BUSINESS STRATEGIES UNDER STABILIZATION
AND TRADE OPENNESS IN THE 1990s

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1. Introduction

The Argentine economy is going through a major transformation process. Stabilization is not just about solving simple disequilibria but involves profound structural reforms needed to overcome coordination failures and return the economy to an equilibrium path. Until the introduction of the Convertibility Plan in 1991 the long-dominant pattern was one of (1) exceedingly volatile relative prices, (2) fiscal and external disequilibria and (3) extreme preferences being shown by economic agents for flexibility, due to the high uncertainty they faced in a permanently inflationary context with hyperinflationary episodes in 1989 and 1990. All these features are amongst those traits from the quite recent past which definitely must still be considered today when implementing economic policy.

Given that context, the recommendations that derive from the stabilization and structural reform programmes inspired by the 'Washington Consensus' - which are articulated in policies to achieve trade openness, deregulation and privatization of state-owned enterprises - do not in themselves offer a sufficiently helpful approach to understanding the multiple aspects involved in the dynamics of structural change. Strikingly absent is any analysis of how businesses react to the implementation of these programmes - and that means that an implicit assumption has been made: i.e. that business reactions are automatic and can be counted on to produce a new specialization pattern that is compatible with both macroeconomic discipline and obtaining suitable linkages into the international economy.
However, the experience that actually emerges from analysis of changes in Argentina's industrial sector in the last two decades shows that the nature of business reactions is much more complex than this. In fact, the observations reveal what can be described as diverse and contrasting business behaviours whose sequences and timing differ greatly from both the timetable of the openness process and the timing of when modifications in the key macroeconomic parameters occurred. Likewise, it turns out that the current dynamics of structural change have been strongly influenced by the previous phase of the economic process; that public and private institutions have not yet caught up with the new scenario; and that, in many cases, the private benefits generated by business strategies have not coincided with the social benefits.

The goal of this chapter is to contribute to the analysis of the recent process of industrial transformation in Argentina. In particular, it will focus on the specific factors which have been responsible for the existence of different business reactions within the dynamics of structural change in the Argentine economy in the period 1975-95. Likewise, it will consider the effects of changes in the macroeconomic conditions and in the international scenario and changes in the linkages between firms and the market. The entire process will be assessed not as a problem of producing industrial goods solely, but as one that involves the simultaneous need to generate industrial goods and develop the technological capabilities needed to succeed in establishing a specialization pattern in a context of transformation and integration into the global economy.

Section two presents a very stylized analysis of the central features of Argentina's industrial transformation over the period 1975-95. It seeks to evaluate some of the determinants of business reactions and see why such contrasting kinds of behaviours occurred. The analysis it offers is in terms of two behavior patterns: the first one is called the 'offensive' restructuring strategy while the other involves a survivors' strategy,
characterized as a 'defensive' one'. Some features of each of these strategies are described.

Section three presents some observations on how firms behaved during the Convertibility Plan that started in 1991. Two stages are distinguished: the first one refers to the period 1991-94; the second one is associated with the changes that were triggered-off once the international interest rate was modified in early 1994, and especially concerns the changes that occurred after the Mexican currency was devalued towards the end of 1994 - the so-called 'Tequila effect'.

Section four analyses the changes that have occurred in the behavior and structure of industrial firms in the 1990s: it emphasizes changes in firms' production functions and in the technological trajectories pursued by them, and discusses the 'boundaries' which industrial firms have.

Lastly, Section 5 makes a brief assessment of the way in which industry has recently been developing.

2. Changes in the 1975-95 period

Between 1975 and 1995 output from the Argentine industrial sector stagnated, and industry also lost its capacity to create employment or lead the way in investment as it had done in the past. A look at the industrial sector in 1995, as compared to 20 years earlier in 1975, reveals that deep changes have occurred (Azpiazu and Nochteff, 1995; Chudnovsky, Lopez and Porta, 1996; Kosacoff, 1994). Although the size of industry is similar to what it was in 1975, its organizational pattern (or 'model') is very different from the pattern obtaining in the semi-closed economy period. In fact this transformation is the outcome of the two main 'avenues' of change which firms have followed: offensive restructuring
strategies by some industrial firms and resort by the rest of the firms to what we have termed as defensive strategies.

Offensive restructuring involves making major investments in machinery and equipment and combining this with far-reaching organizational changes in production methods. Implementing this strategy has led to remarkable increases in productivity, which now nearly match the international best practice standards. The first question that arises is - to what extent has offensive restructuring spread throughout Argentine industry? It turns out that one can identify around 400 firms that have offensive strategies. They account for about 40 per cent of 1995 industrial output. What conclusion can be drawn from this? It is that a large number of remarkably successful microeconomic cases exist - but that when the figures for the whole of industry are aggregated, the overall result is still not powerful enough to generate a new pattern of specialization for Argentine industry that could represent a sustainable long-run model of development.

In which sectors are these firms found? They are spread throughout the entire industrial fabric, and can even be found in those branches that were most severely affected by the economic openness process and by macroeconomic instability. However they are really prominent in four particular areas. The first one corresponds to the basic input-producing industries (which mainly manufacture widely used intermediate inputs such as iron and steel, petrochemicals, cement, oil from refineries, and aluminium, etc.). These industries have been through a transformation. Today some 20 to 25 modern plants that manufacture basic inputs exist, as a result of active government policies, and all of them operate on an international scale.2

The second area arises from the dynamic growth that has occurred since the mid-1970s in Argentina's stock of natural resources - in a break from four previous decades of stagnation. It is noticeable that Argentina's expanded new capacity in the natural resources field is linked to some industrial activities which add value to these resources in final-stage
processing plants that operate at levels equal or close to international best practice - as is the case for the oilseeds industry, the petrochemicals industry, and others.\textsuperscript{3}

