-ups arranged on a share exchange basis (seen in Japan as a sign of good faith) in which both partners play a specific and appropriate role.²⁴

6. - ITALIAN INDUSTRIAL INVESTMENT IN JAPAN (Results of a survey carried out with fifty Italian companies operating with Japanese partners)

In Japan Italian's manufacturing investments have remained rare. There are, however, striking examples of successful ventures. OLIVETTI has a plant with a work force of 2,500; JAPAN-CRESSI-SUB dominates the sector of diving equipment (with products also locally made with licensing agreements); COMAU INDUSTRIALE S.p.A. of Turin has an agreement with Toyama Machine Works permitting "Morando" lathes to be made in Japan to by-pass import controls; several fashion houses (MILA SCHÖN, PIATTELLI, FENDI, LATIZINE, SARLI, TITA ROSSI, LANCETTI, GUCCI, HERMES, BAROCCO) enjoy great reputation.

In the last few months, moreover, FINMECCANICA has explored the possibility of establishing common ventures in third countries (notably in Hungary - to take part in the enlargement of a steel complex - and in Latin America to implement several important projects). Some other Italian companies, in addition, concluded licensing and commercial agreements which seem to lead (at appropriate times) to the setting up of trading and industrial ventures. Thus, MONTEDISON (obtaining recognition of its polypropylene patent) reached an agreement with Ube Industries intended as a first step of a wider industrial collaboration in the chemicals sector; PIRELLI made an agreement with Tsubakimoto

to produce and sell the whole set of Isoran strap-serrated gearing for vehicles and other industrial uses; SNAM PROGETTI (ENI group) with the leading food firm Snow Brand of Tokyo to produce in Japan de-lactosided milk ; BASSETTI S.p.A. with Mtsui-Ai, Kondo, Kurabo to reproduce in Japan its " styling " in exchange of royalties as well as of the initial introduction of its products with its own trade mark.

As to the penetration in Japan of the small-and-medium sized firms the following ideas and proposals were stressed by the sample of the Italian companies that we interviewed:

1st - the Japanese market - besides teaching a lot at technical level (since all the most up-to-date innovations can be found in this market) - offers large and interesting opportunities for Italian products, notably for high-technology goods, infrastructure projects (especially relating to housing, city sewer systems, etc.), high fashion and sophisticated articles (with a top brand-name) and, more in general, for all products representing a novelty (notably for substitution of machinery, transformation of industrial processes to attain energy-savings and lower pollution, elimination of toxic products) as well as the expression of inventiveness and talent (i.e. automatic machine, machine-tools, etc.) ;

2nd - licensing agreements lead to limited success owing to: (a) the passivity and the complications of the agreements themselves; (b) the slowness of the distributor;

3rd - a growing number of the Italian firms are, therefore, aware of the necessity of undertaking manufacturing and marketing tie-ups with Japanese partners to: (a) penetrate effectively the local

market; (b) open up new opportunities in nearby third countries' markets (such as China, South Korea, Taiwan, the Philippines); (c) by-pass stringent anti-pollution standards, quotas (on products like footwear, ski boots and silk yarn), technical verifications (for instance by the Ministry of Health); (d) reduce the fantastic mark-ups of wholesalers (through which most products have to pass) which make Italian goods sell in Japan at inflated prices.

4th - there is, however, a gap of knowledge and of understanding between the small-and-medium sized Italian firms and the Japanese world. Such a gap could be filled by favouring (personal or group) direct contacts (notably with the small-and-medium sized Japanese firms which, as in Italy, represent in Japan the backbone of the economic system) aiming at eliminating delicate problems (i.e. the protection of Italian trade names and patents from encroachment by Japanese competitors)²⁵ as well as establishing mutual confidence and improving the knowledge of the Japanese market.

5th - while the existence of this gap persists the Italian firms prefer to entrust their own products to the Japanese tradings (which, for a consistent amount of business, provide accurate financial and technical assistance) or to Japanese/ European agencies/operators in Italy/Europe (with offices in Japan) familiar with the Japanese market. Alternatively, they resort to an agreement with a chain of stores (allowing permanent commercial relations) or to production in Hong Kong / South Korea, selling from there to Japan as well as to other Asiatic markets.

6th -to overcome difficulties in entering the Japanese market several requests are also specifically addressed to the Italian authorities in order to: (a) allow - at a reduced cost of travelling - more frequent visits to Japan by the technical and marketing staff to establish personal contacts; (b) develop the business centre of the ICE office (recently created in Tokyo) into a centre giving permanent and specific support to those firms which cannot or do not want to create consortia; (c) coordinate in Tokyo the fragmentary activities of the Italian business community, the ICE office and the Italian Embassy with the back-up of the Italian banks operating in Japan; (d) set up appropriate tradings for the small-and-medium sized firms which, in order to act as the counterpart of the Japanese ones, should be sponsored by the IRI group;²⁶ (e) give adequate incentives to entrepreneurs who guarantee quality and reliability (cutting, instead, out the unscrupolous ones) ; (f) set up collaboration mechanisms among the various industries of specific integrated sectors (to follow a common strategy) and of the same sector (to avoid ruinous competition).

7th - within the framework of inter-governmental relations it is, moreover, requested that the process of mutual information is improved and that the integration of Japan into the world economy is fostered by opening up bidding opportunities to foreign suppliers and to allow joint-ventures to flout official import restrictions.²⁹

N O T E S

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- (1) H. Kahn & Th. Pepper, The Japanese Challenge, Harper and Row, 1979, p.15.
- (2) Agence Europe, Statements by Messrs. Jenkins and Haferkamp at the Financial Times Euro-Japanese symposium, 4 May 1979.
- (3) Ch. Smith, Why the EEC Lost Its Temper with Japan, " The Financial Times ", 9 April 1979.
- (4) Ch. Smith, Japanese Angered by EEC Import Barriers, " The Financial Times ", 9 April 1979; Agence Europe, Japanese Industrialists Consider Criticism of Their Country Unfair, 3 February 1978.
- (5) Japan's import, export and overseas investment strategies interrelate. See: Sogo Shoshas and Japan's Foreign Economic Relations, " Journal of World Trade Law ", Vol.13, n°.3, May/ June 1979.
- (6) Such as cars, motorcycles, ball bearings, toys, etc. Towards goods which Italy wants to export - such as shoes and some agricultural products - Japan has a few import restrictions due to domestic reasons, but these are not discriminatory measures against Italy but are globally applied. Lecture at the Chamber of Commerce of Turin by Ambassador N.Fujiyama, Turin, 14th November 1978, p.8.
- (7) Japanese consumer electronics companies - buoyed by the video tape recorder boom - are now pressing ahead with a wave of new products such as flat television technology (ridding TV sets of television tubes), laser-based audio systems (using pulse code modulation to reproduce sound almost perfectly) and home facsimile systems (using radio and TV wavelenghts for transmission). Japan's New Electronic Goodies, " The Economist", 22nd April 1978.
- (8) Japanese Trade, It'll All Come All Right One Day, " The Economist", 1st September 1979.
- (9) G. Turani, Fiat accerchiata: americani, europei e ora i giapponesi, "Repubblica", 26th May 1979; G. Turani, G .Agnelli denuncia l'invasione giapponese, " Repubblica", 1 February 1978.
- (10) Thus, for instance, the American group Chrysler (which has a 15 per cent stake in Mitsubishi and whose sales network is in charge of marketing the Japanese cars) is viewing of collaborating with Mitsubishi Motors to promote sales of Mitsubishi cars in Europe.
- (11) "Eletronica Valtellinese" - a small firm producing consumer electronics goods - submitted to the Italian Ministry for Trade a detailed indictment against the practices of the European multinationals of importing Japanese products in the German market and sell them in Italy with a German trade-mark. Dalla RFT prodotti made in Japan, " Il Sole- 24 Ore", 8 July 1977.

- (I2) F. De La Trove; Les Japonais investissent a' l'étranger moins dans le commerce et plus dans la production, " Le Monde", 3 April 1979; Japan Starts Exporting Jobs, "The Economist", 17 December 1977.
- (I3) The opportunities for Japan's overseas manufacturing investment in Europe are, however, not thought as interesting as on the other side of the Atlantic. D. Wilson, Foreign Investment Breaking Records ?, " The Banker", March 1979, p.71.
- (I4) Over 50 per cent of Japanese investment in European industry is centred in Ireland. One of the reasons for the growth of Japanese interests in Ireland is that the Government, through the Irish Industrial Development Agency (IDA), assumes part of the investment risk. Furthermore, the Japanese are unlikely to come up against much vested interest in Ireland. A last point is that Irish legislation is not found to be too rigid and oppressive. Japanese Investment, " Newsletter " by the Confederation of Irish Industry, 11 September 1979.
- (I5) Japan and Europe, " The Financial Times", 26 July 1977.
- (I6) Possibilita' di intesa fra Italia e Giappone (Interview to Ambassador N. Fujiyama), "Il Sole-24 Ore", 16 aprile 1979.
- (I7) An agreement for the joint-development of a pilot plant of tuna fishing at Favignana Island (between " Ente Siciliano di Promozione Industriale ", the leading Japanese firm Taito Seiko and Tokyo University of Fisheries) has already been signed.
- (I8) Finmeccanica (IRI State-controlled) has, in particular, sent a mission to Japan to explore industrial cooperation in these sectors.
- (I9) Notably by establishing appropriate links with a small firm (SGS Ates) whose production of " chips " can free Italy from foreign dependence.
- (20) T. Dodsworth, Japanese Cars and The Growing Shadow of Protectionism, " The Financial Times", 9 February 1978.
- (21) A. Sarra, Chiusure lampo giapponesi, an open letter by the President of the Italian Association of Zip Fasteners, " Il Sole-24 Ore ", 5 April 1978. At present the Italian zip fasteners producers do meet regularly with Yoshida Italia to exchange mutually advantageous marketing information.
- (22) STS (IRI-Stet controlled) claimed to be the only European firm whose offer to build a telecommunication system in Greenland was equivalent to the one submitted by the Japanese competitor. U. Piccione, L'appalto danese al Giappone ora un caso CEE, " Il Sole-24 Ore", 20 April 1979.

(23) MITI often changes labelling and safety requirements and the foreign company does not have the same kind of personal access to enable it to keep track of such things as readily as its Japanese rivals. Another hard problems for foreign manufacturers investing in Japan is to buy real estate. Joint Venture Problems in Japan, " The Economist", 14 May 1977.

(24) Japan View of " Joint Venture ", The International Herald Tribune, 9 November 1976.

(25) The protection of trade names and patents is made difficult by the language barrier. Registration in European characters does, thus, not mean protection in Japanese words.

(26) The conclusion of cooperative association agreements between purchasing groups - such as the one concluded between Nippon Interior Chain (Kobe) and Europäische Möbel Union (to which are affiliated twelve European furniture coop-and-marketing groups - is another appropriate strategy to sustain the efforts of the small-and-medium sized firms.

(27) Within the framework of the Tokyo Round the Japanese government - in addition to agree to tests on cars for the Japanese market being carried out in Europe - has also taken the committment of an improvement of mutual information (notably in time of changes in legislation and standards).

(28) Despite the committment taken by the Japanese government in the Tokyo Round state monopolies - like Nippon Telephone and Telegraph- are reluctant to open up bidding opportunities to European suppliers.

(29) P. Verkhovskoy, Une liberté d'un usage difficile, " Le Monde " Diplomatique " (Supplement Japon), Paris, January 1979.

A P P E N D I X

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List of the Italian companies
interviewed

(1) Metal products and machinery:

IAP Industriale- HONDA Italia, Ing. U. Biagini, Atessa (Chieti).
(motorcycles)

JEB'S S.p.A., Dr. Fabbi Jader, director of the marketing office,
via Masaccio, Mancasale, Reggio Emilia.
(spare parts for cars and motorcycles)

LEM HELMETS, Mrs. Magnani, via Gramsci 3, Reggio Emilia.
(accessories for motorcycles)

GENERAL SIDER ITALIANA S.p.A., Vc. Carega n° 3 - BOLOGNA
(steel products)

OFFICE PADANE S.p.A., Dr. Carlo De Paulis, Commercial Director,
Via Rabazzoni, II8/30, MODENA.
(printing machinery of the flexographic type)

ITALTRACTOR-ITM- S.p.A.- Dr. Enrico Zuccardi Merli- Castelvetro
(MODENA) -

FIAT TRATTORI S.p.A., Rag. Giovanni Bulgarelli, Deputy Director
General, MODENA.
(tractors)

COSTAN, Dr. Renzo Verdelli, Assistant Area Manager, 32020 Limana/
B1 - (commercial refrigeration)-

G.D. SpA, Dr. De Martiis, marketing manager, via pomponia n° 10,
Bologna.
(wrapping and packing machinery)

SASIB, Mr. Melloni, via Corticella 87/89, Bologna.
(cigarette wrapping machinery)

A.C.M.A. (Azionaria Costruzioni Macchine Automatiche), dr. Ugo
Grafe, export sales manager, Via Fioravanti, 27 - Bologna
(automatic packing machinery)

ANSA MARMITTE, Mr. Filippo Pola, Finale Emilia (Modena).
(spare parts for cars)

WRAP MATIC, Lippo di Calderara di Reno (Bologna).
(automatic paper-wrapping machinery)

ELETTROMECHANICA VISCAT, V.le Santuario 42, CASTELLEONE (Cremona)
(servicing machinery of the machine tools for wood processing)

S.C.M., via Emilia n° 77, Rimini - Rag. Polverelli-
(automatic machinery for wood processing)

FINIKE ITALIANA MARPOSS, Ing. Marco Andina, Bentivoglio (Bologna)
(measures instruments for the mechanical industry)

DURST SpA - BOLZANO (phototechnic company specialized in the
production of enlargement apparatuses for laboratory uses)

ACCUMULATORI ALTO ADIGE -BOLZANO (klaxon, batteries and other
accessories for cars and trucks).

LUCIANI, Ing. Luciani, Parma (automatic machinery for the
production of cardboard frames)

(2) Electronic goods

EMERSON, dr G. Sardella, marketing manager, Via R. Bardazzi, 17
Firenze (colour TV, video tapes, etc.)

PLESSEY ITALIA, Ing. P. Calvi, Sasso Marconi (Bologna)
(telecommunications, domestic appliances, TV sets)

FARFISA , Camerano (Ancona) -musical instruments

BORSARI SARTI , via Farini 7 - Bologna (imports)

(3) Electromedical Instruments

BELCO, Mirandola (Modena) -artificial kidney apparatuses -

DASCO, dr.G. Vecchietti, via modenese 30, Medolla (Modena)
-associated to the multinational SANDOZ- haemo-dialysis materials-

MIRAMED, dr. G. Bellini, Villaggio Artigiano, Mirandola (Modena)
(plastic products for hospital uses)

(4) Pharmaceuticals and Chemicals

ERNEX S.p.A. (chemical raw materials) -Dr. P. Corvi Mora-
Codogno (Milan) -via M. Borsa 11 -

ALFA FARMACEUTICI - Dr. G. Agazzi, export sales manager -
(chemical raw materials)

RANDI G., Faenza (Ravenna), Mr. G. Randi (chemical products,
notably tartaric products).

(5) Toys

BARAVELLI Import-Export, Mr. Luciano Baravelli, via Lazio, 19/A
Zola Predosa (Bologna) -imports of highly specialized toys -

CIGG (Compagnia Italiana Grossisti Giocattoli) - Mrs.G. Paggi-
via Gorizia, 9 - Novara -imports of a wide range of toys -

(6) Clothes and high fashion products

GIANFRANCO FERRE', the commercial director, MILAN / Bologna
(high fashion clothes)

LUBIAM , dr. L. Bianchi, Viale Fiume - Mantova (clothes)

BASSETTI , dr. G. Viterbo , via michele Barozzi 3 -MILAN
(textile products)

BORELLI G.& Son, via Paolo Ruffini n°.160, Modena
(high fashion handbags)

MOLINARI , Mr. L. Ferrari, Via Emilia Est n°.999- Modena
(high quality gloves)

JENNY - Ancona - (high quality clothes)

MIAN - Ancona - (high quality clothes)

CONFEZIONI ALEX - Riccione (Forli') - (luxury clothes)

MAGLI , dr. M. Marabini, via Larga 33 - Bologna (high fashion shoes)

NICHOLOY, Mr. A. Negri, Strada Martinella n°.154, PARMA
(high fashion handbags and belts)

CARDARELLI, V.le Milazzo 26, Parma (high quality leather clothes)

BORELLI G. & Son , via P. Ruffini n° 160, Modena

(7) Furniture and Furnishing :

ANONIMA CASTELLI, Ing. G. Ponzellini, President, via
Torregiani n°.1 - Bologna

SALVARANI, Dr. G. Taddia, Baganzola (Parma)

(8) Ceramics :

GRUPPO CERAMICHE MARAZZI, Mr. Venturoli, Sassuolo (MODENA).

IRIS (Consorzio Gruppo Ceramiche), Dr. Vittori Augusto,
via Ghiarola Nuova II9, Fiorano Modenese (Modena)

LA FAENZA , Via Emilia Ponente, Faenza (Ravenna)

CERAMICA SENIO, Castelbolognese (Ravenna)

IMPRONTA CERAMICA Spa, Mr.L. Lauritzen, Via Radici Nord 27-
Castellarano (Reggio Emilia)

(9) Glassworks:

BORMIOLI, dr. A. Menozzi, Parma.

(10) Watches:

Ditta Lorenz (Milan)

Ditta Zanardi (Bolzano)

(11) Wine:

CANTINE CAVICCHIOLI U. & Sons, via Gramsci 20 , S. Prospero
Sulla Secchia (Modena)

CANTINE COOPERATIVE RIUNITE, Mr. L. Salsi, via Gramsci, Reggio
Emilia.

CONAVI, Consorzio Nazionale Vini, Societa' Cooperativa, via
Barchetta 85, Modena - DrS. Cavalieri-

(12) Industrialists Associations and Chambers of Commerce:

Italian Associations of Zip Fasteners Producers (Associazione
Italiana Fabbrianti Chiusure Lampo), Mr. R. Dal Negro, President,
Piazza Diaz n°2 - Milan

CHAMBER OF COMMERCE OF PARMA, Dr.R. Cervi - chief, export sales-
Parma.

Italian Association of Foot-wear Producers (Associazione
Nazionale Calzaturifici Italiani), Dr. O. Mercatanti, Via Dogana
1 - Milan

The Italian companies were interviewed using the following questionnaire:

- 1st - Do you have (or do you wish to have) commercial relations with Japanese partners ? Are you an exporter or an importer ?
- 2nd - Since how long do you have business relations with Japanese partners ? And in which sector ?
- 3rd - What is your share of business with Japanese partners ?
- 4th - By exporting Italian products to Japan which are the main difficulties you have to face (with the customs, the distributors, the agents, etc.) ?
In your view which is the best strategy to penetrate the Japanese market ?
- 5th - Do you use the assistance of the ICE and/or Italian Embassy offices in Tokyo ?
Do you have any suggestions to improve the ICE services in Tokyo ?
- 6th - Do you have (or are you interested in establishing) manufacturing and/or marketing tie-ups with Japanese partners ?
In the affirmative can you tell us your experience stressing the advantages and the drawbacks ?
- 7th - Do you have any concrete proposals to improve your presence on the Japanese market as well as to ameliorate economic ties with Japan ?
- 8th - Is it of interest to your firm to co-operate with the Japanese industry on third countries' markets (such as China, South-Korea, South-East Asia, Africa, the Middle East, Latin America) ?
If you have any experience can you tell us your point of view ?
- 9th - If you are an importer of Japanese products can you tell us which obstacles (customs, quotas, distribution, etc.) you face to foster your sales on the Italian and European markets ?
Do you know, in particular, any group which opposes your imports ?
In the affirmative can you tell us your experience ?
- 10th - Which are your major competitors on the Japanese market ?

Prof. INNOCENZO GASPARINI

Some proposals regarding economic cooperation between

E.E.C. and Japan in emerging countries

The seventh Tokyo Round of Multilateral Trade

Negotiations in Geneva has produced a series of agreements which are expected to check the trend to protectionism and to provide an important boost to international trade. This complex operation culminated on 12 April with the announcement that the Trade Negotiations Committee had reached broad agreement on the issues. As with previous rounds, attention focuses naturally on the tariff levels. Thus over an eight-year period (beginning on 1 January 1980), the industrialized countries have agreed to reduce their import duties on many thousands of products. As far as Japan and EEC^{are} concerned, the average depth of ~~cut~~^{cut} on a global basis will reach respectively 50% and 25%. Japan's reduction, even if applied to the theoretical tariff of 1974, is thus ^{one} of the biggest among all the participating countries. Moreover, the Japanese Government has publicly announced its intention to take necessary steps to carry out implementation of tariff reductions agreed to in the Tokyo Round.

An important new development in the latest round

of MTN is the series of agreements reached for the first time on a broad range of non-tariff measures. In this respect too, Japan worked-along with the other MTN participants, to arrive at an agreement aimed at eliminating non-tariff barriers.

These recent developments can thus be considered as Japan's new will for a subsequent strengthening of that gradual liberalization process which began in 1964 when the country joined OECD.

In spite of this, the trade unbalance between EEC and Japan has been growing at a steady pace and is now approaching the level of ⁶ billion dollars, according to Japanese data.

The reasons of Japanese surplus lies mainly in the high industrial productivity and in the effectiveness of commercial policy pursued by Japanese firms in Europe. This is undoubtful, and in these last years various studies and reserches have contributed in rendering more clear the reasons of Japanese ^{efficiency} To claim, as europeans have often done, that Japan still holds high trade and non-trade barriers and that Japanese firms

are practicing dumping is quite misleading.

Furthermore we have to bear in mind that, due to the conclusion of the Tokyo Round, in the next decade there will be little margin for significative reductions in trade and non-trade barriers.

In order to find a solution to the trade unbalance problem, it is necessary to start from a precise fact. The lines of commercial policy along which the negociations between EEC and Japan have moved during these last years have not reached any positive conclusion; in the meantime the solution of such a problem appears to be every day harder and harder. In fact, the wider the dimensions of such unbalance, the more difficult seems its elimination. Besides, we have to take into account that the a growing unbalance risks to provoke the rebirth of dangerous protectionist tendencies.

A possible solution cannot but be based on two distinct points. The first relates to a new interpretation

of commercial policy viewed both as a tool for exchange's planning and as a mean prepared to help the *international* specialization of labour. The second point should involve not only the EEC-Japan mutual relations but moreover the possibilities for an effective cooperation between these two areas in the Third World development programmes. Let us try to consider in detail these two points.

Up to now the approach to commercial policy has been generally characterised by the attempt to attain a surplus or an equilibrium in the trade balance. *To* such a short-sighted view, *to substitute* we now need *a* more for reaching approach which should emphasize the necessity to promote a sound development of the economic relations between the two trading partners. By "sound development of the economic relations" we mean that international trade should promote the realization of economic and social objectives in the different countries: *such as balanced growth and full employment.*

The task we are now facing is to choose the appropriate tool.

The real problem do not lies

in a simple choice between protectionism and free trade.

The difficulties ^{that} a few sectors of European industry had to cope with, because of sharp market inroads made by Japanese goods, is an example which is enough to illustrate the need for a decided attempt of ^{exchanges'} planning. However it is extremely important to emphasize the fact that exchange's planning should not be considered as a different label for protectionist measures.

The latter is an unilateral policy which takes aim at excluding a product from a certain market. The ^{former} is a bilateral policy, freely agreed upon between the two trading partners, who aims at an orderly development of commercial relations. ^{Of course} the attainment of free trade must be the ultimate goal of such a policy, but it has to be reached through a ^{gradual move}. This is not only ^{true} in case of EEC and Japan but also as far as industrializing and less developed countries

are concerned.

As we have seen above, to promote a really new type of commercial policy we have first of all to get rid of the mercantilist view of maintaining a surplus or an equilibrium in bilateral trade relations. Indeed in the present gloomy scenario of world economic outlook, the only possibility for both Japan and Europe to avoid a dangerous ^{stagnation} staining in their economic relations is to conceive a commercial policy aimed at realizing a more widespread ^{international} specialization of labour. But it is worthwhile to repeat that in order to do this we will have to get over the concept of trade balance.

This does not necessarily mean that trade balance should be disregarded, and in the next pages we will see through what mechanism a compensating element could be prepared in case ^{any} unbalance (and this is the most realistic assumption) would arise.

Naturally a policy of exchange's planning would entail the adoption of selective measures and thus it is extremely important to establish a serie of principles under which it should be possible to make a precise choice of the items whose trade should be *planned* in order to realize a better *international* specialization of labour.

The main problem in this selection is that in case of EEC and Japan the product cycle theory doesn't work as in the case of international division of labour between advanced and less developed countries. Furthermore the problem is complicated by the fact, as pointed out in a recent study by OECD, that "following the example of Italy and Japan in the 1960s, several NICs (newly industrializing countries), including lately Hong Kong, Korea and Brazil, have started to reduce the share of their exports of manufactures from the typical old industries... There have also been-continues the report- attempts in recent years to short-circuit the product cycle. Thus, countries with ample financial resources but a backward industrial sector (e.g. some OPEC countries)

have established new production units, notably in petro-chemical and steel, with the most advanced technology".

If that is so, advanced industrialized countries (AICs) are facing the problem of international division of labour on a ^{triple} front: on the first we find the LDCs, on the second the NICs and some capital surplus oil exporting countries, and the third the AICs among themselves. We can broadly classify industrial manufacturing activities, according to ^{the} relative productive factors intensity, in labour intensive industries, capital intensive industries and technology intensive industries.

The first and partially the second are more and more becoming the dominion of LDCs and NICs. In this perspective the main development perspectives for AICs lies in technology intensive industries. It is thus in this field that AICs, and in our case EEC and Japan, should strive hard to succeed in finding an horizontal specialization of labour which instead of causing protectionist strains will promote the trade relations between these two areas and also their collaboration in

the industrialization process of LDCs and NICs. Indeed, in our feeling, the problem of the cooperation between EEC and Japan is a truly important one and we will come later back to this point trying to relate it to the already mentioned necessity to find a compensating element to trade unbalances.

We have thus singled out, even if roughly, a set of products (technology intensive) which should represent the core of a trade agreement between EEC and Japan. We are perfectly aware that restricting the problem to technology intensive products could seem artificial, actually this approach leaves out the question of Japanese steel, ships and cars exports to Europe, but what we are mainly interested in finding out now is a line of development of euro-japanese economic relations. Furthermore, at least as far as steel and ships are concerned, Europe and Japan will have to face, from now on, more and more the competition of NICs. Thus in a perspective view European industry will have to cope more with Brazilian or Korean steel and ships than with Japanese steel and ships.

Naturally high technology products constitute a very heterogeneous aggregate ranging from sophisticated capital goods to high quality consumer goods. Certainly a careful sectoral analysis involving a comparative study of the productivity and the relative weight of each sector in total employment could represent a good starting point to select these products whose trade should be enhanced, even if, on a temporary basis in limited quantities. The reason for the choice of the first indicator (comparative productivity) should be self-evident. For instance it would be a waste of resources if European industry would engage in an intensive R & D effort in such a sector of electronic industry as high-fidelity stereos. At the same time, productivity is not enough to give us a real picture of a certain sector's situation and importance in the overall productive system. In fact we cannot overlook the impact of imports on the employment at sectoral level. As far as possible the horizontal trade specialization should be a smooth and gradual process through which production and employment will shift to priority sectors. But in

Order to ensure this we will have to go through a very well conceived exchange's planning. This is ^{true} both in case of Japan and EEC member Countries. The fulfilment of such a condition is one of the indispensable ingredients for a significant development of Euro-Japanese trade. Actually the relative share of Japan in EEC foreign trade is marginal, and the same can be said in the opposite case. At any rate, even if at a moderate pace, our ^{ful}filling is that in the direction we have thus for outlined there will be some concrete possibilities for a growth of EEC-Japan trade even in relative terms.

Only after such a long and complex iter it will be appropriate and productive to introduce and debate the problem of trade and non-trade barriers. Indeed this will have to be a final point, not a starting one as recently has been the case.

Let us now come to the second of the two points on which we think should be based a strategy aimed at improving EEC-Japan economic relations: the cooperation in the industrialization process of Third World, and more generally in third countries. Is this a problem

which is strictly linked to the accomplishment of that new type of commercial policy we have previously outlined. It is out of doubt, or at least highly probable, that in the next few years, in spite of the possible adoption of an exchanges' planning policy, Japan will maintain a certain trade surplus in front of EEC. This fact, as already mentioned, should not be considered, per se, as a thing to be avoided. After all we have said that the scope of commercial policy should be the promotion of international labour specialization and consequently of growth and employment, not a mere mercantilist one. However in order to avoid any possible drive toward protectionism, a compensatory element could be represented by a more active cooperation between EEC and Japan in third countries and especially in LDCs and ^{AKCs}, including China. To put it more briefly, if Japan cannot import from EEC enough goods and services to compensate her exports, she should try to involve Europe more deeply in joint ventures in third countries. This would not only check any trend to protectionism but would also pave the way for the achievement of the targets of

commercial policy. At the present moment we have just a few examples of such a cooperation like for instance Tubarao steel works in Brasil, a joint venture between Brasil's siderbras, Italy's Finsider and Japan's Kawasaki Steel. Another example, which lies in the field of financial cooperation in third countries, is a project by Western banks and Japanese banks to establish a joint-venture international bank in Hungary. The main activity of the bank will be the financing of foreign trade. Thus, the financial cooperation in third countries is likely to smoth the process for the formation of joint ventures in the industrial field. The perspectives of such a cooperation can be considered really bright. LDCs and NICS are undoubtedly needing Europe and Japan for their technological necessities, therefore there could be various opportunities for a Euro-Japanese joint participation in order to realize industrial plants.

The achievement of this target calls however for some further qualifications. As has be done within the European Community, it may be found necessary to go farther towards cooperative or even integrated industrial policies.

However, to be realistic, harmonization of industrial policies are unlikely and probably impractical. In order to coordinate further the discussion between EEC and Japan to implement a sort of common industrial policy towards third countries, an EEC-Japan Working Party should be created, sponsored by both industry and government.

The primary task of this Working Party would be to select among the different projects those most suitable for a formation of an Euro-Japanese joint venture and to find in respective countries the firms interested in taking part. The natural flexibility with which this Working Party could act will assure its prompt adaptability to the different market situations.

Before coming to a conclusion ^{it is necessary} to stress a point directly connected with euro-japanese joint ventures and plants' exports to LDCs and NICs.

The phenomenon of trading companies is now well known in Europe, and in Italy we are now perfectly aware of their substantial contribution to the enhancement of foreign trade. In a certain way the trading company model, or better some of its features, fits quite properly the

needs of a certain part of our industrial sector. Actually small and firms could find, through the establishment of trading companies in Italy, a good channel for the enhancement of their exports. But we have to be realistic and adopt a step by step strategy. Trading companies, at least in their Japanese version, are deeply rooted in the Japanese way of doing business and have a long historical background. However the principle, in itself, can be usefully borrowed and adapted to Italian reality though the formation of the so called export consortia. At present we have a few examples of export consortia for small and medium firms, especially in the mechanical sector, which are particularly active in exporting parts of plants. Thus when fully developed they will be surely able to cooperate more closely with big engineering firms in the construction of industrial plants in the Third World.

Surely Third World will probably continue to expand imports from the industrialized countries, reflecting the purchase of equipment for development. This will help some sectors in the industrialized countries to

grow and thus to offer employment to people who move out of the sectors into which inroads are made by LDCs and NICs exports. Consequently it becomes extremely important that EEC and Japan will act cooperatively in order to speed up the process for the realization of an horizontal labour specialization mostly in high technology sector. But in order to achieve this point we will have to go through the steps of a new commercial policy implying what we have *defined* as exchanges' *and* planning, the enhancement of Euro-Japanese joint ventures which will undoubtedly be *beneficial* if in Europe, and particularly in Italy, export consortia for small and medium firms will become a more widespread reality.

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AUTOMOBILE AND ENERGY

by

Mr. Soichiro Honda

Supreme Advisor - former President

Honda Motor Co., Ltd.

Thank you, Mr. Chairman

Italy, which is the birthplace of Latin civilization, has not only made great contribution to modern civilization, but also, in my opinion, is the ideal place to seek solution to numerous problems created by modern civilization. The Vatican has long been the spiritual home of many peoples. The fact that Latin civilization has been the driving force of the history of mankind is exemplified by the fact that we still talk today of the Roman Empire, Renaissance and humanism. All these thoughts make me feel all the more honored to be given this opportunity of speaking to you in this city of Rome.

The theme of my speech is "Automobile and Energy". Today, it has become impossible to speak of almost any subject without touching on energy.

Italy, Japan and many countries in Europe have the common problem of scarcity in oil resources, which is giving a headache to all of us. The energy problem is not as simple a matter as availability or unavailability of resources. As symbolized by petroleum, the energy problem is a very contemporary theme in which political, economic, environmental and other problems are intertwined with each other in a complicated manner.

Against such background, I now wish to speak on what is true energy conservation in transportation. It seems to me that with regard to the energy problem, automobiles are somehow treated as villains, because of traffic accidents, noise, air pollution and the current oil shortage. In many countries, reducing gasoline consumption of automobiles has been given a top priority in energy saving policies through such measures as reduced speed limits and restrictions on driving on Sundays.

It has been my impression that among all countries of the world, Japan has the most strong feeling that automobiles are anti-social. Perhaps this is because the Japanese people have the sense of incompatibility between automobiles and the society.

Automobiles are strange things in that when you are not driving, you often think they are nuisance, but once you get used to driving, you begin to feel that nothing is more convenient than cars. An analogy can be made with a piano; if a member of your family is playing it, you enjoy listening to it, but the sound of a piano from your next-door neighbor could be most repulsive to your ears. This is indicative of the fact that each individual has this kind of ego, which, however, I do not think is a bad thing.

I believe that one's life becomes most worth living when one utilizes the limited time of life in a most efficient manner. And this finite time of one's life can be utilized most efficiently by acting freely and quickly. This can be made possible by using automobiles. One cannot attain the freedom of individual movement from railways and buses, whose routes and timetables are determined by someone else. Herein lies the true reason why automobiles have become as popular as they are today.

There are two facets to energy saving with respect to automobiles. One is improving their fuel economy and adoption of alternative fuels, and the other is to improve the running environment and usage of automobiles.

Someone has once said to me that improving highways would increase the number of automobiles, resulting in an increase in the overall gasoline consumption. This only proves that he knows nothing about automobiles. The truth is that when highways are improved, traffic congestions will be reduced, so that cars can run at higher average speeds, which in turn reduces gasoline consumption. You must remember that cars consume twice as much gasoline in stop-and-go traffic jam compared with smooth driving conditions.

I am afraid I have to skip the subject of improving the automobile fuel consumption, because discussion of this subject alone would take a good one hour.

As for alternative fuels, I must say that although a wide range of reseach is being carried out, the present technological standards indicate that until about 1985 the conventional gasoline engine will continue to remain as the mainstay of the automobile power plant.

A great deal of expectation is being placed on alcohol as a possible fuel to replace gasoline. Compared with gasoline, however, alcohol has only one half of calorie, and costs twice as much. In other words, its efficiency is only one quarter of gasoline. Moreover, it requires a vast space of land to grow potato and eucalyptus from which alcohol is obtained, and transportation cost will probably be high.

Another candidate is hydrogen. But its colorie is only one quarter of gasoline, and, therefore, it is out of question today.

Lastly, electric vehicles, which at the first glance look good because they are quiet and do not emit exhaust gases.

It must be remembered, however, that an electric car is powered by a battery, which must be charged with electricity that is transmitted by a power company to individual houses. One big problem is that the energy conversion ratio is extremely low at about 17%. Moreover, at the present stage, the big size and heavy weight of a battery present a problem yet to be resolved.

Lastly, I would like to speak on science and technology. As an example, let us consider a nuclear power station. The concept of generating electricity is sound from the viewpoint of science, but it is technology that is creating problems. It has been known through science that by utilizing atomic fission reaction heat, steam can be generated perfectly. And it is the job of technology to control it properly.

We must treat science and technology separately. Science is a system of knowledge on facts, whereas technology is a system of means to achieve an end. Sometimes technology develops with science as the basis, while in other occasions technology serves to systematize science like in the case of the invention of steam engine leading to the formation of thermodynamics.

What has been said by Mr. Aurelio Peccei, who founded the Club of Rome here about technology can be summarized as follows: "Technological development has, as its by-product, brought about a disparity between the rich and the poor. Moreover, technological civilization has created a disparity in technological standards. Technologies that have created such disparities cannot necessarily be regarded as having contributed to the happiness of mankind. Even within one country, there are people who benefit from a certain technology and those who suffer from it. Technology itself is not to blame for this. Rather, this is a result of mankind being not sufficiently careful in the use of technology."

What Mr. Peccei is trying to point out here is that successful development of technology merely means that the conditions necessary for utilization of that technology have been fulfilled but that without assessing how that technology may be used and what impact it may have, sufficient conditions are not met. I agree with this whole heartedly, and believe that this thinking can be applied to the problems related to nuclear power generation.

If I may go one step further, I would say that another major problem lies in the fact that scientists have become arrogant and technologists have become subordinate to scientists.

Both of them should work together on an equal footing to try to solve problems. I have been told that technologists, or engineers, simply follow the lead of scientists, and, as a result, problems cannot be resolved. I think this is totally wrong. Nuclear power generation has already passed the stage of theories, and is now in the stage of achieving methods of control. This is the area for engineers. When scientists try to meddle into the fields of engineers, problems get complicated. In this sense, automobiles are almost entirely in the hands of engineers, and this shows the degree of perfection achieved by automotive engineering and heavy responsibility placed on automotive engineers.

History tells us that in the ancient days, people had to travel on foot. Then, horse-drawn carriages were invented, which were welcomed as wonderful things. But, as the number of carriages increased, people began to suffer from flies and bad odors, or pollution in today's terminology. Then came automobiles, which do not have to be fed, which are clean, and which do not create flies. Automobiles were a trump card against pollution. Today, however, automobiles have become a major source of problems. Such problems as pollution and accidents caused by automobiles should have been foreseen. Because no effective steps were taken then, we now face serious problems. All of us must be very cautious about the future.

In this sense, I believe that we must give a fresh look at human sciences. I myself am seeking to create a science that would enable us to have the foresight to the future, instead of achieving a short-term benefits or profits.

No matter how you look at it, science and everything else is based on man. Without an accurate grasp of man and humanity, all scientific research would come to naught. Technology is nothing but a means of serving mankind. In this sense, knowledge about man must be the starting point for scientific research.

In order to make our society and civilization more humane, cooperation is needed among science, technology, humane studies, literature and art. The relationship between man and science may well be a theme for mankind for ever.

Leonardo da vinci was a poet and sculptor, and at the same time a scientist and engineer. I believe it of great significance that efforts are made to solve problems of modern civilization here in Italy, which is the homeland of this great man of Renaissance.

Thank you very much for your attention.

⑥
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FINANCIAL AND ECONOMIC COOPERATION
BETWEEN JAPAN AND ITALY

by

Mr. Shigeo Horie

Senior Adviser Bank of Tokyo

FINANCIAL AND ECONOMIC COOPERATION BETWEEN JAPAN AND ITALY

By Dr. Shigeo Horie
Senior Adviser
Bank of Tokyo

It is really a pleasure for me to have an opportunity to set forth my views on financial and economic cooperation between Japan and Italy.

To begin with, let me review briefly recent trade relations between Japan and Italy. One of the recent developments featuring trade performance between the two nations is that Japan's trade deficit with Italy has been growing rapidly. According to Japan's customs clearance statistics, exports to Italy amounted to 440 million dollars in 1977 and imports to 465 million dollars. Thus, trade between the two nations was roughly balanced in 1977, though Japan had a trade surplus of 135 million dollars in 1976.

Last year, Japan's exports to Italy rebounded and rose by 10.3 percent to 490 million dollars while its imports increased strongly by 40.7 percent to a record high of 656 million dollars. This left Japan with a trade deficit of about 170 million dollars.

This trend has continued into this year. In the first six

months, Japan's exports to Italy grew at a fast pace to 300 million dollars, rising by 33.5 percent above the level of a year earlier, while its imports rose impressively to 440 million dollars, up by 66.3 percent from a year earlier. The resultant trade deficit of Japan works out at around 280 million dollars in annual rate terms.

In my personal view, there are two important factors behind these trade developments. First, Japanese exports to Italy are influenced primarily by economic developments in Italy. This is because principal Japanese exports are heavy industrial goods such as household electrical appliances, passenger cars, and iron and steel products. In fact, Japan's exports to Italy failed to grow when Italy's economy was in a sluggish state in 1976 and 1977, but have been trending gradually upward since about the middle of 1978 when Italy's economy began to recover.

Second, Japanese imports from Italy include many items whose price elasticities are high. In 1977 and 1978, as you know, the Japanese yen appreciated steeply in relation to other major currencies. Indeed, the yen rate advanced by 26 percent against

the Italian lira between the end of 1976 and the middle of this year, and by the end of October last year, the yen rate had risen by as much as 49 percent. Reflecting the yen's sharp appreciation against the Italian lira, Japan's imports from Italy have been growing at a fast pace. Notably, Japanese imports of works of art, traveling goods, handbags, and high-quality clothing have increased noticeably, as the combined result of reduced prices of these imported goods in Japan due to the yen's appreciation and the latent preference of Japanese consumers for high-grade articles.

The trade developments in the past few years suggest that Japan's trade balance with Italy might swing back into a surplus when Italy's economy commences on the path toward recovery and if the yen does not appreciate sharply against the lira. According to the Pandolfi plan announced in September last year, the Italian economy is projected to grow by an average of 4 to 4.5 percent in the years 1979 to 1981. In addition, there is concern that, not only the trade imbalance between Japan and Italy but Italy's trade deficit with the rest of the world or Japan's trade surplus with the rest of the world will expand again in the period ahead. In that event, protectionist trends in the two nations will be intensified

further.

In view of these trade relations between Japan and Italy, I think closer financial cooperation is of great significance. Now, let me look into the present state of financial cooperation between the two nations.

First, Japanese banks have participated in a variety of medium-term Euro-dollar syndicated loans. Recent syndications in which Japanese banks have taken part in the groups of managers and provided substantial financing, include a 200-million dollar loan to Ente Nazionale Energia Elettrica in January last year, a 100-million dollar loan to Istituto Mobiliare Italiano in February and a 500-million dollar loan to Istituto per la Ricostruzione Industriale in October. On top of these international loans, Japanese banks have so far arranged two major syndicated loans to Italian entities. One is a 200-million loan to Hydrocarbons Bank Limited arranged in September last year under the guarantee of Ente Nazionale Idrocarburi, and another is a 200-million loan to Istituto per la Ricostruzione Industriale arranged in July this year. The proceeds of the loans are used by enterprises under the

shelter of the borrowers to finance their expensive activities.

Second, Japan's direct investment in Italy, together with managerial skills and technologies, has helped Italy in creating employment opportunities. Here, let me cite some typical examples of direct investments by Japanese trading firms and manufacturers, notably those of Japanese manufacturers' advance into Italy through their direct investments. Sanyo Electric Co. made capital investment in Emerson Electronics S.p.A. for the manufacture and sale of home electrical appliances; Toray Industries, Inc. made capital investment in IGANTO S.p.A. for the manufacture and sale of man-made leathers; Honda Motor Co. made capital investment in Industria Automotoa Gricola Produzione S.p.A. for the assembling and sale of motor cycles; and Yoshida Kogyo set up two wholly-owned subsidiaries for the manufacture and sale of zippers and sliders. Speaking generally, however, economic exchanges between Japan and western European countries through the medium of direct investment are not so vigorous, and those between Japan and Italy are no exception. Looking ahead from a medium- and long-term perspective, the European economy is expected to advance robustly with the entry of Greece, Portugal and Spain into the European Community. And

the western European countries will continue to provide bases of production advantageous to Japanese firms. In this context, Italy with its relatively low cost of labor and abundant skilled labor could be a first choice for the advance of Japanese firms into western Europe.

And third, Italian entities may issue yen-denominated bonds in the Tokyo capital market. Foreign yen-denominated bonds were first issued by the Asian Development Bank in late 1970. The market continued expanding in the subsequent years. Actually, such yen bond issues amounted to 326 billion yen, or the equivalent of 1.21 billion dollars, in 1977 and to 827 billion yen, or the equivalent of 3.93 billion dollars, in 1978. In the first six months of this year, Japan's capital exports in the form of foreign yen bond issues decreased to 230 billion yen, or the equivalent of 1.1 billion dollars, against the background of the swift restoration of equilibrium to the balance of payments this year. As domestic savings are expected to continue in excess of investment in the period ahead, however, the foreign yen bond market could be said to have been firmly established when viewed from a medium- and long-term perspective.

Unfortunately, there have been no cases of yen bond issues by Italian entities. One of the reasons for this may be that Italian entities are concerned about exchange risks involved in yen's appreciation. As yen holding by nonresidents is expected to be liberalized further as a step in the direction of yen's liberalization, however, the possibility of foreign entities raising relatively low-cost yen funds will be enhanced. Today, capital market conditions in Japan are not so favorable as at one time in the past. But when viewed from a medium- and long-term standpoint, yen bond issues by Italian entities are highly possible and very advantageous to them, and will receive support from Japan's financial community.

Next, I shall refer to economic cooperation between Japan and Italy in the third country. At this gathering last year, I talked about financial and technical cooperation between the two nations in the construction of a steel mill in Tubarao, Brazil. In July this year, Istituto per la Ricostruzione Industriale, the Export-Import Bank of Japan and the Export-Import Bank of the United States signed an agreement on joint financing for the manufacture and sale of "Boeing 767" aircraft. This agreement requires approval of the respective governments. I think this international cooperation is

really epoch-making. The respective financial institutions in the three nations are expected to provide domestic finance to the manufacturing sectors of the firms concerned. At any rate, the new aircraft as a middle-distance civilian passenger plane, and the airbus "A 310" that has been developed jointly by six western European countries, in which Italy was not included, are considered "star" aircraft in the 1980's. Since the project for the production of "Boeing 767" aircraft calls for all the latest technologies available to the three nations concerned, it is very significant in that it is suggestive of what economic cooperation among advanced nations should be in the period ahead.

Finally, I would like to add that there is widespread concern that the latest substantial oil price increases will accelerate inflation and at the same time expedite deflation on a global scale. Notably, Japan and Italy are so heavily dependent on imported oil that they will most likely face many difficulties in their economic management. Such being the situation, there is the danger of protectionist trends being intensified all over the world. Here, I would like to emphasize the importance of financial and economic cooperation as a major restraint on the intensification of worldwide

protectionist moves.

