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REPORT ON ARGENTINA'S BASIC ECONOMIC ISSUES
INDUSTRIAL PERFORMANCES AND FINANCIAL CONSTRAINTS IN
THE VIEW OF IDENTIFYING POTENTIAL GOALS ACHIEVEMENTS
FOR COMING JOINT CORPORATE INVESTMENTS BY ITALIAN
ENTREPRENEURS

by Massimo Ortolani

I N D E X

1. INVESTMENTS OUTLOOK IN THE EXPERIENCE OF ARGENTINA'S
MACROECONOMIC POLICIES pg. 1
- 2 OPPORTUNITIES AND CONSTRAINTS FROM MACROECONOMIC
ENVIROMENT FOR COMING FOREIGN INVESTMENTS TO
ARGENTINA pg. 9
3. EVALUATING THE G.D.P. COMPONENTS PROFILE SINCE
1970 pg. 12
4. OUTLINED SCENARIOS OF ARGENTINA ECONOMIC TRENDS
IN THE CADRE OF ITS GOVERNMENT COMMITMENTS AND
INTERNATIONAL CONSTRAINTS pg. 15
5. ANALYSIS OF THE MANUFACTURING SECTOR pg. 17
6. SOME BASIC TOPICS IN EVALUATING SECTORAL NEEDS
TO INVOLUCRATE FOREIGN TECHNOLOGICAL
CONTRIBUTIONS pg. 27
7. ASSESSING IMPACT AND POTENTIALITIES OF
COMING JOINT INVESTMENTS IN ARGENTINA FROM AN
INSTITUTIONAL POINT OF VIEW pg. 35
8. SELECTING JOINT INVESTMENTS PROJECTS WHICH ARE
TO QUALIFY FOR OBTAINING THE PUBLIC FINANCE
SUSTAIN AS PROVIDED BY THE ITALIAN LAW
N. 49/1987 pg. 41

1. INVESTMENTS OUTLOOK IN THE
EXPERIENCE OF ARGENTINA'S MACROECONOMIC POLICIES

Argentina is a country where economic measures and political orientations have historically played a very important role in allocating investment and influencing risk propensities and firms returns.

It seems therefore expedient trying to comment briefly some basic issues drawn from the past economic experience as well to outline failures and success of different attitudes towards direct foreign investing held in the context of recurrent macroeconomic imbalances. The following short historical profile of policy measures is also aimed to shed some light on the needs from time to time felt by the country planners to open Argentine economy to international investors and on the spill over effects by this way generated for the overall macroeconomic environment.

At the end of the second world war Argentina was one of the most prosperous nations in the world, exporting food on a big scale. The political orientation guiding at that time the development strategy, which lasted up to the first half of the 1970s, was inward-looking and protectionist. Prominent features of the country's industrial and economic structure seem at present to have been shaped by the rooted effects of the long lasting protectionist measures. Agriculture role was intended to provide enough to cater for all domestic food

requirements and export needs, while protected industry was to concentrate on substituting for imports on the consumer goods area. Although the pace to industrial expansion had to depend widely on the flows of foreign exchange surplus generated by agriculture and related products, like meat and skins, to allow import of capital goods, during the 1960s Argentina economic growth attained considerable amounts.

Such a model of agriculture leading growth run quite well up to mid-1970s. Throughout this period manufacturing industry increased its proportional contribution to the GDP formation so that by the second half of 1970s no other country of Latin America registered a proportionally larger manufacturing sector.

There are some observers who believe that some industry segments have been relying on the fact protection oriented policies were unshakable even in the presence of a world trade rapidly evolving.

Secondly, the domestic demand started to decline quickly since the half of the 1970s, due to a drop in the fairly high birth rate previously experienced and to the phasing out of the immigration from Europe.

The relative declines that were to begin since then also in the peso seemed therefore to reflect the hidden propensity to upward prices by industrial performances which were low at world standard.

It is important to underline that, by the second half of 1970s, the policy measures taken to help the economy fueled indeed the conditions for the surge of a high inflation rate.

In the middle 1975 the government altered the exchange rates by over than 100% while public tariffs went up by 100-175% and interest rates were freed. The shock treatment put the economy into recession, while the average yearly wholesale price increase - kept at about 25% between 1960 and 1974 - as shown in Annex 1, suddently peaked to 292,5% in 1975 to nearly graze 600% in 1976.

It is of some importance to compare some behavioural characteristics of the non agriculture sectors with those of the rest of the economy since they can be explanatory of somewhat different propensities, among the investors, to raise prices as a way to alleviate real economic troubles.

As it steams from Annex 1, agriculture sector has been affected by a lower rate of inflation during the critical biennium 1974-75 than the non agriculture one: 289% compared to 312,7% ; whilst for the 1975-76 the corresponding figures have been 585,2% and 590%.

Such an intrinsec tendency of non agriculture argentine producers to a relatively higher sustaining upward trends in prices is likely to have been induced by factors of structural nature, like the slope and the rigidity of the demand curves, since no evidence has

been drawn from the statistical data that a relatively higher price propensity was to yield larger correlated volumes of real output than in the past (see Annexes 2 and 3).

Also the growth rate of the private investments dropped quickly since 1975 as a consequence of the upsurge of the inflation rate at a large scale. In the meantime the remarkable decline of agriculture contribution to GDP formation, caused by the loss of external markets for meats and grains not compensated by a corresponding expansion of industrial export, was making Argentine economy increasingly isolated.