The third area is Argentina's motor vehicles industry, which nowadays has some strikingly different features from in the past. The transformation within this sector has been very heterogeneous. The core group of manufacturers, who operate at standards close to international best practice, are makers of a selective range of motor-vehicle parts, most of which go to supply the final-assembly plants. Furthermore this core group of parts makers has export capacity that partly compensates for the increased levels of imports by the rest of the sector - especially by the final-assembly plants. Meanwhile, although the assembly plants are more modern than in the past, they still lag far behind international best practice.\textsuperscript{4}

Lastly comes a more recent development that has involved investments being made in some 30 to 40 relatively very modern industrial plants that make dairy products, sweets, telephone equipment, and other industrial products (Subsecretaría de Inversiones, 1995). This development has arisen as a response to the strong increases that have occurred since 1991 in the consumption of some specific differentiated goods by the domestic mass market.

Turning now to the second ‘avenue’ of change identified above - what does it involve? This is the survivors’ avenue: the firms concerned are survivors firstly of the late-1970s openness policy, secondly of the macroeconomic crisis of the 1980s, and thirdly of the new competitive conditions which Convertibility established. Many other firms did not survive. From 1975 to 1995 a large number of firms disappeared and relatively few newcomers joined the industrial structure. Altogether, some 25 000 firms (leaving out small workshops) have adopted defensive strategies, and they account for 60 per cent of Argentine industrial output.

What can be observed in the industrial plants of these firms? The plants are clearly very different from what they were like 20 years ago. Productivity in them has also
increased notably. However, the achieving of efficiency levels in these plants that may be regarded as marking genuine progress in terms of their own previous record looks rather different if the benchmark for comparison is taken as being international best practice. From that standpoint there still remains a very sizable technological gap - although it is not possible to say if that gap is smaller or larger than it was in the past. In other words, although average productivity in these plants has increased by very roughly 100 per cent (to use an estimated figure for the increase that cannot simply be dismissed as insignificant) the fact remains that even the achievement of a good performance relative to these plants' previous efficiency levels still leaves them a long way off the standards needed for them to be able to compete in open-economy conditions.

Why did productivity in these plants increase? There are three sources that produced the improvement. The first one is the laying-off of employees which started in the mid-1970s and which still continues today: firms have retained the same output capacity, but at much lower staffing levels. The second factor involves the introduction of organizational changes: all these plants in Argentina have gradually adopted a much more modern set of organizational practices than in the past even though such practices are not yet as widespread throughout the local society as they are in advanced industrial countries. The third source comes from the investments that have been made throughout all these industrial plants, but which have been of a narrowly targeted and specific kind, and for which the decision to invest has typically been geared to fit in with the upswings in the business cycle. This was the case under Martínez de Hoz (1978-81), under the Austral Plan (1985-87) and again under the Convertibility Plan 1991 onwards. Essentially, the business people in charge of such plants are operating with machinery and equipment that was purchased in the 1960s or 1970s. The consequence is that the typical industrial plant is one in which many technologies of different generations and vintages are combined, and where the plant suffers from major imbalances and bottlenecks. In consequence, when the level of output
has to be expanded, what then happens is that precise investment targeting occurs, so as to tackle some of these specific problems. This may, for example, involve resolving a paint-treatment problem or a packaging problem, or require the balancing production lines, and so forth. This will leave the main plant structure itself unaltered - yet these targeted and specific investments have a positive impact on the firm's productivity levels. Even so, these industrial plants continue to retain the underlying features of workshops during the import substitution stage (Katz and Kosacoff, 1989). They are completely out of scale. On average, industrial plants in Argentina have only 5-10 per cent of the optimum scale that prevails at the international technological frontier and operate with very few economies of specialization. Argentina's industrial sector continues to be characterized by very limited development of specialized suppliers and subcontractors - and this contributes to the levels of vertical integration being too high and the scale of plants being too low.

What are the factors that have produced such contrasting responses at the firm level? In the first place, firms' behaviours and strategies have been deeply influenced by the various changes that took place in Argentina's macroeconomic situation and the associated changes made to incentives and regulations over the past two decades (see Fanelli and Frenkel, 1994).

The turning point in the evolutionary process occurring under the ISI model in Argentina came with the failure of the country's experiment to open-up the economy at the end of the 1970s. At that time the various sectors were by no means all in an identical situation. The trajectories which firms had been following until then - in terms of maturing and developing their competitive capabilities - were heterogeneous. From that starting point, it is observable that those previous trajectories have proved to be a crucial determinant of these firms' subsequent behavior - and the impact of this can clearly be seen at sector level, too. The point is that the previous developmental paths (or trajectories) of firms must be
regarded as an explanatory factor in accounting for how firms actually respond during an adjustment process.

The second determining factor in leading to such contrasting firm-level responses relates to the profound changes that took place in the international technological paradigm in the two decades under discussion (1975-95) - and to the reality that the intensity of these technological changes was different for each sector. Therefore the fact that there is sector-by-sector variation in the extent to which changes in international-best-practice technology occur (during any specified period) provides a second reason to explain why differential firm behaviours exist within industry.

The third factor concerns the size and dynamism of the domestic market. In the new context of an open economy and economic integration into the MERCOSUR common market, this factor helps account for variations in how firms have reacted (Kosacoff, 1995).

The fourth factor is associated with Argentina's natural resources endowment and the expanded levels of activity in discovering and exploiting natural resources in recent years - in marked contrast to the prolonged stagnation in this area that was a feature of the semi-closed economy period.

The fifth determining factor is that some of the industrial and trade policies applied have been selective ones - which has, for obvious reasons, induced differential responses within industry.

