

**STUDY ON  
ECONOMIC DEVELOPMENT  
OF  
THE ARGENTINE REPUBLIC**

**FINAL REPORT**

**SUMMARY**

**Vol. I: ARGENTINE ECONOMY  
I. MACROECONOMIC ANALYSIS**

**JANUARY 1987**

**JAPAN INTERNATIONAL COOPERATION AGENCY**

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P R E F A C E

In response to the request of the Government of the Argentine Republic, the Government of Japan has decided to conduct a study on Economic Development of the Argentine Republic and entrusted the study to the Japan International Cooperation Agency (JICA).

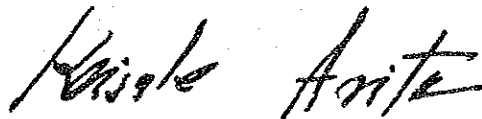
JICA sent to Argentina a study team headed by Dr. Saburo Okita, Special Advisor of the International Development Center of Japan, Former Foreign Minister, during the period from August 1985 to December 1986.

The team had discussions on the study with the officials concerned of the Government of the Argentine Republic and collected information. After the team returned to Japan, further studies were made and the present report has been prepared.

I hope that this report will serve for economic development of the Argentine Republic and contribute to the promotion of friendly relations between our two countries.

I wish to express my deep appreciation to the officials of the Government of the Argentine Republic for their close cooperation extended to the team.

January 1987



Keisuke Arita  
President  
Japan International Cooperation Agency



LETTER OF TRANSMITTAL

January 1987

Mr. Keisuke Arita  
President  
Japan International Cooperation Agency

Dear Mr. President:

I have the honor to submit to you our Final Report of the Study on Economic Development of the Argentine Republic. It is our great pleasure to note that this assignment has been completed through the close cooperation between two governments of Japan and Argentina.

The Report was prepared during the past 16 months by the Study Team organized by the International Development Center of Japan, and headed by Dr. Saburo Okita. It comprises two volumes, i.e. Vol.I Argentine Economy; and Vol.II Japan's Experience.

In preparing this Report, our Team benefited a great deal from the cooperation of officials and experts of the Japan International Cooperation Agency and other authorities concerned of the Government of Japan.

On behalf of the Study Team, I would like to express my deepest appreciation to the Argentine Government including the Secretariat of Planning and to other related agencies of the Government for the unlimited cooperation and assistance and the warm hospitality extended to the Team members during their stay in Argentina.

We wish to add that we sincerely hope this Report will provide an important basis for the development of the Argentine Republic.

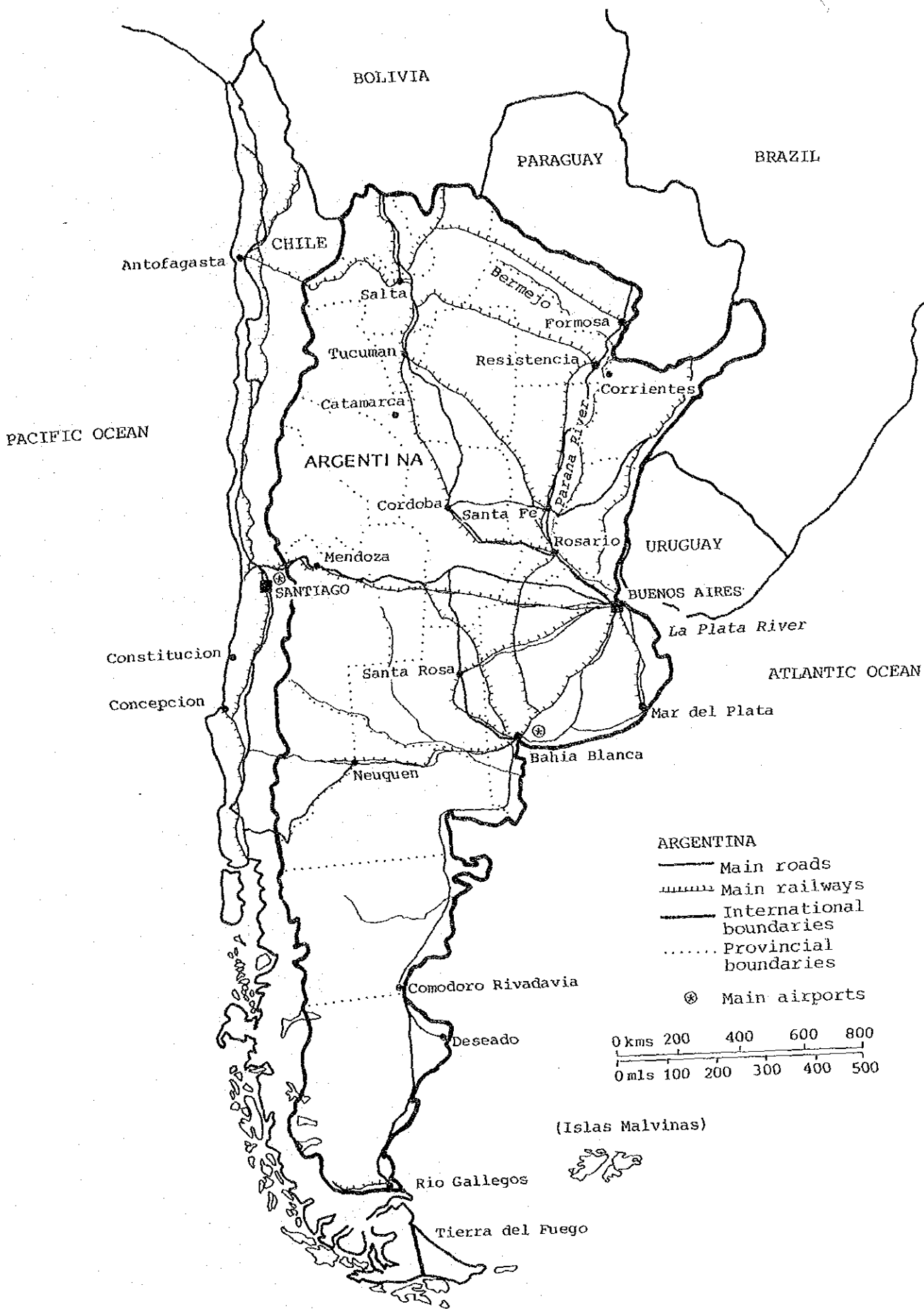
Yours truly,



Hideo Monden  
President  
International Development Center of Japan







BOLIVIA

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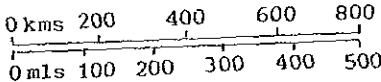
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Bahia Blanca

ARGENTINA

- Main roads
- Main railways
- International boundaries
- ..... Provincial boundaries

⊗ Main airports



(Islas Malvinas)

Rio Gallegos

Tierra del Fuego



## OVERALL CONTENTS

### Vol. I (I)

#### INTRODUCTION

#### SUMMARY

### Volume I ARGENTINE ECONOMY

#### I. MACROECONOMIC ANALYSIS

1. Economic Development and Structural Characteristics of the Economy
2. Major Economic Issues and Development Strategy
3. Economic Perspective and Development Plan
4. Suggestions

### Vol. I (II)

#### II. AGRICULTURE

1. Crop Sector
2. Livestock Sector
3. Fishery Sector
4. Suggestions

### Vol. I (III)

#### III. INDUSTRY

1. Industrial Sector
2. Petrochemical Industry
3. Electronics (Computer-related Industry)
4. Agroindustry (Packaging)
5. Small and Medium Industries

### Vol. I (IV)

#### IV. TRANSPORTATION

1. Overview of and Perspective for Transportation Development
2. Efficient Utilization for Grain Transportation of Parana and La Plata Rivers
3. Containerization in Argentina
4. Cargo Terminal in Buenos Aires
5. Development of Alternative Accesses toward the Pacific

### Vol. I (V)

#### V. EXPORT

1. Changes in Export Structure and International Competitiveness
2. Export Promotion Policy and Measures
3. Export Activities of Exporters
4. Role of International Trading Companies
5. Suggestions

Vol. II

VOLUME II. JAPAN'S EXPERIENCE

I. MACROECONOMY

1. Economic Development and Structural Change in Postwar Japan
2. Economic Planning in Japan

II. BIOTECHNOLOGY DEVELOPMENT, USE OF ELECTRONICS IN AGRICULTURE AND FISH FARMING IN JAPAN

1. Agricultural Biotechnology Development in Japan
2. Use of Electronics in Japanese Agriculture
3. Development of fish Culture and Farming in Japan

III. INDUSTRY

1. Industrial Development and Industrial Policy in Postwar Japan
2. Small and Medium Industry in Japan
3. Development of Petrochemical Industry in Japan
4. Electronics (Computer-related Industry) in Japan
5. Packaging Industry in Japan

IV. TRANSPORTATION

1. Provision and Improvement of Transport Systems in the Course of Japan's Development
2. Cargo Information System in Japanese Ports
3. Container Terminals in Japan
4. Truck Terminals in Japan

V. EXPORT

1. Change in Export Structure in Postwar Japan
2. Japan's Postwar Export Promotion Policy
3. Japan's General Trading Companies
4. JETRO's Role and its Activities

## INTRODUCTION

This is the Final Report of the Study on Economic Development of the Argentine Republic. The Study is based on the Scope of Work signed in August 1985 by the representatives of the Argentine Government and Japan International Cooperation Agency (JICA). JICA commissioned International Development Center of Japan (IDCJ) to organize a Study Team headed by Dr. Saburo Okita. The Study was conducted during August - October of 1985, and February - March and May - December of 1986, including the field survey carried out from August 29 to October 30, 1985 and from May 16 to July 15, 1986.

The Study covers the following five sectors; macroeconomy, agriculture, industry, transportation and export. Major sectoral issues in the Report have been selected through the discussions with the Argentine counterparts of the Planning Secretariat and the members of the Coordinating Committee of the Argentine Government within the framework of the Scope of Work, and thus the coverage of the Study is not necessarily comprehensive. In close cooperation with the counterparts, the JICA Study Team has reviewed structural characteristics of the Argentine economy and its productive sectors, and examined various measures to cope with the problems constraining the prospects of economic development or activation in Argentina from the viewpoint of Japanese experts.

The Study chiefly focused on industrial activation and export promotion, which are considered as major policy issues in the Guidelines for an Economic Growth Strategy 1985-1989 (hereafter referred to as the Guidelines) announced in January 1985. In this regard, Japanese experiences in rapid postwar economic development might have something useful to offer, especially concerning various policies and measures implemented for industrial and trade promotion. Therefore, the Study has examined some relevant aspects of Japanese experiences.

When the Government of President Alfonsín took power in late 1983, the national economy was in serious recession, vexed with high inflation, a large accumulation of external debt and other serious economic difficulties. The inflation accelerated since the beginning of 1984, reaching the monthly rate of 30% in April 1985. To control the situation, the Government introduced in June of the same year the Austral Plan which included the freezing of wages and prices, denomination, abolishment of indexation, prohibition of money issue for fiscal deficit financing, etc. The Plan has been effective in bringing down the inflation to a manageable rate, and must be positively evaluated. Since the beginning of 1986, the price freeze has been relaxed somewhat to price control, but the principle of the Austral Plan is still effective.

Competitiveness and efficiency consciousness are essential for activating the economy. Low inflation is indispensable for harnessing the competitiveness and efficiency in various economic sectors toward growth. Now that the inflation is brought under control, it is advisable for the Government to present to the Argentine people a convincing vision of the future economy where growth and development reward them

with higher standards of living. The Austral Plan currently in force is basically a short-term stabilization policy package. The already announced Guidelines shows the Government's basic policy framework and commitment for generating economic growth, but it does not fully specify concrete steps. Thus, it will be necessary for the Government to present its medium- and long-term economic plan with consistent policy instruments and development programs.

The external debt outstanding of over US\$50 billion and fiscal constraints are making it very difficult for the Government to formulate and implement effective economic development policies from the medium- and long-term perspective. Moreover, there is still a possibility of triggering inflationary pressures. These problems are undoubtedly most serious constraints that Argentina has to cope with. The present Study examined possible approaches and measures for industrial activation and export promotion with due attention to these constraints.

Based on the Japanese experiences during postwar economic development, but with the awareness of the different circumstances between Argentina and Japan, the Study Team has tried to present policy implications and suggestions for the said five sectors, as indicated in the Scope of Work. However, the Study did not examine the ways and means of financing the proposals included in the suggestions, because they are outside the study objectives. The policy suggestions in the Report may not bring immediate results in one or two years. Many of them are meant for early implementation, but the effects of such implementation will be realized in the medium and long terms. Some policy suggestions have a time span extending to the next century.

The Report consists of two volumes. Volume I is prepared on the basis of the findings and analyses of the major study items concerning the Argentine economy. In addition, the volume contains the studies on the trends of consumption of the selected agricultural products in Asian markets and the international situations of petrochemical and computer-related industries.

Volume II of the Report contains overviews of the selected aspects of Japan's development performance and macroeconomic planning, and policy measures taken for the major sectors of agriculture, industry, transportation and export.

The International Development Center of Japan (IDCJ) has organized the Study Team consisting of the members listed below.

