

NEW TRENDS AND COMPETITIVENESS IN THE BRAZILIAN FOOD INDUSTRY¹

Walter Belik²

I INTRODUCTION

By analysing a country's food consumption patterns it is possible to derive much information on the performance of its food system. The relationship between individuals and food is continuous. Also, the handling of foodstuffs - from purchase to consumption - is routine for most humans. In this way, habits are developed that define a particular cultural pattern for a society.

It is often said that eating is a cultural action, even if only for advertising reasons. In this sense, the circumstances surrounding food purchase and consumption are directly linked to our culture. Moreover, as a dynamic process, the linkage occurs in both directions: we not only consume food according to our culture, but also our culture is shaped by food habits.

This may be especially true for Brazilian culture. What can be said about a country in which two out of three families are undernourished or live in a chronic state of hunger? In the same way, what can we say about a country which spends US\$16.5 billion each year on food consumed outside home, contributing to a huge fast-food industry? Those are some features of Brazilian culture.

Brazil is a country in which urbanization has progressed quickly. Nowadays, less than 25% of its population lives in rural areas. Most families, even those in the lowest income level, have a refrigerator, gas cooker and TV. The higher classes own more sophisticated devices, such as microwave ovens and freezers. In other words, the Brazilian consumption pattern is typically urban.

In Brazil, responsibility for the purchase and preparation of food is mostly up to women. However, due to the industrialization of the economy, more women joined the labour force and work outside home. At present women comprise almost 50% of the labour force. Nonetheless, women are still expected to provide food for the family's consumption; this is made possible in two alternative or complementary ways: by working extra hours at home or by purchasing more convenient meals. The Brazilian food industry reflects those trends. In fact, it has followed "step-by-step" those tendencies, even possibly setting the trends itself.

The trajectory of the modern Brazilian food industry began after World War II. Before that, it was possible to observe the presence of industrial capital only in a few sectors in order to complement the food supply to the increasing urban population. Finally, in the late 1940s and early 1950s, Brazil's food industry boomed. This new

1 This article is a short version of a Research Paper "Food Industry in Brazil: Towards a Restructuring" published by Institute of Latin American Studies, University of London, England, 1994.

2 Walter Belik is a Lecturer in the Institute of Economics, State University of Campinas - UNICAMP, São Paulo, Brazil, and was Visiting Honorary Research Fellow at the Institute of Latin American Studies, University of London in 1993. The author wishes to express his thanks for the comments of Fabio Doria Scatolin and for the editing of Margaret Doyle and Oliver Marshall.

phase was based on the diffusion of fordism as a production and consumption paradigm. The modernization of agriculture and distribution of food products sponsored by governments of the period provided the leverage for this phase.

In the 1980s a new phase of food industry emerged. New sources of capital arose, new fields of investment appeared and Brazilian companies merged with foreign companies. At the same time, in the developed countries, changes have led to a concentration of suppliers, with increasing participation of the financial sector. Also, from the demand side, the market segmentation has been stressed, reflected in the production of more value-added items.

2 THE ORIGINS AND GROWTH OF THE BRAZILIAN FOOD INDUSTRY

The first agro-processing activity in Brazil was that of the colonial era: molasses and raw sugar exports from sugarcane. After the decline of the colonial sugarcane export boom, this activity was revived after 200 years with the birth of Brazilian industrialization, in the third quarter of the nineteenth century. As will be shown, besides sugar Brazil already has important textile, food and kindred products industries at the end of nineteenth century. Thus the presence of food processing in Brazil is centuries old.

However, a radical change has taken place in food processing in recent decades. The Brazilian agro-industry of the 1970s and 1980s has little in common with that of early in this century. In the past, the agro-industry had been set as an extension of mercantile or agrarian capital.³ In recent times, these linkages occurred in the reverse way: from financial and industrial capital backwards to agriculture. In other words, the current food industry is not a continuation of that of the last century.

The primary characteristic of Brazilian agro-industry in the beginning of this century was its mercantile basis. Indeed, until World War I the main source of capital invested in industry was the indigenous commercial capital, given that foreign investment was nearly nonexistent and there was little reinvestment of profits from industrial capital.⁴ The agro-industry that was rekindled in the 1950s, however, and which accompanied a new and consolidated durable good sector and a new urban society, was not simply a continuation of the previous agro-industry. The intensive and extensive import substitution process, which began in 1930s, and the heavy industrialization of the 1950s, contributed greatly to a new configuration of the old industry.

According to Tavares (1977, p. 76), between 1929 and 1938, imports of consumer goods fell 70% from to the period before the crisis. This led to an import substitution process on elementary goods - food, drink and other consumables - that, given the level of urbanization, was stimulated by market dynamism.⁵ Padis (1979, p.238) writes:

3 These activities were established on a new basis and could not be considered enlargements of the so-called Rural Complex.

4 Until 1930 foreign capital was concentrated in the public services. The only foreign investment of any noteworthy size in agro-industry had been occurred in the second half of 1920s, in the slaughter and cottonseed oil industries. For more this issue, see Prado Jr. (1970), especially chapter 25.

5 Burbach, Flynn (1982) identify in this period the great industrialization boom in Latin America that involved huge transfers of capital from transnational companies. In the case of the food industry, the authors mention that one of the causes of this inflow towards industry was the weak performance of agricultural commodities in the international market.

*"The 1929 crisis, having promoted a general decrease in prices, led to a fall in the import capacity of traditional Latin American countries."*⁶

From the 1930s crisis until 1948, the import substitution policy developed smoothly. The process worked on many levels, but in different ways. This process has occurred much analogous as a building construction, working out at the same time in many storeys, but in different grades.

"(In Brazil) it was almost impossible to have an industrialization process from the basis through the top of production pyramid. That is, starting with less elaborate consumer goods and going, slowly, until it reaches capital goods." (Tavares, 1977, p. 46)⁷

Here, the modernization of traditional sectors and the subsequent import substitution could not deepen without forcing the emergence of capital goods, intermediate and durable goods. These bottlenecks were obstacles to sustainable and endogenous economic growth.

The modernization of light industries such as food, textiles and pulp and paper required a wider and firmer basis. The given by Pires and Bielschowsky (1978) of the dairy industry of the 1940s is reflects the period's agro-industrial conditions. Milk processing and its market expansion were blocked due the lack of basic equipment. Some equipment such as pasteurizers, tanks, creamers have been produced in Brazil only in the 1950s; others such as powdered milk and cheese-making equipment, only in the 1960s.

The broadening of industry was taking place at the same time that agriculture took a new form. In fact, from the 1940s agriculture and agro-industry accompanied the growth of further industrial sectors. There is no evidence that these primary-based industrial sectors spurred the growth of the other sectors; on the contrary, agro-industry in general was directly dependent on machines, equipment and inputs supplies. Agriculture's dependence on such equipment was particularly strong given the standards and regularity of raw-materials needed [see Kageyama (coord.), 1990, p. 48].

With the new linkages between agriculture and industry developing in the 1950s and 1960s, industry started to create new products, which were much more uniform and were produced in a regular flow. A new articulation agriculture-industry, very different from that known early in the century, began to develop.

Formerly, articulation was made forward, from agriculture to industry, through a vertical integration of agrarian and mercantile capital. The 1960s saw a distinct change. Industrial sources of capital, many of them transnational and taking advantage of the federal government's policy, were established in the consumer goods sector. From this basis, the new capital had pursued links with agriculture, capital goods to agriculture and other inputs. In contrast to the anarchic nature of capitalism, the Brazilian state pointed out a direction, which industry then followed.

6 The Argentinian example is remarkable. The food industry in Argentina was established in the last decades of nineteenth century. The enlargement of this process happened incorporating gradually new activities stressing the so-called "hacia dentro" industrialization. One can see clearly in the figures how the national production could substitute step-by-step the imports (see Gatto, Gutman, 1990).