In this connection, it is worth pointing out that Japan and the European Community are to hold a meeting this autumn to discuss extensive industrial cooperation between the two. In particular, the two parties are expected to discuss the roles they should play at both government and private levels in the areas of not only trade, but capital and technological exchanges and cooperation in the third market.

In concluding my speech, I would like to express my fervent hope that financial and economic cooperation between Japan and Italy will be further promoted on a broader front.

Thank you.

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THE JAPANESE ECONOMY IN THE 1980'S

by

Mr. Hiroki Imazato

Chairman Nippon Seiko

Mr. Imazato, Chairman
Nippon Seiko

The Japanese Economy in the 1980's

I. Transformation of the Japanese economy

Speaking boldly, my opinion is that the Japanese economy will enter a period of middle and low rate of growth in the 80's, after having experienced a period of a high rate of growth for almost the past 20 years.

After the end of the second world war, Japan experienced a period of reconstruction from war damage, from 1945 to 1952, and a period of self-strengthening from 1952 to 1960, in the latter of which she was able to establish the basis of today's key industries. She made plans for the rationalization and the modernization of those industries, such as iron and steel, automobiles, mechanical products, electronics, petrochemicals, etc., and financed them from governmental financial organizations. These industries imported the most developed techniques in the world for their development.

The next period is that of a high rate of growth for 20 years which began with "A Plan for Liberalization of Trade and Foreign Exchange". Through this liberalization policy, Japan tried to strengthen the competitive power of her industries, the fundamental basis of which had already been established in the former period.

Through the liberalization process, Japan succeeded in strengthening the competitive power of her industries, by combining the most developed imported techniques and her relatively low wages, so entering a period of a surplus of international payments from 1965.

The reason for Japan's experience of high rate of growth seems to

be rather simple to understand. The reason is that Japan introduced the benefits from the second and the third innovations of the advanced countries at the same time in this period.

The second innovation which had taken place in the motor industry and the domestic electrical equipment industry in the U. S. A. before the second World War, appeared in the same field in Japan after that war and played a major role in her rapid growth. Third innovation started with brilliant technical inventions in sectors such as atomic power, jet-engines, rockets, synthetic fibres, petro-chemicals, computers, electronics and in the fields of operation research and automation in the U. S. A. around 1940. Japan imported the benefits of the second and third innovations at the same time and thus could have two or three times the investment opportunities of those realized in the U. S. A. or Western Europe. Japan had sufficient funds for these opportunities, and such funds poured from high rate of savings. The government did not need to put too much of its energy into militarization, and so could concentrate on economic development. In such a way rapid growth was inevitable with natural results.

Now, 40 years after 1940, the results of these past innovations are over maturity and are losing the stimulus of the past. Here Japan is no exception. Today is the period of preparation for the 4th innovation, the face of which can not be forecast.

Perhaps the 1980's will be a period of a low rate of growth on an international scale. Therefore, Japan will also enter a period by a low rate of growth after 20 years' experience of a high rate of growth.

Though in the last stage of these 20 years Japan has faced the oil

shock, her policy of adjustment to this problem has been a very rare success in the history of economic policy. This adjustment was the repair of the damage to the economic system caused by the oil shock.

Having stabilized prices and wages, Japan was able to adopt a relatively advantageous position towards the U. S. A. and Western Europe, while the U. S. A. experienced low rate of growth and increasing inflation and Western European countries began to adopt adjustment policies in the autumn of 1976; three years later than Japan.

As a result, Japan realized a surplus of current international payments and thus succeeded in bringing her rate of growth into the planned orientation.

However, the success itself brought about an accumulated surplus of international payments, which in turn resulted in the rapid growth of the value of the Yen, and this was followed by a decline in the national economy.

This decline was mitigated by the expanded fiscal expenditure realized by a considerable expansion of fiscal deficits.

Towards the end of the fiscal year 1978, current international payments began to produce deficits; the same tendency will continue also in 1979 and 1980. Therefore a possible policy for maintaining a certain rate of growth is fiscal expenditure, i. e. fiscal deficits.

There is a possibility that the rate of increase in wholesale prices will be more than 10 %. This will allow the Bank of Japan to adopt a strong deflationary policy. Then, by this latter policy, investment in equipment and inventories will dwindle again. A rise in interest rates will make the issue of national-bonds very difficult

and weaken the stimulating effects of fiscal expenditure and the expansion of exports. The Japanese economy in the fiscal year 1980 will experience a considerable decline in the rate of growth.

This would mark the end of the period of high rate of growth very impressively and clearly.

II. Characteristics of Japan as distinct from Europe

The Japanese economy will one day be westernized. This does not mean the liquidation of the unique historical and cultural character of Japan, but merely the narrowing of the range of different rates of growth of Japan and Europe.

There may exist the following four elements responsible for such differences between Japan and Europe:

- i) The first element is the stabilization of relations between employers and workers,
- ii) the second, the strength of competition;
- iii) the third, the characteristic type of research development;
- iv) the fourth, the active character of businessmen.

As to the first element, in Japan, such social relations like the so-called Japan Incorporated still exists and, in spite of the coming westernization with some time-lag behind Europe, will continue to exist to some extent.

Leaders of Japanese trade unions have a tendency to take into account the stabilization and development of their companies and the national economy when considering their policy for wage negotiations, just as entrepreneurs do. This seems to be very different from the

attitude of trade unionists in U. S. A. and Europe.

The second character is the existence of strong competition which will remain stronger in Japan than in Europe in the 1980's. The effectiveness of the antimonopoly policy which prohibits any single company from occupying more than a 25 % share in the market of a certain commodity will continue to exist also in the 1980's.

The third is the characteristic process of research development in Japan in which Japan has imported highly advanced techniques and has modified them for practical Japanese use. This might well favour Japan; since in the 1980's, the preparatory period for the 4th innovation, no such big innovation will appear so to bring any major difference between Japan, the U. S. A. and Europe.

Thus, in the period of a lack in big innovations, the capacity for minor modifications will play an important role. Of course Japan must realize that an orthodox approach is the strengthening of fundamental research, and so she will channel research funds and man power towards fundamental research.

Last, but not least, the fourth element is the active character of Japanese businessmen. I would have liked to site it as the first, but I have not, because I, myself, have been a businessman and have no intention to lose any of the so-called Japanese virtue of humbleness, if it exists.

The type of contemporary Japanese businessman is different from that of those of before the Second World War, the leaders of the Zaibatsu, i. e. the family clans such as Mitsui, Mitsubishi and Sumitomo. Those people who rose to the top positions, replacing retired or purged

predecessors of big businesses, had been nothing more than middle class managers, such as section or subsection heads at the moment of the Zaibatsu dissolution, which took place after the Second World War.

Their positions had been almost the same as those of the people who were to become the leaders of trade unionism. They were not only qualified and well trained in their business, but also able to understand the minds of the employee. To this type of new leader, the target to reconstruct Japan, to reconstruct their companies and to raise the standard of living of their employees seemed to be the same target. They could hardly recognize that there existed a class relation between the wage earners and profit earners in their company. They could not regard themselves as "capitalists". Recently, a famous Japanese business magazine, "The Economist", made a long series of interviews with top business leaders. I myself was an interviewee. The series was entitled "A Study of Japanese Capitalism" with the sub-title "Consciousness of Big Businessmen".

Among the questions which were always asked to interviewees was: "Are you a capitalist?". Almost every interviewee answered "No, I am not a capitalist." I suppose that it is a laughable matter from the critical point of view of professors of economic science. But, if we consider the situations in which they were, just after the end of the Second World War, we can understand their self-consciousness, because they had been accustomed to regard themselves as employee instead of employer. They could not have had any dream to be top businessmen until the Zaibatsu dissolution.

There was a minority who answered "I am a capitalist". They were "self-made men" who had developed their enterprises from small beginnings.

into big business for themselves. Examples of this type of person are; Mr. Sohichiro Honda of Honda Motor Co., Ltd., Mr. ^{MASARU} ~~IBUKA~~ Ibuka of Sony Corporation, Mr. Kohnosuke of Matsushita Electric Industrial Co., Ltd..

They were rather industrial capitalists than financial capitalists. They were often engineers and owners at the same time. After they had contributed much to the reconstruction and rapid growth of the Japanese economy, they have now reached the age of retirement.

They voluntarily introduced the top-executive's retiring system into their companies, in order to prevent any senility among the stuffs and also to pour fresh young blood into their companies.

It was rather amusing that one of them exempted himself from the retiring system. Still, it was an important advance that they did not stagnate so as to allow their sons or relatives to succeed to their high position.

Another group of top businessmen moved to their present positions from being high governmental officials, or moved to business from banks. In both cases, they are independent from their former organization and do not attempt to have any such relation, neither subjection nor surviellance of their former organs. They usually contribute their comprehensive knowledge concerning the national and international economy which they have obtained in their former jobs into the business field.

Positive characteristics common to the above-mentioned three types of businessmen are their eagerness for innovation, not only in a technical sense but also in a social sense.

III. Further problems

Many problems still exist. I would like to pick several of them.

The first is the problem of international adjustment. In the period of rapid growth, Japan could not avoid being a major rival to U. S. A. and European countries. In the 1980's, the problem of adjustment with ALDC (= advanced less developed countries) will become important because Japan is surrounded by such countries with strong capacity to develop such as Korea, Taiwan and China. Japan should not be afraid and never try to curb their catching up in certain fields. Japan should positively develop more advanced fields.

The second is the problem of energy. Before the realization of development of new alternative energy Japan will be obliged to face at mini-sized oil crises (such raising of oil prices by OPEC as that done last June) intermittently.

Such mini-sized oil crises will bring forth inflation to some extent and curb the rate of growth. Shortage of energy and natural resources continue to be vital to countries such as Italy and Japan. So in the 1980's, Japan will also be obliged to curb the rate of growth to some extent, because of this problem. Japan must endeavour to economise her energy consumption.

Japan must be prepared to endure a higher value of the Yen, must increase imports and curb the rising of profits and wages. I hope that in the 1990's the energy problem will be mitigated through the development of alternative energy supplies.

The third is the problem of senility in the population. From now on to the coming century the proportion of old aged people among the

population will increase very rapidly in Japan. Japan must tackle this problem with the prolongation of the working age and through other methods.

Finally remains the big problem as to how the value-system of the Japanese will change. The problem is so complex, relating to philosophy, religion, psychology etc. that I cannot answer now. All I can say is that we must concentrate our endeavours to the study of this important problem with the interdisciplinary help from many specialists.

I hope that Japan will find some possible solutions for these above-mentioned problems and will be a stabilizing factor in this rapidly changing world.

Marranti

Confronto tra Italia e Giappone: evoluzione
storica e situazione attuale.

2. Attualmente i consumi energetici di Italia e Giappone si collocano rispettivamente intorno ai 150 e ai 360 milioni di tep. *TOE*
Essi sono coperti - per circa tre quarti - da idrocarburi di importazione, con una maggiore presenza del gas naturale nel caso Italiano.

La politica di sviluppo degli impieghi di gas è infatti iniziata in Italia già negli anni '50 con la valorizzazione delle risorse della Valle Padana seguita, negli anni '70, dai grandi contratti di approvvigionamento dall'estero. In Giappone questa linea è molto più recente ma con risultati già rilevanti specie in termini assoluti.

Il carbone copre nei due paesi quote dei consumi totali rispettivamente del 14% per il Giappone e del 7% per l'Italia.

L'energia idro-geo-elettrica assicura il 5% del consumo in Giappone e l'8% in Italia.

L'altra fonte primaria per la produzione di energia elettrica, quella nucleare, ha in Giappone un peso ben più consistente che in Italia. La fonte nucleare assicura già oggi al Giappone 12 milioni di tep pari al 3,3% dei consumi totali di energia, mentre in Italia l'energia nucleare fornisce solo 1 milione di tep pari allo 0,7% dei consumi totali.

3. Per quanto concerne la struttura dei consumi, circa la metà dei consumi finali di energia dei due sistemi viene assorbito dall'industria, meno di un terzo dal settore degli usi civili ed un quinto dai trasporti.

Si tratta di una struttura ben diversa da quella di altri paesi industrializzati che hanno quote dei consumi per usi non direttamente produttivi ben più elevate.

Nell'ambito dei consumi industriali la quota dei combustibili solidi risulta particolarmente elevata nel caso Giappone a causa del forte peso che la siderurgia ha in quel paese.

Mentre in Italia la quota del gas naturale, sul totale dei consumi industriali, è pari a circa il 25%, essa è ancora molto bassa in Giappone.

Nel settore degli usi civili i consumi pro capite italiani (0,6 tep) risultano di poco superiori a quelli giapponesi (0,5 tep); per quanto riguarda le fonti impiegate la principale differenza risiede nel minor utilizzo, in Giappone, del gas naturale.

Nel settore dei trasporti i consumi pro capite giapponesi (0,4 tep) sono invece leggermente superiori a quelli italiani (0,3 tep).

Anche da questi pochi cenni emerge una notevole somiglianza della situazione energetica

dei due paesi, sia per quanto attiene la struttura dei consumi, sia perchè entrambi si trovano a dover affrontare problemi analoghi di diversificazione delle fonti e di accrescimento del grado di autonomia e sicurezza degli approvvigionamenti.

4. Volendo estendere il confronto anche al piano istituzionale e delle politiche di intervento, mi sembra si possa constatare come l'intervento pubblico seppure presente in tutti e due i paesi, si sia estrinsecato nel tempo con modalità diverse.

In Italia, lo Stato, in aggiunta all'attività di indirizzo e di controllo dei vari Ministeri economici, è intervenuto sin dai primi anni del dopoguerra direttamente nel settore energetico con lo strumento dell'impresa pubblica. In particolare all'ENI, creato nel 1953, fu affidato il compito di sviluppare le risorse di idrocarburi nazionali, assicurare una aliquota importante dell'approvvigionamento petrolifero del paese e operare nel settore del combustibile nucleare.

Oggi l'ENI copre circa il 40% del fabbisogno energetico nazionale assicurando oltre un terzo della domanda petrolifera interna e la quasi totalità del gas naturale.

All'intervento nel settore degli idrocarburi ha poi fatto seguito la nazionalizzazione dell'industria elettrica con la creazione di un ente pubblico con il compito di provvedere su base nazionale alla produzione, alla trasmissione e distribuzione dell'energia elettrica.

In Giappone lo Stato più che intervenire direttamente ha inizialmente preferito controllare ed indirizzare tramite il Ministero dell'Industria e del Commercio i vari operatori energetici.

Gli interventi diretti sono stati relativamente più limitati ed hanno riguardato la creazione nel 1955 della Japan Petroleum Exploration e nel 1967 della Japan Petroleum Development Corporation, con l'obiettivo di sviluppare iniziative per la ricerca di idrocarburi.

Recentemente questa politica ha subito una importante modificazione, con la creazione della Japan National Oil Company avente il compito di garantire un'adeguata presenza pubblica nell'approvvigionamento petrolifero giapponese. E' stata anche annunciata la prossima costituzione di una compagnia di stato per le altre fonti di energia. Con queste decisioni anche gli aspetti istituzionali dei due paesi nel settore energetico, vanno assumendo fisionomie analoghe.

Possibilità e prospettive per l'Italia ed il Giappone nel campo dell'energia/

5. Guardando al futuro, i temi centrali rispetto ai quali i paesi industrializzati dovranno misurarsi riguardano: l'uso delle fonti di energia, la politica petrolifera e la politica di diversificazione.

L'Italia ed il Giappone non sono tra i paesi dove più alti sono gli sprechi e le inefficienze nell'uso dell'energia.

I consumi pro capite sono ad ^a esempio relativamente bassi se comparati /quelli degli altri paesi industrializzati. Ciò nonostante anche in Italia e Giappone si possono fare molti passi avanti sulla via della ristrutturazione dei rispettivi sistemi energetici nel senso dell'impiego ottimale delle singole fonti.

L'ENI ha effettuato di recente uno studio sugli usi finali dell'energia in Italia che ha messo in evidenza i larghi margini esistenti per un diverso sistema di impiego delle fonti tradizionali e nuove.

La suddivisione della domanda dei vari settori di utilizzo per fasce di temperatura (alta, media, bassa), e la separazione della domanda di energia elettrica in usi obbligati ed altri impieghi, ha dimostrato, infatti, la possibilità di

aumentare la gamma di fonti con cui soddisfare le esigenze dei consumatori.

In particolare il ricorso alle fonti rinnovabili per la produzione di calore a basse temperature per usi civili ed industriali potrà comportare risparmi sostanziali di fonti tradizionali. Ma in molti casi la trasformazione non è immediatamente economica e ciò rallenta di molto le possibili iniziative. In altri casi la sostituzione del petrolio è possibile tecnicamente ed economicamente ma occorrono degli elevati investimenti che pongono grossi problemi finanziari. In altri casi ancora vi sono barriere tecnologiche da superare.

In conclusione riteniamo che si potrà giungere nel breve periodo ad una stabilizzazione o forse anche ad una leggera riduzione dei consumi petroliferi; ma il greggio continuerà ad essere determinante, per i bilanci energetici di Italia e Giappone.

6. Se questo è il quadro, per grandi linee, dal lato della domanda, quale è la situazione dal lato dell'offerta? Secondo stime presentate al recente congresso mondiale del petrolio c'è ancora nel mondo tanto petrolio da scoprire quanto ne è stato scoperto ed è ancora estraibile ad oggi (circa 90 miliardi di tonnellate); e i nostri tecnici concordano. Questo valore potrebbe apparire soddisfacente se confrontato alla domanda mondiale di greggio che è oggi poco più di 3 miliardi di tonnellate all'anno.

Il problema però è quello di come tramutare le risorse potenziali in nuova capacità produttiva. In molti paesi produttori, anche con buona potenzialità residua, la ricerca petrolifera ristagna da anni e l'esplorazione non trova più grandi bacini produttivi.

Zone non ancora esplorate esistono a tutt'oggi anche in paesi che fino ad ora hanno condotto programmi di ricerca: si tratta però principalmente di zone a grande profondità o in complesse condizioni geologiche fin'ora impenetrabili; o di zone per le quali l'industria non possiede ancora tecnologie necessarie a rendere produttive le eventuali scoperte, come, ad esempio, mari profondi o zone artiche.

Oltre alle riserve ancora rinvenibili con la prosecuzione della ricerca mineraria tradizionale, nuovo petrolio (oltre ai 90 miliardi di tonnellate già citati) verrà in futuro da migliori sistemi di recupero dai giacimenti esistenti, il cosiddetto recupero terziario. Sarà tuttavia difficile che esso produca risultati a breve termine: le ricerche in questo campo devono superare ancora molte difficoltà, anche per i problemi di disponibilità e di costo per alcuni prodotti utilizzati per le tecniche di recupero.

Vi è infine la possibilità di ottenere petrolio sin
tético da scisti e sabbie bituminose e da carbone.
Tuttavia, perchè questi greggi sintetici si affer-
mino sul mercato in quantità industriale, devono
essere risolti gravi problemi tecnologici di pro-
cesso e di costo e problemi ambientali, oltre a
quelli derivanti dalle enormi dimensioni dell'im-
pegno economico-finanziario necessario.

7. Come è noto, a fronte di queste potenzialità anco-
ra notevoli anche se riferite soltanto alle riserve
di petrolio già note, vi sono fortissimi condizio-
namenti di carattere politico che influenzano gli
effettivi livelli di produzione.

Tra i paesi produttori, si è venuta diffondendo la
tesi che un rapido esaurimento delle loro risorse
petrolifere potrebbe privarli dell'unica fonte effet-
tiva di reddito prima che essi abbiano potuto crea-
re, investendo al loro interno le entrate petroli-
fere, un'economia moderna ampiamente diversifica-
ta. Di qui una politica di generale contenimento
dell'offerta e di prezzi crescenti.

Si può, almeno in parte, concordare che una poli-
tica di "conservazione delle risorse petrolifere
nei paesi produttori" corrisponde non solo ad una
legittima esigenza di maggiore valorizzazione del-
le risorse di tali paesi, ma anche - se sviluppata
in modo da non generare traumatici squilibri sul

mercato internazionale - agli interessi di lungo periodo dei paesi consumatori, che saranno in tal modo sollecitati ad accelerare la necessaria trasformazione dei loro sistemi energetici.

Ma occorre soprattutto, da parte dei paesi industrializzati, la capacità e la volontà di affrontare, nei modi e con gli strumenti giusti, quel "dialogo" con i paesi produttori al quale - in concomitanza con la loro nuova politica di conservazione - i paesi produttori si dichiarano pronti, evitando ogni illusione di risolvere le difficoltà di approvvigionamento attraverso lo scontro frontale tra le due parti.

Esistono d'altronde le condizioni per una più stretta integrazione, per una maggiore interdipendenza tra i due gruppi di paesi: i paesi produttori hanno bisogno di quelli industrializzati per il proprio sviluppo, non solo in quanto acquirenti di petrolio ma anche quali fornitori di beni e servizi, partner essenziali per un accelerato processo di crescita: questi ultimi hanno bisogno dei paesi nuovi, non solo come fornitori di petrolio, ma anche come mercati in rapida espansione ed acquirenti di beni e servizi capaci di dare nuovo impulso alla domanda mondiale.

Italia e Giappone hanno mostrato, con le loro politiche e le loro iniziative, di saper affrontare in modo adeguato questa nuova fase dei rapporti internazionali.

8. In un quadro di più stretta interdipendenza, che comporta un maggiore impegno e capacità di programmazione della domanda e dell'offerta, di elaborazione e di attuazione di progetti di sviluppo, si aprono nuove vaste opportunità di cooperazione anche nell'ambito dei paesi industrializzati, sia a livello governativo, sia a livello di imprese industriali.

Sotto quest'ultimo aspetto, è interessante rilevare come la nuova situazione offra uno spazio rapidamente crescente ad un nuovo tipo di impresa petrolifera che si assicura il greggio trattando direttamente con le compagnie nazionali dei paesi produttori, alle quali offre una gamma complessa di servizi, che vanno dall'assistenza tecnica, finanziaria ed organizzativa alla ricerca mineraria ed allo sfruttamento dei giacimenti già in produzione, alla progettazione e costruzione di impianti per le fasi a valle (raffinerie, petrolchimici), fino alla formazione e qualificazione del personale. Una tale impresa deve ovviamete poter offrire servizi al meglio delle tecnologie e dei know-how disponibili, deve avere a valle, sul mercato, sbocchi ampi, e deve dare ai paesi produttori la certezza di impiegare il greggio che ottiene da loro per il rifornimento diretto dei mecati in cui opera, evitando ogni operazione specu

lativa, resa possibile da eventuali situazioni di scarsità.

9. Sotto questo profilo l'Italia, che, come ho già ricordato, dispone di una sua compagnia di Stato sin dagli anni '50 ed ha instaurato, sin da allora relazioni fruttuose con i paesi produttori, e il Giappone, che ha oggi uno strumento di intervento analogo con programmi impegnativi, possono svolgere insieme un ruolo di primo piano.

Questo non è solo un auspicio in quanto contatti operativi tra ENI e Japan National Oil Company sono già avviati per una serie di iniziative comuni nel campo della ricerca mineraria.

E' da considerare a questo proposito che, mentre in passato le iniziative nella ricerca mineraria erano limitate alle aree più vicine ai mercati di consumo, oggi la ricerca ha assunto una dimensione geografica mondiale per la pratica comune di scambi di petrolio tra i vari operatori. Ciò ha naturalmente ampliato le possibilità di collaborazione internazionale tra le varie compagnie.

Anche per quanto riguarda il gas naturale, per il quale si prevede un intenso sviluppo come primaria e più importante fonte di diversificazione rispetto al petrolio, esistono possibilità di cooperazione, sia per la realizzazione di impianti per

la liquefazione di gas da importare nei due paesi, sia per lo sfruttamento, sulla base della vicinanza del mercato di utilizzo, di riserve valorizzate da iniziative minerarie.

Le iniziative nel campo degli idrocarburi, pur avendo carattere irrinunciabile, non possono da sole alleviare le tensioni esistenti sul mercato internazionale dell'energia.

Nel medio-lungo termine occorrerà infatti aumentare la disponibilità di fonti diverse dagli idrocarburi, sia tradizionali (carbone) sia nuove (energia solare ed altre fonti rinnovabili).

In questo senso i programmi energetici di Italia e Giappone puntano ad un aumento graduale della quota di queste fonti ed anche in questo caso le prospettive di collaborazione sono ampie ed interessanti. Il Gruppo ENI è già impegnato in tutti questi campi e la prossima costituzione di un organismo giapponese per lo sviluppo delle fonti alternative costituirà senz'altro un'occasione importante per dare uno sbocco operativo a questa complicità di obiettivi.

Ho voluto richiamare solo alcuni dei possibili termini di collaborazione tra l'Italia ed il Giappone e, in particolare, quelli che riguardano il campo energetico.

L'ENI ha una lunga tradizione di rapporti con le maggiori compagnie giapponesi nei vari campi di attività del Gruppo: oltre all'energia, la chimica, il tessile, la meccanica, l'ingegneria e servizi e, ^{già} di recente, il settore minero-metallurgico dei non ferrosi.

In tutti questi settori potranno svilupparsi nuove iniziative per la cessione e acquisizione di tecnologie, per la partecipazione a progetti, che richiedono una suddivisione di sforzi tecnici e finanziari, per operazioni commerciali ed investimenti congiunti in Italia, Giappone ed altri paesi.

«ITALY — JAPAN: A COMPARISON BETWEEN
THEIR ECONOMIES BY ECONOMISTS AND
OPERATORS OF THE TWO COUNTRIES»

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THE CHEMICAL INDUSTRY IN JAPAN AND ITALY:
STRUCTURAL ASPECTS, TRENDS IN EVOLUTION,
OPPORTUNITIES OF COOPERATION

by

Prof. Giuseppe Medici
Chairman of Montedison

THE CHEMICAL INDUSTRY IN JAPAN AND ITALY: STRUCTURAL ASPECTS,
TRENDS IN EVOLUTION, OPPORTUNITIES OF COOPERATION

Story and evolution

If we take into consideration the structure of the chemical industry both in Japan and Italy, we find many important analogies.

First of all we see that the chemical industry was created about hundred years ago in both countries; then we have a significant growth after World War II in Japan and Italy as well.

In fact after World War II Japan and Italy must face all the problems originated by the industrial reconstruction.

The chemical industry had a great expansion especially as regards petrochemical products, thus as a logical consequence of the rapid increase of industrialization process in both countries.

It must be said that the Government of both countries encouraged this process and helped the chemical industries by means of fiscal and financial provisions. Moreover, as regards Japan, limitations to imports and barriers to foreign investments were enforced to the end of giving advantage and protect the growth of national companies.

During the '60s the Japanese industries gradually intensified their efforts as regards Research, the target being the improvement of the existing processes trying to reduce the costs of production.

During the '60s the rate of growth for chemical industry was remarkably high in both countries, more in Japan.

While GNP grew at an average rate of 5.5% per year in Italy and 11.5% in Japan through 1960-1970, the chemical production increased by 10% and 15% respectively, on a yearly basis.

Beginning 1970 the chemical industry is to show signs of crisis all over the world: the rate of growth consequently slowed down and the profits of companies lessened.

Both in Japan and Italy the rate of growth in demand was falling, while the expansion in capacity of production proceeded as plants had been previously planned.

We have here consequently a situation of overcapacity of plants because demand is falling on one side, and reductions in prices on the other.

Starting 1970, we have besides a progressive increase in labour costs and raw materials prices, which, as they could not be charged on prices, had a great part on the drastic cut in profits.

Then the world situation becomes particularly serious, say in 1974-1975, as a result of the oil crisis and the general recession which hit the major outlets for the chemical products. The first time in their story, as regards chemical products, both Japan and Italy have a negative rate of growth.

As a result of the evolution of the situation described above, in 1977 Japanese chemical industries reached a turn-over which allows Japan to be the second country after the United States and before Western Germany which consequently becomes

the third in the scene of chemical industry in the Western part of world.

Italy gets position No. 6, as its chemical industry had a more moderate development if compared to Japan. It is anyhow uniform to the average of the other industrialized countries.

PRESENT MARKET COMPOSITION

During the last years the added value of the chemical industry represented 10% about of the total added value got by the manufacturing industry both in Japan and Italy.

The number of employed persons (300,000 about in Italy and 550,000 in Japan) represents 5.8% about in Italy and 4% in Japan out of all the labour forces employed by industry.

The turn-over of chemical industry totals 15,000 million US dollars in Italy (52,000 \$ per employed person) and 46,000 million US dollars in Japan (84,000 \$ per employed person); if it is referred to basic chemicals and fine chemicals the value is almost the same, say half and half, in both countries.

The composition of turn-over, if expressed as percentage and sector by sector, shows some differences in the situation of Japan in respect of Italy, but we find also some similar conditions.

The major sectors are in fact in both countries pharmaceuticals, plastics, man-made and synthetic fibres, organic and inorganic products.

If we consider, however, foreign trade as regards the two major sectors, say basic chemicals and fine chemicals, we find great differences.

As regards Italy the Import/Export balance for chemical products

was passive during the last 10 years and the deficit growing and growing, thus as the more evident result of a deficient development in technological applications.

The geographic area which is more important as regards the destination of the Italian exports of chemical products as well as the origin of its imports is Europe. About 80% of the products imported by Italy come from this area and 60% of Italian exports are for Western Europe.

As regards Japan, Import/Export balance which was leveled by 1965, is constantly positive henceforth and in 1977 it reached a balance totalling +2 billion US dollars.

The main area of destination of chemical products made in Japan is Asia (50% of total exports).

The exchanges of chemical products between Japan and Italy are not relevant: about 2% of total value of import and export to and from Japan, as regards Italy.

Considering also other aspects from a geographical point of view, of the presence of chemical industry, we can say that Italy has a production which is substantially national and strong export flows: its situation of production abroad is in fact limited. While Japan in the early '70s began to adopt a strategy of internationalization of production, especially as regards basic petrochemical products and derivatives, and located its industries particularly in underdeveloped countries which have oil resources.

This policy of Japan can be justified taking as a reason :

- 1) defending the positions reached on the markets where Japanese products were exported when these countries were to substitute imports by national products;
- 2) the difficulties met in getting raw materials and the necessity to produce there where oil or natural gas were available;
- 3) the heavy ecological problems existing on a territory which has already been hardly exploited.

Several plants were consequently realized abroad having advanced technological dimensions and sometimes an overcapacity in respect of the local demand, what allows to marginally serve also the Japanese market.

SIMILAR OR DIFFERENT ASPECTS CONSIDERING THE CHEMICAL INDUSTRY IN JAPAN AND ITALY

We find a similar situation in both countries if we consider that the chemical industry is one of the sectors which has been given priority as regards development.

Another point where we find a similar situation is represented by the steps of development, which are typical to "followers" countries having chosen to get a strong position in inorganic chemicals and petrochemical industry. Thus as a consequence of another factor which is character of the chemical industry in both countries, say a deficiency as regards original technologies (exception is made for some cases only).

It must also be pointed out that both Japan and Italy are poor in energetic resources and raw materials as well.

The aspects which make the chemical industry different in Japan and Italy are several and of all kinds.

At the origin, as a factor which had a great importance in the ends of development, we must point out the different role which the Government had in the two countries.

As regards Japan it meant a more relevant protection of the home market through the Board of Industry and Trade (MITI) which has also the task of defining programs of development in cooperation with the companies.

Another factor which makes different the position of Japan and Italy is to be seen in the economic areas where they operate and are competitors, which have different features.

Italy has to operate in an area such as Europe, which is very open to all changes and where the quality level of products is very much developed. The demand for chemical products in Italy is essentially for sophisticated types, thus in presence of a very low capacity of innovation.

As regards Japan, on the contrary, we can see that it exists a chemical industry which is in a position to meet particular national requirements. The policy of Japanese companies is oriented to the development of processes of transformation and in the course of time they became very qualified.

PROSPECTS OF FUTURE EVOLUTION ALL OVER THE WORLD

It is necessary here to go through the world situation in order to rapidly see which are the prospects for great changes in the conditions at the length, so that indications can be drawn as regards the possible alternatives to be taken in behaviour by the national industries, particularly in Japan and Italy.

The major factors of change, the consequences of which we already had to suffer during the last years in an almost shocking way, are essentially the development of emerging countries and the lack of raw materials. As the local demand is growing, the underdeveloped countries originated an early industrialization process, what in the chemical sector means basic petrochemical productions and some derivatives activities such as fertilizers, some types of thermoplastics.

Both Japan and Italy are subject to this threat: the former from China and South-Eastern Asia, the latter from Arabian countries.

To begin a petrochemical activity and increase it is depending on the possibility of having know-hows available, which can be obtained in plants which are part of the technological progress. The possibility of beginning this activity for emergent countries however, is more a matter of extra economic reasons such as political will as regards industrialization, large exceeding capitals, than a matter of strictly economic considerations.

On the other side the limitations of ecological nature become more and more pressing in the industrialized countries, so companies are favourable to move some basic productions to the emergent countries.

If the emergent countries undertake and develop a national chemical industry the possibilities to export from other countries will of course diminish.

As far as the capacity of plants exceeds the local demand, it is clear that these countries will have some quantities of products available and try to export them: we will have here a stronger competition.

As regards raw materials, the critical situation is due to the lower quantities available all over the world: the basic chemicals production especially petrochemical, are particularly conditioned by this event.

The industrialized countries have a large choice as to the location of their plants taking into account the changes on.

On principle the policy which has to be endowed would be to encourage the activities requiring more technology, more research and skilled personnel.

As regards basic chemicals it could be convenient to develop new technologies of process and thus to the end of getting more savings in energy as well as in costs of plants, and then of realizing processes of production starting from alternative sources.

As regards fine chemicals, the strategy will be oriented to meet the needs of improving the performance of products required by the technological progress of the downstream sectors.

From this point of view Japan and Italy are subject to the same challenge as all other industrialized countries.

Another area where evolution is possible, is represented by the possibility of a wider cooperation between industrialized and underdeveloped countries. Industrialized countries can give know-hows selling basic petrochemical plants or give know-hows and agree to joint-ventures particularly as regards intermediates, or be present in underdeveloped countries to produce especially fine chemicals by means of joint-ventures with official bodies.

In consideration of the conditions in which Japanese and Italian chemical companies operate, they cannot help following a selective policy which encourages activities in the countries where they are strong.

Under these circumstances Japan and Italy could study different forms of cooperation which allow to both countries to be more competitive on the international markets.

A first example of cooperation could be a common program for Research, where the rapidity in getting over critical points in the activity of research would allow to both countries to be present and competitive all over the world.

Besides, possible agreements between Italian and Japanese companies would allow Italy to run plants abroad where Japan has already activities, especially if they apply technological innovations. Thus in emergent countries.

Japan and Italy would so be able to better satisfy the local demand, to operate in areas where the dynamic of development is high, to easily have supplies of raw materials or products requiring a first transformation process, which both of them need.

As an example of cooperation between Italian and Japanese companies we can mention the case of Montedison which recently signed some agreements with Japan, regarding :

- the cooperation Montedison - Mitsui Petrolchemical in the field of the conventional process and the process using high return catalysts for polypropylene;
- the creation of a fifty-fifty company (Retipolen Espansi) Montedison-Sekisui Group, which operates in the field of reticular polyethylene;
- the creation of a company named Montedison Eslon where Montedison has a 65% basis participation and Sekisui Chemical a 35% one, which operates in the field of the transformation of plastics. Sekisui Chemical granted Montedison Eslon a licence to use its process for PVC pipes and couplings.

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DOMESTIC POLICY EXCHANGE RATE AND
BALANCE OF PAYMENT IN JAPAN

by

Prof. Takafusa Nakamura

Professor Tokyo University

Domestic Policy Exchange Rate and Balance of Payment in Japan

Takafusa Nakamura

Introduction

It will be interesting for Italian economist to consider the Japanese experience on the relation between economic policy and balance of payment in 1970's. The purpose of this paper is to sketch the trend and fluctuations of Japanese economic policies and business cycle in section I, then survey the exchange rate and balance of payment and various influences of them to the other sides of Japanese economy - such as economic growth, inflation and fiscal policy in the section II. These experiences will be useful to consider the economic problems of coming 1980's for us.

1. Japanese Economy in 1970's

Japanese Economy in 1970's has been strongly influenced by the conditions of international economies. Of course, the Japanese Government and the Bank of Japan made some crucial parts on the decision making of economic policies. However, the very importance of the international factors were the character of 1970's.

In the August of 1970, under the influence of American "New Economic Policy" by President Nixon, Japan evaluated the exchange rate of yen to the U.S. dollar to 308 Yen which was kept at 360 since 1949. This decision introduced a psychological panic to Japan's business society, because of the fear that the Japanese competitive power will decline and the sustained growth of Japan will not be able to recover. Looking at this situation, the fiscal and monetary authority of Japan took bold expansion of public investments and the loose money policy to get rid of this panic since the last half of 1971 to 1972. By these policy devices business society recovered in the last half of 1972, at the same periods, the inflationary trend came in sight. The excess supply of currency stimulated the speculations - at first to the land and then to the various commodities. Price indexes began to seriously increase, and the monetary authority took tight money policy since the beginning of 1973, however, the excess currency could not be absorbed so rapidly. The oil crisis in the October of 1973, struck Japan where the flame of inflation did not yet go out. Not only prices of the oil and related products but of almost commodities raised severely, so that the tight money policy strengthened after the oil crisis and kept through two years until the April of 1975.

Chart I show the domestic economic indicators such as diffusion indexes, which tells us the story of economic fluctuation in the 1970's. The process of the period until 1973 - the pseudo-panic in 1971, then excess supply of currency and the galloping inflation in 1973 - will be clear by following these indicators.

I would like to light up the process of international side of Japanese economy in this paper, since, I think, the new stage of contemporary Japanese economy began after oil crisis of 1973. Japanese economy succeeded in enpressing the inflation through two year's severe tight money policy, however, as the consequence of this severe policy, a recession struck which was gravest after the second World War. Minus growth of GNE at constant price, especially downfall of industrial production which decreased 19% from the last quater of 1973 to the first quarter of 1975, and extraordinary low profit rate of big firms. This situation supplemented by the fact that the tax revenue of the government decreased rapidly because of the downfall of incomes of individuals and especially the firms. The public bond had to be increase to cover the deficit of fiscal expenditure. The share of public bond in the government revenue increased from 10.6% at 1974 to 24.5% at 1975, 28.7% at 1976, 34.0% at 1977. Under such a situation, the fiscal authority had to be timid towards the requirement to increase the government expenditure for the public investment to stimulate the business activities. Therefore, though the tight money policy released in the April of 1975 the government was negative to take any policy to improve the economy except trivial devices.

Thus, Japanese business should try all the efforts to survive - for example, we can remember a symbolic term "the dietting management" which means that the business decrease the employees under the restriction of life-time employment system, and to pay back the loans from banks to cut off the burden of interest payment. Such a efforts continued about five years since 1974. Of course, they tried all the other means to cut off the management cost. The effort of "dietting" succeeded in the recover of profit at the beginning of 1979. As the by-product of this negative policy, the situation of the employment became very severe. --- unemployment increased, especially that of elder male employees, on the other hand, the female employees increased because their wages are lower than that of male. Moreover, the employment of manufacture industry decreased through the "dietting" which was covered by the increase of tertially industries.

Thus the labour market changed into the buyer's market from the seller's market in the days of hyper-growth. Under this condition of labour market, the annual wage negotiation by the labour union restricted to be moderate. The rate of wage increase could not over 10% after 1976, which level could exceed a little the rate of increasing consumer's price, however, the increment real volume of living was at most 2 or 3 percent in a year.

Thus, as surveyed in this section, the stimulating power of domestic demand was not so strong that for the recovery of Japanese economy, inevitably export should play most important part at 1975 or 1976.

Afterwards, since 1977 and 1978, the Government expenditure increased so rapidly to accomplish seven percent economic growth without the increase of demand from abroad. Since 1978, the domestic demand such as private consumption and private investment are going to increase by the success of "dieting" and the stimulation policy. Looking from the inside of Japan, it looks like that the long adjustment period after the oil crisis finished at this period. However, as shown in next section, the new tight money policy is going on now. The future course of Japanese economy will be not so easy.

2. International Situation Surrounding Japan

After the oil crisis Japanese economy required some new source of demand to recover from the depth of recession, but, as we mentioned above, the domestic market was not so expectant. The expectation to the foreign market inevitably expanded. Moreover, it was favorable condition for Japan that the terms of trade of Japan was going to worsen from the influence of rising price of imported crude materials, as was represented by the case of crude oil. On the other hand, the devaluation of yen from 265 yen at September 1973 to 305 yen at December 1975 was another favorable condition for Japanese export.

Chart 2 shows the behavior of exchange rate, foreign trade in US dollar, volumes of export and import at constant price, and the price indexes. Although the balance of trade was deficit only few months after the oil crisis, the surplus of trade was not so large mainly because of the slump of world trade in 1975. But since the beginning of 1976, exports got on the rising stream - the business made every effort for cutting off the cost of production and expansion of foreign market beside the fact that the world trade recovered from the bottom. The consequence of such efforts was the fact that the price index of Japanese export took a downward trend since 1974, despite of the upward trend of that of import prices. The industries of Japan could find the means of survival by export. The share of balance of trade was very important to compensate the declining of private investment and keep the 5 - 6 % growth trend of total economy.

Table 1 shows the structure of increment of GNE at constant prices. Reflecting the improvement of the balance, the exchange rate of yen took the course of evaluation. However, the range of evaluation was rather mild until the end of 1976. But at the beginning of 1977, the international situation has changed to blame the enormous surplus of Japanese balance. U S Government gave a warning that Japan should take every effort to stimulate the domestic demand and suppress the increase of export, or the balance of trade at the countries except OPEC will suffer unfavorable influences, and the exchange rate of yen should be evaluated more and more. Japanese

business went down a mini-recession again by the deflationary influence of evaluation in the last half of this year, Japanese government forced to take a real policy to stimulate the domestic economy through expanding the public investment and loose money policy in spite of her deficit of revenue.

Table 1. Structure of Increment of GNE at 1970's Price(1,000 billion yen)

	GNE	Private consumption	Private fixed investment	Private Inventory investment	Gov't Investment	Gov't Consumption	Current Balance
1973-74	-15	1,123	-1,832	-994	-101	310	2,410
1974-75	2,975	1,946	-749	-1,215	359	393	1,425
1975-76	5,635	2,372	372	616	8	216	1,923
1976-77	5,710	2,288	243	-257	1,314	352	1,481
1977-78	5,906	3,172	1,974	244	1,784	453	-2,122

In 1978 and 1979, this policy succeeded in the objectives the domestic market recoverd and the balance of trade changed to deficit in 1979.

Now, I would like to consider the influences of the violent fluctuations of exchange rate of yen to the Japaness balance of payment problem. Truely, the rapid evaluation of yen since January 1977 to October 1978 and the devaluation afterwards introduced some comlex. disturbances to Japanese economy. These influences will be able to consider from three sides. The first is the time lag which is appeared on the export - so-called J-curve effect. The second, the discrepancy of the balance of trade when it is shown from abroad or domestic. The third, the influence to domestic prices. Let us deal with these three problems.

At first, the J - curve effect is interesting. As it is well known, under the floating exchange rate system, we can see the J-curve effect. Few monthes after the exchange rate devaluates(evaluates) , the export at foreign currency rather decreases (increases) because the exports contracts at the higher (lower) rate realizes. The true positive (negative) effects will be appear after this transitory periods. In Japan, the evaluation of yen continued over 20 monthes, So that the negative effects on her exports did not appear so long - about 12 monthes. As shown in chart 3 , once the exchange rate evaluated, the exports in dollar increase about 6 monthes, it decreases after this period, But in this case, as the rate continuously raised, so many effects over- rapped that, the total export in dollar begin to took downwards trend after 12 monthes, This time lag is very important because the influence of evaluation of yen do not appear about 12 monthes, the evaluation goes inevitably to extremly higher than sound level, then the devaluation begins and go to some too low rate through the reverse process of J-curve effect. Although at the middle of September 1979, for example,

Japanese yen is about 224 yen which level, we might say, will be too low when we compare the trend of severe inflation in U S and more mild case of Japan, but the behavior of the exchange market looks like lead to lower rate of yen. We must suppose some reaction after several monthes.

If such a fluctuation will be usual process under the floating system, it will be necessary to find some alternative system to dicide exchange rate. Without such a system the domestic economy should face to perpetual swings caused from the fluctuation of exchange rate.

We can see an adequate example the swings caused the exchange rate fluctucation. in Japan.

In chart 2, the difference between the export and import at constant price is extremly wider than that of nominal U S dollars. This is the consequence of the price of imported goods goes to higher comparing with the price of exported goods. Thus the volume of import almost constant from 1974 to 1977. On the other hand, the volume of export increased rapidly. Japan took the disadvantages under the unfavorable terms of trade. In this situation, the evaluation of yen introduced a new distrubance, Looking from inside of Japan, the price of imported goods decreased reflecting the high exchange rate, on the other hand, the price of exported good in yen should increase if exporters wishes to keep the total receipt. However, Japanese firms wished to keep the volume of export sacrificing the receipt of export. This price behavior invited further evaluation of yen. The price of Japanese cars in U S begin to rise in the last half of 1977, after the receipt of yen declined too much.

The third problem was the influence of changing exchange rate to domestic economy of Japan, When the evaluation of yen decreased (increased) the price of imported good, the level of wholesale and consumer's price moved to the same direction, so that in 1977 and 1978, the wholesale price index experienced absolute decrease and increasing rate of consumer's price were lowest in 1970's. This was a unexpected by - product of the evaluation. Moreover, the industries based on the imported materials - such as iron and steel, oil refinery, petrochemical and elctric power etc, were very lucky because of the decreasing cost of crude materials, however, the export industries except several ones with strong competitive power- such as motor - car, electric machine and electronics etc., troubled at the decreasing reciept. These chain of influences flew upstream since November 1979 when value of yen began to devaluate.

The wholesale price took upwards trend severely because the influences of the rising prices of imported goods. The balance of industries depending on the imported materials became tight. The Bank of Japan took a dicision to raise the official rate of discount to protect the possible hyper-inflation caused by the devaluation and the increased oil price. We can find another example on the unfavorable effects of the floating exchange rate system.