Saburo OKITA	Team Leader (Special Adviser, IDCJ, Former Foreign Minister)
Hirohisa KOHAMA	Deputy/International Trade (Senior Economist, IDCJ)
Machiko WATANABE	Project Coordinator/Macroeconomic Analysis (Economist, IDCJ)
Akio HOSONO	Macroeconomic Analysis (Research Adviser, IDCJ, Associate Professor, University of Tsukuba)
Kotaro HORISAKA	Macroeconomic Analysis (Research Adviser, IDCJ, Associate Professor, Sophia University)
Hiroko SATO	Crop Sector (Senior Agricultural Economist, IDCJ)
Tadashi ITABASHI	Livestock Sector (Research Associate, IDCJ, Senior Technical Expert, Central Association of Livestock Industry)
Yasuo ISHIMOTO	Fishery Sector (Research Associate, IDCJ, Executive Director, Overseas Agro-Fisheries Consultants Co. Ltd.)
Fumitake TOKUYAMA	Biotechnology (Research Associate, IDCJ, Chief Executive Director, Biotechnology Systems, Inc., Ltd.)
Kiyoshi WATANABE	Industrial Development (Industrial Economist, IDCJ)
Makoto KUWABARA	Industrial Development (Research Associate, IDCJ, Manager, Project Management, UNICO International Co. Ltd.)
Kazumitsu MITANI	Petrochemical Industry (Research Associate, IDCJ, Project Leader, Project Department, Mitsubishi Petrochemical Engineering Co., Ltd.)
Tomoyuki INOUE	Petrochemical Industry (Research Associate, IDCJ, Chief Analyst, Project Department, Mitsubishi Petrochemical Engineering Co., Ltd.)
Kunio SAKUMA	Petrochemical Industry (Research Associate, IDCJ, Consulting Engineer, Project Department, Mitsubishi Petrochemical Engineering Co., Ltd.)

Masatomi TOMODA	Computer Industry (Research Associate, IDCJ, Senior Specialist to Vice President, NEC Corporation)
Toshio BESSHO	Computer Industry (Research Associate, IDCJ, Counsellor, System Consultant Co., Ltd.)
Koichiro SHIBATA	Machine Tool Industry (Research Associate, IDCJ, Senior Researcher, Economic Research Institute, Japan Society for the Promotion of Machine Industry)
Ryoichi KOSHIYAMA	Packaging Technology (Research Associate, IDCJ, Manager, Consumer Packaging Research Division, Japan Packaging Research Institute, Japan Packaging Institute)
Hiroyuki KATAYOSE	Packaging Technology (Research Associate, IDCJ, Manager, Packaging Research Division, Japan Packaging Research Institute, Japan Packaging Institute)
Masashi MIWA	Small and Medium Industries (Economist, IDCJ)
Takayoshi ONO	Small and Medium Industries (Research Associate, IDCJ, Manager, Consulting Group, IHI International, Ishikawajima-Harima Heavy Industries Co., Ltd.)
Noriyoshi NAGAMATSU	Transport Development (Senior Transport Economist, IDCJ)
Ichiro OZAWA	Water Transport (Research Associate, IDCJ, Deputy General Manager, Development Department I, Maritime International Cooperation Center of Japan)
Yasushi JOGO	Water Transport (Research Associate, IDCJ, Consultant, Overseas Shipbuilding Cooperation Center)
Yugo OTSUKI	Port Planning (Research Associate, IDCJ, Senior Port Engineer, Engineering Department I, Overseas Coastal Area Development Institute of Japan)
Tetsuo WAKUI	Road Transport (Research Associate, IDCJ, Executive Director, AZ Planning Co., Ltd.)
Akira KUMAGAI	Railway Transport (Research Associate, IDCJ, Senior Civil Engineer, Japan Railway Technical Service)



Hiroaki AZUMA

Trade Promotion Policy  
(Senior Economist, IDCJ)

Atsuro FUKUMOTO

Trade Policy  
(Research Adviser, IDCJ,  
Special Adviser, Marubeni Co.)

Kenichi ODA

Export Marketing  
(Research Associate, IDCJ,  
Economist, Bussan Translation Center)

Nobuyuki KASAI

International Trade  
(Economist, IDCJ)



# **SUMMARY**



## VOLUME I ARGENTINE ECONOMY

The Volume I of the Report is a study of the Argentine economy and covers five sectors: namely, 1) macroeconomy, 2) agriculture, 3) industry, 4) transportation, and 5) export. This summary is prepared focusing on major findings and suggestions for the respective sectors.

### I. Macroeconomic Analysis

#### 1. Economic Development and Structural Characteristics of the Economy

Argentina is endowed with the agricultural sector in the fertile Pampas capable of producing a sizable export surplus, and achieved its economic development and industrialization mainly relying on the exports of grains and beef. Argentina attained one of the highest standards of living in the world by the 1920s. Because of the prolonged postwar economic stagnation after World War II, however, the country is now classed as one of the upper middle-income countries in terms of per capita income by the World Bank classification.

Economic development in Argentina was chiefly characterized by the low long-term economic growth. The annual average rate of growth was only 3% during 1950-1980, which was less than a half of the growth rates achieved by the other major Latin American countries like Brazil and Mexico. The investment ratio was stagnant and the investment efficiency low, partly because the country pursued industrialization through import substitution policies which heavily protected domestic industries supplying to the limited domestic market.

Under the rapid liberalization of the economy by the previous government, the long-protected domestic industries faced international competition during the later half of the 1970s. Coupled with the overvalued peso, the country's industrial production dropped substantially from the late 1970s to the mid-1980s. The downturn of the industrial sector, which accounts for one fourth of production and employment, has been the primary cause of the current overall economic stagnation.

Investments have been adversely affected by the continued deterioration of the economic environment, most notably, high inflation, decreases of external and domestic demand, discontinuity of economic policies and so on. The ratio of investment went from bad to worse since the beginning of the 1980s, staying at 13% in 1985. Considering the rapid pace of the on-going

technological innovations in the world, substantial shortfalls of plant and equipment investments which should embody such innovations is likely to constrain the future growth of the Argentine economy.

The Argentine economy has a structure similar to those found in the developed countries, as seen in the diversified industrial sector, modern agriculture, the developed financial sector and others. Self-sufficiency in energy is also a definite advantage to the future economic development. Moreover, the high standards of living, the sizable presence of middle classes and the labor force with high levels of education, which are results of the past economic development, can be considered as favorable factors for the future of the economy.

## 2. Major Economic Issues and Development Strategy

A set of liberalization policies adopted in the late 1970s was designed to transform the traditional pattern of economic development in Argentina. However, the policies did not succeed in achieving the intended transformation. On the contrary, they served to bring about the serious difficulties which the Argentine economy now faces, by depressing domestic manufacturing activities and leading to the huge accumulation of external debt.

In addition to the structural problems which emerged during the long-term process of economic development, the Argentine economy is now encumbered by the new constraint of accumulated external debt. The country's development strategy for the future must aim to overcome the long-standing structural constraints and the problem of external debt simultaneously. Firstly, the strategy must seek the path of economic growth, while lowering the import elasticity of growth for the purpose of reducing imports. Secondly, the strategy must be geared to expand exports, especially manufactured exports.

## 3. Economic Perspective and Development Plan

When the Government of President Alfonsín took power in late 1983, the national economy was in serious recession, vexed with high inflation, a large accumulation of external debt and other serious economic difficulties. In January 1985, the Government announced Los Lineamientos de una Estrategia de Crecimiento Economico 1985-1989 (hereafter referred to as the Guidelines), in order to overcome the prevailing economic difficulties and restore the self-sustained growth capability to the economy. The Guidelines focuses on the crisis of economic stagnation as the most fundamental policy issue, and aims to restructure the economic mechanisms for the purpose of generating growth and raising the efficiency of the economy. The Guidelines proposes to acti-

vate the economy through export promotion, selective import substitution for industrial development, and promotion of small and medium industries.

Since the present Government took over the economic management, the inflation accelerated, reaching the monthly rate of 30% in April 1985. To control the situation, the Government introduced in June of the same year the Austral Plan which included the freezing of wages and prices. The Plan has been undoubtedly effective in controlling the extreme destabilization of the economy, and must be positively evaluated. But it is also undeniable that significant distortions have emerged under the Plan.

It would have been impossible to implement effective medium- and long-term development policies under the hyperinflation equivalent to the annual rate of 1,000% prior to June 1985, and the control of the hyperinflation was then the prerequisite to the activation of the economy. Now that the inflation has been brought down to a manageable rate by the Austral Plan, it is time for the Government to address itself to the central issues of economic management by formulating, and implementing, its medium- and long-term economic policies in addition to short-term policy measures.

#### 4. Suggestions

##### (1) Future Directions for the Argentine Economy

The Argentine economy will have to depend heavily in the short run on the surplus generated by agriculture in its export sector. Argentine agriculture, especially its crop sector, has always had sufficient international competitiveness. However, given the current soft international market conditions of agricultural primary commodities, the increased production will not necessarily guarantee proportionally increased export receipts, because it will take some efforts to diversify export markets. If the present declining tendency in international prices continues, the marginal returns from increased exports will drop.

The traditional pattern of heavy dependence on agriculture for foreign exchange earnings will not suffice to activate the entire economy. The most important issue is how to restructure and reactivate the industrial sector. From the viewpoint of economic efficiency, the restructuring of the industrial sector must be through increased competition in the domestic and external markets. This will require a clear scenario for controlled liberalization in the medium and long terms.

Argentina is endowed with the fertile Pampas and vital natural resources like petroleum and natural gas, and have educated human resources. The key is then how to utilize the endowments of such productive factors effectively under fiscal and

other constraints. The country's industrial policies need to promote selectively such strategic industries as agroindustry, petrochemical industry, computer industry, machine tool industry and bioindustry.

(2) Role of the Government: Transparency in Economic Perspective

The key to the activation of the Argentine economy is in how to reactivate the industrial sector. The reactivation of the industrial sector requires the stimulation of investments and the promotion of technological development. Investors in industry must have a more or less clear idea of what to expect in the future before making their investment decisions. The transparency in economic perspective therefore greatly influences the level of industrial investments. The government policies and measures for economic management are an important determinant of the transparency.

In order to enhance the transparency in economic perspective, it is of primary importance that the government ensures the continuity and consistency of basic economic policies it pursues. As mentioned earlier, the present Government announced the Guidelines in January 1985. The basic policy framework indicated in this document is considered economically rational, and therefore, the Government needs to keep the framework consistently for the formulation and implementation of concrete economic policies and measures.

The Government must ensure that once an important policy decision is made, the decision is upheld by the administration collectively, regardless of the changes in the personnel. It is also necessary to improve the efficiency of administration so that policy decisions are speedily and consistently put into effect to get the intended results.

One of the effective ways to ensure the overall continuity and consistency of economic policies is to formulate a medium- and long-term plan based on the national consensus. Such a plan is a concentrated expression of what sort of future the government envisions for the public. The plan should offer the framework and the standard with which the private sector can picture its future business prospects and makes investment decisions accordingly.

Argentina at this stage will need an economic plan which contains specific policy statements and concrete commitments. The plan will have to present not only the target growth rates for the economy and its various sectors but also a public development expenditure plan, investments expected of the private sector, financing sources of the total investments and so on.

It goes without saying that the plan implementation requires the stable fiscal revenues. An increase of public spending is unavoidable in the medium term to stimulate private investments



which play the central role in the activation of the Argentine economy. Considering the current fiscal deficits, it will be necessary to broaden the tax base. However, because taxation is one of the important policy instruments, the increased tax efforts must be rational in relation to the plan's basic goals, such as the expansion of manufactured exports and the improvement of investment efficiency.

The formulation of the medium- and long-term plans must take note of the following points.

1) Realistic targets

The ability of the government to achieve the results as initially targetted is basic to the credibility of an economic plan it formulates, and it improves the confidence of the public in the plan and the government. Therefore, unrealistically high targets must be avoided in the formulation of the plan.

2) Consistency among sectoral plans

In order to realize efficient economic management, it is important for a medium- and long-term plan to maintain consistency among plans for important sectors, such as agriculture, industry, energy and others. For this purpose, it may be useful to develop a macroeconomic model to check inter-sectoral consistency in planning.

3) Compilation and speedy publication of sufficient statistics

Accurate understanding and analysis of the economic situations are basic to the economic planning and inter-sectoral coordination. It is necessary to strengthen the administration's functions of collecting, compiling and analyzing relevant statistics. It would be necessary to adopt new methods for processing economic data and monitoring the progress of policy implementation, for example, through electronic communications technology.

4) Exchange of information and opinions with the private sector

For the formulation of an economic plan, it is necessary to confer closely with the private sector not only on the nature of basic economic goals but also on specific policy instruments to be employed to realize the goals. For instance, it is useful to set up advisory councils where various business and other private interests are properly represented in order to discuss important issues and concrete policy instruments related to market liberalization and expansion of manufactured exports.

## 5) Streamlining of administrative procedures

It is important to simplify the administrative procedures, especially concerning important policy instruments which contribute to the realization of basic economic goals, such as programs of fiscal and financial incentives to increase private investments in strategic industries and expand manufactured exports.

