ESSAYS ON THE ARGENTINE POLITICAL ECONOMY THROUGH THE LENS OF THE CLASSICAL-KEYNESIAN APPROACH

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GLOSSARY OF SYMBOLS

p	*Price of Production*
p_t	*Price of Production at moment* t
p_T	*Price of Production of a Tradable Good*
p_{NT}	*Price of Production of a Non-Tradable Good*
p_i^S	*Supply Price of Commodity* i
p_i^S	*Demand Price of Commodity* i
p_i^*	*International Price of Commodity* i (*denominated in International Currency*)
$\dot{p}$	*Inflation or Price Growth Rate*
a_{ij}	*Technical Coefficient of Domestically Produced Input* i *in the Production of Output* j
l_j	*Technical Coefficient of Labour in the Production of Output* j
η, μ	*Technical Coefficients of Imported Inputs*
w	*Nominal Wage*
$\dot{w}$	*Wage Variation Rate*
w/E	*Wage in Foreign Currency*
ω	*Real Wage or Number of Wage Baskets purchased by the Nominal Wage*
c_i	*Participation of commodity* j *in the Wage Basket*
ω^d	*Desired Real Wage by the Working Class*
r	*Domestic Profit Rate*
r^*	*International Profit Rate*
$\dot{r}$	*Profit Variation Rate*
i_b	*Domestic Riskless Interest Rate*
i^*	*International Interest Rate*
i	*Riskless Interest Rate Variation*
σ_k	*Risk-Premia of Productive Activity in Sector* i
σ_E	*Risk-Premia of Devaluation of National Currency*
ρ	*Return Rate for Carry Trade Operations (The Financial Rent as a positive difference between Domestic Interest Rate and Foreign Indebtedness Cost)*
E	*Nominal Exchange Rate*
E^{Exp}	*Expected Exchange Rate*

E^{Sch} *Scheduled Exchange Rate*

$\dot{E}$ *Exchange Rate Variation*

E/w *Exchange Rage in terms of Wages*

ϵ *Real Exchange Rate*

τ_j *Protective Duties on sector j or Taxation Rate on Agrarian Exports*

s *Subsidy Rate*

Q_j *Level of Product at sector j*

C_j^w *Labour Force's Consumption in Wage Commodity j*

I_j *Investment or Capacity Creating Expenditure at sector j*

G_j *Public Spending Oriented to Purchase Commodity j*

X_j *Exportation or External Effective Demand at sector j*

M_j *Importation of input/output j*

R_j^* *Profit Remission to Central Economies from those who command Sector j*

TD *Trade Balance Deficit*

KK *Capital Account Result*

BP *Balance of Payment Result*

D^* *External or Foreign Currency denominated Debt*

g *Social Product Growth Rate*

g_j *Product Growth Rate at Sector j*

δ *Relation External Debt Services to foreign currency denominated Exports*

INTRODUCTION

This Ph.D. thesis is composed of three essays and aimed to reconstruct, both conceptually and analytically, the Argentine political economy for the period 1955 to 2001. To this purpose, we apply theoretical elements rooted in the Sraffian-Keynesian tradition of thought, such as the extension to the open economy framework of Sraffa's representation of the productive process, the monetary and financial theory of distribution and the demand-led growth model based on Sraffian Supermultiplier. However, unlike recent partial reconstructions of Latin American specificities through the lens of the Classical-Keynesian Approach, in these essays we provide a systematic formal representation of the Argentine historical experience and abandon the canonical dichotomy between agricultural and industrial sectors in representing semi-industrialized economies. To account for the different stages of the industrialization during the fifties and sixties we include, instead, a distinction between manufactures of consumptions and industries that produce capital goods. Likewise, the inclusion of banks and the financial sector becomes relevant to address financial liberalization and capital-account deregulation during the seventies. An intrinsic non-tradable sector, associated with public services, turns to be relevant to capture the consequences of privatization during the nineties. The suggested models take into consideration the heterogeneities among productive sectors, as the natural outcome of the structural changes observed during the period under study.

The 1st essay, presented at *Chapter I* and titled "*An analytical reconstruction of the O'Donnell's Argentine Pendulum (1956-1976) through the lens of the Classical-Keynesian Approach: an Analytical Reconstruction of the O'Donnell's Argentine Pendulum (1956-1976)*", provides a comprehensive analysis regarding some contributions made by the political theorist Guillermo O'Donnell, which revolve around the notions of the Argentine Pendulum, Bureaucratic-Authoritarian State, and their implications on income distribution and output dynamics in Argentine economy. Under the basis of a tripartite productive structure, O'Donnell's pendulum is formally reconstructed as the ambivalent behavior of the international bourgeoisie with respect to its strategy of class alliance for the determination of both economic policies and the pattern of development.

Additionally, it is necessary to stress that first essay is in nature different from the other essays. While the former's main contribution is oriented in the formal reconstruct O'Donnell's thoughts (an author that has not been analyzed in the light of Surplus Approach), the second and third essays try to formally reconstruct the Argentine political economy in the light of the Classical tradition, after having revisited contributions in the understanding of the historical periods under consideration.

Chapter II is entirely dedicated to the 2nd essay, named *"Prices, Distribution and Accumulation in an Economy with Technological and Financial Dependences through the lens of the Classic-Keynesian Approach: A Formal Reconstruction of Argentine Political Economy (1973-1983)"*. This section analytically re-elaborates the change undergone by the Argentine economy, from a strategy of imports-substitution industrialization led by a labor-based government (1973-1976) to another pattern of development based on market liberalization promoted by a Dictatorial Regime (1976-1983). The reconstruction emphasizes the political activation of the labor movement during the popular government as a trigger for the reaction of the capitalist class against the pattern of industrial development and for the pressure to impose an agrarian-exporter pattern. The structural reforms reinforced the dependent nature of the Argentine economy, strengthening the external determinants of the income distribution. The model highlights the deregulation of the short-term capital movement jointly with the huge increase of foreign currency nominated debt, which implied the time-horizon extension of the international means of payment scarcity and the impossibility to implement foreign-currency consuming expansive policies.

Finally, the 3rd essay, titled "*Inflation and Stabilization Experiences in Argentina through the lens of the Classical-Keynesian Approach: The Austral and Convertibility Plans (1985-1991)*", revisits the cost-pushed theories of inflation to reconstruct the dynamics observed in prices and income distribution. The suggested model stresses the role played by the exchange rate and crawling-peg policy in approaching the high inflation and hyperinflationary experiences during the eighties external-debt crisis. Additionally, the two main stabilizing programs are analyzed and formally described in the light of the Classical-Keynesian Approach, highlighting the importance of the exchange rate and external determinants in stabilizing price dynamic. In this sense, the Convertibility Regime, during the nineties, is analyzed as a strategy to control the price dynamic by reinforcing the financial dependence of Argentine economy.

1 CHAPTER I

PRICES, DISTRIBUTION AND ACCUMULATION IN A PERIPHERAL ECONOMY THROUGH THE LENS OF THE CLASSICAL-KEYNESIAN APPROACH. AN ANALYTICAL RECONSTRUCTION OF THE O'DONNELL'S ARGENTINE PENDULUM (1956-1976)

The chapter presents a comprehensive analysis regarding some contributions made by the political theorist Guillermo O'Donnell, which revolve around the notions of the Argentine Pendulum, Bureaucratic-Authoritarian State, and their implications on income distribution and output dynamics in Argentine economy. By applying the Sraffian representation of the productive structure and the Keynesian Principle of Effective Demand in formalizing the Argentine alternance of development strategies, the chapter identifies compatibilities among theoretical elements rooted in the Latin American Structuralist tradition and the Classical-Keynesian Approach. The novelty of the chapter refers to the abandonment of the canonical dichotomy between agricultural and industrial sectors in representing semi-industrialized economies. Within the industrial sector, the suggested model distinguishes the firms that provide manufactured goods for final consumption from the capital goods producing sector, capturing sectorial heterogeneities and tensions within capitalist class during the process of deepening Argentine industrialization (1955-1976). Under the basis of a tripartite productive structure, O'Donnell's pendulum is formally reconstructed as the ambivalent behavior of the international bourgeoisie with respect to its strategy of class alliance for the determination of both economic policies and the pattern of development.

I. Introduction

In the Latin American Structuralist tradition, the so-call Stop & Go cycles refer to the historical experience of interaction among output dynamics, income distribution and the Balance-of-Payment for Latin America, in general, and for Argentina, in particular. Under the Bretton Woods regime (when movements of short-term financial capital were highly regulated), the flow of trade was identified as the main link through which external sector constrains the dynamics observed in accumulation and distribution of semi-industrialized economies. Thus, periods of increasing growth rate, full-employment output, low inflation and increases in real wages coincide with persistent balance-of-trade deficits, while the subsequent period is characterized by balance-of-

trade surplus generated through significative decreases in growth rate, high unemployment, low real wages and persistent inflation.

Based on previous Latin-American Structuralist explanation[1] for this cyclical dynamic, in "*State and Alliances in Argentina, 1956-1976"*[2], the political scientist Guillermo O'Donnell presents the history of those movements in terms of the alternation of poly-class alliances with respect to the domination of the State. In this sense, the author distinguishes the dominant alliance between the *oligarchic-agrarian bourgeoisie* and the *international-oligopolistic bourgeoisie,* during the *Contractive Pendular Movement* (hereafter CPM), from the alliance that unites the latter capitalist fraction with the *urban-domestic bourgeoisie* and popular class, during the *Expansive Pendular Movement* (hereafter EPM). In explaining the *Stop & Go cycles*, O'Donnell highlights the pendular behavior of *oligopolic-international bourgeoise* in his alliances strategies and interprets it as the repeated failure in turning its economic *predominance* into a political *domination.*[3]

Even though the Structuralist explanation of Argentine *Stop & Go* dynamic has been recently formalized through the lens of the Classical-Keynesian Approach (cf. Crespo & Lazzarini, 2015; Dvoskin & Feldman, 2015, 2017a, 2017b), O'Donnell's (1978a) contribution has not been reconstructed in the light of the latter theory. The formalization provided here constitutes an attempt to capture the tensions at the productive structural level in order to reconstruct the rational foundations of the ambiguous behaviour under which the O'Donnell's Pendulum is based. In this sense, the suggested model applies Argentine productive and institutional singularities into the *Production of Commodities by means of Commodities* framework.

In O'Donnell (1978a), two elements are used as drivers of conformation of the strategies that result in pendular dynamic of the *international Bourgeoisie*. The first element is related to the low technical requirement of industrial capital goods by the agrarian method of production under the cost-minimizing technique. In a context in which full specialized agrarian economy is induced by *laissez-faire* trade policies, the latter implies the eventual disappearance of the effectual demands for the productive process ruled by *international bourgeoisie*. The second element is related to the increasing effectiveness of popular class in imposing policies defined according its economic interests, when its class alliance with *urban national* and *international bourgeoises* implements interventionist trade policy to diversify the productive structure.

The chapter is structured in the following sections. The first one describes the main features of the productive processes that constituted the economic structure and characterizes the social

[1] Cf. Ferrer (1963), Braun & Joy (1968), Braun (1970,1973), Diamand (1972, 1978), Villanueva (1972), Brodersohn (1974), Díaz-Alejandro (1975), Mallon & Sourrouille (1975) y Canitrot (1975).
[2] A first version of O'Donnell's article was presented in Spanish for the Conference on "The State and Economic Development in Latin America", Cambridge University, December 12-16, 1976.
[3] Cf. O'Donnell (1978a), p. 20.

classes (and their fractions) involved through them. The second section presents the production prices equations, the relation among productive sectors in the open-economy framework and, finally, the model determining both the level and the growth path of the social product. Based on the suggested formalization, the following section continues in explaining the ambivalent behaviour of the *oligopolistic-international bourgeoisie* by distinguishing the CPM from the EPM. The main features and limits of the institutional arrangements that crystallize the class-alliances are also presented in the third section. Finally, the main conclusions can be found in the final section.

II. O'Donnell's Pendulum: Productive Sectors, Classes and Political Alliances in Argentina, (1956-1976)

In O'Donnell (1978a), the Argentine capitalist system is represented by means of an arrangement between productive sectors, social classes and political alliances. Based on this representation, the author describes a dynamic characterized by the continuous pendular movement in output growth, distribution and international trade during the period 1956-1976. This section approaches the distinctive elements of each productive sector as well as the social classes and fractions that were related in the production processes. Finally, a synthesis of O'Donnell's (1978a) contribution is presented.

Regarding the productive sectors, the feature shared by all of them is the organization around capitalist productive relations[4]. In other words, those individuals that only own their physical and intellectual labour force put themselves under the command of those who enjoy the proprietary rights of the means of production, receiving in exchange a monetary remuneration. Despite this similarity, three separated productive sectors are distinguished in O'Donnell (1978a).

On the one hand, the sector specialized in the production of capital goods has been deliberately developed during an advanced stage of the diversification process of the productive structure, in which international capital has been called to play a central role for the *deepening of industrialization*. Three main distinctive features characterize the capital good industrial sector:

i) *Technical Dependence*[5]: the productive method, associated to the cost-minimizing technique, includes means of productions that have been produced abroad and, therefore, being imported. The Latin American Structuralist School identifies such necessity as a distinctive feature of peripheral economies. The technical dependency generates the

[4] *Ibidem*., p. 22.
[5] Cf. Tavares (2000), Dvoskin & Feldman (2018)

insensitivity of production costs expressed in foreign currency with respect to devaluation policies.[6]

ii) The commodities produced by the sector are inputs. Hence, they are not directly included in the wage basket.[7]

iii) For growth rates being higher than those expected, the capital good sector shows greater accumulation rates than those observed at the non-capacity creating sectors. Such sensitivity to the effectual demand for capital is explained by the attempts of capitalists to restore the desired degree of capacity utilization.[8]

A second productive sector refers to the production of manufactured goods for final consumption. Having been developed in an early stage of the industrialization strategy (1930-1955)[9], its *effectual demand* grew as the result of the inclusion of manufactured goods in the *normal* wage basket, during the Peronist government (1945-1955). It is necessary to stress three main characteristics.

i) The sector produces *basic commodities*, since manufactured goods for final consumption enters indirectly in all productive processes through the labor force reproduction.

ii) The sector was settled at the urban space, where its main mean of production and its source of *effectual demand* was located, i.e. the working class.

iii) *Technical Dependence*: the productive method, under the cost-minimizing technique, requires imported inputs as a result of an unfinished industrialization process.

Lastly, the third sector refers to the productive processes of agricultural goods for final consumption, e.g. beef cattle and cereals. Such sector constitutes one of the distinctive features of Argentine economy, because of the singularities of the so-call "*estancia*" as a method of production. Unlike other regimes (e.g. plantation, *haciendas*), this productive organization is characterized by the following elements:

i) An extensive use of land. The latter implied covering huge extensions of geographical areas by the so-called agrarian-exporting model, inducing greater homogeneity within the national frontiers in comparison to the rest of Latin American economies.

ii) A low level of labour technical requirement and no-inclusion of capital goods in the productive method under the *normal* technique are others essential feature of the

[6] According to O'Donnell (1978a), devaluations have negative impacts on the production costs of capital goods expressed in foreign currency. However, the high participation of imported inputs implies that such decrease is smaller than the one observed in the agricultural sector, where no dependence on the importation of means of production is assumed.

[7] N.B. the capital goods sector constitutes a basic commodity provider, since its products indirectly enters in the wage commodity by offering inputs for manufactured goods for final consumption.

[8] For a further approach of the notion of *normal* or *desired capacity utilization,* see Ciccone (1986), Kurz (1992) and Gargenani (1992).

[9] Cf. O'Donnell (1978b), p.9.

agricultural sector. The author justifies the independence viability of the agricultural sector with respect to the rest of the productive sectors as the result of its technological backwardness and the unsuccessful attempts to convert the *Pampean* "*estancias"* into an *agribusiness regimen*.[10] The latter characterization of the *estancias* regime emphasizes the productive dissociation between agrarian and urban economic activities as being at the very root of the heterogeneous interests within capitalist class.[11]

iii) Contrary to others land ownership regimes, the "*estancia"* favoured the inception of national aristocracy. Because of the low technical requirements of the method of production activated in the agricultural process under the cost-minimizing technique, there was no necessity to involve an *oligopolistic-international bourgeoisie*. Then the control of land was left in the hands of a domestic upper class.

iv) The agrarian sector has been persistently competitive in the international market and in the traditional foreign currency provider.[12]

Having described the essential features of the Argentine productive structure during the middle of the XXth Century, a characterization for social classes, their internal fractions and alliances will be provided below.

Regarding the *popular class*, O'Donnell pointed out the absence of a peasant mass and, therefore, the high participation of workers in comparison with other Latin American societies. In this sense, the homogeneity of the popular class will promote cohesion in the defence of working class' interest. i.e. increases in the volume and composition of the wage basket and the achievement of full employment output level. The uniformity of material interests also enables the formation of institutions that endowed Argentine popular class with an unusual bargaining power compared to other peripheral economies, e.g. *General Confederation of Labour*.[13]

Another important characteristic of *popular class* stressed by Structuralist theorists is due to the high participation of exported agricultural commodities in the wage basket. Unlike the manufactured good for final consumption, agricultural commodities have been, since ever, a traditional component of the basket needed to reproduce labour force, because its necessity in the most physiological sense. According to O'Donnell, the high participation of the exported commodity in the wage basket is at the very root of the interest shared by working class and the urban-national bourgeoise in defending the purchasing power of wages in terms of pampas

[10] The productive dissociation of the agricultural sector is explained in O'Donnell (1978a) by the high volatility of the relative prices. According to the author, the lack of persistence in agricultural and livestock prices stimulated several attempts to use the differential land tax based on its potential production, emulating the case of other Latin American economies where the subjection of the regional economies to the modernization policies from the State (totalized by a large urban bourgeoisie) had the expected results.
[11] Cf. O'Donnell (1978a), p.22.
[12] Cf. Frenkel & O'Donnell (2008 [1978]), p.112.
[13] Cf. O'Donnell (1978a), p.27.

products and the domestic demand for manufactured goods against the recessive effects associated to every rise in the relative price of agrarian goods.

The *bourgeoisie* is the second fundamental social class inherent to capitalist relations of production. This social class is constituted by those who, having advanced the capital to purchase the means of production consumed, rule the productive process. The *bourgeoisie*'s interest is oriented toward both the increase of the profit rate and the social discipline[14]. O'Donnell identifies three fractions in Argentine *bourgeoisie*:

i) The *oligopolistic-international bourgeoisie* (the so-called *strong fraction*) commands the productive sector of capital goods through the transnational corporation's subsidiaries. On the one hand, the characterization as an *oligopolist fraction* is explained by its connection with the technological frontier determined by central economies and the key role that has been called to play during the advanced stage of Argentine industrialization by the *developmentalist* administrations. On the other hand, the *international* feature of this fraction refers to its subordinated relationship with the capitalist class of industrialized economies. The economic predominance of this *fraction of the urban bourgeoisie* can be derived because of the latter description. By controlling the production processes of basic commodities under non-competitive conditions, it has the capacity to asymmetrically influence the technical conditions of industrial sectors. [15]

   In addition to the rise of the profit rates, the aim of the *oligopolistic-international Bourgeoisie* is to reproduce and expand dependency, since the creation of a "*State of Confidence"* and free remission of profits is a necessary condition imposed for being involved in the industrialization strategy. The Argentine Industrial Union could be identified as the institutional arrangement that embodies this capitalist fraction.

ii) The *urban-national* (also referred as *weak fraction*) *bourgeoisie*: It can be understood as the capitalist fraction that rules the productive process of manufactured goods for final consumption. For the period analysed, it was composed by Argentine residents, non-having access to the methods required for the domestic production of capital goods nor to the international financing to advance the capital required in basic industries[16]. Its origin is related to the commercial activities in urban areas during the agrarian exporter economy. However, it was only during the application of protectionist trade policies (by popular government) when the growing command on the urban productive sector

[14] Cf. Kalecki (1943), p.3.

[15] In reviewing the approach that economic theory has given to power relations, Kurz suggests the possibility of a close connection between those who have the ability to influence the behaviour of other agents, and those who rule the productive processes of basic goods, i.e. those that can directly or indirectly influence the condition of production of all the goods that are part of the social product. Cf. Kurz (2018), pp. 13-14. In this sense, the distinction between *basic* and *non-basic* commodities allows to identify an asymmetric power relation among capitalists.

[16] Cf. O'Donnell (1978a), p.21.

endowed them with the political institutions to defence their material interest. The increasing power of the urban-national fractions of capitalist class during such popular experience will induce them (jointly with working class) to identify in Peronism the political movement that includes their interests in the party's agenda. Finally, the General Economic Confederation was the institution that represented its material interest, associated with orienting the public purchasing power to the productive sector commanded by this fraction of national bourgeoisie.

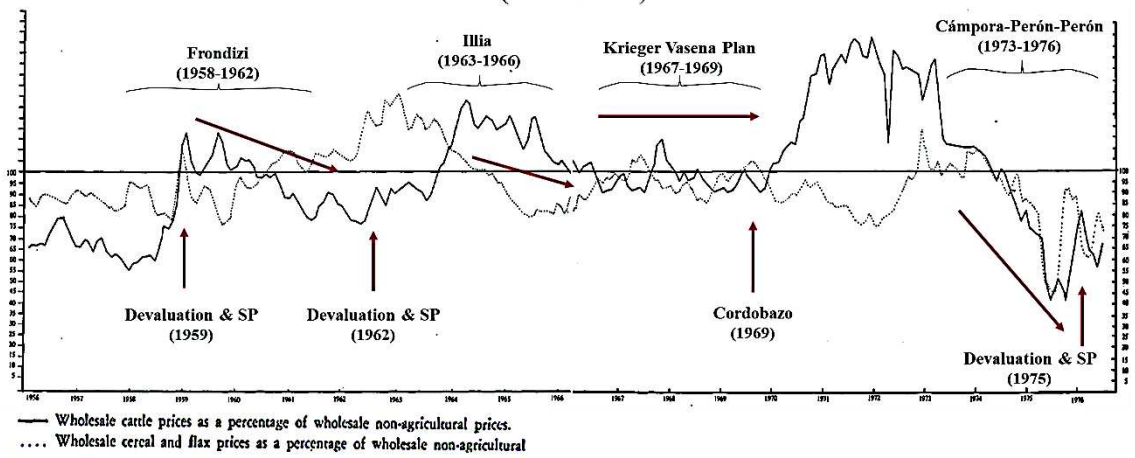
iii) The agrarian (also called *oligarchic-Pampean*) bourgeoisie: The origin of this capitalist fraction is related with the accumulation of differential rent generated by the landlords, during the agrarian-exporting regime (1880-1930), when the latter class enjoyed both the economic predominance and political domination by means of a Liberal State. Their bourgeois becoming meant the deepening of capitalist relations in the agricultural sector. The Argentine Rural Society rises with the representation of its objective interests, this is, in addition to the rise of the rate of profit (therefore, the fall of wages in foreign currency), the agrarian Bourgeoisie pushes for the recovery of its economic predominance by means of recovering the full productive specialization in primary goods and the political domination.

Based on these productive sectors, social classes and its factions, O'Donnell (1978a) approaches the peculiarities taken by the political order in Argentina from 1956 to 1976. In this sense, two propositions are provided in studying the long-term tendencies which link the conjunctures with the historical process.

According to the first proposition, the traditional *Stop & Go* cycles can be conceived in terms of the history of a pendular alternation between two class alliances regarding the determination of economic policies[17]. Therefore, during the phase characterized by low relative prices of agricultural goods, increases in real wages, protectionist trade policies, increased public spending and current account deficit (called *Expansive Pendular Movement*. EPM, hereafter), a class alliance between the *international Bourgeoisie*, the *national-urban Bourgeoisie* and the Popular Sector ruled the State and determined the economic policies. While during the subsequent phase, with high relative prices in favour of agricultural goods, low real wages , *laissez-faire* trade policies, fiscal austerity and current account surplus (denominated as *Contractive Pendular Movement*, CPM, hereafter), the political order is ruled by a coalition between the *international bourgeoisie* and the *agrarian bourgeoisie.*[18]

[17] *Ibidem,* p. 29.
[18] *Ibidem,* p. 33.

Relative Prices in Argentina
(1956-1976)



Source: O'Donnell (1978a), pp.30-31

Figure 1

Figure 1 presents the variation in relative prices from which O'Donnell raises the pendular dynamic of distribution during in Argentina the two decades of Industrialization by Imports Substitution. The figure shows the change of both cattle and cereal wholesale prices as a percentage of non-agricultural wholesale prices. There, simultaneous increases account for devaluations of national currency caused by balance of payments crisis, while declining trends can be understood as the impact of policies in relative prices in favour of the industrial fractions of the capitalist class and increasing the purchasing power of wages, since the high share of agricultural commodities in the wage basket.

The second proposition refers to the persistence influence of the *international bourgeoisie* in the determination of the economic policies and its ambivalent behaviour with respect to the strategy of alliances as the root of the exhaustion of one movement and the inauguration of the subsequent one. According to O'Donnell, such pendular strategies can be though as the result of the incapability in turning the economic *predominance* of the international fraction of the capitalist class into a political *domination*[19]. While the first notion refers to the technological and financial advantages already specified in the characterization of the *oligopolistic-international bourgeoisie,* the latter considers the incapability of this capitalist fraction to impose a stable political order based on the cohesion of the capitalist class around the material interests of the *strong fraction of the urban bourgeoisie* and the subordination of the popular sector, the so-called *Bureaucratic-Authoritarian* State (hereinafter BA State)[20].

[19] *Ibidem,* p. 37.

[20] O'Donnell presents the nature of the BA State by highlighting some essential features: i) The BA state is the organizer of a domination structure based on class subordination in favour of the international bourgeoise, ii) among the set of the State's institutions, there is a clear predominance of those that specialize in repression, e.g. the Armed Forces, iii) it is a political order aimed in the exclusion of the popular sector from the highest sphere of the State, iv) this institution

O'Donnell highlights two elements as drivers of the pendular strategies of the *international bourgeoisie*. The first element is related to the low technical requirement of the agrarian productive method under the cost-minimizing technique[21]. In a context in which full specialized agrarian economy is induced by *laissez-faire* trade policies, the latter implies the eventual disappearance of the effectual demands for the productive process ruled by *international bourgeoisie*, which is mainly productive associated with the manufactured producing sectors. The second element is related to the persistent coordination between the political forces of both the working class and the *urban national bourgeoises* (the so-called *Defensive Alliance*)[22].This national-popular agreement oriented to change relative prices to the detriment of the agrarian bourgeois faction set the basis for a change in the *international bourgeoises'* alliances, since the capitalist system is never threaten by the Argentine working class[23].

III. Modelling O'Donnell's (1978a) Systems of Prices, Quantities and Relations among Productive Sectors

An economic system is considered under the following assumptions:

1. The production of each commodity occurs synchronously in periodic cycles.
2. Only single production system is considered.
3. Money wages are paid *ante-factum* to each productive process, which are used to purchase a basket composed by agricultural and manufactured commodities for final consumption.
4. No alternative technique is considered.
5. Land is abundant and there is no reservation price associated with the marginal land. Absolute rent of land is not considered.
6. Constant returns to scale are assumed for all productive sectors.
7. All commodities are potentially internationally tradable, under different distributive arrangements. No transportation costs are considered.[24]
8. The Argentine economic system is essentially *price-taker*.[25] Prices expressed in international currency are determined outside the model.

arrangement promotes the internationalization of the productive activities and the economy, in general, v) this political regime implies the abolition of democratic channels. Cf. O'Donnell (1978c), pp. 8-10.

[21] *Idem*.

[22] *Ibidem*, p. 44.

[23] *Ibidem*, p. 47.

[24] Even though the existence of intrinsically non-tradable goods is a stylized fact of economic system, the such productive sector does not play a fundamental role in O'Donnell's Pendulum. Thus, being the aim of the chapter the formalization of O'Donnell (1978a), the suggested model makes abstraction from non-tradable producing sectors.

[25] According to the classic notion of competition, an economy will be characterized as *price-taker* if, under its dominant technique, is not able to satisfy the global demand in order to determine the international prices and atomization of providers at the international market avoids the coordination among them. Therefore, the domestic cost-minimizing technique is not able to influence the international price, adding the latter to the set of exogeneous variables in classical

9. Under the *dominant technique*[26], the production of the manufactured commodity for final consumption and the industrial capital good require imported means of production.[27]
10. No constraint is imposed on the labour that the economy can use.
11. The validity of *Kalecki's Aphorism*, i.e. '*capitalists get what they spend, workers spend what they get'* is assumed. Neither wage savings nor profits oriented to final consumption exist.[28]
12. The public expenditure is oriented to the acquisition of manufactured commodities for final consumption, G_2.
13. *Controls over both short-term capital and foreign exchange*[29] under Bretton Woods system: the balance of payments is defined by the current account result.

III.I. Prices and Distribution

Under the set of assumptions presented above and considering the extension of the Classical Keynesian approach to the open economy framework, the analytical representation of O'Donnell's (1978a) productive structure will revolve around the following set of equations, where the numerical subscripts, i.e. 1 ,2 and 3 refer to productive sectors of the industrial capital good, the manufactured consumption good for final consumption and agricultural commodity, respectively.

Regarding the capacity creating sector, being ruled by the *Oligopolistic-International Bourgeoisie,* the equation [1] represents the production cost in domestic currency and under *normal conditions of production,* p_1^s. Additionally, w represents the money wage, r refers to the *normal* rate of profit, E is the nominal exchange rate[30], l_1 represents the labour technical requirement in the industrial capital good producing sector, a_{11} is the input technical requirement for itself, η denotes the technical coefficient associated with the imported means of production,

theory of value. On the contrary, when the domestic productive capacity can satisfy the entire global demand, the economy can be characterized as *price-maker*. Under this last case, the classical explanation of prices for a closed economy holds, determining international relative prices once the domestic relative prices are known. Cf. Machado (2017) Ch. I. p. 24. Among Structuralist authors there is agreement in characterizing the Argentine economy as *price-taker*. Cf. Ferrer (1963), p.6.

[26] In choice of techniques analysis, by taking as given one distributive variable, the notion of *dominant* (or *normal*) *technique* (also called the technique that prevails in the long term) refers to the set of methods of production that maximizes the residual distributive variable. Cf. Kurz & Salvadori (1995). Ch. 5.

[27] The absence of imported means of production in the productive process of agricultural goods is a common assumption found it in the Latin American Structuralist models. Cf. Braun & Joy (1968, p. 869).

[28] Cf. Frenkel & O'Donnell (2008 [1978]), p.112.

[29] The existence of controls over the *short-term capital movements and foreign exchange controls*, as essential features of *Bretton Woods* monetary regime, avoids gravitation of capital to ensure profit rate uniformity across countries. Since O'Donnell's Pendulum concerns to 1950s to 1970s, elimination of such barriers becomes relevant in the subsequent period.

[30] The nominal exchange rate is defined as the units of national currency needed to obtain a unit of foreign currency.

while p_4^* is the internationally given price, nominated in foreign currency, for such externally produced input.

$$p_1^s = \left(p_1^d a_{11} + E p_4^* \eta + w l_1\right)(1 + r) \quad [1]$$

The production price for the manufactured commodity for final consumption, i.e. p_2^s, is presented in equation [2], where l_2 captures the labour requirement to produce a unit of output, a_{12} is defined as the technical coefficient for the industrial capital good domestically produced, μ is associated with the quantities of imported input necessary for producing a unit of output, being p_5^* its international price in foreign currency.

$$p_2^s = \left(p_1^d a_{12} + E p_5^* \mu + w l_2\right)(1 + r) \quad [2]$$

Lastly, the equation [3] represents the price of production for the agricultural commodity, p_3^s. In such equation, the labour requirement for producing a unite of output is associated with l_3. The inclusion of a means of production provided by the same sector reflects the double nature of the agricultural good, both as a wage commodity and as an input for itself. In accordance with the characterization provided to the *Estancias* regime, it must be noted that the productive method used does not require other means of production, neither those provided by domestic industrial sector nor imported inputs.

$$p_3^s = \left(p_3^d a_{33} + w l_3\right)(1 + r) \quad [3]$$

The suggested model follows Dvoskin & Feldman (2015, 2018a, 2018b) and Dvoskin, Feldman & Ianni (2019) by distinguishing *supply prices*, i.e. p_i^s, from *demand prices*, i.e. p_i^d. While the former captures the minimum monetary quantities for unit of output that allow the replacement of all means of production used during the productive process under *normal condition of production*, the former represents the maximum monetary quantities that consumers are willing to afford for acquiring commodity i.