Concluding Remarks

I made a survey on the Japanese economy in 1970's. We can understand the standpoint of Japan in the international perspective. The position of Japan in 1970's and 1980's, are very important and Japan should feel and play heavy responsibility to keep stable development of the world economy. We can, moreover, understand that Japan should not behave from only her interest, for example, if the fluctuation of exchange rate of yen might be an unstable factor for domestic economy of Japan, she should not try it at a fixed level. Or Japan should not try to expand her export over some reasonable level which the stable balance of world economy.

However, I would like to say that, the extreme fluctuation of exchange rate of a country introduce an unstable state for her domestic economy.

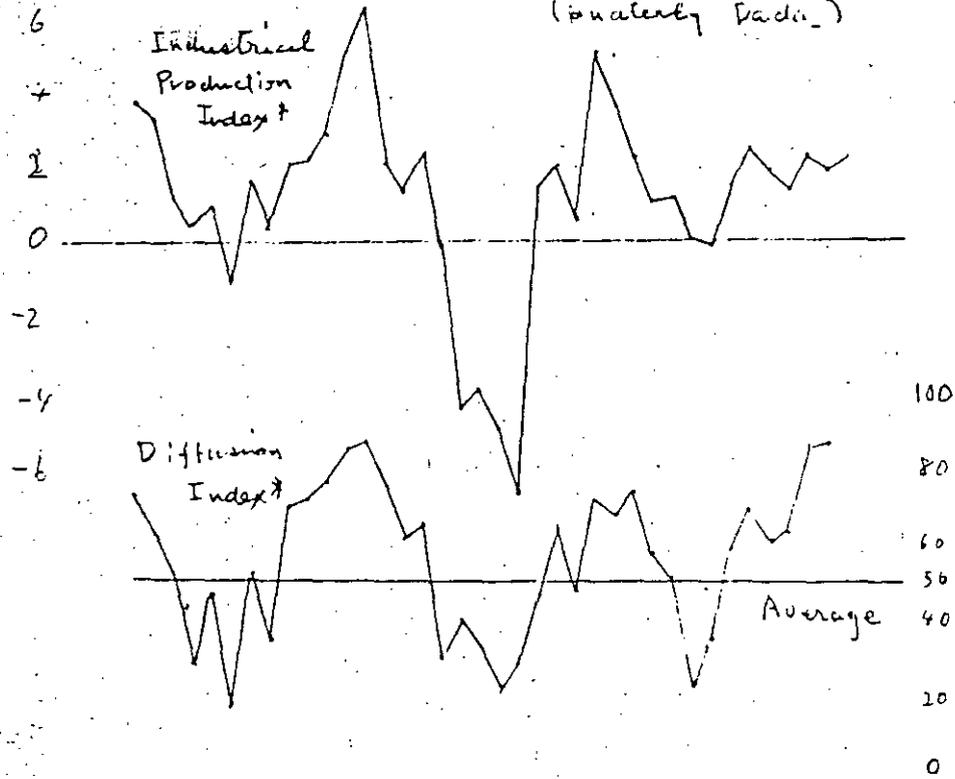
Japanese experience since 1977 was an adequate example of it as I have shown in section 2 of this paper. I wish to propose that some possible range on the floating exchange rate should be set up to avoid the extreme fluctuations that will bring about unstable situations in the domestic economy.

Of course, I do not wish to reconstruct the fixed exchange rate system, or any other severe restrictions. My idea is that a loose range should be set up - for example, from some one day after one year, the exchange rate should not shift some fixed percentage - may be say 10% - to upwards or downwards.

I can forecast many troubles if we set up such a limits. - how to deal with the exchange market if the excess demand or supply introduce over limit rate? how to make up the international understanding? and so on.

However, I would like to say that, present floating system is a product of a transitory period, we have to look for more reasonable system which will compatible the international and the domestic economy as possible as we can.

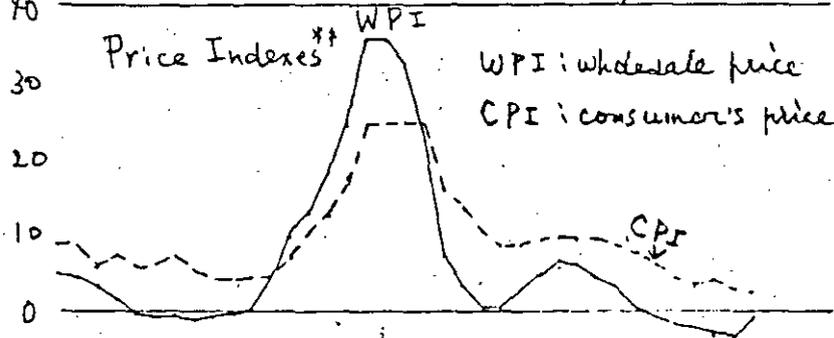
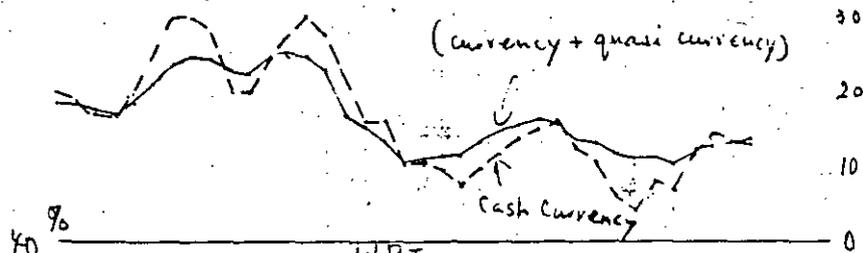
Chart 1. Domestic Economic Indicators
(quarterly basis)



GNE* (at constant price of 1970)



Currency ††

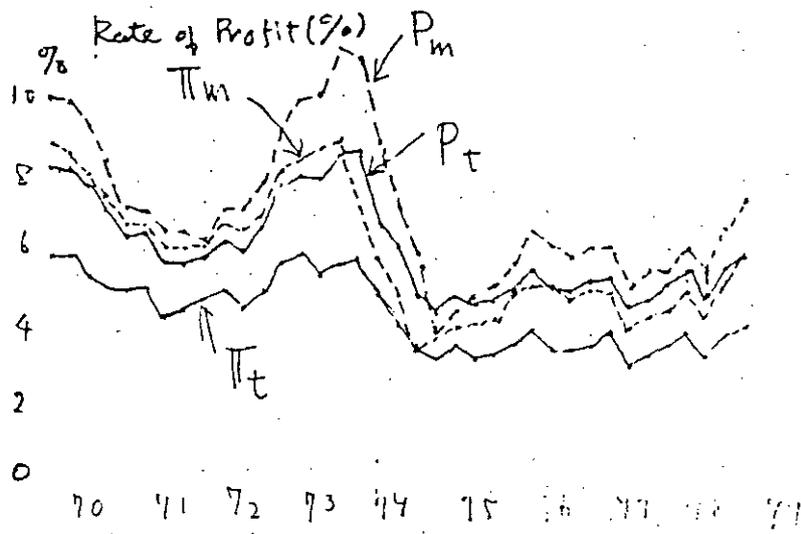


1970 71 72 73 74 75 76 77 78 79

†: Ratio to Previous Quarter, %

††: Ratio to the same Quarter of the last year %

Chart I Continued



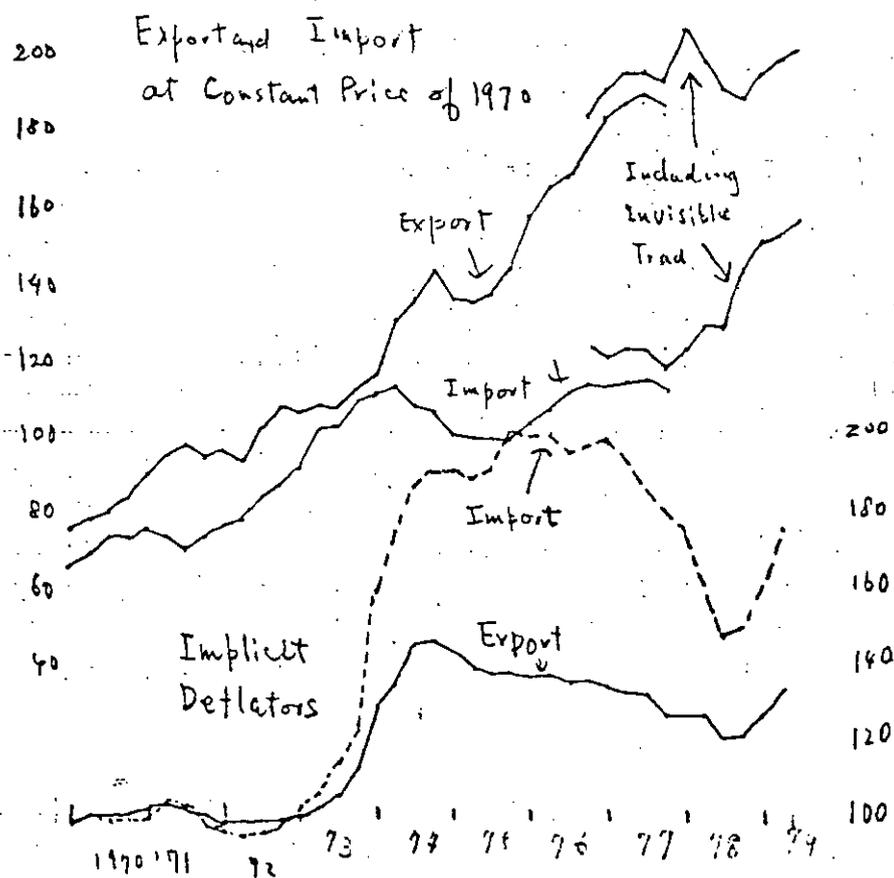
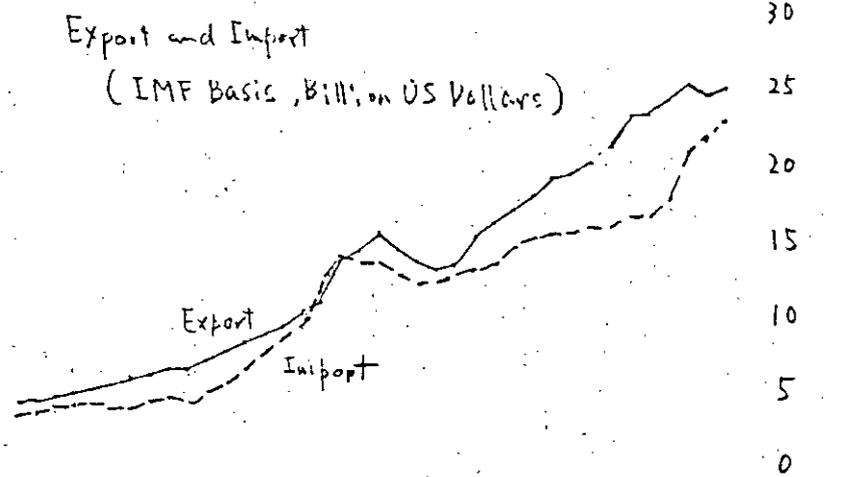
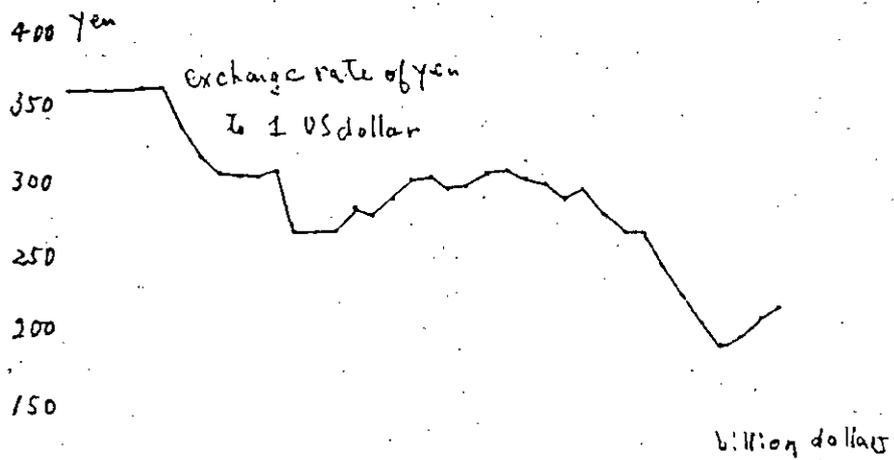
P : Profit-Total Capital Ratio (%)

Π : Profit-Turnover Ratio (%)

t : All industries

m : Manufacturing

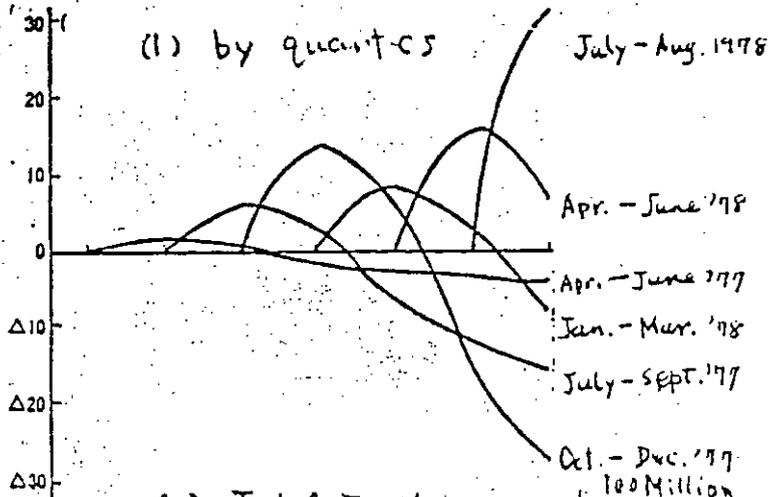
Chart 2. International Trade and Balance



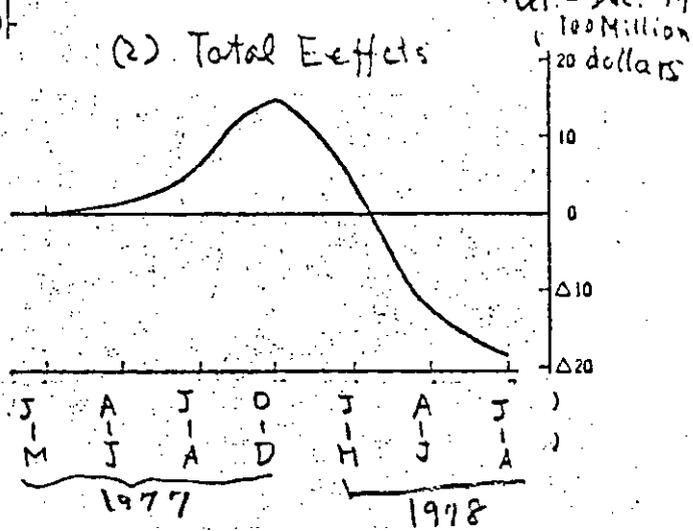
100 Million dollars

Chart 3 Jcurve in Japan

(1) by quarters



(2) Total Effects



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JAPAN AND ITALY : OLD AND NEWLY EMERGING
ROLES IN THE INTERNATIONAL DIVISION OF LABOUR

by

Prof. Fabrizio Onida

Bocconi University

JAPAN AND ITALY: OLD AND NEWLY EMERGING
ROLES IN THE INTERNATIONAL DIVISION OF LABOUR (*)

Introduction

Among the three major fastest growing countries after World War II (Germany, Japan and Italy), Italy and Japan both classify as late industrializing nations.

Following commonly accepted definitions, Japan was the only non-European country that went through an industrial revolution before the beginning of the XXth century. Germany, Italy and Japan were the three major losers of World War II and all three experienced a surprisingly rapid process of reconstruction and a growing share of world manufacturing exports since then. Therefore many historical analogies justify increasing attention and efforts of quantitative analysis of the economic development performance in these countries. This paper is concerned with the intensity and composition of economic "openness" of Italy and Japan. Without any claim to cover serious historical issues, Section I recalls some essential similarities and differences in the long run historical profit of industrialization and trade until World War II. The changing mix in commodity exports and trends in import propensity during the post-war period are then briefly reviewed in Section II, and some reasons are explored for explaining the faster rate of "industrial reconversion" exhibited by Japan, in the last 30 years, including the newly emerging scenarios of international development and specialization in the "post-oil" era. Section III contains a summary and some concluding observations.

(*) A valuable contribution in providing the background material and arguments for the present paper has been given by Dr. Franco Malerba of the "Bocconi" University.

I - THE HISTORICAL PROFILE

Both Italy and Japan underwent the "big push" or the early phase of modern industrialization approximately in the three decades preceding World War II.

In both countries this process was initially dominated by the rise of the textile industry (first, as import substituting, then, as a major exporting industry), whereas basic metals and engineering manufacturing activities gained momentum in a subsequent phase. Public expenses for basic infrastructures (e.g. railroads) and war preparations provided crucial opportunities in both countries for the take-off of these two modern manufacturing industries.

But two important features of Japanese historical development are worth noticing, in contrast with the Italian experience and, for that purpose, with the experience of most Western European countries. First: a substantial degree of "openness" of the Japanese economy started only after 1860 and reached comparable European levels only shortly before World War I. Second: the inter-war period was a peak period for Japanese "openness", in terms of exports of manufactures and import of industrial materials, since Japan was least affected by the 1929-32 crisis. Both features bear implications for the more recent post-war period.

Table 1 shows that the weight of the "foreign sector" (merchandise exports and imports) over the national product in Japan was still about half the corresponding value for Italy as an average during the last two decades of the XIXth century. But the same table also shows the impressive opening of the Japanese economy in the decades preceding World War II. The emergence of Japan as a major trading nation in this century appears even more dramatic if we look at relative export shares (of manufactures): see Table 2 and Fig. 1. While at the beginning of this century only 1.5% of major countries manufactured exports originated in Japan, as against 3.6% in Italy, thirty years later the Japanese share (4.0%) had already surpassed the share of Italy (3.8%) and the declining share of Switzerland (2.8%). The Japanese share of world manufactured exports peaked soon before World War II (6.9% in 1937) (see note A at end of section). Such an impressive performance can only be compared with the emergence of the United States, who in the first half of this century more than doubled its share of world manufactured exports, before undergoing the long decline of the recent post-war period (see note B at end of section).

To get a clearer understanding of analogies and differences between long run evolution of Japan, and Italy's international position, let us briefly recall the main phases of their industrialization processes from the viewpoint of their respective foreign sectors.

The Japanese Experience

Following a periodization recently proposed by M. Baba and M. Tatemoto (1968), the development of the Japanese foreign sector up to 1937 can be synthesized as follows:

- 1858-1867 - Even before the attempted colonization by the U.S. expedition (1853) and until the May 1867 revolution, the absence of tariff autonomy accompanied the early rise of Japanese foreign trade, with exports dominated by traditional semi-manufactures (silk and tea accounted for about 80% of total exports) and 70% of registered (see also note C at end of section) imports dominated by cotton and wool manufactures. The trade balance was in surplus for most of the decade.

- 1868-1896 - The Meiji restoration (1867) opened a great period of social and economic change until World War I. Metal products and capital equipment started gaining share over total Japanese imports and the trade balance tended to deficit. While silk and tea kept a dominant share of Japanese exports, from 1880 to 1896 the first phase of import substitution took place. Cotton and woollen manufactures started being produced at home, first with traditional techniques (e.g. hand reeled silk), then with more capital intensive foreign technology (e.g. French silk factories, British cotton and wool factories). As a consequence, the trade balance rapidly turned to surplus and the share of manufactures over total imports started falling at the advantage of materials and food (Table 3). Chinese reparations and fairly large capital inflows allowed domestic infant industries to gain strength before the end of the century.

- 1897-1915 - While the composition of imports was changing very rapidly, with textiles, other raw materials and machinery taking the place of manufactured textiles and clothing, a favourable export performance due to a fast growing world demand of manufactures and semi-manufactures allowed a fairly easy financing of capital goods imports. Traditional semi-manufactured exports were therefore crucial for consolidating the process of Japanese industrialization (see also note D at end of section). The contribution of exports to total GDP growth was 29% as against less than 10% in the previous period (Table 4). Nonetheless, owing to the rapid import growth, the trade balance tended to deficit. Again, the efforts of industrialization through import of foreign machinery (for domestic production of textiles, construction materials, agricultural goods, energy, etc.) were sustained by sizeable foreign capital inflows and indemnities following the successful Russian-Japanese war (1897-1903).
- 1921-1937 - This was a crucial period for the Japanese international position in all respects. First, Japan's non-dominant position as textile exporter in the world markets, as a rather rapid follow-up to the import substitution phase during which the domestic import textile industry had been consolidated. In 1937 more than 60% of manufactured Japanese exports consisted of textile manufactures (yarns, fabrics, clothing). In the same year Japan's share was 23% of world textile exports: Malerba (1979), Meizels (1963, p. 342). A marked Yen depreciation reflected in a clear downfall of Japanese relative export prices (Fig. 2) and associated to a rather high price elasticity of Japanese exports in the world market (see note E at end of section), allowed a strong increase in relative volumes but also in relative values of manufactured exports. As already mentioned at the beginning, the Japanese export share in world manufactured exports reached the impressive peak of 7%, higher than France (see again Table 2).

In this period one clearly sees the signs of today's well-known ability of the Japanese industry to adapt its supply to trends in world demand. This is also reflected in constantly high values of the income elasticity of Japanese exports (see also note E at end of section). Owing to this high competitiveness and prompt adaptability, Japanese exports were least hit by the big world economic crisis of 1929-32; in particular by the exceptional fall in U.S. import of manufactures. Japan was the only industrial country whose exports to the U.S. in 1937 (mainly textiles and consumer goods) managed to reach a level far higher than the pre-crisis 1929 level (see note F at end of section).

From 1913 to 1937 per capita manufactured exports in Japan roughly quadrupled, while in Italy they increased about 70% (Table 8). Even in the strongly emerging United States, per capita manufactured exports increased by 65% in the same period. As a reference, in the declining Britain they decreased by 40%.

The contribution of exports to Japanese GDP growth from early 1920's to mid-1930's reached an unprecedented 39%. This is perhaps the only period of Japanese economic history 1860-1960 which can be approximately defined as "export-led growth". The share of manufactured exports of total Japanese exports jumped over 57% in the period 1936-40 (Table 3). The proportion of domestic manufactured production exported abroad reached the all historical height of 40% for Japan in 1937 (Table 5).

But the picture on the import side is also crucial, since in the two decades preceding World War II Japan underwent the second marked process of industrialization through import substitution, this time related to capital goods. The share of manufactures of total Japanese imports fell to 15%, down from 32% at the beginning of the century and 52% in 1976-80 (again Table 3). The domestic income-elasticity of Japanese import demand fell below 0.4%, according to Baba - Tatemoto estimates (1968, p. 181).

While GDP per capita approximately doubled from 1913 to 1937 (as against increases of 16% in Italy, 15% in Britain and 30% in U.S.A.) per capita manufactured imports went up by 10% (Table 8).

Despite a rate of GDP growth (global and per capita) remarkably higher than Italy since the early XXth century (again Table 8), and despite the absence of any explicitly autarkic domestic policy comparable to the Italian experience during the 1920's and 1930's (see below), Japanese and Italian ratios of import to apparent consumption in manufacturing fell by about the same percentage from 1899 to 1937 (Table 8).

Despite these rather favourable trends in imports and exports, in the inter-war period the Japanese trade balance stayed in deficit (although negligible from 1929 to 1936), mainly due to the sizeable deterioration in terms of trade, whose index went from 100 in 1929 to 23 in 1937 (see note G at end of section).

The Italian Experience

Accurate and detailed quantitative analyses of the relations between industrialization and development of the Italian foreign sector are not yet available. Some long-term series concerning the Italian foreign trade have been included in past international comparisons of world exports, such as Tyszynski (1951, Baldwin (1958) and Maizels (1963). A rather synthetic profile of Italian imports and exports and relative propensities from 1861 to 1964 can be found in Balloni (1969). Here follows a brief recollection of the main phases of Italian industrialization since the period immediately preceding national unity (1860), with regard to major implications for Italian "openness".

1850 - mid - Cavour, the outstanding political leader of the national
1870's unification, impressed a free trade approach on the initial phase of post-unity development. Today most economic historians (G. Luzzatto, R. Romeo, and A. Gerschenkron among others) agree that such an early opening to European and overseas partners brought about remarkable costs together with the traditional benefits (capital inflow from abroad). In fact, an open and unified market was imposed upon a country not yet endowed with the basic agents for industrial development (entrepreneurship, labour skills, nationally minded bureaucracy, etc.) and for modern agricultural take-off (see note H at end of section).

In this period, while public and foreign capital was mainly directed to build basic infrastructures (e.g. transport, water supply), the dismantling of wheat protection and subsequent reforms of customs regimes brought about beneficial opportunities to silk and wine exporters, at the expense of the traditional agrarian centers (cereal growers) and of the cotton industries, including those located in Southern Italy (strong competition of British textiles). Therefore, on the one hand, the more modern part of agriculture was encouraged but, on the other hand, the infant textile industry was penalized, the Southern part of the country started its secularly lagging growth and, finally, the metal and engineering industries missed their first opportunity to take-off, lacking a rapidly expanding domestic market. As a matter of fact, GDP growth registered a poor 1% average annual rate of growth during this phase.

Mid-1870's - This period was characterized on the international economic
to scene by the European agrarian crisis (mainly attributed to
mid-1890's rapidly increasing imports of cereals from overseas, following a substantial lowering of ocean freights) and a worldwide recession initiated in the late 1880's. In Italy the "centre-leftist" government headed by Depretis reintroduced protectionism for both agriculture and basic industry (metals, textiles). But Italian agriculture had already missed the opportunity of an efficiency minded French revolution, and steel and metal industries soon found support in

a more sheltered "public demand" (state subsidized ship-building and railroads) than in an expanding private domestic and foreign market (see note I at end of section). The engineering sector was still in a backward situation, while most specialized capital goods (agricultural and textile machinery and machine tools) continued to be imported from abroad. Towards the end of the century Italian exports still originated from almost 70% of food and raw materials (mostly silk) (Table 6A); textiles and clothing were about 70% of the remaining manufactured exports (Table 7); these percentages were very close to Japanese ones.

1896-1915 - After two subsequent government coalitions, more sensible to the agrarian rent and to big industrial cartels (Crispi 1887-1896, Liberal Right 1896-1901), the Giolitti government managed the country in its "big push" or main period of industrial revolution. While public and foreign investments fed the expansion of the basic industrial infrastructure (transport, hydroelectric energy), the metal and engineering industries started to integrate among themselves. The share of industrial value added upon GDP rose from 19.6% (1895) to 25.0% (1914), while the share of agriculture correspondingly declined from 49.4% to 43.0% in the same period. The Italian share of world manufactured exports was roughly stable but manufactures started gaining weight in the total basket of Italian exports at the expense of raw materials (Table 6A). Within Italian manufactured exports, the share of textiles and clothing remained overwhelming (more than 60%) but began to decline in favour of metal-related and various consumer goods (Table 7).

The emerging of the new American continent attracted a huge inflow of overseas Italian emigrants, whose remittances helped substantially to finance a persistent trade deficit. At the same time German banks expanded their role of capital importers into the newly emerging Italian industry; a role that was to gain importance during the subsequent inter-war period. The preparation and conduct of World War I gave the first spurt to the engineering industry, which thereafter began to be more carefully protected (see note J at end of section).

1921-1950 - The new 1921 Customs Tariff increased protection for the already largely concentrated steel industry and introduced substantial protection for the emerging engineering industry. While import substitution effects were supported by an increasing availability of electrical energy for industry, manufactured exports were sustained by the lira depreciation after 1921. Before the great world crisis, the infant automobile industry found rapidly increasing export outlets (export reached 61% of total Italian production of road vehicles in 1928, as against 27.4% in France, 14.3% in the U.S.A. and 7.7% in Germany), the domestic market being still rather tenuous (1 car : 254 inhabitants in Italy in 1928, against 1:137 in Germany, 1:41 in Britain, 1:40 in France and 1:5 in the U.S.) (see note K at end of section). But Italian manufactured exports, much like the Japanese, remained overwhelmingly dependent on textiles and clothing (66% in the "peak" year 1929 and almost 50% in 1937).

Most European countries went back to fixed exchange rates in the mid-1920's. (Mussolini, head of the fascist regime, imposed a much too strong revaluation of the lira in 1927 ("quota 90" against the pound sterling), in a political rhetorical effort to improve Italy's international status. Despite some compensatory measure for gaining entrepreneurial consensus (fiscal and domestic transport costs cuts), Italian exports were badly hit (see note L at end of section).

After the great crisis, the Italian economy consolidated its isolation from the international market. Italian industry became more and more state controlled ("Corporate State"), badly damaged by an increasing dualism between cartel agreements among large firms (favoured by strict bank industry connections) and atomistic competition within the immature and dispersed universe of very small firms and handicrafts. Large and inefficient industrial firms were increasingly taken into rescue operations, first through I.M.I., then through the newly born "Istituto per la Ricostruzione Industriale" (I.R.I.), which was to become a central feature of the post-war "mixed economy".

Conclusions on Italian and Japanese "Openness"
until World War II

Japan's particular geographical location was probably determinant in keeping this country out of European colonial domination since the middle ages. Its temperate climate, on the one hand, favoured a relatively high degree of national self-sufficiency in basic commodities and, on the other hand, made this country less attractive to European colonial powers reaching out for abundant supplies of tropical products. North American attempts to submit Far Eastern areas in the XIXth century were also made less urgent by a large availability of mineral and agricultural resources in North America itself and in the nearer Central and Latin American countries.

Perhaps precisely this absence of colonial domination was a decisive factor in explaining Japan's earlier industrialization, relative to all other non-European countries. A lower rate of population growth relative to other semi-industrialized countries (see note M at end of section), where a more rapid drop in mortality rates was brought about by the diffusion of Western medical innovations, prevented Japan from heavy demographic pressures which have typically choked off early efforts of industrialization in developing nations during the last two centuries. Moreover, Japan could avoid the massive disruption of local handicraft activities supplanted by imports of cheap manufactures from Western colonial nations.

Japanese economic culture, grown in isolation from the Continent until mid XIXth century, struggled to maintain its "insular" character thereafter. Efforts of industrialization in late XIXth century probably reflected an urgent need to maintain self-sufficiency and to cover against the risk of further North American invasions (see note N at end of section).

The late, but very rapid, opening of the Japanese economy during the first decades of the XXth century should probably deserve more attention than it has received so far, when one tries to understand the not-too-remote roots of Japanese insularity and export success in the second post-war period. The striking similarity between the Japanese and Italian manufacturing export structures until 1950 (Table 7), the presence in both countries of two similar subsequent import substitution phases (first textile consumer goods, then single machinery and basic intermediaries), a similar structure of external accounts (trade deficits financed by capital inflow and foreign reparations or

emigrant remittances, should not lead one to forget the very different underlying character of these two countries processes of industrialization. Japan developed its industrial take-off initially almost in isolation (except for imports of locally non-available raw materials), then reached its maximum "propensity to export" just when the U.S. started to substitute for Britain as a "central" trading country, while European industrial nations went through a process of temporary closeness and autarky.

Italy was, from the beginning of its industrial take-off, closely tied to European demand for temperate food and single consumer goods, as well as the European supply of intermediaries, durable consumer goods and various capital goods. Until World War II, Italian manufactured export shares were almost stagnant. The second import substitution phase, experienced by Italy during the Fascist protectionist period, contributed to delay and distort the emergence of a truly internationally minded entrepreneurial class, while at the same time managed to keep the import propensity only artificially low. Soon after the second World War, Italy did not face any reasonable alternative to the very rapid process of European integration. Japan came out of the war far worse off in terms of destruction and poverty, but its roots of "insular industrialization" had already strongly consolidated. The same roots were well alive during Japan's growth in the post-war period.

I - THE HISTORICAL PROFILE

NOTES

- A - Only slight differences arise between those relatively recent Maizels' (1963) estimates and previous estimates, mainly due to various geographical inclusions of non-industrial areas in "world" exports. The Japanese share of world manufactured exports in 1937 was 7.2%, according to Tyszynski (1951).
- B - Notice that, basically, the same trends in relative positions of various major exporting countries, in the long run, appear if each country's share is approximated in volume terms rather than in current prices (Fig. 1). Both Japan and Italy, as well as other small European industrialized countries, were characterized by a marked downward trend in relative unit values of their manufactured exports, vis-à-vis their respective competitors (Fig. 2), as well as by a price-elasticity of manufactured exports well above 1: Maizels (1963), p. 214; Baba-Tatemoto (1968), p. 178-9.
- C - Some caution must be used in interpreting these early customs data, since in Japan, as in most countries at that time, imports of plant and equipment related to the military sector (including ships and railroad equipment) were not registered.
- D - See also Kindleberger (1962), p. 206.
- E - See again repression estimates referred to in the footnote above.
- F - Maizels (1963), p. 100.
- G - Baba-Tatemoto (1968), p. 180.
- H - Germany experienced a unified market (Zollverein) about 30 years before national unity was attained.

I - THE HISTORICAL PROFILE

N O T E S

- I - However, the Depretis government managed a significant expansionary period until 1887, during which many elements of "modern industrialization" were already present: see S. Ferroaltea: "Decollo, ciclo e intervento dello Stato", in Caracciolo (1969).
- J - See, among others, J.S. Cohen: "La rivalutazione della lira del 1927: uno studio sulla politica economica fascista", in Toniolo (1973), p. 327-350.
- K - Romeo (1967), p. 142-3.
- L - A. Caracciolo: "La grande industria nella prima guerra mondiale", in Caracciolo (1969).
- M - From 1870 to 1910 Japanese population grew at a 0.9% annual average rate, as against 1.3% in Mexico, 1.5% in India, 2.2% in Egypt and 3% in Brazil: Bairoch (1976), p. 139.
- N - Some historians have recourse to socio-cultural explanations of Japanese industrial emergence before other Asian countries. They point to the Japanese mentality and religion more concerned with earthly problems and practical action than with contemplation. However, these widely popular qualitative and ethical (as opposed to political) explanations of economic development, à la Weber and Sombart, are partly contradicted by most regional experiences (dualism) and some national experiences, e.g. catholic dominated Netherlands and Belgium managed to industrialize far before protestant Scotland, contra Weber's expectations.

II - THE POST-WAR PERIOD

Fairly detailed analyses of various post-war cyclical phases of Japan and Italy can be found in several books and papers. Here we focus only on a few considerations concerning analogies and differences between the two countries in terms of growth of their respective foreign sectors.

Import Propensity

Table 8 shows the impressive damage caused by World War II on Japan's industrial development. By 1950 Italy had already managed to get levels of per capita manufacturing production and consumption well exceeding the 1937 level. On the contrary, again in per capita terms and at constant dollar values, Japanese manufacturing production had been halved and consumption was 62% of the 1937 level. Differences between the two countries in terms of manufactured imports were still more impressive: according to the same Maizels' estimates, in 1950 per capita manufactured imports had almost doubled in Italy relative to the (autarkic) 1937 year, whereas in Japan they showed a more than seven-fold absolute decrease! Of course the sharp drop in Japan's economic activity after the war was generalized even outside the manufacturing sector. Per capita GDP in 1950 in Italy exceeded by 38% the 1937 level, while in Japan it was 27% below.

The fairly high degree of "openness" reached by Japan during the inter-war period was thus followed by a substantial cutback.

Table 9 shows that in 1953-58 Italy and Japan presented approximately the same ratios of foreign trade (goods and services) to GDP, around 8-9% for both imports and exports at constant 1963 prices.

Only in the 1960's one can clearly perceive how Italy, as all other European countries, started to increase its foreign commercial relations relative to GDP at unprecedented rates due to economic integrations. Already in the second half of the 1960's the foreign trade ratios in Italy had approximately doubled relative to 1953-58, whereas in Japan they were up by about one percentage point. By 1971-74 the Italian import/GDP ratio was 20.2% (at 1970 prices), double the Japanese ratio of 10.5%. The Japanese export/GDP ratio was slightly higher (12.5% against 21.3% in Italy).

The slow growth of Japanese import propensity since the post-war reconstruction again reflected geographical and political factors which included Japan to go back to "insular" growth. A "regional" integration with neighbouring South East Asian countries and Australia was even reinforced, but it mainly consisted of a "vertical" integration by which Japan imported its required raw materials (including coal and oil for energy uses) in exchange for manufactures. A rather intensive "horizontal" trade with the United States of America was to emerge after the mid-1960's, as a result of the impressive transformation in Japanese industry (see following point).

Investment vs. Export-Led Growth

It has already been anticipated that Japanese economic history had probably been characterized by export-led growth only during the inter-war period, when Japanese textile exports supplanted British and French production in the international markets, as a result of concomitant supply and demand factors (fully pledged Japanese specialization after the import substitution phase, disruption of international trade by disorderly protectionist moves, Yen depreciation, and so on).

As a matter of fact, the post-war Japanese growth was dominated by at least two domestic investment booms, in the 1950's and in the second half of the 1960's. Only in the early 1960's did exports grow at a faster rate than fixed investment (Table 10). As already shown (Table 9), the export/GDP ratio from mid-1950's to early 1970's grew only from 8.6% to 12.5% at constant prices. It did not increase at all if measured at current prices, due to both falling relative international prices of traded vs. non-traded goods and services during the adjustable pay exchange rate regime, and to the overwhelming presence in Japanese export basket of manufactures produced at falling relative costs (large scale technological innovation). In the same period, comparable export/GDP ratios in industrial Europe went up by 100% or more, following European integration (see note 0 at end of section). The Japanese performance was therefore characterized by a rapidly expanding domestic market until the early 1970's. In its turn, this reflected a strong multiplier-accelerator sequence fed by massive fixed investment in infrastructure, basic industries and gradually in more sophisticated manufacturing industries.

The current account balance stayed in deficit until the mid-1960's, due to the rapid rise of raw materials and food import requirements and to the absence of strong surplus invisible items.

The successful export performance was more a by-product of Japanese rapid accumulation in modern manufacturing activities than the engine for growth, although exports have systematically shifted their composition in favour of industries more dynamic in world demand and more integrated in their import output structure (see note P at end of section).

In all Italian post-war cycles exports were the most dynamic component of aggregate demand (Table 10). However, in the 1950's, while a fast growing European demand provided a favourable outlet for the highly competitive Italian manufacturing industry, a big impetus to Italian industrialization came from massive domestic investments in housing reconstruction, energy supply (electrification), road transport, which induced a fast growth in the metal-working and engineering industries. Then the "economic miracle" of 1958-64 arose out of a concomitant push of private consumer boom (a massive wave of consumer durable purchases, as living conditions started to consolidate after the enforced post-war austerity), a rapid modernization of capital equipment through import of more sophisticated capital equipment and import substituting production of non-electrical machinery, an export expansion induced by the lowering of intra-EEC trade barriers and an early boom of the fast-growing chemical industry.

After the 1963-64 monetary squeeze, very efficiently managed for balance of payments adjustment purposes (after the unexpectedly rapid deterioration of the trade and the capital account balance in the late phase of the "economic miracle") and as a response to the first post-war wage hike, the Italian growth cycle picked up again. Thereafter exports continued to increase their contribution to Italian GDP growth. From a purely statistical point of view one may then define Italy's performance in the most recent decade as export-led growth. However, unlike the period immediately following the opening of EEC, the growth of Italian exports seems to play a role of consolidating the existing industrial structure more than forcing its transformation (see note Q at end of section). Therefore, several authors prefer to speak of Italy's economic development since mid-1960's as export-supported growth rather than export-led growth. To see more clearly this point, let us compare Italy and Japan's trends in export structure in the most recent period.

The Evolving International Specialization

Up until the end of the 1950's Italian and Japanese non-food manufactured export structures had been changing along very similar lines, with the textile sector roughly halved in its importance, a still marginal chemical sector and a rapid growth of metals, engineering and light consumer goods shares (Table 7). Approximately the same trends held during the first part of the 1960's, although with some persistent differences in composition within the main sector: Japanese exports continued to be more characterized by consumer electronic goods and less machinery within the engineering sector, by more ships and less road vehicles within transport equipment, by relatively more intermediate products (fabrics, yarns, fibres) and less clothing and shoes within the enlarged textile sector (Japan had already started its decentralization of finished textile products to South East Asian neighbours, to whom it exported chemical fibres and dyestuffs, apart from textile machinery).

The late 1960's investment boom in Japan was then closely aimed at accelerating the rate of industrial restructuring, with the main emphasis on steel, electrical machinery and electronics, office machines, road vehicles and chemicals. The impact of this rapid reconversion of supply on export flows was already evident in the late 1960's and became magnified in the 1970's, when the Yen revaluation and price increases in industrial raw materials forced Japanese industry to put more and more stress on changing the product mix towards goods with higher value added and larger technological input. The more recent impact of the oil crisis has reinforced this trend. A highly aggregate but illuminating analysis by Jetro (1979) of the compared industrial structure of Japan and Germany from 1960 to 1975 (see Table 11) shows the impressive rate of industrial transformation undergone by Japan from 1965 to 1975. Within the structure of industrial value added, labour-intensive products came down from 35.2% to 26.4%, at the advantage of mostly capital-intensive construction materials (from 22.5% to 28.4%) and of relative technology-intensive sectors (from 19.5% to 21.6%) (see note R at end of section). But the comparison is really striking in terms of the export structure and the related export/production ratio. In the same 10 years, within Japanese manufactured exports, labour-intensive goods (mainly textiles) went down from 28.3% to 10.5%, at the advantage of metals (whose share

of exports, however, had made its greatest advance from 1960 to 1965) and primarily of modern engineering sectors (from 37.9% to 56.0%). The comparison of these trends with the remarkably stable (and more mature) structure of German production and exports is highly impressive. More disaggregated and wide ranging comparative analyses of foreign trade structures in the post-war period (Conti, 1978) and in more recent years (Onide et al, 1978) convey the same impression (Tables 12, 13 and 14).

The comparison with Italy's export structure, world manufacturing shares and foreign trade ratios is of particular interest to our analysis. With the late 1960's the Italian aggregate share in world manufactured exports ceased to increase, since then it has oscillated around a flat trend. In connection with this slow-down of aggregate relative growth, the structure of Italian exports has shown a considerably lesser intensity of transformation, although there are several signs indicating that from 1968-69 to the mid-1970's it has continued to approach somehow the average OECD export structure (Onide et al., 1978, p.). Moreover, if we look at Italian export shares on the OECD market, so that account is taken of various significant advances of the NIC's (newly industrializing countries) as exporters of manufactures to OECD markets in the recent years, the Italian specialization appears clearly to suffer the most in its "traditional" sectors (clothing, shoes, leather products, light consumer goods) (see note S at end of section), whereas Japan had already "disengaged" by promoting an intensive decentralization towards South East Asia (Table 14). The emerging LDC's competition, among other factors, has forced Italian traditional industries to "rationalize" (to become more capital-intensive) and above-all to differentiate and improve their product mix. This type of "reconversion" has undoubtedly contributed to the remarkable Italian export performance during the latest OECD upswing which started in late 1977.

On the whole, one may reasonably conclude that since the second half of the 1960's, while the Japanese industry has multiplied its efforts to "reconvert" in a very broad sense, the Italian industry has reacted to the emergence of a more sophisticated domestic consumer market and to the new stress of international competition more by "rationalizing" its already existing production functions than by undertaking large shifts among sectoral activities.

Compared, Italian and Japanese trends in exports during the 1970's and prospects emerging from the latest industrial policy orientations in the two countries tend to confirm this judgment. From the end of the 1960's upto the mid-1970's Japanese exports made impressive advances in most metalworking and engineering sectors where world demand (including the newly emerging demand by OPEC and NIC's) was particularly increasing: steel (especially on the U.S. and LDC markets), motor vehicles including commercial and industrial road vehicles, shipbuilding (see note T at end of section), office machinery, electronics and scientific instruments (Table 14). But most recent trends (data on 1977, the latest available year for international comparisons at disaggregated levels) and reliable information from political and business sources point to an uninterrupted reconversion of the Japanese industry which is under way. The very high Japanese specialization in steel, ships chemical fibres and simple consumer electronics and optical-photo articles had started to decline in 1977, whereas Japanese exporting efforts have been very successful in many non-electrical machinery and equipment (a traditional German and Italian specialization now challenged also by France), including the strategic power generating equipment, instrumental electronics and telecommunications. Of course, reconversion continues to take place also within sectors: e.g. video-tapes and compound TV sets are successfully exported by Japan, while more traditional tape recorders, radios and TV sets have massively shifted to South East Asian partners as producers.

Japan's high propensity to export goods whose world demand show relatively dynamic trends (see note U at end of section) is clearly reflected in various econometric estimates of income-elasticity of exports from competing industrial countries, although results concerning these statistical coefficients are highly sensitive to different specifications of the independent variables (weighted and unweighted domestic or foreign price indices, various geographical definitions of "competitors" and of "markets", inclusion or exclusion of cyclical variables proxies for supply factors, time lags and so on). Jetro (1979, p. 45-6) has published a set of internationally comparable regressions on the volume of exports and imports of Japan, U.S.A., U.K., Germany, France and Italy, with quarterly data 1967-77. Japan comes out vis-à-vis the 5 other countries as having: (a) the highest long-term income and price elasticities for export (an income elasticity of 1.622 as against 1.020 for Italy and less than 0.9 for traditional sluggish exporters as the U.S. and the U.K.: this implies that, after having taken into account relative price factors and various time lags, for each 1% increase in world imports Japanese

exports tend to grow by 1.6% (see note V at end of section); (b) the lowest long-term income elasticity and the highest long-term price elasticity for imports (an income elasticity of 1.282 as against values around 2 for Italy and Germany and the peak value of 2.6 for the U.S.; this implies that, again after having taken into account relative price factors and various time lags, for each 1% increase in domestic GDP, Japanese imports tend to increase by almost 1.3%) (see note W at end of section); and (c) the longest (after France) coefficient of delay in adjustment of exported and imported volumes to changes in income and price variables; long delays in adjustment imply, among other things, a higher probability of the so-called "J curve" or perverse short-term effects of exchange rate changes.

Some Reasons for Japan's Rapid Conversion of its Export Structure

The above comparison between Japan's persistently high speed of transformation in the commodity composition of its exports and Italy's slowdown since the end of the 1960's raises the question of which factors may explain these different trends. Here follows a brief summary of a few of them. Some of these might be called structural characteristics, having their roots in the long run economic history of the two countries. They are fairly well known, although they would deserve a closer specification of their functioning under recent conditions. Other factors relate to more recent international economic trends and they are also here suggested for further analysis.