Sixthly (and lastly) a very important factor concerns the different kinds of economic agents who operate in the business sector. This must be considered on two levels. First, it obviously does make a big difference whether a firm is a subsidiary of a transnational corporation (TC), or is a national holding company, or is a small or medium-sized enterprise (an SME) - because firms in all three groups respond to very different sets of incentives. Second, the track records of individual firms demonstrate that both firm behavior and entrepreneurial attitudes can vary over a huge range depending on how firms are organized,
how risk-averse they are, what their attitudes towards innovation are, and so forth. Just by way of example, if we consider an SME which has already handed control over to the next generation or which has already undergone substantial restructuring, then that SME is likely to perform in a different way from an SME which is still passing through a conflictive transitional phase and which has not achieved clarity as to what its main goals should be.

3. Industry during the Convertibility Plan

Convertibility brought with it three kinds of good news for business people, which is why they have strongly supported it. Firstly it brought about stability - which reduced the levels of uncertainty firms were facing in relation to their markets. New types of uncertainties then arose for firms in terms of the right competitive strategy to adopt from then on - but at least the context was now quite different when compared to the kinds of uncertainty that had marked the previous decade. The second effect of Convertibility was that it led to a recovery in the growth of demand: in fact the output level rose continuously for 19 uninterrupted quarters, even though growth rates differed markedly between sectors. The third kind of 'good news' was the wealth effect, which refers to the rise that took place in expected future incomes. (This effect was associated with a growing output level, and with a reduction in the rate at which economic agents discounted future income, and with a setting where the local currency was appreciating in value.)

These three developments (arising from the Convertibility policy) inevitably led to pressures on firms to redefine their scope and boundaries in relation to the market. In the new conditions that Convertibility brought with it, the perennial question facing firms of 'What to make versus what to buy?' had to be posed by them once again, but this time in the very different context of markets that functioned with lower transaction costs and much less uncertainty than before. These changed conditions obliged firms to redefine their
positions in matters such as (a) their network of suppliers, which often needed to be respecified, and (b) outsourcing some of the services that they previously had been handling in-house, and (c) making changes as regards inter-firm cooperation, as well as in their levels of horizontal and vertical integration, and so on. All these areas are ones where firms went through deep changes during the Convertibility period. At the same time firms were forced to reappraise their internal organizational structures, and adapt them to the new conditions.

These developments caused by Convertibility (and just described above) did not come 'free', especially for firms that adopted defensive adjustment strategies. The first point to stress is that trade-openness policy intrinsically sets upper limits on firms' ability to fix prices, and so - unlike in the 1980s - firms could no longer simply pass on their raised costs to their customers in the form of higher prices. Indeed the Convertibility Plan was remarkably successful in stabilizing prices. However it did, when first applied, lead to some drastic changes in relative prices, which favored the prices of non-tradable goods to the detriment of the prices of those industrial goods that competed with foreign goods (Fanelli, Kacef, and Machinea, 1994; Gerchunoff and Machinea, 1995). This led to a rise in the prices of those non-tradable goods, which in turn impacted on firms' cost structures, and this particularly affected small and medium-sized enterprises (SMEs). Also the government's improved administrative efficiency in collecting both taxes and employee social security charges, led to a further impact on the cost levels of these firms.

What mechanisms have firms had available to them to offset these kinds of cost increments in the new environment? Basically, three mechanisms exist which can reduce average costs and enable firms to survive. The first is through achieving productivity increases of the kind mentioned earlier. The second emerges from higher levels of economic activity and market concentration, and is based on the assumption that average costs will fall as production is organized at larger scales of output. The third one is through
firms undertaking organizational changes, mergers and investments. Alongside the above mechanisms, the government, for its part, implemented a set of complementary deregulatory measures whose purpose was to improve the extent to which the systemic conditions of the economy would encourage firms to take steps to raise productivity and reduce unit costs (Azpiazu 1993; Squiglia and Delgado 1994).

However the struggle by firms to reduce their average costs has faced diminishing returns, because most of these firms still operate with the basic equipment they purchased in the 1960s or 1970s and have not restructured offensively. Hence, their efforts to lower their average costs have quickly run up against obstacles whereas, in contrast, no such hindrance has prevented cost rises from continuing to occur.

A second factor which has been having an effect on firms is the changes which have occurred in the financial market and in the types of financing which firms utilize (Bonvecchi, 1997). The advent of stability has put in place a totally different financial system from before. The first obvious change is that firms' financial requirements have risen notably. Why? Firstly, because the activity level has grown, but secondly and even more importantly, because commercial credit has started up again. The position that applied during periods of hyperinflation was, basically, that not much working capital was needed: buyers had to pay in advance, production was carried out with this money, and the difference due to indexation was collected, once the merchandise was delivered. Now there is a higher level of activity and merchandise is delivered on 60 to 90 days payment terms. The resulting financial requirements can be offset partly by recourse to commercial credit and partly by bank credit. But in spite of the growing monetization of the economy, the financial market is highly segmented. This has led to a significant rise in firms' indebtedness, held mainly in the form of foreign currency debts (due to their lower cost) and this has raised the level of these firms' financial exposure.6
The impact of these various factors means that firms operate on the basis of a precarious balancing act, and they can only keep this going provided that the level of output is maintained. In such a delicate situation, profit margins get reduced, and hence gross profits can only be kept up by increasing the output level. But to achieve this - operating in this kind of market - requires firms to risk more money than in the past, which increases their indebtedness and financial exposure yet further.