Equations [4]-[6] specify the *demand prices* for commodities potentially produced within the economy, being p_i^*, $\forall i = 1,2,3$ the international prices in foreign currency.

$$p_1^d = E p_1^* \quad [4]$$

$$p_2^d = E p_2^* \quad [5]$$

$$p_3^d = E p_3^* \quad [6]$$

At first sight, equations [1]-[6] are part of a system to determine nine unknown variables, i.e. $p_1^s, p_2^s, p_3^s, p_1^d, p_2^d, p_3^d, w, r, E$. However, it is not disputable to consider the level of the monetary

wage as exogenously determined by the negotiation between unions and capitalist class, i.e. $w = \overline{w}$ [31]. Therefore, two degrees of freedom left.

When laissez-faire trade policy is applied in a price-taker open economy, an additional mechanism strengthens the relation between distribution and the composition of the social output, i.e. the appearance of multiple residual variables for a given level of the exogenous variable under the condition of international competitiveness. This framework requires that the determination of the productive sectors that will be activated in an open economy, the so-called *specialization pattern*, must be studied in a logical stage before to propose any closure to solve the set of equations [1]-[6].

Following the attempts to extend the Classic Surplus Approach to the context of international trade, the proposed approach is based on conceiving the problem of the specialization pattern in terms of a particular case of the choice of techniques analysis, i.e. applying the absolute criterion for the determination of *cost minimizing techniques*. [32] In this sense, the social product of an peripheral open economy will tend to be composed of goods whose productive sectors are able to maximize the residual distributive variable for a given level of the exogenous one.

It should be noted that under a trade policy based on *laissez-faire,* international competitiveness is a necessary condition for the productive activation of the sector. That is,

$$p_j^s(w, r, E) = p_j^d(E) \qquad [7]$$

Where the starts refer to the distributive arrangement associated with the validity of such equality.

If $p_j^d - p_j^s < 0$, the international price in terms of national currency will impose itself at the domestic market and force the importation of commodity j, because of the incapability at this price level to afford the productive services required by the *dominant technique* and the distribution during the domestic production process. If $p_j^d - p_j^s > 0$, those who command the production of good j will obtain a greater remuneration by allocating their production at the international market to satisfy the external demand. The natural consequence of this will be the increase in the domestic price until reaching equalization to the international price in terms of domestic currency.

In a context in which the nominal exchange rate is determined outside the price system by the monetary authority, i.e. $E = \bar{E}$,[33] it is always possible to find for each productive sector the

[31] Henceforth, the upper bar symbol means that the affected variable is taken as given.
[32] Cf. Mainwaring (1974) p. 540; Kurz & Salvadori (1995), Ch. 5.
[33] Since the nominal wage was assumed to be determined by wage negotiation, taking as given the nominal exchange rate automatically implies determination of the wage in foreign currency. It is important to stress that, under laissez-faire trade policies, the real wage is equivalent to the wage in foreign currency.

maximum level of profit rate compatible with the condition in [7]. This is $p_i^s(\bar{E}, r_i^{max}, \overline{w}) = p_i^d(\bar{E})$ for each sector i.

$$
\begin{aligned}
r_1^{max} &= \frac{p_1^*\left(\bar{E}/\overline{w}\right)}{(p_1^* a_{11} + p_4^* \eta)\left(\bar{E}/\overline{w}\right) + l_1} - 1 \\
r_2^{max} &= \frac{p_2^*\left(\bar{E}/\overline{w}\right)}{(p_1^* a_{12} + p_5^* \mu)\left(\bar{E}/\overline{w}\right) + l_2} - 1 \\
r_3^{max} &= \frac{p_3^*\left(\bar{E}/\overline{w}\right)}{\left(\bar{E}/\overline{w}\right) p_3^* a_{33} + l_3} - 1
\end{aligned}
\qquad [8]
$$

The result in [8] corresponds to the recent analytical interpretation of the *Unbalanced Productive Structure* (*UPS*), in the light of the Classic-Keynesian tradition. This notion, provided in Diamand (1972), highlights heterogeneities in the technical conditions of production to account for the impossibility in determining a single level exchange rate value that makes internationally competitive all sectors. In this sense, once identified the productive sector capable of facing the payment of the highest rate of profit compatible with international competitiveness, it is easy to notice the correspondence between the equations in [8] and the notion of *UPS*, since only higher levels of the exchange rate guarantee such a rate of return to the capital invested in the other sectors.

Since the notion of *UPS* underlies O'Donnell's Pendulum, the following assumptions are added to capture the persistent tendency towards specialization in agrarian production in Argentina.

14. For any level of salary in foreign currency, i.e. $\overline{w}/\bar{E}$, the agricultural sector persistently imposes itself as one capable of facing the payment of the highest maximum rate of profit compatible with international competitiveness.
15. The minimum exchange rate necessary for industrial input producing sector in order to be able to pay the profit rate observed by agricultural sector, being internationally competitive, is persistently lower than that corresponding minimum exchange rate that is required in the industrial sector producing final consumption goods.

The relation in [9] can be derived from the assumptions above,

$$E/\overline{w}\,(r_3^{max}) < E_1^{min}/\overline{w}\,(r_3^{max}) < E_2^{min}/\overline{w}\,(r_3^{max}) \qquad [9]^{34}$$

According to the third assumption, the real wage is composed by agricultural goods and manufactured commodities for final consumption. Then, its level is determined by $\omega = \overline{w}/C$, where C refers to the value of daily basket composed by the wage commodities, i.e. $C = \sum_{i=2}^{3} p_i^d c_i = E \sum_{i=2}^{3} p_i^* c_i$, being c_i the participation of wage commodities, $\forall i = 2{,}3$. The negative relation between the real wage and the exchange rate is immediately observed.

[34] The assumption (14) and (15) are based on the notion of *absolute technical advantages* (or *disadvantages*) presented in Crespo & Lazzarini (2012). According to this concept, technical determinants in each sector can be represented as multiples of the prevailing technical conditions in the central economies, being higher (lower) than the unit when absolute technical disadvantages (advantages) are observed.

From this perspective, the *international bourgeoisie* introduced a set of techniques closer to the international technological frontier in the industrial capital good producing sector. Therefore, the multiple that represents such

The relation in [9] is graphically represented in Figure 2a, where each curve represents the maximum rate of profit compatible with international competitiveness as a function of the *Exchange Rage in terms of Wages*, i.e. the amount of units of labour that must be delivered in exchange for obtaining a unit of foreign currency, $e = E/\overline{w}$ [35]. The Figure 2b provides an economic intuition about the effects of depreciation of the national currency on the distributive conflict between the rate of profit and the wage in terms of international currency. It is necessary to highlight that, since there is no intersection among the curves, it is not possible to identify a unique value of the exogenous distributive variable that makes all the productive sectors simultaneously competitive at the international market.

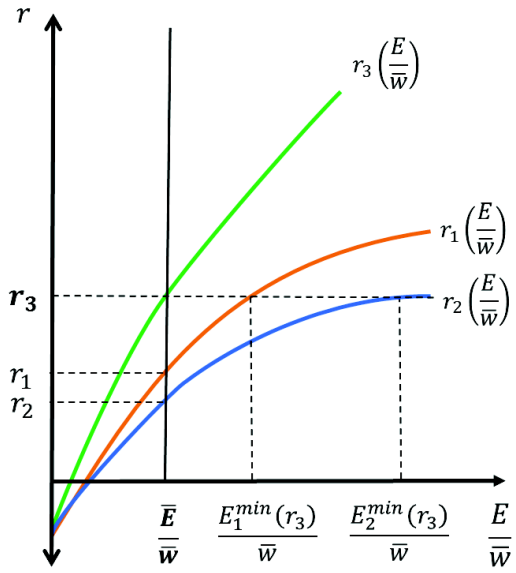


Figure 2a

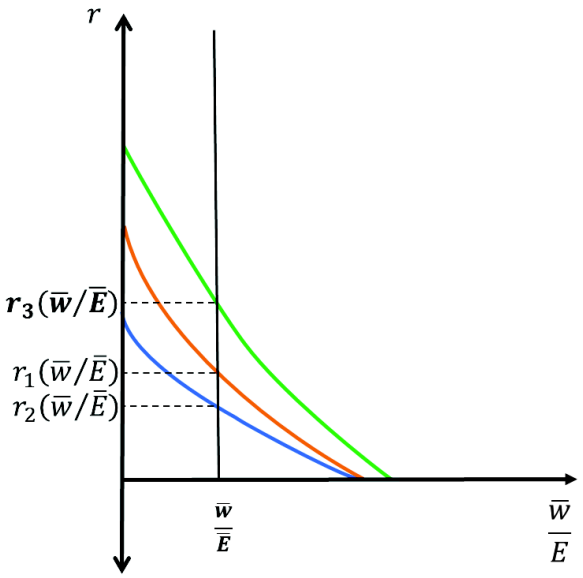


Figure 2b

The results in [8] show the correspondence between the notion of *UPS*, as a notion rooted in the *Latin American Structuralist*, and the conclusions derived from the attempts to extend Sraffa's price system to the open economy framework. Those conclusions have stressed that the price system for a *price-taker economy* could be *overdetermined*[36] when a set international competitive sectors is considered. In few words, if the condition of international competitiveness in [7] holds for every productive sector, it is enough to take the wage in foreign currency as exogenously given in the system [1]-[6], to observe an excess of two equations with respect to the number of

technical conditions for industrial capital goods sector should lower the multiple associate to the prevailing condition for the manufactured sector for final consumption. Cf. O'Donnell (1978b) p. 10.

[35] In order to provide a better understanding of the variable e, it could be assumed a case in which the exchange rate is 80 Argentine pesos per dollar while the hourly wage is 160 pesos, then half an hour of work must be given in exchange of a dollar.

[36] By assuming single commodity wage basket, Steedman (1999) shows that the presence of two exporting sectors eliminates the degree of freedom associated with the *numeraire*. Extending the analysis for the case of n internationally tradable goods, the author states that the price system is overdetermined, since, for each internationally competitive sector, the system increases in one unknown (the price of the commodity) and two equations (the one corresponding to the domestic prices of imported goods and the one corresponding to the so-call *supply price*).

unknowns.[37] Since multi exportation economies are a stylized fact of international trade, Steedman (2001) and Baldone (2001) proposed an interpretation of the multiplicity of residual distributive variables as a way to capture the sectorial heterogeneities of the productive structure.[38]

In this sense, the heterogeneous profit rates in accordance with the international competitiveness of each sector will be relevant for the analytical reconstruction of the dynamic in class alliances described in O'Donnell (1978a).

III.II. Quantities

Likewise, it is necessary to provide an analytical approach to the dynamics followed by output levels and accumulation for the period addressed. In this sense, the model provided in this section adopts the extension of the Principle of *Effective Demand* to long period and, thus, it explains the trends followed by the social product both, in level and the growth rate, through those observed in the autonomous components of the demand, i.e. exports and public expenditure.

In equation [10], the *effectual demand* of industrial capital goods, i.e. Q_1, is explained by both i) the replacement and the expansion of productive capacities for industrial sectors and ii) its external demand[39], i.e. I_1 and X_1 respectively.

$$Q_1 = I_1 + X_1 \qquad [10]$$

While, equation [11] determines the *effectual demand* for manufactured commodity for final consumption, i.e. Q_2, by adding their three sources of demand, i) the one associated to the wage basket, C_2^w, ii) the one generated by the external demand, X_2, and the last source is represented by the autonomous decisions of public spending on the manufactured commodity that does not create productive capacity, G_2. [40]

$$Q_2 = C_2^w + X_2 + G_2 \qquad [11]$$

---

[37] It can be shown that Steedman's *Overdetermination Problem* can also be represented by the set of equations [1] to [6], for the case in which it is assumed that all sectors are *international competitive*, i.e. $p_i^s = p_i^d = p_i, \forall i = 1,2,3$. By replacing the *demand prices* in the equations formalizing production cost, and taking as given both the nominal exchange rate, i.e. $E = \bar{E}$, and the nominal wage, i.e. $w = \overline{w}$, it is immediately observable that the level of the profit rate must be residually obtained from the three remaining equations, in other words, the system is *over-determined*.

$$\begin{cases} p_1^* = [p_1^* a_{11} + p_4^* \eta + (\overline{w}/\bar{E}) l_1](1+r) \\ p_2^* = [p_1^* a_{12} + p_5^* \mu + (\overline{w}/\bar{E}) l_2](1+r) \\ p_3^* = [p_3^* a_{33} + (\overline{w}/\bar{E}) l_3](1+r) \end{cases}$$

[38] Cf. Steedman (1999), p. 272, and Baldone (2001), p. 360.

[39] Recalling the assumption that all commodities are intrinsically tradable and, therefore, potential objects of the international market, their external demand constitutes an autonomous component of aggregate expenditure. Although such components have been irrelevant in the *effectual demands* for industrial sectors during most of the Argentine experience of *Industrialization by Import Substitution*, a sustained increase in the industrial sectors' realization of its external demand, mainly Latin American markets, has been observed by the end of the 1960s and the beginning of the 1970s. Cf. Teitel & Thoumi (1986), Fiorito (2015).

[40] It is important to stress that G_2 constitutes a component of the aggregate demand that does not create productive capacity and, contrary to the external demand, it is entirely explained by domestic political arrangements. Because of this, it is called to play an essential role the presentation of the political determinants of the *Stop & Go* dynamics.

Finally, the *effectual demand* for agricultural sector, i.e. Q_3, is represented in equation [12] and explained by i) the replacement and the expansion of productive capacities at the agricultural sector (corn-seed to produce corn), i.e. I_3, ii) the wage consumption for agricultural goods, i.e. C_3^w, and iii) its external demand, i.e. X_3. It must be pointed out that this sector has historically been the provider of international means of payments for the entire economy.

$$Q_3 = I_3 + C_3^w + X_3 \qquad [12]$$

The equations [13] and [14] represent the demands for those commodities that constitute the wage basket. These elements are induced with respect to the levels of effective product, through their employment of labor force. In this sense, both, C_2^w and C_3^w, will be defined by the product between the aggregate level of employment and the correspondent participation of the consumption good in the wage commodity.

$$C_2^w = \bar{c_2}(l_1 Q_1 + l_2 Q_2 + l_3 Q_3) \qquad [13]$$

$$C_3^w = \bar{c_3}(l_1 Q_1 + l_2 Q_2 + l_3 Q_3) \qquad [14]$$

The model here provided accounts the *dual nature* of *investment spending*, this is, investments are, simultaneously, component of the aggregate demand and the source of productive capacity. It will be this last role, the so-call supply character of investment spending, the one represented by equation in [15], where the *Accelerator Principle of Investment* is introduced. [41] In such equation, the coefficients v_1 and v_2 refer to the investment needed, under the *dominant technique*, to produce one additional unit of productive capacity in the urban sectors. A causal relationship will be established, according to which a raise in the expected rates of growth of the productive capacity in the industrial sectors, i.e. g_1^{Exp} and g_2^{Exp}, will increase the current participation of the investment in the capacity utilization of the productive sector of capital good, i.e. I_1/Q_1. In this way, it is guaranteed that, in the long period, the effective degree of capacity utilization tends toward the desired one[42].

$$I_1/Q_1 = \left(1 + g_1^{Exp}\right)v_1 + \left(1 + g_2^{Exp}\right)v_2(Q_2/Q_1) \qquad [15]$$

The same causal relation can be found in the agrarian sector, where the creation of productive capacity is self-provided. Here, v_3 refers to the investment required to produce one additional unit of productive capacity in the rural sector.

[41] According to the *Accelerator Principle* and the notion of *normal* or *desired degree of capacity utilization*, no capital good will be used in the expansion of productive capacity, unless such use is well founded in objective expectations of persistent increment of future demand. Cf. Monza (1976) p.112.

[42] Cf. Serrano (1995, 2015), Bortis (1997), Dejuán (2005, 2013), White (2006), Feitas & Dweck (2013) and Dvoskin & Feldman (2015).

$$I_3/Q_3 = \left(1 + g_3^{Exp}\right)v_3 \quad [16]$$

Finally, the inclusion of the balance of payments in the system that determines the growth path allows to address the study of the accumulation dynamics in economy such as the one described in O'Donnell (1977), that is, a *price-taker* productive structure, open to international trade and incapable to produce domestically all the inputs used under the dominant technique. In this sense, the sustainability condition will be included for the balance of payments as un upper limit to long-term growth rate of the economy. The equation [17] refers to the Balance of Payment, in which it is presented the result between the international currency inflows from exportations, i.e. $p_i^* X_i$, $\forall i = 1,2,3$, and the outflows associated to both, importations $p_j^* M_j$, $\forall i = 4,5$, and the remission to central economies of parts of the returns obtained by the *oligopoly international bourgeoisie*, i.e. R_1^*.[43]

$$BP = p_1^* X_1 + p_2^* X_2 + p_3^* X_3 - p_4^* M_4 - p_5^* M_5 - R_1^* \quad [17]$$

Furthermore, by recalling the Structuralist notion of *technical dependency*, the equations [18] and [19] capture the endogenous character to the external trade, highlighting the induced nature of imports necessary to produce capital good and manufactured good for final consumption, i.e. M_4, M_5, respectively. In this sense, since the *dominant technique* defines productive methods that use foreign means of production, a sustainability condition for the balance of payment will be included as an upper limit in the next section.[44]

$$M_4 = \eta Q_1 \quad [18]$$

$$M_5 = \mu Q_2 \quad [19]$$

The set of equations [10] to [19] is logically solvable, since ten unknown variables (i.e. $Q_1, Q_2, Q_3, I_1, I_3, C_2^W, C_3^W, M_4, M_5$ and BP) can be simultaneously determined by ten equations. In this sense, assuming as given the technique, the distribution and the autonomous components of effective demand, then the levels of product for each productive sector are obtained.

$$Q_1 = SM_1\{\bar{X}_1 + [a_1(\bar{X}_2 + \bar{G}_2) + b_1\bar{X}_3]\} \quad [20][45]$$

[43] The remission can be conceived as a proportion of the volume of profits made in the sector under the control of the strong faction of the urban bourgeoisie, i.e. $R_1^* = \phi R_1$.

[44] Cf. Palumbo (2011), p. 246-7.

[45] Where $SM_1 = \frac{1}{1-\left(1+g_1^{Exp}\right)v_1-\left(1+g_2^{Exp}\right)v_2\left[\frac{\overline{c_2}l_1\left(1-\left(1+g_3^{Exp}\right)v_3\right)}{\left(1-\overline{c_2}l_2\right)\left(1-\left(1+g_3^{Exp}\right)v_3\right)-\overline{c_3}l_3}\right]}$, $a_1 = \frac{(1+g_2^e)v_2\left(1-\left(1+g_3^{Exp}\right)v_3-\overline{c_3}l_2\right)}{\left(1-\overline{c_2}l_2\right)\left(1-\left(1+g_3^{Exp}\right)v_3\right)-\overline{c_3}l_3}$ and $b_1 = \frac{\left(1+g_2^{Exp}\right)v_2\overline{c_3}l_2}{\left(1-\overline{c_2}l_2\right)\left(1-\left(1+g_3^{Exp}\right)v_3\right)-\overline{c_3}l_3}$.

$$Q_2 = SM_2\{a_2\bar{X}_1 + \bar{X}_2 + \bar{G}_2 + b_2\bar{X}_3\} \quad [21]^{46}$$

$$Q_3 = SM_3\{a_3\bar{X}_1 + b_3(\bar{X}_2 + \bar{G}_2) + \bar{X}_3\} \quad [22]^{47}$$

The expressions [20], [21] and [22] are characterized by the presence of *Supermultipliers*[48], which capture the influence of the autonomous components of the effective demand on the level of output of the productive sectors. This influence is exerted by both, *multiplier effects of consumption* and the effects associated to the *Accelerator Principle of the Investment.*[49] Thus, being invariable the coefficients that represent the technical and distributive condition, the output growth rate for each sector can be derived from those expressions as the weighted average of the growth rates associated to the autonomous non-creating capacity components, i.e. public spending and exports. [50]

$$g_1 = \alpha^1_{X_1}\bar{g}_{X_1} + \alpha^1_{X_2}\bar{g}_{X_2} + \alpha^1_{G_2}\bar{g}_{G_2} + \alpha^1_{X_3}\bar{g}_{X_3} \quad [23]$$

$$g_2 = \alpha^2_{X_1}\bar{g}_{X_1} + \alpha^2_{X_2}\bar{g}_{X_2} + \alpha^2_{G_2}\bar{g}_{G_2} + \alpha^2_{X_3}\bar{g}_{X_3} \quad [24]$$

$$g_3 = \alpha^3_{X_1}\bar{g}_{X_1} + \alpha^3_{X_2}\bar{g}_{X_2} + \alpha^3_{G_2}\bar{g}_{G_2} + \alpha^3_{X_3}\bar{g}_{X_3} \quad [25]$$

IV. An analytical representation of the O'Donnell's Pendulum

The analytical reconstruction of the O'Donnell's Pendulum starts from the description of the EPM as the history of growing victories by the popular class and the *urban-national bourgeoisie* over the domination project of the *oligopoly-international bourgeoisie*, inducing the latter to shift its class alliance strategy and to embrace the adoption of *Stabilization Programs* (hereinafter SPs). This section also provides a formalization of the Krieger-Vasena Program (May 1967), identified by O'Donnell as the most defined attempt to break down the pendular dynamics and subordinate

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[46] Where $SM_2 = \frac{1}{\left\{\frac{(1-\bar{c_2}l_2)\left[1-\left(1+g_3^{Exp}\right)v_3\right]-\bar{c_3}l_3}{1-\left(1+g_3^{Exp}\right)v_3-\bar{c_3}l_3}\right\}-\left\{\frac{\left(1+g_2^{Exp}\right)v_2\bar{c_2}l_1\left[1-\left(1+g_3^{Exp}\right)v_3\right]}{\left[1-\left(1+g_1^{Exp}\right)v_1\right]\left[1-\left(1+g_3^{Exp}\right)v_3-\bar{c_3}l_3\right]}\right\}}$, $a_2 = \frac{\bar{c_2}l_1\left[1-\left(1+g_3^{Exp}\right)v_3\right]}{\left[1-\left(1+g_1^{Exp}\right)v_1\right]\left[1-\left(1+g_3^{Exp}\right)v_3-\bar{c_3}l_3\right]}$ and $b_2 = \frac{\left[1-\left(1+g_1^{Exp}\right)v_1\right]\bar{c_2}l_3}{\left[1-\left(1+g_1^{Exp}\right)v_1\right]\left[1-\left(1+g_3^{Exp}\right)v_3-\bar{c_3}l_3\right]}$.

[47] Where $SM_3 = \frac{1}{\frac{\left[1-\left(1+g_1^{Exp}\right)v_1\right]\left\{(1-\bar{c_2}l_2)\left[1-\left(1+g_3^{Exp}\right)v_3\right]-\bar{c_3}l_3\right\}}{\left[1-\left(1+g_1^{Exp}\right)v_1\right](1-\bar{c_2}l_2)-\left(1+g_1^{Exp}\right)v_2\bar{c_2}l_1}-\left\{\frac{\left(1+g_1^{Exp}\right)v_2\bar{c_2}l_1\left[1-\left(1+g_3^{Exp}\right)v_3\right]}{\left[1-\left(1+g_1^{Exp}\right)v_1\right](1-\bar{c_2}l_2)-\left(1+g_1^{Exp}\right)v_2\bar{c_2}l_1}\right\}}$, $a_3 = \frac{\bar{c_3}l_1}{\left[1-\left(1+g_1^{Exp}\right)v_1\right](1-\bar{c_2}l_2)-\left(1+g_2^{Exp}\right)v_2\bar{c_2}l_1}$ *and* $b_2 = \frac{\left[1-\left(1+g_1^{Exp}\right)v_1\right]\bar{c_3}l_2+\left(1+g_2^{Exp}\right)v_2\bar{c_3}l_1}{\left[1-\left(1+g_1^{Exp}\right)v_1\right](1-\bar{c_2}l_2)-\left(1+g_2^{Exp}\right)v_2\bar{c_2}l_1}$

[48] Cf. Serrano (1995), Freitas & Serrano (2015) and Bortis (1997). Ch. 4.

[49] It should be noted that the long period positions for output levels are functions of expected growth rates of the effectual demand for inputs, i.e. g_1, which is equal to the expected growth rate. The latter is justified because pf the tendency to adjust the effective capacity utilization towards the planned or *normal* one. Cf. Serrano (1995), p. 86.

[50] Being invariable the coefficients that represent the technical and distributive condition under which the demand-led accumulation process is taking place, the rate of growth of the capital goods produced is equal to the rate of growth of the autonomous demand, which is determined by the rate of growth of public spending and exports.

the entire civil society under a corporative political arrangement led by the association between the Armed Forces and the strong faction of the capitalist class.

In a second part, the CPM is described by approaching the class alliance composed of the *agrarian bourgeoisie* and the *international capitalists*. The aim is to describes the economic effects of the policies encouraged by such coalition and to explain the internal tensions that dynamited it, laying the foundations for a new support by the international bourgeoisie for expansive policies.

IV.I. EPM: Tensions of the Argentine BA State from a Growing Economy and the External Constraint

In a context of balance of payments surplus and the accumulation of international reserves, the possibility of setting monetary policy to ensure some desired level of the exchange rate[51] and of carrying out expansive fiscal policy reappears. Under such economic recovering, the imposition of protective tariffs (or, alternately, differential exchange rates) to induce productive diversification was a distinctive feature of the political arrangement that characterized the advanced stage of the import substituting industrialization in Argentina. Such interventions were persistently required in order to allow the industrial sectors to meet, at given production costs, the domestic effectual demands without being displaced by the international competitors.

In this sense, the *international bourgeoisie* supported both the use of State's coercive fiscal power to against the *Pampean bourgeoisie* and growing public spending as concession to the interests of the *popular sector* and the *urban-national bourgeoisie*.[52] In sum, the institution of a political alliance between *industrial bourgeoisies* and popular class can be analytically illustrated at the price system [1]-[6] by introducing tariff protection to home-produced manufactured goods, i.e. τ_1 and τ_2, and taxes for exporting agricultural goods, i.e. τ_3.

[51] Following O'Donnell (1978a), the availability of international reserves gives to the monetary authority the possibility of imposing a foreign exchange policy. Thus, the administration of the exchange rate allowed for the readjustment of relative prices to the detriment of the *agrarian bourgeoisie*. This policy constituted an important tool for the deliberated configuration of the new productive structure.

[52] Regarding the influence of working class in the determination of the economic policy applied by the BA State, it must be highlighted that, even though at first sight the latter seems to be in contradiction with the political exclusion nature of such regime, the subordination of the working class required not just coercion but also legitimation. In Argentina, the segments of the Armed Forces closer to the political forces associated to the urban-industrial bourgeoisies explored the inclusion of unions in determining the economic policies as a strategy to gain legitimacy and political power. In this sense O'Donnell states that, paradoxically, the Peronist influence among unions created the possibility for such political arrangement, by depriving the popular sector as political basis to any political force or movement that pushes for the abandonment of capitalist parameters. Cf. O'Donnell & Lechner (1981) pp. 230-1.

$$
\begin{aligned}
p_1 &= [p_1 a_{11} + \bar{E} p_4^* \eta + \bar{w} l_1](1 + \bar{r}^*) \\
p_2 &= [p_1 a_{12} + \bar{E} p_5^* \mu + \bar{w} l_2](1 + r) \\
p_3 &= (p_3 a_{33} + \bar{w} l_3)(1 + r) \\
p_1 &= \bar{E} p_1^* (1 + \tau_1) \\
p_2 &= \bar{E} p_2^* (1 + \tau_2) \\
p_3 &= \frac{\bar{E} p_3^*}{(1 + \bar{\tau}_3)}
\end{aligned}
\qquad [26]
$$

The suggested analytical reconstruction in [26] stresses for differential profit rate perceived by the international capitalist fraction to capture the asymmetric power relations within the capitalist class described in O'Donnell (1978a). The persistence of a higher profit rate associated with the capital goods producing sector than the return rates perceived by *national bourgeoisie* is mainly within O'Donnell`s framework by the non-competitive nature of the set of techniques available by the capitalist fraction that commands the capacity creating process.

The price system in [26] can be determined logically by recalling the elimination of its degrees of freedom. Taking technical coefficients (i.e. $a_{11}, a_{12}, l_1, l_2, l_3, \eta, \mu$) as given international, prices in foreign currency (i.e. $p_1^*, p_2^*, p_3^*, p_4^*, p_5^*$) and the nominal wage (i.e. $w = \bar{w}$), the equality between the number of equations and the number of unknown variables can be achieved by taking exogenously at least two of the three distributive variables (i.e. w/E, r^*, r) and the level of tax for exporting agricultural commodity, t_3.

It should be highlighted that the choice of the tax of agricultural exports as being determined in a logical stage prior to the knowledge of prices is justified in the bargaining power that characterized the *oligarchic-Pampean bourgeoisie*. The latter is especially true in democratic and developmentalist administrations, e.g. Frondizi (1958-1962) and Illia (1963-1966), where tax levels considered confiscatory could lead to the impulse of *coups d'etat* by the Armed Forces and by the agrarian bourgeoise.

Regarding the choice of exogenous distributive variables, it must be representative of the balance of power that characterizes the EPM. In this sense, the return rate obtained by the *strong faction of the urban bourgeoisie* and the wage in international currency can be presented as natural candidates to be considered variables determined outside the price system. The exogeneity of the former can be explained by the minimum level of profit rate required by international capital to get involved in deepening the industrialization, (a profit rate level at least equivalent to the one that it would be perceived in central economies)[53]. With respect to the latter, the fixed-exchange

[53] Since, differently from other BA State, the Expansive Pendular Movement is characterized by increasing purchasing power of the wages, the inclusion of the international bourgeoise among the main basis of the political arrangement must prevent the wage policy to affect the material interest of the later fraction of the capitalist class. In this sense, duties were provided to the capital good producers in order to make compatible the distributive pretensions and to allow the perceived return rate for international capital in Argentine import substituting industrialization similar than the profit rate they would perceived at the core economies.

rate policy associated to *Bretton Woods Regime* implies the automatic determination of wages in international currency. Then, the unknown variables are prices, the protectionist tariffs, i.e. t_1, t_2, and the rate of return perceived by the *domestic fractions* (*Pampean* and *urban*) *of bourgeoisie* under free competition, i.e. r.

Figure 3 represents the effects that state's interventions impose on the relations between the wages in international currency (or, alternatively, the *Exchange Rage in terms of Wages*) and the rates of return to capital, given the equality between *demand* and *supply prices*. While agricultural export taxes generate a fall in the *demand prices* for agricultural goods, which is represented graphically with the shift of the highest sloped curve associated with this sector, the imposition of tariffs on the importation of domestically produced industrial goods entails market power concession *urban fractions of bourgeoisie*, increasing the rate of return perceived for each level of wage in international currency.[54]

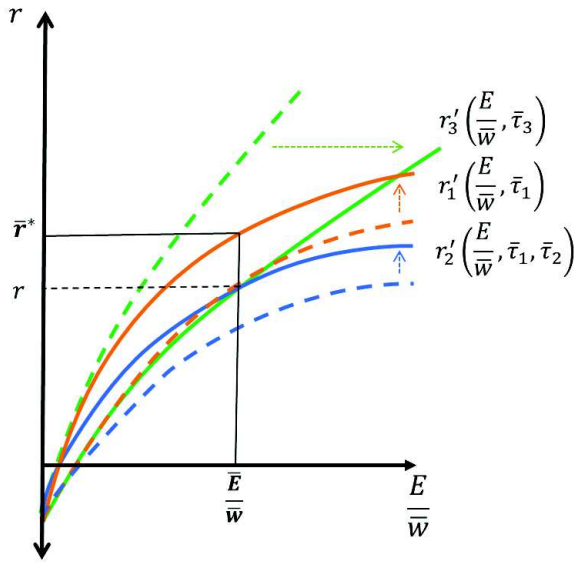

Figure 3

According to O'Donnell (1978a), the industrial productive sectors were beneficiated during the EPM by the intervention of the BA state and its economic policies, either through the imposition of tariff protection, subsidies or allocating the State's purchasing in favour of the urban productive sectors.[55] Under such circumstances, the prices of the agricultural sector tend to decrease in

[54] It should be noted that the protection imposed on the capital good affects the cost structure of manufactured commodity for final consumption, increasing production costs and the tariff protection required by the sector.