7 *"(No Brasil) era praticamente impossível que o processo de industrialização se desse da base para o vértice da pirâmide produtiva, isto é, partindo-se dos bens de consumo menos elaborados e progredindo lentamente até atingir os bens de capital."* (Tavares, 1977, p. 46).

From now, it is important to underline that the leading factor of this new articulation of agriculture and industry was the involvement of the state through its management and public policies instituted in the 1960s. From that point, the links between agriculture and industry relied on regulation by the government and major sectorial interest groups.

According to Candal (1977, p. 245), Brazilian industrialization did not occur in the classic form of intensified mass consumption, as it did in Europe. The first phase of Brazilian industrialization - based on traditional goods consumption remained stable for a long period. At the same time, industry was not diversified until the 1920s due to the erratic and selective policy on imports.

The 1930s crisis followed by World War II and the intensive process of capital internationalization led to an expansion of Brazilian industry. Not surprisingly, agro-industry had lost ground to other industrial sectors. The textile and food segments held more than 50% of the industrial product value during the first half of the twentieth century (Tavares, 1977, p.92). Nevertheless, from the end of World War II heavy foreign and state investments in background sectors producing durable goods led to increasing diversification of industry, leaving behind the textile and food industries.

A limited comparison using official data from the first half of this century reveals that relatively agro-industry lost room to other industrial sectors. According to Muller (1981, p. 47):

"... it has been stated that the agroindustrial sectors has reached a participation ceiling in the 1950s, afterwards declining."

Indeed, an analysis of the 1985 industrial census data shows that the industry from agriculture's share in the total industrial product removed at the level of 24.5% (see Table I).⁸ Albeit, internally there were many changes in the agro-industry. A new economic structure had arose in the early 1960s, given an oligopolic face to agro-industry. At the same time, foreign capital infiltrated some hegemonic areas belonging to national companies.

Table I

BRAZIL:
SHARE OF AGRO-INDUSTRY IN TOTAL INDUSTRY (1960-1985)

	1960	1970	1980	1985
				(%)
Number of establishments	33.4	30.5	32.7	35.7
Number of workers	21.1	19.8	21.5	29.7
Added Value	30.8	25.4	24.4	24.5

Sources: Muller (1981, p. 46) and IBGE - Industrial Census.

⁸ Only the first processing from agricultural raw materials is considered here. Also, it should be noted that these different economic censuses are not totally compatible but represent a good overview of these activities.

A comparison of the capital composition of all agro-industrial sectors in recent decades with the composition of this capital in the import substitution phase reveals important changes. The old agro-industrial capital was completely replaced by a new capital - national or foreign - having a new competitive pattern, based on oligopolist practices.

The post-war years might be characterized by the plentitude of new sources of capital that started to operate in new areas of food industry. This new expansion cycle had the following features:

a) **The spread of American consumption patterns based on canned food and semi-elaborated meals.**

The great marketing effort to introduce new consumption habits were well rewarded by the diffusion of the so-called "American way of life". The penetration of advertising through new media channels was instrumental to the success of this American "raid".

b) **The dissemination of new food retailing equipment relying on self-service procedures.**

The first supermarket, *Supermercados Sirva-se* - "help yourself" in Portuguese, was established in São Paulo in 1953 by foreign tobacco group Souza Cruz.⁹ In the same year, in the industrial town of São José dos Campos, another supermarket arose managed by one of the biggest textile companies - Tecelagem Paraíba. In the former Brazilian capital, Rio de Janeiro, the first supermarket were established in 1955; one of them - SU-CO Supermarket - was helped by american expertise. After ten years, Brazil's supermarkets had more than 1,000 points-of-sale.

Today the supermarket business is the main activity of Brazil's commercial sector. According to *Superhiper* magazine - the official publication of the supermarket owners' association - in 1989 the industry had a turnover of 4.6% of Brazilian GNP and employed 538,000 people in 33,801 shops. The industry is also responsible for 80% of food supplies in Brazil.¹⁰ Figures from the last Brazilian economic census - 1985 - show that supermarkets and hypermarkets distributed 78% of the packed meat, 74% of fresh fruits and vegetables, 72% of grains and 71% of dairy goods, among others.¹¹

c) **Governmental support for new food industries and foreign capital investment.**

In this period a complete change occurred in the sector's capital structure, wich became increasingly oligopolic. Burbach, Flynn (1982), in their research on the entrance of american capital in the Latin American food industry, point to the establishment in Brazil of the following transnational companies in the post-war years: Anderson Clayton (oil refineries, 1948), Carnation (Leite Gloria, 1960), Coca-Cola (instant coffee, 1957), CPC International (Dextrina, 1963), Del Monte Corp. (canned fruits and vegetables, n.a.), General Foods Corp. (Kibon, 1957), Kellogg Co. (cereals, 1962), King Ranch Inc. (meats, 1954), Pepsi Co. (soft drinks, 1951), Quaker Oats (oats, 1954), Standard Brands (starch, coffee and milk, 1957) and Warner Lambert (confectionery, 1962) among others.

9 Souza Cruz now belongs to B. A. T. Industries.

10 *Superhiper* magazine, October 1989, p. 47.

11 The importance of the new links between retailers and food industry must be stressed. This relationship goes beyond buying and selling operations. "The emergence of supermarkets as a new distribution form has meant a radical change in not only infra-sectors. This altered the interdepartmental relationship opening new alternatives to capital circulation, industrial as well commercial" (Fundação Getúlio Vargas, 1981, p. 78).

Moreover, new European investments in the period can be added to this list. Some traditional European companies opened branches or reinforced their investments in Brazil. Also, a new nucleus of Brazilian companies was formed in the food industry. The main segment of Brazilian capital investment was in flour mills, pasta, canned conserves, sauces and dairy products.

Although some cases could be nominated due its relevance, it is necessary to put all examples in the food industry context. Until now, two demarcated phases can be seen in the development of the food industry in Brazil. The observations on the performance of the Brazilian food industry contained in this section illustrate the entering of a third phase in which industrial restructuring is the main subject.

The two phases up to this point are as follows:

The initial phase corresponds to the first industrialization boom from the last quarter of nineteenth century. In this phase the presence of flour mills, animal fats and oil factories, slaughterhouses and sugar refineries gathered a circle of small and medium-sized companies¹² facing the increasingly urban population supply.

Most of the capital goods used by the food industry were imported, and the economic dynamism came from abroad. The performance of coffee determined the industry's rate of expansion, due to its dependence on employment and evolving urbanization.

The second phase, initiated in the post-war period, placed the food sector in a whole economic industrialization context. In this phase, new capital - from both national and foreign sources - developed additional investment fields and also rejuvenated the trajectory of the old food industry.

A different market environment then arose with new consumer habits. The emergence of supermarkets and convenience food radically transformed the suppliers developing the fordist paradigm all over the world. In Brazil, these effects started to be felt in the late 1950s. However, because of the characteristics of the Brazilian market, the fordist model of consumption and production did not take root.

In the late 1970s, the Brazilian food industry entered its **third phase**. This new phase can be attributed to the emergence of new competitors and new sources of capital in the industry. As occurred in the former two phases, a new capital wave flooded the food sector, re-establishing links with other segments of the food system. Two events contributed to the development of this new phase.

On the one hand, the beginning of industrial economic restructuring in the developed world (see Tavares, 1992) led to new forms of competition, as companies reviewed their overseas strategies in light of this restructuring. Also contributing to this new phase were rising economic protectionism, the 1980s recession in the developed world, and the configuration of trade blocs.

On the other hand, the long economic recession, the collapse of the governmental industrial intervention, and substantial changes occurring within and among firms. All contributed to a new environment, displacing the state as regulator of industrial development, and opening new fields of investment.