This set of pressures has led firms into 'traveling the path from being a workshop to being a business enterprise'. Thus, firms tend to view themselves less and less in terms of the work they perform at the lathe, loom or machine-bench, and more and more in terms of how they perform at the cash register. In fact firms can, broadly speaking, be said to have moved on from the approach that they typically used to adopt as workshops in the import substitution epoch - and to have moved towards developing a three-sided strategy instead. The first aspect of this new strategy is that the firms do continue to manufacture goods. The second aspect is based on the observation that rising average costs are associated with increases in value-added - hence one method that firms can use for lowering their average costs is to break off from using local suppliers and rely instead on imported parts and inputs, whilst increasing their assembly activities at the expense of their manufacturing ones. The third aspect is that firms have been giving much greater priority to their sales and distribution networks - because these networks are capable of being turned into the best sales channels for imported products. In that regard, foreign manufacturers have identified domestic manufacturers as their best prospective partners for arranging sales into the local market - precisely because these local firms (a) already possess established distribution and sales networks, (b) know about local customers and (c) are basically capable of providing technical and after-sales services. The new emphasis on assembly and commercialization activities has arisen from the defensive strategies which firms have adopted in order to sustain their positions in the market. It is a characteristic of the firms that have kept going
that they have specialized in more differentiated products and that they operate by staying in close touch with demand. But this whole process, which has involved a 'defensive shift' by firms into placing more emphasis on assembly and commercialization activities, has clearly also had two negative effects: firstly, employment is not being created, and, secondly - and of fundamental importance - new technological and manufacturing capabilities that would allow firms to become producers of higher value-added and more differentiated products are not being developed.

Manufacturers in this context (where heterogeneity was so prevalent) were subjected to various kinds of changes arising from developments in early 1994 when international conditions changed - and the impact on them became especially strong in the wake of the severe financial shock of the 'Tequila effect' at the end of 1994. The changes which firms experienced were in several different areas, of which three will now be mentioned: they relate to (1) changes in financial conditions and arrangements, (2) the downturn in the 'wealth effect', and (3) changes in the level of output and the destination of goods produced.

First, as regards the financial situation, changes in the financial market put firms into serious jeopardy. As far as loans were concerned the restrictions applied to them became excessively onerous and intolerable. In many cases, international credit - including commercial credit - was interrupted, or else loan-maturity terms were shortened and interest rates raised. In an initial stage domestic credit was still available, but the rates of interest banks were charging for it meant that no firms could possibly take up such loans as a rational business proposition. At the same time, the availability of new lines of credit was suspended, and later on, once the level of their deposits began to recover again, the banks did not want to take risks, and preferred to adopt a 'wait and see' approach.

In these circumstances what happened was that a large number of contracts involving commercial credit to clients were breached - as levels of pre-announced and
officially declared bankruptcies rose, and as (even more significantly) firms announced informal bankruptcy meetings to arrange refinancing. The combined effect of all these developments was that (1) creditors lost part of their assets, and (2) no cases are known in which additional interest charges were levied in respect of payment arrears. In consequence whilst levels of debt have increased, the volume of loans has declined: hence a severe mismatch obtains in the overall financial circuit.

Turning, secondly, to the downturn in the 'wealth effect': there is no doubt that a strong wealth effect, i.e. a strong rise in expected future incomes, was one of the features which typically greatly influenced firms during the Convertibility period. But the situation after the 1995 crisis has greatly weakened that effect. The simultaneous combination of a reduced level of output, a mismatched financial system and business fragility has led to current valuations of firms being greatly downgraded. This affects firms' credit ratings for securing financing, because whilst their debt levels are higher than before, their own value as collateral is lower. In fact, their financial exposure has grown and they are rated as credit risks. That has become even clearer with the return of normal financing conditions: the problem is no longer one of a sufficient supply of finance being available, but of locating reliable banking customers.

Turning, thirdly, to changes in the level of output, it is very clear that the expansion cycle broke down: thus in 1995 industrial output fell by nearly 7 per cent.8 The domestic market had received the direct impact of the difficult financial conditions (including the restrictions on loans and the periods of credit interruption) and was also directly affected by the worsening conditions in the labor market (where the unemployment rate rose from 6 per cent in October 1991 to 16.4 per cent in October 1995). Moreover the impact of the recession fell particularly hard on those sectors which had been the dynamic performers under Convertibility up until that point. By contrast to the depressed conditions in the
domestic market, the demand for exports was rising, and it was intermediate goods producers who were the main beneficiaries of that development.

A variety of factors have contributed to this significant increase in industrial exports (Cepeda, 1995; Bisang and Kosacoff, 1995). Some of the principal factors include changes in the Brazilian situation, the major improvement in international prices (especially of commodities), the recession in the domestic market, and gains in competitiveness by some industrial sectors. However, whilst taking a positive view of this rise in exports, it is also sensible to treat it with some caution: this is because these exports come from only a small number of firms and sectors; also they have only rather precarious production linkages into high value added 'chains' of business activity; furthermore the Brazilian market is certainly not immune to cyclical difficulties; also, in many cases, export price levels are only attractive to firms as a means to assure themselves of a reasonable scale of output and cover their variable costs.

In contrast with the past, reductions in the output level now affect firms in a distinct way. Minor falls in sales can alter a firms' break-even point and, under Argentine conditions, that may lead on to very negative and complex repercussions in terms of having a negative impact on 'chains' of payments.

Nonetheless, a new and positive development is that today there is a much more sophisticated level of diagnosis and planning by firms than used to be the case in the import substitution stage. A large number of firms have been involved in business negotiation processes on the advice of consultants and research teams. In addition, local firms have had their horizons widened both through by their involvement in commercial credit and banking credit operations, and through their interactions with foreign suppliers whilst developing commercial, technological, and representative-agency links with them.

Under these conditions, quite a number of transfers have taken place, at rather low prices, of majority stock holdings in businesses which are experiencing financial difficulties
although they are well-positioned in the local market in the long term. The buyers are in a completely different position: they can obtain financing at much lower rates, have the technological strength to embark on restructuring processes, and have long-term strategic goals. Brazilian and Chilean transnational corporations - amongst others - have demonstrated their interest in such transactions, and some actual deals have gone ahead, with the food sector being specially targeted. This phenomenon is obviously a selective and not a generalized one.