1. A strict bank-industry management cooperation. This is one of the features of the "Zaibatsu" long tradition, soon re-enacted after the last war. Italy experienced some sort of operational connection between financial institutions and industrial management, especially during the industrial revolution period when a "mixed bank" regime was de facto accommodated even if not brought under formal regulation (see note X at end of section) but then came the disrupting "corporate state" experience launched by the Fascist regime and the system of independent and specialized financial institutions which still prevail today.

2. Financial and production decisions, in addition, are closely watched by national government, through the peculiarly Japanese industrial policy system. Miti's traditional fears of cut-throat competition among national firms and very extensive highly skilled administrative apparatus induce and permit the central government to preside very efficiently over the rapid transformation in industrial structure, export and import policy, and technological progress. Crucial domestic and international investment decisions thus tend to be taken in a nationally coordinated way, allowing the Japanese economy an extraordinary degree of resilience through the various phases of world cycles and industrial reconversion.

The Italian state-industry relations, after the distorting experience under fascism and the disorientated liberalism of the early post-war period, have been badly damaged by inefficient political leadership, disorderly legislation and the lack of a mature industrial bureaucracy of a French-German-Japanese type.

3. A high complementarity and cooperation (sub contracting) between small and big business permits a rather efficient allocation of labour intensive vs. capital intensive production (small business pays lower wages and higher rent price for capital) (see note Y at end of section) and favours rapid shifts in product mixes. In the recent post-war period the share of Japanese small business in total manufacturing employment and value added, as well as in total exports, has consistently fallen, in response to Japan's growing specialization in production with large scale economies (see note Z at end of section).

In Italy a small business also performs the role of promoting labour intensive activities, especially since the 1969 wage boom, but its higher degree of "independence" from large size firms has contributed to maintain, or indeed increase, the contribution of small and medium firms to employment, output and exports (see note A1 at end of section). Sub-contracting is also well practiced in Italy, but apparently is less finalized to redistribute production lines and to match two conflicting targets (raising large scale production and product differentiation at the same time) in response to an increasingly sophisticated world demand.

4. The well-known "permanent employment" system and the high degree of social cohesion in industrial relations favour Japanese high intra-firm labour mobility within large size enterprises, as well as inter-firm mobility at the small business level. These deeply rooted features again reflect the "insular" character of Japanese economic growth. Italian relatively higher labour mobility had greatly petered out in the 1970's, under the constraints of a growing labour unrest and new labour legislation, especially since the "workers' statute" had been approved in the early 1970's. The Italian system of "employment guarantees" is much less suitable than the socio-culturally based Japanese permanent employment system when rapid shifts in production, capacity utilization and patterns of demand are to be faced.
5. Japan's great ability of searching for international markets, finding new outlets for domestic production, switching specialization and offsetting international events unfavourable to domestic firms' international competitiveness receives much support from the old established network of Trading Companies (T.C.). Both the big "sogo shasha" and the smaller sectorally specialized T.C. have built up international networks of unprecedented extension, technical skills and organizational entrepreneurship. Other (European and American) T.C. fall short of Japanese T.C.'s ability to manage a multi-country and multi-product scale of operations. But a primary peculiarity of Japanese T.C. is the extreme specialization of the trading phase relative to the production phase. Producers commit to the T.C. all aspects of the commercial process, from financing of stocks and delayed payments to risk insurance, transport, customs and legal procedures, tax liabilities, wholesale intermediation, advertising and after sale technical assistance. And of course the highly skilled personnel (more than 90% of Japanese employees in a typical "sogo shasha" are university graduates) and the powerful computer network (which has been compared with the Pentagon's!) are able to provide extremely timely information and forecasting concerning the international scenario, necessary to the producers for their product planning and strategy.

Italian export commercialization processes and institutions are far less sophisticated and often passively dependent on foreign buyers. This does not prevent small and medium size Italian exporters from discovering market opportunities, especially under pressure of a sluggish domestic market, but certainly causes a less prompt adaptation to changing trends in world demand and competing supply.

6. Unlike most European countries, Japanese producers have found themselves much more exposed to the emerging competition of NIC manufacturing exporters since the late 1960's. This followed both from the peculiar geographical position of Japan, close to some of the most aggressive new exporters, and from the relatively large weight in Japanese exports of the U.S. market, traditionally much more open to imports from LDC's than the European market (see note A2 at end of section). This circumstance may have significantly contributed to impress on Japanese export structure a much more rapid "abandonment" of traditional textile and apparel production since the second half of the 1960's than occurred in Italy.
7. The effects of exchange rate changes on the industrial structure are highly controversial (much more is known on short-term price and cyclical effects). According to a well founded theoretical argument, close to the "effective protection" argument in the theory of tariffs, a real devaluation (revaluation) of the national currency induces gains (losses) for domestic exporters' competitiveness and/or profitability in proportion to their sectoral value added/gross output ratio. Since traditional sectors are often characterized by higher value added/gross output ratios than modern capital intensive sectors, traditional exporters' competitiveness and/or profitability may have been reinforced in the devaluing Italy for the same reason that it has been badly hit in the revaluing Japan. Moreover, to the extent that traditional exports are more price elastic than many technology intensive exports, again a devaluation (revaluation) is expected to favour (to penalize) traditional export sales. However the argument would require many additional qualifications, concerning the impact of currency adjustment on domestic prices (nominal vs. real exchange rate

changes), the value added/output in modern skilled labour and technology intensive (not capital intensive) sectors, the behaviour of prices of non-traded domestic services which serve as inputs to traded goods production, the inter-action between price and non-price factors in influencing exporters' competitiveness, and so on (see note A3 at end of section). Finally, Japanese exports have been relieved by the substantial nominal and real effective Yen depreciation in 1974-75 (see note A4 at end of section).

8. Aside from currency movements, the already mentioned investment boom that Japan managed to sustain from mid-1960's to 1973 has permitted a relatively large effort of industrial restructuring and reconversion, ultimately beneficial for the transforming export structure. Italian manufacturing investments since 1965 not only have been much less intensive relative to GDP in comparison with Japan but have also displayed a sensibly lower average growth rate than during the 1958-64 cycle (Table 10).
9. A final feature of recent Japanese international economic strategy, that has partly reflected but partly induced by itself a rapidly changing export structure, stems from Japanese direct investments abroad. The argument has already received much attention, both in Japan and abroad, and deserves some closer consideration.

Japanese Multi-national Approach to the International Division of Labour

There have been two booms of Japanese direct investment abroad in the last 15 years following the October 1965 liberalization; 1965-69 and 1972-74. The latter has been of overwhelming importance: 80% of today's cumulative stock of Japanese capital invested abroad stems from overseas direct investment undertaken after 1972.

Comparisons with Italian foreign investments are impossible given the very scanty statistics available; only the Bank of Italy publishes regular figures, but they can hardly be interpreted, due to the unclear distinction between direct and portfolio capital flows, and to geographical confusions arising from large Swiss intermediation (see note A5 at end of section).

In comparison with more traditional American and British investments abroad, the Japanese expansion has of course been remarkably high: the average annual rate of growth of direct investments abroad in the 1967-74 period has been 31.4% for Japan, 26.1% for West Germany, against 10.4% for U.S.A., 10.7% for Canada and 9.3% for U.K. (see note A6 at end of section). Today Japanese average annual direct investments abroad are around 3 billion dollars.

The geographical and sectoral composition of Japanese foreign direct investment is also peculiar relative to American and European investments abroad. The analysis of this composition and of its most recent changes conveys further elements to an interpretation of the Japanese past and foreseeable role in the international division of labour (see note A7 at end of section).

From the geographical viewpoint, Japanese direct investments are characterized by a high share of LDC's as areas of destination: 60.5% of the cumulative total 1966-76 as against 26.1% for U.S. investments and 22% for German investments abroad (Fig. 3). This area orientation closely reflects the geographical composition of foreign trade: as an average of 1970-77, 45.2% of Japanese exports were directed to LDC's and 51.2% of Japanese imports originated from LDC's; the share of LDC's over U.S. and European foreign trade is far smaller. However notice that, within the decade, there has been a tendency for Japanese investments to increase their share going to Europe (from 2.3% of the total in 1966 to 10% in 1976) and to modify the internal composition of their share going to LDC's, in favour of Asian countries (from 18.8% to 29% of the total) instead of Latin American countries (from 28.6% to 15.7%), although Brazil continues to be a focus area for Japanese investments in metals, chemicals and road vehicles (see note A8 at end of section). As a matter of fact Europe has increased its importance as an area of destination, also for German and more significantly for U.S. direct investments abroad in the same period. For Japanese investments, the increased European share may reflect, among other factors, an increasing attempt to penetrate European markets through direct production, since European goods are still highly protected against imports from Japan (see note A9 at end of section). One might even foresee for Japan, during the next 10-15 years, something similar to what had happened with U.S. foreign investments in the 1950's and 1960's: a growing pressure to invest in

Europe through affiliates and subsidiaries in order to overcome external European trade barriers. However, at least for the past 10 years, the most remarkable shift in geographical orientation of Japanese investment abroad remains the increasing share of South East Asia, which reflects a peculiar strategy of decentralization and search for raw materials.

This strategy appears more clearly if we look at the sectoral composition of Japanese overseas investments, as compared with U.S. and European investments abroad (again Fig. 3). First of all, manufacturing activities absorb a smaller share of Japanese investment compared with U.S. and especially German investments abroad (31.3% of the cumulative total 1966-76, as against 44.5% for U.S. and 69.5% for Germany). This reflects a very high share of Japanese direct investment in mining and agriculture (search for safe access to importable raw materials such as oil, coal, wood, metals), as well as in commercial activities (trading companies). Within manufacturing investments, Japanese direct investments are characterized by a large relative share of textiles, lumber and pulp and (especially vis-à-vis U.S. investment) iron and non-ferrous metals). American and German investments abroad are overwhelmingly directed to chemical and engineering activities, although in the very recent years under the pressure of a revaluing DM there has been an increasing propensity of German textile and steel producers to integrate domestic with overseas production.

On the whole Japanese direct foreign manufacturing investment is clustered in labour intensive and/or technologically standardized products, even within less traditional sectors: e.g. unsophisticated electrical appliances (batteries, fans and radios), metal products, light consumer goods, paints and plastics. Textiles, electrical appliances and sundries alone accounted for 63.5% of Japan's total manufacturing investment in Asia at the end of 1975 (see note A10 at end of section).

Other features of Japanese foreign direct investments, relative to American and European investments, are a high share of small and medium size investors, of "group" investments (several Japanese firms, usually including Trading Companies, take a co-investment venture), of joint-ventures and minority ownership participations with local partners, of external fund financing relative to the total equity investment, of government participation through the Overseas Economic Cooperation Fund (equity participation), Export/Import Bank and other government agencies (loans), some of which specialize in assistance to small and medium investors.

A fairly consistent and widely accepted explanation of these joint features of Japanese foreign ventures has been proposed by Kojima (1973) and elaborated in further contributions of Japanese academicians (see note A11 at end of section). In contrast with typical U.S. manufacturing direct investment abroad, aimed primarily at exploiting fast growing markets (relative to a "saturated" domestic market) through oligopolistic struggles against local advanced producers (the well known interpretation especially expounded by Caves, Hymer, Kindleberger, Galbraith among others) and/or at defending national production by decentralizing abroad production of goods in the later stages of the "product life cycle" (Vernon, Hufbauer), Japanese overseas investment seems dominated by a logic of classical comparative advantages and factor endowments. Aside from investment in trading activities (aimed at supporting Japanese exports and in extractive industries for access to raw materials, Japan's direct investments abroad have reflected in a very clear way a transfer abroad of standardized technology to be combined into labour intensive activities, including technology appropriate to small and medium size firms. More recently, a growing ecological concern has encouraged a strong push of Japanese investment abroad in highly polluting and energy intensive productions such as steel, non-ferrous metals and petrochemicals. On the whole, Japanese overseas investment seems more "trade oriented" than its American counterpart (see note A12 at end of section). Even though the "product cycle" explanation applies rather well to both phenomena, Japanese investment seems dominated by transfer of more "general" technology than U.S. investment abroad in goods as soon as they enter the second stage of the product cycle.

Marginal Japanese firms in "contracting" sectors (due to the evolving comparative advantages and relative factor prices) find it easier to cross the national boundary by going abroad and continue to operate in the same sectors becoming intra-marginal at the new local relative factor prices, rather than crossing the industry boundary by shifting to other expanding sectors at home. This could help to explain the relatively large share of marginal small and medium size firms (in contrast with U.S. direct investment by leading oligopolistic firms in the sector) and the high public financial contribution which is needed to implement this strategy (see note A13 at end of section). Moreover, Japanese investment seems more concerned with investment involving subsequent creation of imports into the Japanese market itself.

This sort of interpretation fits rather well the past characteristics of Japanese overseas investments, but probably must be increasingly complemented by the "American" model in the years to come (see note A14 at end of section).

Some factors that have markedly contributed to impress these characteristics will be less operational or even reversing themselves in the near future. If during the 1960's a largely unsaturated domestic market made less pressure on Japanese producers of sophisticated consumer durable goods and capital equipment to penetrate foreign markets, during the 1980's an increasing need of oligopolistic aggressive strategies is likely to induce those Japanese firms to promote their exports and their international production in more advanced industrial areas. Moreover, to the extent that Japanese manufacturing overseas investments will continue their very recent orientation to the U.S. market (due to the strong Yen-Dollar revaluation) and to European markets (to overcome protectionist European import policies), they will inevitably increase the share of Japanese foreign direct ventures in advanced oligopolistic sectors, at the expense of the traditional textile, single electronic and electrical appliances. The very fact that labour abundant South East Asian countries have been for Japan the main area of economic influence (for very simple geographical and political factors) (see note A15 at end of section), as much as resource abundant Latin American countries and human capital abundant Europe have been for the U.S., contributes to explain the larger weight of traditional and labour-intensive activities in the basket of Japanese foreign direct manufacturing investments relative to U.S. investments. Such a different geographical orientation is likely to persist in the near future, though gradually diminishing.

Regardless of which particular sectoral orientation will be taken by Japanese foreign direct investments in the years to come, an increasing degree of "internationalization" of Japanese production, presumably larger than the corresponding degree for Italy, will reinforce pressures for a continuing transformation of the Japanese export structure.

Japanese firms will stress more and more non-price factors of their international competitiveness and will try to make the best use of further Yen revaluations vis-à-vis the Dollar for improving their network of foreign selling services and buying materials and parts at cheaper prices.

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- O - It should not be forgotten that only in the post-war period (over a full century) did world manufactured exports show a higher rate of growth than world manufacturing production; from 1880 to 1940 rather the opposite held true (Maizels (1963), p. 81). The change over in the post-war period must overwhelmingly be attributed to trade creation effects of economic integration in Western Europe.
- P - See T. Blumenthal (1972), who used 1965 input-output data for Japan.
- Q - By transformation of the manufacturing industrial structure - here I mean relatively higher growth of innovation-intensive, value added-intensive and technological investment-orientated industries. In this respect it must be stressed that the definition and empirical verification of export-led growth of industrial economies is at least highly controversial: see, for instance, Lubitz (1973).
- R - Notice that, contrary to some misinformed opinions, from 1965 to 1975 the structure of German exports has evolved in favour of labour-intensive sectors (including textiles). Trends after 1973 have changed slightly but efforts undertaken by the German government and industry to "reconvert" the German export basket to more technologically intensive products are partly hidden within aggregate figures. Moreover, the impact of these measures upon German export structure will be observable when data about current and following years will be available.
- S - Italian shares on the world market have remained pretty strong in other "traditional" sectors (furniture, construction materials) where a higher incidence of transport costs and a slower transfer of technology have prevented the LDC's from increasing their export penetration.

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- T - Japanese export of ships was particularly successful in many important LDC markets (e.g. Liberia, Latin America) but also in some countries who were strong traditional competing procedures: Sweden, Norway and Greece (see Jetro (1979), part II).
- U - Also Jetro (1979) p. 29, refers to a (unpublished) statistical test of change in Japan's export structure from 1965 to 1975 in response to relatively high rates of increase in world import demand.
- V - This income-elasticity may actually include a favourable "geographical" effect which is not specified in the "world demand" variable. In the period under consideration Japanese exports have been directed more intensively than competing countries exports towards countries whose demand for import was increasing faster (e.g. U.S., OPEC). A more rigorous test based on application of the "constant market share analysis" to major industrial countries exports in 1970-77 is under preparation by the writer. Moreover, this set of comparable equations does not specify supply or cyclical factors, whose incidence is therefore mixed up with statistical coefficients and disturbances. As a matter of fact the low Durbin-Watson test for Japan's equation (Jetro (1979), p. 45) indicates the need for additional explanatory variables. However, a separate estimate of Japanese exports over a longer period (1962-1977), which includes an index of productive capacity utilization in manufacturing, gives no better results (Jetro (1979), p. 28).
- W - It should incidently be noticed that this reported income-elasticity of Japanese import is significantly higher than previous estimates based on more distant periods, when the impact of the Yen revaluation and of customs regimes had not yet been felt.

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N O T E S

- X - See, among others, P.L. Ciocca: "Note sulla politica monetaria Italiana 1900-1913, in Toniolo (1973), and bibliographical references here contained.
- Y - Caves-Uekusa (1976, p. 4).
- Z - Jetro (1978); Caves-Uekusa (1976, Chapter 2).
- A1 - The diminishing degree of concentration and the growing share of small firms in Italian exports during the 1970's has been recently documented by a study conducted within the Bank of Italy: see Biagioli-Pumili (1978).
- A2 - Recent data on export penetration of industrial and non-industrial exporters in various industrial markets (EEC, Other European, U.S. and Japan) confirm very clearly these trends: see Onide et al. (1978, chapter 5).
- A3 - Moreover, one should never forget that a revaluation of the domestic currency allows domestic exporters to buy foreign services (including selling, advertising, marketing services), at cheaper prices. Together with a relatively lower cost of imported raw materials, this may explain the relatively successful export performance in recent years of Germany and Japan, both countries which export a large amount of capital and consumer durable goods requiring high commercial inputs.
- A4 - Besides various OECD and IMF sources, see also Jetro (1979), p. 37-38.

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- A5 - Some recent analyses of Italian investment abroad can be found in A. Biagioli: "Le imprese multinazionali a base italiana", "Bollettino Banca d'Italia", October 1974; N. Cacace: "La multinazionale Italia", Coives, Rome 1977.
- A6 - The following data are mostly from Jetro (1979), p. 67-70, where Fig. 3 is reproduced from. A disaggregated analysis of Japanese investments by areas and sectors of destination in the 1970's can also be found in Onide et al. (1978, chapter 6).
- A7 - Quoted by Ozawa (1979) from Miti sources.
- A8 - Jetro (1978 B, p. 36) and Ozawa (1979, Appendix Table 1). Within the Asian region, the bulk of Japanese direct investments has gone to Indonesia, South Korea, Hong Kong and Malaysia.
- A9 - Although with very different customs treatments among different European countries, even among EEC countries (e.g. Belgian and German imports are more open than French or Italian imports from Japan). EEC countries are bound by a common external tariff, but non-tariff barriers are increasingly determinant.
- A10 - Ozawa (1979, p. 74).
- A11 - See Ozawa (1979) and its bibliographical references.

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- A12 - Kojima (1973).
- A13 - Ozawa (1979, p. 81).
- A14 - See Roemer (1975, chapter 5).
- A15 - Japanese war reparations to Philippines, Indonesia and South Vietnam in the 1950's have constituted an early basis for subsequent aid and loan policy pursued by the Japanese Export-Import Bank.

III - SUMMARY AND CONCLUDING OBSERVATIONS

Japan and Italy were the latest major non-communist countries to achieve their industrial revolution, both approximately in the period from 1880 to World War I. Indeed, Japan was the only non-European country going through its big industrial push before the beginning of this century. Some more specific analogies have been shown to apply to Japan and Italy from the viewpoint of the growth of their foreign sector: (1) both countries entered the latest post-war period with a dominant textile specialization in exports, having gone through two prior phases of import substitution, first in textile, cotton and wool consumer goods, then in simple intermediaries (metals) and capital goods; (2) Japan and Italy, together with Germany (the three major losers of World War II), experienced most dramatic increases in their share of world manufactured exports in the recent post-war period; Japan and Italy went through most impressive transformations of their export structure during the 1950's and 1960's; (3) during the early industrialization period a tendential trade deficit was generally, even though partially, offset by incoming unilateral transfers: emigrant remittances for Italy, war reparations for Japan.

Together with these analogies, however, major differences have also marked the economic history of the foreign sector in the two countries.

First, Japan reached its historical peak in terms of "economic openness" (ratio of export and imports to GDP) and experienced its probably unique phase of export-led growth during the inter-war period (1921-37), precisely when the international position of the U.K. started to decline dramatically in favour of U.S. manufactured exports and the whole European area, including Italy, went through its most disorderly and protectionist period from the standpoint of its own foreign exchanges.

Second, in the post-war period Japan reached back again to its deeply-rooted "insular" pattern of economic growth, whereas Italy entered its crucial integration process with European economies. Japan emerged from World War II far more destroyed in its physical and human structures than Italy, yet its ability to follow a basically insular or self-sufficient pattern of industrialization had been consolidated since early years of the industrialization process. A fairly strong regional integration of Japan with neighbouring South East Asian countries was soon manifested, but it was and still largely

is a type of "vertical" integration (agricultural and extractive raw materials, simple intermediates and standardized consumer goods in exchange for technology and modern manufactures), far different from the "horizontal trade" type of integration rapidly spreading among EEC countries (see note A16 at end of section).

Contrary to some uninformed opinions, post-war Japan did not plausibly experience any export-led growth, but rather an investment-led and domestic market-led growth.

Since the late 1960's Japan was able, contrary to Italy, to pursue and indeed accelerate large sectoral transformation of its manufacturing export structure, and further transformation is under way. Several factors have been cited which may explain this high Japanese propensity to structural industry (and primarily export import) transformation: State-bank-industry relations, complementarity between small business and large size firms, labour mobility, trading companies' intermediation, an earlier and higher familiarity (at home and in its central U.S. market) with export penetration by late-comers LDC's, the recent Yen revaluation and a high progress of "multinationalization" of Japanese industry in the early 1970's.

Western fears for Japanese "aggressive" export policies are still justified and indeed the Japanese government is very keen on persistent surveillance and programs of "voluntary export restraint". However, as some econometric evidence indicates the impact of the average real Yen revaluation during the 1970's upon Japanese exports are already being felt. Much the same argument holds for Japan's import "stagnation" after the oil crisis. As it has happened elsewhere (certainly in Italy) the volume of imports after the oil crisis has experienced a downward shift in its "natural" trend, owing to an escalation of resource and energy saving devices and to purely cyclical factors (a stagnating domestic demand reflected in exceptionally low capacity utilization and high inventory sales ratios, in addition to a falling share of fixed investment over total domestic demand, which by itself causes a falling average propensity to import).

Despite the geographical and cultural differences between Italy and Japan, a closer analysis of their recent economic history and trade performance may offer useful insights to understand present day strategies of industrial reconversion and growth.

Fabrizio Onide (*)

(*) University of Modena and University "L. Bocconi".

III - SUMMARY AND CONCLUDING OBSERVATIONS

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- A16 - Of course some sort of horizontal trade (e.g., consumer electronics, watches) is already emerging between Japan and its most advanced Asian partners (Hong Kong, Singapore, South Korea and Taiwan). See articles by C. Smith in "The Financial Times", June 5 and July 2, 1979.

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TABLE 1

ITALY AND JAPAN:

Commodity Foreign Trade Proportions (a)

1878-1963

	<u>1878-97</u>	<u>1909-13</u>	<u>1925-29</u>	<u>1957-63</u>
Japan	10.3	29.5	35.5	19.4
Italy	21.3	28.1	26.3	25.0

(a) Exports + imports of goods and services over total GDP (Japan) or National Income (Italy)

Source: Kuznets (1968, p. 408)

TABLE 2

Shares of the World Manufactured Exports

1899-1959

Exporting country	Percentage								
	Excluding Netherlands			Including Netherlands					
	1899	1913	1929	1929	1937	1950	1955	1957	1959
United States	11.7	13.0	21.0	20.4	19.2	26.6	24.1	25.3	21.0
Germany	22.4	26.6	21.0	20.5	21.8	..	..	..	..
West Germany	—	—	—	—	16.5 ^a	7.0	15.3	17.2	18.9
United Kingdom	33.2	30.2	23.0	22.4	20.9	24.6	19.5	17.7	17.1
France	14.4	12.1	11.1	10.9	5.8	9.6	8.9	7.9	9.1
Japan	1.5	2.3	4.0	3.9	6.9	3.4	5.1	5.8	6.6
Belgium-Luxembourg	5.5	5.0	5.5	5.4	6.6	6.2	6.4	5.9	6.0
Canada	0.4	0.6	3.6	3.5	4.8	6.1	6.0	5.4	5.2
Netherlands	—	—	—	2.5	3.0	2.9	3.8	3.5	4.1
Italy	3.6	3.3	3.8	3.7	3.5	3.6	3.3	3.8	4.4
Switzerland	4.0	3.1	2.8	2.8	2.8	4.1	3.5	3.3	3.4
Sweden	0.9	1.4	1.8	1.7	2.6	2.8	2.7	2.8	3.0
India	2.4	2.4	2.4	2.3	2.1	3.1	1.4	1.4	1.2
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

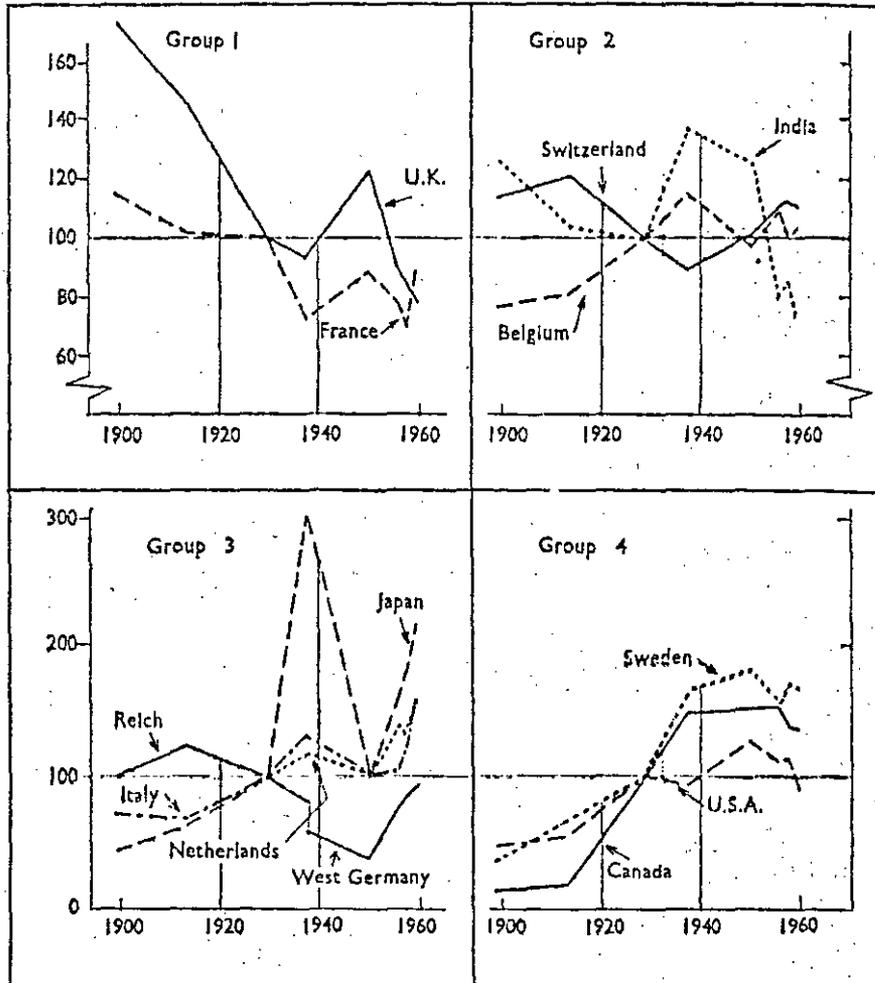
^aApproximate estimate. Exports from present area of West Germany in 1937 were taken as 71 per cent of total German exports in that year, and the residue was excluded from the total.

Source: Maizels (1963), p. 189

FIG. 1

Relative volume indices^a of exports of manufactures from the main industrial countries and India, 1899-1959

Relative volume indices, 1929 = 100



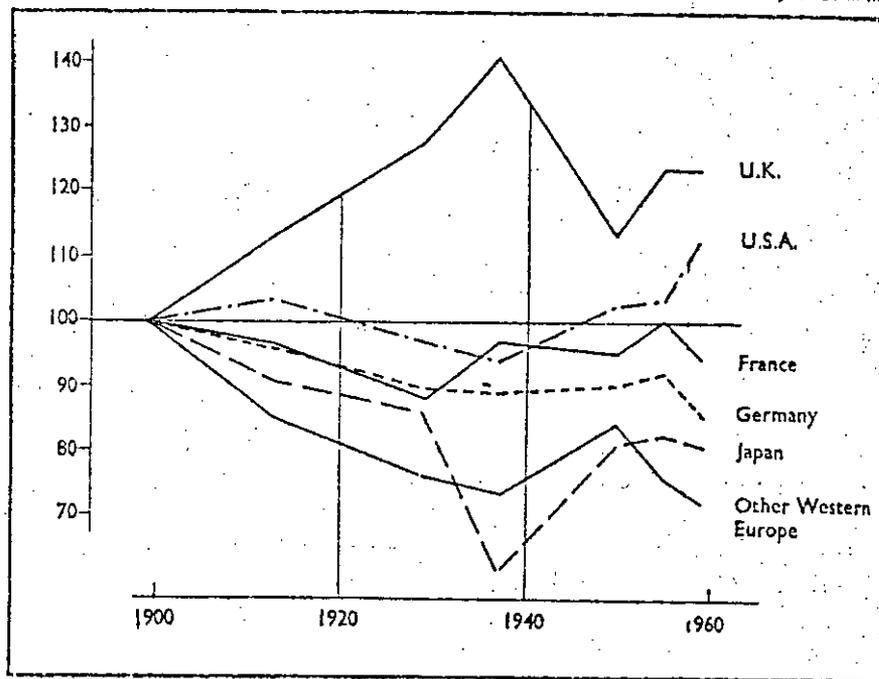
^aVolume index of exports from each country, expressed as percentage of total volume index of world trade in manufactures

Source: Maizels (1963), p. 190

FIG. 2

Relative unit values^a of exports from the main industrial countries, 1899-1959

Indices, 1899 = 100, in terms of U.S. dollars



^aExport unit value index for each country expressed as percentage of unit value index of exports from competing countries (adjusted for differences in commodity patterns).

Source: Maizels (1963), p. 208

TABLE 3

Percentage Composition of Japan's

Foreign Trade by End-Uses

1876-1940

	<u>Food</u>	<u>Material</u>	<u>Semi-manufactured</u>	<u>Manu-factured</u>	<u>Misc.</u>	<u>Total</u>
A. EXPORTS (a)						
1878-80	38.1	11.1	41.60	4.7	3.9	100.0
I: 1894-98	15.1	10.7	44.3	26.5	3.3	100.0
Change	-22.9	-0.4	+2.7	+21.8	-0.6	48.4 (b)
1895-99	14.3	10.7	45.9	26.0	3.1	100.0
II: 1911-15	10.8	7.9	49.5	30.4	1.4	100.0
Change	-3.5	-2.8	+3.6	+4.4	-1.7	16.0
1921-25	6.4	6.0	47.8	38.6	1.3	100.0
III: 1936-40	9.9	4.3	26.0	57.4	2.4	100.0
Change	+3.5	-1.7	-21.8	+18.8	+1.1	46.9
B. IMPORTS						
1876-80	13.5	3.7	27.2	52.1	3.4	100.0
I: 1894-98	23.2	22.5	18.2	34.1	2.0	100.0
Change	+9.7	+18.8	-9.0	-18.0	-1.4	56.9
1895-99	22.5	25.9	17.8	32.0	1.9	100.0
II: 1911-15	11.7	52.2	18.3	17.1	0.7	100.0
Change	-10.8	+26.3	+0.5	-14.9	-1.2	53.7
1921-25	14.1	49.3	18.0	17.9	0.7	100.0
III: 1936-40	8.7	51.1	25.7	13.0	0.7	100.0
Change	-5.4	+1.8	+7.7	-4.9	0.0	19.8

(a) Five-year averages

(b) An index of change as sum of absolute values of changes in percentage shares of each item during the period

Source: Baba-Tatemoto (1968, p. 177)

TABLE 4

Percentage Contribution of Export
to Japan's Economic Growth (a)

1876-1938

From 1876-1880	to 1894-1898	8%
From 1895-1899	to 1911-1915	29%
From 1921-1925	to 1934-1938	39%

(a) Five-year averages

Source: Baba - Tatemoto (1968, p. 177)

TABLE 5

Proportion of production of manufactures^a exported, 1899-1959

	<i>Percentage^b</i>							
	1899	1913	1929	1937	1950	1955	1957	1959
France	33	26	25	12	23	18	15	18
Germany	31	31	27	15	..	..	..	..
West Germany	—	—	—	17	13	19	23	23
United Kingdom	42	45	37	21	23	19	21	19
Other Western Europe ^c	17	18	23	21	17	18	19	21
Canada	4	4	17	21	13	15	15	14
United States	5	5	6	5	5	4	5	4
Japan	25	40	29	40	29	26	24	23
TOTAL	19	18	15	12	10	10	11	11

For this calculation, the f.o.b. values of exports have been reduced by 8 per cent to allow, approximately, for costs of transport, services, etc. factory to port. Production of manufactures for this purpose has been valued on a gross basis, free of duplication, and excluding food, beverages and tobacco.

a - Excluding manufactured foods, beverages and tobacco

b - Based on U.S. dollar values at 1955 prices

c - Belgium-Luxembourg, Italy, Netherlands, Sweden

Source: Maizels (1963), p. 223

TABLE 6A
ITALY AND JAPAN:
Percentage Composition of Total Commodity Exports
1900-1954
(at Current Prices)

		<u>Food</u>	<u>Raw Materials</u>	<u>Metals</u>	<u>Engineering</u>	<u>Vehicles</u>	<u>Chemicals</u>	<u>Textiles</u>	<u>Other Manufactures</u>	<u>N.I.E.</u>
Italy	1900	27.6	39.0	3.2	0.0	0.0	3.5	18.1	8.3	-
	1913	30.3	20.2	1.2	1.3	1.7	2.1	21.0	12.0	-
	1928	23.0	21.4	1.6	1.7	3.7	2.6	34.0	11.3	-
	1938	33.1	12.8	3.7	3.9	6.6	2.3	26.1	11.4	-
	1954	21.9	14.9	6.5	14.2	7.2	5.7	21.0	8.6	-
Japan	1900	11.3	38.0	6.9	0.0	0.1	2.5	30.3	9.2	2.0
	1913	9.9	40.0	5.4	0.3	0.3	1.5	32.8	9.0	0.3
	1928	8.6	44.0	1.6	1.0	0.4	1.8	32.1	9.2	0.4
	1938	11.7	18.3	7.6	6.4	3.4	3.4	35.8	12.3	0.3
	1954	8.2	9.7	28.0	6.4	2.6	3.0	31.3	10.8	0.0

Source: Baldwin (1958)

TABLE 6B

ITALY AND JAPAN:

Percentage Composition of Total Commodity Imports1900-1954

		<u>Food</u>	<u>Raw Materials</u>	<u>Metals</u>	<u>Engineering</u>	<u>Vehicles</u>	<u>Chemicals</u>	<u>Textiles</u>	<u>Other Manufactures</u>	<u>N.I.E.</u>
Italy	1900	17.7	39.0	12.1	4.3	0.9	5.9	10.2	10.2	-
	1913	22.7	37.5	12.3	3.2	1.3	5.0	8.4	9.5	-
	1928	27.8	38.3	9.1	3.6	0.8	3.5	7.2	9.5	-
	1938	12.2	49.0	14.9	6.7	1.7	5.2	3.4	7.1	-
	1954	14.6	52.0	9.3	11.1	1.5	4.4	2.0	5.1	-
Japan	1900	18.5	33.9	12.8	4.4	2.0	4.5	17.8	5.2	0.8
	1913	22.3	42.2	11.4	5.0	1.8	7.9	5.3	4.0	0.1
	1928	20.2	50.1	9.5	4.5	1.9	5.2	3.8	4.1	0.7
	1938	13.0	54.0	16.5	6.8	2.4	3.3	0.3	3.6	0.2
	1954	27.3	59.2	1.9	5.2	2.2	2.3	0.5	1.4	0.0

Source: Baldwin (1958)

TABLE 7

ITALY AND JAPAN:

Percentage Composition of Manufactured Exports

1899-1957

(at Current Prices)

	<u>1899</u>	<u>1913</u>	<u>1929</u>	<u>1937</u>	<u>1950</u>	<u>1957</u>
<u>ITALY</u>						
Metals - engineering vehicles	4	9	12	25	34	50
Chemicals	6	7	7	8	6	10
Textiles clothing	70	61	66	49	49	24
Other manufactures	20	23	15	18	11	16
 <u>JAPAN</u>						
Metals - engineering vehicles	12	12	7	18	34	38
Chemicals	2	4	4	4	3	5
Textiles clothing	65	62	70	59	50	38
Other manufactures	21	22	19	19	13	19

Sources : Maizels (1963), Appendix A, pp. 478, 486

TABLE 8

ITALY AND JAPAN:

Per Capital Manufacturing Output Consumption and Foreign Trade1899-1955

	<u>1899</u>	<u>1913</u>	<u>1929</u>	<u>1937</u>	<u>1950</u>	<u>1955</u>
Population (millions): Italy	32.30	35.20	40.50	43.40	46.60	48.10
Japan	43.70	51.90	62.90	70.40	82.90	89.00
Net value of manufacturing production per head (U.S.\$ at 1955 prices):						
Italy	40.00	65.00	85.00	90.00	100.00	150.00
Japan	10.00	10.00	25.00	40.00	20.00	45.00
Apparent consumption per head (U.S.\$ at 1955 prices):						
Italy	45.00	95.00	120.00	120.00	135.00	220.00
Japan	10.00	15.00	35.00	40.00	25.00	55.00
I/J	4.50	6.30	3.40	3.00	5.40	4.00
Import of manufactures per head (U.S.\$ at 1955 prices):						
Italy	5.70	13.70	13.10	6.20	11.30	15.80
Japan	4.00	6.00	8.40	6.60	0.90	2.90
I/J	1.40	2.30	1.60	0.90	12.50	5.40
Export of manufactures per head (U.S.\$ at 1955 prices):						
Italy	7.10	10.80	18.00	18.30	16.60	23.90
Japan	3.20	6.80	12.10	26.80	9.80	19.60
I/J	2.20	1.60	1.50	0.70	1.70	1.20
100 x Import/consumption:						
Italy	12.70	14.40	10.90	5.20	8.40	7.20
Japan	40.00	40.00	24.00	16.50	3.60	5.30
I/J	0.32	0.36	0.45	0.32	2.33	1.36
GDP per head:(U.S.\$ at 1955 prices):						
Italy	185.00	225.00	275.00	260.00	360.00	470.00
Japan	65.00	90.00	145.00	185.00	135.00	185.00
I/J	2.85	2.50	1.90	1.41	2.67	2.54

Source: Calculations from Maizels (1963), Appendices A and E

TABLE 9

ITALY AND JAPAN:

Foreign Trade Ratios (a) to GDP

In the Post-War Period

		<u>1953-58</u>	<u>1959-64</u>	<u>1965-70</u>	<u>1971-74</u>	<u>1973</u>	<u>1974</u>	<u>1977</u>
		<u>At Constant Prices (b)</u>						
Imports/GDP:	Japan	8.0	10.2	9.0	10.5	11.4	12.8	11.5
	Italy	8.9	14.5	15.7	20.2	20.3	19.9	19.7
Exports/GDP:	Japan	8.6	9.7	10.3	12.5	12.3	15.0	18.3
	Italy	8.6	14.6	17.9	21.3	19.1	20.1	24.2
		<u>At Current Prices</u>						
Imports/GDP:	Japan	11.8	10.7	9.5	11.0	10.9	15.4	12.2
	Italy	13.0	15.6	16.7	23.4	22.0	28.6	26.8
Exports/GDP:	Japan	11.6	10.3	10.8	11.5	11.0	14.6	13.8
	Italy	12.2	15.5	18.4	21.7	18.5	22.4	26.2

(a) Exports and imports of goods and services

(b) 1963 prices for 1953-1958 and 1959-1964; 1970 prices thereafter

Source: O.E.C.D. National Accounts

TABLE 10

ITALY AND JAPAN:Growth of GDP and of its Demand ComponentsIn the Post-War Period(at Constant Prices)

	<u>1951-58</u>	<u>1958-64</u>	<u>1964-71</u>	<u>1971-75</u>	<u>1974-77</u>
<u>ITALY</u>					
GDP	5.1	5.7	4.8	2.6	1.2
Private consumption	4.3	5.8	5.2	2.6	0.9
Public consumption	3.2	4.3	3.5	3.3	2.3
Gross investment	8.0	6.8	2.9	-0.5	-3.9
Exports	11.4	12.4	10.3	6.5	8.1
Imports	8.7	13.6	9.3	2.8	0.7
	<u>1955-61</u>	<u>1961-65</u>	<u>1966-71</u>	<u>1971-75</u>	<u>1974-77</u>
<u>JAPAN</u>					
GDP	10.7	8.6	11.1	5.0	4.3
Private consumption	8.1	8.9	9.2	6.1	4.1
Public consumption	8.1	8.9	5.2	5.5	4.7
Gross fixed investment	20.4	9.9	15.6	3.1	1.5
Export	12.3	16.7	16.0	10.0	12.1
Import	19.0	9.9	14.5	8.0	1.0

Source : O.E.C.D. National Accounts

TABLE 11

JAPAN AND GERMANY:

Comparison of Industrial Structures

1960-1975

Industry Classification (*)		Labor-intensive goods		Technology-intensive goods		Metals		Chemicals		Construction materials		Total	
		(I)		(II)		(III)		(IV)		(V)			
Japan (Year)	F.R. Germany (Year)	Japan	F.R. Germany	Japan	F.R. Germany	Japan	F.R. Germany	Japan	F.R. Germany	Japan	F.R. Germany	Japan	F.R. Germany
Employment Structure													
1960	1962	41.6	29.0	16.4	28.0	5.0	11.0	3.5	6.3	33.5	25.6	100.0	100.0
1965	1966	38.3	28.5	17.8	28.8	4.2	10.3	3.2	6.9	36.7	25.5	100.0	100.0
1970	1972	36.4 ↓	26.7 ↓	20.7 ↗	30.5 ↗	4.5 ↓	9.9 ↓	3.1 ↓	7.9 ↗	35.2 ↗	25.1 →	100.0	100.0
Production Structure (a)													
1960	1958	38.3	36.1	18.2	24.5	17.0	14.0	7.3	7.9	19.2	18.7	100.0	100.0
1965	1962	35.2	33.4	19.5	26.8	14.7	12.9	8.2	9.0	22.5	17.9	100.0	100.0
1970	1966	27.3	32.2	24.7	27.3	16.6	11.6	7.3	11.0	24.2	17.9	100.0	100.0
1975	1972	26.4 ↓	29.1 ↓	21.6 ↑	29.3 ↑	15.0 ↓	10.8 ↓	8.5 ↑	10.7 ↑	28.4 ↑	20.1 ↑	100.0	100.0
Export Structure (b)													
1960	1958	47.9	17.1	29.0	51.5	12.4	15.7	4.3	11.8	6.5	3.8	100.0	100.0
1965	1962	28.3	15.8	37.9	52.1	19.8	14.6	8.7	14.5	5.4	3.1	100.0	100.0
1970	1966	19.8	16.0	48.8	50.6	18.4	12.8	8.5	17.9	4.5	2.8	100.0	100.0
1975	1972	10.5	16.3	56.0	54.5	21.5	11.0	8.7	15.8	3.2	2.5	100.0	100.0
Export Ratio (b/a)													
1960	1958	7.6	6.8	9.7	30.0	4.4	16.0	3.6	21.4	2.1	2.9	-	-
1965	1962	5.8	6.5	13.9	27.0	9.7	15.6	7.6	22.2	1.7	2.4	-	-
1970	1966	5.2	8.1	14.2	30.0	8.0	17.9	8.4	26.3	1.3	2.5	-	-
1975	1972	4.1 ↓	9.8 ↑	26.8 ↑	32.5 =	14.8 ↑	17.9 =	10.6 ↑	25.8 =	1.2 ↓	2.1 =	-	-

(*) Definitions of groups of industrial activities:

- I - Labor-intensive type: foods and beverages, textiles, wood related products, other final products
- II - Technology-intensive type: consumer machinery and equipment, other industrial machinery, transport equipment, precision engineering
- III - Iron and steel: related products, non ferrous metal: related products
- IV - Basic: secondary and final chemical products
- V - Construction materials: glass and ceramics, related products.

Sources: Japan: Input-Output Table for each year

F.R. Germany: DIW Input-Output Table for each year, Statistisches Jahrbuch

From: Jetro, White Paper on International Trade - Japan 1978, Tokyo 1979 (p. 53)

TABLE 12

Percentage Structure of Manufactured Exports
of Major Industrial Countries

1954-1973

Paesi	1954-55				1962-63				1972-73			
	I	II	III	Tot.	I	II	III	Tot.	I	II	III	Tot.
Stati Uniti	26,47	46,46	27,07	100,00	36,01	43,22	20,77	100,00	40,57	43,35	16,08	100,00
Germania Occ.	23,37	46,29	30,35	100,00	26,00	47,33	26,67	100,00	28,50	44,99	26,51	100,00
Regno Unito	19,27	41,25	39,48	100,00	23,12	46,58	30,30	100,00	29,95	41,79	28,26	100,00
Olanda	21,71	34,68	43,61	100,00	31,44	30,35	38,21	100,00	35,14	30,20	34,66	100,00
Svizzera	n.d.	n.d.	n.d.	n.d.	41,59	32,67	25,74	100,00	46,82	31,73	21,45	100,00
Francia	14,32	28,82	56,86	100,00	21,02	32,83	46,16	100,00	24,54	36,82	38,64	100,00
Italia	14,70	40,28	45,02	100,00	19,22	37,45	43,33	100,00	20,02	36,80	43,18	100,00
Belgio	10,13	22,50	67,38	100,00	13,96	24,39	61,65	100,00	19,42	29,45	51,13	100,00
Giappone	6,07	17,17	76,76	100,00	19,43	23,61	56,96	100,00	27,00	39,00	34,00	100,00
Tot. Paesi OECD	19,72	37,31	42,57	100,00	25,10	38,52	36,38	100,00	27,65	39,91	32,44	100,00

Source: Conti (1978), from U.N. and O.E.C.D. sources

TABLE 13

ITALY, JAPAN, GERMANY AND O.E.C.D.