12 See Cano (1977, p. 221) for interesting remarks on the size of industrial establishments. Food industry companies were quite small, in terms of assets, compared to other industries such as textiles, glass, paper, matches and rope.

As a result of these two factors, foreign investment in the Brazilian food industry increased, representing the main interest of foreign capital in the period 1969-90.¹³ Albeit, not only foreign capital has increased its investments in food industries; many Brazilian companies merged with competitors and entered new fields and new market segments. The presence of Brazilian banks and other conglomerates in the production field, especially in agro-industry, is one striking aspect of this.

Table II lists the main partnerships or mergers in this third phase of food industry in Brazil, using available data from the period 1985-91. This is only a small sample of the movements occurring in open companies or companies in which public notice was given. Table does not include investments made by established firms in their own companies.

The changes experienced by Brazilian food industry in 1985-91, as shown in Table II, might be seen as configuring a radical change in most segments of industry. In addition to the listed acquisitions and mergers, many Brazilian and foreign groups entered new or stable segments such as orange juice, vegetable oils, animal feed, dehydrated food, wines and beverages.

The figure suggest a new investment wave bearing changing positions which, as has been pointed out before, represented a new trajectory similar that one occurring in the developed countries. Data from the Brazilian Central Bank corroborate that in the last decade US\$2,5 billion of foreign capital was invested in agro-industry, of which more than US\$ 1 billion was destined for the food industry.

In a world framework, these Brazilian movements coincide with a wider change in positions involving the main international food production and distribution companies. According to Perez, Oncuoglu (1990), these movements in the international food industry are called "structural operations" due to their ability to change the sector morphology. These movements are also related to a new form of competition. Huge mergers and transactions set this phase in an international framework.¹⁴ However, even more dramatic than changing assets is the substantial transformation of the competitive environment.

In regard to capital positioning, there is no doubt that the Brazilian food industry is entering a new phase. Many aspects must be examined, however, to confirm this trend. As in the international framework, a restructuring process is based on more elements than a simple shift in the ownership of assets. These elements will be investigated in detail in the next sections of this paper, which constitute the central subject of the author's research.

13 Figures from *Banco Central do Brasil - Boletim Mensal*.

14 The biggest mergers identified in the late 1980s were the following: RJR Nabisco (USA) incorporated by KKR (USA) in 1989 - US\$24.7 billion; Kraft (USA) incorporated by Philip Morris (USA) in 1989 - US\$13.1 billion; Pillsbury (USA) by Grand Met (UK) in 1988 - US\$5.7 billion; Montedison (ITA) by Ferruzzi (ITA) in 1988 - n.a.; Buitoni (ITA) by Nestle (SWI) in 1988 - FF 7.0 billion; Rowntree (UK) by Nestle (SWI) - US\$4.3 billion; Martell (FRA) by Seagram (CAN) in 1988 - FF5.2 billion; Heublein (USA) by Grand Met (UK) in 1987 - US\$1.2 billion; Courage (UK) by Elders IXL (AUSTRALIA) in 1986 - £1.4 billion; Beatrice Foods (USA) by KKR (USA) in 1986 - US\$6.2 billion; Chesebrough Pond (USA) by Unilever (NL) in 1986 - US\$3.1 billion; Distillers (UK) by Guinness (UK) in 1986 - £2.5 billion; Nabisco (USA) by R. J. Reynolds (USA) in 1985 - US\$4.9 billion; General Foods (USA) by Philip Morris (USA) in 1985 - US\$5.7 billion; Carnation (USA) by Nestle (SWI) in 1984 - US\$2.9 billion; Esmark (USA) by Beatrice Foods (USA) in 1984 - US\$2.8 billion; Carlton (AUSTRALIA) by Elders IXL (AUSTRALIA) in 1983 - AUS\$1 billion. For obtain a complete list of mergers and acquisitions in the last decade see Perez, Oncuoglu (1990), Rama (1992a), Green (1993).

Table II
 BRAZIL: MAIN PARTNERSHIPS,
 JOINT VENTURES OR MERGERS IN THE FOOD INDUSTRY (1985-1993)

NEW ENTRIES	ORIGIN	ACQUIRED COMPANY	SEGMENT
Dart & Kraft	USA	Embaré	Confectionery
Nestlé	SWI	Ailiram ¹ e Buitoni	Pasta
Bung y Born	ARG	Petybon	Pasta
Nabisco	USA	Júpiter	Pasta
Pepsi Co.	USA	Elma Chips	Pasta
Borden	USA	Ádria e Romanini	Pasta
Quaker Oats	USA	Toddy e Coqueiro	Choc./Fish
Philip Morris	USA	Kibon, Sorvane, Lacta ² e Q'Refresco ³	Ice Cream, Choc., Beverages
Hershey Foods	USA	Petybon ⁴ e Lacta	Pasta/Choc.
Fleishmann Royal	USA	Maguary ⁵	Ice Cream/Juice
Unilever ⁶	GB/HOL	Cica	Preserves
M. Mars	USA	Neugebauer	Chocolat
Danone Gervais	FRA	Chandler e LPC	Dairy/Chocolat
Parmalat	ITA	Teixeira, Supremo Via Láctea e Alimba ⁷	Dairy
Bongrain (Polenghi)	FRA	Scandia, C.Limpo ⁸	Dairy
MD Foods	DEN	Vigor	Dairy
Gessy Lever	GB/HOL	Queijos Rex e Luna	Dairy
Sodima	FRA	Lacesa (Yoplait)	Dairy
Mansur (Leco)	BRA	Flor da Nata	Dairy
CPC (Ref. Milho Bras)	USA	McCormick e Kitano	Sauces
Sadia	BRA	Frig. Mouran	Meat
Perdigão	BRA	Chapécó ⁹ , Sulina e Borella	Meat
Hering (Ceval)	BRA	La Villete e Betinha	Meat
Bordon	BRA	Swift - Armour	Meat

Source: Research in specialized press.

Notes:

- 1 Belonged to Beatrice Foods (USA).
- 2 Lacta had been acquired by Suchard (FRA) and Philip Morris controlled 40% of the shares.
- 3 Philip Morris owned 45% of the shares.
- 4 Joint venture with Santista (Bunge & Born - ARG). The company also has a joint venture with LPC-Danone (FRA).
- 5 Belonged to Souza Crus (USA).
- 6 After Ferruzzi SPA (ITA) and Gragnotti & Partners (USA).
- 7 Also Alpha, S. Helena and many other less important acquisitions.
- 8 Also Laticínios Ajuuroca and Santa Rosa.
- 9 Perdigão owned 43% of shares.

The table lists partnerships of foreign companies followed by those of national companies.

Abbreviations: ARG - Argentina; BRA - Brazil; DEN - Denmark;
 USA - United States of America; FRA - France;
 GB - Great Britain; HOL - Holland; ITA - Italy;
 SWI - Switzerland.

3 A NEW PARADIGM IN THE FOOD INDUSTRY OF DEVELOPED COUNTRIES

Unlike many other goods, food maintains a constant and recurring relationship with consumers. Decisions on what and how to consume food are taken every moment. Product attributes such as quality and price are constantly evaluated by consumers. Also, the final food production is distinct from other types of production due to its basic regional characteristics. Massive exports of prepared food are not common in any developed or developing country and are considered to be "market deformities".