Reducing the inflation and solving the troubling problems of the external sector, has been the newly taken orientation which inspired the policy measures adopted between 1976 and 1981, globally centered on a wide liberalisation programme.

Such a reversal in the macroeconomic policy was founded on the assumption that opening the economy to the foreign competition through exchange controls abolition would have forced the producers to become more efficient. The programme was complemented by the government commitment to return to the private sector part of the state-owned firms and to a liberalisation on a large scale in the financial sector to allow foreign entities to set up in Argentina and compete with the domestic institutions.

The new measures obtained some success in widening the

volume of export and lowering the public deficit. The inflation rate dropped moreover to an average yearly level of about 127% between 1977 and 1981 as compared to the 346% of the 1975 - 1976 period.

There are some events, caused by the adoption of specific policy instruments, which emphasize clearly that private activities have been historically hit far large by the policy induced macroeconomic fluctuations than by the impact of microeconomic factors.

For instance the introduction of a system of preannouncing the exchange rates by the authorities, as well as the failure to tie adequately inflation and exchange rates, resulting in a crawling overevaluation of the peso and in making import cheaper, induced manufacturers to shift toward import to sustain investment programmes.

The loss of export markets, in conjunction with a not fully controlled inflation and a massive financial crisis due to unregulated expansion of capital markets, contributed to create a current account deficit of about 4.8 us\$ billion in 1979. The year following, owing to the rise in the fiscal deficit, the government had to engage in substantial borrowing abroad. As a consequence the level of the total external debt far doubled in 1980 the amount registered in 1978.

Whilst the economy was moving into recession produced - among other - by the long wave of the 1979 oil crisis, a new government instituted two big peso's devaluations

and suspended the import tariff reduction schedule, set up during the previous liberalisation period, with the aim to help the heavily indebted industrial sectors. It seems expedient to emphasize on this subject that the fairly erratic and rapid swings and fluctuations in policy orientations and economic strategies might have contributed to foster a somewhat peculiar entrepreneurial habit toward risk bearing which could require adaptive efforts to match foreign managerial philosophies prevailing in quite different economic environments. It is well accepted for instance that quick changes in the inflation and exchange rate scenarios prevent the firms to rely on long term markets trends and demand expectations and appear conversely conducive to privilege projects of investments capable to generate financial returns in the short or medium term. From this point of view one could observe that joint investments to be carried out in the frame of monopolistic competition or collusive oligopolistic markets would in abstract provide more degrees of freedom than those to be conducted within competitive markets or non-collusive oligopolistic relationships.

Turning now to the historical outlook, it has to be noted that after the disastrous embarking in the Malvinas war and the becoming increasingly dependent from the help of the International Monetary Fund, Argen-

tina experienced in 1983 the coming to government of the radical party headed by Mr. Alfonsin. Although the first economic achievements obtained by the new government in 1984 have not been quite good, the introduction in 1985 of the Plan Austral, seemed to channel the economy into the pace of a considerable stabilization.

The Plan Austral reordered drastically the economy by applying both traditional and eterodox policy measures and succeeded in gaining some of the fixed goals in spite of the opposition of corporative and rental groups.

The key elements of the plan were a wage-price freeze and a tight fiscal policy. A new currency, the Austral, was introduced with the exchange rate fixed to the US\$.

The results quickly obtained were a fall in the inflation rate from over 1000% of the first half of the 1985 to about 40% of the second half and a raise in the trade surplus for the same year of about 4,6 US\$ billion due to the failure of the Austral to adequately reflect the relative inflation rates.

The second phase of the Austral Plan started in 1986 with the introduction of price controls and of measures designed to grant tax credits to highly exporting firms. A partial economic recovery was obtained through the bouncing back of the manufacturing industry, sustained by a revival in fixed public investments and capital.

spending.

In 1987 the government had to cope again with an acute edging up of the inflation rate, which had reached the peak rate of 7,6% in January as a consequence of undesired wages increases.

At the end of 1987, in spite of the efforts made to reach a social pact with business and labour to make acceptable further wage tightenings and to obtain a new stand-by credit line from the I.M.F. for 1,33 US\$ billion, the outstanding unsolved problems were:

- a) the capability to definitely peg the inflation rate;
- b) pursuing a drastic reduction of the fiscal deficit;
- c) the ability to match the external debt requirements.

At time one could argue that the Argentine government is pursuing policies of structural adjustment which are likely to get more successes in supporting medium-term growth rather than in alleviating the external sector imbalance. Structural reform in trade, financial sector and public sector are in act while there are government commitments to expand the volume of export and to pursue a somewhat redesigned policies of tariff protection and of selective import substitutions.

2 OPPORTUNITIES AND CONSTRAINTS FROM MACROECONOMIC
ENVIRONMENT FOR COMING FOREIGN INVESTMENTS TO
ARGENTINA

If one could pick up some indication for foreign investments from the new political attitude toward government fixed investments, he would for instance argue that from now on space is open for joint initiative to be carried out in the area previously reserved to the state owned firms

Such an intent is of great importance since it reveals the spirit of demonopolisation put in act by newly orientated industrial policies which emphasize the ways and modes of production tipic of the private sector of the economy.