## (3) Need of Activating the Dynamism of the Private Sector

### 1) Importance of the market mechanism

It is important to the Argentine economy to create an environment where the market mechanism functions properly. For this purpose, it will be necessary to establish competitive conditions in the domestic market, by withdrawing the excessive protection given to the domestic industries and minimizing the intra-industry oligopolistic tendency. The introduction of competitive conditions in the domestic market requires careful timing and planning. In order not to repeat the experiences in the late 1970s, the Government needs to provide clear guidelines for liberalization in close consultation with the private sector and give appropriate incentives during the period of transition.

The primary purpose of having the market mechanism function properly is to raise the efficiency of resource allocation and utilization. It is thus necessary for the Government to maintain the perspective of efficiency in the economy as a whole, when it formulates and implements the guidelines for market liberalization.

From the viewpoint of the private sector, market competition means the reduction of production costs and the improvement of product quality. Such competitive efforts in the domestic market ultimately enhance the international competitiveness of Argentine industries and expand manufactured exports. In this regard, it will be useful to promote quality control campaigns similar to those in Japan and elsewhere, by encouraging the management and employees to work together toward productivity and quality improvements.

### 2) Privatization of public enterprises

The present Government plans to pursue the privatization of the public enterprises in productive and service sectors. Privatization is not merely a means to reduce government deficits but one of the ways to improve the efficiency of the economy. In order to carry out the privatization, it is necessary to examine carefully the needs of the respective sector in which a particular public enterprise operates and to assess the economic effects of its privatization. Such procedures will help identify appropriate methods and steps of privatization,

such as whether to privatize the management and/or capital, or to carry out the privatization in one stage or through scheduled stages.

### 3) Strengthening of support systems for research and development

Promotion of active research and development efforts will have a great impact on technological innovations in production processes and support industrial investments for economic activation. It will be necessary not only to expand or create public research organizations but also to establish systems which coordinate and enhance joint research and development efforts between the government sector, universities and private industries.

The systems to encourage the cooperative efforts of the government sector, universities and private industries will enable the Government to understand the needs of the private sector and mobilize the vitality and dynamism of the private sector for what the Government plans to achieve. It is also important for the systems to facilitate the introduction of advanced technologies which are likely to change the foundations of manufacturing industries and other sectoral activities in the economy.

### 4) Development of efficient infrastructure

The efficient operation of basic infrastructure such as transportation, communications and power is essential to the activation of economic activities. The development and management of basic infrastructure largely belong to the public sector in Argentina, as usually found in other countries. The role of the public sector is important in systematic infrastructural development which requires the medium- and long-term perspective in planning and implementation. In addition, it will also be important to consider the possibility of increasing the participation of the private sector in specific areas of infrastructural services such as port facilities and telecommunication network, in order to facilitate the efficient development and operation in accordance with the changing economic and industrial needs.

## II. Agriculture

The Study has reviewed major characteristics of the crop sector, the livestock sector and the fishery sector, chiefly focusing on the trends since the 1970s. Major policy issues and measures have been studied to clarify development prospects and to indicate suggestions.

## 1. Crop Sector

The crop sector underwent a remarkable change during the 1970s and the 1980s. The change evolved most prominently in the Pampa region, where the crop sector expanded dynamically relative to the livestock sector. Moreover, the five major crops (wheat, maize, sorghum, sunflower and soybean) increased their combined importance relative to other crops. The expansion of the crop sector was partly related to the changes in external market conditions for Argentine export products (most notably the reduction of the market for beef), import liberalization of agricultural inputs during the later 1970s, and generally favorable weather conditions.

But the important factors which contributed to the expanded production of five export crops are 1) the introduction of new varieties with higher genetic potentials like hybrids of maize, sorghum and sunflower, 2) the increased use of agricultural chemicals for plant protection and though to a lesser extent, of fertilizers, 3) employment of larger and more efficient farm machinery, and 4) technical improvements of farm management which accompanied the increased use of such inputs.

Considering the crop sector's unrivalled contribution to the country's foreign exchange earnings, it is of utmost importance to consolidate and advance the technological progress achieved in the last couple of decades and thereby to increase output and export. The Government has already announced the National Program of Agriculture and Livestock (PRONAGRO) and proposed its basic strategies and major policy instruments which serve to activate the potential productive capacity of agriculture and to guarantee economic incentives and returns to producers who participate in the process of realizing technological progress. Thus, the remaining task is to implement the announced policy commitments as early as possible as a coherent system of policy measures.

In terms of their expected fundamental impacts on production and marketing, especially important measures announced by the Government are as follows.

- Reduction and flexible application of export taxes, assuming the introduction of the new land tax
- Expansion and strengthening of the system of support prices for producers of the National Grain Board (JNG)
- Continuation of the JNG's fertilizer distribution program with the express aim of remedying the long-standing distortion in the domestic market of this agricultural input
- Construction, and financial supports thereof, of grain handling and storage facilities

- Strengthening of the regional activities of the National Institute of Agricultural Technology (INTA) in developing and diffusing more technified systems of farming suitable for local conditions
- Increased provision of credit to facilitate the improvement of farming productivity

### Suggestions

In addition to the policies indicated in the PRONAGRO, it will be necessary to consider the following possibilities in order to improve the productivity and efficiency of agricultural production and commercialization.

#### 1) Possibility of further privatization of grain handling facilities

To improve the efficiency of grain handling in expectation of increased grain exports in the future, it is advisable to assess the economic effects of reducing the JNG's direct involvement in the operation of port elevators through further privatization, while increasing its indirect participation in the improvement and development of storage and grain handling facilities (e.g., equity participation, leasing, credit provision for private investments, etc.)

The possibility of further privatization of grain handling facilities does not imply the reduced role of the JNG in grain marketing. On the contrary, the continued deterioration of international prices of Argentina's major export grains calls for an increased role of the JNG, especially in the strengthening of its price support system and export promotion efforts along with the flexible application of export taxes. At the same time, it will be necessary for the JNG to explore ways to reduce the costs of commercialization through modernization and more efficient operation of grain handling facilities. Further privatization and/or the JNG's increased indirect, instead of direct, participation in grain handling and storage as indicated above appear to be some of the possibilities in this regard.

#### 2) Formulation of a coordinated policy for plant protection

The present multiplicity of suppliers and different brands compared with the concentration of consumption in terms of active substances seems to justify a certain degree of consolidation among the domestic pesticide manufacturers and distributors. It will be necessary to formulate a national strategy of plant protection, which includes the possible restructuring of the domestic pesticide industry for import substitution and measures for enhancing the industry's research and development capability.

### 3) Cost reduction and development of farm machinery

It is desirable to promote the reduction of manufacturing costs through economies of scale and to encourage product development efforts by the domestic manufacturers of farm machinery. It will be useful to develop a system to facilitate the standardization of parts designs and the establishment of engineering and performance codes for agricultural machinery.

In view of the on-going development of modern biotechnology and a great impact expected therefrom on agriculture, it will be important that the INTA plays an increased role in the research for varietal development through biotechnology, in addition to strengthening the technology development and diffusion which it has been pursuing. For this purpose, it would be essential to take the following steps.

#### 4) Formulation of a national strategy and establishment of research priorities in biotechnology research

In order to expedite the progress of research and development in the fields of modern biotechnology effectively and efficiently, it is important first of all to formulate a basic long-term national strategy on the basis of comprehensive technology assessments. It is also important to establish, on the basis of the national strategy, short- and long-term priorities on specific research program objectives.

#### 5) Creation of a centralized system of biotechnology research

Because biotechnology is multidisciplinary by its nature, it is important to establish a centralized system of research which expedites the joint efforts of the public sector research institutes, universities and private industry.

#### 6) Development and promotion of biomass technologies

Starting from the basis of the existing sugar industry, it is desirable to develop microbial biotechnology, the key technology for genetic engineering, and thereby to expedite the growth of new bioindustry in the medium and the long terms.

## 2. Livestock Sector

The livestock sector, especially beef cattle farming which is the mainstay of the sector, has reduced its relative economic importance in the Pampa region during the last decade. Cattle population and beef production usually show a cyclical trend between an expanding phase and a liquidation phase. The current liquidation phase was started by the reduction of Argentina's traditional beef exports to Western Europe since the mid-1970s and by its decreased competitive advantage in the international

beef market because of export taxes, the entries of new, often subsidized, exporters and so on. The characteristic of the current phase is its longer duration compared with the previous liquidation phases, and has lasted more than seven years since the late 1970s.

Compared with the crop sector, the diffusion of improved cattle farming technologies has been slow, and the decline and stagnation of profitability in cattle farming were among the important factors which supported the agriculturalization of the Pampa region.

The considerably reduced beef exports resulted in increased domestic consumption of beef, and caused certain unfavorable changes in the domestic beef distribution channels. Most notably, meat-processing factories (frigorificos) equipped with slaughter and processing facilities of higher sanitary standards lost competitiveness in the domestic market to the wholesale merchants (matarifes) who utilize less equipped slaughterhouses. As a result, the performance of many frigorificos deteriorated considerably, as reflected in their increased idle capacity.

In order to aid the recuperation of cattle farming and the related meat-processing industry and to promote exports of beef products, the present Government already announced its basic strategies and major policy instruments in the PRONAGRO. As is the case with the crop sector, therefore, the remaining task is to implement its policy commitments in a consistent manner to achieve the desired objectives.

In terms of their expected fundamental impacts on production and marketing, especially important measures announced by the Government are as follows.

- Diffusion of better and more efficient herd and pasture management technologies which will enhance the stability and efficiency of grazing, fattening and breeding and enable more effective use of land resources
- Argentine Plan of Animal Health (PLANARSA) to eradicate the foot-and-mouth disease and minimize losses due to animal health problems
- Establishment and execution of effective sanitary standards of meat products for the domestic market
- Measures for restructuring meat distribution and marketing (reduction and flexible application of export taxes, strengthening the functions of the National Meat Board in domestic marketing and export promotion, fiscal and financial supports to better performing frigorificos, etc.)

### Suggestions

In view of the urgent need to regain the stability and profitability to cattle farming and to reactivate the meat-processing industry, it will be necessary to direct special policy attention to the following points.

- 1) Increased provision of effective fiscal and financial incentives to cattle producers who make efforts for productivity improvement
- 2) Long-term sustained efforts by both the government agencies in charge of enforcing vaccinations and other necessary animal health measures and by the producers themselves in order to strictly implement the PLANARSA
- 3) Promotion of the export-oriented development and diversification of processed meat products not only in accordance with the sanitary and quality codes of the importing markets but also in accordance with consumers' preferences over tastes, cooking methods, appearances, etc.

### 3. Fishery Sector

Since the early 1970s, fishery production in Argentina began to increase, mainly reflecting the recognition of international commercial value in Merluza which is abundant in the Argentine waters. Coupled with the increased exports of squid, landings increased sharply after the mid-1970s and reached a historical peak of 0.5 million tons in 1979 from the average of 0.2 million in 1971-75.

However, fishery production decreased substantially in the early 1980s, down to less than 0.3 million tons in 1984. The slump was partly related to the decline of international demand and partly to the loss of competitiveness caused by the overvalued peso and general economic destabilization. Especially hard hit were coastal fisheries and conventional deep-sea fisheries based in Mar del Plata.

The growth of the country's fishing industry has been export-oriented, and thus the fishery production is destined to fluctuate according to the changing levels of international demand. This characteristic is further amplified by the fact that the number of species with international commercial value which can be caught in sizable quantity is at present limited in the Argentine waters.

The notable recent change in Argentina's marine fisheries was the increasing importance of landings from the Patagonian waters, reflecting the new investments since the late 1970s. Fishing in the Patagonian waters is largely limited to the area



between 48° - 50° S. Lat., where Merluza, squid and prawn are caught chiefly for export. Fishery resources in the Patagonian waters are not accurately known, especially in the area south of 50° S. Lat., although their existence is reported to be considerable. The further increase of landings is thus possible through the development of new fishing grounds.

### Suggestions

In order to stimulate the sector's recovery from the current slump and ensure its stable growth on the long-term basis, it would be necessary to formulate a national policy framework. The basic principle of the framework must be to reduce production costs through improving the efficiency of fishing and processing operations, and thereby to enhance the competitiveness of the fishing industry.

The national policy framework for the fishery sector needs to consider the following five issues.

- 1) Effective management of fishing efforts in accordance with resource endowments

The trawl fishing, as is chiefly practiced in Argentina, has an implicit possibility of depleting the fishery resources, if exploitations become excessive relative to the level of resource endowments. It will be important to institute an effective system of resource management, including not only the control over the upper limit of annual catches but also over fishing periods and grounds, fishing methods, mesh sizes of fishing nets, sizes of fish to be caught and so on. In the medium and the long terms, it is important to undertake more accurate resource assessments on a regular basis for effective resource management.

- 2) Renovation and modernization of the fishing capacity

The total physical capacity of the existing fleet is larger than the maximum sustainable yields (MSYs) estimated by the National Institute of Fishery Research and Development (INIDEP). Therefore, it will be necessary to adopt a scrap-and-build scheme for facilitating the renovation and modernization of the antiquated and inefficient boats, primarily those engaging in coastal and conventional deep-sea fishing. Because most of the fishing and processing establishments based at Mar del Plata lack financial resources for renovation, it is urgently necessary to expand the institutional financing.