[55] In similar terms, Furtado (1972) describes the interventionist policies of the Brazilian BA State. In this analysis, the Brazilian economist emphasises on the central role played by State directing the financial system towards strategic productive sectors of the productive diversification. Furtado focuses on explicit use of trade taxation barriers and recognizes them as an instrument for determining normal prices compatible with the desired composition of the social product. Cf. Furtado (1972), p. 25.

comparison to the prices of the urban-industrial sectors as the economic manifestation of the attempt to subordinate the *agrarian bourgeoisie*.

Portantiero (1974) identifies in the Frondizi's administration (1958-1962) the first attempt to build a political order led by the *oligopolic-international bourgeoisie* and with the subordinated support of unions and the chambers of *national-urban bourgeoisie*. However, it also implied the beginning of a long sequence of governments that repetitively aimed with the consolidation of international capital's domination, facing two main threats: a) Within the ruling coalition, it can be identified a threat associated to the growing coincidence between the urban-national bourgeoisie and working class for supporting expansive public spending. b) An external threat to the political domination of international capital is related to the increasing capability of the rural faction to sabotage the economic policy under a shortage of international reserves.

Within the history of the Argentine Pendulum, Portantiero (1974). and O'Donnell (1978a, 1978b) present the *Krieger Vasena Plan* (1967-1969) as the most well-defined attempt to deal with such tensions. The reason for this is based not only on the subordination of the *rural-Pampean bourgeoisie* and the endogenization of agrarian export taxes, but also on its effectiveness in increasing the international competitiveness of the industrial sectors without generating the redistributive effects traditionally associated with SPs. In analytical terms, the Plan in 1967 can be illustrated by the introduction of subsidies for the importation of inputs produced abroad, jointly with increases in agrarian export taxes. [56]

$$
\begin{aligned}
p_1 &= [p_1 a_{11} + \bar{E}(1-s)p_4^*\eta + \bar{w}l_1](1+\bar{r}^*) \\
p_2 &= [p_1 a_{12} + \bar{E}(1-s)p_5^*\mu + \bar{w}l_2](1+r) \\
p_3 &= (p_3 a_{33} + \bar{w}l_3)(1+r) \\
p_1 &= \bar{E}p_1^* \\
p_2 &= \bar{E}p_2^* \\
p_3 &= \frac{\bar{E}p_3^*}{(1+\tau)}
\end{aligned}
\qquad [27]^{57}
$$

Under the condition of international competitiveness, $p_i^s = p_i^d = p_i \ \forall i = 1,2,3$, the system [27] is logically determinable when imposing the exogeneity, both international rate of profit and of the wage in foreign currency, i.e. r^* and w/E. It must be noted that, unlike [26], the residual nature of the taxation to agricultural exports accounts for the authoritarian feature of *Krieger Vasena Plan*, implemented by the Armed Forces and eliminating the *coup d'état* threats encouraged by the *rural-Pampean bourgeoisie*.

[56]The elimination of import barriers was justified by the attempt to induce technical gains and the modernization of the economic system. However, differently from standard SPs, the Program of 1967 tried to achieve industrial international competitiveness sectors by reducing the costs of national production. Cf. Canitrot (1980) p. 919.

[57] Note that the model of the protection policy through duties and subsidies is formally equivalent to the establishment of differential exchange rates, i.e. $E_{12} = (1-s)E$ y $e_3 = \frac{E}{1+\tau}$.

Figure 4 represents the international competitiveness curves under *Krieger Vasena Plan*. Elimination of protective tariffs where replaced by capital good-importation subsidies, shifting upward the international competitiveness curves of industrial sectors and allowing the payment of higher profit rates at each level of exchange rate-wage relation under *laissez-faire* trade policy.

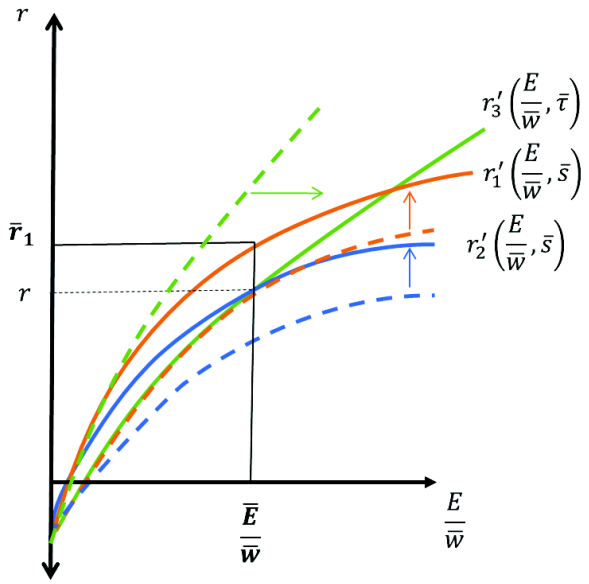

Figure 4

It should be stressed that the control of relative prices was an effective tool that allowed the administration of the distributive conflict and, therefore, the lightening of the inflationary process.[58] Such convergent dynamic of the inflationary process could be explained by improvement in the coordination condition among contradictory distributive interests. According to Okishio (1977), inflation comes about when the capitalist class is not strong enough to depress the real wage rate without proceeding to raise prices and the labouring class is not strong enough to win a higher real wage at the expense of profit, preventing the capitalist classes from raising prices. The Alliance between the *industrial fractions* of *bourgeoisie* and the *popular class* provided a framework in which settle the bargain, without resorting to unilateral increases of the nominal distributive variables and the consequent erratic behaviour of nominal prices.

Even though the described policies succeeded in managing the distributive pressures and, in some cases, in granting the international competitiveness of industrial sectors, this did not mean the elimination of *technical dependence* and capability of the *external constraint* in set a limit to the growth path. [59]

As soon as the reactivation began, the *international fraction* of the urban *bourgeoisie* supported policies that increased effective demand. In accordance with the equation [15], O'Donnell

[58]Cf. O'Donnell (1978a) p. 34.
[59] Cf. Braun (1970), pp. 45-46.

explains such support stressing that decisions to raise the growth rate of the public spending entailed relative increases in the effectual demand for capacity creating goods. The high sensibility of demand for capital goods is related with the necessity to expand productive capacities and restore the *desired degrees* of capacity utilization. In this sense, the author describes fiscal policies aimed at increasing domestic absorption as a necessary condition for the "normalization" of accumulation dynamics in peripheral economies[60].

Nevertheless, the joint result of the greater dynamism in industrial capital sector was the sustained increase in imports. In a semi-industrialized economy, the productive method activated by the *Oligopolistic-International bourgeoisie* under the cost-minimizing techniques characterized by the persistent inclusion of imported input. In order to present the capacity of the external constraint in conditioning the growth path, it is necessary to recall the levels of products derived in [20], [21] and [22], as well as the growth rates presented in [23], [24] and [25] cannot be compatible with a situation of external deficit in the long term.

Taking the dynamics of international prices as given,[61] the amount of international currency spent in the payment of imports and the transfer of profits to central economies is determined by output levels in the industrial sectors. Assuming that the composition of the social product does not change on the growth path, i.e. $g = g_i \ \forall i = 1,2,3$, the growth rate of the international means of payments outflows, i.e. $g_{M+R_1^*}$, is presented in [28].[62]

$$\begin{cases} M + R_1^* = p_4^* M_4 + p_5^* M_5 + R_1^* = p_4^*(\eta Q_1) + p_5^*(\mu Q_2) + R_1^* \\ g_{M+R_1^*} = \left(\alpha_\eta \dot{p}_4^* + \alpha_\mu \dot{p}_5^*\right) + \beta_{X_3} g_{X_3} + \beta_{G_2} g_{G_2} \end{cases} \quad [28]^{63}$$

Similarly, the dynamic observed in exports is represented by the following expressions in [29].

$$\begin{cases} X = p_3^* X_3 \\ g_X = \dot{p}_3^* + g_{X_3} \end{cases} \quad [29]^{64}$$

---

[60] Cf. O'Donnell (1978b) p.12.

[61] Here, the rates of growth for international prices followed by the imported inputs are represented by $\dot{p}_4^*$ and $\dot{p}_5^*$, while the corresponding rates of growth followed by exported goods are $\dot{p}_1^*$, $\dot{p}_2^*$ and $\dot{p}_3^*$.

[62] Where $\beta_{X_1} = \left(\alpha_\eta + \alpha_\mu \gamma_{21}\right)\alpha_{X_1}$, $\beta_{X_2} = \left(\alpha_\eta + \alpha_\mu \gamma_{21}\right)\alpha_{X_2} + \alpha_\mu \gamma_{X_2}$, $\beta_{X_3} = \left(\alpha_\eta + \alpha_\mu \gamma_{21}\right)\alpha_{X_3} + \alpha_\mu \gamma_{X_3}$ and $\beta_{G_2} = \left(\alpha_\eta + \alpha_\mu \gamma_{21}\right)\alpha_{G_2} + \alpha_\mu \gamma_{G_2}$ are the weights of the growth rate of imports, given the growth rates of the autonomous components of effective demand.

[63] The dynamics followed by the outflow of international means of payments can be defined as follows $g_{M+R_1^*} = \alpha_\eta(\dot{p}_4^* + g) + \alpha_\mu(\dot{p}_5^* + g) + \alpha_{R_1^*} g_{R_1^*}$. By replacing $g = g_i \ \forall i = 1,2,3$ with the definitions provided in [22] − [22], it is easy to obtain the equation [28].

[64] It should be noted that the expression in [30] refers to the price system characterized in [26], where the tariff policy prevents domestic production of industrial goods to satisfy external demand at domestic production costs. However, in the case of the Krieger Vasena Plan represented in [27], the same expression in [29] can be rephrased as follows

$$\begin{cases} X = p_1^* X_1 + p_2^* X_2 + p_3^* X_3 \\ g_X = \left(\chi_{X_1} \dot{p}_1^* + \chi_{X_2} \dot{p}_2^* + \chi_{X_3} \dot{p}_3^*\right) + \sum_{i=1}^{3} \chi_{X_i} g_{X_i} \end{cases} \quad [29']$$

The increase of non-traditional exports during in the late 1960s and early 1970s has been explicitly recognized by several authors. However, there exists controversy about the causes of the growing export. While some authors, e.g. Canitrot (1980), identify the subsidy policies as the ultimate determinants of the dynamics observed in the quantities

In accordance with Palumbo (2011), the growth path in a semi-industrialized economy (without capital movement or systematic financing of the current account deficit) must respect the dynamic equilibrium condition of the balance of payments, i.e. $g_X \geq g_{M+R_1^*}$. It follows that external constrain imposes an upper limit on the growth rate of the non-international-currency-generating autonomous component of effective demand, i.e. g_{G_2}.

$$\left[\frac{\dot{p}_3^* - (\alpha_\eta \dot{p}_4^* + \alpha_\mu \dot{p}_5^*)}{\beta_{G_2}}\right] + \left[\frac{(1-\beta_{X_3})\bar{g}_{X_3}}{\beta_{G_2}}\right] = g_{G_2}^{max} \qquad [30]^{65}$$

The first term in [30] captures the influence of the terms of trade on the balance of payment constraint and, therefore, on the maximum level at which domestic autonomous component of the effective demand can grow. The second term represents the same influence but now generated by the dynamics of the exported quantities.

As it was suggested, the increasing coordination between the unions and the institutions that look after the interest of *urban-national bourgeoise* forced the adoption of expansive effective-demand policies, in order to achieve full-employment and the enlargement of domestic market. In this sense, O'Donnell describes the coalitions in the Pendular movements as great tides which covered the whole State and when they had to retire, they appropriated prerogatives that empowered their corporations and set the basis of an offensive against the new ruling alliance[66]. In other words, the institutional result of pendular movements and non-hegemonic society was a dismembered State and fully colonized by civil society.

O'Donnell (1978a) explains the growing coordination between the others two components of the ruling class alliance as a reaction to *international bourgeoise'*s attempts to impose asymmetric relations of power within the political arrangement and impose its material interest as the priority of the economic policies.[67]

The incapability of the international fraction of the capitalist class to maintain over control the pressures coming from the popular sector and the national-urban bourgeoisie towards the adoption the expansive fiscal policies ended up violating the balance of payment condition, i.e. $g_{G_2} > g_{G_2}^{max}$, and binding the external constrain. The raising contradictions within the ruling alliance manifests itself in the determination of strategy to face the scarcity of international means of payments in defining the exchange rate and the maintenance of the *Deliberate Structural*

exported from non-traditional sectors, other authors, e.g. Teitel & Thoumi, (1987), highlight the effect of the use of *Kaldor-Verdoorn Effect* and increasing return to scale in the basic industries.

[65] For the case in [27], the maximum growth rate of the public expenditure must be redefined to include the dynamics that follow both international prices and quantities, when non-traditional sectors are able to satisfy external demand.

$$\left[\frac{(\chi_{X_1}\dot{p}_1^* + \chi_{X_2}\dot{p}_2^* + \chi_{X_3}\dot{p}_3^*) - (\alpha_\eta \dot{p}_4^* + \alpha_\mu \dot{p}_5^*)}{\beta_{G_2}}\right] + \left[\frac{\sum_{i=1}^{3}(\chi_{X_i} - \beta_{X_i})\bar{g}_{X_i}}{\beta_{G_2}}\right] = g_{G_2}^{max} \qquad [30']$$

[66] Cf. O'Donnell (1978a), p. 50.

[67] *Ibidem*, p. 45.

Balance. In a context of high level of employment and social pressure in deepening the industrialization process, the alliance between popular class and the *urban national bourgeoise* determined the strategy taken by AB State to face balance of payment deficits.

In general, by the time external constraint was binding, the power distribution within the ruling coalition was favoured the imposition regulations on exchange rate market and on profit remittance to central economies, such that $g_{R_1^*} \leq 0$ and $R_1^* \leq \bar{R}_1^*$. However, those interventions were incompatible with the essence of *normalization* of the Argentine economic system, that laid the foundations of the BA State.

> *In other respects, when the balance of payments crisis cropped up, the imposition of foreign exchange controls and of restrictions to capital transfers abroad became serious hindrances, above all, to the firms more closely connected with the centres of world capitalism. Truly, none of these controls attained their goals, nor did they prevent massive flights of capital, but many of the high ranking staff of large firms (national and transnational ones) which I interviewed in 1971 and 1972 said that for that effect they "had" to act "excessively" beyond the pale of Argentine legislation, with the consequent uneasiness at times when, during the upward phase of the cycles, "demagogues" and "nationalists" with access to State institutions were not lacking.* (O'Donnell, 1978a, p. 35-36).

Thus, it is relevant to point out that the organizational capabilities of the *oligopolistic-international bourgeoisie* in terms its financial links with the central capitalist class were completely out the scope of public regulation, designed to mitigating the profits remittance. The emergence of parallel markets for the exchange rate and an increasing mobility of capital in outside the law are nothing else but the inability of the State in controlling the capitalist fraction that held the economic-technological predominance. On the contrary, these attempts, even when they did not constitute an effective obstacle, triggered a greater flows of capital transfers abroad, given the uncertainties generated by the final resolution of the conflict within the alliance at the power.

It is at this precise moment when the *agrarian bourgeoisie* uses its power as traditional providers of international currency and reduced the liquidation of exportable stocks, accumulating the harvest and worsening the balance of payments crisis. [68] Eventually, the scarcity of international

[68] Based on this type of threats from the *oligarchic-Pampean* bourgeoisie to the stability of the Deliberate Structural Balance, it is possible to explain the initiatives related with taxation over potential rent, supported by unions and the institutions that represents the interests of the *weaker fraction* of the urban *bourgeoisie*. According to O'Donnell (1978a), such an initiative was completely forbidden when the dimensions of the distributive conflict reached social expositions in 1969 that disturbed the determination of the *strong fraction* of the urban *bourgeoisie* in the deepening of the *Deliberated Structural Balance*.

currency imposed exchange rate and the equilibrium of the Balance of Payment will be reached through the recessive effects of the devaluation on domestic demand and imports.

By the moment at which the crisis of the balance of payments is overcome, the *oligopolistic-international bourgeoisie* is already taking part of an alliance with the *Pampean bourgeoisie* and supporting the prescriptions of the SPs. A new pendular movement in the class-alliances of the *stronger fraction* of the urban *bourgeoisie* is consolidated, where the reestablishment of its objective of subordination to the central-industrialized economies is prioritized.

IV.II. The CPM: Tensions in the BA State from the adoption Of SPs

If the economic policies implemented during the EPM had as result the growing bargaining power of the popular class and its alignment with the urban-national bourgeoisie, up to alter the internal balance of power and expel the international capitalist faction from the coalition, the adoption of SP during the CPM ended up cementing the tensions between the *Pampean bourgeoisie* and the *strong faction of the urban bourgeoisie*. In synthetises, the consequences of such policies induced the emergence of a specialized productive structure that dispense with the productive sectors led by the international capitalist fraction. In this section it will be formally addressed the evolution of the MPC and the tensions, natural causes of its exhaustion.

Starting from a situation of Balance of Payment Crisis and forthcoming devaluation, the new ruling class alliance overcame the scarcity of international currency by signing a Standby agreement with the multilateral agencies, e.g. International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (IBRD). Such agencies grant conditional credits to a set of fiscal, monetary and exchange rate policies that guarantee the repayment of capital and services, i.e. SP.[69]

Such suggested policies lead to a convergence of interests between the *oligarchic-Pampean bourgeoisie* and the *oligopolistic-international bourgeoisie*. In the case of the former, its support to the SPs could be explained both, by the fall of wages in international currency and by the pull to pieces of the protectionist trade policies that change the relative prices against them. The SPs characterized by an asymmetric treatment in terms of price control. On the one hand, such set of policies aimed to deregulate the external exchange markets, both the exchange rate market and the agrarian prices. On the other hand, it used the repressive nature of the BA State in order to freeze the nominal wages and control the bargain between labours and entrepreneurs[70].

Regarding the *international capitalist faction,* O'Donnell emphasizes that the unification of the exchange rate market and the elimination of the controls to the remission of profits, severely

[69] Cf. O'Donnell (1978a), pp. 34. Diaz Alejandro (1979) p. 6.
[70] Cf. Frenkel & O'Donnell. (1978), p.108.

threatened by the capital-controlling policies during the EPM. The relaxation of the external constraint through devaluation and capital disbursement associated with the *Stand By* agreement generate the necessary increase of the international reserves at the monetary authority to face demand of foreign currency from the international bourgeoisie's profit remission.[71]

In short, the SPs succeeded in unite both agrarian and international factions in the support of economic policies designed around *laissez-faire* principles. Therefore, given the price system specified in [1]-[6], the market liberalization triggered a gravitation of capital towards the sector that can afford the payment of the maximum return rate being international competitive and generating a complete specialization of the social product in the agricultural sector.

In addition, O'Donnell stresses that even though an *"stabilizing" devaluation* increases the profit rate of manufactured sectors as the natural result of the fall of wages in international currency, such exchange rate variation would not be enough to raise the demand prices of manufactured consumption goods up to the point in which the production costs covers the profit rate observed in agrarian sector, i.e. $Ep_2^* = p_2^d < p_2^s$. Therefore, in absence of duties, the latter implies the eventual disappearance of the productive processes ruled by *the urban-national bourgeoisie* and in the long-period position of the specialization pattern.

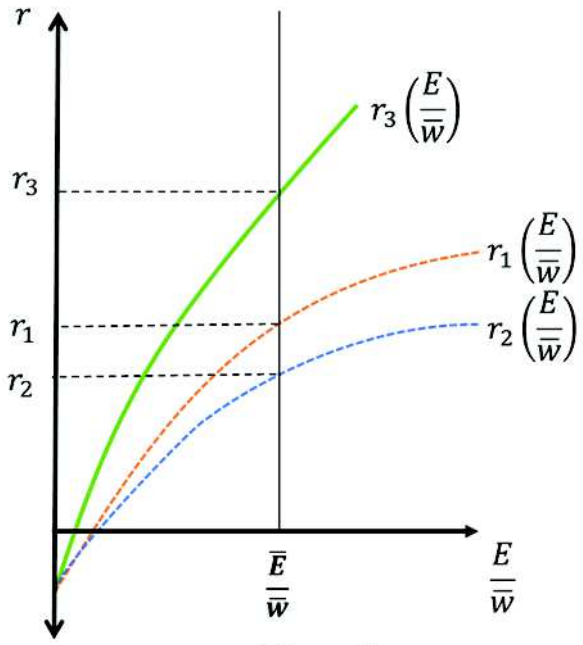

Figure 5

As it can be observed in [1]-[6], the tendency towards the disappearance of the manufactured consumer goods sector implies the suppression of the effectual demand for capital goods. As it was mentioned before, during the 1960s, the Argentine industrialization strategy was oriented to

[71] Cf. O'Donnell (1978a) p. 36.

stimulate the entry of international capital and developed the domestic productive sector of capital goods. However, the new productive sector had as the only source of effectual demand the one that came from the first stage of the industrialization strategy, where the imports of manufactured consumption goods were substituted by domestic production, promoted by Peronist governments (1945-1955). [72]

In this sense, the productive independence of the agricultural sector constituted a limit to the ruling alliance during the CPM.[73] Although the adoption of SP allowed, on the one hand, to facilitate social discipline through higher unemployment levels and the fall of the real wage, the overcoming of the current account unbalances and the elimination of regulations for the transfer of remissions of profits, on the other hand, it has as natural consequence the elimination of the effective demand of the sector in which *international bourgeoise* was called to invest. In fact, such productive detachment explains O'Donnell's emphasis in presenting the technification of the agricultural sector as the cornerstone of solid basis for a political arrangement between the strong fractions of capitalist class, aimed in the subordination of the Argentine civic society.[74]

Following Prebisch (1963)[75], O'Donnell stressed the capacity of agrarian reforms and taxation on potential land income to induce the technification of the productive method in agricultural sector. In the light of other Latin American experiences, the author highlights these policies with a view to inducing a technification of the agricultural sector and a productive integration with the sector led by the *oligopolistic-international bourgeoisie*. However, the pressures by the *rural bourgeoisie* prevented any structural change in this direction, because of the greater bargaining power in comparison with other peripheral economies. In Argentine case, the *agrarian bourgeoisie* still ruled institutions closely connected with the Armed Forces. Moreover, by controlling the production of a wage commodity and becoming the traditional provider of international means of payment, such capitalist fraction had an effective capacity to affect the interests of civil society.

Not being viable, in Argentina, the strategies used in other Latin American economies for the technification of the primary sector, the threat to the profit realization in the capital goods producing sector (when the fully specialized economy is the long period position towards which the composition of the social product tends) can be understood as the true trigger element of the tensions in the ruling class alliance during the CPM

[72] According to O'Donnell, it must be recalled, as a stylized fact of all Latin American industrialization experiences, the central role played by the size of the market, i.e. the level of effectual demands, in orientating the international capital from the traditional exporting sector to those associated with the input producing. Cf. O'Donnell (1978b) p. 9.
[73] The characterization of the Argentine economic structure as one of scarce productive interconnection between sectors can be also found in Canitrot (1981), pp. 12-13.
[74] Cf. O'Donnell (1978a), p. 33.
[75] Cf. Prebisch (1963), p. 44.

During the political domination of the *Pampean aristocracy* and its liberal State (1870-1930), the Argentine economic structure was characterized by the agricultural homogeneity and subordinated to the *International Division of Labour* (being exporter of agricultural goods and importer of manufactured consumer goods). The SPs applied during the CPM favoured the emergence of full specialized structure, represented in [31].

$$\begin{aligned} p_3 &= (p_3 a_{33} + w l_3)(1 + r) \\ p_3 &= E p_3^* \end{aligned} \qquad [31]^{76}$$

In this way, given the nominal wage as exogenously determined to the price system, the distributive closure suggested for the representation of the CPM consists in the exogenous determination of the wage in international currency, i.e. w/E (such closure is in correspondence with the *Bretton Woods* Regime based on the fixing the exchange rate regime). In order to address the problem of value and distribution, the production price system is formed by two equations for the determination of two unknowns, i.e. p_3 y r.

Simultaneously, the quantities system in [10]-[18] must be re-written as presented in [29].

$$\begin{aligned} Q_3 &= I_3 + C_3^w + \bar{X}_3 \\ C_2^w &= c_2 l_3 Q_3 \\ C_3^w &= c_3 l_3 Q_3 \\ \tfrac{I_3}{Q_3} &= \left(1 + g_3^{Exp}\right) v_3 \\ BP &= p_3^* \bar{X}_3 - p_2^* M_2 \\ M_2 &= C_2^w + \bar{G}_2 \end{aligned} \qquad [32]$$

It is important to note that the tendency towards full specialization ended up involving the importation of manufactured goods for consumption, since the inclusion of the latter commodity in the wage basket is determined by historical-institutional factors. The system in [32] is logically solvable, being composed by 6 equations to determine 6 unknowns, i.e. $Q_3, I_3, C_2^w, C_3^w, BP$ and M_2. In this sense, it is possible to obtain $Q_3 = \frac{\bar{X}_3}{1-\left(1+g_3^{Exp}\right)v_3 - c_3 l_3}$ and $g_3 = \bar{g}_{X_3}$.

Recalling the particularities of the *estancias* regime that characterized Argentine agrarian sector, the absorption of the labour force under such economy turned to be substantially lower than the corresponding to the system [10]-[19]. In fact, the only autonomous component of demand, capable of increasing both the level of output and employment is the one associated to the external demand for agricultural goods, which is entirely explained by factors outside the influence of

[76] Even though the analytical representation of the CPM highlights the similarities between the tendency follows by the composition of the social product with the Agrarian Exporter Period (1870-1930), the distributive closure suggested here takes in consideration historical specificities, that were different with respect institutional framework (e.g. the financial opening and the international monetary system) that characterized the International Division of Labour Regime, during XIX century.

domestic political decisions. In sum, the fiscal austerity imposed by the SP and the agrarian specialization of the productive economy made almost impossible to achieve full employment. [77]

In sum, the limits to the alliance between bourgeoise fractions emerged from: i) the threats to the *effectual demand* for the sector ruled by the *oligopolistic-international bourgeoisie* and ii) the incompatibility between the full-specialized productive structure and the standard of material life acquired by the popular class and its full employment aspirations.

> *"Faced with this, the large bourgeoisie again and again did what all bourgeoisies do in the absence of a tutelary State which induces them to adopt longer-term strategies: they looked to their short-term economic interests, supported the economic reactivation policies, and thus rode the crest of the wave of economic recovery (...). In so doing this fraction covered a full swing of the pendulum, joining the whole of the urban sector and abandoning the pampas bourgeoisie to a solitary lament because of the deterioration of its relative prices"* (O'Donnell, 1978a, p. 36).

V. Conclusions

The chapter presents both conceptually and in formal terms the contributions by the political scientist Guillermo O'Donnell, which revolves around the notions of the Pendulum, *Bureaucratic-Authoritarian State* and their implications on income distribution and output dynamics in Argentinian economy. Based on previous attempts to explain the *Stop & Go* dynamics, O'Donnell (1978a) provides a useful framework to understand the history of those pendular movements in terms of the alternation of class alliances in regarding with the dominion of the State and the determination of its policies.

By applying Sraffa's representation of *Production of Commodities by Means of Commodities* and the Keynesian Principle of *Effective Demand,* in the modelling of the relative price system and the output dynamics (respectively) for the Argentine pendulum, the present chapter identifies complementarities between theoretical elements rooted in the Latin American Structuralist tradition and the Classical-Keynesian Approach. Particularly, the Structuralist notion of *UPS*, provided by Diamand, and the concept of *Bureaucratic-Authoritarian State,* formulated by O'Donnell, proved to be compatible with extensions of the Classical-Keynesian approach to the multi-export peripheral economy framework, offered by Steedman, Baldone, and others.

[77] There is a broad consensus among the theorists of Latin American structuralism regarding the conflictive relationship between the agricultural bourgeoisie and the working class. In Braun & Joy (1968), as a seminal contribution on the Argentine Stop & Go cycle, it is assumed that "That the value of agricultural exports is insufficient to cover the cost of imported inputs at full employment level, given that the relationship of money-wage level to the rate of exchange at full employment can be changed very little*"* (p.869).

Unlike recent attempts to interpret the Latin American Structuralism from the Classical-Keynesian Approach, the traditional dichotomy between industrial versus agricultural sectors is here replaced by distinguishing, within the former, the productive process of manufactured goods for final consumption from the sector associated to the produced means of production. The latter distinction represents one of the main novelties of O'Donnell's approach to *UPS*, capturing the technical dependence of peripheral economies with respect to international capital in deepening of import substitution industrialization strategy and the irruption of transnational corporations in the production of capital and intermediate goods during the period considered. Based on a tripartite productive structure, the model reconstructs the traditional *Stop & Go* dynamic as the ambivalent behavior of the Oligopolistic- International *bourgeoisie* in its alliance strategies for the definition of the economic policies.

The formalization provided was structured highlighting two elements that shed light on the changes of alliances by the *international capitalist fraction*. The first element refers to the productive autonomy of the agricultural process, sector where the economy tends to specialize under *laissez-faire* trade policies. Thus, the productive separation among sectors dynamited the bases of its class alliance with the *agrarian bourgeoisie*. The second element concerns the persistent emergence of the external constraint in a scenario in which the increasing influence of the popular class and the urban-national bourgeoisie forced the adoption of expansive fiscal policies. The growing tensions within the ruling class alliance in managing of the international currency scarcity ended up expelling the *international bourgeoisie* from the alliance and pushing it to a new coalition with the *rural-Pampean capitalist fraction.*

The resulting image of the attempt to diversify Argentine productive structure through an industrialization corresponds with the *Gramscian* definition of crisis, that is, a state in which the *old is dying and the new cannot be born*.

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2 CHAPTER II

PRICES, DISTRIBUTION AND ACCUMULATION IN AN ECONOMY WITH TECHNOLOGICAL AND FINANCIAL DEPENDENCES THROUGH THE LENS OF THE CLASSIC-KEYNESIAN APPROACH: A FORMAL RECONSTRUCTION OF ARGENTINE POLITICAL ECONOMY (1973-1983)

The chapter analytically re-elaborates the change in the Argentine pattern of development, passing from imports substitution industrialization led by a popular government (1973-1976) to a strategy based on market liberalization, implemented by a Dictatorship (1976-1983). By applying Sraffa's representation of productive process, the monetary approach of distribution in the light of the classical revival and the extension of the Keynesian Principle of Effective Demand in explaining the growth path, such structural changes are analysed and modelized. Unlike recent attempts in revisiting Structuralist tradition through the lens of the Classical-Keynesian Approach, the novelty of the chapter refers to the abandonment of the traditional representation of argentine economy as a two-sectors productive structure. The suggested formal representation accounts for the capital goods producing industry, the financial sector and an intrinsic non-tradable sector as distinctive elements of the Argentine productive structure of the period considered. The reconstruction emphasizes that it was the participation of the labour movement in the political order, represented by popular government, what triggered the rejection of the capitalist class to the pattern of industrialized development and induced the domestic bourgeoisie to reinforce the dependent character of the Argentine economy, as a disciplining obstacle for the working class.