Percentage Structure of Exports

1968-1977

(at Current Prices)

S.I.T.C. Code	Sectors	Italy		Japan		Germany		O.E.C.D. Average	
		1968	1977	1968	1977	1968	1977	1968	1977
0.	Food and live animals	7.5	6.2	3.2	1.0	2.2	3.9	9.1	8.9
1.	Beverages-tobacco	1.0	1.4	0.1	0.1	0.4	0.5	1.7	1.3
2.	Crude materials, inedible excluding fuel	2.5	2.4	1.9	1.3	2.7	1.9	7.7	6.4
3.	Mineral fuels	6.0	5.7	0.2	0.2	3.3	2.6	3.3	5.0
4.	Vegetable and animal oils and fats	0.2	0.2	0.1	0.1	0.3	0.5	0.4	0.6
5.	Chemicals	7.7	7.0	6.2	5.4	12.5	12.0	9.2	9.6
5.1	Chemical elements and compounds	2.7	2.1	2.8	2.5	3.9	4.0	3.1	3.5
6.1	Leather and skins	-	1.0	0.1	0.3	-	0.3	0.4	0.4
6.2	Rubber	1.1	1.2	1.1	1.1	0.8	0.9	0.8	0.9
6.3	Wood manufactures excluding furniture	-	0.6	1.1	0.2	-	0.3	0.5	0.6
6.4	Pulp and paper	-	1.0	0.9	0.6	-	1.1	2.1	2.0
6.5	Textiles	7.7	5.5	11.1	4.7	4.0	3.4	4.7	3.5
6.6	Non metallic mineral manufactures	-	3.6	2.5	1.5	-	1.8	2.4	2.5
6.7	Iron and steel	3.9	5.4	13.2	13.1	7.4	5.8	5.7	5.5
6.8	Non ferrous metals	1.2	0.9	1.3	1.1	2.6	1.8	3.4	2.2
6.9	Metal products	3.6	4.4	3.1	3.4	3.6	3.3	2.6	2.9
7.	Total engineering	34.4	33.9	38.0	55.7	45.7	47.9	35.5	38.1
7.1	Non electrical machines	17.0	16.4	9.0	12.6	22.1	21.4	15.1	14.9
7.2	Electrical machines	6.9	7.0	11.7	14.0	7.8	9.3	6.7	8.1
7.3	Transport equipment	10.6	10.6	17.2	29.1	15.7	17.0	13.7	15.2
8.1	Sanitary, plumbing etc.	-	0.8	2.5	0.1	-	0.3	2.4	0.3
8.2	Furniture	0.8	2.2	0.2	0.1	0.8	1.1	0.4	0.7
8.3-8.4	Clothing and travel goods	6.5	6.5	3.3	0.7	1.4	1.5	1.9	1.8
8.5	Footwear	4.4	4.6	1.0	0.1	0.3	0.1	0.6	0.6
8.6	Scientific instruments etc.	1.4	1.3	3.6	4.8	3.0	2.7	2.5	2.5
8.9	Miscellaneous manufactures n.e.s.	-	5.1	6.7	4.3	-	3.0	3.2	3.1
9.	Special transactions	-	0.1	0.5	0.8	-	-	1.4	1.5
	Total goods	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: O.E.C.D. Trade by commodities

TABLE 14

ITALY, JAPAN, GERMANY AND LDC'S SHARE ON OECD IMPORTS

1968-1977

(at Current Prices)

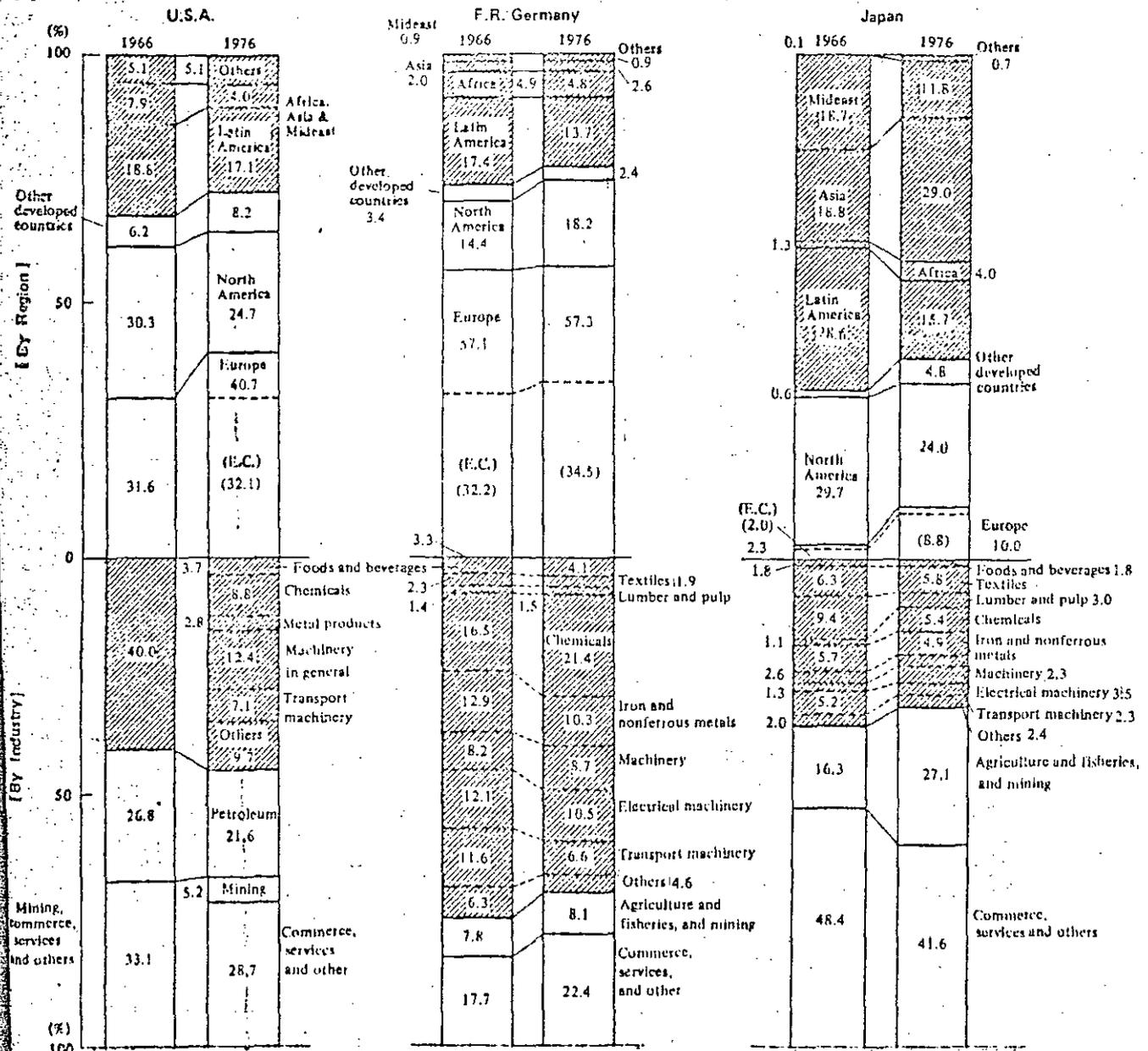
S.I.T.C. Code	Sectors	Italy		Japan		Germany		Less developed countries	
		1968-69	1977	1968-69	1977	1968-69	1977	1968-69	1977
0	Food and live animals	3.2	3.2	1.1	0.6	2.3	4.6	37.0	38.9
1.	Beverages and tobacco	4.9	9.2	0.4	0.1	3.7	5.9	14.6	16.0
2.	Crude materials inedible, excluding fuels	1.0	1.0	0.4	0.5	2.6	3.2	31.5	33.2
3.	Mineral fuels	2.7	1.0	0.0	0.0	4.1	1.4	67.7	74.9
4.	Vegetal and animal oil and fats	1.3	1.6	0.7	1.2	6.2	10.3	43.3	43.4
5.	Chemicals	4.2	4.2	1.8	2.4	20.8	19.0	4.4	4.1
6.1	Leather and skin	7.7	11.4	1.5	1.7	12.0	9.4	22.6	29.5
6.2	Rubber	9.0	8.6	3.0	7.6	17.3	10.2	1.8	4.9
6.3	Wood manufactures excluding furniture	5.1	3.9	10.2	2.6	6.8	7.7	23.1	27.1
6.4	Pulp and paper	1.5	2.7	0.8	1.4	6.9	10.9	0.5	1.3
6.5	Textiles	9.1	9.3	6.7	4.4	13.5	14.0	13.7	17.0
6.6	Non metallic mineral manufactures	-	7.0	-	3.4	-	10.1	-	13.4
6.7	Iron and steel	3.0	5.1	12.1	15.4	20.0	18.4	2.5	4.2
6.8	Non ferrous metals.	-	1.4	-	1.0	-	9.5	-	25.2
6.9	Metal products	6.7	6.5	9.0	9.2	24.4	21.6	2.2	6.5
7.	Total engineering	5.7	5.2	5.1	11.7	21.8	20.4	1.3	4.5
7.1	Non electrical machines	6.6	6.2	2.5	5.8	24.6	22.6	0.6	2.3
7.2	Electrical machines	6.1	4.9	11.4	14.6	20.2	18.4	4.3	13.2
7.3	Transport equipment	4.8	4.3	4.5	15.3	20.7	19.4	0.6	1.5
7.3.2.	Motor vehicles	5.6	4.8	4.2	15.1	22.9	21.5	0.1	0.6
7.3.5.	Ships	2.0	1.3	16.9	30.5	16.1	9.2	5.3	7.0
8.2	Furniture	10.0	15.2	2.0	0.6	24.6	22.9	5.6	8.8
8.3	Travel goods	18.5	23.5	16.6	3.7	13.9	6.9	21.0	45.1
8.4	Clothing	17.9	12.6	7.8	1.7	8.4	7.6	25.6	42.8
8.5	Footwear	42.4	36.1	9.3	0.7	5.4	3.8	9.8	29.4
8.6	Scientific instruments etc.	4.0	3.2	9.6	17.6	19.9	17.3	1.1	7.1
8.9	Miscellaneous manufactures n;e;s;	-	7.9	-	12.4	-	13.4	-	15.4
8.9.1	Musical instruments, recorders etc.	4.1	4.2	30.7	38.1	15.5	10.3	1.0	9.8
	Total goods	4.5	4.3	3.5	4.9	11.4	10.8	22.1	29.2

Source: O.E.C.D. Trade by commodities

FIG. 3

U.S., GERMANY AND JAPAN:

Percentage Composition of Foreign Direct Investment
by Geographical Area and by Industry
1966-1976



Remarks: 1. Total licensed investment as of the end of a fiscal year for Japan and investment outstanding as of the end of a calendar year for F.R. Germany and the U.S.
2. The shaded portions in the above charts designate developing countries in the case of the chart by region and the manufacturing industry in the case of the chart by industry.
3. Figures within the charts represent percentage composition.

Source: Jetro, White book on international trade 1978, p. 69 (from Survey of current business, Dresdner Bank-Merkblätter für den Außenhandel, Bank of Japan data)

REFERENCES

- M. Baba, M. Tatemoto - Foreign trade and economic growth in Japan: 1858-1937, in L. Klein-K. Ohkawa (1968, ch. 6).
- P. Bairoch - Lo sviluppo bloccato - L'economia del terzo mondo tra il XIX e il XX secolo, Einaudi, Torino 1976 (French original: Le tiers monde dans l'impasse - Le demarrage economique du XVIII^e au XX^e siecle, Gallimard, Paris 1971).
- R.E. Baldwin - The commodity composition of trade: Selected industrial countries, 1900-1954, "Review of Economics and Statistics", February 1958.
- V. Balloni - L'andamento delle importazioni e delle esportazioni, in G. Fruà, a cura di, Lo sviluppo economico in Italia, vol. II, F. Angeli, Milano 1969, ch. VI.
- A. Biagioli,
L. Pompili - Struttura e aspetti finanziari del commercio estero dell'Italia: Un'analisi per imprese, Bollettino Banca d'Italia, Ottobre-Dicembre 1978.
- T. Blummenthal - Exports and economic growth: The case of post-war Japan, "Quarterly Journal of Economics", November 1972.
- A. Caracciolo
(a cura di) - La formazione dell'Italia industriale, Laterza, Bari 1969.
- R.E. Caves,
M. Uekusa - Industrial organization in Japan, The Brookings Institutions, Washington D.C., 1976.
- G. Conti - La posizione dell'Italia nella divisione internazionale del lavoro, in P. Alessandrini, a cura di, Specializzazione e competitività internazionale della Italia, Il Mulino, Bologna 1978.

- Jetro - White paper on small and medium enterprises, Tokyo 1978 (a).
- Jetro - Economic cooperation of Japan 1977, Tokyo 1978 (b).
- Jetro - White paper on international trade - Japan 1978, Tokyo 1979.
- C.P. Kindlerberger - Foreign trade and the national economy, Yale University Press, New Haven, 1962.
- L. Klein-K. Ohkawa - Economic growth: The Japanese experience since the Meiji Era, Irwin, Homewood, Ill. 1968.
- K. Kojima - A macroeconomic approach to foreign direct investment, Hitotsubashi Journal of Economics, June 1973.
- S. Kuznets - Notes on Japan's economic growth, in L. Klein-K. Ohkawa (1968).
- R. Lubitz - Export-led growth in industrial economies, "Kykkos", 1973, pp. 307-321.
- A. Maizels - Industrial growth and world trade - World trends in production, consumption and trade in manufactures, Cambridge University Press, Cambridge 1963.
- F. Malerba - Specializzazione e competitività internazionale nell'industria tessile, forthcoming in "Rivista di Economia e Politica Industriale", 1979.
- F. Onide et al. - Industria Italiana e commercio internazionale, Il Mulino, Bologna 1978.

T. Ozawa

- International investment and industrial structure: New theoretical implications from the Japanese experience, "Oxford Economic Papers", 1, 1979.

J.E. Roemer

- U.S.-Japanese competition in international markets - a study of the trade-investment cycle in modern capitalism, research series n° 22, Institute of International Studies, University of California, Berkeley 1975.

R. Romeo

- Breve storia della grande industria in Italia, 3a edizione riveduta, Cappelli, Bologna 1967.

G. Toniolo

- Lo sviluppo economico italiano 1861-1940, Laterza, Bari 1973.

M. Tyszinsky

- World trade in manufactured commodities 1899-1950, "The Manchester School of Economic and Social Studies", September 1951.

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THE PROCESS OF ECONOMIC POLICY-MAKING:
THE CASE OF JAPAN

by

Prof. Hisao Onoe

Professor University of Kyoto

The Process of Economic Policy-Making:

The Case of Japan

Hisao Onoe
Professor
University of Kyoto

In this paper we wish to analyse the mechanism and characteristics of the decision-making process in Japan, bearing in mind any comparison with the case of Italy.

Formally, constitutional practice should offer the fundamental basis for the decision-making policy of all national affairs. Article 41 of the 1947 Constitution defines the parliament, (the National Diet) as "the highest organ of state power" and "the sole law-making authority of the state". Article 43 defines the members of the two Houses as "representatives of all the people". Therefore the most decisive policy-maker should be the National Diet. But, as in other countries, the real process of policy making is rather complex and, moreover, the role of parliament in economic policy-making is rather in a decline. On, we might say that extra-parliamentary institutions and influential groups are playing more important roles in reality.

The government, which is the focal point of all political influence and the most meriting the title of "policy-maker" has been very much influenced by all kinds of pressures from parliamentary and extra-parliamentary forces.

Since the end of the second World War, the Liberal Democratic Party (LDP) and its predecessor parties has controlled both houses and has been power, except for the short period of coalition-government with a socialist

prime-minister, Tetsu Katayama.

In order to grasp the characteristics of economic programmes of political parties, it will be useful to make a classification of the political parties according to their ideologies relating to the existing economic system, "capitalism". For that purpose, we might use the classification of the three schools of economics of Lord Eric Roll.

- I. "The Free Enterprise School": Capitalism should survive and can survive.
- II. "Reformism": Capitalism should survive and can survive, as long as it is reformed.
- III. "Socialism": Capitalism should not survive and cannot survive.

In Italy the Liberalist Party belongs to the first group and the Christian Democrats, to the second group; while in Japan, the LDP includes both the first and the more moderate part of the second. In Italy the famous Confindustria has moved from the first group to the second, while in Japan the Keidanren (the Federation of Economic Organizations) has rather lagged behind their Italian friends in the movement.

As to the second group, the so-called "central" groups, the Kohmei Party, the Democratic Socialist Party, the New Liberal Club etc. might be included.

In Italy, the PCI and PSI belong to the third group, whilst in Japan the right wing of the Socialist Party might be included in the second group.

A close working relationship between government officials and the LDP, plays a important role in decision-making. The Policy Affairs Research Council (Seimu Chosakai) of the LDP plays a crucial role in

evaluating the budget drafting, which has a decisive importance for any current national economic policies.

In those years, after the Second World War, it was not a very important organ. But, as the LDP established a more decisive position in the decision-making process of the government, the council gained a more conspicuous influence. Before the demands for the budget for the coming financial year are estimated by a certain section or department of the Ministry of Finance, they are usually checked by the council of the LDP. When big business and other interested groups try to realize their demands in the budget, they will use the channels through that council, the Seimu Chōsakai.

Sometimes business groups will utilize more direct links with high officials as a channel for realizing their demands in economic policies.

A close relation between business and government is often exaggerated, so as to termed "Japan Incorporated". Although the phrase should be regarded as an exaggeration, we cannot deny the existence of considerable links for national decision-making among governments, the party in power and business groups.

The opposition parties, in general, were not very active in making alternative economic policies. Their activities were oriented rather to claims and criticism against the government. But over these past two or three years, the opposition parties have reflected upon such attitudes, and have become eager to publish their programmes for the long-term range.

Compared with European Trade Unionism, the Japanese Trade Union Movement did not play an influential rôle in the creation of any general

economic policy. A tri-partite organization, such as the Social Economic Council, as exists in several European countries, has yet to be established in Japan. There might be some relation between the shortage of policy-mindedness of the trade unions and the lack of such an institution.

The shortage of such institutions might be cause of the lack of a chance for trade unions to argue for their own economic policy, or the latter might be the cause of the former.

The birth of a tri-partite organization has, in a sense, a complementary function to the weak points in the parliamentary system.

There are several reasons why parliament has diminished in its influence in economic policy-making.

In those days, when Western parliamentary systems were introduced, parliaments dealt with military problems, the police, transportation etc.. Economic policy was not so detailed or refined, save only in problems of protective tariffs and other taxes.

Today, representatives who are elected by the local electorates under the traditional system do not always reflect the nation-wide economic interests of different social classes and are not always knowledgeable as to the details of national economic policy which has become more and more sophisticated.

This is yet another reason for the tendency that parliament tends to leave considerable parts of the economic decision-making to the government, particularly into the hands of high officials.

Even in Japan, we can not deny the possibility of the institutionalization of such a policy-making organization in the future. To me, it is more likely that some kind of institutionalization of participation

in policy-making will be necessary in the 1980's. We can say that it seems to have germinated already in Japan. We have already an organization, The Economic Deliberation Council, which plays an advisory role for drafting long-range economic plans for the Economic Planning Agency. The council consists of representatives from various fields, including leaders of national trade unions. Although these leaders do not participate there as true representatives of their organizations, but only as specialists on labour problems, their participation seems to have derived from the consideration of the European situation, in which Trade Unionists can argue for their alternative economic policies at an institutionalized level.

Another kind of such a germ can be found in the case of the Council for Rice Pricing in Japan, which consists of a tri-partite arrangement, i. e. representatives of farmers, consumers and neutral specialists.

Tri-partite organizations in European countries have a close relation with incomes policy. In order to plan the macro-share for each social class in the national income and allow it to accept the share distributed to it, a national consensus through such organizations will be necessary. Nowadays almost all economic policies in any country may include the character of incomes policy, and in the future this tendency will not decrease but increase rather than decrease. We mean that economic policies must take incomes policy into account whether the name incomes policy is attached to them or not.

Formally in Japan, there was no incomes policy, but something similar did exist. Usually, every summer, the government decides the level of the wage and salary for public employees.

In Japan the level of wages of government employees in public sectors are institutionalized to be fixed to standards which seem to be plausible; taking into account the wage-level of workers in private enterprises which is usually fixed in Spring. But, in fact, there is a tendency for the wage-level in private business level for the following Spring to be influenced by the level of wages of government employees and worker in the public sector. Therefore, business groups may attempt to influence government settlements concerning wages for public employees, through which they can expect to have some effect on the level of wages in general. In such a way, some kind of incomes policy can function to some extent in Japan. Perhaps might call this the Japanese type of incomes policy. In theory, a trade union can reject the level of wages fixed in such a way. But, Japanese Trade Union leaders tend to consider problems such as wages from a national point of view. An atmosphere of so-called "company-unions" still exists in Japan. So we can say that, in Japan, the national mood and tradition give acts as substitute for a tri-partite institution system, so as to achieve a national consensus helping towards the implementation of a valid incomes policy.

As regards the future of the policy-making process in Japan, this is rather difficult to forecast, since it depends upon a very changeable political situation. But, judging from the results of a recent general election, it can be said that at least for the next that several years, the possibility the LDP will lose control of governmental power would seem to be inconceivable. Still, there is also the likelihood that the opposition will have increased influence on policy-making.

Keynes thought labourers were aware, more of nominal wages than

real wages. But nowadays, workers are very aware, not only their real wages but also of the whole system of economic policy.

During the period of a high rate of growth in Japan, which lasted roughly from 1955 to 1970, labourers were reasonably satisfied with the level of their wages which increased considerably, albeit rather slowly, and this resulted in a more rapid increase in productivity.

But, in this period of low rate of growth, in which we now find ourselves and shall still be in the 1980's the way in which we can distribute the limited amounts of national income will have increased importance. In such a situation, one-sided decision-making will not function well at all. A "Westernization" of the decision-making process may take place to some extent in Japan.

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JAPAN AS A CONSUMER MARKET

by

Mr. Hideharu Tamaru

President of the Dentsu Inc.

DENTSU INCORPORATED

11, 1 CHOME, TSUKIJI, CHUO-KU, TOKYO, 104 JAPAN / CABLE : DENTSU TOKYO / TELEX : DENTSU J 26223

Japan As a Consumer Market

Our company, Dentsu Incorporated, was established in 1901. This means that we have a history of 78 years, a history which parallels the progress of Japan's economic society in the modern age. It took the advanced capitalist nations of Europe a process of roughly 200 years since the Industrial Revolution to reach their present stage of a highly industrialized society. Japan attained her present level in half that time, running breathlessly for about 100 years. It has been estimated that Japan's average annual growth rate during these 100 years has been about 4%.

I think there are two things which symbolize the two centuries since the Industrial Revolution. One is the "railway" between 1775 and 1875. The other is the "automobile" in the approximately 100 years between 1875 and the present. In the broad sense of "movement of man and goods", both of these are means of communication. I need not explain how greatly the development of these two, together with today's airplane, had contributed to promoting mutual exchange and understanding between peoples.

However, we have already passed beyond the century which was symbolized by the "railway, automobile and aircraft". What will be the main characteristic of the next 100 years? The century of "movement of man and goods" will most probably be followed by the century of "movement of information". In other words, it can be called the century of communication.

The Japanese learned railway know-how from the British and automobile know-how from the Americans. The Japanese particularly excel in electronics technology which constitutes one of the pillars of communication. It can be said that Japan has contributed greatly in helping the world's electronics technology reach its full bloom. However, in this age of communication, with respect to Japan, there is a big imbalance in the actual flow of information.

The volume of information concerning Japan exported to the West is exceedingly small, whereas information about the countries of the West flows into Japan in exceptionally large volume. Even when information is considered as general knowledge and not as specific data, if we take for instance the case of high school graduates, those in Japan most likely have a far greater store of knowledge about Italy than Italian high school graduates have about Japan. Probably the same difference exists among businessmen concerning information and understanding related to each other's economy and market.

Please do not misunderstand me. I am not saying that this imbalance in the mutual flow of information is the result of a lack of effort on the part of the Italians to gather information about Japan. The Japanese have to admit frankly that the efforts we made to supply information on Japan were regrettably small in comparison to the efforts we made to export Japanese products. Japan and Italy must continue to expand their free trade for mutual profit. We must aim to balance not only our trade in goods but also our trade in information.

A certain West European journalist who visited Japan concluded as a result of his investigation that it is not at all impossible for a Western product to succeed in Japan. He recognized that a great marketing opportunity exists in Japan. However, he added, a "tuition fee" is necessary. By this he meant, firstly, that an "emphatic" attitude is important and, secondly, that an understanding of Japanese business practices must be acquired. These two constitute, in this journalist's opinion, the "admission fee" to enter the Japanese market.

Such a "tuition fee" or "admission fee", if it does exist, is not limited to Japan. It seems to me that the level of the tuition or admission fee is proportionate to the volume of infor-

mation on hand regarding the target country. If the admission fee to the Japanese market is exceptionally high and is thus regarded as a barrier, it means that you have insufficient information about the Japanese market. And the reason for this would be that our efforts to provide you with information were either inadequate or inappropriate.

The admission fee which Japanese industry had to pay to enter the West European market was not so high. This is because a large number of Japanese were able during the past 100 years to acquire information and knowledge about your country -- even to the extent that macaroni and spaghetti have become popular dishes among the Japanese.

The West European journalist I mentioned also said, "All things considered, a giant market of 112 million people is beckoning. The consumption behavior of this market does not differ so much from that of Europe and it is certain that, sooner or later, it will become quite similar."

With respect to consumption structure and behavior, it is exactly as he says.

The characteristics of the Japanese market and consumers and the various marketing problems which you might have in your mind will require a detailed and lengthy explanation. In order to use the time allotted to me effectively, I shall restrict myself to a digest of two points on which I hope to further your understanding.

The first point concerns what has been frequently described as the "complexity of the Japanese market". It cannot be denied that the structure and the distribution mechanism of the Japanese consumer market is complicated. It is, however, neither disorderly nor confused. To be accurate, one should say that it is the "diversity" of a highly developed or sophisticated consumer economic society.

you may say that West European companies become mired in this maze called diversity. If this diversity is a maze, we must supply you with a map to help you find your way through it without getting lost. Such a map is available.

However, if you should insist that the multifarious roads be reconstructed into a single motorway, I must say that it is impossible. Japan, like Italy, is a country with a history of thousands of years. Japan's history of exchanges with other countries, particularly with the countries of Europe, is only about 100 years. Strictly speaking, the history of our main exchange with Europe is only about 50 years. Before that, Japan was an isolated country, completely cut off from the rest of the world. And while we were isolated from other countries, we had built up a distribution and economic system which is uniquely Japanese. The Japanese-style wholesaling business called "ton-ya" which is the prototype of today's "sogo shosha", the general trading company, already existed in the days when Japan was isolated.

I am sure that you can appreciate the enormous difficulty of changing in a short period the Japanese market structure, moulded by history, into a form similar to that of Western Europe. It is awesome enough just to contemplate. Although the Japanese market structure is regarded as complicated, it is not such that it constitutes a fundamental barrier to the activities of West European corporations. I do not believe that it constitutes a difference in customs which are beyond understanding. With a little bit of experience in the Japanese market, the problem can be surmounted. In a way, the proverb "When in Rome, do as the Romans do" holds wherever you may go in the world.

The second point I wish to take up is the Japanese consumer and consumer market. Japan, as you perhaps know, is an island country in the Far East, about 10,000 kilometers from Rome. The

country's total land area is about 370,000 square kilometers of which only about one-quarter is habitable. Within this space, a modern consumer market of huge scale was formed in about ten years beginning around 1955.

From 1965, within the Japanese market which had grown to gigantic proportions, there began to appear phenomena of "concentration and fluidity" in many aspects. An example of the phenomena is the concentration of the population in the cities and the formation of a giant middle-class market. According to the results of surveys, as much as 90% of the Japanese believe that they belong to the middle class. The homogeneous and relatively sophisticated consumption of this middle class sustains the Japanese market. In education, too, uniformity at a high level progressed. Furthermore, communications, transportation and the information media expanded greatly and reached a high level of qualitative development.

Allow me to digress briefly here to describe the mass communication media in Japan today.

As I mentioned earlier, a population of more than 110 million live in Japan's area of roughly 370,000 square kilometers. This high population density is matched by an exceptionally high information density. 97% of Japanese families own color television sets and are served by the nationwide networks of NHK, the public broadcasting corporation, and of commercial stations. In Tokyo alone, there are seven TV channels (VHF) with each one broadcasting for almost 18 hours a day.

As for newspapers, journals with long tradition and history are published not only in the big metropolises of Tokyo and Osaka but also in other cities throughout the country. They are closely linked to the culture, society and economy of regional communities. Worth particular mention is the fact that there are five daily papers, known as national newspapers, which are distributed in every part of the country. Two of these each boast a circulation of between 7,000,000

and 8,000,000 copies a day. In addition, there are four daily general English-language newspapers in Tokyo.

When it comes to magazines, they are so numerous that an accurate figure on the number of titles cannot be given. Some weekly magazines have circulations exceeding one million. Between July and December 1978, there were 14 weekly and monthly magazines in the 500,000 circulation class. As for radio, it has become a part of the life of the younger generation.

The information put out by this huge mass communication media is constantly swirling about in the Japanese archipelago. This mass media enjoys complete freedom of the press. It does not fawn on whoever is in power. Each media reports world events and news topics from its own independent standpoint and supplies entertainment suitable for each segment of society.

Thus, on top of its homogeneity and sophistication, the huge Japanese market of 110 million consumers has assumed the characteristics of an informationalized society with many outstanding functions.

Since 1975, new phenomena have been appearing in the Japanese market. They are moves away from "concentration" towards "division" and from "homogeneity" towards "diversity". This has become most conspicuous in the personalization of the consumer's life awareness and of consumption. It may be a very natural reaction against the uniformity of living standard and of life pattern for the consumers to reach the stage where each wishes to give expression to his individuality. In response to this trend, for example, the retail stores have become diversified in their forms and features. Tokyo's shopping centers are no longer the traditional Ginza and Shinjuku areas but a large number of streets and malls, each with its own personality.

If your view of the typical Japanese is the old standardized one of spectacles, camera and grey suit, I must inform you that

your eyes are on the Japan of the decade that ended in 1965. I wish that you and the other businessmen of Western Europe would re-focus your sights on today's Japanese market. The Japanese consumer today is free and individualistic and with this awareness makes his choice from among a great variety of products.

I have given you a brief outline of some of the problems relating to the Japanese market and explained a few of its characteristics. If my remarks have aroused in you even a spark of interest in Japan, I shall feel rewarded. Some data related to what I have said have been distributed to you. I think the data will help you to get a more concrete understanding of what I have told you.

Japan and Italy both have a long history and many distinctive cultural characteristics. I believe that a mutual exchange of a greater volume of accurate information, while respecting each other's history and culture, will be the foundation on which we can build further understanding as we move towards the 21st Century.

Thank you for your kind attention.

HIDEHARU TAMARU, President, Rome, October 1979

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**SUPPLEMENTARY MATERIALS
TO THE SPEECH BY
MR. HIDEHARU TAMARU
PRESIDENT, DENTSU INCORPORATED**

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2. Reference tables 8
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1. Ten popular 'fallacies' regarding the Japanese market

Appraisal of the qualitative aspects of the Japanese market

Fallacy 1

Japan is a homogeneous mass market with a high consumption level. Therefore, it is only suitable for high-volume sales. Japanese manufacturers already control the high-volume sales making entry prohibitively expensive, and there is little scope for low-volume products because of lack of marketing skills.

Japan is a huge, high-density consumer market in which a population of 110 million live in an area of a mere 370 000 sq. kilometres (of which only 9 400 sq. kilometres is habitable). The market is characterized by a high level of consumption and supported by a homogeneous middle class.

The Japanese population consists almost entirely of a single ethnic group which speaks a single language. Her racial homogeneity is higher than any western country. Besides, the Japanese psychologically share a basically common national consciousness stronger than that found in any western nation.

The social classes which were formed through history in Japan, just as in Europe, have almost vanished since 1945. As a result, something close to equality has become prevalent not only in thought but also in socio-economic status or position. Now at least 90 per cent of the Japanese people believe that they belong to the middle class.

It is often concluded from this that only products suitable for mass selling and intended for a mass market can take firm root in Japan because marketing efficiency is low except in the case of mass products. It is certainly true that Japanese manufacturers are already so predominant in the mass markets for many consumer products that great cost and risk are usually thought to be involved when foreign firms enter such markets.

The colossal, highly homogeneous Japanese market was formed in the 'sixties during the period of rapid economic growth. As the Japanese economy entered an era of slow growth following the oil crisis of 1973, the Japanese market began to change from a concentrated to a diversified structure. Differences in income diminished and housing conditions were equalized, leading to a tremendous growth of the middle class.

In spite of all the above developments, or rather because of them, individual consumers began to desire individuality or diversification. Consumers now want 'differentiation' in many aspects of their life consciousness or life style. It can no longer be said that only mass products intended for a mass market are suitable for the Japanese market.

Fallacy 2

Although as much as 60 per cent of the Japanese market is a gigantic urban market, it must have regional characteristics or communities as in Europe.

As much as 60 per cent of the Japanese population inhabit the Pacific coast occupied by Tokyo, Nagoya, and Osaka, making this 'Tokaido' belt

almost one single urban market. While there is a worldwide tendency towards population concentration in urban areas, this 'Tokaido Megalopolis' in Japan is unique in that this particular area and other parts of Japan are connected by a highly developed transportation system and a huge volume of information is shared instantaneously with the whole nation on a real-time basis.

The Tokyo conurbation, including Yokohama and other satellite cities especially, represents more than 30 per cent of the national population, and trends in consumption and consumer behaviour in this area can in most cases reflect those in national markets.

The regional differences existing between various parts of Japan are more climatic than cultural and commercial. From this fact, success in marketing operations in the Tokyo area can mean almost certain success in other parts of Japan, and vice versa, a failure in this area will imply less possibilities in other areas.

It naturally follows that in order to minimize the risks involved in launching a new product on the Japanese market, test marketing or thorough market research work is needed, regardless of the type and field of product. In fact, those foreign manufacturers who have recently introduced new products to the Japanese market, have started their operations from test areas which are usually rather small or medium-sized cities, such as Hiroshima, Sapporo, or Shizuoka, and which are believed to be representative of Tokyo and the whole nation in terms of various marketing indications.

Product fitness for the Japanese Market

Fallacy 3

The Japanese consider European products familiar and excellent. Therefore, it is unnecessary to reconsider their specifications or their general appearance.

The Japanese feel a sense of familiarity and have a quality-product image for products produced from the long tradition and history of Europe. In some cases, however, it is considered necessary to adapt products for the Japanese market.

When introducing an entirely new product, it is essential that the product's positioning in the market is determined by examining afresh the suitability of functions, quality, price, and other specifications for the product, and studying its acceptability for Japanese consumers.

It is also desirable that the following points are taken into consideration in advance:

1. Japanese consumers take a keen interest in new things and have a liking for change. For this reason it is sometimes necessary to adopt the market policy of foreseeing the life cycle of the product in question to effect a deliberate minor change in due course of time.
2. It is necessary to examine the acceptability of the physical properties—size, content, weight, etc.—of the product to the Japanese market.
3. Japanese-language catalogues and written specifications are invariably needed in the early stages. Mutual understanding and an early expression of the desire to enter the Japanese market are important.
4. Japanese trademarks should be checked in advance. It is important to register your trade mark at the earliest possible date.
5. Japanese standards for legal regulation of the sale of goods, particularly from the standpoint of consumer protection, are somewhat different to those in the west. Compared with similar standards in other countries, Japanese laws can often be considered severe. (Legal regulation in Japan will be described later.)

In connection with 2 above, in particular, it should be pointed out that consumer durables for homes require merchandising taking account of

Japanese characteristics such as the size or place of installation because Japanese living space is divided into smaller units than in Europe or the United States.

In Japan successful imported products cannot rest on their laurels, if they are not to be soon overtaken and outstripped by Japanese firms who make strenuous marketing efforts. For this reason it is particularly important that an imported product is appropriately positioned in terms of product characteristics at the early stage of its introduction.

Whether you adopt a small-profits-and-quick-returns policy for mass selling to the mass market or a high-price-and-high-margin policy, giving priority to differentiation, will affect your merchandising.

If you have so much confidence in your product as to stress its superiority, features, convenience, and other product characteristics in advertisements—i.e., if you enter the Japanese market without fully considering the fitness of your product for the market—you are bound to encounter various problems.

Fallacy 4

Japanese consumers have a limited knowledge of Europe.

In the preceding section we gave attention to the need to consider the fitness of a Western product for the Japanese market on points such as its function, quality, price, and other specifications. At the same time, the product should not lose its identity as a European product in terms of product image.

Seen from Europe, Japan is certainly a Far Eastern country. To Japanese consumers, particularly well-educated middle-class people, however, Europe is psychologically considerably nearer. Even those Japanese who have never been to Europe know its history and geography fairly well.

In view of this it should be understood that Japanese consumers want a 'European image' in European products. In other words, the product should look European.

If you advertise only the functions and quality of your product without giving it a 'European image', it will not be understood as such. Japanese consumers want an exclusively European product characteristic which is not found or cannot be produced in Japan.

Distribution policy and sales promotion in the Japanese market

Fallacy 5

The Japanese distribution system is too complicated to be understood and is best left to the importers.

The distribution system in Japan is not 'complicated' but 'diversified'. Here are a few points which require attention as likely pitfalls in a 'diversified' distribution system:

POINTS CONNECTED WITH DISTRIBUTOR MENTALITY

1. There is often an error in the choice of distribution channels. For example, mass-selling channels are used for a non-mass product; or a product which should be sold at a speciality store is distributed to large stores.

Attention should be given to the fact that distribution channels can be chosen according to product characteristics and market conditions.

2. It is advisable to avoid the use of overlapping (competing) distribution channels as much as possible. It is also advisable not to change channels without very careful thought.

The Japanese distribution trade has a psychological resistance to the

combined use of competing distribution channels, e.g., the use of several wholesalers of the same rank (in the case of traditional distribution channels).

3. In the traditional distribution trade in Japan, human relations of long standing are considered important from the viewpoint of credit.

Not only the volume of business, but also the length in time of business relations serve as yardsticks for measuring credit. That line of thinking is particularly deep-rooted in the traditional distribution trade. This should be taken into consideration when choosing, or changing, wholesalers.

In short, it is important to show willingness to trust wholesalers and to deal with them over a long period.

4. Regard for human relations is also necessary in promotion directed at wholesalers and retailers.

The president of a foreign firm in Japan, who learned of the death of a member of the family of a country wholesaler with whom he had business relations, visited the wholesaler immediately to offer his condolences.

The board chairman of a mammoth appliance company never fails to visit local retailers to pay respects, whenever he goes to a summer resort on holiday. These may appear to be typically Japanese gestures, but you should regard them as important.

Promotion based only on rationalism might lead to an unexpected difficulty.

5. It is therefore important that you have as your partner a Japanese (or a Japanese firm) well versed in distribution in Japan and having considerable influence on distribution channels in Japan.

FINANCIAL FUNCTIONS OF THE DISTRIBUTION SYSTEM

Generally speaking, you will sometimes be forced to choose between a small-profit-and-quick-returns policy and a high-price-and-high-margin policy in the Japanese market.

The market environment in Japan is such that relatively great importance should be attached to gross sales. A multi-stage distribution system is often considered to cause manufacturers and exporters a profit squeeze, but it also diversifies risks and serves the purpose of financial hedging. Distribution systems in Japan are diversified, they are safe and excel in mass distribution. This is one of the patterns of small profits and quick returns.

However, distribution systems in Japan are not always multi-stage or diversified ones. You have a free choice. When the manufacturer deals directly with retailers, their primary objective is often not so much to secure profits as to ensure mass selling by lowering the retail price.

It should be borne in mind that a high-price-and-high-margin policy is not necessarily gladly accepted by Japanese distributors.

Fallacy 6

I know that advertising is needed, but it is so expensive that I shall not be able to afford more than a small amount.

Advertising is indispensable for promotion in Japan. In gigantic mass media and amid a deluge of information, advertising sometimes fails to produce any effect unless it is above a certain level in scale or volume. This level, below which advertising fails to be effective, is called the 'noise level'. To think that advertising of any volume in any medium will produce an effect is to walk into a trap. It is important that advertising policy is decided according to the size of the sales promotion budget.

When sufficiently powerful advertising or promotion cannot be financed by a single firm, it is considered advisable to organize a joint campaign financed by a trade association.

Furthermore, promotion directed at retailers can be easily carried out in

a high-density market and measures taken by manufacturers or sales companies for retailers are generally accepted with understanding. If extensive mass-media advertising cannot be afforded, carefully planned regional sales campaigns with the cooperation of the local retailers should be considered.

Personality and human relations

Fallacy 7

Europeans and Japanese have many things in common. So I can do business just like any other market.

It goes without saying that when you do business in a foreign country, it is important that you first understand the people of that country. Here are certain matters which are often overlooked by foreigners in Japan:

1. It is important not to cause the Japanese to lose face. This applies to all Japanese with whom you may come into contact in connection with business: from your customers and the management of the companies you deal with, to distributors, your partners, and employees.
2. The Japanese have little class consciousness. (Traditional social classes like those in Europe do not exist). A notion prevalent among the Japanese is that all people are equal when their business positions are not taken into account. The Japanese generally attach greater importance to seniority in age than to social status. They also have great respect for learning and the arts.
3. A trait peculiar to the Japanese mentality is the degree to which business relations of long standing are respected. The Japanese are not exclusive. They accept newcomers if the latter show a willingness to do business with them for a long time.
4. The Japanese people are well educated and there are many capable men among them. They understand English well, but generally lack proficiency in conversational English. If you insist on proficiency in conversation in any foreign language, you might not be able to employ workers of business ability. It should be noted here that a Japanese person proficient in any foreign language does not necessarily mean an asset to your company from a business viewpoint.
5. The Japanese are very strict in their demands for product safety, and guarantees against trouble, accident, and defects. General consumers widely assume that products available on the market are perfectly safe and have no defects.
6. Cleanliness is valued very highly by the Japanese. They are therefore fastidious about packaging, design, colour, etc. For instance, they claim compensation for the discolouration or uneven colouring of leather products. They also have a keen sense of hygiene and reject any product which does not look clean.
7. Japanese consumers are also severe in their demands for uniformity in size, colour, etc., among the individual units of the same product. They are not very tolerant of inevitable slight differences in quality between individual units.
8. Any difference between a sample and the real product will be severely criticized by the Japanese. They demand as a matter of course that what they get is identical to the sample shown them.

There have been a large number of cases in which ignorance of such characteristic severity led to a failure in marketing because the product was regarded as imperfect or the after-sales service as insufficient.

Fallacy 8

There are no special rules for securing the close cooperation of Japanese business contacts.

To encourage the Japanese to give you their loyalty and become your good partners you should take note of the following:

1. Be prepared to have your top management stay in Japan for a long time, and indicate by your attitude that you are settling down to business in Japan in earnest. Those foreign firms which are successful in Japan have all been there for a long time.
2. Avoid, above all, replacing your top management in Japan after a short time—two or three years. If changes are necessary try to maintain continuity between the outgoing and incoming managements. Foreign firms fail in Japan when their top managers, intent on achieving the goals set by their headquarters outside Japan, lose sight of a long-range perspective and leave Japan before they are able to establish good human relations with the Japanese.
3. The head of your company in Japan should periodically call on his customers to pay respects. He should also attend his customers' funerals, weddings, etc. In addition, he should talk privately with his employees and listen to their views. In short, it is absolutely necessary for the Japanese to have personal contact with their top management.
4. When establishing a corporation in Japan and employing Japanese workers, you should endeavour to adopt the merits of the typically Japanese system of life employment. Personnel plans should not be entrusted exclusively to your non-Japanese general manager; the Japanese staff should be allowed to participate as much as possible in such plans.

Basic points which require attention in connection with operations in the Japanese market

Fallacy 9

One can go into the labour market and recruit any skilled staff required.

College-educated Japanese office workers, encouraged by the lifelong employment system and a technocrat-led management system, grow into able businessmen who work exclusively for their companies with great loyalty and an eagerness for self-training. This is most frequently overlooked or not easily understood by foreign business people. In Japan truly able workers tend to be employed by big companies; it is virtually impossible to entice them to join your company. If a foreign firm is to succeed in Japan, it should recruit new college graduates and train them over 10 to 20 years. This tends to make immediate operations difficult.

A foreign firm determined to cope successfully with keen competition from Japanese firms staffed with loyal employees in long service, should be prepared to foster able workers in a similar way. At the same time, it is vitally important for the foreign firm to take measures designed to recruit excellent professional staff members. One way to do this is to enter into partnership with a Japanese firm so that its excellent staff can be placed at the disposal of the foreign firm. Another method is to choose a Japanese marketing research partner—an advertising agency, a business consultant, or a market research institute—at the earliest possible stage after deciding to enter the Japanese market, or while considering entry. By working jointly with such a Japanese organization, the foreign firm can make effective use of outside staff.

Fallacy 10

Return on investment in the shortest possible time is the best target.

In Japan, as in the United States and the principal European countries, personnel costs and sales promotion costs such as advertising expenditure, constitute important cost factors. What is pointed out particularly about Japan is that extremely high land prices make office establishment and maintenance an important factor in the decision on the size of investment.

Since the size of initial investment is required to exceed a certain level, business plans such as a revenue and expenditure plan and a return-on-investment plan should be worked out from a medium- or long-range, instead of a short-range, view. An attempt to set a break-even point at an early date would overstrain the marketing plan.