4. Changes in the behavior and structure of Argentine industrial firms in the 1990s

The structure and behavior of industrial firms in the mid-1990s present some new features when compared with previous decades. These firms have been faced with profound changes in the domestic and international environment - and their responses to the new conditions and challenges have been diverse. As was stated earlier, two approaches or behaviour patterns can, broadly speaking, be identified: the first is the 'offensive' restructuring strategy: it has led to some notable successes in attaining productivity levels close to international standards. The second is the 'defensive' strategy: its characteristics make it unmistakably clear that efforts to close the productivity gap have fallen far short of the mark; and it can also be deduced that firms still suffer today from many of the constraints, problems and deficiencies which affected them in the past. Some of the most salient stylized facts about this 'new microeconomy' will now be described:
4.1. Capital- and labour-intensity

At the start of the 1970s local industry operated with production functions that were, mostly, of the more labour-intensive sort. The restructuring, installation and start-up in the 1980s of some 20 manufacturing plants to make widely used intermediate products (steel, petrochemicals, refinery products, paper, aluminium etc.) led to a significant shift in industrial specialization. The technology in use in these plants is close to international best practice - it involves large-scale, continuous processes that are highly capital-intensive. Meanwhile, the developmental impact that these plants have had in stimulating progress towards the manufacturing of more differentiated products has proved considerably weaker than was expected. A further pertinent fact is that the new vegetable-oil plants have also employed only very few staff.

In addition, when the main industrial investments made during 1978-95 are reviewed, it is clear that: 1) the trend has been towards operating with production functions of greater capital intensity, 2) a striking proportion of these investments have been carried out by a restricted group of national holding companies; and 3) promotional schemes and subsidies have played a major role in financing these investments. Everything points to the conclusion - if trends observed in the large firms can be extrapolated - that industry must have lost its primacy as a source of employment creation - which is exactly what the evidence presented earlier showed.

The above points indicate that the trend since the beginning of the 1980s has been for the leading Argentine industrial firms to increase the capital intensity of their production functions. Furthermore, during the Convertibility period, industrial firms needed to react to the fact that industrial gross real profit margins were squeezed down in a context in which unit wage costs were rising and price rises were firmly held back by the greater import-openness of the economy. This situation led firms, in a first stage, into making labour-force
reductions and it then led them, in a second stage, into installing new machines, technologies and processes that were labour-saving. Economic policy in fact 'lubricated' this process through the tariff reductions applying to capital goods and through the way in which exchange-rate appreciation raised the value of the local currency.

Evidence revealing the decline in the capacity of this 'new microeconomy' to create new jobs shows up clearly in the periods of output growth that have taken place during Convertibility (1991-94). The evidence of decline in employment-generating capacity is even more pronounced - indeed alarmingly so - when one looks at the period during which output has contracted (1995). This latter period has been associated with a major increase in the open-unemployment rate, (which reached 18 per cent in 1996/97, roughly three times its historical average rate). Moreover it is quite clear that industrial activities have been one of the casual factors producing this state of affairs.

4.2. Changes in the behavior and technological trajectory of industrial firms

The conditions which established the overall framework for the economy in the 1990s have tended to invoke a new pattern of technological behavior from industry. This differs, greatly from the pattern that was typically followed by firms in the import substitution period (for which, see Katz, 1986). Some of the central features of the new pattern are:

i) For a group of firms - and this especially applies to those in the metal products and machinery industry - there has been a growing trend towards them participating in international trading networks. This approach enables the firms concerned to begin to specialize more than before, and to start reducing their product mix whilst also 'de-integrating' some of their production facilities whilst making far greater use of the trading network. The technological implication that inherently follows from the increasing levels of globalization in production is that firms have to specialize in making products that meet
international technical standards. This leads them into activities that tend to reduce the extent of the technological gap that exists in product technologies. But at the same time it discourages local firms from making their own R&D efforts either to develop some new product or process or to adapt foreign technologies. (At any rate it tends at least to minimize such R&D or adaptative efforts). Also, it does nothing to strengthen the domestic chain of suppliers.

ii) In contrast, a circumscribed group of firms are strengthening their systems for adopting technology (via the channel of importing capital goods). This forms part of their strategy to incorporate foreign products and processes so as to have a widened product mix to offer when operating in segmented-demand areas the consumer mass market. These are firms that actively supply the internal market and whose influence also extends outwards to the rest of the MERCOSUR countries. The activities of the firms concerned are based both on natural advantages and on the fact that they have for many years engaged in a process of building up (and acquiring) capabilities (in food products, drinks, dairy products etc.).

iii) There has been a decline in the output from the local 'technology-intensive' sectors, i.e. from those very branches of industry that are regarded as 'engine-of-growth' sectors in the more successful economies. In fact, the contraction in local production of pharmaceutical products, some capital goods, a range of electronics industry goods, and telecommunications products deprives the local economy both of a degree of independence and of the 'spillover' effects that would accrue to the rest of the economy if these sectors were performing well.

iv) A greater level of concern is evident about organizational technologies. This has happened for various reasons which include: (a) the fact that production methods are being re-examined to include new criteria linked to flexibilization and specialization (subcontracting, quality management, just-in-time, etc.), (b) the fact that more frequent use is being made of forms of business organization and cooperation that were very unusual in
the 1970s (national holding companies, partnerships between local and foreign firms, complementarily agreements, etc.), and (c) the impact which the takeover of firms by the next generation has been having. The extensive activity by large national and international consulting firms in Argentina in the last few years does suggest that these organizational technologies must at least have begun to diffuse into industry. Another sign of the adoption of such changes is that some firms have subjected themselves to having their technological level and capability tested through the international certification process (Ramos, 1995).

v) In terms of international comparisons the typical local 1970s plant was one that - amongst its other characteristics - operated on a small production scale and with a significant productivity gap. In the 1990s these characteristics have been modified to some extent, but continue basically to hold true. In that regard, some current surveys have shown that the majority of local industrial plants differ in size from their competitors' - plants both in Brazil and in the rest of the world. In one study of comparative production scales it was shown that out of 408 cases, 78 per cent involved cases where local (i.e. Argentine) plants were smaller in scale. In those cases where local plants were either larger or equal in scale, 35 per cent of them were from the food sector, and 30 per cent (the next largest group) were from the chemical-pharmaceutical sector (Secretaría de Programación Económica, 1994).