I. Introduction

The present chapter is inserted in the revision of the Latin American Structuralist tradition through the lens of the classical revival.[78] In particular, the contribution advanced here can be understood as an analytical reconstruction of the Argentine political economy by means of theoretical elements rooted in the Structuralist framework and compatible with the classical theory of value and distribution. In this sense, the interaction between income distribution, accumulation and the

[78] Cf. Crespo & Lazzarini (2015); Dvoskin & Feldman (2015, 2018a, 2018b).

Balance-of-Payments is modelized for Argentina in the post-*Bretton Woods* Era (1973-1983), approaching the implication of the phenomena of '*technical* and *financial dependencies'*.[79]

The period under consideration includes the transformation observed in the Argentine pattern of development during the late 1970s, when the industrialization led by a popular government (1973-1976) was substituted for a strategy based on *laissez-faire* policies (both at the productive and financial levels) implemented by Civic-Military Dictatorship (1976-1983) and aimed at reducing the capability of the State to impose a distributive arrangement associated to the high relative bargaining power of a well-organized labour movement. Under the new strategy, the international determinants of distribution and accumulation were exalted, not only by deepening the *technological* and *financial dependences* as the natural consequence of de-regulation of capital account and liberalization of trade, but particularly through the increase of foreign currency denominated indebtedness. The latter exacerbated the external constraint and made it increasingly difficult the usage of surplus trade to rise the growth rate of the domestic autonomous components of effective demand; with the further implication that it considerably restricted the expansive phase of the *Stop & Go* cycle during 1980s.[80]

By applying Sraffa's representation of productive process, where commodities are produced by means of commodities, the monetary explanations of distribution in the light of the classical revival and the extension of the Keynesian Principle of *Effective Demand* to the explanation of the growth path, the structural transformations, imposed through State Terror in Argentina, are examined and modelized. Nevertheless, unlike recent attempts at revisiting Structuralist tradition through the lenses of the Classical-Keynesian Approach, the novelty of the chapter refers to the abandonment of the traditional two sectors representation for argentine economy. In addition to the agricultural and manufactured for final consumption sectors, the suggested model accounts for a more sophisticated productive structure, including the emergence of both the capital goods industry (after the deepening of industrialization by the Developmentalist States) and the financial sector (as the result of the deregulation of capital markets under the new development strategy,

[79] While the *technical dependency* refers to the persistent inclusion of imported means of production under the *dominant technique* in a *pricing-taker* economy, the *financial dependency* is associated to the influence exerted by the international interest rate on the domestic profit rate, through the interest rate, in non-issuing economy of international means of payment. Cf. Dvoskin & Feldman (2018a,2018b).

[80] In the Latin American Structuralist tradition, the so-call *Stop & Go cycles* refer to the historical experience of interaction among output dynamics, income distribution and the Balance-of-Payment. Under the Bretton Woods regime (when movement of short-term financial capital was highly regulated), the flow of trade can be identified as the main link through which external sector constrains the dynamics observed in accumulation and distribution of semi-industrialized economies. Thus, periods of increasing growth rate, full-employment output, low inflation and increases in real wages coincide with persistent trade deficits, while the subsequent period is characterized by balance-of-trade surplus generated through decreases in growth rate, high unemployment, low real wages and persistent inflation. The accumulation of international reserves, obtained through the trade surplus and recessive devaluation, can be understood as a necessary condition for the expansive policy that inaugurates the phase of the *Go*. Cf. Ferrer (1963), Braun & Joy (1968), Braun (1970,1973), Diamand (1972, 1978), Villanueva (1972), Brodersohn (1974), Mallon & Sourrouille (1975) and Canitrot (1975).

since 1976). The formal representation also includes an intrinsically non-tradable sector to address the services as another distinct element of Argentine productive structure.

After this introduction, the chapter considers (section II) a generic model through which the Argentinian political economy will be formally reconstructed. This second section also provides a discussion related with the pattern of specialization. A third section (III) provides the historical description and analytical reconstruction of the Developmentalist strategy, stressing the third Peronist government (1973-1976) and the Crisis of 1975 to highlight the traditional tensions that arrive when the import substitution industrialization is subordinated to working class interests, e.g. increasing wage baskets and nearly to full-employment output level. The following section (IV) approaches the structural transformation introduced by the dictatorship (1976-1983) and its frustrating attempt to control the inflationary dynamics. The fourth section concludes by providing a global examination and an analytical reconstruction of the political economy during the State Terror. A final section (V) provides the main conclusions.

II. Modelling Prices and Distribution, Quantities and Relations among Productive Sectors

After listing the assumptions required by the formal reconstructions (II.I), the following subsections extensively present the meaning and content of the equations used here, both for studying the dynamics followed by distribution and by the social product(II.II and II.III). The activation of the production processes and closures proposed for the equation systems will vary according to the historical experiences under consideration, being presented and explained in the subsequent sections.

The present section is structured according to the tradition of separation in studying normal prices and quantities suggested by the surplus-based theory.[81]

II.I. Assumptions

A productive and monetary market economy is considered under the following assumptions:

1. The production of each commodity occurs synchronously in periodic cycles.
2. Only single production system is considered.
3. Money wages are paid *ante-factum* to each productive process, which are used to purchase a basket composed by agricultural, manufactured commodities for final consumption and services.

[81] Cf. Crespo, E. (2008).

4. Prices are normalized by taking the nominal wage rate as given, i.e. $w = \overline{w}$, in terms of inconvertible fiat money.
5. No alternative technique is considered.
6. Land is abundant and there is no reservation price associated with the marginal land.
7. Constant returns to scale are assumed for all productive sectors.
8. The social product is divided between tradable sectors and an intrinsically non-tradable sector (services). The international competitiveness of each tradable sector depends on distribution.
9. The Argentinian economic system is *pricing-taker* for tradable goods.[82]
10. The Argentinian monetary system is essentially *interest rate-taker*.[83]
11. Under the *dominant technique*[84], the production of the manufactured commodity for final consumption and the capital good requires imported means of production.
12. No constraint is imposed on the labour that the economy can use.
13. There exists a uniform "*risk-premia*" for productive sectors, $\sigma_{k_i} = \sigma_k, \forall i = 1,2,3,nt.$
14. The validity of *Kalecki's Aphorism*, i.e. '*capitalists get what they spend, workers spend what they get'* is assumed.[85]
15. The public expenditure is oriented to the acquisition of manufactured commodities for final consumption, i.e. G_2, and services, i.e. G_{nt}.

II.II. Prices and Distribution

Under the set of assumptions presented above, the analytical representation of Argentine productive structure revolves around the following set of equations, where the alphanumeric

[82] According to the classical notion of competition, an economic system will be defined as *pricing-taker* if, under its dominant technique, is not able to satisfy the global demand in order to determine the international prices and atomization of providers at the international market avoids the coordination among them. Therefore, the domestic cost-minimizing technique cannot influence the normal international price, belonging the latter to the classical set of exogeneous variables in determining domestic relative prices.
The inverse holds for notion of *price-maker*. The productive capacity is completely able to satisfy the entire global demand when the method is activated by the *dominant technique*. In this case, the theory of value and the distribution in closed economy fully operates, determining international relative prices once the domestic relative prices are known. Cf. Machado (2017) Ch. I. p. 24.
Regarding Argentina's "*pricing-taker*" condition, the Structuralist literature agree in characterizing the economy as incapable of influence international prices through currency devaluation and changes in distribution. Cf. Ferrer (1963) p.6, Frenkel & O'Donnell (2008 [1978]) p. 112, and Canitrot & Rozenwurcel (1986, p.354).

[83] The economic system under consideration is characterized by its *financial dependency*, this is, the inability to cancel financial commitments at the international markets in their own currency. This creates an asymmetric condition in the relationship between the international and domestic interest rates, while the former is a relevant element in the determination process of the later, the domestic interest does not influence in the determination of the return rate of financial assets denominated in international currency. Cf. Tavares (1985, 2000), Vernengo (2006, p. 563), Medeiros (2008) and Dvoskin & Feldman (2018).

[84] In the analysis of choice of techniques, the notion of *dominant technique* (also called the technique that prevails in the long term or *normal*) refers to the set of methods of production that maximizes the residual distributive variable, once a distributive variable is taken as given outside the price system. Cf. Kurz & Salvadori (1995). Ch. 5.

[85] In Braun & Joy (1968), Canitrot (1983) and Canitrot & Rozenwurcel (1986), the workers' marginal propensity to consume is assumed to be higher than that the one observed for capitalists. According to the authors, the latter constitutes a stylized fact of the Argentine economy. *Kalecki's Aphorism* can be understood as a simplified strategy to capture the same phenomenon.

subscripts, 1,2,3 and nt refer to productive sectors of the capital good, the manufactured consumption good, the agricultural commodity and the non-tradable sector (service) respectively.

Equation [1] refers to the capital good sector (e.g. steel, petrochemical, cellulose, automobile industries). p_1^s represents the cost of production in domestic currency under *normal conditions*. Additionally, w represents the money wage, r the *normal* rate of profit, E is the nominal exchange rate. [86] Moreover, l_1 represents the labour technical requirement in the industrial capital good producing sector, a_{11} is the input technical requirement for itself, η denotes the technical coefficient of the imported means of production, while p_4^* is the internationally given price, denominated in foreign currency for such externally produced input.

$$p_1^s = \left(p_1^d a_{11} + E p_4^* \eta + w l_1\right)(1 + r) \qquad [1]$$

The production price for the manufactured commodity for final consumption (e.g. textile) is presented in equation [2] by p_2^s. There l_2 captures the labour requirement to produce a unit of output, a_{12} is defined as the technical coefficient for the industrial capital good domestically produced, μ is associated with the quantities of imported input necessary for producing a unit of output, being p_5^* its international price in foreign currency.

$$p_2^s = \left(p_1^d a_{12} + E p_5^* \mu + w l_2\right)(1 + r) \qquad [2]$$

The equation [3] presents the cost of production for the agricultural commodity, p_3^s (e.g. beef cattle and cereals). There, the labour requirement for producing a unite of output is again associated with l_3, the technical coefficients associated to produced means of production used by the agricultural sector is represented by a_{33}.

$$p_3^s = \left(p_3^d a_{33} + w l_3\right)(1 + r) \qquad [3]^{87}$$

Equation [4] presents the production price for the non-tradable good, p_{NT} (e.g. transports and public services). Again, l_{NT} represents the labour requirement for producing a unite of output, a_{1NT} is the technical coefficient of capital good in the service sector[88].

$$p_{NT} = \left(p_1^d a_{1NT} + w l_{NT}\right)(1 + r) \qquad [4]$$

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[86] The nominal exchange rate, i.e. E, is defined as the units of national currency needed to purchase a unit of foreign currency.

[87] When an exogeneous *absolute rent*, i.e. $x = \bar{x}$, must be afforded for the inclusion of land in the productive method activated in the agricultural sector under the *dominant technique*, equation in[3] must be rewritten as follows:

$$p_3^s = \left(p_3^d a_{33} + w l_3 + \bar{x} t_3\right)(1 + r) \qquad [3']$$

Where t_3 refers to the technical coefficient associated to the units of land per units of agricultural. Following Braun (1974), the price associated to the acquisition of a unit of land can be defined as follows $p_t = \bar{x}/i_b$, where i_b, as will be presented, refers the riskless interest rate.

[88] Cf. Frenkel & O'Donnell, *op. cit.* p. 112.

Equation [5] characterizes the real wage rate, i.e. ω, measured in terms of the wage bundle C. The latter is specified in equation [6], where $\bar{c}_j$, $\forall\, j = 2,3,nt$, refers to the composition of the wage bundle.

$$\omega = \overline{w}/C \qquad [5]$$

$$C = p_2^d \bar{c}_2 + p_3^d \bar{c}_3 + p_{NT} \bar{c}_{NT} \qquad [6]$$

The following equation represents the equilibrium conditions for the gross rates of return of productive sectors. Where, i_b is the riskless nominal interest rate imposed by the monetary policy, σ_k refers to the risk premium or "net profit of enterprise", in Pivetti's (1991) terms, of investment projects in the productive sectors.

$$r = i_b + \sigma_k \qquad [7]$$

Additionally, the equality in [8] represents the so-called *Uncovered Interest Parity*, according to which "*the expected rate movements offset nominal interest differentials so as to equalize expected nominal yields internationally*"[89]. In equation [8], i^* is the nominal international interest rate, σ_E represents the expected risk for currency depreciation associated to issues denominated in the national currency, i.e. $\sigma_E = E^{Exp}/E - 1$.[90] Finally, ρ accounts for the *risk-premia* and defined as the difference between the riskless interest rate in national currency and the return rate of foreign assets denominated in domestic currency.

$$i_b = i^* + \sigma_E + \rho \qquad [8]$$

The suggested model follows Dvoskin & Feldman (2015, 2018) and Dvoskin, Feldman & Ianni (2019) in distinguishing *supply prices*, i.e. p_i^s, from *demand prices*, i.e. p_i^d for the case of tradable sectors. While the former captures the minimum monetary quantities for unit of output that allow the replacement of all means of production used during the productive process under *normal conditions of production*, the latter represents the maximum monetary quantities that consumers are willing to afford for acquiring a certain commodity. In this sense, equations [11]-[13] specify the *demand prices* for commodities potentially produced within the economy, being p_i^*, $\forall i = 1,2,3$ the international prices in foreign currency.

$$p_1^d = E p_1^* \qquad [9]$$

[89] Cf. Cumby &Obstfeld (1984), p.135.

[90] The expected risk for currency depreciation becomes particularly relevant in determining distribution in a post-Bretton Woods Era for economies that do not issue a currency that is the international value reserve. For such economies the recurrence of balance of payment deficits and the decrease of international reserves eventually raise the expectation of devaluation and impact in the interest rate on short-term loans charged by banking system. Cf. Canitrot (1983) and Dvoskin & Feldman (2018), p. 382.

$$p_2^d = Ep_2^* \quad [10]$$

$$p_3^d = Ep_3^* \quad [11]$$

The model has 11 equations and 14 unknowns, i.e. $p_1^s, p_2^s, p_3^s, p_{NT}, p_1^d, p_2^d, p_3^d, \omega, C, r, E, i_b, \rho, \sigma_e$.

When *laissez-faire* trade policy is applied in a price-taking open economy, an additional mechanism strengthens the relation between distribution and the composition of the social output, i.e. the appearance of multiple residual variables for a given level of the exogenous variable under the condition of international competitiveness. Then, the determination of the productive sectors that will be activated in an open economy, the so-called *specialization pattern*, must be studied jointly to any suggested any closure to solve the set of equations [1]-[11].

The problem of the specialization pattern is presented here as a particular problem of choice of techniques[91]. In this sense, the social product of *pricing-taker* open economy will consist of those goods whose productive sectors are able to maximize the residual distributive variable for a given level of the exogenous one. [92]

It should be noted that under a trade policy based on *laissez-faire,* international competitiveness is a necessary condition for the productive activation of the tradable sector. That is,

$$p_j^s = p_j^d \quad [12]^{93}$$

From the condition [12] it is always possible to obtain, for each E/w, the maximum value of the rate of profit that each sector can pay. This is $p_j^s\left(\bar{E}, r_j^{max}, \overline{w}\right) = p_j^d(\bar{E})$ for each tradable sector j.

$$\begin{aligned} r_1^{max} &= \frac{p_1^*\left(\bar{E}/\overline{w}\right)}{(p_1^* a_{11} + p_4^* \eta)\left(\bar{E}/\overline{w}\right) + l_1} - 1 \\ r_2^{max} &= \frac{p_2^*\left(\bar{E}/\overline{w}\right)}{(p_1^* a_{12} + p_5^* \mu)\left(\bar{E}/\overline{w}\right) + l_2} - 1 \\ r_3^{max} &= \frac{p_3^*\left(\bar{E}/\overline{w}\right)}{p_3^* a_{33}\left(\bar{E}/\overline{w}\right) + l_3} - 1 \end{aligned} \quad [13]$$

It must be noticed that there will not, in general, be possible to identify a ratio $E^*/\overline{w}$ such that $r_1^{max}(E^*/\overline{w}) = r_2^{max}(E^*/\overline{w}\,) = r_3^{max}(E^*/\overline{w}\,,)$. Therefore, in a *price-taking* economy, for a

[91] Cf. Mainwaring, (1974), p. 540; Kurz & Salvadori (1995), Ch. 5.

[92] The formal equivalence between the study of the determination of the specialization pattern the choice of technique analysis applies for tradable sectors, referring to those distributive variables capable to close the gap between *supply* and *demand prices*, i.e. the profit rate and the wage in foreign currency.

[93] If $p_j^d - p_j^s < 0$, the international price in terms of national currency will impose itself at the domestic market and force the importation of commodity j, because of the incapability at this price level to afford the productive services required by the *dominant technique* and the distribution during the domestic production process. If $p_j^d - p_j^s > 0$, those who command the production of good j will obtain a greater remuneration by allocating their production at the international market to satisfy the external demand. The natural consequence of this will be the increase in the domestic price until reaching equalization to the international price in terms of domestic currency.

given level of the money wage in foreign currency, the three tradable sectors cannot be jointly activated.[94] Thus, the productive specialization will be oriented towards the sector that can afford the maximum profit rate without violating the international competitiveness. In order to capture the persistence of the Argentine productive specialization towards the primary agrarian sector when *laissez-faire* trade policies are applied, it is reasonable to characterize the relation among the sectorial profit-rates as follows: $r_2^{max}(\bar{E}/\bar{w}) < r_1^{max}(\bar{E}/\bar{w}) < r_3^{max}(\bar{E}/\bar{w})$. This means that, for a given level of wages in international currency, the agrarian sector can afford the highest profit rate.

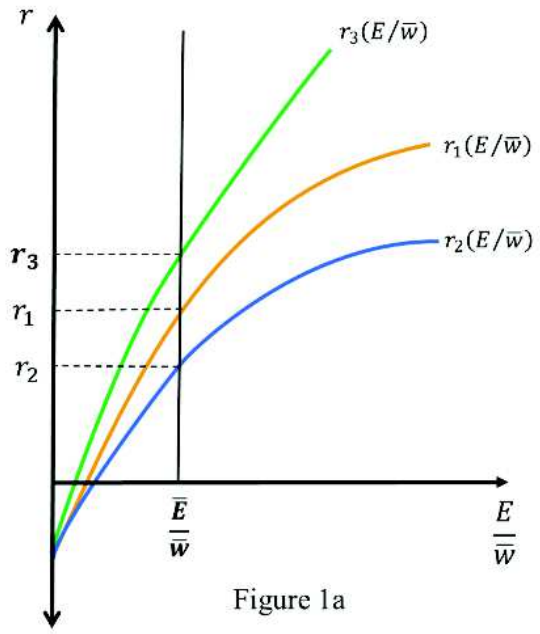


Figure 1a

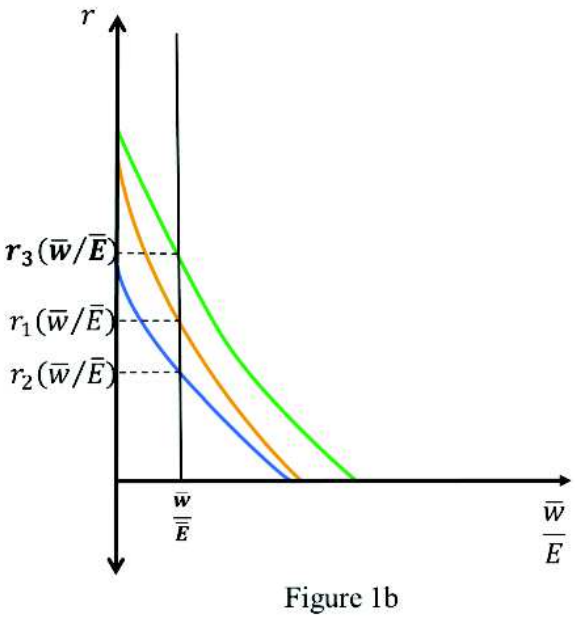


Figure 1b

Relations in [13] are graphically represented in *Figures 1a* and *1b*, where each curve refers to the maximum rate of profit compatible with international competitiveness as a function of the *exchange rate commanded*, i.e. the amount of foreign currency that can be commanded by the nominal wage. An appendix is presented for an extensive development of Classical approach to the *price-taking* open economy framework.

II.III. Quantities

Likewise, it is necessary to provide an analytical approach to the dynamics of quantities and accumulation of Argentine economy for the period addressed. In this sense, the model provided in this section adopts the extension of the *Principle of Effective Demand* to long period and, thus, it explains the trends followed by the social product both, in level and the growth rate, through those observed in the autonomous components of demand, i.e. exports and public expenditure.

[94] This impossibility is reinforced in an economy with free capital mobility, $r_j^{max} \lessgtr (i^* + \sigma_E + \rho) + \sigma_k$, $\forall\, j = 1,2,3$.

In equation [14], the *effectual demand* of industrial capital goods, i.e. Q_1, is mainly explained by the demand coming from both the replacement and the expansion of productive capacities for industrial, financial and non-tradable sectors, i.e. I_1.

$$Q_1 = I_1 \quad [14]$$

While, equation [15] determines the *effectual demand* for manufactured commodity for final consumption, i.e. Q_2, by adding their two sources, i) the one associated to the wage basket, C_2^w, and ii) the demand coming from the autonomous decisions of public spending on the manufactured commodity that does not create productive capacity, $\bar{G}_2$.[95]

$$Q_2 = C_2^w + \bar{G}_2 \quad [15]$$

The *effectual demand* for agricultural sector, i.e. Q_3, is represented in equation [16] and explained by i) the use of agricultural inputs in the production process, i.e. I_3, ii) the wage consumption for agricultural goods, i.e. C_3^w, and iii) the external demand, i.e. $\bar{X}_3$. It must be stressed that this sector has historically been the provider of international means of payments for the entire economy.

$$Q_3 = I_3 + C_3^w + \bar{X}_3 \quad [16]$$

Equation [17] represents the sources of the *effectual demand* for the non-tradable good, i.e. Q_{NT}. There, C_{NT}^w refers to the effectual demand for services coming from the purchases of the working class, while $\bar{G}_{NT}$ represents the demand by the State for services or non-tradable goods.

$$Q_{NT} = C_{NT}^w + \bar{G}_{NT} \quad [17]$$

Given distribution and prices, equation [18] refers to the total demand for credits, i.e. Q_b, provided by banks to the productive sectors and to the working class. Moreover, h_i refers to the share of the borrowed capital over the total capital advanced in each sector, while $\bar{C}_j^w$ represents the autonomous component of the working class's demand on commodity *j* financed by domestic credits.

$$Q_b = \sum_{i=1}^{NT} Q_i h_i + \sum_{j=2}^{NT} \bar{C}_j^w \quad [18]$$

Equations [19], [20] and [21] represent the demands for those commodities that constitute the wage basket. These elements are induced by the levels of effective product through the employment of labor force. In this sense, both, C_2^w, C_3^w and C_{NT}^w, will be defined by the product

[95] Following Serrano (1995), it is important to stress that G_2 constitutes a component of the aggregate demand that does not create productive capacity and, in contradistinction to the external demand, it is entirely explained by the political arrangements. Because of this, it is called to play an essential role the presentation of the political determinants of the *Stop & Go* dynamics.

between the aggregate level of employment and the respective participation of the consumption good in the wage commodity.

$$C_2^w = \bar{\lambda}_2\left(\sum_{i=1}^{NT} Q_i l_i\right) + \bar{C}_2^w \quad [19]$$

$$C_3^w = \bar{\lambda}_3\left(\sum_{i=1}^{NT} Q_i l_i\right) + \bar{C}_3^w \quad [20]$$

$$C_{NT}^w = \bar{\lambda}_{NT}\left(\sum_{i=1}^{NT} Q_i l_i\right) + \bar{C}_{NT}^w \quad [21]$$

Additionally, the model accounts the *dual nature* of *investment spending*, this is, investments are, simultaneously, component of aggregate demand and source of productive capacity. It will be this last role, the so-call supply character of investment spending, the one represented by equation in [22]. There the *Accelerator Principle of Investment* is introduced. [96] In such equation, the coefficients $v_i, \forall i = 1,2,3,nt$ and b, refer to the investment needed under the *dominant technique* to produce an additional unit of productive capacity in the urban sectors. A causal relationship will be established, according to which a raise in the expected growth rates of the productive capacity in the urban sectors, i.e. g_i^{Exp}, will increase the current participation of volume of capital good oriented to the creation of productive capacity in the total quantity of capital good produced. In this way, it is guaranteed that, in the long period, the effective degrees of capacity utilization tend toward the desired one. [97]

$$\frac{I_1}{\sum_{i=1}^{nt} v_i Q_i} = (1 + g^{Exp}) \quad [22]^{98}$$

The same causal relation can be found in the agrarian sector, where the creation of productive capacity is self-provided. In equation [23], v_3 refers to the investment required to produce one additional unit of productive capacity in the rural sector.

$$\frac{I_3}{v_3 Q_3} = (1 + g^{Exp}) \quad [23]$$

Finally, the inclusion of the balance of payments in the system that determines the growth path allows studying the accumulation dynamics in a *pricing-taker semi-industrialized* economy. In this sense, by including a sustainability condition for the balance of payments as an upper-limit to long-term growth rate of the economy, the suggested model captures the impossibility for *technologically dependent* economy to growth maintaining long-term deficit in the external

[96] According to the *Accelerator Principle* and the notion of *normal degree of capacity utilization*, no capital good will be acquired for the expansion of productive capacity, unless such use is well founded in expectations of persistent increment of future demand. Thus, "*Regarding the relationship between the effective product and the productive capacity, it has been observed that both maintain a stable proportion in the average of long periods, that is, the proportion is constant in time when their fluctuations are eliminated cyclicals*" (Monza, 1976, p.112. Own translation).

[97] Cf. Serrano (1995), Bortis (1997) and Dvoskin & Feldman (2015).

[98] From the assumption of constant returns to scale, once the distribution is given, it seems reasonable to treat the expected growth rate for each sector as uniform, since the composition of the social product do not change under the growth path, i.e. $g_i^{Exp} = g^{Exp}, \forall i = 1,2,3,nt$ and b.

sector.[99] The equation [24] refers to the Balance of Payment result, i.e. BP, in which the result between the international currency inflows from exports, i.e. $p_3^* X_3$, and the outflows associated to both, imports $p_j^* M_j$, $\forall i = 4,5$, D represents the current stock of external debt, while KK is the result of the capital account, i.e. the net flows of foreign capital to the economy.

$$BP = p_3^* X_3 - p_4^* M_4 - p_5^* M_5 - i^* D + KK \qquad [24]$$

Furthermore, by recalling the notion of *technical dependency*, equations [25] and [26] capture the endogenous character of the external trade, stressing the induced nature of imports necessary to produce capital good and manufactured good for final consumption, i.e. M_4, M_5, respectively.

$$M_4 = \eta Q_1 \qquad [25]$$

$$M_5 = \mu Q_2 \qquad [26]$$

It can noticed that the set of equations [14] to [26] is logically solvable, since thirteen unknown variables can be simultaneously determined by thirteen equations, i.e. $Q_1, Q_2, Q_3, Q_b, Q_{NT}, I_1, I_3, C_2^w, C_3^w, C_{NT}^w, M_4, M_5$ and BP. In this sense, assuming as given the technique, distribution, external demands and public expenditure, then the output levels for each productive sector can be defined as it follows:

$$Q_i = SM_i\left(\alpha_i \bar{G}_2 + \beta_i \bar{X}_3 + \gamma_i \bar{G}_{NT} + \sum_{j=2}^{nt} \delta_{ij} \bar{C}_j^w\right) \forall i = 1,2,3,NT,b \qquad [27] - [31]$$

The expressions [27] to [31] are characterized by the presence of *Supermultipliers,*[100] capturing the influence of the autonomous components of the effective demand on sectorial output levels. This influence is exerted by both, *multiplier effects of consumption* and the effects associated to the *Accelerator Principle of Investment.*[101] Thus, if we assume that both distributive variables and technical coefficients do not change with output , the growth rate for each sector can be derived from those expressions as the weighted average of the growth rates associated to the autonomous non-creating capacity components, i.e. public spending on consumption goods and non-tradable goods, agrarian exports and workers' autonomous consumption.

---

[99] Cf. Palumbo (2011), p. 246-7.

[100] The Sraffian Supermultiplier is characterized by two features: 1) On the one hand, it constitutes an increasing function with respect to the participations of consumption goods in the wage basket, i.e. $\frac{\partial SM_i}{\partial c_j} > 0, \forall\ i = 1,2,3,nt,b$ and $j = 2,3,nt,$ 2) On the other hand, SM_i is an increasing function on the capital-output technical coefficients and on the expected rates of growth, i.e. g_i^{Exp}, $\forall\ i = 1,2,3,NT,b$. For a detailed description of the supermultiplier model in a classical perspective. Cf. Serrano (1995) and Bortis (1997, ch. 4).

[101] It should be noted that the long period position for the output level of each sector is a function of growth rate of the effectual demand for the same sector, i.e. g_i, which is equal to the expected growth rate, i.e. g_i^e The latter is a direct consequence of the fact that it is recognized a tendency to adjust the effective capacity utilization towards the planned or *normal* one. In Serrano's words "(…) *It shows that, in a Sraffian supermultiplier framework, saying that the actual degree of utilisation in the long run is systematically different from the planned one is one and the same thing as saying that there are persistent collective 'mistakes' or a bias in long-term demand expectations*" (1995, p. 86).

$$g_i = \alpha^i_{X_3}\bar{g}_{X_3} + \alpha^i_{G_2}\bar{g}_{G_2} + \alpha^i_{G_{NT}}\bar{g}_{G_{NT}} + \sum_{j=2}^{NT}\alpha^i_{bj}\bar{g}_{C^w_j} \quad [32]$$

Where $i = 1,2,3,NT$ and b. However, since constant returns to scale were assumed in all productive sectors, then the composition of the social product will not change under the growth path, being $\alpha^i_{G_2} = \alpha_{G_2}$, $\alpha^i_{X_3} = \alpha_{X_3}$, $\alpha^i_{G_{NT}} = \alpha_{G_{NT}}$ and $\alpha^i_{bj} = \alpha_{bj}$. Thus, $g_i = g$.

On the bases of this model, the following sections of the chapter reconstruct the political economy of Argentina. Starting with the Third Peronist government and the subordination of the deliberated productive diversification to achievement of the material interests of working class (1973-1976), and ending with the State Terror (1976-1983), its structural changes (at productive and financial levels), the becoming of anti-inflationary policy as the main focus of the economic policy and successive frustrations in forcing a stable path in price dynamic.

III. The Political Economy of the Third Peronism (1973-1976): The Import Substitution Industrialization led by the Popular Government

Even though the Argentine Import-Substituting Industrialization must be conceived as a development strategy thought to face the economic crisis of 1930, it was only after 1946 when the State turned this policy into a long-term strategy to promote productive diversification and implemented policies to develop domestic productive techniques. The *state-sponsored industrialization* (1945-1976) can be conceived as a pattern of development characterized by the importance of the domestic components of aggregate demand as drivers of accumulation and by the intensification of the class conflict as the result of the redistributive polices in favour of working class.[102] Two elements played a central role: a) High protection tariffs in order to favour the capital goods importers against the consumption goods importers. b) Increasing public intervention, by orienting the public expenditure and providing funds to private investment.[103]

From 1973 to 1976, the Argentine productive structure can be represented by a four-sector economy: 1) a capital good sector, 2) a consumption good urban sector , 3) an agrarian sector consumer goods and 4) an intrinsically non-tradable sector (services), represented by the subscripts $i = 1,2,3,NT$ respectively.