For the renovation of fishing equipment to increase the productivity of fishing efforts, it will be important to relax the current restrictions on imports of equipment, because the efficiency and durability of domestic products are generally lower than the imports. The same applies to the imports of fishing boats, including the relaxation of the restriction on

the age of second-hand boats.

### 3) Improvement of fishing port facilities

The harbor of Mar del Plata Port needs the salvaging of three sunken boats and the clearing of moored obsolete boats to facilitate efficient port operations. The existing ports in the Patagonian region are inadequate for accommodating fishing boats, and it will be necessary to improve piers and cargo handling facilities. In addition, steps need be taken to provide better facilities for supplying power, fuel and water to processing plants on the shore, and to set up workshops for simpler maintenance and repair of fishing equipment and boats.

### 4) Utilization of unused or underused resources

There seem to be considerable underutilized or unutilized resource potentials of demersal species south of 50°S. Lat. and pelagic and migratory species. It will be important in the medium and long terms to develop suitable fishing methods for commercial exploitation on the basis of resource assessments.

Fish caught by trawling but without established commercial value and residues after processing on board are now discarded on the ocean. Research is thus needed to ascertain possibilities of putting them to use. For instance, if fish culture in the coastal areas or in brackish waters around Bahía Blanca are found technically and economically feasible, they can be used as feeds.

### 5) Product development for export promotion

It is important to develop new products which not only qualify for the sanitary and quality codes of the export markets but also appeal to the consumers' preferences on tastes, appearances and cooking methods. For this purpose, it is necessary to strengthen the efforts to collect relevant information on prospective export markets and feed it to the domestic processing industry.

## III. Industry

The Study on the industrial sector consists of five parts. The first part reviews the past trend and structural characteristics of the industrial sector as a whole. The second to fourth parts examine the current situations and prospects of three industrial subsectors, namely, petrochemical industry, electronics (computer-related industry) and agroindustry (packaging), which have been selected in accordance with the Scope of Work and the discussions between the representatives of the two Governments. The fifth part studies small and medium industries, which

the Argentine Government considers important in its industrial promotional policies.

## 1. Industrial Sector

Industrialization in Argentina progressed under import substitution policies. The resultant industrial structure is more diversified by comparison with other countries which have the similar levels of per capita income. At the same time, the industrial import substitution supported by heavy protections created weak domestic industries characterized by low productivity and lack of international competitiveness.

Industrial production in Argentina began to stagnate in the mid-1970s and deteriorated since the beginning of the 1980s. The decline in output was especially pronounced in labor-intensive industries which produce intermediate inputs and machinery industries. Furthermore, the discontinuity of economic policies, high inflation, instability of the exchange rate and the real interest rates, and other factors created the highly uncertain economic climate which was unfavorable to industrialists' investment planning and decisions. Investments have been stagnant throughout the last decade or so, resulting in the aging and obsolescence of productive plants and equipment. Virtual absence of new investments which embody recent technological innovations indicates that the country has been falling behind the on-going rapid progress of industrial technologies in the world.

The Government has been trying to reorient its industrial policies in order to reactivate the existing industries and expedite the growth of new industries, and considers that the promotion of manufactured exports and small and medium industries is the key to reactivate the industrial sector.

### Suggestions

From the viewpoint of Japanese experiences, Argentina's new industrial policies should take into account the following points.

#### 1) Need to identify clear guidelines for industrial promotion

It is essential to clarify the criteria for selective industrial promotion and thereby to designate priority industries. The most important criterion for Argentina at the present moment would be the efficient utilization of national resources, both natural and human. Processing industries of agricultural products and petrochemical industries would be important for utilization of natural resources, because Argentina has international competitiveness in major grains and oilseeds, and is endowed with petrochemical resources.

The promotion of knowledge-intensive industries like electronics and biotechnology industries would be important from the viewpoint of efficient utilization of human resources. The development of such knowledge-intensive industries does not appear very easy at the present moment, because it requires strong supports in terms of technological buildup and capital investment. However, the percentage of population with higher education in Argentina is comparable to those in developed countries, and thus has the advantage in absorbing new technologies by comparison with other Latin American countries. Moreover, the urbanized characteristics of the economy and society, as seen in the sizable presence of urban-middle class and the development of the financial sector, indicate the sizable potential demand for manufactured goods embodying new technologies.

2) Need to introduce competitive conditions to industrial production

Technological progress is indispensable to industrial promotion, and the existence of competition among enterprises stimulates technology development. In the oligopolistic market where competitive conditions are weakly developed, industrialists would not see adequate incentives in technology development efforts. Unless the industries are only interested in producing for the domestic market and the consumers are willing to pay more for manufactured goods of lesser quality, it is necessary to create competitive conditions in the market by the minimization of protections and other measures.

3) Need to formulate government policies through exchange of opinions with the private sector

If industrial policies are formulated solely by the government without due understanding of the real situations and prospects of the respective domestic industries, they will not bring the desired results, and may even disrupt industrial production. In this sense, it is crucial that the industrial policies reflect the opinions and judgements of the private sector. Closer exchange and coordination with the private industries are important not only for formulating overall guidelines but also for identifying concrete policy instruments for specific industries. In Japan, for this purpose various advisory councils such as the Industrial Structure Council and the Industrial Technology Council have played important roles.

4) Need to enhance the confidence of foreign capital

The stimulation of domestic investment is indispensable for reactivating the industrial sector, but it is also important to encourage the entry of foreign capital. From the viewpoint of technological development, the entry of foreign capital embodying advanced technologies will be of special significance to the economy. In order to induce investments of

both foreign and domestic capital, it is necessary to improve the investment environment (the stability of economic policies and price movements, advantage of financial costs, etc.). Especially with respect to foreign capital, it is essential to enhance the confidence of prospective investors in the Argentine market, by ensuring the continuity of legislations concerning foreign capital, and providing consistent administrative treatments of incoming foreign investors.

5) Need to strengthen support systems for technology development

The public sector institutions like the National Institute for Industrial Technology (INTI) and the National Council for Scientific and Technological Research (CONICET) undertake and/or promote research and development related to industrial technologies, but their efforts are constrained by budgetary and manpower limitations. The contact of these institutions with private industries is generally weak. Thus the needs of industries are not necessarily reflected in their activities, and as a result, their research outputs do not often influence actual production processes.

Therefore, it will be necessary to strengthen the functions of the public sector research institutions, including their interactions with private industries. In this connection, it will be necessary to 1) coordinate well between projects and programs undertaken by various public sector research institutions, 2) provide appropriate incentives to promote research and development activities of private enterprises, and 3) strengthen training programs for middle-level technicians to facilitate the application of research outputs to production processes.

6) Need to establish a long-term capital market

The increase of investments is necessary for the reactivation of industries, and the availability of long-term financing is necessary for increased investments. Partly because of the economic fluctuations in the past, the capital market is yet underdeveloped in Argentina and the market of long-term capital is practically non-existent.

Japan did not have the developed capital market after World War II, and introduced a system of bank-issued debentures in order to mobilize money in the private sector and channel it to finance the growing demand of industrial investments. This experience might be useful for Argentina as an institutional device to activate a saving-investment circuit, enabling domestic savings to be cycled to industrial investments.

## 2. Petrochemical Industry

Until the oil crises in the 1970s, the world productive capacity of various petrochemical products was mostly in the hands of the developed countries. The sharp soaring of oil prices after the crises worked to put off further investments in petrochemical industries by Western European countries and Japan. Meanwhile, countries endowed with hydrocarbon resources like Saudi Arabia began to invest in various petrochemical complexes with the increased earnings from crude oil exports in order to utilize surplus natural gas effectively. During the last ten years or so, the productive capacity of petrochemical industries utilizing naphtha as raw material in Western Europe and Japan stayed stagnant, while the capacity utilizing ethane in resource-endowed countries expanded rapidly.

Plastics are one of the major final petrochemical derivatives, and their demand grew rapidly because of their diverse advantages, by replacing traditionally-used materials. However, the substitutable demand already began to taper off except for a limited number of products in the industrialized countries, while sharply increased prices of raw materials functioned to depress the growth of the demand for plastics.

The strength of petrochemical industries in Argentina is found primarily in the lower prices of raw materials and energy. For example, the cost of raw materials for ethylene in Argentina is roughly three-fifths of the cost in Japan.

Major disadvantages are high costs of plant construction and of transportation for exporting the products. Higher costs of construction are partly because of the high proportion of imports in plant equipment which embody special high technologies. In addition, delays of delivery of equipment and supplies manufactured by domestic enterprises, and the postponement of construction works due to the shortage of financing contribute to the increase of construction costs. The costs of plant construction in Argentina are 20 - 50% higher than in the US coast of the Mexican Gulf.

Because of Argentina's geographical location, the transportation of petrochemical products to major consuming markets like North America, Western Europe and Southeast Asia are more costly. For instance, the transportation costs of low-density polyethylene to Southeast Asia are equivalent to some 30% of the FOB price, and 12 - 13% if destined to Western Europe.

Argentina's petrochemical industries are divided into three groups of public enterprises, subsidiaries of foreign companies and national companies, each having different interests and orientations. Moreover, there are differences of interests in the public sector, for example, between the State Petroleum Corporation (YPF), the State Gas Company (GDE) and governments of

the provinces with hydro-carbon reserves. Adjustment and coordination of different interests and needs seem to consume considerable time before finalizing decisions.

Because of the sudden drops of oil prices which are confusing international markets of petrochemical products, it is difficult to evaluate the feasibility of investments in petrochemical industries. Therefore, it is judged better to postpone large-scale new investments until the stabilization of international market conditions of crude oil.

### Suggestions

It is important for the Government to make effective coordination for correcting some imbalances caused by the delay of project implementation and to formulate a consistent policy framework for the future projects. The following points need be considered for policy formulation.

- 1) Strengthening of the Government's comprehensive coordinating role over new investment projects through clarifying priorities
- 2) Periodic and speedy assessment of international market conditions of petrochemical products
- 3) Formulation and implementation of policy instruments to stimulate investments of national and foreign capital in petrochemical industries
- 4) Reduction of plant construction costs, by such measures as reduction or exemption of taxes on imported plant equipment, and rationalization efforts in construction works and procurement
- 5) Abolition of related export taxes and scheduled reduction of import duties

### 3. Electronics (Computer-related Industry)

#### (1) Computer industry

Computerization has been progressing steadily in Argentina, and the domestic production plan for microcomputers was announced in January 1985 by the then Secretariat of Industry. However, in order to formulate strategies and policy instruments for fostering the domestic computer industry, it is necessary to recognize its characteristics, most notably, the rapidity of technological innovations, huge investments in plant equipment, and the constant need of sizable R & D investments.

The progress of computerization in Argentina has centered

around home computers and micro-computers. The demand for large computers (main frames) has been stagnant in the last five years. Subsidiaries of US computer companies like IBM (chiefly main frames) and Texas Instruments (home computers) have most of the market share in Argentina. A national company began to produce micro-computers since the beginning of the 1980s, but its production is an assembly of imported semifinished components. Full-scale domestic production of computers will require sufficient preparations and sizable investments.

#### Suggestions

Because of the relatively small domestic market and the high speed of technological progresses in this industry in the world, the Government will have to bear a considerable burden in order to implement the proposed computer nationalization plan. For the development of the computer industry in Argentina, the following points are suggested.

- 1) It is essential to formulate a well thought-out long-term plan through close coordination and exchange of opinions with the private sector.
- 2) The domestic production plan for micro-computers divides the related components into eight segments. However, in order to benefit from possible economies of scale, it is not advisable to stick to the eight segments. It will be important to readjust the segmentation flexibly and to promote competition. This will in the end serve to improve international competitiveness of the industry.
- 3) The participating companies in the plan are provided with fiscal incentives like tax exemptions or reductions. But it is also desirable to offer financial incentives of low-interest loans.
- 4) It is necessary to stimulate the potential domestic demand by such measures as setting up an institutional lease system, which has been effective in Japan during the early years of computerization.
- 5) In order to utilize the limited funds more efficiently, it is desirable to integrate the computer-related research projects which are now separately carried out by different institutions.

#### (2) Information service industry

Balanced growth of hardware and software technologies is indispensable to the steady growth of the computer industry. It will be important to implement policies which favorably influence the use of computers and software development. At the present moment, in-house software development is predominant in Argentina, and the software industry is still in the incipient



stage of development. Basic software programs used in Argentina have so far been those developed overseas, but the country has the potential to develop its own software industry which makes applied software programs in Spanish.

### Suggestions

In order to promote the growth of the software industry, it is necessary to formulate and implement policies by emphasizing the following points.

- 1) It is important for the Government to adjust the implementation of the domestic computer production plan from the viewpoint of increasing computer users. The protection of the domestic computer industry through import restrictions should not be too rigid to discourage the spread of computerization among potential users.
- 2) It is necessary to modernize telephone networks which will be indispensable to create a society where computers and communications will play an important role.
- 3) It is advisable to upgrade computer education and disseminate practical knowledge and skills in computer utilization widely among the public. Practicable training programs must be organized for entrepreneurs of small and medium industries and middle-level technicians.
- 4) It is necessary to set up a financing scheme for the software industry. Because the development of software programs usually requires time and money, it is desirable that governmental and private banks provide financing for the operating capital during the initial stage of software development.
- 5) It will be important for the Government to place orders of software development in order to foster the software houses in Argentina.