Under the conditions prevailing in the economy in the 1990s, the targeted investments that were made, the adoption of soft technologies, the adjustments made to staffing levels, and the increases in output levels have all led to significant increases in industry's productivity. Moreover it is clear from analyzing particular cases (such as the motor vehicles, steel, light metals, and paper industries) as well as from considering manufacturing industry as a whole, that strong increases in industrial productivity occurred between the last few years of the 1980s and the mid-1990s (Fanelli, Kacef and Machinea, 1994). Nevertheless, with the exception of some plants representing large-scale investments made in the previous decade, average productivity levels still differ greatly
from the levels achieved by firms and/or sectors internationally. To a large extent local productivity growth has come up against a limiting factor in the form of the initial stock of equipment and machinery which the plants started out with and the way in which the plants are organized - both of which in essence, data from various decades back.

By way of summary, in a setting where a heterogeneous range of behaviours are in evidence, the tendency has been for firms to follow a pattern of technological behavior that is very closely allied to what is being supplied to them from abroad. This has been accompanied by stronger negotiating capacity and better initial knowledge on their part, and by the disbandment of teams involved in technological developments involving major 'localist' components. Also, much stronger emphasis than before is now placed on organizational aspects as applied not just to production but to sales and finances as well.

4.3 The boundaries of Argentine manufacturing firms

One of the typical features of local industrial development at the beginning of the 1970s was the high degree of vertical integration in firms. The firms then operated almost entirely in the small, protected domestic market, in which there was only a quite weak presence of specialist supplier firms. At the same time, firms' organizations were strongly centralized - since most of them were family businesses.

Significant changes are, however, now visible in the industrial organization of a great many production plants in terms of how they tackle the 'make versus subcontract' decision (i.e. whether to make parts or buy them in, whether to handle in-house or to subcontract specific process stages for particular products, and whether to obtain their supplies from the domestic market or from imports. The general trend indicates that firms have been moving towards the 'de-integration' of their production activities. The changes made in this direction have arisen in response to: (a) changes in relative prices; (b)
modifications made in the legal regulatory framework for importing parts and components (as expressed, particularly, in the reformulated sectoral policies applying to motor vehicles, tractors, the naval industry, and electric motors, amongst others); (c) changes introduced in general economic conditions so as to achieve greater stability and economic openness, which have lowered uncertainty and raised confidence in the credibility of contractual relationships and the functioning of market mechanisms.

This process has not, however, been accompanied and balanced out by a strengthening in the networks of local sub-contractors. Indeed, the new regulatory conditions (like those applying to motor vehicles, and those that govern specialization), and the fact that some firms are linked to organizations abroad (through ownership or specific agreements), as well as the favorable terms offered by external suppliers, have all had the effect that when firms have vertically de-integrated their plants they have then tended to obtain most of their resulting requirements for substitutes by way of imports (Kosacoff, 1997). This is one of the factors which explains why the ratio of value added to the value of production has fallen in the past decade.

In short, the data show that the manufacturing sector has itself utilized trade openness and economic deregulation to increase its imports not only of parts and components but of finished products, too. This is indicative of a trend towards the vertical de-integration of activities that affects both manufacturing activities (as revealed by the levels of parts and components purchases from abroad) and commercialization activities (as revealed by the way that product lines for sales purposes are rounded out with imported products). To judge from the data, vertical de-integration of production is a process carried out in association with foreign suppliers, and this is consistent with how the subsidiaries of transnational corporations behave, especially within the MERCOSUR area. In that regard a study of a representative group of main subsidiaries of transnational corporations in Argentina reveals that 60 per cent of their exports and 78 per cent of their imports are intra-
corporate transactions - i.e. consist of trade between those corporations' own divisions and units. Of the imports, 56.6 per cent correspond to inputs and 40.4 per cent to final goods (Kosacoff and Bezchinsky, 1994).

A complementary development that has occurred - and especially so in larger-sized firms - is that companies have increased the volume of their activities which they contract externally for rather than carry them out inside their plants like they did before. No aggregate, quantitative estimates exist for this development but it can easily be verified that there has been widespread adoption throughout industry of higher levels of contracting out of services such as maintenance, security, cleaning, catering, training, advertising, marketing etc. Until quite recently these activities were being handled in house. So when this changed, it had a negative impact on employment in industry itself and on the value added directly by industry, whilst generating an increased level of demands from industry upon the service sector.

4.4 The profile of firms in industry

Both the composition of the industrial sector and the way it is developing in the mid-1990 show that the profile of industry is now different from what it was like in the previous few decades. The first point is that, owing to privatization, scarcely any State firms are left in the industrial sector. Turning, next, to the changes that have taken place in transnational corporations (TCs), in national holding firms, and in small and medium-sized enterprises (SMEs) - these have certainly not been minor ones either: Chapters 3, 4 and 5 of this book analyze in detail the changes that each of these different kinds of economic agent has undergone.
5. A brief assessment of recent industrial development

It would be hard to find anyone seriously disagreeing with the assessment that the second half of the 1970s marked a turning point in Argentine industrial development. This is not merely because manufacturing activities in the ISI period differed from how they are today. In addition, the viewpoints that were held and the kinds of forecasts that were made at that time about industry's future bear little resemblance to the way in which industry has actually developed since then. What happened was that in 1978, a start was made on the process of dismantling the industrialization model that had been articulated so centrally around import substitution.