During the post-war period, many factors contributed to the emergence of a sort of a pattern so-called fordism consumption. Among these factors are the following:

- i) **The food shortage in Europe and the aid and recovery programmes led by americans.**¹⁵ The great production effort in agriculture and industry permitted, in global terms, the transition from a food deficit and hunger to overproduction in fifteen years.
- ii) **Relative high elasticity of food products.** Given the economic depression in Europe and other regions, growth in demand was directly related to increases in household income and product price reduction for staples food.
- iii) **The effective penetration of media and advertising and the homogenization of habits and demand.** This occurred with the introduction of television when the communication became a reality.
- iv) **Generalization of oligopolistic behaviour in the food industry.** The first oligopolistic firms in the food sector were established, mostly in the United States early in the 1920s. In the post-war period the presence of huge corporations intensified, in spite of the implementation of a through anti-monopoly legislation in the U.S. and Europe. The United Kingdom, for instance, passed restrictive legislation that considered some activities, such as the food industry, to be in the "public interest".
- v) **The gradual rise in the scales of production.** The scales of production arose given the generalization of consumption on one hand and, the requirement to impose competitive barriers competition, on the other hand.
- vi) **The low participation of the food distribution segment in value-added of the food industry.** Until the early 1950s, food retailing was based on small business, well dispersed and very specialized. At this time, retailing hadn't experienced the self-service revolution.

All these factors set the conditions to the introduction of a new competitive, fordism, pattern within the international food industry. The fordism accumulation pattern aims for mass production and falling costs in order to supply uniform products for mass consumption. To sum up, fordism can be characterized by any structure facing basic productivity.

15 According to Goodman, Redclift (1990, p. 139) the United States, under the Public Law 480, exported US\$22.3 billion in products between 1954 and 1973. This amount represented 20% of the total agriculture exports in this period. Under PL 480 exports included not only cereals but also cotton, soybeans and dairy products.

The participation of transnational companies in many segments of the food industry can be linked to their strategy to supply market with mass production, low prices and profits margins in the post-war period. Enormous business structures were constructed to support the expansion of the international companies into new markets, offering homogeneous food products to compete with local companies, local tastes and local consumer habits. The predominance of transnational companies was established all over the world through their brands, prices and revolutionary way of consumption.

Berhman (1984) analyzing the competitive strategy of international food companies, describes them as "market seekers" due to the constant need to widen their consumption and production bases. Investigating the food firms, Rama (1992a) underlines the fact that the competition in this field is from country to country, contributing to the multidomestic characteristic of the food industry. This is contrast to most international industry, in wich the competition is global.

Given this competitive pattern, the management of these companies are required to have widespread knowledge of the market. Issues such as brand fidelity and constant consumption are everyday concerns for international companies in each country. Advertising and cultural environment have been the most important weapons in the food supply competition. Nonetheless, without low prices the goal of mass consumption would never be reached. In this sense, the expansion of the food industry in the post-war period only can only be explained by the constitution of a "virtuous circle" of growth.

In this period, flourishing consumption was provided for by the addition of new production units gathered with huge advertisement investments. The increasing agricultural output and the standardization of raw-materials, given the new crop techniques, allowed low costs and cheap prices to filter down to the consumer. And finally, continuous employment growth supplied the market with new waves of consumers eager to spend their earnings. All these elements converged to form a "virtuous circle" of capital accumulation.

The continuous enlargement of this circle allowed an enormous supply to be concentrated in the hands of few a companies which hold a considerable market share. In the late 1980s, the ten largest firms in the world agro-food sector had a turnover of US\$185 billion in production and trade activities (Rastion, Allya, 1990). As an additional basis of comparison, according to the International Labour Organization the food industry was the largest industry in the world getting a turnover of US\$ 800 billion in 1975 (ILO, 1984). In spite of the different dates and sources, these figures show that the power of big companies is striking.¹⁶

According to Williamson (1985), the oligopolistic predominance in particular activities can not be explained by the traditional theory of barriers. On the contrary, the output concentration generally is linked to a sucessful strategy to reduce transaction costs. The main feature of this strategy is vertical integration. Vertical integration leads to more output concentration, which seldom should translates into reduction of final prices.

This is exactly the case of the food industry. The main objective of integration in this industry has always been to lower the costs of suppliers. Such integration should lead to falling prices. Nevertheless, what takes place is exactly the

16 In food trade activity alone, the concentration is substantial. Goodman, Redclift (1990, p. 166), quoting many authors, mention that between 60% and 90% of agricultural international trade is controlled by only fifteen transnational companies. Taking statistics for each commodity, one can see that only three or six companies have the largest slice of the market.

contrary: evidence shows that processed food prices are rising in spite of a drop in costs of agricultural raw materials.¹⁷

Data from 1977 for the United States show that three-quarters of output in the food industry has come from structures considered to be oligopolies. Given vertical integration, integration contracts are the most conventional structural form of production. In the United States, for instance, integration contracts are responsible for more than 90% of the supply in some segments such as poultry, milk, sugarbeet etc. (Marion, 1985). In Europe, the situation is the same. Many European companies are being prosecuted by government agencies under anti-trust legislation in areas such as sugar, tinned vegetables and baby-foods, among others (Maudner, 1983).

Given the market saturation experienced from the early 1970s and the unattainable further large productivity gains, the fordist strategy of accumulation reveals some problems. In short, the fordist production and consumption pattern has fallen into crisis.

On the one hand, due to the particular shape of the demand curve and given household income, the demand for food is relatively inelastic. Consumers are spending proportionally less on food than ever. In the developed countries spending on food has not followed the population's rise in income. Also, with the world recession in the last few years, consumers have spent less and purchase only the essentials. In Great Britain, food spending in the home and outside the home fell from 29% of household income in the 1960s to 17.2% in the 1980s, and then to 12.7% in the early 1990s (Burns, 1983; Goodman, Redclift, 1990).¹⁸ In Italy this proportion was 20% (Fanfani, Montessor, 1991) and in the U.S. only 17% in 1980s (Ritson *et al.*, 1986) in the last decade.

The food industry is representative of the well known Engel-Law, given family size and dietary habits. As food consumption has shrunk as a proportion of income, industry's only alternative in order to increase profits in the highest levels of household income is by adding value to their products.

The food consumption crisis is the other side of the agricultural crisis (Goodman, Redclift, 1990). The agricultural growth that followed the post-war period was tuned to a fordist diet. Mass marketing, advertising and standard products were the characteristics of this phase. To quote Goodman, Redclift (1990, p. 20):

"It is at the level of food manufacturing and consumption, rather than agricultural production, that the analogy with 'fordism' in this industry is most apposite..."

Given the market saturation, the fordist diet entered a crisis requiring a gradual restructuring of industry and market strategies.

Two of the main social elements that have provided the impulse to the new fordist pattern in the post-war period are presenting continuity problems: the expansion of female labour and the increasing variety and use of labor saving home appliances. First, the women going out to work opened the way for new, more practical and convenient food products. Secondly, the housewife began to rely on additional

17 Connor *et al.* (1985, p. 5) pointed to the fact that before World War II, agricultural prices and those of processed food goods were aligned. However, between 1947 and 1972, agricultural prices in the U. S. dropped 15% at the same time as food prices rose 47%.

18 Including expenditure on tobacco and drinks, this proportion goes up to 22% of household income in Britain.

appliances, transferring the traditional hard work of preparing and cooking ingredients to the factory environment. With the proper appliances and convenient food, tasks in the kitchen were reduced.

Common sense suggests that the introduction of ready-to-cook food and new appliances freed women from housework giving them opportunities in the labour market. However, as Goodman, Redclift (1991) point out, the direction of this causality is exactly the opposite. Women were compelled work outside the home and contribute to the family budget, and the food industry responded by providing the necessary support to facilitate housework tasks. The food industry had to begin offering more practical meals, and the retail sector had to exhibit new and more convenient formats of sale. Finally, a new, important segment arose in the food industry: the profitable catering service.¹⁹

Nonetheless, from the mid-1970s these two leverage elements of demand collapsed. Female participation in the labour market reached its ceiling of 50% in most developed countries. Also, the demand for new home appliances was reduced; most kitchens now have all the gadgets they can bear. From this environment, the implementation of new strategies regarding the production growth became much more intense. From this time the main source of growth was not the horizontal widening of consumption but its deepening through product differentiation.