2. Reference tables

Table 1. Average consumption structure of urban households. (Source: Prime Minister's Office, 'Household Income and Expenditure Survey')

	1966	1968	1976	1978
	%	%	%	%
Consumption spending	100	100	100	100
Food expenses	37.1	35.6	31.8	30.4
Housing expenses	9.3	10.3	9.5	9.4
Light and heat expenses	4.4	4.0	3.9	4.1
Clothing expenses	11.1	11.0	10.6	9.8
Miscellaneous expenses	38.1	39.1	44.2	46.3

Table 2. Monthly income and expenditure: Average of all Japan workers' households. (Source: Prime Minister's Office, 'Household Income and Expenditure Survey')

	1976	1978
	¥	¥
Income	258,237	304,562
Disposable income	233,462	270,307
Consumption spendings	180,663	208,232
food	54,386	60,200
housing	17,250	19,432
fuel and light	6,707	8,051
clothing	18,552	19,691
miscellaneous	83,768	100,858
Surplus	52,798	62,075
net savings	32,287	37,511
Consumption propensity	% 77.4	% 77.0
Saving propensity	% 13.8	% 13.9
Engel's coefficient	30.1	28.9

Table 3. International comparison of calorie supply

	Starch	Sugar, etc.	Animal protein	Fat	Others
USA	21.3	16.9	37.2	16.6	8.0
West Germany	25.5	13.1	38.3	15.3	7.8
France	27.8	13.1	37.7	14.2	7.2
Britain	28.2	17.7	36.2	12.7	5.2
Italy	42.1	10.6	22.9	15.4	9.0
Japan	52.0	11.4	13.9	11.2	11.5

Table 4. International comparison of ratio of students advancing to higher education institutions.

	Students having education up to 18 years (Senior High School) (1973) (%)	Students advancing to universities and junior colleges (1973) (%)
Japan	90.8	32.7
Britain	61.3	19.8
West Germany	41.9	17.1
France	76.3 (1972)	22.9
USA	96.7 (1972)	43.1

Table 5. Nationwide ownership of home electrical appliances and motor cars. (Source: Brand Barometer Report [BBR])

	September 1971(%)	September 1976(%)	March 1979(%)
Home radio	25.4	29.3	26.6
Transistor radio	61.7	61.2	54.4
Stereo set	36.3	51.0	54.8
Record player	31.5	25.8	23.6
Tape-recorder	32.7	51.8	55.0
Black & white TV set	77.7	34.9	26.0
Colour TV set	50.9	95.4	98.0
Electric rice cooker	50.9	53.2	54.9
Toaster	65.5	79.3	80.4
Juicer	24.1	41.6	43.5
Mixer	16.5	18.8	19.1
Refrigerator	95.6	99.3	99.6
Vacuum cleaner	73.5	93.0	95.9
Washing machine	94.3	98.4	99.1
Electric 'kotatsu' footwarmer	84.2	90.4	92.0
Electric fire	13.1	21.4	26.0
Electric blanket	33.3	50.3	53.2
Electric fan	89.2	93.6	94.2
Kitchen fan	35.4	66.7	77.2
Room air-conditioner	9.6	27.7	35.5
Timer	21.1	22.9	24.3
Electric shaver	51.0	65.3	68.4
Hair dryer	46.0	66.3	75.3
Electric kettle	3.6	7.9	7.6
Massaging machine	15.0	19.7	20.5
Interphone	6.3	11.5	16.3
Hair curler	12.5	27.6	27.7
Microwave range	2.5	17.6	25.3
Window fan	—	9.1	9.3
Electric rice warmer	—	59.7	57.9
Four-wheel motor car	30.9	48.9	53.4
Van	10.5	9.5	9.0

Table 6. Percentage of economic concentration in five prefectures (1979).

	Population	Personal income	Industrial shipment value	Retail sales	Private savings	Number of firms
	%	%	%	%	%	%
Tokyo	10.0	14.1	8.4	30.6	23.3	12.3
Osaka	7.2	8.3	9.3	16.1	10.5	8.0
Kanagawa (Yokohama)	5.8	6.4	9.6	2.7	4.2	4.3
Aichi (Nagoya)	5.3	5.4	9.4	8.0	5.6	5.5
Hyogo (Kobe)	4.4	4.4	5.7	2.7	4.4	4.1
Total of the five prefectures	32.7	38.6	42.4	60.0	47.9	34.2

Table 7. Market size of consumer goods in Japan (1976). (Source: Yano Economic Research Institute)

	(¥ million)	(\$ million)	Volume	Status of foreign makers, imported goods
Alcoholic beverages (total)	2 155 089	7 982	5 970 296 kl	(P)
Beer	830 757	3 677	3 710 094 kl	(P)
Whisky, brandy, gin, etc. (total)	440 861	1 633	333 264 kl	(P)
Whisky			227 526 kl	(FS) { Imported Scotch whisky, 2 341 210 cartons
Wine (74)	20 000	74 (75)	20 500 kl	(FS)
Milk	630 751	2 336	3 740 000 kl	(P)
Frozen preparations	210 020	778	463 620 t	(P)
Tinned & bottled foods (fish, fruit, vegetables, juice, baby food, jam, etc.)	551 480	2 043	165 270 000 c/s	(P)
Carbonated drinks (colas, flavours, etc.)	355 910	1 318	2 751 000 kl	(P) { Share: Coca Cola 87.9%, Pepsi Cola 10.8%, Nestlé 69.0%, other foreign brands 30%
Instant coffee	118 000	437	27 300 t	(P)
Coffee	78 000	239	52 200 t	(P)
Tea	26 500	98	7 900 t	(P) { Lipton 30.4%, Twining 22.8%, Brooke Bond 12.0%
Soup (granules, cubes, tinned)	14 772	55	14 680 t	(P)
Macaroni & spaghetti	23 090	86	101 500 t	(P)
Processed meats (ham, sausage, bacon, etc.)	320 000	1 185	330 000 t	(P)
Instant creaming powder			24 000 t	(FS) { Nestlé 25.0%, AGF (Ajinomoto-General Foods) 5.8%
Sweets (75)	100 000	370	140 000 t	(P)
Chocolate	205 000	759	130 000 t	(P)
Biscuits	144 000	533	292 000 t	(P)
Cosmetics (perfume, men's cosmetics, etc.)	606 000	2 244		(FS) { Imports in value ¥7 685 million
Men's cosmetics	14 700	54		(FS)
Toilet soap	55 900	207		(FS)—P&G Sun Home 4.2%
Detergent	93 500	346		(FS)—P&G Sun Home 9.6%
Kitchen detergents	46 600	173		(FS)—P&G Sun Home 11.2%
House cleaner	58 500	217		(FS)—P&G Sun Home 11.4%
Shampoo	36 500	135		(P)
Fountain pens	14 837	55		(R)
Still cameras (75)	165 161	612		(P)

Watches, clocks		209 000	774		(P)	Imports in value ¥34 200 million
Wooden furniture		688 920	2 552		(P)	
Men's wear (75)		830 200	3 075		(R)	
Tailored clothes (75)		158 600	587		(R)	
Men's accessories (75)		668 800	2 477		(R)	
Women's wear (75)		1 010 700	3 743		(R)	
Women's accessories (75)		860 800	3 188		(R)	
Fabric (75)		149 300	553		(R)	
Carpets, curtains		269 600	999		(R)	

P = Production
R = Retail sales
FS = Factory shipment

Table 8. Typical distribution channels in Japan

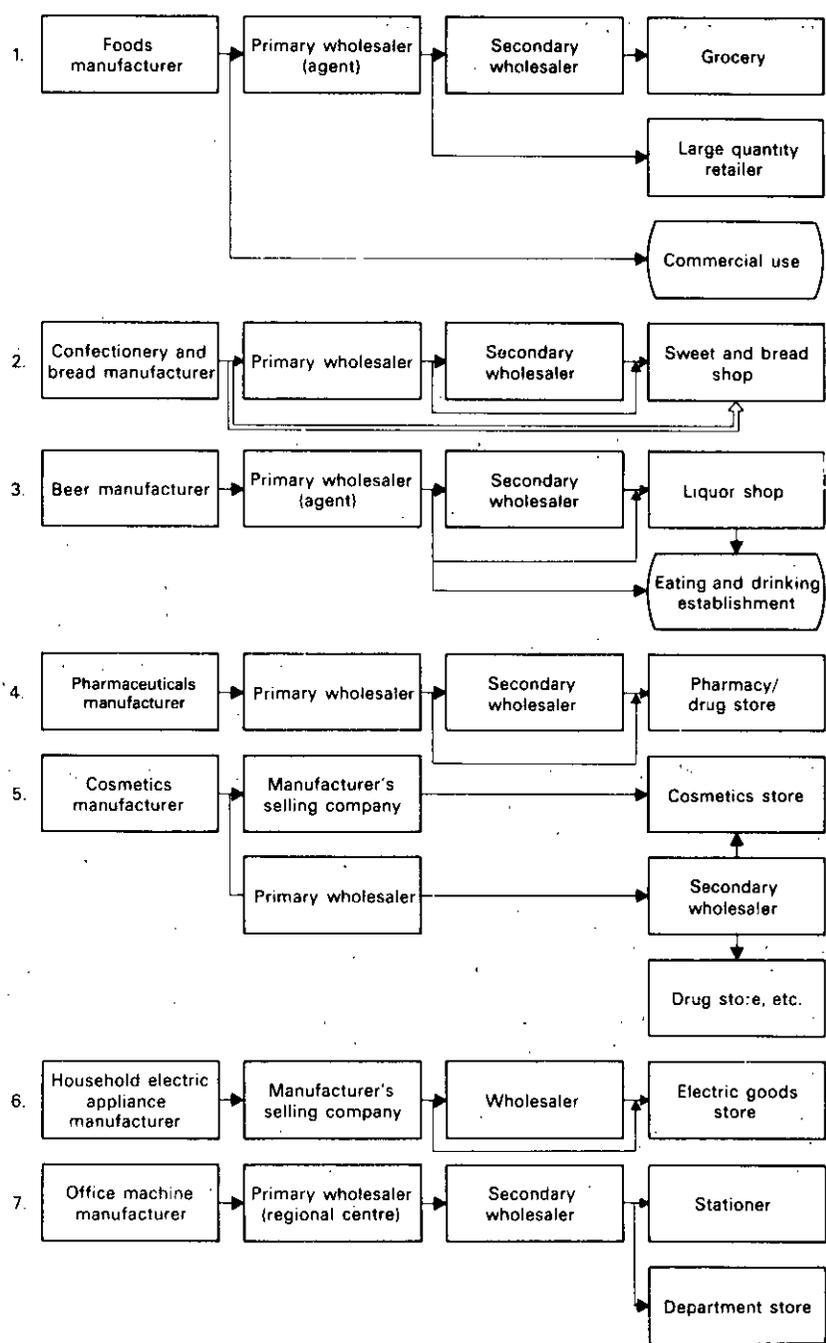


Table 9. Comparison of wholesale business between Japan and Europe, and USA. (Source: EEC 'The Distribution Trade in Common Market', *Distribution Trades EDC*, HMSO, 1973. USA—'Directory of International Statistics', Statistics Bureau, Prime Minister's Office. Japan—'Commercial Statistics')

Country	Year of survey	Number of wholesale dealers	Number of workers	Number of workers per dealer	Population per dealer
Belgium	1961	34 970	143 270	4.1	270
Denmark	1958	10 665	89 900	8.4	446
France	1966	77 520	675 300	8.7	634
West Germany	1968	110 375	1 190 090	10.8	545
UK	1965	41 050	772 835	18.8	1 320
Ireland	1966	2 325	33 820	14.5	1 239
Italy	1969	84 000	415 570	5.0	634
Luxemburg	1958	1 145	6 245	5.4	288
Netherlands	1963	30 915	263 540	8.5	398
USA	1967	311 464	3 641 000	11.7	638
Japan	1976	340 430	3 518 794	10.3	329

Table 10. Classification of Japanese retail dealers

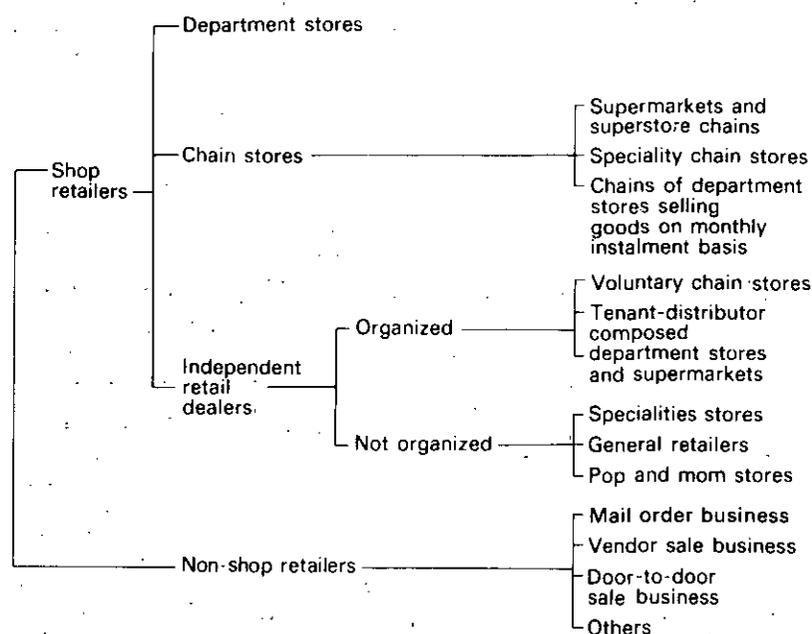
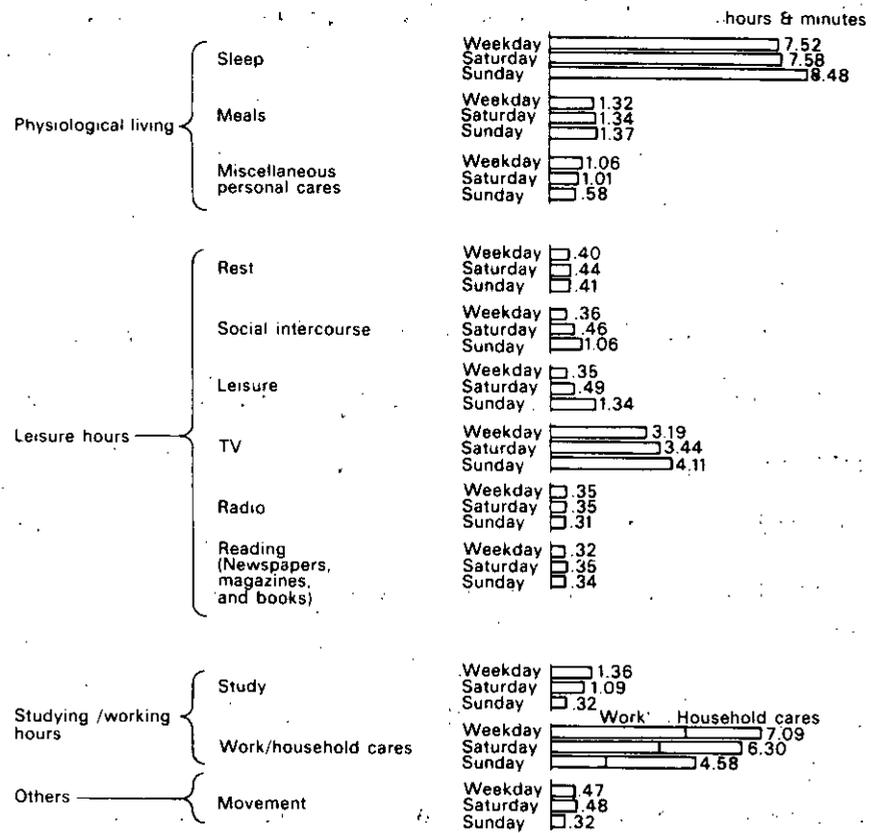


Table 11. Retail dealers in Japan, Europe, and USA. (Source: UN Statistical Yearbook 1976, etc.)

Country	Year of survey	Number of retail establishments	Number of employees	Number of employees per establishment	Population per establishment
Belgium	1970	144 293	157 000	1.1	56
Denmark	1969	57 919	226 400	3.9	84
France	1966	481 930	1 625 000	3.4	102
West Germany	1968	404 693	2 251 000	5.6	149
UK	1966	504 412	2 556 000	5.1	107
Finland	1971	37 665	160 000	4.2	123
Italy	1971	931 757	1 730 000	1.9	58
Austria	1971	42 254	107 900	4.9	177
Australia	1975	121 390	786 600	6.5	78
USA	1972	1 533 000	8 577 000	5.6	140
Japan	1974	1 546 634	5 297 348	3.4	71

Table 12. Ordinal life pattern of the Japanese people



3. Advertising expenditures in Japan for 1978

Advertising expenditures in Japan in the 1978 calendar year totaled an estimated ¥1,845,700 million (\$9,044 million calculated at an exchange rate of \$1=¥204.08), up 12.4%, for an increase of ¥203,000 million (\$995 million) over the ¥1,642,700 million (\$8,049 million) of the previous year.

I. The Japanese Economy in 1978

The Japanese economy went through difficulties during 1978. The appreciation of the yen affected the economic climate throughout the year. Under this stormy condition, the government policy to stimulate domestic demand did not easily produce results. Not much headway was made, either, in the efforts to rectify the international economic imbalance. However, surviving the rough weather, new buds of reform appeared in the Japanese economy, and industry set sail for a vigorous development.

* * *

The economic environment, both internal and external, became increasingly unclear from the beginning of the year, and Japanese industries started the year with a feeling of uncertainty. The yen's exchange value began to rise again in the middle of February, to the bewilderment and irritation of the business community. In March, the Government came up with measures to increase dome-

stic demand and reduce Japan's trade surplus. At the same time, the official discount rate was lowered sharply.

However, the yen's appreciation did not cause so great a financial shock as had been feared. Public investment began to produce effects, and industrial production became active. The real economic growth in the January-March period was 9.5% in terms of annual rate. Although there were both hopeful and dark aspects in industry, on the whole, streaks of sunlight began to come through the cloud hanging over the Japanese economy.

The loud cries of alarm over the recession, in which all industries joined at one time for a "grand chorus," became subdued. The Government's budget for fiscal 1978 provided for increased public investment to stimulate business in order to achieve the targeted 7% real economic growth and reduce the trade surplus to \$6,000 million. This government measure, combined with the concentration of public works spending in the April-June period, should have aroused private demand and put the Japanese economy on the recovery road.

However, if the basic economic condition took a favorable turn, that was due to external factors such as fiscal spending and export growth; domestic private demand remained inactive. While consumer prices calmed down, labor's spring wage drive resulted in a low rate of wage raises which, coupled with employment uncertainties, discouraged personal spending. A cautious mood prevailed in the industrial world, and corporations showed no strong desire to invest in plant and equipment. Moreover,

exports which had supported the economy until then began to decline in volume, as the yen's value rose.

The economic outlook grew dimmer in the July-September period. The yen started to rise again, and the export volume continued to drop. Corporate strength of the smaller enterprises reached its limit, and the unemployment rate kept rising. Although the sales of summer goods quickened owing to a spell of very hot weather, consumption on the whole remained inactive. It was feared that the deflationary effect of the yen's appreciation and the concentration of public works spending in the first half of the fiscal year might cause a reaction in the second half leaving business out of breath.

Industry called for large-scale government measures against recession. At the same time, it became doubtful that the goal of "7% real growth" during fiscal 1978, internationally pledged at the Bonn summit in July, would be attained. Moreover, the current-account surplus continued to increase. To cope with the situation the Government announced a comprehensive economic policy in September.

The yen's value, however, continued to rise, and in October its exchange rate against the U.S. dollar broke the ¥180 level. The Government encountered difficulties in implementing its financial policy. Later, the yen's value dropped in reaction, but the adverse effects of its earlier appreciation surfaced gradually. It was feared that the resulting distortion would affect the economy through decline of export volume.

The industrial world tried to cope with the decelerating economic situation despite the yen's steep rise. Although there were gaps between industries that did well and those that did not, corporations on the whole increased their earning power. At the half-yearly settlement of accounts in September, quite a few corporations showed increase in profit despite decrease in income for the first such phenomenon in postwar Japan. This was due to the decline in prices of imported raw materials resulting from the yen's appreciation and a thorough "weight-reducing" management.

After early autumn, inventory adjustment proceeded further, and production activities continued to rise until the end of the year. Private corporations revised their policies to increase investments in plant and equipment. Even structurally depressed industries showed signs of recovery. Encouraged by price stabilization and expectation of business perk-up, private spending, too, increased. Economic activities gradually recovered from a temporary stagnation in midyear, while domestic and external demands continued to play a tug-of-war.

The real economic growth in calendar 1978 was 5.6% (10.7% nominally), reflecting the decline in exports and the delay in expansion of domestic demand despite the Government's business-stimulating measures. The Government had to abandon the original target of "7% real growth" for fiscal 1978. Actual real growth was estimated at slightly under 6% (slightly over 10% nominally). Consumer prices settled down for the first time since 1960, rising a mere 3.8% on the annual average, thanks mainly to

the yen's appreciation. The rise from the beginning of the year was 3.5%. Wholesale prices also marked the first sharp drop in 20 years, declining by 2.5% from the previous year on the annual average, and by 2.3% from the beginning of the year.

II. Breakdown of Advertising Expenditures by Media

Advertising expenditures in the 1978 calendar year totaled \$9,044 million for an increase of 12.4% over the previous year.

In spite of the uncertain economic climate, the advertising industry enjoyed relative prosperity throughout the year. This was probably due to the fact that, while exports declined as the yen soared, the industrial world tried harder to find a way out of its financial difficulties by developing the domestic rather than the overseas market. Many corporations also assumed an "aggressive" attitude from the beginning of the year, switching from the "defensive" attitude they had maintained mostly by "weight-reducing" since the oil crisis.

A notable move among industries was to concentrate their efforts for the anticipated increase in domestic demand, developing new products with high added value and reexamining the domestic market. The automobile and home electric appliance industries intensified competition for the domestic market, encouraging other industries to undertake brisk domestic marketing activities.

The advertising business in 1978, after showing a slight decline in the April-June period, recovered in the latter half

of the year and improved towards the end of the year as indicated by the general Ad Index. The volume of advertisements in each medium exceeded that of the previous year, and the advertisements in the printed media nearly attained the level of 1973, the peak year:

The rate of total advertising expenditures to the gross national product, which began to improve in 1976 for the first time in a long time, continued to increase in 1978. This rate had declined since around the mid-1960's. This may indicate that the advertising industry has been strengthening its position in the Japanese business world. It may also mean that the intense competition under the declining economic growth compelled industries to emphasize marketing policies in their management strategy. Advertising activities became increasingly important.

Advertising expenditures of each category rose steadily except for export advertising which showed little growth because the yen's rise offset the increase in advertising volume. Expenditures for direct mail, outdoor and other media achieved fairly large increases, reflecting advertisers' marketing activities which placed emphasis on sales promotion. Although television's premier position in the share of total advertising expenditures was unshaken, the growth rate of newspaper advertising exceeded that of television for the first time since 1972, because moves to reexamine newspaper advertising, which have been active for some years, finally took root.

Advertising expenditures by media

Media	Advertising expenditures (Unit: \$1 million)			Compared with previous year (%)	
	1977	1978	Increase	1977	1978
Newspaper	2,483.3	2,794.0	310.7	111.4	112.5
Magazine	429.7	466.0	36.3	110.0	108.4
Radio	397.4	444.9	47.5	115.2	112.0
Television	2,865.0	3,202.2	337.2	114.8	111.8
Major Media Total	6,175.4	6,907.1	731.7	113.1	111.8
Direct Mail Outdoor and Others	1,717.0	1,974.7	257.7	112.5	115.0
Export Advertising	156.8	162.2	5.4	103.2	103.4
Total (less major media)	1,873.8	2,136.9	263.1	111.7	114.0
Total Advertising Expenditures	8,049.3	9,044.0	994.7	112.8	112.4

Note: Converted at US\$1 = ¥204.08

NEWSPAPERS

Newspaper advertising expenditures totaled \$2,794 million, up 12.5% over the previous year for the highest rate of growth of all the four mass media.

Newspaper advertising was relatively active, probably because more advertisers reappraised the value of newspapers as an advertising medium. The newspapers themselves actively publicized themselves under the slogan "redevelopment of newspaper advertising."

As the export climate deteriorated, all industries paid greater attention to developing domestic demand, which meant intensified competition for the domestic market. Major corporations with large capital and adaptability to the changing climate took the lead in advertising activities. They used newspaper advertising because it suited their advertising policy to emphasize their difference from their rivals. Large project advertisements and special advertising features appeared in newspapers more conspicuously than before. Wide-space and irregular-shaped advertisements aimed at greater exposure and impact became also notable.

The volume of newspaper advertisements showed a steady growth. Some monthly totals even exceeded the levels of 1973, the peak year. The advertising volume in regional newspapers greatly exceeded the 1973 level, and its growth rate in value surpassed that of national newspapers. The volume of color and full-page advertisements increased sharply as in the previous year.

Active advertisers were electrical equipment manufacturers who came up with various new products, automakers who announced new models, makers of household articles and equipment catering to the desires of consumers for a richer material life, and food and beverage industries that realized the effectiveness of newspaper advertising. However, the expenditures of such major advertisers as housing developers, building material manufacturers and publishing houses did not increase as expected.

MAGAZINES

Magazine advertising expenditures totaled \$466 million, showing an increase of 8.4% over the preceding year.

Magazines always are a step ahead of their readers in their consciousness of life-styles and are highly effective as an advertising medium. In 1978, however, they did not make the expected advance, and the increase in their advertising expenditures was the smallest of all mass media. New magazines which mushroomed during the previous year with the so-called "New Family" and young people as their target did not do well, although advertisements in long-established weeklies and monthlies grew steadily throughout the year.

Some of the new magazines ceased publication, having failed to grasp the readers' needs accurately. Under these conditions, magazine advertising remained inactive, particularly during the first half of the year. In the second half, however, the picture brightened, as advertising volume, mainly in weeklies and women's magazines, showed a marked increase, owing to editorial efforts by each magazine to emphasize its own characteristics which resulted in increased circulation.

Advertising expenditures increased remarkably for services/entertainment, and household articles/equipment. Precision/office machines, electrical equipment, and pharmaceuticals also contributed to the increase of advertising revenues. In contrast, advertising of cosmetics/detergents, foods/beverages, and clothing/personal effects was inactive. There were prosperous and

unprosperous industries among major advertisers. In recent years, advertisements by wholesalers/department stores, particularly in women's magazines, increased, although their share in the total magazine advertising was not much. In 1978, however, their increase was not so great as expected.

RADIO

Radio advertising expenditures totaled \$445 million, increasing by 12.0% (\$48 million) over the previous year. In an uncertain environment for advertising, radio achieved a stable growth. This probably was the result of the efforts the radio companies had been making for years to improve their management. It may also be due to the joint efforts of all commercial radio stations in an active media promotion campaign and to their steady sales efforts to expand various listener classes.

Among notable activities were the 24-hour "radithon" (radio marathon) broadcast by five stations during Radio Broadcasting Month to commemorate their 25th anniversary, and a special program simultaneously broadcast by all commercial medium-wave radio stations. Sales promotion which made effective use of radio's function as a community medium was also notable as in the previous year.

The monopoly by one station of the night games of a certain popular professional baseball team caused a controversy among commercial radio stations and created the problem of reorganiz-

DIRECT MAIL, OUTDOOR AND OTHERS

Expenditures for direct mail, outdoor and other media advertising totaled \$1,975 million, increasing by 11.5% over the previous year for the highest growth of all advertising media. Many corporations followed a marketing strategy that emphasized sales promotion in order to cope with the uncertain economic situation.

*Direct Mail ----- The drop in volume that resulted from a sharp rise of postage rates in 1976 persisted in 1978, and direct mail advertising expenditures barely increased from the previous year.

*Newspaper Fliers ----- An advantage of newspaper fliers, which have established a firm position as a medium of useful information for living, is that they enable advertisers to clearly define their target areas. Seeking direct sales increases, the industrial world turned their attention to this medium. As major advertisers such as real estate agents, department stores and supermarkets used more fliers and their advertising rates, mainly in the metropolitan areas were raised, advertising expenditures in this medium showed a satisfactory growth.

*Outdoor Advertising ----- During the first half of the year, outdoor advertising was inactive, because advertisers had difficulty in finding suitable sites to construct large advertising towers and neon signboards. In the second half, expenditures mainly on large neon sign towers increased. This was because of redevelopment of their construction sites, dismantling of old towers, and reappraisal of their value as an advertising medium.

*Transit Advertising ----- The field for transit advertising expanded. With the opening of the New Tokyo International Airport in Narita, miscellaneous transit advertisements related to airport operation increased. Permission was given to put advertising stickers on the windows of the National Railways' commuter trains in Tokyo and Osaka areas. New or additional poster boards were built at national and private railway stations. The effectiveness of train coach advertisements was recognized anew by advertisers, who used wider advertisements increasingly. Advertising

expenditures grew steadily for these reasons and also as a result of the revision of transit advertising rates.

*Motion Picture Ads ----- Expenditures for advertising in this medium showed little increase. Yet, long publicity films which had been decreasing in recent years began to increase. Also noteworthy was the use of slides and video tape in sales promotion.

EXPORT ADVERTISING

Export advertising expenditures were estimated at \$162 million, up only 3.4% over the previous year. This was due to the continuing rise of the yen's exchange value. In terms of U.S. dollars, however, the increase was a sharp 31.7%.

In 1978, as in the preceding years, the current-account surplus increased monthly, and foreign criticisms of Japan grew louder. At one time in October the yen's exchange rate against the U.S. dollar broke the ¥180 level, and the competitive power of key Japanese export industries declined.

While Japanese exports continued to grow in dollar amount, their volume decreased in and after the April-June period. For the whole year, although exports increased by 21.2% in terms of

U.S. dollars on a customs clearance basis, they decreased by 5.0% in terms of yen from the previous year. The increase in volume was only 1.2%.

Exports showing steady growth included cameras and other optical apparatus which enjoyed a strong competitive edge, tape recorders including VTRs, and business machines. Auto exports, which showed a satisfactory growth during the first half of the year, stood still in the second half, particularly the shipments to the Middle East and the United States.

Exports to the United States, EC, and the Middle East were inactive, while those to Southeast Asia, South Korea and the communist bloc including China showed a steady growth. This indicated that Japan shifted the emphasis of exports from industrialized countries and oil-producing nations.

Advertising activities overseas were vigorous during the first half of the year, but became sluggish in the second half because of the worsening export conditions and the sharp rise of the yen.

III. Advertising Expenditures Classified by Industry

Advertising expenditures in the four mass media (total of advertising expenditures for newspapers, magazines, radio and television), comparison with the previous year and the rates of contribution to increase were as shown in the accompanying table.

Type of Product	Advertising Expenditures (US\$1 million)	(%) Compared with 1977	(%) Share in Increase
Basic materials	100.7	121.5	2.4
Food & beverages	1,248.1	107.8	12.4
Pharmaceuticals	372.4	114.2	6.3
Cosmetics & detergents	521.7	115.1	9.3
Clothing & personal effects	201.2	107.4	1.9
Publications	431.2	112.0	6.3
Industrial machines	78.1	95.2	0.6
Precision & office machines	253.4	118.1	5.3
Electric equipment	356.3	129.1	11.0
Transport machinery	334.5	115.3	6.1
Household equipment	330.4	113.4	5.3
Housing & building material	463.9	106.1	3.7
Wholesalers & department stores	409.4	115.9	7.7
Banking & insurance	246.1	105.0	1.6
Service & entertainment	585.7	115.0	10.5
Government offices & other organizations	120.2	112.0	1.8
Medical, education and others	853.8	108.4	9.0
Total	6,907.1	111.8	100.0

Note: Converted at \$1 = ¥204.08

Expenditures in the four mass media in 1978 totaled \$6,907 million, up 11.8% over the previous year. Advertising during the first half of the year was inactive. While economic recovery due to vigorous government measures was expected, the steep rise of yen in February caused anxiety about future economic conditions and cooled industry's eagerness to advertise. Personal spending did not increase, either.

In the second half, when the corporations that had "reduced weight" saw possibilities of tiding over the "strong-yen" recession, business conditions began to look up slightly. Expenditures of all Japanese households during the April-June period increased only by 4.3% over the same quarter in the previous year. After hitting this bottom, the growth rate picked up gradually in the following two quarters, registering 5.7% and 6.8%, respectively. In yen, the increase in 1978 was 5.9%, the lowest rate in recent years.

In spite of these conditions, advertising expenditures showed an increase of more than 10%. This can be attributed to the fact that companies intensified their marketing competition to develop domestic demand and conducted active advertising drives. The factors that particularly contributed to greater demand for advertising included appearance of new products and new models aimed at larger market shares, as well as multi-functional products in various fields, and entry into other industries.

Manufacturers of foods/beverages and electrical equipment as well as services/entertainment contributed greatly to the

total increase of advertising expenditures. Advertisements of electrical equipment, basic materials, and precision/office machines showed a particularly sharp increase. Those of wholesalers/department stores, transport machinery, cosmetics/detergents, and services/entertainment also showed a satisfactory growth.

Newspaper advertising by manufacturers of electrical equipment and foods/beverages and broadcast advertising by wholesalers/department stores and electrical equipment manufacturers increased greatly.

Foods and Beverages

The foods/beverages industry, which formerly had given priority to television advertising in the hope of immediate effects on sales, returned to newspaper advertising. Those advertisers who reappraised the effectiveness of newspaper advertising made big use of this media simultaneously with the introduction of new products in the market. In premium campaigns, too, they used newspaper advertising in conjunction with television advertising.

A big topic of the year in the field of imported foods and beverages such as cheese, coffee, wine and whisky was how the suppliers would respond to consumers' demand for a reduction of prices corresponding to the rise in the yen's exchange rate.

Distributors of instant coffee lowered their prices by more than 20% during the year, which resulted in increased demand.

In July and August, when a very hot spell came, sales of beer, juice, lactic drinks and other soft drinks were very active. Beer companies intensified sales promotion for draft beer, starting a "draft beer war." In the soft drinks market, a revival of the powdered beverage boom was anticipated and new manufacturers joined in the race. As for new products, varieties of butter mixed with tiny pieces of apples and raisins, new types of margarine and baby foods appeared on the market one after another. Their manufacturers fought vigorously for the market through premium campaigns.

The advertising activities of foods/beverages companies were quite brisk. However, their advertising expenditures increased by only 7.8% over the previous year.

Pharmaceuticals

The total production of pharmaceuticals was estimated at \$13,720 million, up 13.9% over the previous year for a double-digit growth for the third successive year. Of the total production, non-prescription medicines accounted for a little less than 20%. This might affect demand for advertising. Corporate advertising increased, and advertising of the "big three" popular medicines -- cold remedies, digestives and vitamin tablets -- continued to show a steady growth. Many new products were mar-

keted in such "non-pharmaceutical" categories as deodorants and insecticides, which caused brisk advertising activities.

While the increase rate of advertising expenditures for newspapers remained at the single digit level, those for television, magazines and radio attained the double-digit level. Total pharmaceutical advertising expenditures in the four mass media increased by 14.2% over the previous year.

Cosmetics and Detergents

The growth rate of the total shipments of cosmetics was 8.0%. While output of make-up cosmetics showed a high rate of growth, that of basic cosmetics was stagnant. New companies crowded into the market, but demand remained sluggish. Cosmetics companies carried on active marketing competition for all their products, including cosmetics for men and fragrances. A particularly notable move in the industry was a winter campaign conducted for the first time in addition to the sales drives in other seasons.

The detergents industry introduced new products with stronger cleansing power, which created a steady demand for advertising.

Advertising expenditures in the four mass media showed a satisfactory increase of 15.1%. Television advertising contributed particularly to the growth.

Clothing and Personal Effects

The textile industry, chronically suffering from structural depression, showed a black-ink balance at the half-yearly settlement in September, and began to recover from the recession at last. This was a result of production cutbacks over a long period, depreciation in price of imported raw materials owing to the strong yen, various managerial efforts, and success achieved by artificial leather and other special products.

On the other hand, large apparel makers such as Van and Hanasaki went bankrupt in the first half of the year, indicating that the recession had extended its effect from the smaller to large businesses. The gaps between prosperous and unprosperous companies became clearer. As regards women's clothing, sales of formal wear increased and the New York fashion took root. In summer, sales of "tank top" shirts grew, and men's polyester suits made a hit.

In the sportswear market, many companies from various other industries made inroads, and competition became excessive. Demand for training wear bipolarized, as functional quality was pursued on the one hand and emphasis on fashion on the other. Sales of training wear as a whole increased steadily. Jogging wear and sports shoes showed a very sharp growth, as the market expanded to include more diverse classes of users.

Advertising expenditures in newspapers and television increased by 12.4% and 9.2%, respectively. However, because of the decrease in magazine and radio advertising, the increase in all four mass media was only 7.4%.

Publications

The publications business had been dull for several years, and conditions did not improve much during 1978. Total sales showed little growth. Books returned unsold rose to an extraordinarily high rate. A publishing house of high reputation, Chikuma Shobo, went bankrupt. The Fair Trade Commission proposed to abolish the resale price maintenance system for publications. A mammoth retail bookstore, the Yaesu Book Center, opened in spite of opposition from small retailers.

Sales of both monthly and weekly magazines recovered to the level of 6% growth. It was particularly notable that weekly magazines emerged from their declining tendency which had persisted for several years. This may be mainly because sales of major magazines recovered, readers returned to magazines in reaction to the boom in comic books and paperbacks, and magazines for the young generation prospered. Although there was no great hit in the book publishing business, sales of literary books, especially those by young authors, increased. Reflecting the recession, books on economics and business management showed improved sales, though in a modest way.

Another noteworthy move was participation in the publications market of companies originally based in other industries. They showed particular interest in science fiction, nonfiction, books concerning movies, three-dimension picture books, and fashion books.

The total advertising expenditures in the four mass media increased by 12.0% over the previous year, owing to active advertising on television and radio and steady increase in newspaper and magazine advertising.

Precision and Office Equipment

The precision equipment industry and the office equipment industry advertised actively, mainly on television to promote their corporate images. Watch manufacturers, in particular, competed in development of new products as quartz crystal watches began to dominate the market. The competition became so intense that many manufacturers were forced to review their existing product lines, and their hot sales war was directly reflected in advertising activities.

As regards the camera industry, with the dissemination of cameras estimated at a near saturation point of over 80%, sales of all types dropped except 35 mm medium-class cameras which showed a satisfactory growth. This was due to the success in development of new classes of users by introducing new products equipped with more automatic devices for easier operation. The sales race based on diversification of products sustained advertising activities of the camera industry as a whole.

The office equipment industry increased sales smoothly owing to the development of such new products as plain paper co-

piers, electronic calculators of extra-thin type, those with long-life battery and of multi-functional type, and the expansion of the facsimile market.

The advertising expenditures in the four mass media increased sharply by 18.1% over the previous year, owing particularly to an increase in television advertising.

Electrical Equipment

During the first half of the year, the general stagnation of the domestic market for electrical equipment continued from the previous year, and sales of color television sets and stereos were inactive. In the summer months, however, owing to the very hot weather, sales of refrigerators, air conditioners, fans and other summer goods shot up. With this as a turning point, the market held firm during the rest of the year.

As sound multiplex broadcasting started in autumn, television sets adapted to this system were put on the market. Dual screen television sets also appeared, and manufacturers vied with each other in their advertising campaigns. Various new products with some new functions added to the conventional system were introduced. These included air conditioners and washing machines with built-in micro-computers, video television sets with cassette tape recorders, and a combination of color video camera with video tape recorder.

The FF-type hot air room heater, which was the main product in the winter sales war, also sold well. Demand also increased steadily for smaller electric kitchen appliances such as oven ranges with built-in micro-computers, sesame seed bulverizers, knife sharpeners and food processors, which met the wishes of housewives for labor-saving utensils.

Advertising expenditures increased by 29.1% over the previous year for a higher rate of growth than any other industry.

Automobiles

The domestic demand for new cars during the 1978 calendar year exceeded the estimate made at the beginning of the year. A total of 4,660,000 new automotive vehicles (excluding motor-cycles) were sold, up 12% over the previous year for the second highest growth in history. Demand for replacements which had been suppressed during the prolonged recession exploded. In fact, this was due to the aggressive sales campaign by manufacturers to develop domestic demand to make up for an expected drop in exports due to the yen's appreciation. They tried to stimulate demand for replacements by developing new models and conducted vigorous advertising.

Owing mainly to replacement purchases, sales of trucks and other industrial cars increased smoothly, reflecting the steady growth of public investment and market recovery. As for motor-

cycles, sales of 50 cc class, in the third year since their appearance on the market, showed increasingly favorable growth. The manufacturers put new models on the market and launched colorful advertising campaigns aimed at women users, employing popular female personalities.

The vehicle market as a whole, from general passenger cars, popular cars, light cars, industrial cars to motorcycles, exceeded the estimates made at the beginning of the year.

Advertising expenditures increased by 15.3% over the previous year, exceeding the average rate of growth of all industries.

Housing and Building Materials

In the 1978 calendar year, construction was started on 1,549,000 housing units, up 2.7% over the previous year, which was not as much as expected. This was due to the growth in sales of condominiums which were built in record numbers, the consequent decrease in inventories, decline in supply of prefabricated houses, and the "weight-reducing" operations by manufacturers of prefabricated homes.

The market for old apartments and houses expanded rapidly, mainly because demand for replacements increased and major housing companies joined in the competition. Advertisements of real estate brokers increased sharply and made a significant contribution to the advertising growth of the industry as a whole.

The total advertising expenditures in the four mass media increased by only 6.1% over the previous year. Although the recovery of advertising in broadcast media contributed to the increase, sluggish growth of newspaper advertising had a strong adverse effect.

Wholesalers and Department Stores

The department store business was stagnant throughout the year because the consumers' desire to buy was dampened by economic uncertainties, anxieties about future livelihood, and a gloomy outlook for increase in household income. Stimulated by brisk sales of summer goods due to the extremely hot weather, the mid-year "chugen" gift sales increased beyond expectations. The year-end sales, however, fell a little short of satisfactory growth, due to the very slight increase in bonuses. Sales throughout the year increased by only 7.2% over the previous year. Sales of large supermarkets, too, were up only 9.8%, falling far short of the 17.3% growth of the year before.

Department stores and supermarkets made efforts to secure customers, employing sales tactics carefully worked out to meet the individualizing and diversifying wishes of consumers. Department stores in large cities which aimed at transformation into fashionable stores altered their interiors and window displays in order to establish a new image. They also actively set about to organize customers who used credit cards.

Supermarkets began to advertise extensively in mass media. New advertising drives conducted by supermarkets and installment payment stores were particularly noteworthy.

The total advertising expenditures of wholesalers/department stores in the four mass media showed a satisfactory increase of 15.9% over the previous year, owing to the particularly big increase in television advertising.

Trend in Advertising Expenditures 1965 - 1978

	Compared with Previous year (%)	Total Advertising Expenditures (US\$ 1 million)
1965	98.5	955.6
1966	111.4	1,064.2
1967	119.9	1,276.1
1968	115.8	1,478.1
1969	118.9	1,757.8
1970	119.5	2,100.0
1971	104.1	2,554.5 (2,185.6)
1972	111.6	2,851.3 (2,439.4)
1973	122.6	3,589.3 (2,991.1)
1974	108.6	3,898.3 (3,248.6)
1975	105.8	4,125.0 (3,437.5)
1976	117.7	4,856.0 (4,046.7)
1977	112.8	6,084.1 (4,563.1)
1978	112.4	9,044.0 (5,126.9)

Note: 1965 to 1970 converted at \$1=¥360.
 1971 and 1972 converted at \$1=¥308.
 1973 to 1976 converted at \$1=¥300.
 1977 converted at \$1=¥270.
 1978 converted at \$1=¥204.08.

Figures in parentheses converted at \$1=¥360
 for comparison with earlier years.

Economic Growth of Japan
and
Advertising Expenditures
(1965 - 1978)

<u>Gross National Product (B)</u>		<u>Advertising Expenditures (A)</u>					
		Compared with previous year (%)	Index 100 in 1965	Advertising Expenditures (\$1 million)	Compared with previous year (%)	Index 100 in 1965	A/B(%)
(\$1 million)							
1965	88,768	110.5	100	955.6	98.5	100	1.08
1966	102,284	115.2	115	1,064.2	111.4	111	1.04
1967	121,016	118.3	136	1,276.1	119.9	134	1.05
1968	143,315	118.4	161	1,478.1	115.8	155	1.03
1969	165,804	115.6	187	1,757.8	118.9	184	1.06
1970	196,475	118.5	221	2,100.0	119.5	220	1.07
1971	257,317 (220,149)	112.0	248	2,554.5 (2,185.6)	104.1	229	0.99
1972	294,194 (251,699)	114.5	284	2,851.3 (2,439.4)	111.6	255	0.97
1973	370,203 (308,503)	122.5	348	3,589.3 (2,991.1)	122.6	313	0.97
1974	441,576 (367,980)	119.1	414	3,898.3 (3,248.6)	108.6	340	0.88
1975	483,050 (402,542)	110.0	456	4,125.0 (3,437.5)	105.8	360	0.85
1976	547,590 (456,325)	112.9	515	4,856.0 (4,046.7)	117.7	423	0.89
1977	680,000 (510,000)	111.7	575	6,084.1 (4,563.1)	112.8	478	0.89
1978	1,010,878 (573,056)	110.7	643	9,044.0 (5,126.9)	112.4	537	0.89

Notes: 1. GNP from 1965 to 1975: Annual Report on National Income by Economic Planning Board.