The demonopolisation policy may therefore offer opportunities to private - rather than public foreign companies - to engage business in the vast and strategic fields generally considered of primary importance.

A second key element which should be learnt from the historical economic experience gained by Argentina - which has been only partially described before - is the suggestion for foreign investors to select those industrial stakes and productions whose growth propensity is not strategically based on organizational and markets factors structurally affected by the erratic swings and fluctuations in the most important macroeconomic variables, like prices: level of interest and inflation, exchange rate. Reference is therefore

made to those productions whose financial statements and statistical data prove are deeply rooted in the "real" economy and alternatively protected by having to face on large scale with world markets rather than with the domestic ones.

The last concern is of foremost importance since all the examined reports and studies on argentine economic conditions emphasize both the necessity to adapt in time the combination of firms productive factors to the nominal change of interest, and the possibility the interest may remain high in real terms, owing to a mismatching of policy measures.

From this point of view it would be advisable trying to channel foreign investments entailing purchases of equity stakes toward those firms or subsectors where the level of debt-to-equity ratio appears to be comparatively higher, owing to the profile of the financial needs and of the cash requirements imposed by the nature of the industrial processes conducted. It comes from itself indeed that this kind of firms would benefit proportionally far more from increased stakes of equity participation than those showing a lower debt-to-equity ratio.

It is also worthy to be added that foreign investments entailing transfer of updated technology should be directed to those subsectors of production showing an higher leverage standings also in the cases where their relatively larger debt propensity should be accribed to

lower productivity levels.

A further criterion which could turn out to be useful when ranking joint project investments, according to their capability to tackle macroeconomic policies implications, entails to avoid considering those firms or investments which are traditionally classified as "marginal" in the microeconomic theory, although showing an acceptable financial rate of return at the feasibility study stage. The reason is that the project has to show also an high degree of financial "sensitivity", while by definition the "marginal" projects do not qualify for capability to offset fluctuating rates of competition imposed by the effects of macroeconomic imbalances.

Such a proposition about the need of financial sensitivity is of prominent importance since in given circumstances the lack of lasting returns from the business could even tempt the investor to divert his resources to financial operations. The high interest rate of time deposits registered during the 1978-80 attracted in fact capital inflows to Argentina and many producers decided that it was more profitable to invest their cash in financial deposits.

3. EVALUATING THE GDP COMPONENTS PROFILE SINCE 1970

The three traditional components of Argentina's gross domestic product at factor cost maintain at present almost the same relative weight they had in 1970 (see annex 2). The percent portion of the agriculture was 13,2 in 1970 and appears to be at 14,8 in 1986.

The manufacturing sector, which counted for 27% in 1970 has been conversely shrinking modestly toward the 1986 level of 24,2%.

Remarkable increases are those registered by the Electricity, Gas and Water facilities which more than doubled their percent weight over the period in question. It seems, therefore, that the troubling events experienced by the Argentine economy have contributed to crystallize the economic structure preventing agriculture registered an increasing gap in respect to the other components as has usually occurred in most of the developed countries.

A further important finding is that the "real" growth of the Argentine GDP has been quite negligible over the period in question: the figures as shown in annex 3 have consented to measure the yearly average GDP raise from 1970 to 1986 at 1,24%. The same rate, calculated with reference to the manufacturing sector, has turned out to be 0,36%.

Opposite considerations have to be drawn when considering the growth trend of the GDP components

related to the foreign trade, as annex 4 proves the existence of an increasing opening of the economy to external markets, marked by yearly average growth rates of 4% and 2,2% respectively for export and import measured at 1970 Australes.

That means the country has been expanding very modestly its levels of production over the time by contemporary widening much more its dependence from abroad.

The worst key element of such a scenario is that referred to the gross domestic fixed investments figures, characterized by a steady positive trend between 1970 and 1977. From 1977 to 1980 their real value stabilizes to start to decline abruptly since then.

Annex 5 gives clear evidence that the amount in real terms of the investments carried out in 1977 far doubles that relative to the 1986.

In order to investigate some explanatory relationship of the Argentine investments performance, it has been calculated the correlation coefficient between the figures of the private gross fixed investments and those of the GDP deflator from 1973 and 1986. The coefficient value, which has come out negative and quite below the zero (-0,551) could function as an alert for future investments programmes as it clearly shows that, in a climate of inflation on a large scale, investment propensity has been historically shrunk in Argentina. Such a proposition enforces again the assumption, already expressed, that foreign capital contributions are to be

preferibly channeled to those segments of production relatively hard hit by the inflation induced factors, in order to help contrast them.

By comparing moreover the fall occurred in the private fixed investments during the recent years to the contemporary stagnant levels of production one could also get the conclusion that in some of the industrial segments even the replacement investments have been delayed. Such an assumption needs to be minutely analysed in order to identify exactly those subsectors where replacement investments should be certainly carried out to avoid that spill-over effects weaken definitely their capital accumulation capability.

4. OUTLINED SCENARIOS OF ARGENTINA'S ECONOMIC TRENDS IN THE CADRE OF ITS GOVERNMENT COMMITMENTS AND INTERNATIONAL CONSTRAINTS

To complete the outlook of structural macroeconomic imbalances able to badly affect new coming investments, it seems worthy to present some economic projections based on the estimates on this subject made by both the World Bank and The Economist Intelligence Unit.