The outstanding growth of profit margins reached by companies illustrated this new phase of industry. In spite of the so-called "consumer crisis", the profitability of remaining industry post-concentration, as well as the added value provided, increased in the 1980s. According to Rama (1992a, p. 58), between the 1960s and the 1980s profits after taxes in the American food industry grew from 7% to 10% of sales.²⁰ In the United States, for instance, the food sector is the leader among industry's nineteen sectors. This sector - including tobacco and beverages - in 1980 contributed 14% of the whole American entire economic added value (Connor *et al.*, 1985).

The food industry expands slowly in developed countries; its growth rate is less than the rate of the population growth.²¹ Nevertheless, the competitive strategy of international food companies is adjusted to supply goods to this saturated market. Given their enormous population growth and also economic growth, one would expect developing countries to be the main investment field for transnational food companies. However, in general these companies prefer to invest in saturated markets in developed countries. An overview of investments on the part of the American food and kindred products industry has shown that developing countries represented only around 23% of investment destinations in the last decade; Europe roughly had two-thirds of total investment (Rama, 1992a).

19 According to Dossier, "Le restauration collective en Europe" published by **Restauration** magazine (no. 267, 7 May 1993), the catering services in Europe have served 2.4 billion meals in 1992.

20 The performance of the world's largest agribusiness in 1980-85 shows a growth rate between 5.17% and 13.54% in sales. The growth in the net profits was outstanding reaching 30.45% in sugar, 25.62% in meat although sector as oils and fats have suffered heavy losses (-6.92%) [see Rama (1992a)].

21 According to Zuñiga, Gutierrez (1992), the sales growth in developed countries did not transcend 0.5% p.a. in recent years. Also, reports of A.C. Nielsen, the international research company, show that Latin America has been the fastest-growing region in terms of food consumption. Among 27 researched countries - 3,000 product categories - analyzed between 1987 and 1989, Latin America presented an increase of 15.4% in dairy sales for two years, compared to 3.4% in Europe, 2.1% in North America and 4.0% in the Pacific Rim. For sweets and confectionery the rates were 7.4%, 4.4%, 0.8% and 2.6%.

This new transnational positioning can no longer be considered typically fordist. The competition is not measured now by market extension but by intensity of consumption, particularly on increasing the added value of products. The First World consumer will always be motivated to consume since the products available fulfil the requirements of convenience, taste, appearance and quantity. The consumer will be eager to spend what is necessary in order to satisfy these requirements.

The former fordist companies were forced to change to face a global demand, by making large market extensions to cover differentiations by social segment and regional characteristics. Such transformations led to a new competitive pattern in the past two decades. This new environment has caused the mainstream theoretical framework to be re-examined.

Indeed, the cost theoretical transaction model does not suit the new production conditions. Given the agro-food system as a whole, the problem is not only to reduce transaction costs but also to regain **flexibility** and **quality**.

According to the original theory of transaction costs, such costs are necessary and implicit to move the productive system. Transaction costs are different from other costs of production, which are the basis of neoclassical theory. Williamson (1985) stated that transaction costs are the equivalent to friction in physics systems.

The absence of friction in any natural system is unrealistic. The same is true for an economic system. Transactions costs can explain why certain competitive structures were erected. In other words, transaction costs theory helps explain how economic agents behave in the search for friction diminutions, on their transaction costs. Verticalization is one of many strategies of cost reduction. Franchising, joint ventures and distribution agreements are further forms of the relationship between agents. However, all these related forms have the same characteristic: they are relatively stable and presume collaboration schemes between the agents.

Changes in supply orientation are transforming mass production into a differentiated and segmented production. The collaboration between agents tends to be extended and more permanent. Now the relationship between firms is not guided more by market mechanisms at all. Issues such as price, quality and delivery terms are discussed in parallel agreements. This might be said to be a new stage in the concurrence, given the collaboration between agents and having "a new paradigm based on solidarity between actors who work together in the same production wisdom that flows from demand to supply" (Green, Santos, 1992a, p. 209). This new solidarity paradigm is called network economy.

Using the example of Toyota's integration model, Williamson (1985) underlines that this company and its suppliers worldwide have a common development project. Despite common interests, the contract renovation between Toyota and its suppliers is not automatic. The Japanese company uses its power to promote competition among its suppliers that bears a frictional charge. The network economy model goes through a compromise model, unless it is unlikely that friction will be totally eliminated between agents.

As has been noted, another relevant difference between the network economy and the traditional model is that in the network the main concern is to improve the process as a whole. In improving the efficiency, the precedence of the inputs - the company's own inputs or those of external suppliers - matters less than the optimization of "the entire cost from different actors related to productive operation, and useless questioning on who is the capital's ownership" (Green, Santos, 1992a, p. 208).

The network economy paradigm holds a post-fordist rationale that touches directly on the performance of the agrofood system today. The changes in the agro-food system, due to consumer sophistication and low price elasticity, led to new forms of production without addressing the issues of cost reduction and scales of production. Nowadays, consumers' decisions are based on a thorough consideration of their needs. Consumers participate in a large number of food-related transactions every day. Having income and choice, consumers will spontaneously adopt a differentiated diet. In this context, the fordist diet lose out to alternatives like "healthy foods", "ethnic foods", and others.

These changes in the demand side affect the entire food chain, making a flexible adjustment in the production process. This shift occurs mainly in the following operations:

1. Food production procedures
2. The capital-labour relationship
3. Product circulation
4. The inter-companies relationship.

The effect of these changes in agriculture is widespread. In this sector the adjustment is prolonged and difficult, given that most innovation is outside agriculture. It has not yet been possible to customize agricultural products for commercial purposes. It is quite difficult producing animal or vegetable goods on a large scale regarding each market segment in a short period. Until now, agriculture has had marginal participation in the post-fordist dynamic. In general, product customization takes place in the industrial environment by means of bleaching and adding flavourings, regulators and many artificial preservatives. There are forms of product customization in the agricultural field, as well. However, most of these processes are considerably damaging to the environment.

Looking at industry as an organizational system, that productive solidarity means new organizational forms. The links between firms and agents are not fortuitous; they are limited to buying and selling. With production flexibility, third-party schemes in all manufacturing phases have become the norm. Third-party schemes involve mutual agreements of collaboration with shared responsibilities.

Given the increasing influence of demand on the manufacturing process and companies' segmented strategies, the distribution link becomes a critical element in the competition. By distribution, is meant not only retail and wholesale but also all services related to production such as marketing, advertising, customer service, etc. The importance of advertising in food, drink and tobacco sales cannot be underestimated. These producers are the biggest advertisers in Europe, the United States and Third World countries such as Brazil. Connor *et al.* (1985) estimates that in the 1980s the American consumer paid 10% more, on average, for companies' brand-name products just to cover the publicity cost.

It is in distribution that companies could employ, with advantages, the gains provided by new competitive circumstances. Food retailing, for instance, is linked directly with the consumer. Unlike segments, retailing has better conditions in which to assess consumer preferences and so change supply conditions when necessary in order to be competitive.

New information technology such as scanners and bar codes have given supermarkets the opportunity to evaluate their positions every day, using this information to take decisions. Nowadays, in developed countries, supermarkets can obtain

sociodemographic profiles of their clients, enabling them to estimate precisely their customers' purchasing habits. Decisions are then taken regarding suppliers, ticket prices, margins and promotions. Food retailing has recently reached a remarkable synergistic effect. From one side consumers provide more information on their preferences and, from the other side, the retailer puts on sale exactly what the consumer wants.