### (3) NC machine tool industry

The application of electronics to machine tools accelerated in the world only during the last decade or so. In Argentina, numerically controlled (NC) machine tools were introduced for the first time around 1970. Domestic demand reached 54 units in 1981 but decreased 18 units in 1983 reflecting the change of economic environment. Replacement of industrial machines has been generally very slow in Argentina. Therefore, the introduction of NC machine tools to replace obsolete machines will make a great impact on the improvement of productivity and consequently on the reactivation of the industrial sector. It is urgently necessary to institute policy instruments to promote this process.

At present, four large machine manufacturers produce NC

machines in Argentina, but all of them rely on imports for core components like NC units. The employed manufacturing technology vary depending on the respective companies' policies, and consist of licenced production technologies and in-house technologies.

#### Suggestions

In order to expedite the growth of the NC machine tool industry, it is important to take the following measures.

- 1) It is necessary to institute financial and fiscal incentives under firm development policy, including the scrap and build scheme, in order to stimulate the demand for NC machine tools.
- 2) It is advisable to take measures to upgrade the technological level of the existing NC machine companies further. Possible measures are; a) promotion of joint efforts between public research institutes and private companies in related research and training of technicians, b) tax incentives on R&D expenditures and c) international exchange of information and experts.

#### 4. Agroindustry (Packaging)

In the discussion meeting with the Study Team, the Argentine counterparts have pointed out the problems of quality and production control and packaging concerning agricultural processed products. The Study has selected the issue of packaging.

Domestic consumers in Argentina are apparently less-demanding on the quality of packaging compared with the counterparts in the developed countries. Agricultural processing industries do not have strong interest in the improvement of packaging technologies, and this seems to be an economically rational behavior, as long as they supply to the domestic market. However, the improvement of packaging is considered as one of the important conditions for promoting exports of agricultural processed products.

The basic requirement for modernizing packaging technologies is to use those packaging materials which are stable in quality and low in price through mass production, such as plastics, corrugated paper, and tin plates and aluminium. Most of these basic packaging materials are produced domestically in Argentina, but their quality is generally lower than in the developed countries. Moreover, their monopolistic or oligopolistic production makes their prices generally higher than in the developed countries, and this seems to be reflected in the country's consumption pattern of packaging materials.

Most of the plastics used as packaging materials are pro-

duced in Argentina. However, the country's per capita consumption of plastics is still relatively low, equivalent to one sixth of the level in the USA and one fifth of that in Japan. The consumption is thus likely to increase in the future. For transportation packaging, wooden boxes are chiefly used, and corrugated paper boxes which are widely used in the developed countries are less important mainly for economic reasons. Tin plates are manufactured by only one company, and they have quality and price problems.

The preliminary findings from the limited company visits conducted during the present Study are as follows. The packaging of frozen fish for exportation is adequately done by using corrugated paper boxes effectively. The flat tray shrink method is used for the transport packaging of canned fishery products in some plants. This method tends to cause dents on the surface, and it will be necessary to improve the technology. Canning and bottling of vegetables and fruits need better systems of quality and production control. Generally speaking, the current inspection systems over production processes were found inadequate.

#### Suggestions

In order to improve packaging technologies in agroindustries, it will be necessary to consider the following measures.

##### 1) Training of packaging specialists

Packaging has to cover diverse areas in terms of materials and technologies it utilizes. Seminars and training courses on packaging technologies are important not only to raise the levels of the specialists but also to provide opportunities for exchanging technical information and experiences accumulated in different industries.

##### 2) Systematic upgrading of packaging research

Packaging technologies are closely interrelated with technologies utilized in transportation, cargo handling and storage. Therefore, a systematic approach is necessary for the development of packaging technologies.

##### 3) Opening of packaging fairs

It is useful to hold periodic local fairs on packaging in order to appeal the importance of packaging to consumers as well as manufacturers and users of packaging materials.

#### 5. Small and Medium Industries

The Government considers that the promotion of small and

medium industries is one of the key policies to reactivate the industrial sector, but has not yet announced any concrete strategies and policy instruments. The understanding of the actual conditions of small and medium industries is essential to formulate effective policies for them.

There have been no set official definitions of small and medium industries in Argentina, and the Government is now preparing their own definitions. The standard definitions are indispensable for effectively and objectively targetting promotional policies on certain categories of enterprises.

In consultation with the counterparts and the staff of related government agencies, the Study tentatively used the following definitions on the basis of the available statistics: small enterprises are those which employ 50 workers or less, medium enterprises from 51 to 200 workers, and large enterprises more than 201 workers.

As of 1984, small and medium enterprises in Argentina as defined above accounted for 97% of the total number of industrial establishments, 56% of the total workers in the industrial sector, and 44% of the total industrial production. These figures indicate the importance of small and medium enterprises. The participation of small and medium enterprises is especially important in metal products and machinery industries and food industries, followed by textile and apparel industries and chemical industries.

On the basis of the limited number of interviews conducted during the Study, small and medium enterprises of the industrial sector in Argentina were found to have the following characteristics. Firstly, they employ stabilized production technologies and manufacture products of stabilized quality. Secondly, they manage to continue their operations although the levels of capacity utilization are generally low. Lastly, they do not rely on external financing.

Many small and medium enterprises maintain their old machinery and equipment rather well, and apparently have continued to manufacture the same old set of products for years. One of the immediately noticeable problems is that small and medium enterprises lack forward-looking entrepreneurial attitudes. Except for a few in machine tool industries, the interviewed enterprises do not exhibit strong interest in the introduction of new technologies, the development of new technologies and products on their own, and the new market development. Such passive attitudes are understandable to a certain degree, because they must have been related to the deterioration of the business environment which was caused by the economic fluctuations and frequent changes of government economic policies, especially since the mid-1970s. At the same time, their passivity must have been related to the long-standing import substitution policies which protected the domestic industries from competition.

Passive entrepreneurial attitudes are not limited to small and medium enterprises and apparently one of the general characteristics of the industrial sector in Argentina where the competition in the domestic market has not been very strong. But they appear to be more manifest among small and medium enterprises, primarily because it is more difficult for these enterprises to bear the risks of investments in new technologies and new products.

During the Study, entrepreneurs of small and medium industries were often found to have other industrial or non-industrial lines of business. This might partly explain the above-mentioned observation that small and medium enterprises manage to continue their operation despite the generally low level of capacity utilization. The plurality of business might be related to their need of distributing the risks of entrepreneurial undertakings, given the economic fluctuations they experienced for quite some time. The overall business environment in Argentina might have been unfavorable for them to commit themselves fully to manufacturing.

The interviewed enterprises asked for better access to external financing in favorable terms and technical supports from the Government. At present, the National Development Bank (BANADE) has financing schemes for small and medium industries, while the National Institute for Industrial Technology (INTI) provides technical supports.

The BANADE started its small and medium industries financing scheme since 1984, but the available fund was limited. The Bank added a new line of credit in March 1986, and also began to lend from its schemes indirectly through commercial banks in order to offset its limited network of local branches.

Technical supports which the INTI offers to industrial enterprises chiefly consist of measurement and testing services, development of new technologies on the commission basis, distribution of technical information, and training programs for management and technical staff. Because of the limited funds and manpower, however, the INTI's programs in these spheres are far from being sufficient to satisfy their intended beneficiaries. The interviewed small and medium enterprises pointed out that the INTI did not sufficiently understand their real needs and that its interactions with private enterprises were limited.

The INTI's laboratories and other facilities are chiefly located in the Federal Capital and its proximity, and its regional facilities are limited to other major cities of Rosario, Cordoba and Mar del Plata. This physical distribution itself suggests the limitation of the INTI's activities with respect to small and medium industries. At present, organizations capable of technological supports are virtually non-existent on the provincial levels, and thus there is no adequate information on the real needs of local small and medium industries. In Japan, for

instance, industrial experiment and research institutions of the prefectural governments play an important role in finding out the needs of local industries and providing necessary technical supports.

### Suggestions

#### (1) Promotional policies for small and medium industries

Promotional policies for small and medium industries must be consistent with the overall national strategy for industrialization. At the same time, it is necessary to vary the relative emphasis of such promotional policies in accordance with the types of small and medium industries.

The majority of small and medium industries are "traditional" in the sense that they manufacture standardized products with standardized production technologies for local markets, such as bakeries and repair shops. Another type of industries also manufacture standardized products with standardized technologies but with wider market orientation, including overseas markets, such as machine tool manufacturers and other types of machinery industries. The last type consists of small and medium industries which are "progressive" in the sense that they are interested in developing new products, new production technologies and new markets by taking advantage of their highly skilled manpower and the flexibility derived from the small size of their operations, such as high technology industries in electronics or biotechnology.

The first two types of small and medium industries will need technical information and training to upgrade their products and production technologies, and supports to their efforts for market expansion in addition to usual types of financing. The last type of industries will chiefly require financing which supports their technology and product development efforts.

#### (2) Financial assistance

The limited availability of funds still remains a major problem, but in addition, the BANADE's institutional financing for small and medium industries needs to take into account the following points.

- 1) In order to raise the effectiveness of institutional financing, it is essential to select target industries, and the selection must be consistent with the strategies of national industrial policies.
- 2) The BANADE has just introduced the indirect financing through commercial banks. Considering the BANADE's limited manpower and branches, this indirect financing system will be effective for the promotion of small and medium industry financing. However, it is necessary to control carefully

the progress of this financing system, in order to ensure the effectiveness of industrial policies.

- 3) It is necessary to provide preferential lending terms for small and medium industries. However, such terms should not be overly preferential compared with commercial lending conditions, because wide differentials increase the need for the BANADE to check closely proper utilization of loans, thus constraining its routine operations.

### (3) Technical assistance

On the basis of the preliminary findings, it is advisable to consider the following points in order to strengthen technical supports to small and medium industries.

- 1) To grasp the needs of local small and medium industries and provide them with appropriate technical services accordingly by utilizing existing institutions and/or by establishing technical institutions at regional level,
- 2) To strengthen technical and management consulting services for small and medium industries, with the INTI playing the central role,
- 3) To set up a system for providing up-to-date information on new technologies, new products and international market prospects, with the INTI playing the central coordinating role,
- 4) To strengthen training programs for technical personnel at the INTI and other public sector institutions. The on-going training programs of the INTI are of short duration of several days and largely consist of lectures. It will be necessary to introduce training programs of longer duration, such as six or twelve months, and to emphasize workshop training.

## IV. Transportation

On the basis of the Scope of Work and the discussions with the counterparts at the Planning Secretariat and the representatives of various transportation-related government agencies, the Study has selected five issues for examination. Namely, they are 1) an overview of transportation development in Argentina, 2) efficient utilization for grain transportation of Parana and La Plata Rivers, 3) containerization in Argentina, 4) cargo terminal in Buenos Aires, and 5) development of alternative accesses toward the Pacific.

## 1. Overview of and Perspective for Transportation Development

The transportation system in Argentina has well-developed networks chiefly in the Pampa region where there are concentrations of the population and productive activities. However, because of the prolonged period of economic stagnation, investments in new transport infrastructure and the maintenance of the existing facilities have been inadequate. These delays of investments necessary to catch up with the on-going innovations of transport technologies in the world and the insufficient maintenance and repairs may become serious bottlenecks to the anticipated industrial activation and export promotion.

In order to develop the national transportation system, it is especially important to take the following steps.

- 1) To strengthen the maintenance and improvement of the existing facilities, especially railways and ports
- 2) To formulate guidelines for transportation development in the outlying regions which the Government is planning to develop
- 3) To reformulate policies on transport tariffs and government subsidization in order to enable the operating entities to make necessary reinvestments, in view of the wide disparities between the tariff structure and the actual transportation costs
- 4) To concentrate investments to the developments necessary to catch up with the world transportation trend, especially concerning containerization and introduction of large bulk carriers
- 5) To develop transportation systems which effectively utilize new communications technologies, provide speedier and economical services and handle diversified and smaller lots of cargo.

## 2. Efficient Utilization for Grain Transportation of Parana and La Plata Rivers

Argentina currently exports some 24 million tons of grains and their by-products. Approximately 70% of these exports are handled by the ports developed along Parana and La Plata Rivers, and the remainder by the ports on the Atlantic coast, most notably the Bahia Blanca Port. Although very important for grain exports, the river ports have their inherent limitations, requiring frequent maintenance dredging to cope with constant sedimentation in their berths and access channels.



Furthermore, because of the shallow drafts of berths and access channels, it is not possible at these ports to full-load PANAMAX-type ships which are most commonly used for grain transportation in the world. Top-off operations must be done either at the special facilities set up near the mouth of La Plata River or at Bahia Blanca Port. This sort of double or triple loading is one of the major factors which increase the share of transportation costs in the export prices (FOB) of cereals and oilseeds.