The projections, exploited up to the first 1990s, agree on emphasizing the importance of the following topics involving future political orientations:

- a) the continuity of the fight against inflation;
- b) the need to balance fiscal books with a modest curbing effect expected on the domestic demand;
- c) the Austral depreciation to allow maintain competitiveness.

From these points of view one could observe that the continuity in the devaluation of the Austral can yield the expected effects only over the long run and in the event the firms' actions do not make resilience through the phenomenon known in macroeconomics as the "J effect", by which shifts from imports to exports due to devaluations are inherently restrained. Such a forecasted exchange policy seems therefore implicitly favourable to those investments productions whose export performance appears to be far more based on the price competitiveness than on the quality or the commer

ce and MKT factors.

While both the mentioned projections agree on foreseeing expanding outputs in the agriculture, industry, and in services sectors, they differ as to the forecasts of the GDP and investments figures. As shown in annex 6 the World Bank based scenario provides a modest but stable growth of the Argentine economy, while the I.E.U. one emphasizes the presence of a relevant depression - which should take place in 1990 - promptly recovered in 1991. The effects of a cyclical element in the I.E.U. forecasts of GDP apply also to the performance of both public and private investments. Some elements of contrast appear as well in the projection of the annual rate of price increase: 122% for the World Bank and 114% for I.E.U.

The foremost economic problem that both the projections leave unsolved in the coming years refers to the pressure exerted by the outstanding foreign debt of Argentina, since it is hardly credible that the Argentine commercial banks may proceed to a further rescheduling of the loans contracted with foreign financial intermediaries.

5. ANALYSIS OF THE MANUFACTURING SECTOR

In spite of the exacerbated imbalances in the macroeconomic cadre, Argentina maintains today a relatively sophisticated and diversified industrial sector when compared with other countries of similar income level.

Its manufacturing sector experienced a fairly rapid growth during 1970 - 1984, increasing the contribution to the GDP formation from 24% to 30%.

Deep structural changes have in the meantime taken place, like the relatively greater advancement of the metal-working industry and of chemicals and petrochemicals - in terms of productivity levels and technological endowment - as compared to those obtained by the food and textile sectors, for instance.

Annexes 8 and 9 outline the path of the manufacturing subsectors growth and the breakdown of their relative weight in terms of value added generated.

The food product sector appears to be far the largest one with a proportional value added quota increasing over the time from 14,9% of 1970 to 17,1% of 1986.

The transport and equipments sector which ranked second during the first 1970s has been losing ground so that in terms of value added the following sectors: metal products, petroleum refineries and other chemical products gained respectively the second third and fourth position in 1985.

In order to draw useful indications from the growth trend of the macro-components of the manufacturing sectors, these have been classified and grouped into 4 comprehensive sets.

The basic criterion applied has been to aggregate those subsectoral productions whose most inputs originate proportionally larger from: a) agriculture, b) ferrous minerals, c) non ferrous - non metallic minerals, d) mineral oils.

The evolution of the four macrosectors may provide some key information about the trend of their structural comparative advantages that are likely to hold also in the next future.

The agriculture resources based products changed their relative contribution to the final output from 37,8% to 36% averagely in the period from 1970-71 to 1984-85, while non ferrous - non metallic and ferrous minerals based products showed both a declining profile since their relative contribution dropped from 6,4% to 5% and from 33,2% to 30,9 respectively.

The oil based products have turned out to be the only marking a raise of their relative contribution to final output which passed from 22,6% to 25,2% in the same period. Before stating that the last macrosector have been revealing a better relative performance one should nevertheless consider to what extent such a performance reflects higher protectionist measures or the benefits

of public subsidies granted programmes.

Moreover the rate of the growth of the value added at constant prices of each of the 4 mentioned macrosectors has been compared with the corresponding growth rate of the employment (see annex 10).

The agriculture based group presents a modestly declining tendency from 1970-71 to 1984-85 of about 2%, but reveals a quite remarkable fall in the employment trend: - 28,6%. That clearly means the group in question has been taking advantage from adopting capital intensive productive processes. Such a phenomenon seems to broadly characterize the performances also of the other macrogroups.

The oil based products sector, the non ferrous - non metallic minerals sector and the ferrous minerals based products group show the following breakdown in the rate of the deflated production growth (dpg) as compared to the corresponding growth rate in the employment index (eig), respectively: (dpg) +24 -18,3 -1; (eig) -5,1 -25,6 -33,6. With the exception of the oil based group of products - whose volumes of production follow a real climb over the time - the other ones reveal considerable reductions in both the output quantities and the employment levels.

A detailed analysis of each sectoral performance has proved that a steady increase in the output volumes has been gained only by the following : Food products,

Beverages, Tobacco, Paper, Basic chemicals, Other chemicals, Petroleum refineries, Rubber products, Plastic products, Iron and Steel, Non ferrous metals, Metal products, Scientific equipment.

Before concluding that the goal of expanding the output in the manufacturing sectors is partially in contrast with the maintaining of the labour levels, some further observations are to be set up at least to point out that whenever the manufacturing sector as a whole has been releasing workers from 1970 to 1975, the drastic drop in the country employment occurred since 1977 have been caused by the coming of the generalised economic recession.