However, this whole process did not by any means take place in a smooth sequence of phases, and nor was it a progression of events that succeeded each other in a linear, inevitable way. On the contrary, one of the hallmarks of the process, at least until the end of the 1980s and beginning of the 1990s, was that both forward and backward steps were involved in it. Thus, the period 1976-82 was one when political interests favorable to a more open economy were vigorously attaining in positions of power. But this same period also saw other important interests mobilizing to defend and continue with the import substitution model - and on occasions they received some support and reinforcement from the state itself. External conditions also played a circumstantial role at that time by 'casting their lot' (as it were) in support of the import substitution interests. This was very clearly the case with the foreign-debt crisis that occurred at the start of the 1980s: for, in addition to its other consequences, the debt crisis imposed a virtually unavoidable new 'shutting-in' process on the indebted economies (i.e. it forced a kind of semi-closure of these economies once more).

Toward the end of the 1980s, the combination of (a) the dramatic circumstances that then surrounded domestic political, social and economic events, and (b) the rapid
globalization process then occurring due to new international economic conditions, created a set of conditions that became more and more strongly favorable to those forces and interests who wanted to introduce a greater degree of commercial, financial and technological opening-up of the economy. Indeed the impact of these conditions was so strong as to make it effectively inevitable that a transition to a different kind of dynamic industrial structure would occur. Some opposing tendencies continued to exist, but they rapidly diminished in importance.

In the new conditions that became dominant, it was very clear that the economic ‘game’ was now being played under new rules and that the competitive environment for firms had changed. It then soon became obvious that there were very marked contrasts in the kinds of responses and reactions - and results - which businesses were having as they faced these new conditions. Indeed the heterogeneity in firms' responses was one of the key characteristics observable in the new economic conditions.

In this new (and very different) framework, when the time comes to assess how well firms have been performing and what their future prospects (including for survival) are, then one parameter that unavoidably has to be considered is the lesser or greater degree to which firms have succeeded in their efforts to close or reduce the productivity gap that separates them from the levels of productivity prevailing in the more developed economies. Meanwhile, the phenomenon of simultaneous but widely contrasting responses by firms has also (a) become translated, over time, into a growing degree of heterogeneity in the industrial structure, and (b) become discernible in terms of the impact which it has had on the recorded statistics for value added in production - which, from a medium-term perspective, do not indicate that much progress has been achieved by industry as a whole. On the contrary, in the case of gross industrial output, the provisional data which have been circulated from the 1994 Census reveal that in the period 1986-93 the ratio of value added to the value of goods produced went down significantly.
However, notwithstanding the possible differences of view that may exist as to what
the correct figures are (although not about what signs they have) a broad consensus exists
among industry researchers that, during the 1990s so far, manufacturing activity has been,
in net terms, a *shedder* of employment. It is also widely accepted that the numbers of both
manufacturing establishments and production lines have diminished; that the extent of
external trade openness has increased, although more on the import side than on the export
side; that significant investment inflows have occurred at least when compared to their level
in previous years; and that these investments have gone mainly into larger-sized firms by
means of acquisition of existing firms; that the majority of output (and also a growing
percentage of it) is produced in large and medium-large firms; and that these large and
medium-large firms are a segment of the business world in which the level of foreign
ownership has significantly increased.

It is also a matter of consensus that, in spite of signs of some ‘half-hearted’ progress
being made towards reducing the level of concentration of banking credit, large firms still
continue to corner a huge proportion of all loans, whilst at the same time SMEs continue to
grapple with almost the same tough obstacles to obtaining loans as they faced in the not so
distant past - both in their dealings with the local banking system and as regards their
access to the domestic and international capital market. It is also widely accepted that
output prices have gone down appreciably both in relation to the costs of the inputs and
services required in production and in relation to the wages of workers and employees; and
that the value-added coefficient has declined abruptly in the context of a parallel decline in
the real gross profit margin of manufacturing activities.

There is also general agreement on the fact that significant microeconomic changes
have occurred in recent years. Some of the salient changes of this kind include all the
following ones: (a) firms are making more widespread use of less labour-intensive
production functions; (b) there has been a growing trend towards adopting product
technologies from abroad that are close to international best-practice ones, and this has had a negative effect on local adaptative efforts; (c) the cancellation of those local technological efforts that involve domestic generation of new products or processes have been even more systematic and frequent than before; (d) levels of vertical integration of domestic production have become much lower due mainly to the replacement of domestic value-added by greater levels of imported content and due secondarily to the only meager progress achieved by the weak local subcontracting industry; (e) as a major step in reorienting their efforts, firms have significantly streamlined their product mixes and these same firms have also then filled out their product ranges with imports so as to ensure they can supply a wide range of products to the domestic market; (f) a growing trend has taken place towards the 'outsourcing' of activities (especially auxiliary services) which until recently, were being carried out with their own staff; (g) companies have become more 'internationalized' and firms' growth strategies have increasingly placed their emphasis on export markets, especially on MERCOSUR; (h) there has been a shake-up in the ranking by output of different segments of the business community: in particular, both transnational corporation subsidiaries and large national holding companies have steadily been gaining larger shares of output while state firms have virtually disappeared; (i) 'soft' innovations have been introduced which (along with all the other changes) have resulted in gains in labour-and equipment-productivity - in fact it is the existence of differential productivity growth between firms which has been the real motor of the growing structural heterogeneity that has been taking shape, both inter-and intra-sectorally, throughout the whole of industry.