Exports of five major grains and their by-products are targetted to increase to some 40 million tons by the beginning of the 1990s. Although efforts for the improvement of Argentina's grain transportation system are presently focused to the development of Bahia Blanca Port, on which no detailed reference is made in this study since it is an on-going project, the present Government has not yet formulated its long-term policy framework clarifying the direction for developing the grain transportation system for the future. The on-going government measures chiefly address to the solution of short-term issues, and sometimes lack adequate consistency among themselves.

#### Suggestions

In order to cope with the targetted increase in grain exports, various actions and investments will be necessary to upgrade the transportation system. In addition to the on-going Bahia Blanca Port development project, two important projects are as follows.

- 1) To develop a deep-sea port at Quequen
- 2) To set up a floating elevator near the mouth of La Plata River

From the viewpoint of offering some fundamental solution to the constraints of the country's entire port system, one possibility is to construct a port island off the coast to the south of La Plata River. But this possibility would involve huge initial investments compared with the above two projects, and thus it would be necessary to consider it from the long-term perspective.

In order to develop an efficient and economical grain transportation system, it is important to identify a consistent long-term policy framework. For this purpose, it is necessary to assess the future grain production and its regional distribution, and examine land transport systems, ports, and river transport systems in a comprehensive manner. It will be desirable to evaluate the projects mentioned above and identify an appropriate schedule for their implementation.

### 3. Containerization in Argentina

The containerization of cargo has been progressing rapidly in marine transportation not only between developed countries but also between them and developing countries. It is expected moreover that large full container ships loading 3,000 - 4,000 TEU (twenty footer equivalent units) will become dominant in ocean traffic in the foreseeable future.

Buenos Aires Port alone currently handles container cargo in Argentina. Because of the draft limitation of the access channel, the port will not be able to accommodate large container ships, while the existing container handling yard and related facilities are extremely limited.

#### Suggestions

Given the current trend of ocean freight, the development of a container port is requisite in Argentina for industrial activation and export promotion of industrial products. The expansion and improvement of the existing container handling facilities at Buenos Aires Port might be sufficient in the immediate future, but it is necessary to consider the long-range development of a container terminal at an Atlantic deep-sea port, preferably close to the Federal Capital.

### 4. Cargo Terminal in Buenos Aires

Along with the increase of cargo transportation by trucks since the beginning of the 1960s, the need to establish a cargo terminal in Buenos Aires City gradually became apparent. A consortium of 121 private trucking firms established a cargo terminal company in 1978, but the terminal is not yet constructed. Moreover, the National Directorate of Road Transport, the Ministry of Public Works, carried out a feasibility study on the cargo terminal in 1982. The study selected La Matanza as the candidate site for the cargo terminal and calculated the high economic internal rate of return.

#### Suggestions

On the basis of similar Japanese experiences, the strategy for developing a cargo terminal at Buenos Aires needs to consider the following points.

- 1) It would be useful to consider the possibility of Japan's so-called third sector approach in which the central government, the municipal government and the private sector jointly invest to set up the general cargo terminal.
- 2) It is necessary to make appropriate legislation which

defines the access to official financing, preferential treatments for the managing entity and users, an appropriate system for operating the terminal, design standards of the terminal facilities, etc.

- 3) If the general cargo terminal is to be constructed at La Matanza, the strategy should be to plan it as a complex of the distribution industry, by facilitating good working relationships with users (associations of trucking firms) and with the owner of the premise (Central Market of Buenos Aires), and also by paying due attention to environmental conservation.

## 5. Development of Alternative Accesses Toward the Pacific

Economic activities in Argentina developed mainly within the radius of 600 km from the capital on the basis of the productivity of the humid Pampa. However, in order to overcome the economic difficulties the country is now facing and to reduce the regional economic disparities, it is considered necessary to activate fully the development potentials of the underdeveloped outlying regions of the country. The development of the Northwest (NOA) is being considered from this viewpoint.

The solution of the problem concerning the Beagle Strait improved the relationship between Argentina and Chile, and opened a possibility of exporting the products of the NOA through the ports in Chile. Therefore, each of the provinces along or close to the border with Chile are now actively promoting the development of a trans-Andes passage to Chile as the key to activating their respective provincial economy.

A number of studies have been done or being done on development possibilities of trans-Andes routes. But they are considered inadequate in their respective assessments of development potentials in the hinterlands, possibilities of overseas marketing for regional products, and the future transportation demand generated along the proposed routes. And the studies are in need of better coordination in line with the common methodological framework.

### Suggestions

In order to determine priorities among proposed routes to the Pacific and formulate a program of their development, it is necessary to examine the following issues.

- (1) Regional development prospects and transportation demand projections for the respective proposed routes

- 1) Formulation of a development plan for the region within the sphere of influence of each proposed route

- 2) Overseas market analysis for regional products
- 3) Analysis of transportation costs for the proposed routes
- 4) Transportation demand projection for each proposed route
- 5) Technical studies (required service levels and design standards, development policies for the related ports, etc.)

(2) Feasibility study on alternative routes

- 1) Technical studies (surveys on critical portions of the routes and identification of plans for improvement or new construction, indicative route designs, and cost estimates)
- 2) Analysis of comparative advantages of the proposed routes
- 3) Formulation of a development program for the priority route
- 4) A plan for financing and a plan for operation

Many of the issues mentioned above have been either already studied or currently being studied by the related agencies or departments of the Argentine central and provincial governments. Therefore, the remaining major work is to integrate and coordinate the results of their studies in line with the consistent methodological framework and to conduct necessary supplementary studies. It will be necessary to designate a special organization in the central government for systematic coordination.

## V. Export

The Study has reviewed 1) changes in the export structure and international competitiveness, 2) export promotion policies and measures, 3) export activities of exporters, and 4) the role of international trading companies. Some suggestions are presented on the basis of Japanese experiences.

### 1. Changes in Export Structure and International Competitiveness

Agricultural and livestock products account for over 50% of Argentine total exports, and when their processed products are included, the combined percentage exceeds 70%. The contribution of manufactures to total exports is around 20%, and no increase has been observed since the mid-1970s. Argentina's share in the total Central and South American market for manufactures dropped

from over 22% in 1960 to a little less than 13% by 1980.

## 2. Export Promotion Policy and Measures

### (1) Policies for export promotion

Argentina's exports always depended heavily on primary commodities, and the foreign exchange earnings from such traditional exports could finance the imports of necessary goods. Therefore, the need for aggressive export promotion policies has never been really strong. Because of the continued decline of international prices of primary commodities and the increased interest payments on accumulated external debts in recent years, the present Government has decided to strengthen its policies for export promotion.

The Export Promotion Law was announced in October 1984. The Law not only consolidated the existing export-related promotional measures, but also added new ones such as a system to encourage international trading companies and consortiums or cooperatives of exporters, a system for the certification of export quality, establishment of the Export Promotion Fund, and a system for the export promotion of regional products.

In addition, the Government has been improving and strengthening the legal bases for export promotion since August of 1985, including the reduction or exemption of export taxes, the creation of a credit system for industrial investments mainly by small and medium enterprises, and the establishment of the Special Export Program which offers additional incentives to exporters. Furthermore, at the end of 1985, the Secretariat of Foreign Trade and the Secretariat of Industry were incorporated into one agency for the purpose of implementing export and industrial policies in an integrated manner.

### (2) Improvement of legal bases for export promotion

The Export Promotion Law must be consistent with other interrelated laws, especially with the Industrial Promotion Law, the Foreign Investment Law and the Technology Transfer Law. A new Industrial Promotion Law is currently under preparation, and it is desirable that the Law emphasize industrial activation and export promotion consistently. In the similar manner, the Foreign Investment Law and the Technology Transfer Law need also be revised from the viewpoint of industrial activation and export promotion.

Industrial activation will necessitate the importation of capital goods from abroad in addition to procuring them domestically. It is important in this regard to reduce or exempt import duties and to simplify the import procedures.

There are a number of constraints to exports, such as slow repayment of indirect taxes, high import duties on capital goods, export duties, high direct taxes, and taxes on ocean freight. Export taxes have been certainly reduced since the end of 1984, but a sizable number of manufactured goods are still subject to export taxation. Repeated increases of the petroleum tax and utility service charges are also considered constraining the export promotion efforts of the private sector. The tax on ocean freight, though its rates were reduced, is currently imposed on both exports and imports. In addition, it normally takes considerable time for exporters to get the benefits from the import duty drawback system and the repayment system of value-added taxes.

In order to draw benefits from various programs for export promotion, exporters have to apply separately to the respective programs and get approvals, and this is quite time consuming. The export promotion programs cover a wide range of manufactures without clear designation of specific manufactures for selective promotion. At present, the Ministry of Economy is in charge of approving the applications to the various export promotion programs. However, the Secretariat of Foreign Trade and Industry had better do this job, by listing up specific categories of manufactures in order of importance for selective promotion, and then approving the benefits to the applications in accordance with the list. Furthermore, it is absolutely necessary to simplify the procedures for application and approval.

(It has to be noted that, since August of 1986 or after the Study Team's second visit to Argentina, import duties have been selectively reduced or exempted, and that the procedures of applying for import licenses, fiscal benefits and the like have begun to be simplified.)

### (3) Activities of various export promotion agencies

The Secretariat of Foreign Trade and Industry is directly responsible for overseas activities for export promotion, and there is no specialized statutory organization like the JETRO (Japan External Trade Organization) in Japan. Overseas market information is sent back to the Secretariat from 63 offices of commercial attaches set up over the world. In addition, the Secretariat is in charge of planning the participation in international trade fairs, sending official missions to overseas, and undertaking trade negotiations, and has been strengthening its export promotion activities through the creation of the Export Promotion Fund and other measures. On the other hand, exporters associations (camaras de exportadores) have been stepping up their promotional efforts.

The Secretariat of Foreign Trade and Industry is now planning to establish the data bank on the basis of the information sent by overseas commercial attaches and thereby to provide on-line services to prospective exporters, but the details are yet

undecided. Apparently, the Secretariat has no plan at the moment to conduct overseas market research. It is desirable to establish a system of information services, because basic market information must cover a wide range of subjects and requires a sizable collection of publications in overseas markets.

For this purpose, it would be necessary to set up trade information documentation and service centers at major industrial cities in the country. In this regard, it is important to select basic information items (including categories of merchandise) by country and collect relevant data on the continuous basis. It is necessary to select important merchandise categories for each prospective market, and collect information therein on their supply and demand, the degree of competition, marketing networks, consumer behaviors and other relevant characteristics. It will be useful to introduce the system of market surveys by merchandise category similar to the one adopted by the JETRO.

Commercial attaches stationed overseas are entrusted to undertake various functions, and it would be difficult for them to collect the basic market information on the continuous basis as suggested above. Therefore, it would be necessary to assign additional personnel, either nationals or local staff, who specialize in such information collection and compilation. It is advisable to start the additional assignment in those countries which already import sizably from Argentina or has been increasing imports from Argentina.

The basic conditions for export expansion are the improvement of productivity and the upgrading of product quality and industrial design. Therefore, it is essential to stimulate industrial investments and strengthen industrial research and development efforts. It will be necessary to expand the research and development programs at the INTI and orient them toward export promotion. It will be equally necessary to encourage the private sector's efforts for productivity and quality improvements.

The establishment of industrial standards is indispensable to upgrade production technology, and thus to promote manufactured exports. A private organization called the Institute for Rationalization of Materials (IRAM) has so far established standards covering 6,000 items. Most of the IRAM standards are said to be set somewhat below the international standards, and they do not have regulatory power unlike the JIS standards in Japan. In order to expand manufactured exports, it will be necessary to increase their coverage, raise them to the international levels, and give them legal power. The establishment of an export inspection system is stipulated in the Export Promotion Law, but the details are still being deliberated. It is necessary to put this system into practice as early as possible.

### 3. Export Activities of Exporters

Most of the exporters in Argentina are manufacturers themselves, and there are some 1,000 firms which annually export more than US\$ 100,000. The Export Promotion Law stipulates to foster trading companies, but a small number of the existing trading companies chiefly handle machinery and plant exports, and differ from general trading companies in Japan.

In order to distribute the risks of their operations, the existing trading companies need to diversify products they export, engage in imports and domestic marketing, and increase bulk exports and imports. Furthermore, it will be necessary to improve their access to unsecured long-term low-interest financing. Currently, there are some ten consortiums or cooperatives of exporters, and those handling food products, leather goods (bags) and fruits appear most active in export promotion. It is important for these groups to expand their membership and install joint factories and other facilities to enhance competitiveness of export products.

Few exporting firms have branches or representatives of their own in overseas markets. The exporters chiefly obtain market information from their trade partners. The information available from overseas commercial attaches are often considered less than satisfactory for their trading business.

### 4. Role of International Trading Companies

Japan's general trading companies developed their own networks of marketing and information gathering all over the world and tried to follow market signals to estimate demand prospects in the various corners of the world. Coupled with industrialists' efforts to improve the potential international competitiveness of their products, these efforts of the trading companies greatly contributed to the expansion of Japanese manufactured exports.

The trading companies also played an important role in the industrialization of the Japanese economy, by securing stable imports of cheaper and better-quality industrial raw materials, sometimes organizing overseas investments in mining. The contribution which the trading companies made to Japan's export expansion primarily depended on their personnel who were experienced in the details of international trading business and their know-how to utilize the personnel efficiently.