By focusing on the subsectors one finds out also that 4 of them, out of the 27 forming the whole manufacturing sector, have been raising their employment index, namely: Beverages, Rubber products, Plastics products and Non ferrous metals.

There are some information elements - among other the dramatic fall of the employment index in certain subsectors like the textile one - which support the opinion that part of the unemployed people are in the reality engaged in productive activities by means of labour relationships typical of the informal economy.

From this point of view, foreign direct investments capable to alleviate acute situations of informal economy should therefore be appreciated like those directly channeled to reduce effective unemployment.

It is now possible to conclude that at subsectoral level the existence of a conflict in both the goals of production and employment is not equally present.

In fact one can easily identify, by crossing the lists of subsectors above presented, those able to obtain raising productivity levels from adopting non labour saving industrial modes of production, namely: Beverages, Plastic products, Rubber products and Non ferrous metals.

Some analyses have been devoted also to the export performance of the manufacturing sector to try to qualify, among other, the linkages existing between the internal demand and the need to open to the world markets. From 1970 to 1984 the 8 subsectors showing the largest increments in the export volumes have been: Tobacco, Leather products, Paper, Wood products, Textile, Non ferrous metals, Clay products, Plastic products.

The 8 subsectors showing conversely the smallest rates of export increase in the same period have come out to be: Clothing, Furniture, Other chemicals, Printing, Metal products, Scientific equipment, Petroleum refineries (see annex 11).

Interesting findings are also those broadly concerning the relative export performance of the 4 "macrosectors" as above classified. The Non ferrous - Non metal macrosector, which gained an increment of over 1000% in its export performance between 1970 and 1984, has come out to be the first.

In decreasing order appear: the oil based products (465,2%), the agriculture resources based products (428%) and the ferrous mineral based products (227,2%). A useful indicator for assessing the viability of investment projects designed to implement export programmes on a large scale is given by the relationship connecting responses to the inward demand to the export strategy, as one should give preference to investments facing export markets trends unrelated to the domestic market fluctuations. Such a degree of correlation has been therefore tentatively estimated by applying a somewhat statistically row test, given by the predominance of positive versus negative jointed fluctuations in the figures of subsectoral export and output, between 1977 and 1984.

The findings obtained, which are to be regarded with extreme caution, relate only to the 11 major subsectors in terms of value added production. Except for the tobacco based products, whose export seem to have fluctuated cyclically with respect to the correspondent subsectoral value added, the rest of the subsectors appears to have been following either a countercyclical path, or a trend largely unrelated to the domestic market fluctuations. The Textile, Other chemicals, Non electric machinery, Electric machinery and Metal products may be grouped on the basis of their relative capability to contrast inward demand imbalances by enlarging the export volumes. Food products,

Beverages, Basic chemicals, Transport equipment and Iron and Steel are conversely subsectors which avail from export performances apparently unrelated with the trend of their domestic markets

All the information about the comparative effects of the microeconomic factors affecting both the internal and external markets performances are of vital importance for a country like Argentina and should be clearly stated at the feasibility studies stage. In the absence of detailed elements on this topic, one should in principle try to prioritize those joint corporate investment in which new products or non mature products are to be fabricated and traded in both the domestic and the external market. Such kind of products in fact, permits the producers to benefits at least for a given time from the advantages of oligopolistic or monopolistic market positions.

It comes from itself, furthermore, that the most contribution to the balance of payments recovery will steam out from those joint investments showing the highest "export propensity ratios" i.e. the largest ratio of export to output produced.

As regards the imports by the manufacturing sector it is quite surprisingly to observe their high degree of concentration, as just 4 fields of production, namely: machinery and electrical equipment, basic metal manufactures, chemical products and transport equipment

have been covering as a whole almost 60% of total Argentina imports from 1970 to 1976 (see annex 12).

A proxy indicator of the country import propensity has been obtained by identifying those subsectors that have been enlarging the output volumes in the period from 1970 to 1982 and at the same time increased the import quantities.

Thirteen subsectors, out of the twenty seven embraced by the manufacturing breakdown (see annex 12/1) have fit the mentioned requisite. That means the Argentine economy is structurally affected by an import rigidity widely disseminated over its sectoral components, although specifically concentrated in the oil and chemical production fields.

Moreover it has to be noted that whenever the export has shown a larger growth rate than the import, such an advantage has been partially offset by the relatively greater drop in US\$ export prices than in the US\$ import prices.

From the above assumptions one should argue that in order foreign investments provide adequate supports to the Argentine economy, they should be possibly concentrated in those fields of production whose "coverage rate" - i.e. the ratio between the export and the import generated by the productions - have historically turned out to be increasingly positive or negative. Selecting the extreme performances can in fact consent to avail from relatively higher elastic-

ties when channeling import substitution investments toward low-coverage rate sectors, and export oriented projects to high-coverage fields of production.

The suggestion to channel italian investments toward production involving modest volumes of import as compared to those of the export generated at the project stage may nevertheless appear somewhat misleading in those cases where the total macroeconomic import effects (which means counting for both the direct and the indirect imports) is estimated larger than the correspondent total export effect. (

To get such a comparison one should avail from a macro economic matrix explanatory of the intersectoral relationships. It is possible noneless to overcome the absence of a strong work instrument, like the mentioned matrix, when one can rely on available estimated indicators of the export/ import content of the most items for class of investments.