[102] Cf. Vernengo (2017), p.413.
[103] Cf. Canitrot (1980), p. 918.

$$
\begin{aligned}
&p_1 = [p_1 a_{11} + E p_4^* \eta + w l_1](1 + r^*) \\
&p_2 = [p_1 a_{12} + E p_5^* \mu + w l_2](1 + r) \\
&p_3 = (p_3 a_{33} + w l_3)(1 + r) \\
&p_{NT} = (1 - s)(p_1 a_{1NT} + w l_{NT})(1 + r) \\
&p_1 = E p_1^* (1 + \tau_1) \\
&p_2 = E p_2^* (1 + \tau_2) \\
&p_3 = E p_3^* / (1 + \tau_3) \\
&\omega = \bar{w} / C \\
&C = p_2 \bar{c}_2 + p_3 \bar{c}_3 + p_{NT} \bar{c}_{NT} \\
&i_b = r - \sigma_k
\end{aligned}
\qquad [33]
$$

The system in [33] describes the Argentine economy during third Peronism. The price determination under such popular government was mainly explained by the institutional nature of a certain wage basket (i.e. $\bar{\omega}$), the conventional character of the exchange rate under a fixed exchange regime (i.e. $\bar{E}$), a certain level of tax on agricultural exports, (i.e. $\bar{\tau}_3$) and the profit rate required by the international fraction of the capitalist class (i.e. $\bar{r}^*$). Having determined the latter variables in a previous stage, [33] is logically solvable, being composed by 10 unknowns in 10 equations, i.e. r, p_1, p_2, p_3, p_{NT}, τ_1, τ_2, s, C and i_b.

The exogenous distributive variables have been chosen in order to capture the balance of power that characterized the Peronist institutional framework. Differently for the *Bureaucratic Authoritarian State* (1966-1973), the *Popular Government* (1973-1976) was based on the class alliance predominated by national-urban components (i.e. *the urban-national bourgeoisie* and the *working class*).

In this sense, the number of wage basket that nominal wages can purchase is considered as determined outside price system and explained by institutional framework inaugurated by the Popular Governments (1946-1955), when the working-class wellbeing was included among the civil rights that the State must guarantee. Thus, for a certain daily basket (i.e. $\bar{c}_2, \bar{c}_3$ and $\bar{c}_{NT}$) and a nominal wage, the popular government intervened changing relative prices through the imposition a subsidies, agrarian taxes and exchange rate in order ensure the purchase of such wage basket for a month.

The fixed exchange regime was an essential feature of the international payment system and it was based on the political compromise of the Popular Government in maintaining a certain level of wages in foreign currency. Additionally, τ_3 was also exogeneous. Contrary to duties and subsidies, the taxes on agrarian exports directly affected the material interest of the *agrarian bourgeoisie* and retaining the crop to cause currency shortages showed that not any tax level would be accepted and effectively imposed without strong reaction.

The exogeneity of r^* can be explained by the minimum level required for its investments, being equivalent (at least) to the one that would be perceived in central economies. The distinction

between the return rate perceived by domestic capitalists and the one perceived by the international fraction (i.e. $r \neq r^*$), was the result of the asymmetry in technological capabilities. Therefore, under a political arrangement in which the domestic profit rate (i.e. r) was residually determined, the international capitalists can use its technological advantages in order to impose a level of return rate equivalent to the one perceived in centre economies without triggering the entering of domestic bourgeoise in the capital-good producing sector.

Given $\bar{\tau}_3$ and $\bar{e}$, r was residually obtained in the third equation. At the same time, for a certain level of w, e and r^*, the protective tariff on capital goods imports (i.e. τ_1) was determined from the first equation of system [33]. The protective tariff in the consumption good producing sector (i.e. τ_2) was obtained, once τ_1 and r were known. For a given e and ω, the non-tradable price and the subsidy are residually determined. Finally, the Central Bank adapts the riskless interest rate, for a given level of the productive *risk-premia* and residually determined r.

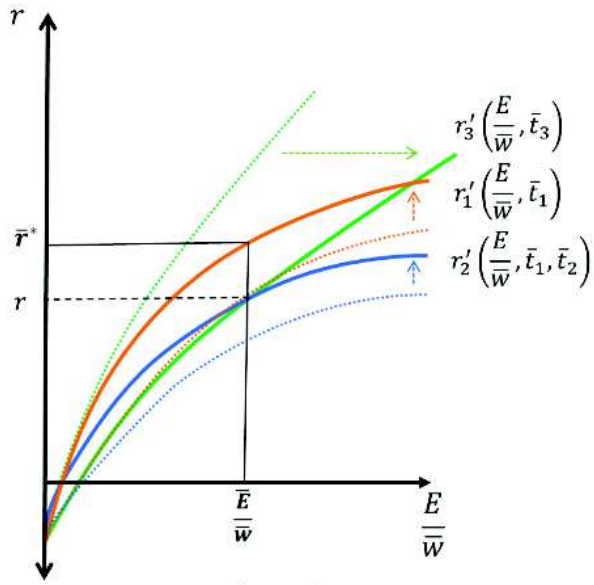


Figure 2a

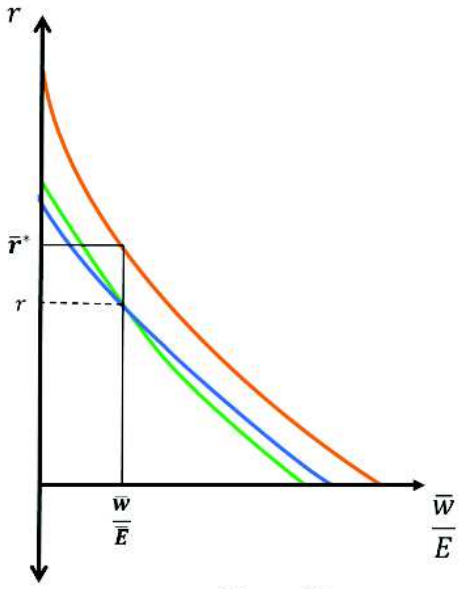


Figure 2b

In sum, the Developmentalist period can be characterized by distinguishing three strategies to impose a industrialization model led by capitalists in a society with a well-organized labour movement:[104] a) through political arrangement by which workers accept to surrender some fraction of their income[105], b) through inflation and c) through an authoritarian political regime. While the first and the second strategies were implemented during the first half of 1960s by extreme fragile democratic regimes, the third method prevailed between 1966-1970. The third

[104] Cf. Canitrot (1980), p. 919.

[105] Union's leaders played a key role under this strategy during the instauration of the Bureaucratic-Authoritarian Regime (1966-1970). Under such political argument, led by the general Juan Carlos Ongania, the Armed Forces included the union bureaucracy and some material interest of the working class in the determination of the economic policy, with the hope to dispute the link between syndicates and the Peronist movement. Cf. Portantiero (1974).

Peronism Government was an attempt to change the evolution of the industrialization dynamic from a democratic political order with great popular legitimacy and prioritizing the material interest of the working class (thus, avoiding the first strategy abovementioned)[106]. However, the inflationary process received from the military government of Lanusse (from May of 1972 to May of 1973, the cost of living index had increased by 75.8%)[107] threatened the viability of such aspirations.

To inspect inflation dynamics more closely, let us define first the price index as follows, $p = p_{NT}(t)\bar{c}_{NT} + \sum_{i=1}^{3} p_i(t)\bar{c}_i$. The inflationary phenomenon is explained by equation [34]. The general inflation rate, i.e. $\dot{p}$, is represented as the addition of two different dynamic processes: the inflation observed at the non-tradable sector, $\dot{p}_{NT}$, and the one associated with the tradable sectors, $\dot{p}_T$, weighted by the respective participation of each type of good in the price index, i.e. $\bar{b}_{NT}$ and $\bar{b}_T = 1 - \bar{b}_{NT}$.

$$\dot{p} = \bar{b}_{NT}\dot{p}_{NT} + \left(1 - \bar{b}_{NT}\right)\dot{p}_T \qquad [34]$$

The inflation rate in the non-tradable sector is presented in [35], where the variation in the price level of the sector is explained by the dynamics observed at capital good producing sector, the distributive conflict associated with the growth rate of profit rate, i.e. $\dot{r} = \left(\frac{dr/dt}{1+r}\right)$, and growth rate of nominal wages, i.e. $\dot{w} = \left(\frac{dw/dt}{w}\right)$. Finally, the dynamic followed by the subsidy moderates the inflationary process in services and non-tradable goods, i.e. $\dot{s} = \frac{ds/dt}{(1-s)}$.

$$\dot{p}_{NT} = \dot{r} + \bar{b}_{K_{NT}}\left(\dot{E} + \dot{p}_1^* + \dot{\tau}_1\right) + \left(1 - \bar{b}_{K_{NT}}\right)\dot{w} - \dot{s} \qquad [35]$$

The inflation in the tradable sector is mainly explained by the depreciation rate, i.e. $\dot{E} = \left(\frac{dE/dt}{E}\right)$, the international inflation rate for each tradable commodity, i.e. $\dot{p}_j^*, \forall j = 1,2,3$, and $\dot{\tau}_j = \frac{d\tau_j/dt}{1+\tau_j}$ captures the dynamics in duties, $j = 1,2$, and taxes on agrarian exports, $j = 3$.

$$\dot{p}_T = \dot{E} + (\dot{p}_1^* + \dot{\tau}_1)\bar{b}_1 + (\dot{p}_2^* + \dot{\tau}_2)\bar{b}_2 + (\dot{p}_3^* - \dot{\tau}_3)\bar{b}_3 \qquad [36]$$

Okishio (1977) explains, for a closed economy, the inflationary phenomenon as the manifestation of the absence of a class *hegemony*.[108] As it is represented in equations in [37] and [38], $\dot{w}$ and $\dot{r}$

[106] Marie (2010) describes the economic program implemented in 1973 by stressing four main objectives to be achieved through induced growth in the basic industries (petroleum and metal) and agricultural exports: "*a voluntarist industrial policy, a reorganization of the State, the maintenance of national economic independence by controls on foreign trade and capital flows; and the securing of compromise among the main economic groups and the state*" (p. 284).
[107] Cf. Ayres (1976), p.481.
[108] Cf. Okishio (1977), p.17.

are direct function of the gap between their *desired* level of the distributive variables, i.e. ω^d and r^s, and the effective values, i.e. λ and $r = f(\omega)$.

$$\dot{w} = \alpha[\omega^d - \omega] \quad [37]$$

$$\dot{r} = P(r^s - r) = P^*[\omega - \omega^s] \quad [38]$$

The notion of *class hegemony* refers for the capability of one social class to impose its distributive aspirations to the entire society, such that $\omega^d = \omega^s$.The inflationary acceleration would eventually arrive when those aspirations are simply incompatible, e.g. $\omega^d > \omega^s$. In this case, nominal variation would not be completely effective in terms of imposing the desired level of the distributive variable, since the antagonist class reacts by rising either the money prices or wages.[109]

The expression $[34] - [36]$[110] reflects the complexity of such phenomenon in a *pricing-taker* semi-industrialized economy, where, additionally to the class-antagonism determinants, the dynamics of the exchange rate, the international prices and protectionist duties, subsidies and export taxes also become relevant elements in explaining the dynamic of the price index.[111] In sum, the price-dynamic formalization provided follows the characterization of inflationary phenomena as an "*observable outcome of a complex process of political and economic interaction in the society*"[112].

Now, after a week of the beginning of the third Peronist government, a *Social Pact* was subscribed by the General Confederation of Labor, the General Economic Confederation and the State including a general wage rise and price freeze in exchange for a two year suspension of collective wage bargaining, from May 1973 to June 1975.[113] The anti-inflationary program designed by the Minister of Economy, Jose Ber Gelbard, used Peron's political legitimacy in order to coordinate the fixing process of prices and wages. However, international inflation (associated with the increase in the international price of oil), institutional limitations to control the effectiveness of the agreement, growing tensions between social classes due to the redistributive implications of the agreement and, finally, Perón's death undermined the initial success of the anti-inflationary policy.

[109] Cf. Stirati (2007), Serrano (2012) and Fiorito (2015).
[110] It must be highlighted $\tau_2 = f(\omega, e, r, \tau_1)$. The latter was nothing else but the outcome of the asymmetric relation in determining prices and distribution between produced means of production and final consumption goods.
[111] It must be stressed that, in the tradable components of the general inflation rate, the dynamics of the class antagonism presented by Okishio are operating here through the behaviour of the protective tariffs. In a *pricing-taker* economy, such public interventions allow some degrees of freedom to the domestic politics in determining the relation between profit rate and wage in foreign currency without affecting the composition of the social product, i.e. the composition that includes, among the activated processes, those producing manufactured goods.
[112] Heymann & Leijohnufvhud (1995) p. 11.
[113] Cf. Marie (2010), p. 284.

The output dynamic was also connected with the international reserves and the capability of the State to control exchange markets. According to the economic structure presented in [33], the quantity equations in [14] − [26] can be redefined as presented in [39]. The system is logically solvable since it composed by 10 equations to determine 10 unknowns.

$$
\begin{aligned}
&Q_1 = I_1 \\
&Q_2 = C_2^w + G_2 \\
&Q_3 = I_3 + C_3^w + \bar{X}_3 \\
&Q_{NT} = C_{NT}^w + \bar{G}_{NT} \\
&C_2^w = \bar{\omega}_2\left(\sum_{i=1}^{NT} Q_i l_i\right) \\
&C_3^w = \bar{\omega}_3\left(\sum_{i=1}^{NT} Q_i l_i\right) \\
&C_{NT}^w = \bar{\omega}_{NT}\left(\sum_{i=1}^{NT} Q_i l_i\right) \\
&I_1 = (1 + g^{Exp}) \sum_{i=1}^{NT} v_i Q_i \\
&I_3 = (1 + g^{Exp}) v_3 Q_3 \\
&BP = p_3^* X_3 - p_4^* \eta Q_1 - p_5^* \mu Q_2 - R_1^*
\end{aligned}
\qquad [39]^{114}
$$

In order to present the capacity of the external constraint in conditioning the domestic growth path of Argentine semi-industrialized economy, it is necessary to recall the levels of outputs and growth rates derived in [27] − [31] and in [32], respectively, once redefined for the system [33]. In this sense, it must be noted that such results cannot be compatible with a situation of external deficit in the long-term position. Taking the international prices as given, the amount of international currency spent in the payment of imports and the transfer of profits to central economies is determined by the output levels in the industrial sectors.

$$
\begin{aligned}
&M + R_1^* = p_4^* M_4 + p_5^* M_5 = p_4^*(\eta Q_1) + p_5^*(\mu Q_2) + R_1^* \\
&g_{M+R_1^*} = \left(\alpha_\eta \dot{p}_4^* + \alpha_\mu \dot{p}_5^*\right) + \beta_{G_2} g_{G_2} + \beta_{G_{NT}} g_{G_{NT}} + \beta_{X_3} g_{X_3}
\end{aligned}
\qquad [40]^{115}
$$

Likewise, the dynamic observed by the amount of international currency obtained through exports is represented in [41].

$$
\begin{aligned}
&X = p_3^* X_3 \\
&g_X = \dot{p}_3^* + g_{X_3}
\end{aligned}
\qquad [41]
$$

According to Thirlwall's (1979) contribution, the trend followed by the growth of the semi-closed economy cannot be in contradiction with the constraint imposed by the behaviour of the balance of payments, i.e. $g_X \geq g_{M+R_1^*}$. This means that the external constraint sets an *upper limit* to the

[114] The Balance of Payments formalized in [39] implies the remission to central economies of parts of the returns obtained by the *oligopoly international bourgeoisie*, i.e. R_1^*. For the simplification of the argument it is assumed that such remission is conceived as a proportion of the volume of profits (and, therefore, a proportion of the sells volume) made in the sector under the control of the international bourgeoisie, i.e. $R_1^* = \phi R_1 =. \phi f(Q_1)$

[115] The dynamics followed by the outflow of international means of payments can be defined as follows $g_{M+R_1^*} = \alpha_\eta(\dot{p}_4^* + g_1) + \alpha_\mu(\dot{p}_5^* + g_2) + \alpha_{R_1^*} g_{R_1^*}$. By replacing $g_j = g \; \forall j = 1,2$, with the definitions provided in [27] − [31], it is easy to obtain the equation [38].

non-foreign currency generating autonomous component of effective demand. The violation of such maximum growth rate eventually causes a balance of payments crisis

$$g_G^{max} = \left[\alpha_{X_3}\dot{p}_3^* - \left(\alpha_\eta \dot{p}_4^* + \alpha_\mu \dot{p}_5^*\right)\right] + \left(\alpha_{X_3} - \beta_{X_3}\right)\bar{g}_{X_3} \quad [42]^{116}$$

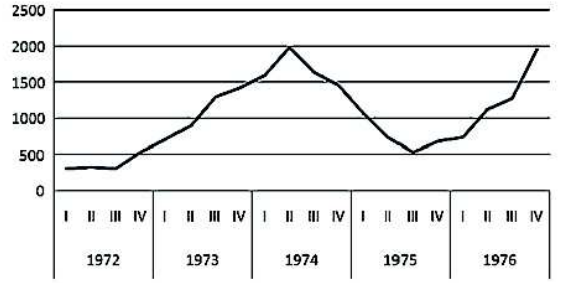
During the third Peronism, the political compromises with the working class and the *national-urban bourgeoisie*, encouraged the adoption of expansive fiscal policies to accelerate accumulation[117], such that $g_G > g_G^{max}$, therefore $g_X \leq g_{M+R_1^*}$.[118]

Moreover, by the early 1970s, the effectiveness of regulation on the exchange rate started to show problems related to the emergence of a parallel market. The further increases in the wage in terms of foreign currency and its validation by monetary policy were placed in a context in which the domestic financial circuit was connected with the international financial market through the latter parallel exchange rate, in an economy where the main provider of international currency was the capitalist fraction openly against the popular government, i.e. the agrarian *bourgeoisie*. As it is explained in Dvoskin & Feldman (2018), the diminishing foreign currency inflows and the increasing gap between the effective and the parallel exchange rates triggered devaluation expectations. Such context was worsened by the attempt of the economic board to validate ruling income distribution through the imposition of a lower official exchange rate and generating a vicious cycle by further exchange rate gaps, devaluation expectations and reserves drains.

As it can be observed in Figure 3, since July 1974, the persistent deficits in the *Balance-of-Trade* implied a drain of international reserves. In June 1975, Martinez de Peron's Administration applied a Stabilization Program (hereafter SP), devaluating the peso more than 100% and generating an income transfer from the popular sector to the agrarian fraction of the capitalist class, triggering an *organic crisis*.[119] The latter change in distribution reduced the effective demand because of a lower propensity to consume of the *Pampean bourgeoisie*, decreased imports and the restored the external surplus. However, this did not prevent the union reaction and a rise of nominal wages by 150%. In other words, by the beginning of 1976 the Argentine economy was under the effects of a standard SP and a distributive conflict out of control. [120]

[116] The specification in [40], i.e. $g_G^{max} = \left(\beta_{G_2} g_{G_2} + \beta_{G_{NT}} g_{G_{NT}}\right)^{max}$, is derived from the condition $g_X = g_{M+R_1^*}$. While the first term captures the influence of the trends followed by the terms of trade on the balance of payment constraint, the second term represents the same influence but now generated by the dynamics of the exported quantities.
[117] Cf. Ayres (1976), p.486.
[118] Cf. Ferrer (1977), p.144.
[119] Cf. Gramsci (1971), p.210.
[120] Cf. Frenkel & O'Donnell, *op. cit.,* p. 116.

Variations in International Reserves (1972-1976)



Source: Marie (2010) p. 297.

Figure 3

In this context, the appearance of indexed debt securities that were negotiated outside the highly regulated banking system gave rise to intense financial speculation and altered the relative weight of the non-banking sector compared to the banking sector. The banks were transformed to mere credit providers at negatives real interest rate, while the capital was oriented to the acquisition of such indexed debt. The emergence of the submarket of indexed securities finally devastated the controlled credit mechanism that prevailed during the developmentalist stage. [121]

The lack of legitimacy during Martinez de Perón's Administration corresponded to the increasing consensus within the Armed Forces about the convenience of the arbitrary use of coercive power and dissuasive fear to ensure the political demobilization of the popular sector. The *coup d'etat* of March 24, 1976, deposed the democratic government and the Armed Forced colonized the State. Therefore, the self-designed *Process of National Reorganization* (hereafter PNR) imposed a set of reforms that drastically restructured the institutions of Argentine State, e.g. i) the suspension of the National Constitution and it substitution by the constituent statute of the Military Junta, ii) the closure of the national legislative body, iii) the judiciary was placed under military control, iv) press censorship, v) prohibition on the right to assembly, speech and thought, vi) changes in school curricula and vii) the criminalisation of all political parties[122].

IV. The Political Economy of The State Terror (1976-1983): Terror and De-Regulation to Prevent the Political Aspects Of Autarchic Development

The aim of the economic program announced on April 2, 1976, was more extended than previous Stabilizing experiences in Argentina (1955, 1963, 1966, 1975). While the main goal of those programs was the reestablishment of the economic "normality" after an external crisis, the policies applied by the *PNR* were completely subordinated to the Junta's objectives, i.e. i) to

[121] Cf. Canitrot (1982), p. 31.
[122] Cf. Buchanan (1986), p.346.

eradicate subversion, ii) to restructure the national economy and iii) to guarantee the obstruction of any new experience of popular government in Argentina.[123] In this view, the stabilization of the inflationary dynamic and the balance-of-payment crisis were stages that were necessary to overcome, but not an end in itself.

In this respect, the liberal paradigm provided Military Junta an ideological framework to redesign the productive structure and its relations. The construction of an economic system based on free markets was presented by liberal economists as the most effective instrument to achieve the Armed Forces' objective. The main policy prescriptions were rooted in the notion of the market as a place of global convergence and compatibilization of individual decisions. The civilian advisors of the regime disapproved societies characterized by a well-organized labour force, public interventions and protected industries.[124]

The economic liberalism that permeated the economic board explained the crisis of 1975 by stressing two elements: a) the State intervention in the price system during Peronist Administration and b) the expansions of State's activities to improve accumulation through increasing public spending. The liberal supervisors of the Military Junta judged the imposition of protectionist tariffs to prevent foreign competition as synthons of highly industrial inefficiency.[125] According to their perspective, such "artificial relative prices" favoured the establishment of inefficient industrial sectors and discriminated the agricultural sector, where "*comparative advantages*" were identified as naturally given.[126] These public interventions were conceived as depriving the Argentine economy from the benefits of free competition and, therefore, generated a stagnation in the capital accumulation. Additionally, the expansion of the State was conceived as the attempt to face the low growth under the development strategy, generating public deficit financed by issuing means of payments and a chronic inflationary process.[127]

To carry out the structural transformation desired by the Armed Forces, the liberal economists designed a set of policies to enforce the *"price disclosure"* of the economy.[128] Under such perspective, the restoration of the "*genuine*" relative prices[129] by the liberalization and internationalization of "*market forces*", together with the elimination of "*unproductive*" public spending and the financing of government deficits by issues of fixed interest stock in the capital markets should be enough to gradually eradicate inflation and productive "inefficiencies". This consensus influenced the political thinking of the upper level of the military hierarchy and made

[123] Cf. Buchanan, *op. cit.*, 355.
[124] Cf. Wynia (1990), p. 265.
[125] Cf. Diamand (1992), p. 197.
[126] Cf. Frenkel & O'Donnell (2008 [1978]) p. 107.
[127] Cf. Belini & Korol (2012), p. 235.
[128] Cf. Canitrot (1981) p. 134.
[129] This imply an increase in exchange rate, in the public services charges and a decrease in the real wages.

it to focus on the long-term issues. As it is described in Canitrot (1980, 1981), the discontent with the uncertainties generated both by the high inflation rate and by cyclical dynamics observed in the recent past provided the justification of the liberal academic groups to promote a radically different economic programme with respect to the stabilization plans.

The economic plan of April 1976 can be conceived as the logical consequence of the abovementioned diagnosis. Its central measures were:

i. The elimination of taxes on agrarian exports.
ii. A progressive reduction in protectionist tariffs.
iii. Salary freezes with subsequent increases set and programmed by the economic board.
iv. The minimum work per week increased 36 to 42 hours.
v. The elimination of subsidies on non-traditional exports and of development credits.
vi. The liberalization of financial and foreign exchange markets.
vii. The financing of public deficits through publicity subscribed bonds.
viii. The reduction of public expenditure and employment.
ix. The elimination of price controls.

Even though economic plan did not follow the standard SPs in including a devaluation, the elimination of subsidies and of taxes on agrarian exports, jointly with the repression over demands for increases in monetary wages exacerbated the distributive changes against workers initiated during the balance-of-payment crisis in 1975. Therefore, by the end of 1976, the real wage had decreased 40% with respect the average level of the previous 5 years.[130] Figure 4 shows the direct relation between wages in foreign currency and the purchasing power of wages in terms of a certain wage basket. The curve's shift represents the decrease observed in the real wage for each level of wage in foreign currency as a result of the 1976 economic programme.

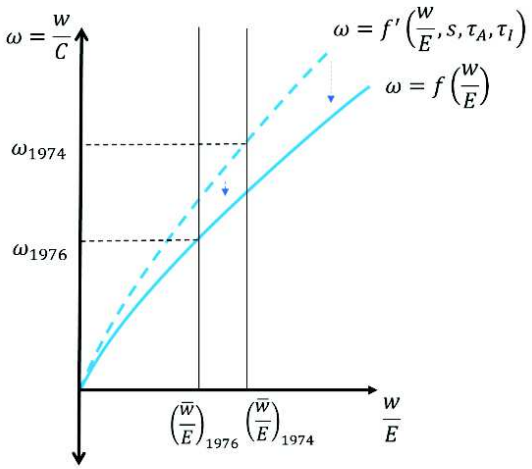


Figure 4

[130] Cf. Buchanan, *op. cit.*, 357.

The declared objectives of the economic plan were the financial and trade liberalization of the economy, presupposing that de-regulating policies would trigger capital accumulation. Thus, the notion of market liberalization was mainly associated to the *laissez-faire* strategy and the exposition of domestic markets (both for commodity and capital markets) to international competition in order to constrain the bargaining wage negotiation. The liberal position, being the ideological defender of bourgeoisie's interest, could convince the Armed Forces that the political-institutional arrangement they were trying to impose was closely involved to the preservation of the market-economy order. Thus, the economic plan of the Civilian Military Dictatorship found its justification not in the overcoming of an external crisis[131], but in the creation of the necessary material conditions for the achievement of the political objective of the armed forces: the subordination and discipline of the workers' movement. In synthesis, it can be stated that the economic plan was dependent on the political project but was at the same time a necessary condition for it.

IV.I. The Opening of the Economy: Trade Liberalization Reform (1976-1978)

Since the middle of 1960s the industrial exports grew slowly but with a persistent positive trend.[132] This process was suddenly interrupted by the policies implemented in 1976. The government made a first tariff reduction and elimination of taxes on agrarian exports in November 1976, implementing a progressive policy of opening the domestic market until 1978. The Trade Liberalization Reform was adopted after the huge devaluation of 1975 and simultaneously to the elimination of subsidies and a contractive monetary policy. The internationalization of the economy implied the opening of the domestic market to external competition rather than the promotion of domestic production in the external markets. In the view of liberal economists, the disappearance of those sectors that cannot cover the respective production costs can be understood as the manifestation of "inefficiency problems" [133]. In this sense, the government used the liberalization policies as being part of the anti-inflationary program implemented[134].

The implementation of protectionist tariffs accounted for the limited capability in the tradable sector to adjust the relation between prices and wages in foreign currency, because of the pressure exerted by of international competition. As it was presented by system [33], in the industrial sectors, the reproduction prices depend on the level of protective tariffs, i.e. $p_i = Ep_i^*(1+\tau_i)\ \forall i = 1{,}2$. Thus, the tariffs allow the realization at the domestic market of industrial prices that cover production costs, given the international prices, $p_i^*\ \forall i = 1{,}2$, the profit rate

[131] In fact, as it can be appreciated from Figure 3, the International Reserves were observing a recovery, setting the basis for a new expansive phase of the traditional Stop & Go cycle.
[132] Cf. Canitrot (1980), p. 918.
[133] Cf. Ferrer (1979), p.488.
[134] Cf. Canitrot (1981), p.138.

perceived by the international capitalists and the wage in terms of foreign currency, i.e. w/e. As it was presented, in a *price-taking* economy, the level of protectionist tariff is an essential variable in the determination of the composition of output, i.e. deciding whether to produce domestically or not a commodity[135].

For the system in [33], the relation between wage in foreign currency and the level of the protective tariff can be conceived as a bi-directional causality, i.e. protective tariffs could be adjusted to protect domestic production from foreign competition when wages in international currency increase or, alternately, decreases in protective tariffs could be used to force the decrease in nominal wages, preserving the international competitiveness. Thus, during the Third Peronist Government, the attempts to increase the wage purchasing power required (in general) higher protective tariffs. In analytical terms, it is easy to show that $\frac{d\tau_1}{d(w/E)} > 0$, while $\frac{d\tau_2}{d(w/E)} \gtreqless 0$.[136]

$$\begin{aligned}\tau_1 &= \left\{\frac{[(w/E)l_1+p_4^*\eta](1+r^*)}{p_1^*[1-a_{11}(1+r^*)]}\right\}-1\\ \tau_2 &= \left\{\frac{[(w/E)l_2+p_1^*(1+\tau_1)a_{12}+p_5^*\mu]\tau_3}{p_2^*[p_3^*a_{33}+(1+\tau_3)(w/E)l_3]}\right\}-1\end{aligned} \qquad [43]$$

The political objective of the *PNR* related with the subordination of the workers implied the attempt to revert the causality. Taking as given the profit rate and the exchange rate, the maximum nominal wages that industrial sectors can afford (without violating the industrial protection) are positively related to the level of duties, $\frac{d}{d\tau_i}\left(\frac{w_i^{max}}{\bar{E}}\right) > 0\ \forall i = 1,2$. The latter is appreciated in [44], where it can be shown that a fall in protective tariffs, i.e. $d\tau_1 < 0$ and $d\tau_2 < 0$, generates pressure to downfall in the maximum nominal wages compatible with international competitiveness, i.e. $p_i^s = p_i^d\ \forall i = 1,2$.[137]

$$\begin{aligned}\frac{w_1^{max}}{\bar{E}} &= \frac{p_1^*(1+\tau_1)[1-a_{11}(1+r^*)]-p_4^*\eta(1+r^*)}{(1+r^*)l_1}\\ \frac{w_2^{max}}{\bar{E}} &= \frac{p_2^*(1+\tau_2)}{(1+r)l_2}-\left[\frac{p_1^*(1+\tau_1)a_{12}+p_5^*\mu}{l_2}\right]\end{aligned} \qquad [44]$$

For all manufactured goods, the average tariff level fell from 93.7%, in October 1976, to 34.4%, in October 1979.[138] However, the effects of this policy on the specialization pattern were not

[135] Canitrot (1981), p. 140.

[136] In most of the cases, increases in nominal wages (given exchange rates and profit rate perceived by international capitalists) will require increasing duties on manufactured goods for final consumption. This is reinforced by the immediate positive impact of increasing wages in foreign currency terms on the protective tariff on capital goods. However, the impact of a higher wage in terms of foreign currency on the protective tariff for manufactured goods for final consumption cannot be determined a priori since the fall of domestic profit rate could counterbalance the direct effect of monetary wages on the tariff.

[137] Cf. Dvoskin & Feldman (2018), p.375.

[138] The progressive *laissez-faire* trade policies were justified by referring to: 1) the Pareto's theorems of efficiency under free market system, 2) the high requirement of State controlling capacity, in a context of severe inflationary process, to adjust tariff and, 3) the difficulties that the exposure to international competition implied to the collusions between some fractions of the capitalist class and the working class (The third Peronist economic board was the political manifestation of such alliance, 1973-1975). Cf. Canitrot (1980), p.920-1.

immediate. Until April 1978, the deceasing tariffs were mitigated by the depreciation of the national currency. Only after May 1978, the real exchange rate appreciation policy exacerbated the change in the composition of the social product by threatening the realization in the local market of domestic production against international competition.[139]

IV.II. The Opening of the Economy: Financial Reform

A second structural change introduced by Martínez de Hoz's economic board was the Financial Reform of 1977. The latter can be understood as the attempt to liberalize the interest rate, to introduce competition for deposits and grant the capital market the role that until then the State had played in the transfer of surplus from the agricultural to the industrial sector. The latter implied the rupture with a history of fiscal subsidies, full-reserve banking system, official bank credits, rediscounting and negative real interest rate. In this sense, the fundamental tool for the capital market restructuration was the capital movement deregulation implemented in 1980, as a second stage of the structural changes introduced by the Dictatorship.