Notwithstanding the above range of microeconomic changes, the evidence shows that the relative importance of manufacturing activities as a 'driver' of overall GDP has progressively been declining, and that manufacturing is heavily dependent on external financial cycles, and, moreover, that the pattern of leadership within the manufacturing sector has been a changing one. These points of evidence all combine in tending to show
that the previously-mentioned changes of a microeconomic nature have not been sufficient to give shape to a new industrialization model or lay the foundations for growth that would be more sustainable in the long term. Nevertheless, when the effort is made to examine the results of all the above-mentioned changes in terms of the progress made in the levels of output, and of value-added, one finds that some surprisingly divergent interpretations of the facts have been put forward.

Thus, according to people who analyze the figures produced by the system of National Accounts, the above-mentioned process of changes is supposed to have led to 31 per cent growth in output and in GDP between 1990 and 1994 (or 20 per cent growth up to 1994 if the base year is taken as 1986). These growth figures are then regarded as supporting the interpretation that the economic benefits secured in terms of output and productivity do actually 'legitimize' the policies pursued, since the benefits obtained are regarded as outweighing the inevitable costs and sacrifices which structural adjustment and reform programmes bring in their train. In contrast to this view, the approach taken by those who expressed 'critical' interpretations was rather different. As they could neither ignore nor avoid or deny the evidence of output and productivity gains, they wavered between (a) expressing their manifest disapproval of the character and direction of the changes that were taking place, and (b) presenting lists of recommendations which either were about how to correct or improve some aspects of the policies in force, or else were about why entirely new kinds of measures were needed of the sort which (at least up until then) the authorities were not adopting.

Publication of the 1994 Census data introduced a more balanced perspective into assessments of the results of the structural adjustment and reform process. This sense of perspective (i.e. caution) had been lacking until then - because no quantitative evidence, even of a provisional kind, had existed to back it up. However what this Census data has now indicated is that the growth in output between 1990 and 1994 was only half as great as
had previously been supposed, and that the corresponding figure for growth in value added was negligible. The results look even worse when the comparison is made with the 1986 figures: in that case, output is up by only 8 per cent and value added is down by around 10 per cent.

However, only a quite short time has elapsed since the structural adjustment and reform process got under way. So it is too soon to be able to evaluate its results in a categorical way. What is, however, already clear, is that it would now be extremely difficult to put this reform process into reverse in its substantive aspects. The kind of industrialization that was articulated around the linchpin of import substitution had, by around the mid-1970s, yielded up just about everything it was capable of. Already in those years it was hard to deny the need for reforms which, whilst making good use of the positive aspects of the existing economic model, would involve changes towards uniting with (and melding with) a more open and competitive kind of model. Such a model would, it was envisaged, stimulate the creation of an industrial fabric based on more modern organizational principles, more recent technology and up-to-date products, in which manufacturing activities would incorporate a larger percentage of domestic value added.

Although it clearly is too soon for any conclusive assessment to be made of the structural reform process, the substance of what the new census data is pointing out is firstly, that the costs associated with the structural adjustment and reform process have been higher than was initially estimated, and secondly that the results achieved, (in terms of growth in output and value added) have been significantly less than was initially announced. But what the Census data do not say is that the higher-than-estimated costs and lower-than-expected growth might, possibly, owe something to a certain kind of 'non-involvement' in the stance adopted by the public authorities - this applies, especially, to the government's over-inclination for leaving the direction and speed of the industrial transformation process to be determined entirely by the free play of market forces. The implication is that the costs
associated with the structural adjustment reforms have been left free to increase more than they need have done - especially when account is taken of the low levels of domestic value added that are incorporated in products, the low levels to which employment has fallen, the extent to which production lines have been decommissioned and firms closed down, and the degree to which concentration and transnationalization in industry have proceeded, etc. If this attitude of 'non-involvement' were to change, it could signify that the process of industrial transformation still has an 'open future'.
Notes

1 See Kosacoff (1994).

2 For the particular cases of the iron and steel industry and the petrochemical complex see Bisang (1989), and Lopez (1993) respectively.

3 For the particular case of agribusiness, see Obschatko (1993).


5 For a more detailed analysis of Convertibility see Canavese (1992), Bouzas (1993), and Porta (1995).

6 A study by Fundación Capital of 76 firms quoted on the Buenos Aires stock exchange - which represented approximately 90 per cent of total capital stock quoted there - came to the following conclusions: (a) the degree of indebtedness (liabilities/net worth) had doubled; (b) negotiable obligations had become a significant additional financial instrument; (c) indebtedness in U.S. dollars had deepened and no market existed for long-run loans in pesos; (d) access to international financial markets had recently become complicated; (e) the percentages of payment arrears had increased. See Ambito Financiero (1994).

7 According to Report No. 3 of the provisional results of the 1994 National Economic Census, released by the Instituto Nacional de Estadísticas y Censos (INDEC), the ratio of gross value added to gross value of production for the industrial sector went down from 43.3 per cent in 1986 to 36.3 per cent in 1994.

8 A growth path which lasted 19 quarters (and which had led output to increase by more than 30 per cent from 1990 to 1994) came to end in the second quarter of 1995 when output fell by 4.1 per cent. The decline for the whole of 1995 was 7 per cent. The contraction buffeted the various sectors differently. Hardest hit were producers of durable consumer goods (and especially the motor vehicles industry) who had led the way in industry's recovery since the start of the Convertibility Plan. The
intermediate-goods-producing sectors are the ones which have recently been expanding their output, in marked contrast to how their output declined in the first years of Convertibility.

9 The interest in this subject is also apparent from the viewpoint of the requirements for staff training that arise due to the new ways in which production is organized (Fuchs, 1994).
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