A consistent assessment of economic impact of coming projects should furthermore take into consideration the "distortion effects" caused by exploiting resources in the highly protected sectors. A criterion of foremost importance in such circumstances would be to elect preferibly those investments whose output prices are in line with those prevailing in the international markets or determined at arm's lenght conditions.

The above set of criteria should be viewed in dynamic terms, that means priority importance is to be attached

to those productions whose related imports are envisaged to follow a "forecasted" price trend lower than the corresponding in export.

6. SOME BASIC TOPICS IN EVALUATING SECTORAL NEEDS TO
INVOLUCRATE FOREIGN TECHNOLOGICAL CONTRIBUTIONS

As regards the industrial policies, the Plan Austral placed considerable emphasis on remodeling existing industry by issuing special measures to assist small and medium sized enterprises as well as to set a comprehensive scheme of industrial incentives.

In line with such assumptions, the foreign technology contributions could come out as successful opportunities to alleviate the effects caused also by the government commitment to gradually phasing out import tariffs and tax reliefs to push the economy toward world market standards of competition.

The observations which follow have been drawn from many studies and reports on the status of technologies presently adopted and the sectoral needs to incorporate foreign innovative contributions. It has not been possible to provide a detailed outlook of each sectoral or macrosectoral constraints and potentialities from this point of view, as some findings have been based on small samples surveys and somewhat old statistical data and because it would have entailed entering in long descriptions and technicalities.

On this subject key elements are those provided in the study of J. Campos and S. Feldman (Ref. n. 9) focused on the area of metal working industry in Argentina.

The authors examined some important data supplied by the Argentine Register of Technology, to offer a comprehensive cadre of forms of transfers of technology by size of foreign investing firms and country of origin. Although the period observed is that elapsing between 1977 and 1983, findings obtained may noneless considered representative of tendencies in act which should reasonably change only in the long run.

Annex 13 makes clear that the technology arrangements between Italian and Argentine entrepreneurs have been predominantly performed in the forms of contracts entailing non equity shares purchases as regards the metalworking industry. Lately the data prove a de facto unexistence of technology arrangements with Italian small sized firms, while small enterprises from West Germany and U.S.A. have been experiencing such forms of joint operations. The importance of such a finding has to be emphasized since it is well known that small and medium sized firms form the most industry in Italy.

A useful proposition that the authors state on this subject is to avoid classifying the investing firms in accordance to quantitative indicators, like the number of employees or the output magnitude. One should agree that, when dealing with investing and trading at international scale with developing countries, the firms limit should be based on the broader criterion of assessing "small" in terms of capacity to exploit resources to operate in those countries.

An encouraging indicator shown in this study refers conversely to the proportionally higher number of technology agreements with argentine firms facing the market demand as compared to the agreements entailing a pure transfer of the licensor industrial process, as is the case of the "made to order" mode of production (see annex 14).

It seems obvious to state that coming italian joint investments having to face with the demand constraints are in principle to be preferred to those restricted to custom order forms or bound by similar production or trade obligations, for the simple reason the latter type technology transfers are basically aimed to match the foreign licensor necessities rather than the genuine interest of the recipient country.

The main adaptive efforts necessary to obtain the expected standard performances by the investments involving foreign technology are by the authors described as: necessity of higher level of integration of local plant; lower level of vertical integration; introduction of special devices in existing machinery; changes in moulds and matrices to reduce costs. These concepts exemplify how large are the implications connecting technology transfers to industrial policy orientations and how much is the need to know a priori fields and directions to which address foreign technical innovations.

To do this a specific plan of technological improvement

priorities by subsector should be set up by the competent argentine authorities.

To move the first steps toward the selection of joint investments programmes capable to provide technological contributios adequate to the needs of the specific types of argentine products that are to be yielded, the italian competent authority should become aware of plans and committments which are likely to be undertaken by the public sector development institutes of Argentina. Reference is made particularly to INTI (Instituto National de Tecnologia Industrial) which is charged with the official task to supervise and control contracts entailing transfer of technology to Argentina. INTI operates as an autonomous institution affiliated to the Secretaria de Industria and the members particpating to its boards are reresentative of the Secretaria de Industria, of the National Development bank (BANADE) as well as of chambers of industry.

Contacts should also start with the National Council of Science and Technology (CONICET) that is the most important institute operating in the field of promoting primarily the basic research. It reports directly to the Secretary of the Science and Technology. Both the mentioned institutes are organized in many discipline oriented branches .

INTA (National Institute for Agriculture Technology) and some university centers with a good deal of acti

vities in technology management should be contacted with the aim to constitute a joint committee with the function to intermediate between the representatives of the italian public authority and the argentine technical istitutions. The information from the committee works could allow the italian Foreign Ministry to prioritize technological targets achievements according to the counterpart needs as officially expressed. A second important task of the committee should be to gather and elaborate all the useful information to get a "technology matrix" suitable to make transparent technological inputs/output flows at subsectoral level. Such a matrix would consent to identify the most technologically interrelated industrial outputs, suitable, therefore, to offer the largest contribution in the view of disseminating at most over the argentine economy the technology imports involucred in the investments to be made jointly with the italian firms.