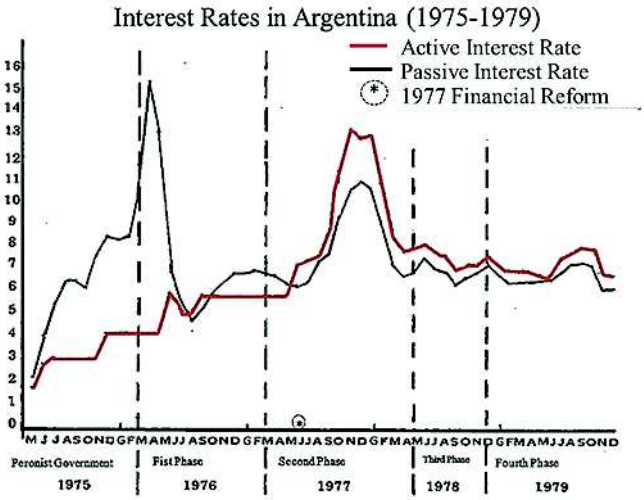
From the perspective of the Dictatorship, the deregulation of the capital market was justified as an attempted to improve the efficiency of the sectorial transferences on which the industrialization system was based. From their perspective the incapability of industrial sectors to internally generate the funds needed was the root of both, the distortions observed in the Argentine capital markets and the necessity of State interventions. Under this logic, the higher ratio of debt to industrial net worth and the associated risk attached to further credit would be taken in consideration by both lenders and borrowers. To face this, capitalists reacted by increasing the real rate of return required to their own capital and subsidies or other advantages that implies lower interest rate, i.e. external financing. The uncertainties that industrial sectors introduced in the domestic capital market triggered the interest rates, something that, according to the neoclassical tradition, would reduce private investments. [140]

The Financial Reform can be synthetized as follows: [141]

i. The liberation of interest rates: the introduced changes freed the interest rates paid on deposits and charged on loans to the private banking system.
ii. Relaxation of the regulation of minimum cash hold by banks as reserves.
iii. Progressive elimination of controls on the foreign currencies market.

[139] Cf. Ferrer (1979) p. 489.
[140] The critique to this argument involves the fact that, after the controversies in the capital theory during 1960s and 1970s, there is no consistent explanation for an inverse relation between the amount of investment and the real interest rate. Cf. Gargenani (1978), p.350; Petri (2004), p.126.
[141] Cf. Frenkel (1980), p. 216.

Figure 5 represents the dynamic followed by both the deposit rate, i.e. the one paid by banks and financial intermediaries to time deposits (represented by the continuous line), and the loan rate, i.e. the return rate for short-term loans (represented by the discontinuous line). As it can be appreciated, the argentine capital market before the Financial Reform of May 1977 was characterized by both the stable behaviour of the active interest rate (ruled by the Central Bank) and the negative banking spread, i.e. difference between the active and passive interest rates.



Source: Frenkel (1980) p. 217 (Own translation).

Figure 5

The relative expansion of the financial sector in Argentine economy has been identified as one of the main consequences of the Financial Reform[142]. The irruption of foreign capital in the financial sector was comparable with the emergence of the *international bourgeoisie* in controlling the capital good sector during the Developmentalist period of the import substituting industrialization. Given its increasing importance in the economy, it is convenient to represent its behaviour by equation [45], where the subscripts b refer to the banking sector, a_{1b} refers to the technical coefficients of the capital good required while l_b is associated to the technical coefficients of labour employed. Finally, i is the nominal interest rate on loans charged by the domestic banking sector.

$$i = \left(p_1^d a_{1b} + w l_b\right)(1 + r) \qquad [45]$$

Furthermore, the inclusion of a banking sector implies the addition of interest rate payments for financial services provided by it in the *supply price* equations [1]-[4], i.e. ih_j, where h_j refer to the credit input technical coefficient, $\forall j = 1,2,3,nt$.

[142] Cf. Canitrot (1981), p. 151.

A second important consequence of the financial reforms concerns to the determination of the domestic interest rate. The Financial Reform implied a capital account deregulation for the Balance-of-Payment forcing the riskless interest rate set by the monetary authority to cover the international interest rate and the expected devaluation rate, i.e. the UIP in [8]. The elimination of the capital movement controls allowed the increasing participation of assets and loans denominated in foreign currency in the private investment portfolios. In fact, the domestic demand for foreign assets constituted the main driver of the growth of the external debt since 1980.

The implication of such structural changes meant the weakening of the monetary authority to validate any attempt to increase nominal wages by adjusting the nominal interest rate. [143] Moreover, the undergoing inflationary process, triggered in 1975 and exacerbated after April 1976, enlarged the gap between two interest rates by accelerating the expected devaluation rate. As it will be presented, the latter will constitute the main reason for the monetary policy based on the devaluations program applied since December 1978, as an attempt to direct the expectations of the future exchange rate level. In this sense, Braun synthetized the Financial Reform in 1977 as the attempt to increase the real interest rate, whose immediate distributive consequence was the fall of real wages.[144] In short, the deregulation of the capital market and the liberalization of international capital movements must be understood by recalling the political objective of the Dictatorship: the prevention of the Peronist return and the associated distributive changes.

IV.III. The Anti-Inflation Policy

There is consensus in identifying the deceleration of inflation as the main target at which the economic policy was oriented,[145] being the control of price dynamic (which implies the imposition of a distributive arrangement) a necessary condition to the political objective of the Armed Forces. As it will be appreciated at the end of the subsection, the importance of price controlling was reinforced with the persistence of the phenomenon, since the frustration of the economic board in achieving that goal eroded the political support that most of the capitalist class gave to Martínez de Hoz's plan.[146]

Initially, the liberal tradition had conceived that the elimination of taxes on agrarian exports, the freezing of the monetary wage, the policy of changing relative prices in favour of the agrarian bourgeoisie and the liberalization policies, i.e. both the opening of the domestic market to international competition and the financial reform, would be enough to discipline the price dynamic and to force the convergence towards the international inflation.

[143] Cf. Canitrot (1982), p.33.
[144] Cf. Braun (1981) p. 88.
[145] Cf. Ferrer (1979), Frenkel (1980) and Canitrot (1980, 1981 1982).
[146] Cf. Canitrot (1981), p.146.

Even though, the programme of April 1976 had the standard effects in generating a balance-of-payment surplus and a substantial decrease in the level of wages in international currency, its outcome regarding the inflationary process were not satisfactory. In this sense, the plan was not substantially different from the ones observed during the application of SP, prescribed by IMF and implemented from 1955 to 1975.[147]

As it can be observed in [34], the persistence of inflationary process under these abovementioned policies can be mainly explained by two channels:

a) The exchange rate dynamic, $\dot{E} > 0$: The variation in the exchange rate affects the general price level (*passthrough)* by at least three sub-channels. The most immediate one is associated with the direct impact generated on tradable sectors through their demand prices, which can be appreciated in the first equation of [34]. A second channel is related with the impact on exchange rate in the cost of production of the non-tradable sector, since the activated productive method under the dominant technique uses tradable goods, i.e. the capital good.[148] A third way of is associated with increase of the profit rate at the tradable sectors because of the decrease of production cost in foreign currency, inducing increases in the profit rate perceived by the non-tradable sectors and on their production costs.
b) The elimination of taxes on agrarian export, $\dot{\tau}_3 < 0$: The letter implied both the exacerbation of the *pass through* from the exchange rate to domestic agricultural prices and the exposition of the domestic market to the agrarian inflation. These channels are captured by the first equation in [34], in which there is a negative relation between $\dot{\tau}_3$ and
c) The reduction and virtual elimination of subsidies, i.e. $\dot{s} < 0$, increased the price of production in non-tradable sectors.

In sum, the behaviour of the price levels from 1976 to 1977 seemed to be explained (even in non-tradable activities) essentially by other determinants of the cost structure, different from the nominal wage (mainly, the dynamic observed in the exchange rate).[149]

By April 1977, a contractive monetary policy was imposed, having as target the reduction in high-powered money in circulation. In this sense, the public deficit was reduced in order not to depend on the financing by the monetary authority through advances to the national treasury[150]. Simultaneously to this austerity policy, the public deficit financing was mainly reoriented towards

[147] Cf. O'Donnell (1978).
[148] Cf. Diamand (1992), p. 208.
[149] Cf. Canitrot (1982), p.149.
[150] Cf. Frenkel (1980), p.216.

the domestic capital market,[151] contributing to the expansion of the deregulated capital market. Additionally, the exchange rate policy changed by finishing with the free-floating regime and converging towards pegged exchange rate policy.

Furthermore, after six months in which the monetary authority tried to achieve targets concerning the monetary supply and left the determination of the interest rate on short-term loan to the capital market, the inflationary process proved to be a phenomenon driven by cost-pushed forces, not rooted on demand sources.[152] The contractive monetary policy had as natural consequence the increases in the active interest rate, raising the financing cost of the productive sectors, constituting a new channel through which the inflationary process was fed between April 1977 and May 1978.[153]

The increasing consensus within the neoclassical economists stressed that, in an open economy with a free capital market, the attempt to control the monetary supply by the Central Bank implied either to renounce to the convergence towards a fixed exchange regime or the imposition of capital controls. In the absence of the letter conditions, the quantitates of means of payment were far away from the State control capacity, being a residual variable adjusted to guarantee the exchange rate target. Since both alternatives to improve the capability of State in controlling the monetary supply were rejected (because of the inflationary impact of the floating exchange regime and the contradiction between capital controls and liberal philosophy of the policy makers), the economic board decided to conclude with the monetarist experiment.

By May 1978, the government applied a policy that combined adjustment in the exchange rate in a lower variation than inflation and a contractive monetary policy. The policy was based on the so-called *Monetary Approach of the Balance of Payment* and implied a change within the economic board, from the classical monetarism[154] to the new monetarist framework. According to the latter framework, in an economy that takes as given the international interest rate, under a pegged exchange rate regime and the assumption of full-employment output, the balance-of-payment result is the main determinant of the sign of excess demand for money and the consequent reaction of the money supply. [155] In this sense, the new diagnostic was that the balance-of-payments surplus (generated after the changes of the relative prices introduced in April

[151] Cf. Ferrer (1979), p. 490.
[152] Cf. Canitrot (1981), p. 38.
[153] Cf. Frenkel & O'Donnell, *op. cit.,* p. 129.
[154] Friedman (1969, 1970) can be presented as seminal contributions for what has been called Classical tradition within the Monetarist Approach.
[155] This theoretical approach was firstly presented in Johnson (1972) and it became trending among Monetarist theorists for *prices* and *interest taker* economies. According to this framework, assuming the value of excess demand for goods is zero, "*Deficits and surpluses* (in the balance of payment) *represents phases of stock adjustment in money market and not equilibrium flows and should not be treated within an analytical framework that treats them as equilibrium phenomena*" (Johnson, 1976, p. 153).

1976) was the main force that counteracted the attempt to reduce the monetary supply by applying an austerity policy.[156]

The strategy based on the de-indexation of the exchange rate to vanish the balance-of-payment surplus and "control" the volume of means of payments in the economy did not show the expected result. According to the Martínez de Hoz's team, influencing the formation of devaluation expectations was one of the priorities to which the anti-inflationary policy should be oriented. Thus, in December 1978, scheduled devaluations were defined at a lower rate than the domestic inflation, the so-called "*Tablita"*, and capital account was completely deregulated while the monetary supply was endogenously determined. The change in the policy was radical since it could be understood as the abandonment of the traditional notion of inflation as a demand-led phenomenon. The anti-inflationary policy required neither unemployment nor resigning the free capital movement, two elements that the Dictatorship identified as fundamental for the disciplinary policy of the working class without risking the political stability of the regime.[157]

The announced nature of devaluations was associated with the attempt to shape expectations and facilitate the adjustment of production costs and relative prices, especially because of the determinant role played by the exchange rate in tradable price formation. With respect to the non-tradable sector, the idea was to control the price dynamic through two channels. On one hand, the control over price expectation would act by disciplining the general prices level. On the other hand, the second channel was based on the "*substitution effect*" in favour of tradable goods, because of the difference in inflationary deceleration rates. The latter would create an excess of supply in the non-tradable market, pushing down the prices.[158]

The policy makers' diagnostic recognized that domestic inflation, i.e. $\dot{p} = \dot{p}_{NT}\bar{b}_{NT} + \dot{p}_T\bar{b}_T$, was higher than the sum of the international inflation, i.e. $\dot{p}^* = \dot{p}_1^*\bar{b}_1 + \dot{p}_2^*\bar{b}_2 + \dot{p}_3^*\bar{b}_3$, and the effective devaluation rate, i.e. $\dot{E} = E_t/E_{t-1} - 1$.

$$\dot{p} > \dot{p}^* + \dot{E} \qquad [46]$$

The latter inequality was mainly explained by the price level dynamic in the non-tradable sector, i. e. $\dot{p}_{NT} > \dot{p} > \dot{p}^* + \dot{E}$. However, according to the economic board the disequilibrium would not be persistent since the abovementioned channels were supposed to force the convergence towards

[156] Cf. Canitrot (1982), p.151.

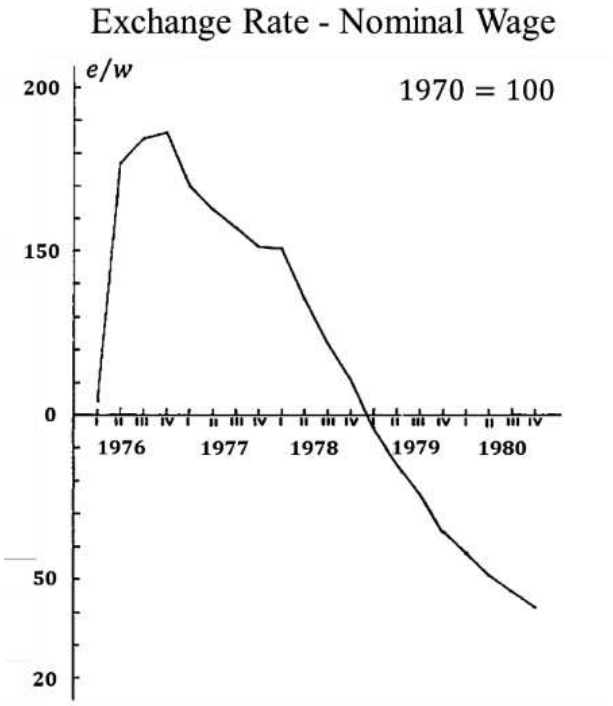
[157] As described by Fiorito (2015, p.81), the Armed Forces visualized a social order in which the working class was subordinated but not excluded from economic activity. The social and political costs associated with high persistent unemployment were not desired by the Military Junta, due to the fear that this exclusion would lead to the rejection of a society that, after Perón's death, had never observed a comparable political demobilization since 1945 .This constitutes a fundamental difference with the Chilean dictatorship (1973-1990), where unemployment, on average, represented 20% of the labour force during most of the 1970s, was the joint product of the industrial dismantling associated with the privatization of companies nationalized by Allende's Administration (1970-1973).

[158] Cf. Canitrot (1981, p. 40) and Canitrot (1982, p.158).

international inflation, i.e. $\dot{p} \rightarrow \dot{p}^* + \dot{E}$. In order to accelerate such process, the authorities applied a scheduled devaluation policy, $\dot{E}^{sch}$, that implied a real appreciation of the exchange rate and exacerbated the divergences between international and domestic inflations.

$$\dot{E}^{sch} < \dot{p} - \dot{p}^* \qquad [47]$$

The negative effects of the anti-inflationary policy on the industrial competitiveness were reinforced by trade liberalization, i.e. $\dot{\tau}_i < 0, \ \forall i = 1,2$.[159] However, the real appreciation currency had also negative impacts on the *agrarian bourgeoise*, where the increasing wages in foreign currency reduced the profit rate compatible with the competitive condition.[160] In this sense, paradoxically, the anti-inflationary policy entered in conflict with the material interest of the capitalist faction that supported the coup h 1976. As it can be appreciated in Figure 6, the anti-inflationary policy of December 1978 generated a persistent fall in the relation between exchange rate and the nominal wage, i.e. E/w.



Source: Canitrot (1981) p. 136

Figure 6

Moreover, not only the wages in terms of foreign currency increased[161], but also there was a redirection of the intersectoral surplus transfers. Differently from the experiences observed during

[159] Cf. Frenkel (1980), p.223.

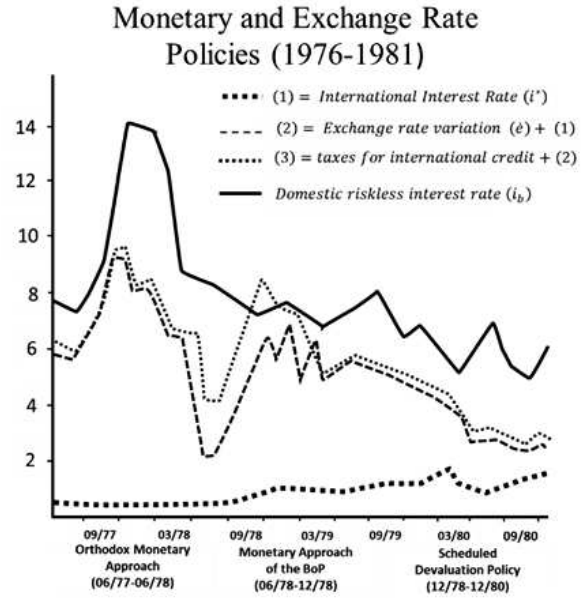
[160] Cf. Ferrer (1979), p.498. Fiorito (2015), p.73.

[161] The theoretical models that supported the anti-inflationary policy did not specifically mention the impact of the policy on the level of wages in foreign currency. According to the author, it was simply assumed that the persistence of a full employment would maintain the real wage constant, in a way that the nominal wage would adjust residually to the evolution in prices led by the exchange policy of unannounced appreciation. Cf. Canitrot (1982), p.40.

Popular governments (1945-1955, 1973-1976), Developmentalist (1958-1962, 1963-1966) and *Authoritarian-Bureaucratic* States (1966-1973), the surplus transfer from the agricultural sector[162] was not orientated towards any industrial sector, but to the financial system.

The real appreciation policy introduced distortions in the return rates of financial assets by increasing their return rate in foreign currency, with respect to both the real interest rate and the international interest rate. In this context, the foreign capital inflows were converted into pesos and used to purchase domestic financial assets. Just before the planned devaluation occurs, the assets were liquidated and the obtained returns were dollarized, the so-called *carry trade* operations.

As it was already suggested, the scheduled devaluations were oriented to influence the exchange rate expectations, i.e. $dE^{Exp}(E)/dE > 0$, in a way such that expected devaluation would be equal to effective one, i.e. $E_{t+1}^{Exp}/E_t - 1 = \dot{E}^{sch}$. This policy was implemented jointly with the maintenance of high nominal interest rate by the monetary authority, in order to incentivize inflows of foreign capital.



Source: Basualdo (2006) p. 141.

Figure 7

In formal terms, the persistence positive difference between the riskless interest rate, i.e. i_b, and the return in domestic currency of international financial assets, $\overline{i^*} + E^*/\bar{E} - 1$, ir defined in

[162] Eliminated the protective the protective tariffs and the tax on agrarian exports, the productive method activated in the agrarian sector can afore the payment of maximum profit rate (given the wages in international currency) without threatening the competitive equilibrium, that is persistently higher that the ones that industrial sectors can afore. This is at the base of tendency towards Argentine specializations as an agrarian commodities provider in the world market.

equation [48]. Such financial rent is specified by $\bar{\rho}$ and, as it can be appreciated in Figure 7, was a persistence element of the Dictatorship.

$$\bar{\rho} = i_b - (\overline{i^*} + E^*/\bar{E} - 1) > 0 \qquad [48]$$

The real appreciation policy failed to force the converging trajectory of domestic price dynamic towards the international inflation. Several attempts to explain the incapability of the real appreciation policy in December 1978 were provided by the neoclassical economists, most of them in relation with the dynamic followed by public spending or investment.[163] In this sense, those attempts were based on the theory of value and distribution founded on supply and demand forces, in which the persistent increase in the general price level was conceived as a demand-led phenomenon.

A second explanation problematizes the "substitution mechanism" in controlling not tradable price formation and the creation of excess of supply in services as a result of the increase in their relative prices. According to this perspective, the positive variation of wages in terms of the agrarian good freed purchasing power towards the services avoiding the disciplinary pressure of the real appreciation policy on the non-tradable sector.[164] The latter explanation highlights the differences in price formation between tradable (internationally competitive or not) with respect non-tradable sector, in an scenario in which the wage basket composition is mainly determined by institutions historically constructed.

Finally, a third explanation is provided by Frenkel (1978), according to which the wage policy, implemented by the dictatorship, incentivized the indexation of wages and promoted the generalization of this pricing strategy all over the economy. Fiorito (2015) also stresses that bargaining power of working-class in a context characterized by high employment level.[165]

In addition to [48], the initial distortion between real interest rates, i.e. $i_b - \pi < i^* - \pi^*$, as a result of the persistent highly inflation, accelerated the domestic components of demand related with consumption and, at the same time, the productive sector increased the domestic indebtedness rate, as a natural counterpart to the growth of the financial sector. The stimulus to the effective demand coming for the low real interest rate at the banking system reinforced the current account deficits. However, by the end of 1979, the initial effects of the real appreciation policy forced the inflationary process to start a decreasing trend, passing from 27, 7% in the last trimester of 1978 to 9,8% in the third of 1980. The negative trend of inflation and the maintenance

[163] Cf. Fernández & Cavallo (1980).
[164] Cf. Canitrot (1981), p.163.
[165] Cf. Stirati (2001), p. 443. Fiorito (2015), p.76.

of the nominal interest rate, generated a huge increased in real domestic interest and exacerbated the volatility in income distribution.[166]

The centrality that the anti-inflationary policy took within the Economic Programme induced the necessity to increase the international reserves through the external indebtedness of public enterprises[167], in order to face a context in which current account deficit was motivating devaluation expectations. The external indebtedness of private sectors also increased as a result of the anti-inflationary policy of December 1978. The international faction of the capitalist class had taken external debt in international markets to participate in the extraordinary profits that *carry-trade* operations allowed.

By 1980, the combination of 1) the persistent real appreciation with successive current account deficits, 2) the described distortions in relative prices, 3) the accumulation of foreign currency denominated debt and 4) the high level achieved of the *risk-premia*, triggered devaluation expectations, i.e. $\Delta\sigma_e > 0$. The impact was immediate, increasing the active interest rate, i.e. $\Delta i > 0$, and the financial costs of the industrial sectors. For the banking system, the increase in the interest rate meant a rise in the banking spread and, therefore, in the profit rate perceived by the sector. However, the level of indebtedness of the productive sectors unleashed the risk of bankruptcies in chains and the Central Bank had to guarantee bank deposits to avoid a bank run.

In 1981, the Military Junta changed, and the Economic Plan applied by the new board included a 30% devaluation in March, and another two by June. Inflation reached 100%, while the recession achieved 6% of the GDP.[168] By August 1982, Mexico declared the incapability to face the interest rate payments of the foreign debt, triggering Argentinian default expectations. In this context, the Dictatorship nationalized the private debts raised during the anti-inflationary policy of 1978, growing the already high external interest payments-exports and external debts-GDP ratios and benefiting the international *bourgeoise*. The imminent expirations of capital debts commitments and interest payments, in a scenario of international illiquidity for Latin American countries,[169] required increasing trade balance surpluses via import adjustment, i.e. inducing a fall in output levels and real wages.

The result after seven years of the policies applied by the dictatorship was a huge external fragility due to a less diversified productive structure and to the increase of the external debt. Since the mid-1970s to 1983, Argentina's external debt increased over USD 44 billion, an amount that

[166] Cf. Canitrot (1981), p.145.
[167] Cf. Belini & Korol (2012), p.239.
[168] Cf. Belini & Korol (2012), p.241.
[169] In 1979, the US FED induced a massive outflow of foreign exchange when the interest rate increased. Cf. Fiorito (2015), p.80.

represents more than the 60% of the GDP (six times the exported value, while the interest payments were closed to 58% of the foreign currencies received through exports).[170]

IV.IV. The Global Evaluation of Economic Programme Implemented during the Dictatorship

In synthesis, it must be emphasized the openly anti-workers character of the early phase of the anti-inflationary policy (April 1976 to April 1978): frozen nominal wages, massive repression with Humans Rights violations against union leaders[171], unification and liberalization of exchange rate, deregulation of capital market and capital account and elimination of taxes on agricultural exports. The latter policies laid the foundations for a new structure of relative bargaining power, different from the one represented in the distributive closure suggested to system [33]. Hence, the economy that emerged during this early stage of dictatorship can be represented in [49].

$$
\begin{aligned}
&p_1 = (p_1 a'_{11} + E p^*_4 \eta + \overline{w} l'_1)(1 + \bar{r}) \\
&p_2 = (p_1 a'_{12} + E p^*_5 \mu + \overline{w} l'_2)(1 + \bar{r}) \\
&p_3 = (p_1 a_{1b} h_3 + p_3 a_{33} + \overline{w} l'_3)(1 + \bar{r}) \\
&p_{NT} = (p_1 a'_{1NT} + \overline{w} l'_{NT})(1 + \bar{r}) \\
&p_1 = E p^*_1 (1 + \tau_1) \\
&p_2 = E p^*_2 (1 + \tau_2) \\
&p_3 = E p^*_3 \\
&\omega = \frac{\overline{w}}{C} \\
&C = p_2 \bar{c}_2 + p_3 \bar{c}_3 + p_{NT} \bar{c}_{NT} \\
&\bar{r} = i_b + \sigma_k \\
&i_b = \overline{i^*} + E^{Exp}/E - 1 + \rho
\end{aligned}
\qquad [49]
$$

Following the *Monetary Theory of Prices and Distribution*[172], the system [49] takes the nominal wages as given by the Civic-Military regime, i.e. $w = \overline{w}$, and assumes that the monetary authority adjusts the riskless interest rate in order to guarantee a certain level of the profit rate, i.e. $r = \bar{r}$. Moreover, unlikely system [33], the formal representation suggested in [49] implicitly includes the financial sector emerged as a product of the financial deregulation and follows the approach Kurz & Salvadori,(1995)[173], where $a'_{1j} = a_{1j} + a_{1b} h_j$ and $l'_j = l_j + l_b h_j, \forall j = 1,2,3, NT$. Thus, taking in consideration the *risk premia* in the UIP, i.e. ρ,[174] the formal reconstruction suggested in [49] is composed by 11 equations to determine 11 unknowns, i.e. p_1, p_2, p_3, p_{nt}, E, ρ, i_b, τ_1,τ_2, C and ω, being, therefore, logically solvable.

---

[170] Cf. Rozenwurcel & Sánchez (1994), p. 90.
[171] Cf. Wynia, *op. cit.*, p.265.
[172] Cf. Panico (1988) and Pivetti (1991).
[173] Kurz & Salvadori (*op. cit.*) pp.480-3.
[174] Cf. Frenkel (1980) presents evidence about the systematic divergence of domestic interest rate from the addition between the international interest rate and the devaluation rate. In this sense, the risk-premia is included in system [47], and it represents the imperfect degree of substitutability between the Argentine and international currencies, based on the uncertainty regarding the sustainability.

Once the agricultural exports taxes were eliminated, the exchange rate and the protective tariff to capital goods imports are simultaneously determined in the equations associated with the agricultural and capital good sectors.[175] Differently from [33], the wage in terms of foreign currency is now *endogenously* obtained, i.e. $\overline{w}/E$. The import duties for manufactured good for final consumption are determined in the second equation, after the exchange rate- wage relation and the tariff on capital goods imports are known. Once the subsides for services were eliminated, the price of the non-tradable good, i.e. p_{nt}, the value of the wage basket, i.e. C, and the real wage, i.e. ω, are residually determined. Finally, taking the exchange rate and the riskless interest rate set by the Central Bank, the *risk premia* is residually obtained from the UIP. Figure 7 represents graphically the system [49].

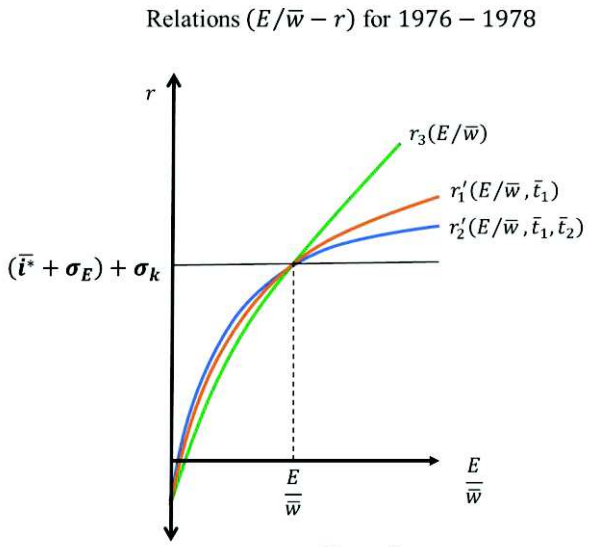


Figure 8

Nevertheless, as it was described, the consequences related with the Financial Reform undermined the stability of the system [49]. The deregulation of capital account empowered the role of expectations in controlling the interest rate according to UIP. The dirty floating exchange rate regime, in which no intervention rule was specified, had a strong impact on the instability of depreciation expectations. In other words, the residual determination of the exchange rate had impacts on expectations formation, increasing the interest rate and, therefore, the financial costs associated with productive activities. As it is described by Canitrot (1982), the need to control

[175] From the first, the third equations in [49] and the competitiveness and interest rate parity conditions, it is possible to obtain the following subsystem, characterized by two unknown variables, i.e. E and τ_1, in two equations.

$$\begin{cases} p_1^* \left[\frac{1}{1+\bar{r}} - a_{11}'\right](1+\tau_1) - \left(\frac{\overline{w}}{E}\right) l_1' = p_4^* \eta \\ p_1^* a_{1b} h_3 (1+\tau_1) + \left(\frac{\overline{w}}{E}\right) l_3' = p_3^* \left[\frac{1}{1+\bar{r}} - a_{33}\right] \end{cases} \quad [47']$$

It must be stressed that the floating exchange regime in the suggested distributive closure makes compatible the endogenous nature of the protective tariff for domestically produced capital good and tariff reduction program applied by the dictatorship.

devaluation expectations (without renouncing to *laissez-faire* commitments), led to the policy of scheduled devaluations in December 1978.

> *"The ability of the Central Bank to exercise a monetary policy was weakened. It lost control over the money supply and resort to instruments. In the absence of capital restrictions* (the author clarifies that the latter was not total but partial) *had two alternatives. The first was to fix the interest rate and the money supply by keeping its reserves in foreign currency without intervening in the market, that is, allowing the free floating of the exchange rate. This alternative, when adopted, was not satisfactory because it transferred all the instability to expectations. The second option was to try to influence the expectations of devaluation of the peso, adopting in advance, and announcing, the rates of variation of the exchange rate. This is what was done. Thus, fixing the expected future rates of devaluation, the government sought, and to a large extent achieved, a control over the nominal rate of interest in pesos".* (Canitrot, 1982, p.33-34, Own translation).