As a result of these supermarket advances, consumers increase their identification with point-of-sale and consequently with a private retail brand. Supermarkets' possibilities of penetrating the market through their private branded products are growing quickly. In the United Kingdom, where this process is more advanced, retailers have managed to get private brands to almost every consumer segment.²²

Given the simple technology involved in the manufacture of major foods, beverages and even tobacco, the production of these items is spread among many companies. Innovations are rare: most frequently, traditional products are simply submitted to new forms of presentation. Nowadays, any firm in the food business is able to reproduce, to the same quality, the majority of products made. In reality, what distinguishes one product from another is only the brand name. Not surprising, huge amounts are spent by companies for advertising and sales promotion to fix their brands in the consumer's mind. As Rama (1992b) demonstrates, the profits appropriation period is very short in the food industry. Most profits can be obtained immediately after the launch of a new product or a modified old product. Because of this peculiarity, the profit margins of monopolies are high and remain high for little time, until late comers companies penetrate this market.

In this respect, food distributors have an advantage. Through integration schemes with producers, large supermarket chains can sell their own brands that are of the same quality as top brandname products, but at cheaper prices. Retailers are linked to their industry suppliers and are able to replenish empty shelves within a few hours.

Statistics show a close relationship between supermarket concentration and the distribution of private brands. In most high - and medium - income countries, the ten largest supermarket chains share at least 50% of grocery sales. In these countries the own-brand process has progressed rapidly.

This link between supermarket concentration and private brands, however, might not be valid in the case for some countries. In Brazil, for instance, has very high supermarket concentration - in the late 1980s, the ten largest supermarket chains held 79% of sales - yet private brands strategy are almost non-existent (Rama, 1992a; Marion, 1985; Green, 1992b). On the one hand, this fact demonstrates that the power of industrial supplier companies is still very strong in countries like Brazil. On the other hand, it shows that both supermarkets and small to medium sized producers have not achieved any sort of integration in continuous terms.²³

22 Supermarkets in the United Kingdom lead in private brand sales. On average, U.K. supermarkets deal 30% of groceries' value by private brands. The presence of private brands in other European supermarkets as well as in the U.S., is around 20%. This British leadership can be explained in terms of sales concentration figures. In Britain the top five retailers have more than 60% of grocer sales, making it one of the most concentrated markets in the world. It is not possible to establish a positive correlation between market concentration and private brand penetration (Data obtained from the *Financial Times*, 15/06/93).

23 American supermarkets are an interesting case. There, the concentration is not as high as in Europe. The ten largest supermarkets have less than 40% of sales, and the penetration of private brands reached only 9% of total sales recently (see *Financial Times* 15/06/1993 and Marion *et al.*, 1985).

Given the large amount of inexpensive goods traded in supermarkets within a short time, the managing of logistic systems are critical. In France, investment in business information for retailing activities reached US\$ 4 billion in 1991.²⁴ That is why a new profitable business is emerging in developed countries: logistic services. According to Green (1992b, p. 53) this is one of the fastest growing businesses in France. In 1986, for instance, 31% of added value - 15,5% of final consumer prices - in the french food industry was held by logistic activities. According to these figures, in France, in areas such as frozen foods the logistic costs could mount up 40% of retail sales turnover.

All these elements combine to show that, in the early 1980s, the agro-food system entered into a new phase penetrated by post-fordist matters. The next section investigates the impact of these changes on Brazil.

4 BRAZIL: CRISIS AND RESTRUCTURING

In the last decade Brazil experienced an intense process of mergers and acquisitions in its food industry. Does this activity near that Brazil's food industry is undergoing a wide restructuring, or are the examples - as shown in Table II - merely sporadic cases ruled by transitory financial conditions?

For a long time Brazil has been seen as a land of opportunities. Particularly in the case of the food industry, Brazil has been considered a promising investment field due to its so-called comparative advantages. An emerging consumer market, vast sources of raw materials, and cheap labour contributed to this view. Nevertheless, after all the changes in the fordist paradigm regarding production and consumption, what are the future prospects for Brazil?

In terms of Brazil's market advantages, consider the following points:

- i) In the last ten years, Brazil has stagnated in terms of growth. Per capita income has declined and the poverty has advanced. Even in this depressed context, however, the food industry grew at a rate slightly higher than the population growth and consequently higher than the GNP-per-capita growth. The population grew 2.48% per year in the 1970s and dropped to 1.96% per year in the 1980s. Table III compares income growth with the performance of food and beverage sectors in Brazil in the recent years.

Note that the growth of the food and beverages industries had surpassed the growth of the GNP overall. The increase of these sectors in 1980-91 were 27.3% and 30.5%, respectively, compared to 25.1% of GNP and 23.8% of population. Moreover, particularly in the case of the food industry, performance is conducted in a counter-cycle pace with a one-year lag. When the economy goes down, the food sector decreases less than the whole economy. Alternatively, when the economy goes up this sector also increases relatively less. The common explanation for this phenomenon is the relative non-compressibility of food demand. Even with decreasing income, people have to feed themselves.

24 According to Green (1993) approximately half of bar-coded prepared points-of-sale in France did not exist three years ago in France.

Table III

BRAZIL: GNP, GNP PER CAPITA AND FOOD
AND KINDRED OUTPUT GROWTH
(1980-1992)

Year	GNP	GNP per capita	Food	Beverages
1980	9.2	6.8	8.0	7.0
1981	-4.5	-6.3	2.7	-7.4
1982	0.5	-1.4	0.9	0.9
1983	-3.5	-5.3	3.3	-5.0
1984	5.3	3.3	-0.7	-0.6
1985	7.9	5.9	0.2	11.0
1986	7.6	5.6	0.3	23.2
1987	3.6	1.6	4.9	-3.4
1988	-0.1	-2.1	-2.4	2.4
1989	3.3	1.2	1.3	14.7
1990	-3.9	-5.9	2.3	-1.3
1991	0.8	-1.1	4.9	1.5
1992	-0.1	-3.0	n. a.	n. a.

Sources: IBGE and FGV National Accounts.

Official statistics collected in the last national research study of households show that, in spite of high income concentration and social differences, the Brazilian market has considerable dimensions. Families earning yearly more than ten minimum salaries - approximately US\$9,600 per year - represent only 18.2% of Brazilian households, yet these families hold almost 60% of the National Income Available to Consume: nearly US\$180 billion. Given that, in this income level, families spend 25% of their income in food, both at home and outside the home, even considering the richest strata a market of US\$45 billion is created.

The highest income strata in Brazil dwell in urban areas, chiefly in the centre-south. This region holds 59.3% of the Brazilian household income. Here, one can see that the Brazilian market is concentrated in two ways: among families and among regions. To the food industry this is an adequate operation framework. In this environment, more value added products can be distributed to demand in a concentrated area. Moreover, given the consumer's urban and cosmopolitan profile, the openings created by new shopping and consume habits are much more advantageous.

- ii) The proximity of sources of raw materials resources has been kept in check by the food industry, basically in two forms: First, by the opening and widening of international agricultural trade, and second, by the inclusion of substitutes and alternatives to primary raw materials.

Regarding of agricultural trade, this is so far, a sluggish trend. Most agricultural trade is performed inside commercial blocs. Europe is self-sufficient in most of agricultural products. The United States has not only reached self-sufficiency but also consolidated its position as the largest agricultural exporter in the world in the last decade. The only member of OECD (Organization for Economic Cooperation and Development) that remains heavily dependent on agricultural imports is Japan, where the food self-sufficiency is very low, at nearly 40% (ABAG, 1993, p. 43).²⁵ For this reason, Japanese investment abroad in the food industry is high and has been concentrated basically in developing countries (Rama, 1992a).

In spite of the high Japanese domestic demand, there is no massive investment into sources of raw materials. Generally, producing food for export is not a priority strategy for transnational companies. Food production is still being characterized by its regional issues, as has been stressed before.