1965 to 1970 figures converted at \$1=¥360

1971 and 1972 figures converted at \$1=¥308

1973 to 1976 figures converted at \$1=¥300

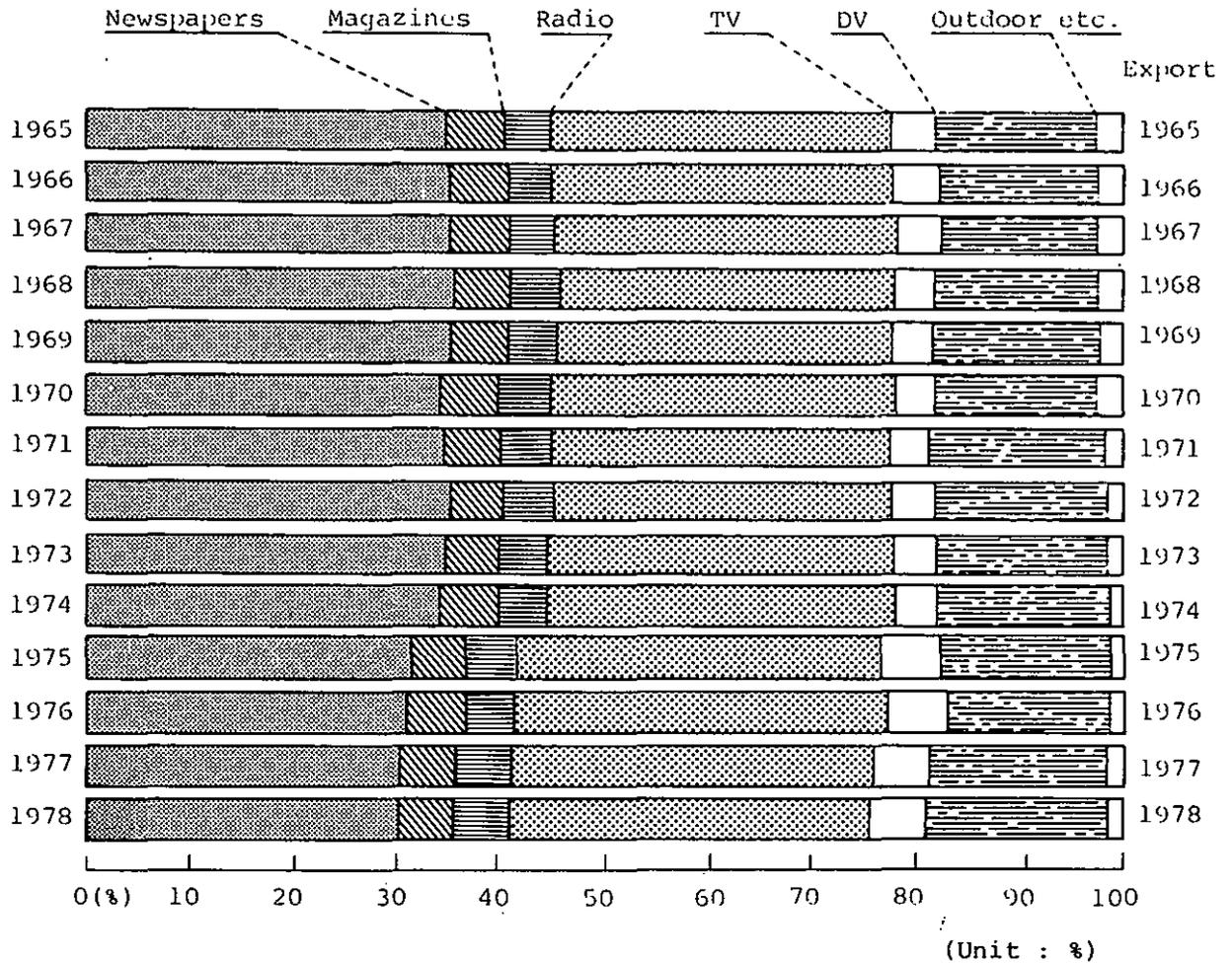
Figures for 1977 converted at \$1=¥270

Figures for 1978 converted at \$1=¥204.08

Figures in parentheses converted at \$1=¥360 for comparison with earlier years.

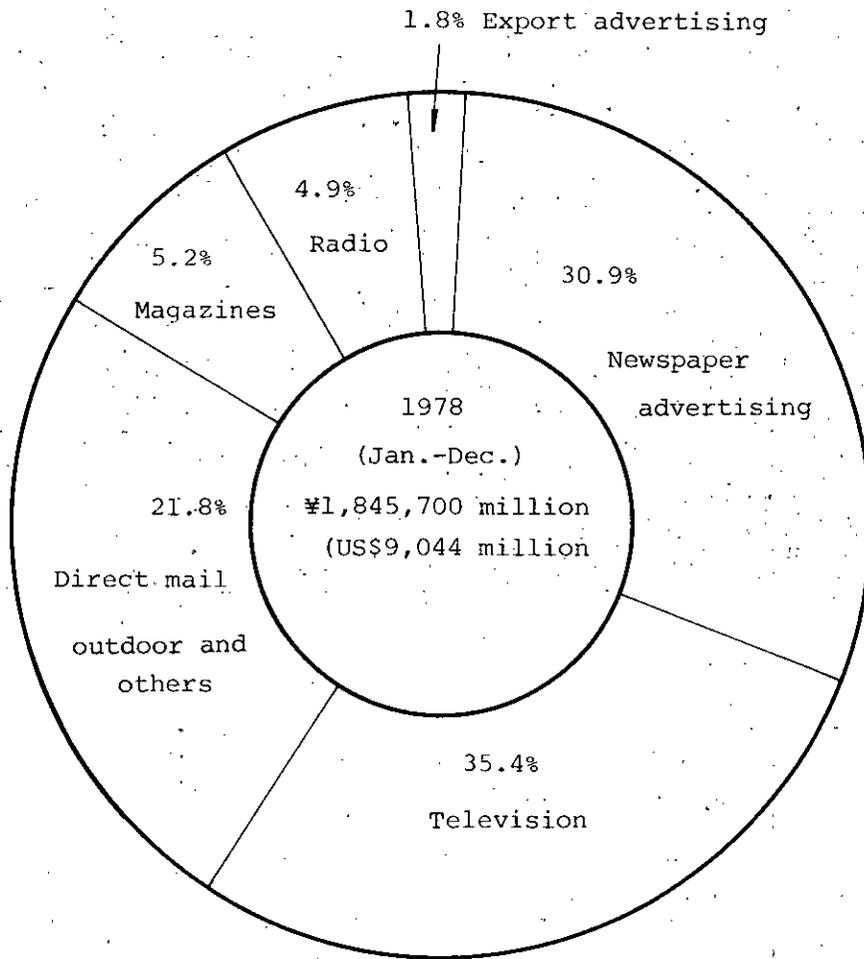
2. Gross national product for 1976 was calculated from figures in bulletin reports for the January-September period and from the Economic Planning Agency's outlook for the October-December period.
3. All data are for calendar years.

Advertising Shares by Medium
(1965 - 1978)



Year \ Medium	News- papers	Maga- zines	Radio	TV	DM, outdoor etc.	Export	Total
1965	35.8	5.6	4.7	32.2	19.1	2.6	100.0
1966	34.9	5.5	4.4	32.6	20.1	2.5	100.0
1967	35.1	5.6	4.2	32.8	19.7	2.6	100.0
1968	35.4	5.6	4.4	32.8	19.0	2.8	100.0
1969	35.5	5.5	4.6	32.3	19.2	2.9	100.0
1970	35.1	5.5	4.6	32.3	19.6	2.9	100.0
1971	34.1	5.6	4.9	33.0	19.5	2.9	100.0
1972	34.4	5.4	4.9	32.4	20.6	2.3	100.0
1973	34.6	5.3	4.6	32.7	20.5	2.3	100.0
1974	33.7	5.4	4.7	33.5	20.4	2.3	100.0
1975	33.1	5.4	4.9	34.0	20.6	2.1	100.0
1976	31.2	5.5	4.8	35.0	21.4	2.1	100.0
1977	30.9	5.3	4.9	35.6	21.4	1.9	100.0
1978	30.9	5.2	4.9	35.4	21.8	1.8	100.0

BREAKDOWN BY MEDIUM



1978 ADVERTISING EXPENDITURES IN FOUR MEDIA BY INDUSTRIES AND COMPARISON WITH PREVIOUS YEAR

(Unit: US\$1 million)

	Newspaper			Magazine			Radio			Television			Total		
	1978	1977	Comp'd with previous year %	1978	1977	Comp'd with previous year %	1978	1977	Comp'd with previous year %	1978	1977	Comp'd with previous year %	1978	1977	Comp'd with previous year %
Basic materials	19.6	17.4	112.4	4.7	4.3	108.0	20.9	20.3	103.1	55.6	40.9	135.9	100.7	82.9	121.5
Foodstuffs & beverages	192.8	149.0	129.4	56.4	54.1	104.2	58.7	53.6	109.6	940.3	900.8	104.4	1,248.1	1,157.5	107.8
Pharmaceuticals	78.3	74.5	105.1	22.8	19.7	115.6	8.0	7.2	111.6	263.3	224.7	117.2	372.4	326.1	114.2
Cosmetics & detergents	61.4	57.1	107.5	68.0	64.9	104.8	14.3	12.3	116.0	378.0	319.1	118.4	521.7	453.4	115.1
Clothing & personal effects	47.5	42.2	112.4	41.5	41.7	99.4	7.1	7.2	99.3	105.2	96.3	109.2	201.2	187.4	107.4
Publications	329.7	300.5	109.7	14.5	12.9	112.2	39.2	31.8	123.1	47.9	40.0	119.9	431.2	385.1	112.0
Industrial machines	22.3	22.3	100.0	4.2	3.4	122.9	5.8	7.5	76.6	45.7	48.7	93.9	78.1	82.0	95.2
Precision & office machine	95.0	84.4	112.5	25.6	22.3	114.7	13.8	8.7	157.9	119.0	99.0	120.2	253.4	214.5	118.1
Electric equipment	109.0	77.0	141.6	36.4	32.7	111.2	19.1	17.9	106.8	191.9	148.4	129.3	356.3	276.0	129.1
Transport machinery	136.9	114.3	119.8	15.9	15.0	105.5	80.9	71.1	113.7	100.8	89.5	112.6	334.5	290.0	115.3
Housing equipment	111.8	84.4	132.4	31.2	25.8	121.1	11.2	11.1	100.9	176.2	170.0	103.6	330.4	291.4	113.4
Housing & building	368.8	352.7	104.6	12.6	12.4	101.2	10.2	8.7	117.4	72.2	63.3	114.1	463.9	437.1	106.1
Wholesalers & department stores	248.7	223.5	111.3	15.8	14.6	108.1	30.2	27.5	109.8	114.8	87.7	130.9	409.4	353.3	115.9
Banking & insurance	159.3	151.5	105.1	23.8	24.5	97.0	7.9	8.3	95.9	55.1	50.2	109.8	246.1	234.5	105.0
Service & entertainment	268.2	238.4	112.5	37.3	29.7	125.8	46.3	40.5	114.1	233.9	200.6	116.6	585.7	509.1	115.0
Government agencies & associations	30.7	27.3	112.6	10.2	9.0	113.6	12.0	9.6	125.6	67.3	61.6	109.3	120.2	107.4	112.0
Others	514.0	466.8	110.1	45.1	42.7	106.2	59.3	54.1	109.7	235.0	224.2	104.9	853.8	787.7	108.4
Total	2,794.0	2,483.3	112.5	466.0	429.7	108.4	444.9	397.4	112.0	3,202.2	2,865.0	111.8	6,907.1	6,175.4	111.8

Energy Policy and Environmental Considerations

- The Case of Japan -

Shigeto TSURU
Professor Emeritus
Hitotsubashi University, Japan

I. Demand and Supply: Past, Present and Future

1. It probably reflects the vagaries of the age of uncertainty that collective wisdom of experts in 1970 projecting Japan's energy need for 1985 was drastically revised to the one-half level within mere seven years' time. It is to be noted that the revision was not on the prospect of supply possibilities, but on that of need itself.

In July 1970 the Overall Energy Research Commission (OERC), a governmental consultative body, made "the revised projections" on Japan's overall energy needs and supply possibilities for 1975 and 1985 as follows (the key figures only):

	1975	1985
Total primary energies (10^{13} kcal)	413	877 - 966
The same in petroleum equivalent (10^6 kl)	438	933 - 1,029
Petroleum imports (10^6 kl)	322	650 - 723
Nuclear power capacity (10^6 kW)	8.66	60.0

The projection was based on the assumptions that the Japanese economy would grow, in terms of real GNP, at the annual rate of 8.5 to 10.6 percent during the period of 1970 to 1985 and that the elasticity of energy needs to GNP growth could be brought down to less than unity as compared with the figure of 1.1 during 1965 to 1970.

The basic mistake in this projections, of course, was the failure to realize that the unusually high rate of growth of the 1955 - 70 period had been the consequence of a special conjuncture of postwar events¹⁾ and that a stably sustainable growth rate might be not any higher than 5 or 6 percent per annum.

Then, there was the "oil shock" of late 1973, which not only forced the rethinking on the availability of abundant oil, but also shifted cost functions in the oil-using industries.

Thus the first half of the decade of 70's saw Japan going through a period of agonizing reappraisal over her prospective energy problems, which by then had become further complicated by the mounting voice in support of environmental amenities. The Overall Energy Research Commission (OERC), naturally, had to revise again their projection

1) cf. Shigeto Tsuru, The Mainsprings of Japanese Growth: A Turning Point?, The Atlantic Institute for International Affairs, Paris, 1977.

for 1985; and in June 1977 they came out with the following figures:

	1975 (actual)	1985 (minimum)
Total primary energies (10^{13} kcal)	367	620
The same in petroleum equivalent (10^6 kl)	390	660*
Petroleum imports (10^6 kl)	288	432
Nuclear power capacity (10^6 kW)	6.62	33.0

Comparing this table with the earlier one, one can see that the 1975 figures turned out to be about 10 percent less than the projection five years before and that the 1985 minimum needs could be covered by roughly two-thirds of the erstwhile estimate. But even before this, the Institute of Energy Economics (IEE) made a calculation in December 1976 that the projection for 1985 could be reduced further if Japan would countenance the possibility of getting along with the growth rate of 3.7 percent during 1977 - 85 and manage to reduce the energy elasticity to 0.8. Their minimum estimates came down to the following figures as compared with the 1970 semi-official ones quoted above:

	1970 OERC projection	1976 IEE projection
Total primary energies (10^{13} kcal)	877 - 966	484
The same in petroleum equivalent (10^6 kl)	933 - 1,029	520
Petroleum imports (10^6 kl)	650 - 723	320
Nuclear power capacity (10^6 kW)	60.0	27.0

* As a result of the Tokyo Summit in June 1979, Japanese government made an official promise to reduce this target to 366 (10^6) or 6,300,000 B/D.

It is truly astounding that a relatively near-term projection for probably the most basic sine qua non of a modern industrial society could diverge to such an extent.

2. It might be appropriate at this point to review somewhat historically the trend of increase in the energy consumption in Japan and also the changing composition of the sources of primary energy, as tabulated below:

	Total Energy Consumption (1933 = 100)	Sources - Relative Shares				
		Petroleum (%)	Coal (%)	Hydro (%)	Others (%)	Total (%)
1933	100	8	69	12	11	100
1948	100	5	60	21	14	100
1966	500	60	26	11	3	100
1975	1000	72	18	6	4	100

Source: The Institute of Energy Economics, Japan

In roughly forty years the energy consumption in Japan increased ten-fold and the sources shifted dramatically from coal to petroleum, the latter now occupying 72 percent of the total --- relatively highest among the OECD countries.

3. Summarizing the characteristics of the energy situation which came to stay with Japan in the period of rapid economic growth of 1955 to 1970, one may enumerate the following features:

(1) The degree of dependence on imports is extremely high --- approximately 88 percent in most recent years.

(2) The share occupied by petroleum in the total supply of primary energy is very high --- 70 percent or thereabouts in recent years; and almost the whole of it is imported.

(3) The share of industrial consumption is higher than most countries --- 57 percent (in 1975) of the total primary energy use as compared with the one-third level in most western countries.

(4) The part which goes into generation of electricity out of primary energy sources is higher than most other countries --- approximately one-third.

In connection with this last point, it should be mentioned that the energy loss in the process of generation and transmission of electricity amounts to more than 60 percent --- 52.2×10^{13} kcal out of 86.6×10^{13} kcal in 1975, and also that the rates charged for industrial use have been kept unduly low involving cross-subsidization at the sacrifice of household users, the ratio being roughly 53 to 100 in the unit rate per kWh in favor of industrial users.

II. Policy Problems

4. In estimating the energy need for a future year, we have to make assumptions for two overall variables, namely, (1) the prospective growth rate of the economy and (2) the energy elasticity in relation to the rate of growth, both of which depend a great deal upon deliberate policies taken by the government.

But at the same time we must be aware that there are certain objective constraints to these variables --- the constraints which policy makers will have to take into account. For example, if we are to aim at a more or less full employment situation in the coming decade, this desideratum would dictate a certain minimum rate of growth in real GNP. Most experts say that the figure of six percent for the coming decade is the floor below which unemployment would accumulate unless a work-sharing system of fairly revolutionary character could be instituted.

As for the energy elasticity, energy-saving policy measures, of course, are decisive; but it must be pointed out that the fact of wide-ranging differences in energy intensity among industries and other economic activities means that shift in industrial structure by

itself, with the given specific energy intensity for each activity, can change the overall energy elasticity over the years such a shift takes place.

Once we break down the energy supply sources into specific categories such as petroleum, nuclear power, etc., it goes without saying that there are numerous objective constraints with different degrees of unmalleability.

Another important consideration constituting a datum for the discussion of energy problems is the dimension of time required for dynamic adjustment of any sort. For example, the lead time needed for setting up of a new electricity generating plant in Japan is said to be about ten years; and the replacement of an oil-burning plant by a coal-burning one would also require a gestation period of considerable duration.

Thus, the starting point of any overall discussion on energy policies of a country has to be a projection of the country's demand and supply of energies at least ten years ahead based on the most complex assessment of desiderata, possibilities and feasibilities of all kinds. One can start such a projection first by placing major emphases on more or less objective constraints and then introduce adjustments which can predictably be counted on as consequences of deliberate policy

measures. To what extent this latter step is incorporated in a projection for a future year accounts for the often wide margin of difference in several projections for the same future year.

We cited earlier the key figures of demand projection for 1985 as estimated by the Overall Energy Research Commission in June 1977. But the Tokyo Summit of June 1979 imposed a further constraint on the import availability of petroleum for Japan in 1985; and a revised table had to be worked out on that basis.

The following table gives somewhat more in detail the composition and specific quantities of major energy sources for 1985 contrasting the latest revision with the one two years earlier.

	<u>1977 Projection</u>		<u>1979 Projection</u>	
	<u>Quan- tities</u>	<u>Share (%)</u>	<u>Quan- tities</u>	<u>Share (%)</u>
Total (10^6 kl)	660	(100)	582	(100)
Hydro Power (10^6 kW)	41	(3.9)	41.5	(4.7)
Geothermal (10^6 kW)	1	(0.3)	1	(0.4)
Domestic Petroleum & Natural Gas (10^6 kl)	11	(1.7)	8	(1.4)
Domestic Coal (10^6 ton)	20	(2.1)	20	(2.5)
Nuclear Power (10^6 kW)	33	(7.4)	30	(6.7)
LNG (10^6 ton)	30	(6.4)	29	(7.2)
Imported Coal (10^6 ton)	102	(12.4)	101	(13.6)
Imported Petroleum (10^6 kl)	432	(65.5)	366	(62.9)
New Energy Sources (10^6 kl)	2.3	(0.4)	5.2	(0.9)

(Percentage figures for the composition do not add up exactly to 100 because of the rounding.)

With this picture in mind, we may discuss below various policy problems involved in Japan's energy prospect for the near future.

5. A simpler problem could be disposed of at the outset; that is the question of the availability of foreign exchange for the purchase of primary energy materials. Although Japan's dependence on foreign sources of energy will remain high through the coming decade and probably beyond, the wherewithal to purchase them is likely to be forthcoming unless something most unexpected happens in the price of petroleum and/or Japan's export earnings. The following table summarizes the relevant statistics of Japan's foreign trade in the wake of OPEC price hike:

	(unit: billion dollars)		
	<u>1975</u>	<u>1976</u>	<u>1977</u>
Total Imports	49.7	56.1	62.0
Energy	25.6	28.3	31.2
(Petroleum & Products)	(21.0)	(23.3)	(25.8)
Total Exports	54.7	66.0	79.3
Engineering Products	30.0	39.6	49.7

It can be seen that the export earnings from engineering products could comfortably cover the needed expenses for energy imports. Still, one might say that the fact that the import bill for energy materials constitutes one half of the total imports of the country is not to be taken lightly.

6. In the light of an unalterable, high degree of dependence on foreign-based supplies for energy, it is quite natural that Japan should feel that the most important policy problem for the country is that of securing stable supply, in particular, of petroleum year in and year out. This task, however, is an extremely complex one, involving as it does (1) the diversification of sources of supply, (2) direct investment by Japan herself in ^{the} producing countries with an agreement to have the product shipped to Japan, (3) providing of stockpiling facilities not only in Japan but, if possible, also abroad, and (4) international political and diplomatic vigilance for the maintenance of smooth and friendly relations with the exporting countries.

At present, major sources of supply of petroleum for Japan are in the Middle-East area, with Saudi Arabia (33.8%), Iran (17.0%), United Arab Emirates (11.4%), Kuwait (8.3%), Oman (3.7%) and Iraq (3.1%) together occupying 77.3 percent of the total in 1977 in quantities and Indonesia (13.6%) and Brunei (3.4%) in the Asian region filling up 17 percent in addition. We can easily see that the Middle-East oil is of paramount importance for Japan, with a further implication that the shipping route from that region to Japan has to be secured under all circumstances. Stranding of a mammoth tanker (Showa-maru) in the Malacca Straits in January 1975 with the resulting oil spill of

4500 kl triggered the restrictive measures by the countries concerned in the region on the navigation of super-tankers through the Straits and brought to the fore dramatically the precariousness of the shipping route of petroleum to which Japan had been accustomed. Exploratory discussion thus ensued subsequently to transfer the route to the Lombok Straits in Indonesia and to construct a transshipment super-port in Palau, causing still another controversy over the question of "Development vs. Environment" in that most beautiful coral-reef island in the world.

As for Japan's own efforts to develop new oil fields abroad, the pace of extending tentacles quickened in recent years; and by 1976 the importation of petroleum into Japan from the joint venture companies amounted to 24.2 million kl, or approximately 9 percent of the total in that year.

7. The import requirement of petroleum in 1985 in the Overall Energy Research Commission's projection cited earlier -- 366 million kl or 6.3 million B/D -- is probably the maximum Japan can hope for within the agreed-upon constraint of 23.1 million B/D set for 1985 by the Tokyo Summit meeting of June 1979 as the target ceiling of the total imports by the seven countries concerned. But at the same time the

Japanese authorities say that the target figure of 6,300,000 B/D is the minimum required for the country in 1985 after making maximum efforts in developing alternative sources of energy. In fact, the government has gone so far as to announce in January 1979 that they will not give a permit to the construction of any new oil-burning electricity generating plant which is aimed at going into operation in 1985 or thereafter. The immediate alternative indicated is to increase the share of coal.

But in the search for alternative energy sources to replace petroleum, the authorities seem, at present, to be placing a major emphasis on the expansion of the use of nuclear power. History of the nuclear power development in Japan is a tortured one. For some time until about October 1975 the official target for 1985 was the generating capacity of 60,000,000 kW in the nuclear power field, with an interim target of 31,770,000 kW by the end of 1980. Public consensus, however, has been slow to come in Japan in the nuclear field, the country having in the background the unique experience of atomic bombing towards the end of the last war. Some people refer to such sensitivity of Japanese as a case of "nuclear allergy"; but as is now well known, Japan is certainly not an exception in being hesitant in accepting what is often called the "Faustian Bargain." Furthermore,

the capacity factor of the operating nuclear plants has been disappointingly low, the weighted average ranging between 36 and 54 percent during 1973 to 1977. Such a poor showing was mainly due to frequent stoppage of operation for sundry repair purposes and naturally raised the unit cost of generated electricity substantially above the level originally tooted for.

Meanwhile, the government attempted to expedite the construction of new plants by increasing further the degree of subsidy to those regions agreeing to site the new nuclear plants. But citizens' opposition flared up in a number of places, forcing the slow-down of the pace of construction. Thus the earlier target of 60,000,000 kW for 1985 was marked down in several steps to 26,000,000 kW by the middle of 1977. However, the imperative of finding an alternative source replacing petroleum has caused the fuel authorities to decide to set their sights higher by raising the revised target by 4,000,000 kW. It remains to be seen how successful the authorities will be in tackling this knotty problem.

For the immediate future, up to the year 1985, the alternatives available are not very ample. At the time the Overall Energy Research Commission revised the 1985 target of nuclear power upward in 1977, they also proposed that the government should exert special efforts to expand the energy sources beyond what were till then projected

in the following fields (all the items converted into petroleum equivalents):

Imported coal	+ 7,000,000 kl
Imported LNG	+ 8,000,000 kl
Domestic oil and natural gas	+ 3,000,000 kl
Hydro power	+ 2,600,000 kl
Geothermal energy	+ 1,000,000 kl
Other new types of energy	+ 2,300,000 kl
Total	+ 23,900,000 kl

With this total we should compare the projected reduction of the target of petroleum imports in 1985 amounting to 66×10^6 kl. Thus, even if we can be certain of the success in the expansion of nuclear power to the level of 30×10^6 kW, which in petroleum equivalents means the upward revision of approximately 9×10^6 kl, we can fill the shortfall gap in the oil imports only to the extent of about 50 percent.

For a longer time projection it is of course possible to count on various other forms of new sources of energy including the solar energy and the fusion power. But realistic appraisal for the coming decade has to work within the constraints described above; and even then the maximum efforts will be required in all directions. The only unpredictably favorable possibility is the development of geothermal energy tapping the deep subterranean layer of 3,000 meters or more.

Exploratory research has already begun with a prospect of eventually constructing an electricity generating plant of 2 million to 3 million kW capacity at each site. Practically available total resource in this sphere in Japan is estimated to amount to 145×10^6 kW capacity of electricity. A major hurdle here, however, lies in the fact that most of the sites suitable for the purpose are within the boundary of national parks and that environmental considerations stand in the way.

8. Now, the summary figures for the year 1985 come out to somewhat as follows:

- (1) Probable total demand for primary energy in case no special policy measures are taken --- 662×10^6 kl
- (2) Probable total supply of primary energy in case no special policy measures are taken --- 549×10^6 kl
- (3) Incremental supply through special efforts in nuclear power and others --- 33×10^6 kl
- (4) Energy saving needed beyond what has thus far been practised --- 80×10^6 kl

This gives the broad dimension of the energy picture looking towards 1985 and it is clear enough that the energy-saving policy measures have to be placed on the high priority list in the coming years in Japan.

However, from the standpoint of the household sector the average use of primary energy in Japan in 1975 was not commensurate with her relative position in the per-capita GNP. As of 1975, the estimates for the relevant figures are as follows:

	Per capita GNP (dollars)	A	Per capita consumption of energy in the household (10^3 kcal)	B	B/A
U. S. A.	7,120	(100)	26,304	(100)	1.00
Western Germany	6,670	(94)	14,774	(56)	.60
France	5,950	(84)	11,253	(43)	.51
Japan	4,450	(63)	7,173	(27)	.43
U. K.	3,780	(53)	13,420	(51)	.96
Italy	2,810	(39)	7,408	(28)	.72

Sources: The per capita GNP figures are taken from World Bank Atlas, 1977 and the energy consumption figures from the Institute of Energy Economics Studies.

It is instructive to note that the relative energy intensity of per capita GNP in 1975, with the then prevailing exchange rates, was the lowest for Japan compared with the United States. This relation would turn out to be more strikingly clear if the more recent exchange rate were applied for Japan vis-à-vis the U. S. --- 200 yen to a dollar instead of 300 yen which prevailed in 1975.

Compared with most other countries in the West, Japan may be

said to have less leeway in economizing the use of energy in the household sector, favored as she is with more moderate climate than others and being able to rely on efficient and economical mass transport system for urban centers. Still, there remain a large number of areas where energy-saving is possible, such as a greater use of insulating materials for building construction, less reliance on energy-intensive synthetic fabrics, lengthening of durability of various household durable goods, a greater concession to seasonality of vegetables and fruits, less use of automobiles for recreational purposes, etc. How much energy can be saved altogether through these measures is problematical; but one estimate of the governmental source says that 750,000 kl of petroleum can be saved in every winter month if the ceiling is placed at 20°C for the heating of office and domestic buildings throughout the country.

In any case, more important in the order of magnitude would be the energy-saving consequences of the shift in Japan's industrial structure and also of the shift in the media of transportation in general. Of these, the former will come about more or less automatically with the relative decline of energy-intensive branches of manufacturing; but the latter involves a definitely more complex problem of institutional character.

Ideally speaking, the energy coefficient per unit of transport

on the assumption of 100 percent load factor is estimated to be as follows for different modes of vehicles:

For Freight

Mode	Capacity	kcal per ton-km
Trucks	8 ton	320
Electric Railway	500 ton	50
Freight-ships	499 G/T	60

For Passengers

Mode	Capacity (persons)	kcal per man-km
Bus	50	60
Passenger car	5	190
Commuting train	144	30
"Bullet" train	100	70
B747-SR	498	300

Source: The Ministry of Transportation, Japanese Government

These estimates are suggestive of possibilities for the saving of energy for transport purposes, which in 1975 consumed approximately 70×10^{13} kcal, or almost 20 percent of the total primary energies in Japan. But in actual fact, the choice made by household and business of the media of transport is dependent on so many factors that the market mechanism does not necessarily achieve the state of maximum efficiency

in energy use. In the recent years the use of energy-efficient railroad media has been steadily declining in relative shares, especially in the field of freight transport, and the per-unit coefficient of energy in the transport field as a whole has been on the increase. The problem involved here is not only that of changing patterns of user preference cum cost factors but also the institutional peculiarities which pertain to the public-corporate character of the Japan National Railroad and also the different degrees of internalization of external effects for various modes of transport. The imperative of energy efficiency in the coming years may force the authorities to tackle these intractable problems more seriously than before to improve the situation.

III. Environmental Considerations

9. Dr. Charles J. Hitch, president of Resources for the Future, wrote: "Energy is an environmental problem. Energy production and consumption combine to form the world's greatest environmental insult. The list of effects is long and ugly: death for coal miners from cave-ins and black lung; air pollution from electric power generation, industrial processes, and automobiles; an increase in the proportion of carbon

dioxide in the atmosphere, perhaps leading to adverse changes in climate having far-reaching implications; ocean oil spills; water pollution from acid mine drainage; scarring of strip-mined landscapes."²⁾

In the case of Japan, environmental considerations related to energy production and consumption are somewhat different in emphasis from the ones enumerated by Dr. Hitch. The biggest problem has been that of environmental disruption incident to the reclamation of shallow coastline for the purpose of creating industrial sites, in particular, the sites for oil-burning electricity generating plants and nuclear power plants.

The Japanese archipelago is endowed with an unusually long coastline with abundant natural beauties, easy access to the sea for fishing industries and varied kinds of recreational activities. As Rachel Carson used to say, the seaside is the best place for observation of biological life of the earth inasmuch as it is there that the dividing line of the land and the sea shifts back and forth with the moving tide and delicate adaptation is required for the living organism which makes the seaside their habitat. From the standpoint of modern industries, however,

2) Charles J. Hitch, "Energy in our Future," The Key Reporter, Summer 1978, p. 3.

shallow coastline is an ideal place to fill up and to create new land as factory sites if an adequate harbor is located nearby or can be newly constructed. This, for the reason that transportation cost can be minimized for petroleum, heavy raw materials, etc. Thus in the course of the rapid rate of growth of GNP during 1955 to 1973, Japan went ahead with tremendous speed and energy with the job of reclaiming the shallow coastline all around the archipelago. The Seto Inland Sea³⁾, for example, which is Japan's national park, was no exception in this regard.

When such reclamation takes place, the framework in which the job is done is essentially market-economy oriented. Construction cost of reclamation plus compensation for loss of any fishing interests are the base for calculation of the selling price of the land thus created; and once a private firm purchases such reclaimed land protruding into the erstwhile sea, it becomes not only a private owner of that land but also is in the position to exclude the access to the sea by the third party,

3) The Law for Environmental Conservation of the Seto Inland Sea, proposed by Diet members and enacted unanimously in October 1973, stated in the Article III: "The Seto Inland Sea is not only a natural endowment of incomparable beauty of Japan and the world but also has been a treasure house of valuable marine resources for the nation and it shall be the heritage of the present to the future generations."

effectively nullifying the opportunity by private citizens to enjoy the amenities which they once enjoyed as public goods. These are lost without compensation, because they had existed outside the calculus of cost and benefit of a market-oriented economy.

The extent of loss of such non-quantifiable amenities has been enormous during the rapid growth period in Japan; and in many parts of the country the aroused public opinion has staged revolts against this technico-economic juggernaut, coining, in the process, a new word of "The Access Right to the Beach." The widespread movement by citizens fighting for this access right started in February 1975 by defining and proclaiming the right in a mass meeting; but the idea itself dates back to, and contained in, what is known as the Tokyo Resolution of March 1970, which said in part: "Above all, it is important that we urge the adoption in law of the principle that every person is entitled by right to the environment free of elements which infringe human health and well-being and the nature's endowment, including its beauty, which shall be the heritage of the present to the future generation." This statement, adopted on the occasion of an international symposium organized by the International Social Science Council in Tokyo, served as a springboard for a basic reorientation in the matters concerning environmental rights of citizens subsequently; and the pace of construc-

tion of electricity-generating plants, whether thermal or nuclear, and of petro-chemical complexes along the seashore has been palpably slowed down. It is an expressive simile of the shifting value judgement of the Japanese populace when they say that "Our expanding kitchen should no longer encroach upon our small enough garden."

"The Access Right to the Beach," however, still remains in the stage of a proclamation, not yet codified in any legal instrumentation. Nevertheless, the slogan has served as a basis for broad appeal which strengthened the confidence of those local autonomous bodies which negotiated with electricity-generating companies to have a "clean environment agreement" signed at numerous sites of construction. The earliest of such an agreement of some significance was signed in 1965 between Yokohama Municipal Government and the Tokyo Electric Company. It specified concrete measures of decreasing the degree of air pollution through replacing the old smoke stacks (85 meters high) by new ones (130 - 150 meters high) and also by instituting a much more complete system of environment-surveillance than had existed before. The Yokohama Agreement became a model subsequently for a large number of municipalities and other local governments. But it must be conceded, after the practical experience of almost fifteen years, that an agreement of this sort could not but be in the nature of gentlemen's

agreement and that it did not quite satisfy the need felt by the concerned citizens in the environmental field.

Thus it was natural that the litigation by citizens and/or victims came as a next step. So far as the court litigations in the environmental field are concerned, there were a number of notable cases which started in the latter part of 1960's. Especially well known are (1) the "itai-itai disease" case of cadmium poisoning, (2) the "Niigata Minamata disease" case of mercury poisoning, (3) the "Yokkaichi pollution" case of respiratory ailments, and (4) the "Kumamoto Minamata disease" case of mercury poisoning. While the trials on these four cases were going on, general public opinion turned markedly against environmental polluters; and significantly enough, in December 1970, an Extraordinary Session of the Diet (parliament) was held to pass and/or revise fourteen acts of law, all related to the matter of environmental protection. In particular, the Basic Law for Environmental Pollution Control, which had been in existence since 1967, was revised in its fundamental approach through the deletion of the so-called "Harmony Clause" which had specified that "in conservation of the living environment . . . harmony with sound economic development should be considered."

In the wake of such heightened concern by general public, the four major pollution trial cases, referred to earlier, all ended in

the victory of plaintiffs representing the victims in the course of June 1971 to March 1973. However, excepting the "itai-itai disease" case where an article in the Mining Act, which provides for absolute liability, was invoked, all the other cases relied mainly upon the Article 709 of the Civil Code which reads: "Whoever has infringed on another's rights by intention or negligence shall be held responsible for compensating the damage thus incurred." The article sets out liability for breaches of the law in general and was never intended to cover the case like, for example, the Yokkaichi pollution damage; and therefore the court faced, in each one of the above cases, a difficult task of handling a case without a legal framework pertinent to the purpose and was forced to find an innovative solution.

Encouraged by the victories in these environmental litigations, the concerned citizens next went on to an entirely new type of legal action, namely, to ask for court injunction on the construction of electricity-generating plants on the reclaimed sites basing their argument on the principle of "Environmental Rights" of citizens. A legal action of this sort had been taken before by a group of fishermen, for example, who wanted to protect their fishing rights. But now the economically non-quantifiable amenity rights of ordinary citizens became the ground for litigation. The first of such legal action was taken in July 1972 against

Daté Thermal Plant of the Hokkaido Electric Company and then was followed by several others, the most notable being the case of Igata Nuclear Plant of the Shikoku Electric Company which was initiated in August 1973. This Igata case ended in the defeat of the plaintiffs by the court decision of April 1978 in which the local citizens' competence to bring the matter to the court was acknowledged but the contested issue of "safety" was held to be within the "discretionary domain" of the government to judge. A more genuine "Environmental Rights" case is a legal action taken by ordinary citizens against Buzen Thermal Plant of the Kyushu Electric Company, initiated in August 1973 and still lingering on in the court. It is clear enough that the judicial community in Japan has not yet come around to making the citizens' "Environmental Rights" a contestable legal issue.

10. From the administrative point of view one of the most important problems is that of setting standards in relation to the levels of pollution connected with the generation of electricity. It is important, however, to distinguish between "quality standards" and "emission standards." The former is essentially policy objectives whereas the latter specify concretely the quantity of pollutants which may be discharged from a given source per unit of time.

So far as the "quality standards" are concerned, Japan has been the most strict in relation to some of the air pollutants among OECD countries in 1975, as shown in the table below:

	SO ₂ (ppm)	Particulates (mg/m ³)	NO ₂ (ppm)
Japan	0.04	0.10	0.02
Canada	0.06	0.12	0.10
U. S. A.	0.14	0.26	0.13
W. Germany	0.06	n.a.	0.15
France	0.38	0.35	n.a.
Italy	0.15	0.30	n.a.
Sweden	0.25	n.a.	n.a.

Source: OECD, Environmental Policies in Japan, 1977, p. 25

Of these pollutants, the most controversial has been the standard set for NO₂. Such quality standards are to be set always in relation to the local specificity of congestion of all kinds. Japanese urban centers, being probably the most congested in the world not only in terms of population but also in terms of factory sites and automobiles and further having the record of frequent incidence of photo-chemical smogs, did at one point of time choose to set the standards specified above. But the business world, especially the iron and steel industry

and the automobile-manufacturing industry, pressed upon the government subsequently to have the standards revised; and the Environment Agency finally decided to take an administrative action in July 1978 to change the quality standard for NO₂ to the daily average range of 0.04 to 0.06 ppm. The law suit ensued immediately afterwards initiated by residents of Tokyo who sought to enjoin the Environment Agency from relaxing the NO₂ standard. The matter is still in the court; but the case is considered to be of landmark importance in Japan not only because it challenges the Environment Agency's decision-making procedures, but because it is the first suit filed by private citizens against the Agency since its creation in 1971.

The SO₂ pollution has shown some improvement in the recent years, and by the end of 1978 the inspection points satisfying the threshold limit rose by 5 percentage-point compared with the previous year to 93% of the total. But as for the NO₂ pollution, the old standard of 0.02 ppm was met only by 10.4% of the 892 inspection points throughout the country at the end of 1978; and even the new relaxed standard could not be met by 70% of the inspection points located in Tokyo. Thus the Tokyo Metropolitan Government set up its own investigative commission on NO_x and at present pursuing an independent research with a view to establishing its own standard irrespective of what the central government says. Whether a

local government can issue a decree on such matters with a severer standard than the national one is a moot issue that is bound to occupy the attention of legal specialists in the near future.

Although one must admit that the environmental concern in Japan is not as keen as it once was in the early years of 1970's, it has in a way shifted its emphasis from the critical attitude against the criminal type of environmental disruption like the methylmercury poisoning to the valuing of environmental amenities such as nature's beauty, the access to the beach, the conservation of historical structures, etc. The problem is bound to remain, therefore, for the need for reconciliation of the energy-expanding schemes of the country and the environmental considerations.

ITALO-JAPANESE ECONOMIC SYMPOSIUM

16

Italy-Japan: A Comparison between their Economies
by Economists and Operators of the two Countries

Rome - 16-17-18 October 1979

ELECTRICITY DEVELOPMENT IN JAPAN AND ITALY:
COMMON FEATURES AND POSSIBLE STRATEGIES

Marino Valtorta

The numerous and difficult problems related to the development of electricity demand and supply would require a deep consideration owing to the complexity and the uncertainties of the forecast of the whole economy, to which energy and electricity give essential contribution and burden.

In this short report, only the main features will be outlined, in order to appraise the situation and problems in the two countries, Italy and Japan.

The remarks expressed below refer to a time horizon until 1990: the actions to be undertaken for this term have to be decided at present and the possible options are practically limited to those already industrially mature.

On one side the effect of modifications on the economic and social growth pattern, as deriving may be from a new development model, can be neglected in a first approximation, owing to the "inertia" involved and to the related "time constant". On the other side the penetration of new energy sources (solar, aeolic, nuclear fusion, etc.) can be reasonably assumed as modest up to the end of the next decade, particularly in regard to the strict electricity field, and not able to modify substantially the foreseen scenarios.

The utilisation of new sources is anyway a matter of heavy concern already at present, because the need of such utilisation in large scale will mature in a time term which does not allow any delay for an intensive effort of Research and Development, involving heavy expenditure, in order to solve many scientific and technological problems.

Detailed information regarding also the past evolution was given on the subject by Dr.K. Veno ¹ and Prof.A.M. Angelini ² at the Italo-Japanese Economic Symposium held in Tokyo on November 1978. The present report would up-date that information with special regard to future perspectives on the basis of data available in recent documents ^{3 4 5 6 7}.

1. Total energy situation and perspectives

The situation and perspectives of electricity have to be considered within those of the whole energy system, in which electricity has a substantial share and plays an essential policy role.

The data shown in Tables I and II for the primary energy supply in Japan and Italy respectively are grouped so as to distinguish domestic production (hydroelectric, geothermal, domestic coal and hydrocarbons, nuclear and new energy sources), imported natural gas (liquefied for Japan) and coal, imported oil (including liquefied petroleum gas for Japan).

The percentage of domestic production on the total supply gives a measure of the energy independence of the country; by adding to this percentage that of natural gas and coal imports we have a measure of the oil independence.

Referring to the actual situation in 1975, the main following remarks can be pointed out:

- both countries presented a poor energy independence, Japan having a domestic production of 11.7%, Italy of 19.5%. In Japan there was a larger

contribution of domestic coal and nuclear, in Italy a larger contribution of hydro electricity and domestic gas.

- both countries presented a reduced oil independence, in Japan 26.6%, in Italy 32.6%. In Japan there was a comparatively larger contribution of coal imports and a comparatively lower contribution of natural gas imports (liquified in Japan, gaseous in Italy).

The oil crisis at the end of 1973 revealed the very high vulnerability of the energy supply of the two countries in comparison with the other industrialized countries and pressed toward the establishment of an energy policy according to the following main lines:

- to increase the supply from domestic sources, as much as possible in the new terms of the energy economy;
- to diversify the supply from foreign sources, reducing the oil dependence (in 1975: 73.4 in Japan, 67.4 in Italy).

The forecast structure of primary energy supply established according to these policy lines is shown for the years 1985 and 1990 in Tables I and II.

Referring to the year 1990 it is possible to point out:

- the energy independence is improved and foreseen at the same value in both countries, 20.8%, the improvement being larger in Japan with reference to the situation in 1975. This result is obtained by a relatively small increase in both countries of hydro electricity generated by natural inflows, this source being largely already exploited (pumped storage generation is however increased for peak duty); domestic production of coal is maintained at the present level during the period considered; larger contribution of domestic hydrocarbons is provided in Japan, whereas in Italy the hydrocarbon production will probably decrease;

increasing contribution of nuclear generation (1) is considered in both countries, to a higher extent in Japan; the share of new energy sources is still modest, in Japan and in Italy;

- the oil independence is improved in both countries, practically at the same level (42.6% in Japan, 44.2% in Italy). The contribution of non-oil imports is higher for coal in Japan, and for natural gas in Italy. It should be pointed out that the absolute values of oil imports are still increasing, particularly in the period 1975-1985 (50% in Japan and 40% in Italy during the decade).

2. Electricity situation and perspectives

In 1975 the share of electricity (primary generation and transformation from other sources) in respect of total primary energy supply was substantial in both countries (27.1% in Japan, 25.6% in Italy).

The grouping of data given in Tables III (Japan) and IV (Italy) allows to assess the measure of primary energy independence and of oil independence of gross electricity production.

In 1975 the energy independence of electricity was higher in both countries than that of primary energy supply as a whole: 26.8% against 11.7% in Japan, 37.1% against 19.5% in Italy. The main contribution comes from hydro generation peculiar of electricity within the whole energy system; the contribution of nuclear generation, also peculiar of electricity, shows already significant values in absolute (25 TWh) and percentage (6%) terms in Japan (3.8 TWh and 2.5% in Italy).

The oil independence of electricity in 1975 is also better than that of primary energy supply as a whole: 34.4% against 26.6% in Japan, 44.4% against 32.6% in Italy.

(1) - The classification of nuclear energy among domestic sources is generally admitted, owing to the very favourable technical and economic characteristics of anticipated supply, transportation and stockage of fuel.

For the implementation of the energy policy previously outlined, the electricity policy offers unique means and then opportunities.

The utilisation of the nuclear source is possible for the time being only through the electric transformation: the way is open to the improvement of energy independence. The utilisation of coal on a substantial scale is largely allowed by the electric transformation: the opportunity is given for improving oil independence.

It should also be recalled that electricity is not only flexible in respect of primary sources exploitation but it is but also the appropriate energy carrier for many enlarging uses at the consumer end where electricity appears to be compulsory for fostering economic growth and welfare development.

Accordingly, the foreseen structure of gross electricity production in 1990 is that shown in Tables III and IV for Japan and Italy respectively.

In 1990 the share of electricity in the energy system reaches higher levels than in 1975: 31.3% in Japan, 36.4% in Italy.

The energy independence of electricity is substantially increased in Japan (50.8%); the Italian level is the same in 1975 and 1990 (37.1%). These figures result from the very important contribution foreseen in Japan from the nuclear source (35.2% and 341.5 TWh), while in Italy the corresponding development is still delayed (19.2% and 70 TWh).

Energy independence reflects on oil independence of electricity, which is foreseen already of about 80% in Japan (including however LPG) and still 55% in Italy with only a reduced improvement in comparison with 1975 (44%). It should be pointed out that in Japan a relatively large use of gas fuels (LNG and LPG) is foreseen for electricity generation (18.6%). In Italy the policy currently adopted is to give priority in the use of natural gas to industrial and residential consumption and to utilize for electricity only temporary surplus: accordingly, the imported coal share

is higher, 15.8% in Italy against 9.9% in Japan, and a large program of plant conversion from oil to coal is currently being implemented.

4. Development of power generation systems

The implementation of the electric energy policy requires a substantial development of the power generation systems.

Table V shows the structure of the public utilities systems in Japan and of ENEL system in Italy as foreseen in 1985 and 1990. The Japanese forecast is strictly corresponding to the assumptions adopted for the energy and the electricity perspectives (Tables I and III). The Italian forecast corresponds to the ENEL plan based on a "reference" assumption of GNP development with an average annual growth rate of 4.1% during the period 1975-1985 and 4.5% up to 1990; the Italian perspectives shown in Table II and III correspond to a "minimum" growth assumption (possibly not sufficient for to solve the sectorial and territorial problems of the country) which has appeared more appropriate for comparison with the Accelerated Policy Case considered for Japan; the "reference" assumption gives also flexibility to face better higher growth rates.