By the end of 1978, the progressive real appreciation policy became a powerful tool of economic control, especially after the reduction of protective tariffs.[176] The anti-inflationary policy implied the incapability for the manufactured sector for final consumption to meet the domestic *demand prices*, being incapable to reproduce the production process in this sector.[177] The new productive structure that emerged was characterized by the reinforced presence of the *international bourgeoise* in controlling capital and intermediate goods sectors and the high level of *risk-premia* in financial sector. The price system associated to the anti-inflationary policy applied since December 1978 is formally represented as in [50].

$$
\begin{aligned}
&p_1 = (p_1 a'_{11} + \bar{E} p_4^* \eta + \bar{w} l'_1)(1 + r) \\
&p_3 = (p_1 a_{1b} h_3 + p_3 a_{33} + \bar{w} l'_3)(1 + r) \\
&p_{nt} = (p_1 a'_{1nt} + \bar{w} l'_n)(1 + r) \\
&p_1 = \bar{E} p_1^* \\
&p_3 = \bar{E} p_3^* \\
&\lambda = \frac{\bar{w}}{c} \\
&C = \bar{E} p_2^* \bar{c}_2 + p_3 \bar{c}_3 + p_{nt} \bar{c}_{nt} \\
&r = i_b + \sigma_k \\
&\bar{\rho} = i_b - \left(\overline{i^*} + E^{Sch}/\bar{E} - 1\right) > 0
\end{aligned}
\qquad [50]
$$

In system [50], three elements differentiate the economy from the productive structure represented in [49]:

[176] The consequences of the abandonment of the scheduled devaluation, in terms of a potential massive capital outflows and the drop of International Reserves, constrained the Central Bank to maintain the exchange rate policy announced.
[177] Cf. Schvarzer (1978), p. 351. Ferrer (1979).

1) The inclusion of a commodity directly imported in the wage basket.

2) Fixed exchange rate regime based on the devaluation policy such that the expected exchange rate, i.e. $\bar{E}^{Exp}$, equalizes the scheduled level, i.e. E^{Sch}.

3) The adjustment of the interest rate in order to guarantee the payment of positive level of risk-premia, $\bar{\rho} > 0$, and to incentive *carry-trade* operations.

In a context in which nominal wages were determined by bargaining power, the system [50] remains overdetermined, since there are 5 equations to determine 4 unknowns, i.e. r, p_{nt}, C and ω. This overdetermination is associated with *pricing-taker* nature of Argentine economy, in which there are multiple tradable good. This can be appreciated in Figure 9.

Even though the Argentine historical experience allows to state that, under a *laissez-faire,* $r_1^{max}(\bar{E}/\bar{w}) < r_3^{max}(\bar{E}/\bar{w})$, the advantages of the *international bourgeoise* in increasing its indebtedness in the international markets and obtain high returns in foreign currency under the monetary policy applied during the *tablita* (this is, in investing in *carry-trade* operations), facilitated the domestic production of such sector. Furthermore, the policy of real appreciation reduced the gap between the rates of return among the tradable sectors under *laissez-faire* by lowering the importation costs required by the industrial sector.

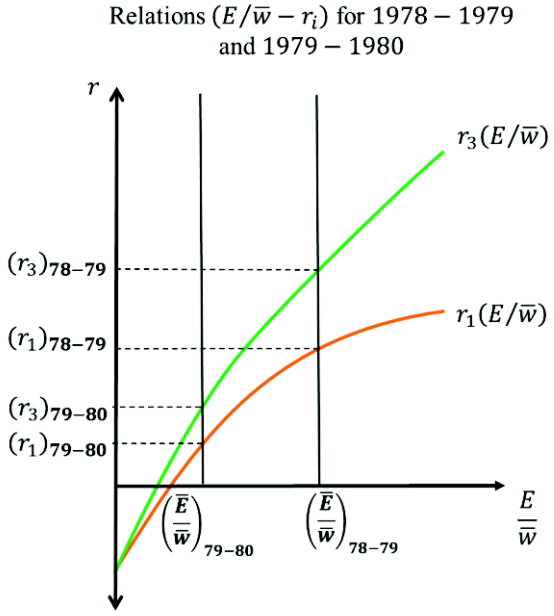


Figure 9

The quantities system presented in equation $[16] - [28]$ must be adapted to [50]. It is important to stress that, even though the disappearance of the manufactured sector for final consumption because of the deindustrialization during the PNR, the effectual demand for industrial good for final consumption, being a component of the wage basket and public purchases, is now included

among the sources of imports. In fact, besides the manufactured goods imports, the new economy presents two novelties in the Balance of Payments equation: a) the international interest rate payments associated to the external debt, i.e. i^*D^*, and b) the foreign capital flows as the natural outcome of the Financial Reform of 1977, i.e. $KK \gtreqless 0$.

$$
\begin{aligned}
&Q_1 = I_1 \\
&Q_3 = I_3 + C_3^w + \bar{X}_3 \\
&Q_{nt} = C_{nt}^w + \bar{G}_{nt} \\
&Q_b = \textstyle\sum_{i=1}^{nt} Q_i h_i + \sum_{j=2}^{nt} \bar{C}_j^w \\
&C_3^w = \bar{\omega}_3\left(\textstyle\sum_{i=1}^{nt} Q_i l_i\right) + \bar{C}_3^w \\
&C_{nt}^w = \bar{\omega}_{nt}\left(\textstyle\sum_{i=1}^{nt} Q_i l_i\right) + \bar{C}_{nt}^w \\
&I_1 = (1 + g^{Exp}) \textstyle\sum_{i=1}^{nt} v_i Q_i \\
&I_3 = (1 + g^{Exp}) v_3 Q_3 \\
&BP = p_3^* \bar{X}_3 - p_4^* \eta Q_1 \; - p_2^* [\bar{\omega}_2 (Q_1 l_1 + Q_3 l_3 + Q_{nt} l_{nt}) + \bar{C}_2^w + \bar{G}_2] - i^* D^* + KK
\end{aligned}
\qquad [51]^{178}
$$

The resolution of the system specified in [50] must be compatible to the stability condition of the Balance of Payments equilibrium under the growth path the economy, i.e. $g_{BP} = 0$. Contrary to the system in [37], it can be appreciated that, after the changes introduced by the Martínez de Hoz (1976-1981), the trend followed by domestic autonomous drivers of effective demand (i.e. $\bar{G}_{nt}, \bar{G}_2, \bar{C}_2^w, \bar{C}_3^w$ and $\bar{C}_{nt}^w$) is now constrained, not only by dynamic in the foreign currency provided through exports (the variation in the terms of trade and the growth path of exportations), but also by the dynamics observed in the interest rate payments of the external debt and the foreign capital flows.

$$
{g_{(\bar{G}+\bar{C}^w)}}^{max} = \left[\alpha_{\bar{X}_3}\left(\pi_3^* + g_{\bar{X}_3}\right) - \alpha_{M_2}\pi_2^* - \alpha_{M_4}\pi_4^*\right] - \alpha_{i^*D^*}(g_{i^*} + g_{D^*}) + \alpha_{KK} g_{KK} \qquad [52]^{179}
$$

During the anti-inflationary policy of December 1978, it can be shown that $g_{(\bar{G}+\bar{C}^w)} > {g_{(\bar{G}+\bar{C}^w)}}^{max}$ and, therefore, there was a tendency towards the deterioration of the balance of payments result. By the end of 1979, the current account result was already negative, and the deficit was reinforced in 1980 and 1981. As it was presented in Rozenwurcel & Sánchez (1994), the economic policy implied an acceleration in the external debt accumulation, i.e. the $\Delta g_{D^*} > 0$, led by both 1) persistent trade balance deficit and 2) the "nationalization" of private external debts and international context regarding the monetary policy in central economies, $\Delta g_{i^*} > 0$. A it was already described, the scenario at the end of the Dictatorship in 1983 was characterized by the

[178] It is important to stress that system [51] accounts for the conflictive relation between the real wage (the participation level of manufactured goods for final consumption) and the international interest rate, for a given a given level of economic activity. In this analytical representation of Argentine economy, where $D^* > 0$, an increase in the international interest rate imposes the necessity to reallocate a positive balance of payments result from the real wage towards the interest payment of the foreign debt.

[179] Where ${g_{(\bar{G}+\bar{C}^w)}}^{max} = \left(\sum_{j=2}^{nt} \alpha_{Mb\bar{C}_j^w} g_{\bar{C}_j^{w+}} \sum_{i=2}^{nt} \alpha_{M\bar{G}_i} g_{\bar{G}_i}\right)^{max}$. The first sum refers to the aggregate growth rate associated to the worker's autonomous consumptions, while the second sum captures the dynamics in the public spending oriented towards the acquisition of non-tradable goods and manufactured goods for final consumption.

collapse of the *laissez-faire* trade regime and the worsened the external front of the Argentine economy.

Given the terms of trades, the external demand and a regional context (Latin American Debt Crisis in 1982), the only strategy that the dictatorship implemented from 1981 to 1983 was the generation of balance trade surplus to face external debts payments, either by inducing strong decrease in the domestic autonomous component of effective demand, i.e. $g_{(\bar{G}+\bar{C}^w)} < g_{(\bar{G}+\bar{C}^w)}{}^{max}$, or by adjusting the real wages through devaluations.[180]

V. Conclusions

The paper presented in formal and historical terms the structural changes introduced by the State Terror (1976-1983) to both i) discipline a well-organized labor movement and ii) to prevent the formation of the class alliance that based the Industrialization strategy. By revisiting Latin American Structuralist tradition through the lens of the reappraisal of classical theory of value and distribution and its extension to the open-economy framework, the chapter highlights the role played by the deepening of the dependent character of the Argentine economy, both in its technical and financial dimension, as a strategy to achieve the political objectives of the Civic-Military Regime.

The suggested reconstruction of the third Peronism (1973-1976) tried to represent the pattern of development characterized by a productive diversification led by the State and a class alliance dominated by the *national urban bourgeoisie* and working class. By approaching the price dynamic, driven by the class antagonism in an economy with technological dependence, the suggested model addresses the limits faced by a popular government in controlling inflation. In this sense, the external conditions and the political facts were highlighted in the explanation of the frustration of the coordinated and shock-based anti-inflationary policy.

Additionally, even though the reconstruction of the Argentine political economy identified difficulties for the Popular regime in controlling the exchange market in an economy in which the main source of the international means of payments was ruled by the capitalist fraction negatively affected by the political order, the Structuralist consensus in suggesting that Import Substitution Industrialization was not showing systemic exhaustion is also recognized. On the one hand, the decreasing trajectories observed in duties since 1960s can be understood as an evidence of the weakening of *technological dependence*. On the other, the fast recovering of International Reserves after the Balance-of-Payment Crisis in 1975 shows that the Peronist government was not facing challenges substantially different from those of the *Stop & Go* dynamic.

[180] Cf. Dvoskin & Feldman (2018).

The formalization provided for political economy of the Civic-Military Dictatorship distinguished two phases of the economic policy. In this sense, the analytical representation of the period (1976-1978) tried to demonstrate that liberalization and deregulations eroded the capacity of the State to influence the domestic interest rates and, therefore, in the distribution. The exacerbation of the inflation (because of the depreciation of the national currency, the elimination of agrarian export taxes and the rise of financial costs), sponsored the emergence of the attempt to control the price dynamic as the focus of economic policy.

The model suggested for the period (1976-1938) intends to represent both the distributive consequences and the effects on the pattern of specialization of the real appreciation policy, after the frustration of several attempts based on monetarist tradition as anti-inflationary programs. The rise of wages in international currency triggered the loss of part of the political support that the dictatorship had by the *agrarian capitalist fraction*, in the benefit of the financial sector. At the same time, the elimination of import duties jointly with the real appreciation negatively affected the activation of the manufactured sector producing final consumption goods and therefore deepened the technological dependence of Argentine economy. Moreover, this reversion in the productive diversification obstructed the class coalitions on which the popular and developmental governments had founded, by means of the disappearance of the sector ruled by *the national-urban bourgeoise*.

In 1943, Kalecki identified, for industrialized economies, the political changes resulting from the maintenance of full employment as the main foundation for the rejection by capitalist class to State intervention and to policies oriented to achieve output levels associated with absence of unemployment. By following the Latin American Structuralism, the reconstruction stressed that it was the threat of the political order represented by the popular government and the participation of unions provoked the rejection of the capitalist class to the pattern of industrialized development and induced the reinforcement of the dependent character of the Argentine economy, as an obstacle to disciplining the labour movement.

VI. References

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VII. Appendix: Over-Determination of Price System in an Economy with Technological and Financial Dependence

By assuming single commodity wage basket, Steedman (1999) shows that the presence of two exporting sectors eliminates the degree of freedom associated with the *numeraire* in the price equation system in which commodities are produced by means of commodities[181]. Extending the analysis for the case of n internationally tradable goods, the author states that the system is *overdetermined*, since, for each internationally competitive sector, the system increases in one unknown (the price of the commodity) and two equations (the one corresponding to the domestic prices of imported goods and the one corresponding to the so-call *supply price*).

In this since, in approaching the *over-determination problem*, Steedman (1999) and Baldone (2001) consider a single production *pricing-taker* economy in which there is a single non-tradable capital good, and n internationally tradable commodities for final consumption and n residual distributive variables (either multiple real wages or profit rates).

The system [53] represents Baldone's (2001) suggestion based on the consideration of sectorial profit rates as residual variables, for a multi-exporter economy. Where p refers to the prices of production in the non-tradable sector, w is the wage rate, π_j is the price of the tradable good j, while b, a, β_j and α_j are the technical coefficient for labour and capital good per unite of output in the non-tradable good and the tradable commodity j. Finally, m and μ_j are the technical coefficients associated to the imported mean of production, while f and θ_j are the international prices of the imported input and the exported commodities, respectively.

$$\begin{cases} p = bw + (1+r)[ap + E(fm)] \\ \pi_j = \beta_j w + (1+r_j)[\alpha_j p + E(f\mu_j)] \quad \forall j = 1,2,\dots n \\ \pi_j = E\theta_j \longrightarrow {}^{\pi_j}/_{\theta_j} = E \end{cases} \qquad [53]$$

By choosing a tradable commodity as a *numeraire*, the nominal exchange rate and the set of domestic tradable prices, i.e. π_j, are automatically determined. The remaining $n+1$ equations must be used to determine $n+3$ unknowns. Therefore, by assuming both r and w as given, the multiplicity of exportable goods will imply the appropriation of differential distributive variables by the different factions of capitalist class that rules the production process in tradable sectors.[182]

The price equation system $[1]-[13]$ can be easily rewritten following Baldone 's (2001) approach to the over-determination problem.

[181] Cf. Sraffa, (1960).
[182] Cf. Baldone (2001).

$$Ep_1^* = (Ep_1^* a_{11} + Ep_4^* \eta + wl_1)(1 + r) \quad [1']$$

$$Ep_2^* = (Ep_1^* a_{12} + Ep_5^* \mu + wl_2)(1 + r) \quad [2']$$

$$Ep_3^* = (Ep_3^* a_{33} + wl_3)(1 + r) \quad [3']$$

$$p_{nt} = (Ep_1^* a_{1nt} + wl_{nt})[1 + (i^* + \sigma_e + \rho) + \sigma_k] \quad [4']$$

$$\omega = \frac{\bar{w}}{Ep_1^* \bar{c}_1 + Ep_2^* \bar{c}_2 + Ep_3^* \bar{c}_3 + p_{nt} \bar{c}_{nt}} \quad [5']$$

Then the model is composed by 5 equations to determine 3 unknowns, i.e. r, p_{nt}, λ. By differentiating the profit rate perceived by the tradable sectors, i.e. r_1, r_2, r_3, the over-determination problem can be overcome, since the equality between the numbers of equations and unknowns is restored. Moreover, the comparison among the different profit rates yields the same conclusions that have been presented during the analysis of the pattern of trade in the second section of the paper.

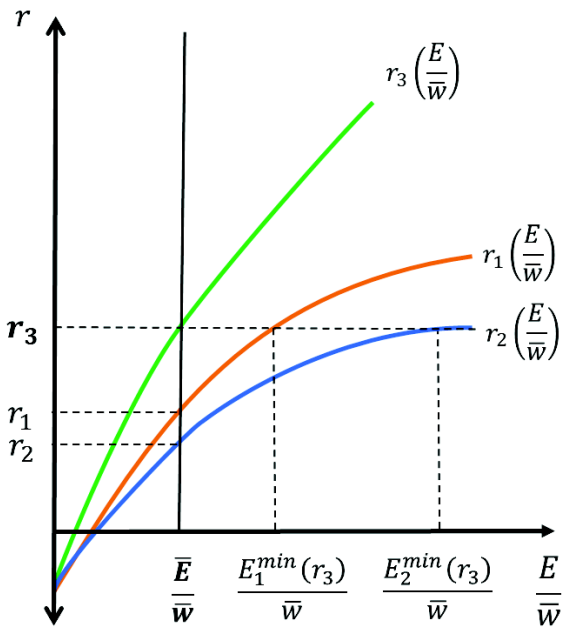

Figure 1A

Additionally, the graphical representation in Figure A1 shows the correspondence between the notion of *Unbalanced Productive Structure* (UPS), rooted in the *Latin American Structuralist*, and the conclusions derived from the attempts to extend Sraffa's price system to the open economy framework. The UPS, provided in Diamand (1972), highlights heterogeneities in the technical conditions of production to account for the impossibility in determining a single level exchange rate value that makes internationally competitive all sectors. In this sense, once identified the productive sector capable of facing the payment of the highest rate of profit compatible, without threatening its international competitiveness, only higher levels of the

exchange rate guarantee such a rate of return to the capital invested in the other productive tradable sectors.

3 CHAPTER III

INFLATION AND STABILIZATION EXPERIENCES IN ARGENTINA THROUGH THE LENS OF THE CLASSICAL-KEYNESIAN APPROACH: THE AUSTRAL AND CONVERTIBILITY PLANS (1985-1991)

The chapter can be divided in two parts, the one that revisit the cost-pushed theory of price dynamics and a second part that re-elaborates both the Argentine political economy during return to democratic order and the long road to price stability achieved by the beginning of 1990s. The theoretical revision is provided for a pricing-taker, semi-industrialized economy and focused on cost-pushed theories of inflation, based on three price drivers: the class antagonism highlighted by Classical Surplus Approach, inertial mechanisms stressed by Neo-Structuralist theorists, and foreign currency shortage, inspired in Latin American Inflation and German Hyperinflation experiences. In a second part, the chapter analysis, in the light of the latter theoretical revision, the multiple stabilizing programs applied in Argentina during the 1980s, stressing the importance of the exchange rate and external determinants in stabilizing price dynamic. In this sense, the Convertibility Regime, applied 1991, is analyzed as a strategy to control the price dynamic by reinforcing the financial dependence of Argentine economy. The presented models stress the role played by the exchange rate and crawling-peg policy in approaching the hyperinflationary experiences during the eighties external-debt crisis and its determinant role in stabilizing the price growth path.

I. Introduction

The phenomenon of inflation could be defined as the generalized and persistent rise in *normal* prices; this is, those exchange relations which allow covering the cost of production under *normal conditions*. After *Capital Debates* (Cf. Lazzarini, 2011), the theory of value and distribution based on demand and supply curves proved to be incapable, for economies with heterogeneous goods, in determining gravitation centres as relative scarcity indexes, towards which the market mechanisms force effective prices to converge. In synthesis, the impossibility to ensure the factor substitution mechanisms to operate in the direction that guarantee a *well-behaved* demand curve for capital, as a single magnitude, avoids any consistent determination of factor remunerations as variables that adjust in a way to achieve full-employment positions (Cf. Garegnani, 1978, p. 324; Petri, 2004, p. 32).

The difficulties in providing a theoretical framework that presents full-employment output and price levels as the natural outcome of market mechanisms in capitalist economies allow us to leave aside all inflation theories based on *money neutrality*[183] and to focus on cost-pushed theories of price variations.

Even though there have been some non-mainstream attempts in approaching the high inflation experiences and the applied Stabilization Programs in Argentina during 1980s or 1990s (e.g. Canitrot, 1992; Perez-Caltentey & Vernengo, 2007; Fiorito, 2015) or inflation process before the 1976 *Coup d'Etat* (e.g. Marie, 2010), there is no attempt (as far as the author knows) to provide an analysis for the hyperinflationary processes and the policies to face the explosive price growth trajectories during the 1980s and 1990s in the light of the classical theory of value. Based on explanations that stress a) class antagonism, b) the inertial mechanism and c) the foreign currency scarcity, an analytical reconstruction of Argentine political economy from 1983 to 1992 is presented in the following sections.

After the introduction, here presented, the second section revisits three main sources of cost-pushed inflation for a semi-industrialized pricing-taker economy. Since the independent nature of the cost-pushed sources of inflation, three subsections are presented in order to analytically present each particularly determinant. The first subsection assumes a very simple productive structure, the *corn-seed economy*[184], in approaching from a classical revival perspective the growth path of corn-price led by class-antagonism and propagation mechanisms associated with wage indexation. In second subsection, the corn-seed economy is extended to the open economy framework, leaving aside the determinants associated with class antagonism. Finally, a third subsection approaches the explosive growth path when the persistent distributive conflict generalizes indexation and foreign currency shortage triggers devaluation and the hyperinflation. In this section the models are integrated, and the outcome is used in the following sections.

The chapter uses analytical approaches for cost-pushed inflation in reconstructing Argentine experience during 1980s and the beginning of 1990s. In this sense, the third section presents the Argentine Political Economy during the democratic recovery, by 1983. The Austral Plan (1985) is here described and formally reconstructed in the light of the theories of inflation presented in the previous section. Their effects, weakness and the context in which it was implemented are

[183] Theories that conceives money as *neutral* phenomenon implies that positive variations in the quantity of means of payment cannot induce increase in real output level, which is mainly treated as a parameter and compatible with full employment, but just increase nominal price level. The argument of the *Neutrality of Money* was re-formulated in 1970s in terms of a vertical Phillips Curve, i.e. there is no trade-off between inflation and unemployment rate, in the long period analysis (Cf. Hahn, 1981, p.74).

[184] A *corn-seed* economy could be conceived as a market economy in which a unique commodity is both output and input, either being directly included as a produced mean of production or indirectly needed as wage commodity and, therefore, labour force producer.

also presented. A fourth section explains the explosive growth paths acquired by the price dynamics between 1989 and 1991, the implementation of the Convertibility Plan and their outcomes in price stabilization and its approach to the inflationary sources presented in section II. Finally, the main conclusions of the chapter are presented.

II. Theories of Inflation and Hyperinflation in the Light of the Classical Theory of Value and Distribution

In revisiting the main cost-pushed inflationary theories, a simple model is based on the following assumptions.

1. The production of each commodity occurs synchronously in periodic cycles.
2. Only single production system is considered.
3. Money wages are paid *ante-factum* to each productive process.
4. No alternative technique is considered.
5. No constraint is imposed on the labour force that the economy can use.
6. The quantities of means of payments are adjusted by the monetary authority[185].

II.I. The Distributive Conflict and the Inertial Inflation in a Closed Corn-Economy

In order to revisit the theories of inflation that stress class antagonism and inertial mechanisms as the main drivers of the price growth path, a close economy is assumed. Additionally, the section will be focused on the *corn-seed economy* case, where the output (corn) is assumed to be produced by labour force and itself as input (corn-seed).

Following Serrano (2010), the price of production can be described by adding a nominal gross profit rate, i.e. r, to the historical cost of production. As represented in equation [1], the advanced capital is determined by the nominal wages and the input prices paid in the previous period, when the means of production necessary to produce a unite of output where acquired. Then l and a

[185] "*It is a truly well-documented empirical regularity that all persistent inflations are accompanied by a rising stock of nominal money (…). Yet the channels which transform monetary impulses into are neither simple nor direct. Moreover, it is clear that money is in no sense an ultimate cause of inflation. (…) In high inflations, the money supply is typically driven by financing requirement. But the fiscal deficit in itself can be considered an endogenous variable*". Cf. Heymann & Leijonhufvud (1995), pp. 12.

represent the technical requirement for labour and output-input[186] to produce a unit of output, under normal circumstances.

$$p_t = (1 + r)(w_{t-1}l + p_{t-1}a) \quad [1]$$

In a *corn-seed economy*, the real wage, i.e. $\omega_{t-1} = \frac{w_{t-1}}{C}$, can be defined as the number of corn-basket, i.e. $C = p_{t-1}\bar{c}$, that can be purchased by the nominal wage.

It is easy to obtain a price variation rate, also called inflation rate, i.e. $\dot{p}_t = \frac{dp_t/dt}{p_t}$, as presented in equation [2]. There, λ refers to the proportion of labour cost in production while $1 - \lambda$ represent the participation of input purchased by advanced capital in terms of value in the total production cost. Additionally, $\dot{w}_{t-1} = \frac{dw_{t-1}/dt}{w_{t-1}}$ represents the wage inflation observed at the beginning of production period, $\dot{p}_{t-1} = \frac{dp_{t-1}/dt}{p_{t-1}}$ is the inflation for inputs and $\dot{r}_t = \frac{dr_t/dt}{1+r_t}$ is the growth rate of the nominal rate of profit.

$$\dot{p}_t = \dot{r}_t + \lambda\dot{w}_{t-1} + (1 - \lambda)\dot{p}_{t-1} \quad [2]$$

Regarding the dynamic followed by the nominal wage, Serrano (2010) identifies two main determinants. On the one hand, wage increases are directly associated with the gap between a given desired real wage, i.e. ω^d, and the effective wage in the previous period, i.e. ω_{-1}. It is important to stress that there is no reason to expect that the actual growth rate of wages coincides with the desired rate.

On the other hand, the expected inflation is also another source of wage increases. Workers use to include among their wage demands the lost percentage in the purchasing power of their income by previous inflation, as one determinant of expected inflation, i.e. $\dot{p}_t^E = \dot{p}_{t-1}$. Even though such a source of wage demand is independent of the inclusion of automatic indexation mechanisms in wage contracts, its importance is reinforced by formal indexation clauses. Equation [3] analytically represents the dynamics of monetary wage demand.

$$\dot{w}_{t-1} = \alpha\left(\omega_t^d - \omega_{t-1}\right) + \gamma\dot{p}_{t-1} \quad [3]$$

In general, the perceived wage growth rate is lower than the nominal wage variation required to obtain the distribution desired at moment t,[187] i.e.$\dot{w}_{t-1} < \omega_t^d - \omega_{t-1}$.The latter implies that the

[186] The economy is assumed to be viable when the social product is capable to replace the means of production spent during the production process, i.e. $a + \omega_{t-1}\bar{c}l \leq 1$, such that $r_t = \frac{(1-a)-\omega_{t-1}\bar{c}l}{a+\omega_{t-1}\bar{c}l}$ (Cf. Kurz & Salvadori, 1997, p. 44).

[187] According to Rowthron (1977), the bargaining power of labour is inversely related with the employment rate and directly related with the level of effective demand, i.e. $\alpha = f(u), f'(u) > 0$. As presented in Stirati (2001), such model was integrated to theoretical frameworks in which it is possible to determine an

perceived wage variation is a less than a unity proportion of the distributive gap (Cf. Rowthorn, 1977). The same reasoning is true for the sensibility of the wage variation with respect previous inflation. The full wage-indexation could be presented as a particular case.

The formal representation in [3] corresponds to Sraffa's suggestion to split the wage rate in two components. On one side, the level of wage basket associated with the institutional subsistence and reproduction of labour force. On the other side, a wage component is associated with the surplus bargaining between workers and capitalists (Cf. Pivetti, 1999).

The dynamic followed by the nominal gross profit rate could also be formalized as a direct function of unrealized distributive aspirations and the dynamic observed in the financial cost for advancing capital. In equation [4], a certain sought level of real net profit rate, i.e. ϱ_t^s, is compared with respect the effectively perceived by bourgeoise, i.e. $\varrho_t = r_t - \left(i_{b_{t-1}} - \dot{p}_t\right)$. The net profit rate is the remuneration obtained by those who advance capital in productive activities, subjected to *"risk and troubles"* or the so-called *normal profit of enterprise* (Pivetti, 1991, p. 24). Under the assumptions specified above and taking as given the interest rate (defining the latter as a monetary phenomenon determined by the Monetary Authority), it is easy to prove that the net real profit rate is a negative function with respect to the real wage. Therefore, both the sought real profit rate and the perceived level are univocally associated to real wage levels, i.e. $\varrho_t = \Pi(\omega_{t-1})$ with $\Pi'(\omega_{t-1}) < 0$.[188]

A second determinant must be taken in consideration in explaining the dynamic followed by gross profit rate: the dynamic followed by the opportunity cost to employ capital in productive activities, i.e. $i = \frac{di_b/dt}{i_b}$. The latter component captures the argument advanced by the Monetary Theory of Distribution (Cf. Pivetti, 1991), by which, in a condition of free entry, the lower limit for the gross profit rate is determined by the rate of interest.

$$\dot{r}_t = \mathrm{A}(\varrho_t^s - \varrho_{t-1}) + i_{t-1} = \beta(\omega_{t-1} - \omega_t^s) + i_{t-1} \qquad [4]$$

equilibrium unemployment rate or non-accelerated inflation-rate unemployment (the so-called NAIRU), such that $\alpha = 0 = f(u_n)$.
According to Vernengo (2006), while in neoclassical approach demand affects prices directly because of the tendency towards full-employment that such theoretical framework pretends to demonstrate, Rowthron's demand-pull inflation theory is based on an indirect link in which effective demand generate price increases through its effects on relative bargaining power.

[188] The treatment for the *risk and trouble* as a component of the profit rate which is suggested in this chapter is contrary to the treatment presented in Pivetti (1991), since the chapter tries to formalize the price adjustment generated by productive enterprises when the perceived distribution does not correspond with the distributive aspiration and, therefore, capitalists vary prices. In the context as the one suggested here, in which the monetary policy and the determination of the interest rate is not coordinated with capitalists' distributive desires, the "*risk and trouble"* element of the profit rate becomes determinant for changing in the profit rate and price adjustment.

Coefficient A captures the fact that in general capitalists cannot fully adapt prices to achieve their distributive aspirations. A reaction by working class could trigger the acceleration of distributive conflict and spiralization of inflation. In general, the capitalists partially transfer their distributive aspiration to prices, $0 < A < 1$.

By substituting [3] and [4] into [2] and simplifying for the case in which $\lambda\alpha = \beta$,[189] the price dynamic is presented in [5]. In such equation, class antagonism-led inflation is the outcome of incompatible aspirations regarding the distribution of the social surplus i.e. in general $\omega_t^d > \omega_t^s$ (Cf. Okishio, 1977, p.25; Lavoie, 1992, pp. 372-421). The elimination of such source of inflation requires the persistent coincidence about distributive aspirations, i.e. $\omega_t^d = \omega_t^s$.

$$\dot{p}_t = \lambda\alpha\left(\omega_t^d - \omega_t^s\right) + (1 - \lambda + \lambda\gamma)\dot{p}_{t-1} + i_{t-1} \qquad [5]$$

Following Serrano (2010), the inertial component must be conceived as a propagation channel, and therefore subordinated to an inflationary source, such as class-antagonism (Cf. p. 409). In a context as the one assumed by the traditional inertial-led inflation theory[190], where unions fail in rising real wages by increasing nominal wages, there would be no reason for the inclusion of an indexation mechanism or a wage demand.

II.II. Inflation in an Open Corn-Economy

In this section the *corn-seed* system is extended to the open economy framework. By doing so, the distributive conflict is left as a secondary role and the inertial inflation is presented as a propagation mechanism through wage indexation, in order to focus on external determinants, i.e. international prices and the exchange rate variation, to present their influences on price dynamic.

Further assumptions must be added to the abovementioned set (a. - f.)

7. An imported input is assumed as being required by the cost-minimizing technique in corn-production.
8. The corn-seed economy is assumed to be a pricing-taker system.

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[189] The simplification above implies that divergences from distributive aspirations in working class and bourgeoises affect equally wage or profit variations, respectively. It is used only to synthetize in one term the class antagonism as inflationary source of the price growth rate. In the case in which $\lambda\alpha \neq \beta$, Equation [5] must be written as in [5′].

$$\dot{p}_t = \lambda\alpha(\omega_t^d - \omega_{t-1}) + \beta(\omega_{t-1} - \omega_t^s) + (1 - \lambda + \lambda\gamma)\dot{p}_{t-1} + i_{t-1} \qquad [5']$$

[190] The standard theory of inertial inflation assumes that a) capitalists always succeed in perceiving the desired real profit rate (i.e. $\varrho_t^s = \varrho_{t-1}$), by full adjusting the nominal profit rate to wage inflation (i.e. and no variation in interest rate or exchange rate is imposed by the monetary authority, Cf. Lopes & Lara Resende (1982), Lopes (1982) and Modiano (1983).
Following Vernengo (2006), the main difference between those models and the neoclassical framework is related with the fact that the former explanation effective demand pushes upwards the prices only indirectly through distributive conflict, while for the latter the effective demand generated inflationary pressures since the interaction between supply and demand curves for productive factors pushes market economy towards full-employment.