The matrix information should be complemented with other in order to prioritize the coming investments in line with the somewhat traditional following classification: a) retooling to simply enlarge the capital endowment of the corporations which are to be jointly owned; b) retooling with the aim to conversely modernize the existig plants of production; c) restyling and remodeling standardised lines of products as compared to restructuring and innovating the industrial

"processess". Selecting the type of industrial innovations is of great interest since the state of the art of the technologies presently adopted in Argentina are but uniform, owing to the fact the country presents at sectoral levels certain conditions of underdevelopment common to the neighbours in the continent.

To gain time, and in the absence of the detailed information like only INTI or the envisaged monitoring committee could provide, it seems right to suggest to appraise joint ventures programmes according to their relative technological contribution to the Argentine Sectoral Promotion Regimes (SPRs), which are programmes sponsored by the government to develop specific subsectors like: paper, electronics, steel and petrochemicals.

As the organizational aspects play an important role on determining the modes of productions and the relating adaptive actions, one could also suggest to give priority consideration to those projects of technology transfer consenting to subdivide the layout phases of production in such a way to foster industrial processes outside the joint owned firms. From this point of view preference should be reserved to those projects involving proportionally larger amounts of tangible output to be locally produced as compared to a given value of import of intangible contribution.

Such an orientation to externalize phases of productions should tend to reproduce also among the Argentine small firms those schemes of decentralization and subcontracting that have been so successful in Italy.

Many documents and reports focusing on the conditions and needs of subsectors, other than the one of the metalworking machines, like textile, plastics, food processing, footwear, capital goods, etc. all emphasize the need to harmonically fit the technological function with that of the marketing at firms level. The projects which are likely to get the goal of well matching the two functions - owing to a relatively higher involvement of trade skillfulness and distribution system of the Italian investors, should in principle therefore gain in much consideration.

If one has to stick to other indicators, explanatory of the economic effects of transfers of technology to Argentina, he should consider the subsectors or industrial segments where the residual production capacity is relatively narrow as compared to the potential in the demand of the outputs to be produced.

In such conditions, enlarging the productive base by investments entailing new technology would probably consent not to create pressures on the relevant prices. Besides, in the absence of definite guiding elements from the Argentine part on technological priorities, it seems expedient to channel technologically updated contributions toward those sectors which register the

largest actual and potential gap in an international comparison. On this subject some tentative suggestions are for considering specific niches of the textile, the footwear, the capital goods and the food processing sectors. Food processed products will probably continue to represent a prominent part of Argentina's export; such a conditions will certainly favour the effort to improve their own comparative advantage by making technological progress mostly in the standardised lines of production.

The last key element drawn from above mentioned studies on the technological state of the art in the argentine industry refers to the high degree of concentration at sectoral level. Relying on this assumption one should therefore try to spread out on a same sector imported technology advancements rather than prioritizing highly sophisticated foreign contributions capable even to enhance the technological frontiers of the country, but at cost of increasing the sectoral rate of concentration.

7. ASSESSING IMPACT AND POTENTIALITIES OF COMING
JOINT INVESTMENTS IN ARGENTINA FROM AN INSTITUTIONAL
POINT OF VIEW

It is well known that all foreign participations to equity of the corporations resident of Argentina, as well as the issuing of equity in a newly formed company, requires the prior approval of the Exchange Power if are to be carried on in particular areas or sectors specifically indicated by the foreign investments law. These sectors are, among other, national defence, public services and telecommunications, energy exploitation and utilization, iron and steel, petrochemical industries, mining and the aluminium production.

The following circumstances require the prior authorization too: a) when application is made for special or promotional benefits that are available through decree of the Executive Power as a condition for the investments; b) in the cases where the amount of the projected investment is over US\$ 20 million, or its equivalent in Austral; c) the participation from foreign entrepreneurs would imply either the transfer of majority ownership in an existing local company with a network in excess of US\$ 10 million or the acquisition from a national company of the assets of a business (Fondo de Comercio), with a value in excess of US\$ 10 million.

The above listed cases clearly identify fields of strategic importance for the country. The fact a projected investment with italians gets the due authorization to enter these areas entails it is going to match basic needs and, coeteris paribus, it should gain an element of priority as compared to the other. The argentine law n.18.875 has stated the existence of two kinds of corporations, according to the degree of the foreign participation and the effective control exerted: a) the so called "local entreprise of foreign capital" in which the foreign participants hold directly or indirectly over than 49% of the total equity or can rely on aside agreements which consent them to gain the votin majority; b) the so called " local corporation of domestic capital " in which the owners hold at least 51% of the equity or can count on a prevailing control, thanks to thè existence of aside pacts as above mentioned.

Joint investments with italians in which the effective control remained in the hand of the argentine investors should be appreciated, as revealing a more genuine attitude by the foreign partners to cooperate with no aim to submit the firms objectives to their own strategy. A further guide when selecting terms of priority can be provided by the contribution the coming investments may offer to the fiscal revenues of the recipient country. A useful indicator on this subject may be found in the

rate of the total tax outlays to the gross sales from the investment. Owing to the specific commercial transactions involved by such coming agreements and to the correlated different tax implications that should stem out (reference is for instance made to the cases where payments for royalties, dividends, interest and services fees combine in quite different manner) projects of similar magnitude and volumes of sales could yield proportionally different amounts of tax payments.