The installed capacity foreseen in Japan (public utilities) for 1990 is 219 GW to be compared with 109 GW in 1977 (fiscal year).

The maximum net output capacity foreseen in Italy (ENEL) for 1990 is 78.5 GW to be compared with 32.7 GW at the end of 1978.

The amount of plants to be built is actually very important and raises difficult problems in territorial planning and public acceptance: generally speaking, the situation is similar in both countries.

Restricting our consideration to the thermal plants (mainly base-load plants), the required new installations for 1990 are about 52 GW in Japan and 12 GW in Italy for nuclear and about 26 GW in both countries for fossil fuels.

At present 17 GW nuclear and 11.5 GW fossil fuelled plants are under construction in Japan; 2.4 GW nuclear (including the Italian share of the Superphenix fast breeder in France) and 11 GW fossil fuelled plants in Italy.

As far as the nuclear generation is concerned, taking into account the capacity operating at the end of 1977 (fiscal year) in Japan, 8 GW, and at the end of 1978 in Italy, 1 GW, the development in Italy appears to be heavily delayed, therefore giving a reduced contribution to energy and electricity independence.

Referring to coal generation, the Italian plan provides not only for the diversification of foreign sources, but also for covering the gap caused by the delay in the nuclear plan. At present 2 GW are coal operated and 13.5 GW have to be constructed, mainly by 640 GW units: taking into account the oil to coal conversion programme 20 GW should be in operation in 1990 with an imported coal consumption between 20 and 30 million tons. In Japan a consumption of 38 million tons of imported coal is provided.

The above mentioned figures give the dimensions of the technical, financial and public relation problems involved.

These problems are common to both countries and can be only shortly summarized as follows:

- a strong opposition variously motivated from local people and authorities operates against siting power stations, particularly nuclear but also fossil fuelled. A very strong effort of the electricity industry and governmental authorities has to be continued and strengthened for obtaining public acceptance: larger and deeper information on one side and appropriate indemnities and incentives on the other are needed to get over this opposition;
- safety, particularly for nuclear, and environmental protection, particularly for fossil fuelled plant, have to be incessantly pursued and improved. As far as nuclear generation is concerned the best efforts should be made to reach a final solution for the whole fuel cycle, waste disposal included, possibly in a frame of international cooperation;

- the amount of coal to be shipped and handled is rapidly increasing: coal is an abundant primary source but the international market is at present still limited (40 million tons of steam coal) in comparison with the above mentioned figures of Japanese and Italian requirements and those of other countries); large facilities and commercial organizations should be timely provided;
- the large investments needed for the energy industry, the electricity in particular, should take place in the financial, national and international plans.

5. Development of power transmission systems

The large amount of generated power to be delivered to the load areas needs transmission facilities having adequate capacity.

At present networks at voltage levels of 500 kV in Japan and 400 kV in Italy are utilized for bulk transmission and interconnection between different areas of the country. The development of these networks started at the beginning of the years '60.

A new higher level appears to be appropriate for the requirements to be faced in the future, probably already in the latest years of the next decade: optimum transmission of large amounts of power having regard to the distances involved, to the necessity of reducing land and landscape occupation, to the necessity of limiting short-circuit stresses to the equipment.

Extensive studies and tests have been undertaken in Japan 8 and Italy 9 10 in order to solve many difficult problems (insulation, electro-magnetic field and audible noises, equipment new technologies, system reliability, etc.). Alternative, Direct Current and combined solutions in the range of Ultra High Voltage have been considered.

As far as the A. C. transmission is concerned, a voltage level in the range of 1000-1100 kV seems to be appropriate in both countries.

In Italy about ten years ago a special "1000 kV" project was established : after a first phase of theoretical studies and laboratory tests, a special test station was erected in Suvereto with an experimental line 1-km long and facilities for testing various equipment; in a third phase starting next year a full-scale pilot plant (400/1000 kV transformers, 1000-kV substation bay with circuit-breakers, isolators and arresters, 1000-kV line 15-km long) will be erected, tested and finally utilized within the ENEL transmission system in order to anticipate the operating experience.

6. Some concluding remarks

The aim of this report was to evidence by means of a few synthetic figures and consideration the electricity situation and perspective in the next decade.

The similarity of problems arising from the common penury of primary energy resources and the common requirements of a developing economy is confirmed.

The main lines of the energy and electricity policy are also confirmed and lead to similar plans.

The common understanding, which already fostered exchange of information and experience should be the basis for strenghtening collaboration toward common actions.

REFERENCES

- 1 - K. Veno - Electric Utility Industry in Japan - Italo-Japanese Symposium, Tokyo, November 1978.
- 2 - A. M. Angelini - A Survey of Electricity Development in Italy and Japan with a view to possible cooperation - Italo-Japanese Economic Symposium, Tokyo, November 1978.
- 3 - M.I.T.I. - Japan's Energy Strategy toward the 21st Century; Report of the Advisory Committee for Energy Conference on Fundamental Issues, Tokyo, March 1979.
- 4 - Central Electric Power Council - Long-term Electric Power Supply Plan, Tokyo, April 1979.
- 5 - Overseas Electrical Industry Survey Institute - Electric Power Industry in Japan 1978, Tokyo, December 1978.
- 6 - Ministero dell'Industria - Piano Energetico Nazionale, Roma, Dicembre 1978.
- 7 - Ministero dell'Industria - Disponibilità energetiche e politiche di risparmio e conservazione dell'energia, Roma, Giugno 1979
- 8 - Japan IERE Council - Technical Development of UHV in Japan - International Electric Research Exchange, 10th Annual Meeting, Toronto, May 1979.
- 9 - L. Paris, F. Reggiani, M. Valtorta - Presentation and Discussion of Italian Power System of the Future; Symposium of CIGRE Study Committee 31, Rome, May 1969 - Summary in "Electra", October 1969.
- 10 - G. Manzoni, L. Paris, M. Valtorta - Long-term Development of Electric System in Italy with special regard to UHV Transmission Symposium of CIGRE Study Committee 31, Tirrenia, September 1977.
- 11 - E. Bagalà, F. Galli, C. Malaguti, L. Paris, M. Sforzini, M. Valtorta - Italian 1000-kV Project and related test facilities - CIGRE Session 1978, paper 31.16.

TABLE I

PRIMARY ENERGY SUPPLY IN JAPAN

Million tons oil equivalent and percent composition

	1975		1985		1990	
	Mtoe	%	Mtoe	%	Mtoe	%
Hydro generation total (pumped storage)	20.9 (0.5)	5.7 (0.1)	24.2 (3.8)	3.9 (0.6)	29.0 (5.2)	3.9 (0.7)
Geothermal	..	..	1.9	0.3	5.2	0.7
Domestic oil	} 3.3	0.9	10.5	1.7	12.6	1.7
Domestic natural gas						
Domestic coal	12.5	3.4	13.0	2.1	13.0	1.7
Nuclear	6.2	1.7	45.9	7.4	83.4	11.2
New energy sources	-	-	2.5	0.4	11.9	1.6
DOMESTIC PRODUCTION	42.9	11.7	98.0	15.8	155.1	20.8
LNG imported	6.6	1.8	39.7	6.4	57.3	7.7
Coal imported	48.0	13.1	76.9	12.4	105.0	14.1
SUB TOTAL	97.5	26.6	214.6	34.6	317.4	42.6
Oil imported (LPG)	269.1 (7.7)	73.4 (2.1)	405.8 (26.0)	65.4 (4.2)	427.1 (32.5)	57.4 (4.4)
TOTAL	366.6	100.0	620.4	100.0	744.5	100.0

The forecasts are based on GNP average growth rate of approximately 6%.

The estimates shown for 1985 and 1990 are related to assumptions of conservation measures (Accelerated Policy Case) corresponding to reductions of 10.8% in 1985 and 13.5% in 1990 with respect to the pre-energy-saving demand.

TABLE II

PRIMARY ENERGY SUPPLY IN ITALY

Million tons oil equivalent and percent composition

	1975		1985		1990	
	Mtoe	%	Mtoe	%	Mtoe	%
Hydro generation (pumped storage)	9.4 (0.3)	7.3 (0.2)	11.1 (1.5)	5.9 (0.8)	11.7 (1.8)	5.3 (0.8)
Geothermal	0.5	0.4	0.7	0.4	0.8	0.4
Domestic oil	1.1	0.9	3.0	1.6	3.0	1.4
Domestic natural gas	12.0	9.3	12.9	6.9	10.0	4.5
Domestic coal	1.3	1.0	1.5	0.8	1.5	0.7
Nuclear	0.8	0.6	2.4	1.3	15.4	7.0
New energies	-	-	1.5	0.8	3.3	1.5
DOMESTIC PRODUCTION	25.1	19.5	33.1	17.7	45.7	20.8
Natural gas imported	7.2	5.6	17.8	9.5	27.0	12.3
Coal imported	9.0	7.0	14.7	7.8	24.5	11.1
Electricity imported	0.6	0.5	-	-	-	-
SUB TOTAL	41.9	32.6	65.6	35.0	97.2	44.2
Oil imported	86.6	67.4	121.6	65.0	123.0	55.8
TOTAL	128.5	100.0	187.2	100.0	220.2	100.0

The forecasts are based on a minimum assumption corresponding to a GNP average growth rate of 3.8% up to 1985 and 4% up to 1990.

The estimates for 1985 and 1990 are related to additional conservation measures corresponding to reductions of 4.1% in 1985 and 4.8% in 1990 with respect to the reference case which takes into account the current conservation policy.

TABLE III

GROSS ELECTRICITY PRODUCTION IN JAPAN

(Public Utilities)

	1975		1985		1990	
	TWh	%	TWh	%	TWh	%
<u>Domestic production:</u>						
- hydro	79.3	19.1	97.0	12.6	116.5	12.0
(pumped storage)	(1.9)	(0.5)	(16.0)	(2.1)	(21.5)	(2.2)
- geothermal	0.2	..	5.5	0.7	17.5	1.8
- domestic solid fuels	3.2	0.8	7.2	0.9	11.8	1.2
- domestic oil	3.3	0.8	7.4	1.0	5.9	0.6
- nuclear	25.1	6.1	188.0	24.4	341.5	35.2
SUB TOTAL	111.1	26.8	305.1	39.6	493.2	50.8
<u>From imported fuels</u>						
- oil	271.6	65.6	287.6	37.4	201.1	20.7
- LNG (including LPG)	19.4	4.7	134.5	17.5	181.0	18.6
- coal	12.1	2.9	42.8	5.5	95.7	9.9
SUB TOTAL	303.1	73.2	464.9	60.4	477.8	49.2
TOTAL PRODUCTION	414.2	100.0	770.0	100.0	971.0	100.0

The forecasts are consistent with the assumptions of "Accelerated Policy Case" (See Table I).

TABLE IV

GROSS ELECTRICITY PRODUCTION IN ITALY

(all producers including industrial self-producers)

	1975			1985			1990		
	TWh	Mtoe	%	TWh	Mtoe	%	TWh	Mtoe	%
<u>Domestic production:</u>									
- hydro	42.6	9.4	28.6	50.6	11.1	19.2	53.0	11.7	14.6
(pumped storage)	(1.6)	(0.3)	(0.9)	(6.7)	(1.5)	(2.6)	(8.1)	(1.8)	(2.2)
- geothermal	2.5	0.5	1.5	3.0	0.7	1.2	3.5	0.8	1.0
- domestic solid fuels	1.4	0.3	0.9	1.4	0.3	0.5	2.2	0.5	0.6
- domestic natural gas	4.8	1.0	3.0	4.5	1.0	1.7	2.3	0.5	0.6
- domestic oil	1.0	0.2	0.6	3.6	0.8	1.4	4.1	0.9	1.1
- nuclear	3.8	0.8	2.5	11.0	2.4	4.2	70.0	15.4	19.2
SUB TOTAL	56.1	12.2	37.1	74.1	16.3	28.2	135.1	29.8	37.1
<u>From imported fuels</u>									
- oil	83.0	18.3	55.6	156.4	34.4	59.5	164.5	36.2	45.2
- natural gas	2.9	0.6	1.8	6.8	1.5	2.6	6.8	1.5	1.9
- coal	5.3	1.2	3.7	25.5	5.6	9.7	57.7	12.7	15.8
SUB TOTAL	91.2	20.1	61.1	188.7	41.5	71.8	229.0	50.4	62.9
TOTAL PRODUCTION	147.3	32.3	98.2	262.8	57.8	100.0	364.1	80.2	100.0
Solde electric exchange	2.6	0.6	1.8	-	-	-	-	-	-
Gross inland consumption	149.9	32.9	100.0	262.8	57.8	100.0	364.1	80.2	100.0

The forecasts are consistent with the assumptions of economic and energy development given in Table II.

TABLE V

POWER SYSTEMS IN JAPAN AND ITALY IN 1985 AND 1990

Power sources	Year (1)		1985				1990			
			Public Utilities		ENEL		Public Utilities		ENEL	
	MW	%	MW	%	MW	%	MW	%		
Hydro	40,000	22.7	17,400	32.9	50,000	22.9	18,900	24.1		
(of which pumped storage)	(18,500)	(10.5)	(7,900)	(15.0)	(24,500)	(11.2)	(8,700)	(11.0)		
Geothermal	800	0.5	400	0.8	2,500	1.1	500	0.6		
Nuclear	33,000	18.7	2,800	5.3	60,000	27.4	13,800	17.6		
Thermal	102,200	58.1	32,200	61.0	106,500	48.6	45,300	57.7		
(of which: coal)	(9,800)	(5.6)	(7,300)	(13.8)	(20,000)	(9.1)	(20,000)	(25.5)		
(" " LNG)	(27,500)	(15.6)	(-)	(-)	(33,000)	(15.1)	(-)	(-)		
TOTAL	176,000	100.0	52,800	100.0	219,000	100.0	78,500	100.0		

(1) For Japan: fiscal year

NOTE: For Japan: Installed capacity
For Italy: Maximum net output capacity

«ITALY — JAPAN: A COMPARISON BETWEEN
THEIR ECONOMIES BY ECONOMISTS AND
OPERATORS OF THE TWO COUNTRIES»

17

A symposium organised by the
BANCA COMMERCIALE ITALIANA
in Rome, at the Grand Hotel, from
16 up to and through 18 October, 1979

CONSIDERATIONS ON THE OPPORTUNITIES FOR
INDUSTRIAL COOPERATION BETWEEN ITALY
AND JAPAN

by

Mr. Franco Viezzoli

Chairman of the Finmeccanica

CONSIDERATIONS ON THE OPPORTUNITIES FOR INDUSTRIAL
COOPERATION BETWEEN ITALY AND JAPAN

During this meeting, some brilliant and complex comparative analysis were made of the economy and industry in Italy and Japan with focus being maintained on the subject chosen for discussion.

Accordingly, we thought it would be more useful for us to provide here some of our considerations on the possibilities and ways of cooperation between the Italian and Japanese industries based on the preliminary impressions we derived from a recent visit in Japan.

During the past, industrial and trade relationships between the Finmeccanica Group and the Japanese industry were somewhat scarce: some rare sale of our products on the Japanese market; some purchase in Japan of semi-finished products by our member companies; exchange of technologies was almost nonexistent.

The sole lively and steady business relationship between the two countries has been and still is one of open competitiveness all over the world. Some rare exceptions such as the Tubarao Steel Mill Project resulting from a joint venture among Kawasaki, Italmimpianti and the Brazilian industry, stand to confirm the generality of the above situation.

In order for us to understand whether such situation has a reasonable and unavoidable background, or whether there existed some more satisfactory alternatives, we decided to authorize a two-week visit to Japan by a team consisting of some 15 members of the Group's staff.

The main purpose of such visit was for us to identify areas of potential technological, industrial or trade cooperation, and establish direct personal contacts in such areas.

The considerations we will provide hereinafter are in fact based on the information collected and the numerous contacts developed by such team in Japan.

First - it may be desirable for us to reiterate a consideration made here in some other reports: although geographically far apart, with histories and cultures all but similar, Japan and Italy are under many respects two countries largely comparable for a number of features they have in common: a small and muntaineous territory, a numerous but active population, scarce immigration, non-existence of domestic raw materials and energy sources.

Based on some widely used indicators and notwithstanding several basic differences, such countries may well compare also under the respect of industrial development (see Table 1).

If we switch from macroeconomic considerations to sector-by-sector considerations we will observe some additional interesting similarities. Per example, the aircraft industry both in Italy and Japan has almost the same employment level (some 40,000) and turnover (1 billion Dollars approx) and the proportion of large, medium and small entities within such industry are likewise identical. Even their level of technological independence and their prevailing type of international ties may be roughly considered as being similar.

One other aspect now - the various big industrial combines our team happened to visit in Japan are structured by sectors and product lines that are largely comparable with those of Finmeccanica. Mitsubishi Heavy Industries, Toshiba or Hitachi stand as good examples of this.

A COMPARISON BETWEEN THE JAPANESE AND ITALIAN
INDUSTRIAL STRUCTURES (1)

A - Share of operations represented by each major sector

	Products % (in terms of value)		Employment %	
	Japan	Italy	Japan	Italy
Farming	4.0	7.2	12.7	15.0
Industry	58.8	47.7	35.2	38.3
Distribution and services	37.2	45.1	52.1	46.7
	100.0	100.0	100.0	100.0

B - Comparative percentages among the relative weights of certain
industrial sectors

<u>Industry</u>	Percentage on products value		Percentage on employment	
	Japan	Italy	Japan	Italy
Food	12	14	9	8
Textiles and garments	5	13	9	25
Paper and wood	3	9	2	13
Chemicals	7		4	5
Petrol and coal	7	7	0.5	3
Ores, ferrous and non-ferrous	15	12	6	12
Metal products	4	5	9	7
Farm and industrial equipment	8	7	8	7
Electrical machinery	8	6	10	7
Transportation	11	7	8	7
Precision mechanical engineering and office equipment	1	1	2	1

(1) Sources: "Tavole intersettoriali"

Some kind of comparison can even be made, e.g., between the IRI Group on the one part and Mitsui on the other part.

But similarities between the two countries go much beyond this. Per example, Italy and Japan share similar industrial structures under the respect of energy contents; they both have an economic policy largely aiming at exports of manufactured goods with an ever growing added value; both share the problem - one complex at that - to encourage a quick industrial reconversion process while maintaining a high employment level and a high productivity rate and providing for a growing technological contents in their products; both countries are almost entirely dependent on foreign energy sources and have substantially similar energy strategies.

We believe these brief considerations are enough to justify our initial statement about the substantial analogy of the economic and industrial environment in which the two countries operate.

Vis-à-vis a number of similarities, however, there exist some major differences and their understanding may represent a useful starting point for us to identify and develop future cooperation projects.

One first difference lies in the size of the domestic market. With 115 million inhabitants and a GNP of over 1,00 billion Dollars (the equivalent of 9,000 Dollars per inhabitant), Japan ranks among the major world markets for consumer products, and - by virtue of a very good policy - for capital goods.

A few simple comparisons will be enough to show the gap between Japan and Italy:

- in 1977, the amount of gross capital investments in Japan was in the order of 56,000 billion Lira against 12,600 billion Lira in Italy;

- the rate of growth of investments in the two countries can be summarized as follows:

Table 2

GROSS CAPITAL INVESTMENTS
(variations over the preceding year)

	<u>Italy</u>	<u>Japan</u>
1977	- 2%	+ 20%
1978	- 1%	+ 25%
1979 (1st half)	..	+ 25%

- the Japanese nuclear program calls for the construction of power plants by 1990 totaling 65,000 MW (against only 12,000 MW in the Italian corresponding program).

As for industrial products, the Japanese market is almost four times as big as its Italian equivalent.

By contrast, Japanese export levels, either as a percentage of the GNP or as a percentage of total sales of combines comparable with Italian equivalents are generally somewhat lower, except for some cases (automobiles) where such levels are similar.

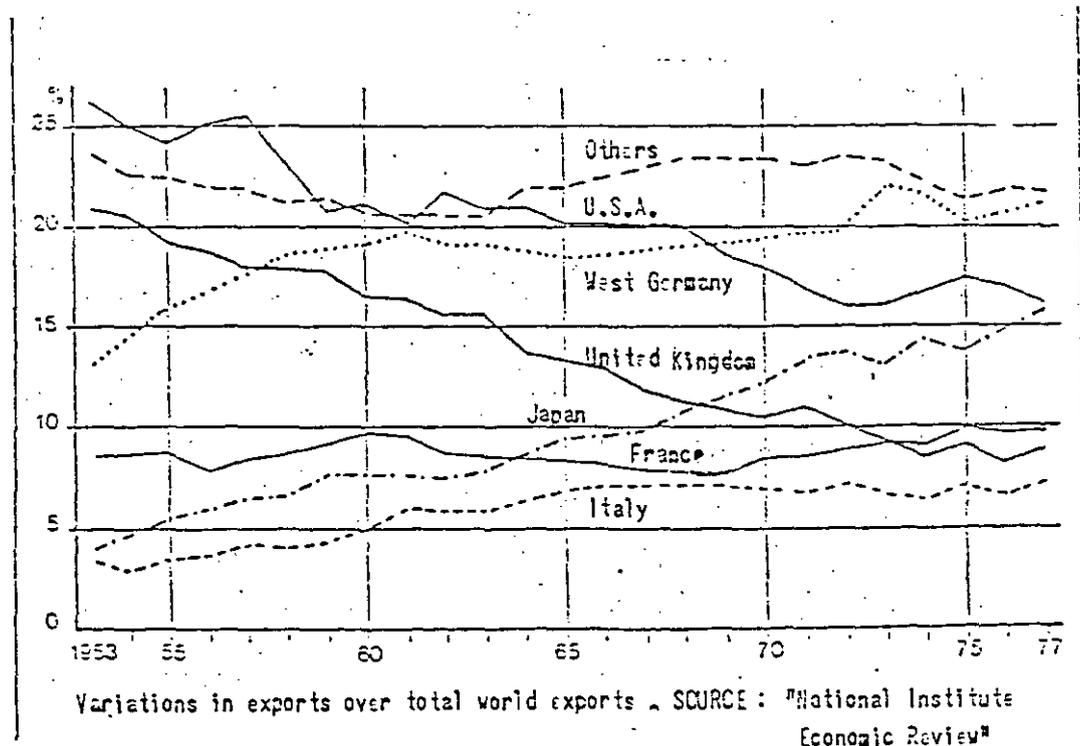
Table 3

PERCENTAGE OF EXPORTS OVER GNP

	<u>1970</u>	<u>1975</u>	<u>1976</u>
Japan	11.6	13.9	14.5
Italy	17.2	23.0	24.7

However, the size of the Japanese industry is such as to make such export levels extremely significant in the overall international trade picture.

TRADE LEVELS IN THE MAJOR COUNTRIES



In short, Italy's share of world trade is 7% approximately (or 58 billion Dollars in 1978) against Japan's corresponding share of over 15% in the same year (100 billion \$). Result: Japan ranks third in the list of the major exporting countries after the Federal Republic of Germany and the U.S..

Today, 54% of the Japanese exports are machinery against 39% approximately for Italy.

And here a second major consideration becomes apparent: commercial penetration of the Japanese industry in certain markets has been and

continues to be very strong. Per example: one fourth of total imports in the Asiatic countries originates from Japan.

There should be added that in the past few years these very Asiatic countries have witnessed an ample and spreading process of Japanese "production decentralization" with respect to Japan especially in such areas as textiles, electric home appliances and consumer electronic products. Hence it is apparent that such a strong Japanese presence may hinder in the future any further expansion by the domestic industry in this region.

The Japanese industrialists, on their part, are conscious of the negative implications which derive from developments of this kind to the point that some concerns to this effect were expressed by them during their meetings with our team. Moves for further expansion of the Nippon industry in this geographical area would prove easier and meet with a higher acceptance if made by such industry with local partners or partners from any third country that is not yet so strongly established in these markets.

The third aspect which makes the current commercial policy of the Japanese industry differ from that - e.g. - of certain Italian industrial combines, is represented by their approach to joint ventures for the sale of plants and capital goods in general. The Italian industry is very actively engaged and highly qualified in certain sectors but does not rank first in the world. Such industry has thus been confronted with the need to search new ways of collaboration with foreign combines for the joint sale of plants and has thus acquired a significant experience in establishing and developing good business ties with the customer countries, with such ties being growingly based on actual industrial cooperation relationships.

Traditionally, the Japanese industry has rather searched its own essential ties within the domestic territory and has thus maintained a more compact and integrated image.

The changing market trends and a growing desire for technological independence from third countries are such that the Japanese industry is confronted with the problem of deciding in all earnestness and with such pragmatism as is peculiar to it, whether its traditional approach to the sale of plants should be continued in the future, or it would rather be desirable for it to switch to a policy similar to that used by other countries, namely: to see that its trade methods would change to allow a wider cooperation with foreign partners. We understand that an ad hoc working group has been established recently within the MITI, its membership including representatives from the major plant engineering combines in Japan. The purpose of such group is to study the best way for the industry to make future plant exports.

One additional point that should be mentioned here concerns the traditional surplus in the Japanese balance of trade. The insisting demand from several ends for a reinstatement of a stable balance in the Japanese foreign trade accounts has induced the Japanese authorities to study a program of public procurements in such countries as the U.S. As for the Japanese trade relationship with the EEC countries, the recent conflicts between the Japanese and the European ends are a matter of general knowledge.

The current trend of the Japanese balance of trade which will expectedly end up in a substantial deficit in 1979 (5 billion Dollars is the rumored figure for it) could be just a passing circumstance but is no doubt one fairly negligible if compared with the enormous surplus of the past years. Hopefully the Japanese authorities will decide to translate into practice their expressed goal of letting the "public" market open to foreign suppliers

- not just American but European suppliers as well.

In our opinion, this would be one of the counterparts Japan could offer, among other things, to obtain from its importing nations such changes in the mechanism of restrictions on Japanese imports as have been reiteratedly requested so far by the Nippon authorities. Additional counterparts to be used to this effect could well be extrapolated from the existing restrictions on the import by Japan of a wide range of products originating from the Western World.

This very short and partial analysis of some of the similarities or differences existing in the economic-industrial conditions of our respective countries, with specific regard to the mechanical engineering industry sector, may be sufficient, in our opinion, for us to draw a few general conclusions.

In synthesis - we believe there exist some interesting areas for mutual cooperation:

- Per example, we think the participation of Italian firms in certain major Japanese industrial programs (such as the nuclear program) could be a reasonable proposition;
- Industrial cooperation programs could be successfully developed in certain specific areas of high interest for the two countries (e.g., the aircraft industry area);
- A likewise reasonable proposition could concern joint ventures for development in third countries. The advantage offered by this approach is to permit Italy and Japan to operate on such markets using their combined, if different but complementary images and qualified reputations, a factor which could well make any Italian/Japanese joint venture more acceptable to any host country. One

of the numerous examples of such joint venture opportunities would concern electric home appliances and consumer electronic products;

- Finally, opportunities should be pursued in the area of commercial agreements whenever this could prove an advantageous step or one acceptable to or even requested by the customer.

However, the area where - in our opinion - lie the most promising prospects for a long-term, articulated and profitable cooperation is to be identified in Technology. On top and above any licensing agreement and arrangement for the transfer of know-how along the lines followed so far or to be certainly followed in the future, we should like to put an emphasis here on the enormous potentials which could exist in joint research programs for development by the universities and industries of our respective countries. Both Italy and Japan have the appropriate laws, regulations and structures required for them to successfully control the performance of research joint ventures in such area as the Japanese economic plan would term - using a very interesting expression - as "knowledge intensive".

For any such research program, efforts should desirably be concentrated on any aspect associated with the existing energy challenge and environment protection requirements.

A first sign confirming the correctness of the potentials indicated in this report, was noted during the recent visit to Japan by our team.

All of the contacts established by them on that occasion were highly interesting but obviously preliminary. It would be ambitious at this point in time to draw any conclusion of a practical nature.

However, certain areas have been identified where we are willing to

continue such contacts, with such areas including, among other things, Energy, Aircraft, Industrial Electronics, Railway Equipment, Automotive (certain specific sectors), Ecology, Technologies (certain specific sectors).

Based on our team's recent visit to Japan, we found that in each such areas the Italian and Japanese industries are to a certain extent complementary in terms of technology and marketing - a fact which could represent a good basis for the development of working agreements. What is perhaps most important is the commonality of views we and the Japanese share on the expected development trends and the size of investments that should be devoted to R&D. Also, we believe that one additional point on which we and the Japanese agree is the desirability for any possible joint effort in such areas to be developed from its very fundamentals, say its basic technological aspects, in order that the commercial benefits deriving from closer technological cooperation ties may be exploited to the maximum possible extent.

One more point to be emphasized here: the results of our team's recent visit to Japan confirmed the extreme complexity for anyone to establish and maintain effective cooperation relationships with the Japanese industry, unless aid is obtained from some efficient liaison organization such as, per example, one of the existing Japanese trading companies or (and this could well be not the sole response to the problem) a liaison office to be established by us in Tokyo.

This matter is now being reviewed at this end and a decision thereon is expected to be taken pretty soon by our Group or even by IRI, say, our parent-organization.

T/GCel((151)

6/9/1979

18

Japanese Capital Market

Mr. Kanbei Yoshimura
President
The Long-Term Credit Bank of Japan, Ltd.

Italo-Japanese Economic Symposium
Rome
October 18, 1979

I. Introduction

[1] Mr. Chairman and Gentlemen, I feel very much privileged to have this opportunity to present to you outline of the Japanese Capital Market.

The Japanese capital market has recently remarkably expanded and has acquired increasing importance, not only for Japanese industrial companies and the Japanese government, but also for foreign businesses and foreign governments. The Tokyo capital market has grown so rapidly that it is now equal in size to that of New York or London. My main topic today will be the Japanese securities market, which is the fastest growing sector of the capital market.

II. Outline of the Japanese Securities Market

[2] By definition, I divide the capital market into a bank loan market and a securities market. The securities market is then divisible into two sectors: the stock market and the bonds market.

At present there are 1,407 stocks of Japanese corporations listed in the Tokyo Stock Exchange, and the market value of the total stocks listed is in excess of 200 billion dollars. Additionally 15 foreign stocks are listed. In this respect the Tokyo Stock Exchange ranks second after the New York Stock Exchange, and outreaches in scale the London and Frankfurt. New methods of issue, such as stocks issued at market price or issuance of convertible bonds at market price, have come into increasing use, with the result that the stock issue in the Japanese securities market has been increasing

steeply year by year. Trading is both active and voluminous. The volume for 1977 was nearly 90 billion dollars.

[3] Now I will turn to the bonds and debentures market. This sector has been sharply expanding since 1975. The amount of bond-and-debenture issues has, in recent years, almost doubled, reaching 150 billion dollars in 1978. Such rapid growth is largely due to government and other public bonds which have been issued in large volumes. After the oil crisis of 1973, when the Japanese economy shifted gear from a high rate of growth to one which was more stable, the government was forced yearly to issue bonds in a large volume in order to cope with the fund shortage in the public sector. As a result, the amount of bonds and debentures outstanding at the end of March 1979 reached a level of approximately 500 billion dollars, accounting for as much as just over 50 percent of GNP. Government bonds are 38 percent of all the bond-and-debenture issues outstanding, showing largest share. Following these are bank debentures, the bonds of public corporations and corporate bonds.

[4] With the increase in new issues, trading of bonds and debentures has snowballed from year to year. In 1978, the value of bonds and debentures traded was 930 billion dollars, which is a 3.6 times increase in the last three years. The bulk of bonds and debentures are traded over the counter in the security houses, and government bonds and bank debentures, when combined, account for as much as 60 percent of the total trade of bond-and-debentures. For the most part, the bonds and debentures which have been issued in Japan are

long-term securities of more than five years. And long-term bonds with a repurchase agreement is showing sharp increase to form an important part of short-term security market.

III. Yen-denominated Foreign Bonds

[5] The Japanese securities market, which has made rapid growth in recent years, is now playing the important role of an international fund-raising market, open to residents and non-residents alike.

[6] One of the remarkable recent developments in the Japanese stock market is the admission of foreign names, either by listing their stocks or by selling new stocks to the public. In the bond market particular importance is attached to new issues of bonds in Japanese Yen by foreign issuers.

[7] It was in December 1970 that, for the first time in Japan, yen-denominated foreign bonds were issued by the Asian Development Bank. After this memorable event, there became available to non-residents an effective means by which to raise funds in the Japanese capital market. However, after the oil crisis, Japanese interest rates soared up and the international balance of payments deteriorated, hence no new issues for some time. By the winter of 1978, interest rate differences between Japan and other countries became increasingly wide; also Japan's international balance of payments began to register a reassuring surplus. As a result of this, the issue of yen-denominated foreign bonds restarted and increased sharply, until the total value of the 95 issues (publicly offered and privately placed) in the 9 years since 1970, amounted to some 1,600.0 billion

yen or 7.2 billion dollars. They have already outreached the German market, and are catching up with the Swiss market in terms of the value of debentures recently floated by the foreign issuers.

[8] In the early stages, the issuers of yen-denominated foreign bonds were mainly international financial organizations and in recent years, an increasing number of issues have been floated by foreign governments. Furthermore, in March of this year, Sears Roebuck, as a foreign corporation, floated yen-denominated foreign bonds, the first in Japan. This was a meaningful step because by that time the Japanese market had been practically closed to an unsecured bond by non-governmental corporations, and now is open to a corporation of triple A rating.

[9] The growing number of issues of yen-denominated foreign bonds has had an important influence on the Japanese securities market. In the past the conditions of bond and debenture issue were inflexible so as were other money market instruments or interest rates on savings deposits, while the foreign issues carried the terms and conditions reflecting those in the secondary market in Japan of the comparable issues and also those in the other international markets. Eventually, the issuing conditions of bonds and debentures by the Japanese corporations have attained flexibility, such as a variety of maturities to fulfil the varying needs of issuers. Following these developments, efforts have been made to develop the secondary market. Therefrom arises a new problem relating to the protection of investors and the rating system in Japan should be reviewed.

[10] This advent of yen-denominated foreign bonds served as a

powerful stimulus, and the market reacted favorable to it. The expansion and development thus brought to our market has eventually helped increase in volume of new issues by foreign borrower in Japan. Furthermore, in Euro market, World Bank, European Investment Bank, Eurofima and Asian Development Bank already issued bonds denominated in Japanese Yen.

IV. Yen-denominated Loans

[11] Now I should like to say a few words about yen-denominated loans.

Since the admittance of yen-denominated foreign bonds and other foreign securities to the Japanese securities market, Japan has been widely open to overseas, non-resident borrowers. In this respect we should not overlook the recent development in yen-denominated loans, which, like yen-denominated foreign bonds, have been increasing remarkably during the last few years. In 1978 there was a marked increase in amount to 550 billion yen (2.5 billion dollars) that is three times what was in the previous year. Apart from the U.S. dollar, the Japanese yen has acquired such importance in the international syndicated loan market as to rank along-side the German mark. In line with such an expansion in amount, the terms and conditions became flexible. For example, the standard term of yen-denominated loans is 10 years, but loans ranging in life from 5 to 20 years also appeared in the market. In addition, Japanese capital market offers various alternatives such as yen-denominated foreign bonds parallel with yen-denominated

syndicated loans, or Dollar-Yen package deal.

V. Role of Banks in the Securities Market

[12] Having briefly referred to both yen securities and yen loan markets in Japan, I will turn to the role of the banks in new issue market. Japanese commercial banks are deeply involved in the floatation of yen-denominated foreign bonds and yen-denominated loans and have indeed been playing an important and active role in the promotion of the growth of these markets. First, Japanese commercial banks are, as a rule, prohibited from dealing in securities as in the U.S. There is a clear distinction drawn between security houses and banks. Technically, when a bond is issued, a security house or a group of security houses underwrite the issue, and banks, here defined as "commissioned bank," look after delivery or safe custody of bond certificates. Or if the bonds are secured by mortgages, banks perform trust business for administration of security. At the same time, in practice, banks, being a specialist on economic and financial situation, act as advisor to the issues.

[13] This division of business also holds true for yen-denominated foreign bonds. First, in floatation of yen-denominated foreign bonds, a long-term credit bank or a specialized foreign exchange bank becomes the lead commissioned bank. Secondly, in the case of a private placement, bonds are sold to a limited number of investors and both banks and securities houses can take a lead and arrange the whole deal. Thirdly, yen-denominated loans are of such a nature that they could be handled by none but banks. In the early

days of yen-denominated loans, the long-term credit banks were the major lenders, but in recent years long-term financial institutions, such as trust banks, life insurance companies, other long-term investors and some city banks have come to this market.

VI. Relations between Japan and Italy

[14] My brief comment will make you feel familiar with our market now. In the end, I should like to review briefly how we served the Italian interests in our market. Considerable foreign-currency (U.S. dollar) loans have been made to Italy by Japanese banks. To date, however, no Italian entity has raised funds by floating yen-denominated bond or yen-denominated loan. As of the end of March 1979, the amount of foreign-currency loans to Italy was 1,300 million dollars. This amount accounts for a little more than 6 percent of the total foreign-currency loans made by Japanese bank. Italy is at the top of the list of foreign borrowers from Japan, followed by Brazil, Mexico and the U.K. Japanese commercial banks have been working with the leading banks in Europe and other parts of the world since the early 1970's, participating in syndicated loans to Italy or taking a lead position in several loan syndicates for Italy.

VII. Conclusion

[15] The Japanese capital market has grown remarkably, both in quantity and quality. It has been rapidly acquiring importance as an international fund raising market, and this tendency will become

more marked in line with the Government's policy toward the liberalization of foreign exchange control. We, Japanese banks, as financial advisor, can furnish our customers with appropriate advice and suggestions, using experiences and know-how we developed in the Japanese capital market. It is our sincere desire that we will see further development of economic cooperation between Italy and Japan. And, we all hope that our capital market will serve fully for the capital transactions between our two countries.

Thank you.

Securities Market
(International Comparison, 1977)

(Table 1) (\$1,000 million)

		Japan	U.S.A.	West Germany	U.K.
Stock Market					
New Capitalization		6	11	2	2
Total Market Value	(A)	215	777	57	117
Total Turnover	(B)	90	150	6	19
Stock Turnover Ratio by Value (B/A)		42%	19%	10%	16%
Bond & Debenture Market					
Issue Amount		118	180	54	27
Outstanding Balance		357	1,113	224	59
Total Turnover		573	5,800*	118*	286*

Note 1. a. "Total Market Value" of Stock Market is compiled by Tokyo Stock Exchange.

b. All figures are only for major stock exchange. Other figures are based on OECD "Financial Statistics".

2. Total Turn over of bond and stock market is calculated on buying and selling basis.

3. * indicates estimation

Yen-denominated Foreign Bonds

(Table 2) (¥100 million)

	Publicly Offered		Privately Placed		Total	
	No. of Issues	Amount of Issue	No. of Issues	Amount of Issue	No. of Issues	Amount of Issue
1970	1	60	-	-	1	60
71	4	480	-	-	4	480
72	5	700	3	237	8	937
73	3	400	4	271	7	671
74	-	-	-	-	-	-
75	3	350	-	-	3	350
76	6	620	-	-	6	620
77	22	4,540	8	750	30	5,290
78	28	6,570	8	820	36	7,390
Total	72	13,720	23	2,078	95	15,798

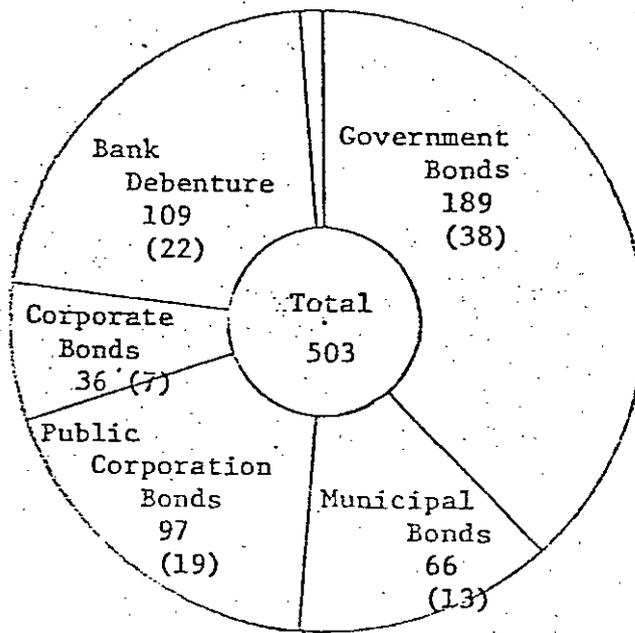
Composition of Bonds & Debenture by Types

(March 31, 1979)

Outstanding Balance: \$1,000 million

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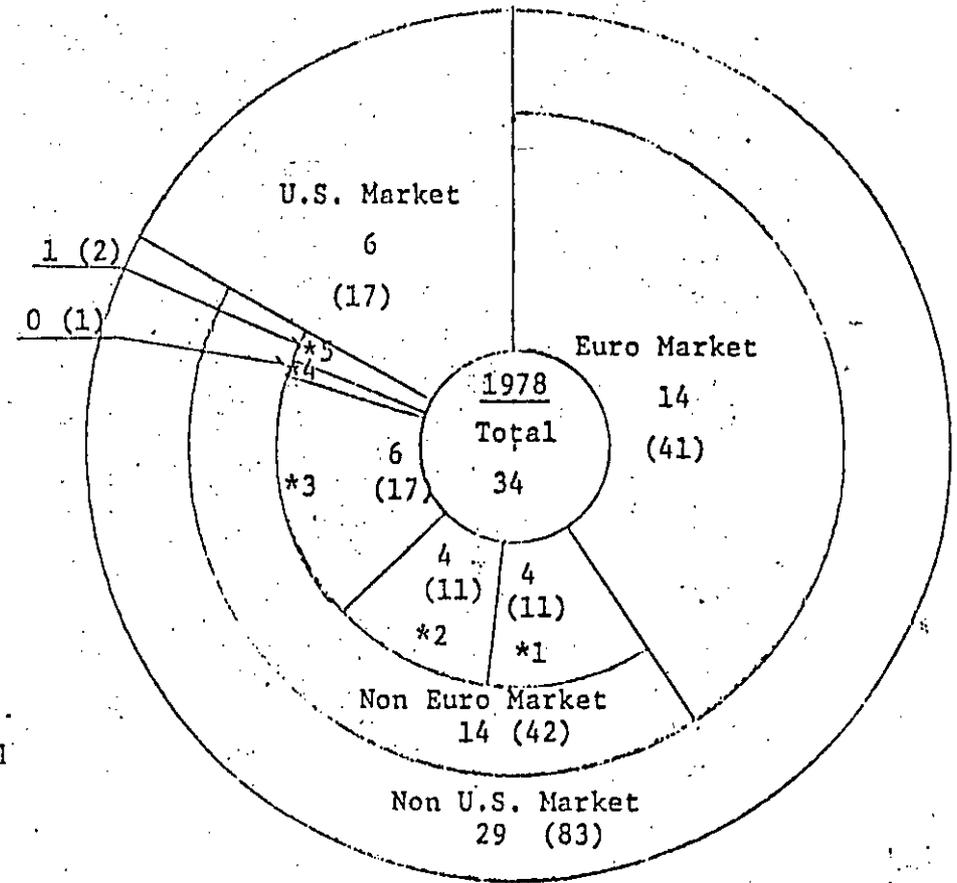
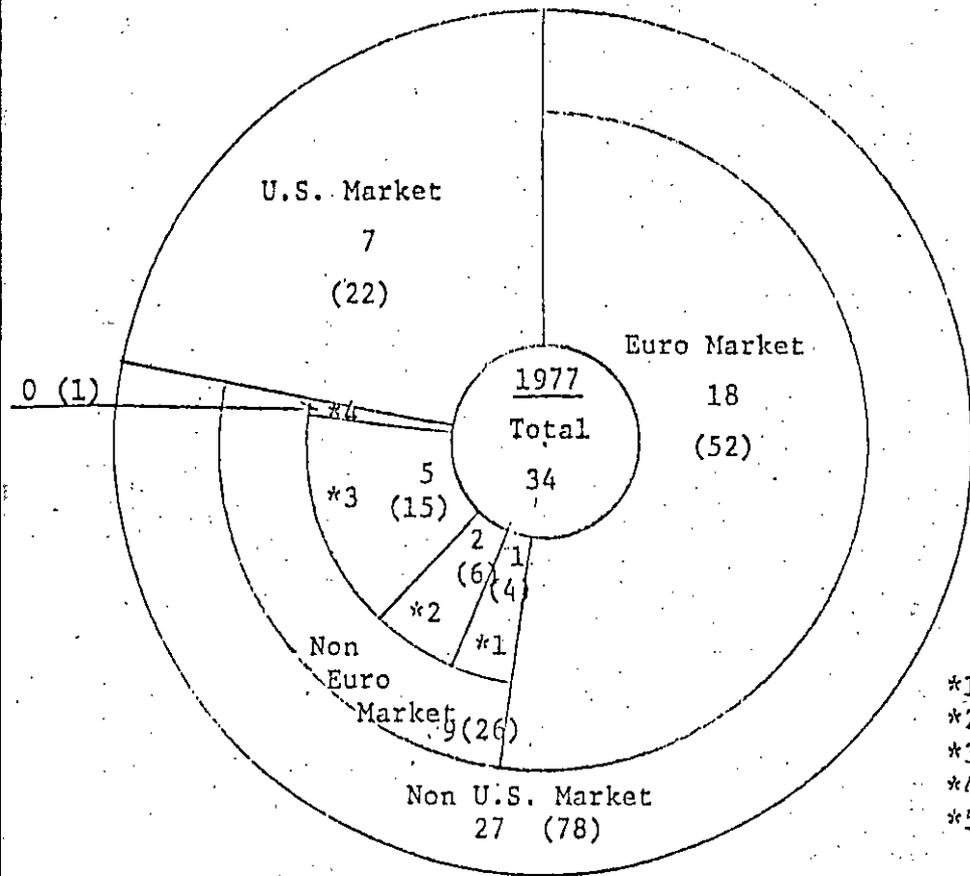
(Chart 1)



Issue of Bonds by Market

(Chart 2)

Amount of Issue: \$1,000 million
() : %



- *1: Japan
- *2: W. Germany
- *3: Switzerland
- *4: Holland
- *5: Others