In Argentina, as mentioned already, manufacturers themselves export their products, and specialized trading companies are relatively few in number. They have not yet developed adequate overseas networks of marketing, personnel and information gather-



ing. The most important constraint is the shortage of competent manpower experienced in international trading business. Market information available through trading partners is not sufficient, and it is vital to expand the networks of information collection in prospective markets. Because of the underdevelopment of trading companies in Argentina, it is indispensable to strengthen the information gathering function of the overseas offices of commercial attaches.

#### 5. Suggestions

- 1) With regard to the Export Promotion Law, it is necessary to put the programs and measures stipulated in the Law into practice as early as possible, to simplify the procedures for applying to various promotional programs, and to speed up the repayment of indirect taxes.
- 2) It is important that the new Industrial Promotion Law under preparation is consistent with the basic objectives and major policy instruments stipulated in the Export Promotion Law.
- 3) It is desirable to abolish export taxes on manufactures selected for export promotion, to abolish the ocean freight tax on exports, and to institute fiscal incentives to capital goods imports for modernization investment of exporting industries.
- 4) It is essential to simplify the export procedures and the temporary import procedures, by studying examples of Japan and other countries.
- 5) It is necessary to establish an export credit guarantee system for the export promotion of small and medium industries.
- 6) It is important for exporting industries to make efforts for improving the productivity, and the quality and design of the products, and for expanding overseas markets. The Government, on the other hand, needs to strengthen the information gathering function of overseas commercial attaches, to establish trade information documentation and service centers in the country's major cities, to raise the industrial standards to the international level, and to stimulate the improvement of industrial designs.
- 7) It is desirable to set up a system to educate younger generation to become well qualified international trade experts.

## VOLUME II JAPAN'S EXPERIENCE

The Volume II of the Report consists of brief reviews of Japanese experiences during the years after World War II, which correspond to the five sectors selected for study in Volume I. Specific themes of Japanese experiences have been selected on the basis of the discussions with the Argentine counterparts at the Secretariat of Planning and the representatives of the other related government agencies.

The reviews of Japanese experiences have been prepared partly as references to be used by the members of the Study Team in their analyses of the characteristics of the Argentine economy, and partly as supplementary materials to aid the understanding of relevant Japanese experiences by the Argentine counterparts and other representatives.

### I. Macroeconomy

This chapter consists of two parts. The first part reviews the patterns of Japan's economic development and the changes observed in the industrial structure from the period of reconstruction immediately after World War II until the present day. The second part discusses the relevant aspects of the macroeconomic plans in relation to the contemporary situations of economic development, and presents the role played by the plans in the Japanese economy and the processes of plan formulation. Furthermore, it presents the role of various advisory councils established to facilitate the exchange of opinions between the public and private sectors in the formulation of important policies.

### II. Agriculture

This chapter consists of three independent parts dealing with three specific areas of Japanese experiences, which have been selected through the discussions with the counterparts and the representatives of related Argentine government agencies. The first part reviews the current state of agricultural biotechnology research and development with emphasis on the public sector. The second part presents the utilization of electronics technologies in Japanese agriculture. The third part reviews the development of fish culture and farming in Japan.

### III. Industry

This chapter consists of three parts. The first part

reviews Japanese postwar industrial policies which supported and expedited the changes of the industrial structure. The second part reviews the development of small and medium industries and the governmental promotion policies in Japan. The third part summarizes Japanese development experiences and policies concerning petrochemical industry, electronics industry and agroindustry (packaging).

#### IV. Transportation

This chapter consists of four parts. The first part reviews the development of transport systems and the government strategies for infrastructural development during the period of postwar economic recovery and growth. The second to fourth parts respectively discuss Japanese experiences in three specific areas; namely, the cargo information system, container terminals, and truck terminals.

#### V. Export

This chapter consists of four parts. The first part discusses the structural changes of Japanese exports, and the second part reviews export promotion policies which supported the efforts for export expansion by the private sector. The third and the fourth parts discuss the roles and contributions of general trading companies and the Japan External Trade Organization (JETRO) respectively.



**Vol. I: ARGENTINE ECONOMY**



# **I. MACROECONOMIC ANALYSIS**





## CONTENTS

	Page
I. MACROECONOMIC ANALYSIS .....	1
1. Economic Development and Structural Characteristics of the Economy .....	1
1-1 Overview .....	1
1-2 Review of Economic Development .....	3
1-3 Supply and Demand Structure of the Economy .....	6
1-4 Industrial Structure .....	9
1-5 Social Aspects of the Economy .....	16
2. Major Economic Issues and Development Strategy .....	20
2-1 Major Economic Issues .....	20
2-2 Economic Development Strategy .....	25
3. Economic Perspective and Development Plan .....	28
3-1 Stabilization Policies and Present Economic Situation .....	28
3-2 Economic Perspective and Development Plan .....	31
4. Suggestions .....	37
4-1 Future Directions for the Argentine Economy .....	37
4-2 Role of the Government: Transparency in Economic Perspective .....	38
4-3 Need of Activating the Dynamism of the Private Sector .....	40

## TABLES

		Page
I-1-1	Annual Economic Growth Rates of Selected Latin American Countries .....	4
I-1-2	Gross Domestic Product of Selected Latin American Countries (at constant 1970 market prices) .....	5
I-1-3	Economic Growth, Investment and ICOR .....	6
I-1-4	Structure of Demand and Supply 1970-1985 (at 1970 prices) .....	7
I-1-5	Gross Domestic Investment, 1970-1985 (at 1970 prices) .....	10
I-1-6	Industrial Structure for Selected Latin American Countries (percentages of the total gross domestic product at constant 1970 prices) .....	12
I-1-7	Gross Domestic Product by Industrial Origin (at 1970 prices) (percentage of the total GDP at factor cost) .....	13
I-1-8	Economically Active Population by Economic Activity .....	15
I-1-9	Labor Productivity by Industry .....	15
I-1-10	Demographic Factors for Selected Countries .....	17
I-1-11	Education Level of Selected Countries .....	18
I-2-1	External Debt .....	23
I-2-2	Balance of Payments .....	24
I-3-1	Recent Trends of Key Economic Indicators .....	30

## FIGURES

I-1-1	Per Capita GDP (1950=100) .....	5
I-1-2	Income Distribution (percentage of household income, by percentile groups of households) .....	18
I-2-1	Effects of Liberalization Policy .....	21
I-3-1	Monthly Changes in Price Indexes .....	29

## I. MACROECONOMIC ANALYSIS

### 1. ECONOMIC DEVELOPMENT AND STRUCTURAL CHARACTERISTICS OF THE ECONOMY

#### 1-1 Overview

The pattern of long-term economic development in Argentina significantly differs from the standard patterns observed in the developed Western countries, Japan, and many developing countries.

Firstly, the annual average economic growth of Argentina in the last three decades remained roughly half the rates achieved in other medium-income countries, staying at 3.0% in the 1950s, 4.3% in the 1960s and 2.2% in the 1970s. In addition to the noticeably lower growth rate, the trend over 30 years deviates from those commonly found in other medium-income countries. That is, it does not show the acceleration of economic growth.

Secondly, the rate of investment in Argentina remained low throughout the three decades despite the relatively high level of income. Moreover, the rate showed no appreciable increase over 30 years. This structural characteristic is closely interrelated with the low growth rate and the absence of growth acceleration mentioned above.

Thirdly, the incremental capital-output ratio (ICOR), an indicator of investment efficiency, remained generally high in Argentina. Medium-income countries usually show a declining tendency in this ratio, indicating the improvement of investment efficiency. On the contrary, Argentina's ratio shows a rising tendency, which means the drop of investment efficiency.

Three major deviations mentioned above are closely related to the differences observed in the evolution of the industrial and export structures of Argentina. The industrial structure of the Argentine economy underwent a standard change in the long term. The share of agriculture in GDP declined from 16.5% in 1950 to 13.1% in 1975, while that of manufacturing rose from 20.5% to 27.8%. In other countries which underwent similar changes in their industrial structures, the relative importance of primary products in total exports usually declined concurrently, whereas first light industrial goods and then heavy industrial goods increased their percentages.

However, Argentina shows a deviation from this standard pattern. The substitution of primary products by light manufactured goods (the process of so-called primary export substitution) and then the substitution of light manufactures by heavy industrial products (the process of secondary export substitution) did not take place in Argentina along with the standard change in the industrial structure. Although the share of manufactures in total exports has shown a gradual increase, agricultural commodities have continued to account for the bulk of the country's exports to this day.

X

In other words, although Argentina significantly changed its industrial structure through import-substitutive industrialization over an extended period of time, it has not yet managed to develop industries through the expansion of manufactured exports. For developing countries, import substitution is no doubt necessary at an earlier stage of industrialization. And it is possible, and also desirable, for the developing countries to pursue import substitution and export expansion simultaneously in different manufacturing subsectors. After industrial development reaches a certain level, industrialization without expansion of manufactured exports will sooner or later encounter a ceiling of the demand, especially in countries with relatively small domestic markets like Argentina.

X

Countries which are advanced in import substitution need to import certain quantities of raw materials, intermediate inputs and capital goods so as to pursue further industrialization. If these countries depend on foreign exchange earnings from primary commodity exports to pay for the imports necessary for industrialization, downturns of primary commodity exports directly influence their industrial performances. In other words, in addition to the constraint of the demand side mentioned above, industrialization faces the limitation of the supply side. The growth of Argentina's primary commodity exports fluctuated repeatedly, and it is undeniable that the country's industrial performance was affected by such fluctuations.

Manufacturing is usually the most important leading sector in economic development. The constraints in demand and supply mentioned above kept the growth of the manufacturing sector at a low level in Argentina, and this unsatisfactory performance is one of the major factors for the country's low long-term economic growth.

The low industrial growth is related to the absence in Argentina of the cumulative process of industrialization in which new investments and technology transfer lead to productivity improvements and therefore industrial growth in particular and economic growth in general, which in turn stimulate investments. This absence of the cumulative process partly explains the low investment rate and efficiency in Argentina. Heavily protected import-substitutive industrialization tolerated the persistent inefficiency of industrial production, and kept the investment efficiency from improvement.

The current economic difficulties in Argentina have a great deal to do with the failures of the liberalization policy during the later 1970s, such as industrial recession, persistent inflationary pressures, and the accumulation of huge external debt. However, these difficulties are also closely related with the structural problems discussed above which emerged during the country's long-term process of economic development.

## 1-2 Review of Economic Development

The Argentine economy began to grow steadily since the turn of the century, buttressed by rapidly growing exports of wheat and beef, and the country attained by the 1920s one of the highest standards of living in the contemporary world. Argentina began industrializing its economy in the 1930s and 1940s, and the share of manufacturing in GDP reached over 20% by 1950. After three decades since then, however, the Argentine economy seems to have lost an impetus of its dynamism, as gleaned from macroeconomic indicators like growth rates of GDP and total exports, by comparison with other major Latin American countries like Brazil and Mexico.

The annual growth rate of Argentine economy during three decades since 1950 is 3%. This rate is less than a half of the levels observed in other major countries of Latin America, such as Brazil and Mexico (see Table I-1-1). The very fact that the Argentine economy could not attain a higher growth rate than this for a very prolonged period constitutes one of the most important characteristics of its development.

Figure I-1-1 shows the changes in per capita GDP with an index starting at 100 in 1950 and charting the movement from 1950 up to now. The per capita GDP, though increasing from the mid-1960s to the mid-1970s, grew at a low rate (the average annual growth rate from 1950 to 1984 was 0.7%), and worsened especially after the mid-1970s.

Compared with other major Latin American countries, relative level of Argentina's per capita GDP has fallen as shown in Table I-1-2. Namely, Argentina's per capita GDP was US\$ 944.8, 1.76 times as high as the average in Latin American countries in 1960 but the ratio dropped to 1.36 times in 1980 and 1.31 times in 1983.

The second important characteristic of Argentina's economic development is found in the trends in the country's investment ratio and incremental capital output ratio (ICOR, the ratio of gross domestic fixed investment (GDFI) to increase of gross domestic product (GDP)) which indicates the efficiency of investment. The investment ratio (the ratio of GDFI to GDP) increased from 14% in 1950 to 19% in 1960, but it remained at the level of 20% all through the 1960s and 1970s and declined in the first five years of the 1980s. This level of investment ratio is considerably lower than those in newly industrializing countries (NICs) such as Korea, Singapore and Brazil. Especially Asian NICs rapidly raised investment ratios during the 1970s. In the case of Korea, for example, the investment ratio was 15% in 1965 and rose to 27% in 1983.