Curiously, the most visible trend in this area, is the recent entry of traditional traders in food production in developed countries. Because of the low profits obtained in international trade, many international companies are opening processing plants in Europe and Asian countries. Contrary to common sense, there is no defining trend within transnational investments. On the one hand, investments flooding towards new fields, looking for diversification in developing countries; on the other hand, there is also some investment in complementary areas of food production.

In the case of food products, it appears that since colonial times few things have changed. Developing countries are of interest only in terms of exporting irreplaceable tropical products. This is the main purpose for establishing factories near the sources of raw materials. However, because of protectionism by the wealthy - illustrated by quotas and preferential imports from former colonies - market expansion for these products is difficult and uncertain.

In global terms, proximity to sources of raw materials is not necessarily a competitive advantage regarding investment. This concept was related to geopolitics issues in the post-war environment, a period when shortages of food and raw materials shortage were seen as a constraint to companies' growth.

Regarding innovations within the agro-food System, however, the introduction of substitutes to natural products is only embryonic. Very few products or ingredients produced in a laboratory enter the market. Despite progresses in biotechnology based on genetic engineering, it is too soon to announce a new agricultural or agroindustrial revolution based on these techniques. In fact, in Schumpeterian terms, the few changes in the technological paradigm could not suggest new products or processes, or even cost reductions, in goods or services for the next decade (see Brown, Goldin, 1992).

There is an exaggerated optimism about the new technologies which suggest that they can create new products to substitute imports. Such products, if produced at competitive costs, could invalidate any natural advantages in the production of raw materials. In other words, natural products could be reproduced at convenience according to different market needs. In this scenario, countries like Brazil would lose their place in raw materials production and food supply to developed countries.

Any discussion of biotechnology's future is misplaced here, however. It is enough to point out that the gains provided by new biotechnology have not shifted

25 According to statistics of UNCTAD (United Nations Conference on Trade and Development) the participation of primary imports, including fuel, in total imports was 30.3% in Japan, in 1990. The average for the developed countries was 16.1%, in the same year.

the original production framework. It is important to distinguish between the traditional biotechnologies such as brewing and enzymatic processes and new biotechnologies based on genetic manipulation, tissue breeding and others. Brewing and enzymatic digestion have been long in the food industry. New biotechnology processes however, have added only a few products, contributing little to food producers' expertise. Nevertheless, the food industry is one of the sectors in which the new technologies were developing faster.²⁶

The radical change that is likely to take place is related to animal and vegetable genetics. New genetically engineered plants such as potato, cotton, tomato, tobacco and soya have already been tested in laboratories and might be introduced to the market very soon, given their better resistance to insects, viruses and even weeds. In the animal sector, efforts to obtain more resistant cattle specimens should be a reality in the short run, as should the introduction of the first transgenic fish. Nevertheless, there is a great uncertainty related to market acceptance of these products; consumer reaction will likely be negative. Also, the question of intellectual rights on these new products is still controversial (OECD, 1992; Goodman, Redclift, 1991; Wilkinson, 1992).

- iii) The cost of Brazilian labour is an important positive factor regarding comparative advantages. Despite the low quality of the labour force, reduced wages and the absence of industrial action have long been a key element in attracting long term foreign investment capital.²⁷

Contrary to common sense, the food, beverage and tobacco industries is changing towards more capital intensity.²⁸ According to Rama, in the United States labour in the food industry represents only 12% of total industrial costs, half the industrial sector average (1992b, p. 38). Nowadays, most of the processes used by the food industry require little manual work.

Given the sophistication of industrial procedures and the spillover of corporate strategies searching for superior market niches, factors such as low-cost labour have lost their former importance. In this new competitive phase, mass production with low costs as a fordist strategy gives way to quality and flexibility besides the productivity standards. In this new paradigm for the food industry, Brazil is in the early stage of transformation.

Low wages keep out of the market an important part of Brazilian population. This is another important labor-related aspect that does not fit even within the former fordist pattern. Mass consumption in Brazil is still restricted to parts of the population. Brazil is one of the biggest producers of soya beans, poultry and canned beef. Nevertheless, "low wages and regressive income distribution weaken the articulation between the production complex of animal grains and mass consumption" (Goodman, Redclift, 1990, p.164). More than 75% of soya beans are exported, causing integration to a fordist consumption pattern in other countries with a little internal integration. In this sense Goodman, Redclift (1991) regard Brazil, as well as Mexico, as a "proto-fordist" agro-food system.

26 We might estimate that for 1995-2000 horizon the most substantial advances would happen in traditional and conventional areas as new bacteria to enhance flavour and texture, enzymes, biocatalysis, biotests etc. (OECD, 1992).

27 In spite of the low wages, labour costs in Brazil are not so modest. Low labour productivity and multiple duties make the cost of production very high. Pension and union contributions turn this cost to more than 100% of salaries.

28 The links between these industries and agriculture articulates an important amount of labour.

Since the constitution of a common market, European countries have been doing their best to balance the power of purchase of their food consumers. Green, Santos (1992b) remarked that in Latin America, as a market, the opposite occurred. There are no regulations common to all countries, and transnational companies are not able to operate in such a heterogeneous market. Add to this the differences in legislation, consumption patterns and infra-structural and political instability and it becomes clear why international companies prefer to act in other markets.

5 CONCLUSIONS

The aim of this paper has been to discuss the main aspects of the restructuring of the worldwide food industry and its effects on Brazil. The food industry was one of the first industrial activities to be constituted in Brazil in the last century. Its development until the 1930s was noteworthy for the import substitution process regarding the increasing urban population. The origin of this first development phase has been identified with the links between the hegemonic agrarian and mercantile capital sources. At this time, most of the equipment and machinery involved in manufacturing were imported, and so enchainment power within the sectors of industry was weak.

From the 1920s, the food industry grew and became an important target of foreign investment. The Brazil's natural advantages and its huge emerging market have attracted an entire cluster of light industries. In the 1950s, with the establishment of industries in capital and intermediate-goods, and with agricultural modernization, modern food production began in Brazil.

Contributing to this progress was the spread of a consumption pattern similar to that in developed countries, with the so-called fordist diet as support. Among many elements of this second phase of Brazil's food industry were mass production, the growing number of women engaged in the labour market, the introduction of home appliances, and new consumer habits.

Despite the large numbers of urban consumers incorporated into the market, the fordist strategy has not taken hold in Brazil. Unlike in other countries in which non-durable production was the basis of subsequent industrialization, in Brazil this process remained inconclusive. The official policy depressing salaries and the uneven income distribution obstructed the permanent market expansion. At the same time, a spurious competitiveness was established emphasized by the high levels of external protection.

From the 1950s the industrial policy emphasis had shifted towards production of durable goods, leaving the non-durable as a non-priority investment area. Economic plans of that time touched only marginally on non-durable goods as a particular target of government incentives. Without taking firm root, food production continued to expand, in absolute terms, towards medium- and upper-class consumers or, alternatively, towards foreign markets.

The mid-1980s saw many changes in ownership positions in the food industry. New sources of capital emerged, mergers took place and new forms of relationship between companies and their market developed in Brazil. Given the restructuring process in the food industry, is this activity does Brazil only reflect changes in developing countries or do they represent an initial step for a new industrial phase?

Such activity in developed countries is very different in the quality from that which took place in Brazil in recent decades. The food industry in developed countries is gradually abandoning the fordist consumer pattern to adapt to a new reality. The dynamic element that drives this new phase is on the demand side, mostly in the food distribution link.

The market power of the big food retailing chains is being used in Europe and the U.S. to shape and reinforce new consumer habits. Facing a considering saturated and non-permeable market, retailers and industry have succeeded in segmenting consumer preferences. Recent profit margins of industry and retailers are very impressive. Having failed to widen the consumer base with price reductions, companies instead tried to deepen the consumer base. To this end, remarkable innovations - technical and organizational - were made to establish a so-called network economy.