Lately it seems worthy to recall the criterion of matching in principle the local law requirements and the institutional attitudes as regards the commercial transactions to be settled, since it is of foremost importance they are made as between unrelated parties. Reference is also made to the possibility that an overevaluation of the Italian capital contribution may become detrimental over the time, due to the connected financial implications.

By contrast priority should be attached to those projects which, for instance: a) do not impose clauses preventing the participated enterprises from obtaining licenses also from third parties or from performing research aimed at developing new products different from those to be produced by applying the Italian partners technology; b) do not restrict in other ways the use of technology by determining the prices or the quantities of final output; c) do not set limits as to

the countries of export; d) do not oblige to use the service of the Italian partners as sales agents.

Referring to the specific financial transactions involved by the joint ventures problems it has to be observed a foreign investor is not presently permitted to purchase at the Argentina's Stock Markets shares of a local firm for a value higher than 2% of total equity. In the cases where an Italian corporation could envisage investments on a large scale, it should better consider to apply for the advantages offered by the debt to equity program presently enacted in Argentina. Such a program was agreed to between Argentina and its creditor banks as part of the commercial bank portion of the 1987 financing plan.

The main goal of such a program is to create a lasting system for the conversion of debts, which facilitates productive investments permitting a net increase in exports.

It has to be noted that at time the matter in question appears slightly fluctuating: important amendments have been introduced in the original resolution 520 of May 29 1987 particularly for what concerns the definitions of debts, investments and investors eligible to benefit from the program. Unfortunately among the specific projects qualified as ineligible there is: the acquisition of quotas, shares, and other corporate participations or rights to the same, and

subscription of coupons. It appears nevertheless that those participations by italian partners to be conducted in conjunction with the implementation of larger investments plans deemed eligible by the argentine authorities should, coeteris paribus, play a relatively higher active role for the country.

From a strict financial point of view, a further indicative element worth of interest should be found in the presence of somewhat sophisticated institutional guarantees an italian investor may request to obtained at the time of registering in Argentina the entry of capital. In fact, although the agreement signed between Italy and Argentina in 1987 states that dividends and registered capitals will be freele remittable from the country, those capital registrations providing also the possibility of opting, at the time of remittance, for conversion in hard currency, may come out favourable for both the parties.

Broadly speaking one could observe that the best financial shelters for coming investments comes from getting acquainted the italian partners with new products like swaps, in currency and interest, and the floating rate notes whose adoption may reduce, as well known, the effects of uncertainties in cost and proceeds.

Should an equity partecipation scheme be associated to international leasing operations to cover the entire value of the new investments, it should be preferred to

those implemented, conversely, through new equities issues in conjunction with foreign loans. That's because if the leasing scheme is devised in a somewhat sophisticated manner - entailing for instance the use of an escrow account abroad - it consents avoiding to register the forecasted repayments of the leasing fees as new debts for Argentina.

Finely structured leasing operations would help therefore the country to improve, albeit modestly, its credit worthiness in the long run.

8. SELECTING JOINT INVESTMENTS PROJECTS WHICH ARE TO QUALIFY FOR OBTAINING THE PUBLIC FINANCE SUSTAIN AS PROVIDED BY THE ITALIAN LAW N. 49/1987

The outmost constraint which will bound the action of the Italian authority (Direzione generale per la Cooperazione at the Ministry of Foreign Affairs) deputed to evaluate the impact of ^{potential} ~~coming~~ joint corporate investments ^{To} ~~for~~ Argentina, will ^{not possible} ~~surely~~ consist in the randomly distribution characterizing, at sectoral level, the applications ^{presented} ~~sent~~ by Italian entrepreneurs. This circumstance will not consent to plan the cover ^{or} ~~of~~ all the subsectors ^{not} ~~worthy~~ of priority importance ~~according to desiderata~~ expressed by both the Italian and the Argentine competent authorities.

Although Argentina has been defined as a "primarily priority" country among those of the Latin America group by the Comitato Interministeriale per la Cooperazione allo Sviluppo (CICS), the proportionally large volume of conceivably eligible investments, if compared to that to be channeled to other countries in the continent, may probably reach many the amount of many tents of US\$.

Such ^{a perspective} ~~an event~~ ~~certainly~~ would ^{require} ~~entail~~ the adoption of criteria ~~for~~ selection simple and manageable but, ~~at~~ ~~the same time~~, capable to adequately reflect and measure achievements of the objectives committed to the bilateral cooperation between the countries.

In fact Argentina only with reference to certain aspects can be straightforwardly classified among the developing nations.

The CICS decision of December 2nd 1987 seems to have clearly perceived such a peculiarity of the country when designing the role of the Italian cooperative policy basically in terms of alleviating the economic consequences of the overwhelmed outstanding debts of the country.

As regards the specific topic of defining guidelines to select the joint ventures projects which are likely to yield the expected impacts on the Argentine productive system, no other elements seem to have been provided except for the opinion of the Comitato Direzionale to restrict the fields of the eligible investments to the productive and the infrastructural branches. To avoid the general content of such a proposition turn out to create possible mismatching of projects selection by both the Italian and the Argentine counterpart, it seems to us that a common set of consistent indicators should be set out with the aim to rank by levels of importance the utmost goals as well as to measure the extent by which they are likely gained by each eligible project. Reference is clearly made to the use of the multicriteria analysis.

In such a way objectives of different nature, like the value added generation, lowering the balance of