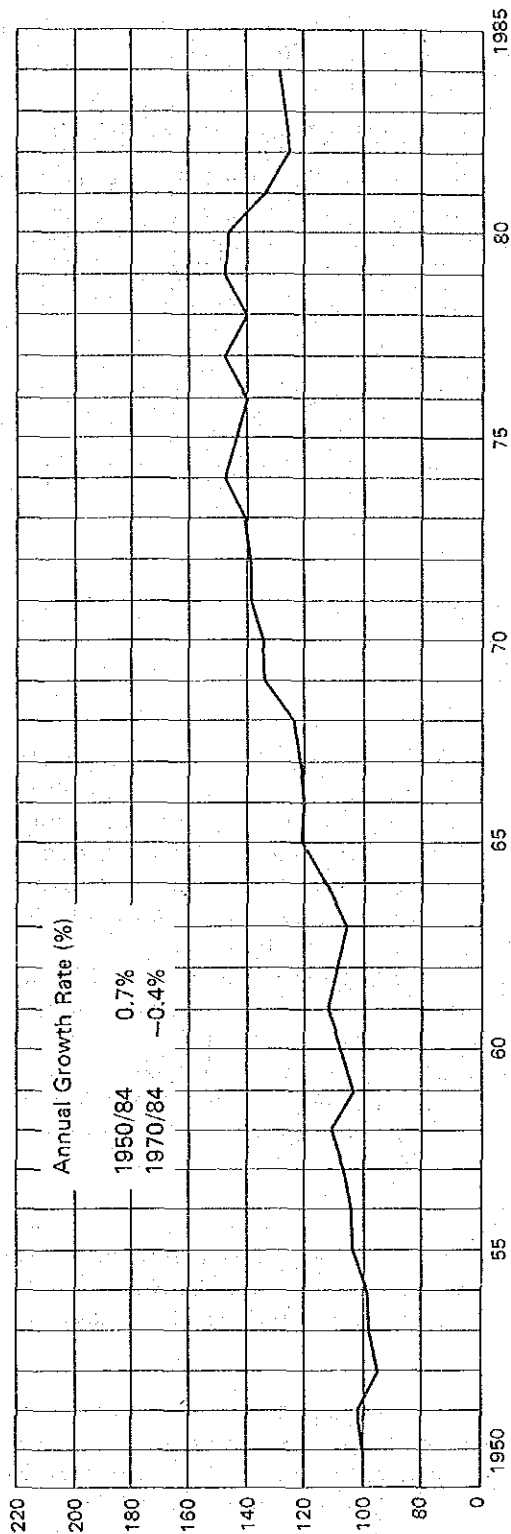
What is more serious for the economy of Argentina is the investment efficiency and its deteriorating trend. The incremental capital output ratio (ICOR) shows a rising tendency, in other words, a worsening trend (Table I-1-3). It remained at the level of 5 in the 1960s, but rose to 7.1 in the first half and 11.0 in the second half of the 1970s. In the 1980s, the ratio turned negative, which indicates decreases in output despite additional investment. Therefore long-term stagnation of the

Table I-1-1 Annual Economic Growth Rates of Selected Latin American Countries

	1950-55	1955-60	1960-65	1965-70	1970-75	1975-80	1980	1981	1982	1983
( % )										
< GDP >										
Argentina	3.0	2.7	4.4	4.3	2.9	1.9	0.7	-6.2	-5.1	3.1
Brazil	6.8	6.8	4.5	7.7	10.3	6.8	7.2	-1.6	0.9	-3.2
Colombia	5.3	4.0	4.7	5.8	5.7	5.4	4.1	2.3	0.9	1.0
Chile	3.8	4.1	3.8	4.7	-2.2	7.5	7.8	5.5	-14.1	-0.7
Mexico	6.0	6.2	7.1	6.9	6.5	6.7	8.4	7.9	-0.5	-5.3
Peru	5.7	5.3	6.4	3.7	4.6	1.9	3.8	3.9	0.4	-10.9
Average(19)	5.3	5.0	5.3	6.0	6.4	5.5	5.6	1.7	-1.0	-3.1
< Per Capita GDP >										
Argentina	1.0	0.9	2.8	2.8	1.2	0.3	-0.8	-7.7	-6.6	1.5
Brazil	3.5	3.7	1.4	4.9	7.8	4.4	4.8	-3.7	-1.3	-5.3
Colombia	2.3	1.0	1.5	2.9	3.5	3.2	1.9	0.1	-1.2	-1.1
Chile	1.7	1.7	1.4	2.7	-3.9	6.0	6.2	4.0	-15.4	-2.2
Mexico	3.0	2.9	3.8	3.5	3.2	3.7	5.5	5.1	-3.1	-7.6
Peru	3.1	2.5	3.3	0.9	1.8	-0.7	1.2	1.2	-2.2	-13.1
Average(19)	2.4	2.1	2.4	3.2	3.7	3.0	3.2	-0.7	-3.3	-5.3
< Agricultural Product >										
Argentina	4.4	-0.1	3.6	1.1	2.8	1.2	-6.7	2.4	7.3	0.9
Brazil	5.0	3.8	5.7	0.4	6.5	4.6	6.3	6.4	-2.5	2.2
Colombia	2.7	3.5	2.8	4.8	4.4	4.1	1.8	3.3	-1.8	1.7
Chile	2.9	2.2	0.4	3.5	1.6	2.9	3.8	3.8	-1.2	-2.5
Mexico	5.5	3.5	4.7	2.7	3.0	3.8	7.1	6.1	-0.6	2.9
Peru	2.0	3.6	3.7	4.7	-0.9	0.0	-5.5	10.7	2.1	-11.2
Average(19)	4.0	2.9	4.2	2.7	3.8	3.3	2.7	4.8	-1.2	0.7
< Manufacturing Product >										
Argentina	3.9	4.3	6.2	5.1	3.4	-0.2	-3.8	-19.0	-4.7	10.8
Brazil	8.1	10.2	3.7	10.1	11.0	7.4	7.6	-6.5	0.2	-6.3
Colombia	6.9	6.1	5.6	6.4	7.8	3.4	12.7	-1.2	-2.6	-0.6
Chile	3.9	5.5	6.0	4.6	-4.9	7.6	6.2	2.6	-21.0	3.1
Mexico	6.1	6.2	9.4	8.8	7.1	7.2	7.2	7.0	-2.9	-7.3
Peru	9.0	7.0	7.0	4.6	5.7	1.1	5.7	-0.2	-2.5	-16.0
Average(19)	6.3	6.7	6.3	7.6	7.0	5.7	5.7	-2.2	-2.3	-4.1

Source : ECLAC, Statistical Yearbook for Latin America. X  
 Note : Average (19) means the average of 19 Latin American countries.

Figure I-1-1 Per Capita GDP (1950=100)



Source: Planning Secretariat, Basic Data.

Table I-1-2 Gross Domestic Product of Selected Latin American Countries  
(at constant 1970 market prices)

	Gross Domestic Product (millions of dollars)			Per Capita Gross Domestic Product (dollars)			Index (Latin American Average = 100)		
	1960	1970	1983	1960	1970	1983	1960	1970	1983
Argentina	19,478.9	29,744.4	37,675.3	944.8	1,241.3	1,334.5	176	175	136
Brazil	26,259.3	47,369.7	107,614.4	361.7	494.2	887.3	67	70	90
Colombia	7,468.0	12,431.5	21,255.6	480.6	597.6	824.1	89	84	84
Chile	5,983.8	9,054.0	11,623.7	786.4	957.5	1,044.6	146	135	106
Mexico	25,388.2	50,030.6	94,803.4	684.8	977.6	1,366.2	127	138	144
Peru	5,320.9	8,695.3	11,932.1	535.8	659.1	689.9	100	93	70
Total*	108,725.9	188,587.8	335,682.2	537.4	708.6	982.4	100	100	100

Source : ECLAC, Statistical Yearbook for Latin America 1984.  
Note : \* Average of 19 Latin American countries.

economy has been caused not only by the low rate of investment but also by the low efficiency of investment.

Table I-1-3 Economic Growth, Investment and ICOR

	(Million pesos, Australs, %)				
	1960-65 <sup>1)</sup>	1965-70 <sup>1)</sup>	1970-75 <sup>2)</sup>	1975-80 <sup>2)</sup>	1980-85 <sup>2)</sup>
GDP ( at market price )	10.061	12.413	9.500	10.564	10.356
Gross Domestic Investment	2.209	2.672	8.025	5.385	1.695
Changes in Inventories	72	58	54	24	1
Gross Domestic Fixed Investment	2,137	2,614	1,947	2,298	1,694
GDP Growth Rate ( $\Delta$ GDP / GDP )	4.4	4.0	2.9	2.0	-2.1
Investment Ratio (GDFI/GDP)	21.2	21.1	20.5	21.8	16.4
ICOR ( GDFI / $\Delta$ GDP )	4.9	5.3	7.1	11.0	-7.7

Source: Central Bank of the Argentine Republic

Notes : 1) at 1960 prices, million pesos.

2) at 1970 prices, Australs.

### 1-3 Supply and Demand Structure of the Economy

Table I-1-4 shows the supply and demand structure of Argentina's national economy. The total supply, consisting of the domestic production and imports, increased by 1.34 times, an annual growth rate of 3.0%, in the decade from 1970 to 1980 (at constant 1970 prices), while GDP rose by 1.27 times (annual growth rate 2.4%), less than that of the total supply. As a result, the share of GDP in the total supply decreased from 92% to 87%. In addition, from the beginning of the 1980s, the total supply tended to decrease or stagnate due to declining GDP and imports, and in 1985 it was only 84% of the 1980 figure. As for contribution to the increase of the total supply in the 1970s, 92% of the total increase in the first five-years came from the growth of GDP, but the ratio was reduced to 57% in the last five-years. Considering the significance of GDP in the total supply, it shows the sluggishness of the production in the second half of the 1970s.

Imports were stable at 7 - 9% of the total supply until 1978, but increased to 10 - 13% between 1979 and 1981, reflecting the liberalization policy of the government. After that, imports diminished because of the changes in the government policies, and their share of the total supply returned to the early 1970s level.

Now, let us focus on the total demand comprising consumption, investment and exports. Consumption in the private sector, which accounts for around 85% of the total consumption, expanded at an annual rate of 3.7% in the first half of the 1970s. After that, however, it stagnated except the period of the liberalization policy. The level of private consumption of 1985 was only 13% over that of 1970. On the other hand, the consumption of the public sector grew at an annual rate



Table I-1-4 Structure of Demand and Supply 1970-1985 (at 1970 prices)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Total Supply & Demand (1970 = 100)	100	104	105	108	115	115	112	121	116	128	134	126	113	116	119	113
Total Supply	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
G D P	92	91	92	93	92	92	94	92	93	90	87	86	91	92	92	92
Import	8	9	8	7	8	8	6	8	7	10	13	14	9	8	8	8
Total Demand	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Consumption	72	72	72	73	74	75	71	67	68	70	70	73	72	73	75	74
Public	13	13	13	13	13	13	15	15	16	15	14	15	16	16	15	-
Private	87	87	87	87	87	87	85	85	84	85	86	85	87	84	85	-
G D I	19	21	21	19	18	19	20	22	20	19	20	16	15	14	12	10
Export	8	7	7	8	8	7	9	11	12	11	10	11	13	13	13	15
Consumption / GDP	79	79	78	78	80	81	75	72	74	77	81	84	79	79	82	80
GDI / GDP	21	23	22	21	20	20	22	24	21	22	23	19	17	15	13	11
Import / GDP	9	9	9	8	8	9	7	8	8	11	15	16	10	9	9	8
Export / GDP	9	8	8	9	8	7	10	11	13	12	11	13	14	14	14	17

Source : Central Bank of the Argentine Republic

of 3.6% throughout the 1970s; in particular, it effectively supported the total demand in the latter half of the 1970s during which time private consumption was sluggish. As a result, the share of the public consumption to the total consumption jumped up by some 2-3 percentage points during the 1970s, from 12 - 13% in the first half to 15 - 16% in the second. From the beginning of the 1980s, however, public consumption has remained at an almost even level, similar to private consumption, resulting in a leveling off in shares for both sectors.

Compared with other countries, Argentina shows relatively high level of propensity to consume compared with other newly industrializing countries. It rather shows a similar level of industrialized countries. For countries like Argentina which promote the industrialization, it is necessary to increase domestic savings. The ratios of consumption to GDP of the selected countries are as follows (World Bank, World Development Report):

	1965 (%)	1983 (%)
Argentina	77	82
Brazil	73	79
Mexico	79	77
Korea	92	73
Malaysia	78	71
Japan	66	69
UK	81	82
USA	78	85

Gross domestic investment (GDI) peaked in 1977, but then stagnated, falling sharply from the beginning of the 1980s. The level of GDI in 1985 was less than half of the peak value.

It is noteworthy that exports showed a opposite trend to the other demand sectors, namely, it was lackluster in the first half of the 1970s but enjoyed a relatively favorable expansion in the second half, particularly after 1977. As a result, the export share of the total demand soared from 7 - 8% in the first half of the 1970s to 10 - 13% in the latter half, and increased to 15% in 1985 when both consumption and GDI had shrunk.

Contribution of consumption, GDI and exports, as percentages of their increase to the total demand, varied from time to time. In the first half of the 1970s, the total demand increased heartily thanks to the growth of consumption, specifically to that in the private sector (total consumption: 92.5%, private consumption: 81.2%). The increase of GDI accounted for 12.5% of that of the total while exports contributed negatively due to decreases in this period. In the latter half of the 1970s, the increase of total consumption was 44.3% of that of the total, far less than that in the former half. By contrast, contributions of the GDI and exports increased to 28.0% and 27.7% respectively. In the first five-years of the 1980s, the total demand dropped, the most notable decline being that of the GDI which accounted for 71.6% of the total decrease. Private consumption also declined,