The Brazilian market is affected in negative and positive ways by restructuring of the worldwide food industry. There are significant temporal factors such as economic instability and low external opening that hamper the attraction of new foreign capital to Brazil's food sector. Nevertheless, the same transitory circumstances seem to have encouraged the acquisition of new assets in Brazil. Low acquisition prices and an economically depressed framework are attracting many investors to the food sector. In addition, Brazil's relaxed fiscal environment and healthy legislation are favourable points to new entries in sector.

Nowadays, new foreign investors and new national companies entering the field are benefiting from joint venture schemes or cooperation agreements in the food sector. These are only small in the observed search for greater efficiency in production and distribution. Brazil is a long way from reaching a new post-fordist production paradigm. Given the evident trends, however, it is clearly headed in that direction.

6 BIBLIOGRAPHY

- ABAG. *Segurança alimentar: uma abordagem de agribusiness*. São Paulo : ABAG - Associação Brasileira de Agribusiness, 1993.
- BEHRMAN, J. N. *Industrial policies: international restructuring and transnationals*. Lexington : Lexington Books, 1984.
- BROWN, M., GOLDIN, I. *The future of agriculture: developing country implications*. Paris : OECD, 1992.
- BURBACH, R., FLYNN, P. *Agroindústria nas Américas*. Rio de Janeiro : Zahar, 1982.
- BURNS, J. A synotic view of food industry. In: ----, McINERNEY, J., SWINBANK, A. (eds.) *The food industry: economics and politics*. London : Heinemann, 1983.
- CANDAL, A. *Industrialização brasileira: diagnóstico e perspectivas*. Slp : Scept, 1977.
- CANO, Wilson. *Raízes da concentração industrial no Brasil*. São Paulo : T. A. Queiroz, 1977.
- CONNOR, J. M. et al. *The food manufacturing industries: structure, strategies, performance and policies*. Lexington : Lexington Books, 1985.
- FANFANI, R., MONTRESOR, E. Filière, multinazionali e dimensione spaziale nel sistema agro-alimentare italiano. *Rev. La Questione Agrária*, Milano, n. 41, 1991.

- GATTO, Francisco, GUTMAN, Graciela E. El Sector agroalimentario Argentino. In: GUTMAN, G. E., GATTO, F. *Agrindústrias en la Argentina*. Buenos Aires : CEPAL, 1990. p. 17-43.
- GOODMAN, D., REDCLIFT, M. The farm crisis and the food system: some reflections on the new agenda. In: MARSDEN, T., LITTLE, J. (eds.) *Political, social and economic perspectives on the international food system*. Aldershot : Aveburry Gower, 1990. p. 19-35.
- , ----. *Refashioning nature: food, ecology and culture*. London : Routledge, 1991.
- GREEN, Raúl H. Estratégias e câmbios organizativos de los grupos alimentarios frente al Mercado Único Europeo. In: ZUÑIGA, Manuel Rodriguez (ed.) *El sistema agroalimentario ante el Mercado Único Europeo*. Madrid : Ministério de Agr. Pesca y Alimentación, NEREA, 1992a. p. 35-58.
- . A Rigor di logistica. *Rev. Agricoop.*, v. 22, n. 10, nov./dez. 1992b.
- . *Principais tendencias de la restructuración del sistema alimentario mundial*. Paris : INRA, 1993.
- , SANTOS, Roseli Rocha dos. Economia de red y restructuración del sector agroalimentario. *Rev. Des. Economico*, Buenos Aires, v. 32, n. 126, p. 199-225, jul./sep. 1992a.
- , ----. *Las multinacionales alimentarias y la evolución del sistema agroalimentario mundial*. Paris : INRA, 1992b.
- ILO/UN. *The social effects of technological developments in the food and drink industries, including those arising from new production methods and the need of training and retraining*. Food and drink industries committee. Geneve : ILO/UN, 1984.
- KAGEYAMA, A. et al. O novo padrão agrícola brasileiro: do complexo rural aos complexos agroindustriais. In: DELGADO, G. C. et al. *Agricultura e políticas públicas brasileiras*. Rio de Janeiro : IPEA, 1990. p. 113-221. (Série IPEA n. 127).
- LE RESTAURATION collective en Europe. *Restauration Magazine*, n. 267, 7 May 1993.
- MARION, B. W. *The organization and performance of the U.S. food system*. Lexington : Lexington Books, 1985. (Report NC 117/USDA).
- MAUNDER, P. Competition policy in the food industry. In: BURNS, J., McINERNEY, J., SWINBANK, A. (eds.) *The food industry: economics and politics*. London : Heinemann, 1983.
- MULLER, G. *Estrutura e dinâmica do complexo agroindustrial brasileiro*. São Paulo, 1980. Tese (Doutorado) FFLCH/USP.
- . *O Complexo industrial brasileiro*. São Paulo : FGV, 1981. (Research Papers n. 13).
- "NIELSEN AVALIA mercado internacional e destaca potencial latino americano". São Paulo : Report Nielsen Serviços de Marketing, 1990.
- OECD. *Biotechnology, agriculture and food*. Paris : OECD, 1992.
- PADIS, P. C. Agricultura e Subdesenvolvimento. In: ---- (org.) *América Latina: cinquenta anos de industrialização*. São Paulo : Hucitec. 1979. p. 219-241.
- PEREZ, R., ONCUOGLU, S. Les opérations structurelles des grands groupes agro-alimentaires. *Economie et Gestion Agro-Alimentaire*, Paris, n. 17, oct 1990. p. 26-32.

- PIRES, Eginardo, BIELSCHOWSKY, Ricardo, FIGUEIREDO, C. Maria Poppe. *Dois estudos sobre tecnologia de alimentos*. Rio de Janeiro : IPEA/INPES, 1978. 120 p.
- PRADO Jr., Caio. *História Econômica do Brasil*, 12 ed. São Paulo : Brasiliense, 1970.
- RAMA, Ruth. *Investing in food*. Paris : OECD, Development Centre, 1992a.
- . Tecnologia endógena, tecnologia exógena. In: ZUÑIGA, M. R. (ed.) *El sistema agroalimentario ante el Mercado Único Europeo*. Madrid : Ministério de Agr. Pesca y Alimentación, NEREA, 1992b. p. 59-79.
- RASTOIN, J. L., ALLAYA, M. C. Les multinationales de l'agro-alimentaire à la fins des annés 80: l'imperatif de la mondialisation. *Rev. Econ. et Gestion Agro-Alimentaire*, n. 17, oct. 1990. p. 21-25.
- RITSON, C., GOFTON, L., McKENZIE, J. *The food consumer*. Chichester : John Wiley & Sons, 1986.
- TAVARES, M. C. Auge e declínio do processo desubstituição de importações no Brasil. In: *DA SUBSTITUIÇÃO de importações ao capitalismo financeiro*, 6. ed. Rio de Janeiro : Zahar, 1977.
- . Ajuste e reestruturação nos países centrais. *Economia e sociedade*, Campinas, n.1, ago 1992. p. 21-58.
- WILKINSON, J. La biotecnología y el sistema agroalimentario: impactos en la reorganización de las fases de producción y transformación. In: ZUÑIGA, M. R. (ed.) *El sistema agroalimentario ante el Mercado Único Europeo*. Madrid : Ministério de Agr. Pesca y Alimentación, NEREA, 1985. p. 81-110.
- WILLIAMSON, O. E. *The economic institutions of capitalism: firms, markets, relational contracting*. New York : The Free Press, 1985.
- ZUÑIGA, M. R., GUTIERREZ, R. S. La articulación de las diferentes etapas del sistema agroalimentario: situación y perspectivas. In: ZUÑIGA, Manuel Rodriguez (ed.) *El sistema agroalimentario ante el Mercado Único Europeo*. Madrid : Ministério de Agr. Pesca y Alimentación, NEREA, 1992. p. 15-34.