9. Corn is a tradable good, therefore its domestic production is international competitive depending on distributive arrangement.

Under such economy the main cause of inflation is the variation in the exchange relation between domestic and foreign currencies. Such variation could be the deliberated outcome of the monetary authority interventions at the exchange market, (e.g. crawling peg policy) or the result of a balance of payment crisis and chronic foreign currency scarcity. This is seen as being consistent with the recent history of Latin America. External shocks affect the cost structure and may change the distributive configuration of the economy. Under such experiences, wage indexation is the main propagation mechanism; however, inflation is not inertial in nature.

The importance of the exchange rate in explaining the price dynamic in a peripheral semi-industrialized economy can be approached by two channels, which establish a causal relation from exchange rate variation to price dynamics in both tradable and non-tradable sectors. In the former case, since depreciation causes local producers to receive higher price for export than those perceived at the local market, arbitration puts pressure on domestic prices. When price variation is studied intrinsically non-tradable goods, the influence of currency depreciation on production costs enforces the increase in prices mainly through imported inputs which are included directly or indirectly in the activated method of production.

In the case of tradable goods, the international competitiveness conditions the activation of domestic production to the fact that domestic price of production must be less or equal to the international price in domestic currency, i.e. $p_{T_t} \leq E_t p^*_{T_t}$. In other words, if production prices were higher than the international price of corn denominated in domestic currency, importation would be more convenient and domestic production would be displaced by external production. Taking as given the international competitiveness condition and one of the distributive variables as essential feature of the classical theory of distribution and value, it is always possible to determine the maximum level of the residual distributive variable that is not threat by the international competition, turning the latter condition into an equality as presented in [6].

$$p_{T_t} = E_t p^*_{T_t} \qquad [6]$$

Hereafter, E represents the exchange rate, this is, the number of domestic currency necessary to purchase a unite of international currency. The price dynamic for a tradable goods can be derived from [6]. Thus, the exchange rate variation and the international inflation in foreign currency are the main sources for domestic inflation in tradable sectors [7].

$$\dot{p}_{T_t} = \dot{E}_t + \dot{p}^*_{T_t} \qquad [7]$$

As it was already mentioned, the second channel for the pass-through from the exchange rate to prices is especially applicable for intrinsically non-tradable goods, where the international competitiveness condition is not determinant in the pricing process. Therefore, redefining equation [1] as presented in [8] for considering imported inputs, m refers to technical coefficient for imported inputs and p_m^* is the international price denominated in foreign currency.

$$p_{NT_t} = (1 + r)\left(w_{t-1}l + E_{t-1}p^*_{m_{t-1}}m + p_{NT_{t-1}}a\right) \quad [8]$$

The price dynamic trajectory for non-tradable corn produced in a semi-industrialized economy can be written as follows:

$$\dot{p}_{NT_t} = \mu\left(\dot{E}_{t-1} + \dot{p}^*_{m_{t-1}}\right) + i_{t-1} + (1 - \lambda - \mu + \lambda\gamma)\dot{p}_{NT_{t-1}} \quad [9]$$

In [9], the class-antagonism is avoided, i.e. $\alpha = \mathrm{A} = 0$, therefore [3] and [4] must be rewritten as follows: $\dot{w}_{t-1} = \gamma\dot{p}_{NT_{t-1}}$ and $\dot{r}_t = i_{t-1}$, respectively. Moreover, μ refers to the proportion of imported-input cost in the whole capital advanced.

In conclusion, the exchange rate seems to be determinant in explaining the price growth path both for tradable and non-tradable commodities in a semi-industrialized economy. Such importance in approaching inflationary phenomenon was evident in Latin American countries during 1980s, when *Crawling pegs* rules to stimulate exports were adopted. The necessity to maintain the ratio debt capital services to exports under a stable path and keeping the trade account balanced motivated many government to apply devaluation rules such as the one presented in [10].

$$\dot{E}_t = \varepsilon\left(E_t^d - E_{t-1}\right) + \delta\dot{p}_{t-1} \quad [10]$$

In Equation [10], E_t^d represent the target exchange rate, fixed by the monetary authority in order to guarantee a certain level of the real exchange rate, i.e. $\epsilon_t^d = E_t^d/p_t$. Furthermore, the *crawling pegs* rules implied the adjustment of the exchange rate by adding past inflation. In order words, such policy implies the (partial or full) indexation of the exchange rate. For tradable-corn economy the analytical determination of the inflation is explained by Equation [11].

$$\dot{p}_{T_t} = \varepsilon\left(E_t^d - E_{t-1}\right) + \dot{p}^*_{T_t} + \delta\dot{p}_{T_{t-1}} \quad [11]$$

In the case in which the commodity is an intrinsically non-tradable good, the *Crawling Pegs* rule redefines the price dynamic for the sector from Equation [9] to Equation [12].

$$\dot{p}_{NT_t} = \mu\left[\varepsilon\left(E_t^d - E_{t-1}\right) + \dot{p}^*_{m_{t-1}}\right] + i_{t-1} + (1 - \lambda + \mu\delta + \lambda\gamma)\dot{p}_{NT_{t-1}} \quad [12]$$

II.III. On Hyperinflation and the Explosive Trajectory of Price Growth Paths

Kalecki defines in 1962 the hyperinflation phenomenon as a case of explosive acceleration in price variation and the massive conversion of means of payments into goods and services (1962, p. 275). Moreover, in multiple attempts to extend Kalecki's definition towards the open economy framework, the hyperinflation was redefined for context in which the skyrocketed price variation is jointly observed with the frantic demand for dollars (Cf. Carvalho, 1991, p.78; Charles & Marie, 2016).

According to Llach (1987), hyperinflationary experiences have coincided with institutional instability. Under such circumstances the State may loss its capacity in determining the exchange between foreign and domestic currency, triggering the uncertainty and the conversion into foreign currency of each unite of currency issued by the State. The threats to the institutional cohesion and erratic relative price variability, dynamite all distributive coordination mechanisms and the risk that relative price configuration generates a massive income transfer and the threats the subsistence, induce the generalization of indexation. In sum, in a context of deep foreign currency shortage and inertial inflation as result of persistent distributive conflict, hyperinflation could be presented in nature as price spiral triggered by the explosive trajectory followed by the exchange rate.

Leaving aside one-commodity economy and assuming a system composed by tradable and non-tradable goods, Equation [13] represents a general price index, i.e. $\dot{p}_t = \frac{dp_t/dt}{p_t}$, connecting both price dynamics, where ν_T refers to the participation of tradable goods in the social product.

$$\dot{p}_t = \nu_T \dot{p}_{T\,t} + (1 - \nu_T)\dot{p}_{NT\,t} \qquad [13]$$

By replacing [5], [11] and [12] in [13], and assuming no inflationary sources coming from international determinants, i.e. $\dot{p}^*_{m\,t-1} = \dot{p}^*_{T\,t} = \dot{p}^*_{T\,t-1} = 0$,[191] it is possible to obtain Equation [14].

$$\dot{p}_t = \nu_T \dot{E}_t + (1 - \nu_T)\left[\beta \Delta \omega^{ds}_{t-1} + i_{t-1} + \lambda\gamma \dot{p}_{t-1} + (1 - \lambda)\dot{E}_{t-1}\right] \qquad [14]$$

In order to study the general price index's dynamic trajectory some simplification can help in explaining accelerationist inflationary or even hyperinflation processes: 1) A persistent non-correspondence workers' and capitalists' distributive aspirations, i.e. $\omega^d - \omega^s = \Delta\varpi^{sd} > 0$, 2) an indexation mechanism of nominal interest rate, i.e. $i_t = \dot{p}_t$, and 3) a constant adjustment of the exchange rate $\dot{E}_{t-i} = \dot{E}_{t-j} = \dot{E} > 0$.

[191] In a context of international inflation (i.e. $\dot{p}^*_m > 0$ and $\dot{p}^*_T > 0$), Equation [14] must be written as follows.

$$\dot{p}_t = \nu_T\left(\dot{E}_t + \dot{p}^*_{T\,t}\right) + \nu_{NT}\left[\beta \Delta \omega^{ds}_{t-1} + \mu \dot{p}^*_{m\,t-1} + i_{t-1} + \lambda\gamma \dot{p}_{t-1} + (1 - \lambda - \mu)\dot{p}^*_{T\,t-1} + (1 - \lambda)\dot{E}_{t-1}\right] \qquad [14']$$

It is easy to show that the avoidance of an explosive trajectory of Equation [14] requires that $0 < z = (1 - \nu_T)(1 + \lambda\gamma) < 1$. In other words, the price growth rate follows a convergent path if and only if the associated weights to the inertial mechanism is positive but lower than the unity. Under such context, Equation [14] can be re-written by iteration as in Equation [15], where $x = \nu_T + (1 - \nu_T)(1 - \lambda)$ and $y = (1 - \nu_T)\beta$.

$$\dot{p}_t = \frac{x\dot{E} + y\Delta\varpi^{sd}}{1 - z} \qquad [15]$$

It must be noted that any indexation of the exchange rate, as presented in the devaluation rule suggested in Equation [10], reinforces the inertial mechanism by increasing z and pushing the price growth path into an explosive trajectory.

III. The Austal Plan. The Avoidance of the Hyperinflationary Trajectory

This third section, and the follow one, applies the inflationary theories to study the Argentine political economy after the self-denominated "*National Reorganization Process*" (1976-1983), characterized by institutional fragility in a distributive conflict context, external debt crisis that exacerbated the chronic foreign currency shortage, a trend towards explosive trajectories of the price growth path and the implementation of stabilization plans to avoid hyperinflationary experiences.

By 1983, when the Dictatorship ended, the GDP per capita was 20% lower than the one observed by 1975. The industrial GDP was 12% lower than in 1974, while the agricultural product was 20% higher. Inflation was around 350% and the wage share collapse from 45%, in 1974, to 26%, in 1983. By 1976, the external debt represented 2,5 times and its services were 14% of the total value of exportation, denominated in foreign currency. By the time the Civic-Military Junta left the power, the external debt rose to 5,8 times the amount of exports and its services represented 64% of the foreign currency obtained through exports (Cf. Ferrer & Rougier, 2008, pp. 392-393).

In December 1983, the Radical party's candidate, Raul Alfonsin, inaugurated a new democratic order in the Argentinian history, interrupted since March 1976. The new economic board, led by Bernando Grinspun, stimulated the autonomous components of effective demand by increasing public spending and providing credit facilities (Cf. Epstein, 1987, p.1000). Moreover, Grinspun's board suspended both the payments of the capital and its services, in order to force the IMF, foreign banking creditors and governments to come to the financial rescue through a combination of bridge loans and rescheduling (Cf. Smith, 1990, p. 7).

However, by September 1984, the radical administration re-assumed external debt payments and succumbed to international pressure to reach an agreement with the IMF. The latter had seriously compromised the degrees of freedom for Grinspun's Plan and expansive economic policy. The

anti-inflationary program applied December 1978 and the nationalization of private foreign debt in 1982 by the Dictatorship had increased the external indebtedness and temporally prolonged the foreign currency scarcity. It was estimated that the payments of external debt services represented between 6% and 8% of GDP, a burden even heavier than the one imposed on the Weimar Republic in 1919 (Cf, Belini & Korol, 2012, p. 244). Contrary to what has been traditionally observed during the so-called *Stop & Go Cycles*, the repayment of debt commitments avoided the spending of foreign reserves in growth-led imports, as the natural consequence of expansive demand policies in a semi-industrialized economy (Cf. Rozenwurcel & Sanchez, 1994, p. 78).

The political transition took place under an economic context characterized by the exacerbation of distributive conflict (i.e. $\omega_t^d > \omega_t^s$), which accelerated the inflationary dynamic from 90% yearly by 1980 to 343% in 1983 and 626.7% in 1984 (Cf. Heymann, 1987, p. 284). The exacerbated distributive conflict was triggered by successive devaluations under a *crawling peg* exchange regime, as presented in Equation [10] and aimed in the generation of trade surplus to face the external commitments. The depreciation policy implemented had erratically changed the relative prices and distribution. From 1982 to 1984, the real wages had passed from a sharp minimum to very rapid recovery and fell again in 1985. In addition to *crawling peg* policy, public sector prices had increased by around 50% as a result of the decrease in subsidies. Further acceleration of inflation in the first five months of 1985 created the sense of emergency necessary for drastic action.

In terms of a price dynamics presented in previous sections regarding theoretical revisions, equations [16] - [17] approach the main determinants of the inflationary trajectory for a semi-industrialized peripheral economy like Argentina in 1982. Industrial and agrarian goods constituted the tradable basket, while services and public enterprises composed the non-tradable goods.

More precisely, equation [16] represents the main drivers of tradable price index and can be conceived as the extension of Equation [7] for an economy with multiple tradable goods and protective trade policies. There, the variations related with trade regulations inherent for a deliberated industrialization based on import substitution, such as duties on manufactured commodities, is represented by $\dot{\tau}_I^* = \frac{d\tau_I^*/dt}{\tau_I^*}$. Additionally, variations in agrarian export taxes are captures by $\dot{\tau}_A^* = \frac{d\tau_A^*/dt}{\tau_A^*}$. Both, jointly with exchange rate variation and international inflation, determine price growth path for Argentine tradable basket.

$$\dot{p}_{T_t} = \dot{E}_t + \left(\dot{p}^*_{I_t} + \dot{\tau}_{I_t}\right)\bar{\beta}_{I_T} + \left(\dot{p}^*_{A_t} - \dot{\tau}_{A_t}\right)\bar{\beta}_{A_T} \qquad [16]$$

Equation [17] refers to the price dynamic that characterized the non-tradable commodities. The dynamic followed by subsidies, i.e.$\dot{s} = \frac{ds/dt}{(1-s)}$, in some utilities or services mitigated the inflation coming from non-tradable sector.

$$\dot{p}_{NT_t} = \dot{r}_t + \beta_{K_{NT}}\left(\dot{E}_{t-1} + p^*_{I_{t-1}} + \dot{\tau}_{I_{t-1}}\right) + \left(1 - \bar{\beta}_{K_{NT}}\right)\dot{w}_{t-1} - \dot{s}_{t-1} \quad [17]$$

The wage policy implemented by the Dictatorship (1976-1983) generalized the inclusion of the indexing mechanism in order to guarantee the subsistence in a context of high inflation (Cf. Frenkel, 1984). Alfonsin's administration tried to control the political institution of the labour movement in order to appease the inflation coming from distributive conflict, while real exchange deprecation, i.e. $E_t^d > E_{t-1}$, and increasing public prices were oriented to improve export performance and fiscal deficit. In this sense, the government supported a bill to constraint workers' bargaining power by means of the atomization of unions. In terms of the formal approach presented in Equation [5] for study inflation coming for class antagonism, the Alfonsin's government tried to reduce the sensibility of inflation wage to workers' material discontent, i.e. $\alpha_{1985} < \alpha_{1984}$ and $\omega_t^d \rightarrow \omega_t^s$.

However, the rejection in the congress of the bill to weaken the bargaining power of the union bureaucracy implied a severe defeat for the economic plan represented by Grinspun. In addition to this, the disappointing outcome obtained in terms of growth and constraining capacity of the IMF to implement Keynesian policies motivated Grinspun's replacement by Sourrouille. The changes in the economic board tightened even more the already deteriorated relation with unions and threatened the viability for any social agreement to coordinate the domestic components of inflation and guide it to a stable path.

III.I. The Austral Plan: A Description of its Main Measures

On 14 June 1985, Sourrouille's economic board announced an economic plan oriented to face the accelerating inflation. Nevertheless, differently from the 1973 anti-inflationary policy, the policies combined some measures that characterized stabilization programs and some non-standards policies. The so-called Austral Plan consisted in the following policies (Cf. Canavese & Di Tella, 1988, p. 190):

- The government announced a reduction in fiscal deficit, by means of i) increasing public sector prices, to improve the public enterprises' balances, i.e. $\dot{s} < 0$, ii) re-instituting taxes on agrarian exports, i.e. $\dot{\tau}_{A_t} > 0$, and higher duties on foreign trade, i.e. $\dot{\tau}_{I_t} > 0$, and iii) the drop in nominal interest rates to reduce payments on bank reserves (the "quasi-fiscal" deficit of the central bank), i.e. $i_t < 0$. Moreover, Sourrouille's board announced that the central bank would stop granting credits to the Treasury. The latter commitments

were taken in a context in which public revenues were expected to increase as an outcome of the *Olivera-Tanzi Effect* (Cf. Canavese & Di Tella, *op. cit.,* p. 192). External commitments were renegotiated through a *Stand By* agreement with the IMF. Sourrouille's board used the foreign capital to fill the fiscal gap between public spending and public revenue coming from taxation, i.e. a fiscal deficit denominated in domestic currency.

- After having increased 23% the nominal wages, a price-wage freeze was implemented, i.e. $\dot{w}_t = 0$ and $\dot{p}_t = 0$. Maximum price-levels were imposed for sectors with high seasonal volatility. The duration of the freeze period was not predetermined, since it might have created expectations that would destabilize the economy as the final day of the freeze approached. (Cf. Frenkel, op. cit., p.324).
- The elimination of indexed contracts was a necessary condition to eradicate the inflationary inertia and the implementation of the wage-price freeze. Since the State could not change private agreements. a new currency was issued as an attempt of incentivising a deindexation of the economy (Cf. Canitrot, 1992, p. 40). In terms of Equation [3] and [10], the Austral Plan meant the elimination of indexation mechanism $\gamma = 0$ and $\delta = 0$, respectively. The deindexation process was designed to incentive the demand for the new currency. Thus, contracts signed in Argentine pesos and ending after the implementation date of the plan, were suggested to a conversion scale, whereby the previous domestic currency was depreciated in relation to the austral (Cf. Frenkel, 1987, p. 321). Under the new monetary system, the exchange rate devaluated 18% in terms of the dollar and was fixed at the new level, i.e. $\dot{E}_t = 0$. Additionally, the maintenance of positive real interest to halt speculation against the new currency.

The effects associated with Austral Plan in preventing hyperinflationary path and controlling the inflation were almost immediate. For nine months, from June 1985 to March 1986, the wholesale price index (hereafter, WPI) increased 1% per month on average, while the consumer price index (hereafter, CPI) increased at 3% per month on average (Cf. Canitrot, 1992, p. 42). The inflation rate declined from 42.4% in June 1985 to -0.9% in July 1985, averaging out at 1% during the first quarter of the Plan's implementation (Cf. Frenkel, *op. cit*., p. 322).

Moreover, the price controls did not produce massive reorientation of capital among productive sectors and associated shortage those commodities in which production costs exceed frozen prices (Cf. Heymann, *op. cit.*, p. 286). Simultaneously, the fiscal balance improved because of the increase in real terms of public income, which jump from 23% to the 28% of the GDP. The latter fiscal improvement decreased the requirement of issuing money by the treasury (Canavese & Di Tella, *op. cit.*, p. 196). The effects of the anti-inflationary policy continued in 1986, when the cost

of the wage basket recorded the smallest annual increase since 1974, 90%, and the growth rate was 7% (Cf. Belini & Korol, *op. cit*., p. 245).

III.II. The Austral Plan: Internal and External Tensions

Despite the achievements in terms of stabilizing the price dynamics, it is possible to identify some tensions coming from both internal and external elements. The reappearance of the accelerated inflationary dynamic is based on such vulnerabilities. Firstly, the wage-price freeze was applied on relative prices that had not internalised the distributive changes associated to Sourroille's economic program. Therefore, distributive conflicts that in the past had accelerated inflationary dynamics were only detained and awaiting the elimination of freezing to be activated again. Lastly, the international contexts by the mid-1980s added some difficulties that subsumed the maintenance of the price stability achieved until April 1986 to other political objectives and pressures (e.g. the payments of external debt capital and interest).

Similarly to other stabilization plans in Latin America (Cf. Serrano, 2010, p. 411), the freezing policy was simultaneously implemented to policies that induced distributive variations (e.g. exchange rate devaluation, wage and public price adjustments). Thus, the propagation mechanism on the relative price system was not completed by the time current prices were frozen. The economic board was convinced that the recent acceleration of the inflationary process had decreased the contracts' duration, eliminating the possibility of relative price distortions. However, the propagation mechanism and its capacity in adapting relative prices to production cost were overestimated (Cf. Frenkel & Fanelli, 1987, p. 74).

The relative prices distortions meant the introduction of a latent tension in the price structure that would imply an immediate price adjustment after the elimination of freezing policy. Even though the Alfonsin's administration has had a more complex strategy than just freezing wages and prices than other experiences (e.g. Gelbard's Social Pact), it faced the same pressures in terms of the tendency of competing societal groups seeking to recover lost income shares (Cf. Dornbusch, 1986, pp. 19-20).

In analytical terms, the price distortions meant the incapacity of production price to reflect wage and exchange rate adjustment in simultaneous of price-wage freeze. By recalling Equations [6] and [8], it is possible to represent the tension inherent for the wage-price freeze as in Equations [18] and [19].

$$\bar{p}_{I_{t-1}} < E_t p^*_{I\,t-1}\left(1+\tau_{I_t}\right) \qquad [18]$$

$$\bar{p}_{NT\,t-1} < \left(1+r_{NT\,t-1}\right)\left(w_t l + E_t p^*_{m_{t-1}} m + \bar{p}_{I\,t-1} a\right)(1-s_t) \qquad [19]$$

Because of the Wage-Price Freeze, higher production costs associated with new levels of nominal wages, exchange rate, protective tariffs and subsidies, could not be reflected in prices. The direct consequence was the emergence of differential profit rates (being the residual distributive variables) across the economy, depending on the adjustment measures and the activated method of production. The eventual lifting of the price freeze would lead to a relative adjustment of prices towards the uniformity of the profit rate. However, such adjustment would imply a price increase that would trigger the distributive conflict and the mechanisms of propagation of inertial inflation.

Moreover, the negative trend followed by the terms of trade and the worsening in the Balance of Payments generated pressure on the payment of interest on the debt, triggering devaluation expectations. The inflationary pressures were reinforced by the virtual elimination of agrarian export taxes, which were adjusted according to the international price dynamics (Cf. Fiorito, 2015, p. 83). The latter accelerated the increase on primary commodities prices, which were not affected by the wage-price freeze. By the end of 1985, the wage-price freeze had failed in the recovery of the purchasing power of wages and, therefore, the legitimacy of Alfonsin's Administration among workers and their political forces and unions did not improve. In this sense, nominal wages adjustment was granted by sectors, pushed by unions in order to restore part of the real wage lost during the implementation of the plan.

III.III. The Austral Plan: Foreign Debt as the Main Priority in determining Economic Policy

In a context of successive general strikes, the political constraints to the implementation of the austerity commitments generated doubts about the persistence of Austral Plan's outcome and led the capitalist class to keep their financial assets in foreign currency. Speculative behaviour, by retaining the production in order to boost prices, increased the weakness of the price stability. The union bureaucracy exerted pressure and triggered the end of the freeze policy by April 1986. The frequency for wages and public prices adjustment were planned to avoid the progressive erosion of monetary wage's purchasing power and the appearance of deficits in the budgets of the public enterprises, starting a new accelerationist inflationary stage through inertial mechanism. The re-indexation was progressively re-introduced with currency depreciations and quarterly increases in nominal wages.

The economic board substituted the wage-price freeze with controlled periodic adjustment. That means to add a fixed increment to capture the distributive wage aspiration of Argentine working classes at the wage inflation rate, i.e. $\overline{\Omega}$. Equation [3] can be rewritten as follows in [20]. To improve the tight relations between the Radical government and the unions, the economic board announced a 30% increase for the last 1986 quarter.

$$\dot{w}_{t-1} = \overline{\Omega} + \gamma \dot{p}_{t-1} \quad [20]$$

The international reserves decrease in order to face the payment of external debt services and the monetary authority favoured the fall of the real interest rate, by not adjusting the riskless interest rate to observed inflation, i.e. $\dot{p}_{t-1}$. Nevertheless, the increasing devaluation risk grew the return rate of foreign financial assets incentivizing the dollarization of investment portfolio.

$$i_t < i_t^* + E_t^{Exp} / E_{t-1} - 1 \quad [21]$$

To face the increasing dollarization of the economy, the monetary authority increased the interest rate to avoid the drainage of foreign means of payments. However, such monetary policy was not neutral regarding accelerated price dynamic. The positive variation of the riskless interest rate implies a shock to the price dynamic by means of the financial cost for productive activities, whose effect propagates through indexation mechanism, as presented in Equation [4]. In simultaneous to the increase of the interest rate, a financial reform, oriented to capture foreign capital held by Argentinian residents and to incentive the de-dollarization of portfolios, was announced. The poor macroeconomic results in stimulating economic activity could not revert the progressive growth in unemployment rate, passing from 8.3% in 1984 to 11.5% in 1985 and 10.8% in 1986.[192]

By January 1987, Sourrouille implemented a new version of Austral Plan, included the re-implementation of a new temporary "wage-price" freeze. However, this time the capitalist class speculated strongly against the local currency and the persistent outflow of capital forced the monetary authority to raise the interest rate to new heights. In a context of increasing scarcity of international means of payments, an external shock exacerbated the balance-of-payment constraint when terms of trade fell,[193] exerting more pressure on the fulfilment of Argentine debt commitments. Since 1987, the economic board redefined the priorities in the definition of the economic policies, emphasizing compliance with the debt commitments assumed.

As it can be appreciated in [22], the dynamic observed in the terms of trade was one of the main determinants of the path followed by debt services payments-exports ratio. By defining the latter as the relation between foreign debt services and value of exports, i.e. $\delta_t = i^* D^* / p_A^* X_A$, it is possible to derive the following dynamic expression.

$$\dot{\delta}_t = i_t^* + \dot{D}_t^* - \left(\dot{p}_{A_t}^* + \dot{X}_{A_t}\right) \quad [22]$$

[192] Cf. Smith, *op.cit.*, p. 16.
[193] Cf. The trade surplus has reduced from U$S 4,600 million, in 1985, to U$S 500 million, in 1987. Cf. Belini & Korol, *op. cit.*, p. 248.

Where $\dot{\delta} = \frac{d\dot{\delta}/dt}{\delta_t}$ has a direct relation with the variation in international interest rate, i.e. $i_t^* = \frac{di^*/dt}{i_t^*}$, and the growth rate of the foreign denominated debt, i.e. $\dot{D}_t^* = \frac{dD^*/dt}{D_t^*}$, and an inverse relation with the price variation of the agrarian exported commodity and the growth rate of the agrarian exportation, i.e. $\dot{X}_{A_t} = \frac{dX_A/dt}{X_{A_t}}$. Moreover, the stock of external debt is mainly explained by the Balance of Payments result, in other words, the trade deficit, the payments associated with the external debt services and the capital account result, i.e. $\dot{D}_t^* = TD_t/D_t^* + i_t^* + KK/D^*$.

If Grinspun's strategy to stabilize the growth path of the ratio debt service-exportation was based on a re-structuration of the debt stock and its services in order to free the debt influence on the balance of payment result, Sourrouille's strategy was based on the generation of increasing trade balance and capital account surplus (improving the external position of the country and the accumulation of international reserves) through contractive macroeconomic policies. Therefore, the obtention of a positive variation in international reserve, for the first time in 1979, through a substantial drop in the current account deficit and capital account surplus, must be understood from the perspective that will characterize Sourrouille's policies.[194]

Sourrouille replaced the system based on rigid price controls with a scheme of "managed" prices. Additionally, the fixed exchange regime was abandoned, and a crawling peg system of periodic devaluations was implemented as an attempt to induced balance of payment surplus. The latter implied the reactivation of the main source of inflation in an open economy, i.e. $\dot{E}_t > 0$.

However, by 1987, the current account deficit approached 1982 levels (5.2% of GDP).[195] and the relation interest payments-exports took an explosive trajectory, forcing the government to seek a new agreement to re-schedule the sovereign commitments and accepting new austerity compromises. By July, the *Stand-By* agreement with the IMF was announced, accepting as counterpart new targets related with fiscal austerity. Three months after, another agreement, this time with the US Treasury Department, was subscripted. The Alfonsin's administration was obligated to induce a drop in real wages and to reduce the public deficit through an increase in public sector tariffs jointly with a price freeze, the privatization of public enterprises and a new deregulation of capital market. The stabilization experience was finished.

The analytical reconstruction presented above stresses the importance of external determinant in a price-taker economy with financial and technological dependences for the success of the price stabilization. The growing importance of fulfilling external commitments regarding price stabilization policies and distributive variables, e.g. exchange rate, interest rate and subsidies of

[194] Cf. Rozenwurcel & Sanchez, *op. cit.,* p. 79.
[195] Cf. Idem.

public services, eventually dynamiting the successes achieved by the Austral Plan. External pressures to condition financial support to the achievement of fiscal equilibrium and Trade-Balance surplus, in a context of tense relationships with the political forces of the social classes, generated a political environment that was not conducive to contain class antagonism and re-establishment of propagation mechanisms.

IV. The Convertibility Plan

IV.I. The Fourth Peronist Government and The Political Economy under Hyperinflation

After the failure of the Austral Plan, i.e. the CPI accelerated during the final quarter of 1987, and the re-indexation of the new currency system, the balance of power changed when Peronism won the legislative at middle-term election and controlled the congress. This political result induced the inclusion of some union leaders in Alfonsin's board, triggering internal conflicts. The New Minister of Labour, Carlos Alderete, faced with the Sourrouille's economic board, had designed a new labour protection law by which allowed the free collective bargaining without the government imposing ceilings on wage agreement (Cf. Smith, op. cit, p.23).

The Peronist's victory virtually exhausted the legitimacy of Alfonsin's administration to carry on the coordination in fixing prices and nominal wage to set a stable path or even to negotiate a new wage-price freeze. The lack of political support was exacerbated by April 1988, when the interruption of debt interest payments was finally declared. By the beginning of 1988, the government's relation with either, business chambers, union and multilateral credit agencies became increasingly conflictive (Cf. Basualdo, 2006, p.242). IMF cancelled undrawn loans and capital continued to flight abroad. By July 1988, the price controls were finished, and the accelerating distributive conflict triggered once again the already high inflation, i.e. prices were rising monthly by 20% percent (Cf. Wynia, *op. cit*., p.274).

The tensions that characterized the period after Austral Plan implied an increasing riskless interest rate in order to disincentive the portfolio dollarization, and the negative effects of contractive monetary policy on the financial deficit (Cf. Canitrot, 1992, p.44). The increasing bargaining power of creditors in determining the economic policy to the guarantee of the debt payment, forced the economic board to adopt spending cuts and austerity policies, undermining the Alfonsin's political support.

In August 1988, Sourrouille announced a new emergency plan, the so-called Spring Plan, to avoid the hyperinflationary explosion before presidential elections, scheduled in May 1989. The economic board negotiated the implementation of a price-truce, also adopted policies to differentiate the exchange rate and re-established the export taxes. A stabilization of the nominal

exchange rate was needed as a price-anchor, but external debt payments threatened the foreign reserves and the plausibility of such exchange rate policy.

Initially, the US Treasury and the World Bank supported the new program by providing external credit to maintain the foreign currency under control. Nevertheless, the inevitable electoral loss of Radicalism against Peronism caused the US Treasury to withdraw its support and triggered the exchange run against the Austral. On February 1989, the Central Bank announced a non-intervention exchange policy, i.e. $\dot{E}_t > 0$. The IMF, the Work Bank and the US Treasury cut off the flow of dollars to Argentina in early March, the skyrocket depreciation generated the hyperinflation and forced the resignation of Sourrouille's team. Figure 1 shows the strong depreciation that the national currency suffered between February to August 1989 and its triggered effect on the monthly consumer price index.

In May 15th, the Peronist candidate, Carlos Menem, won the elections and his political movement obtained the control of the parliament. After the elections, the economy fell apart. Workers panicked as they watched the purchasing power of their wages evaporating. A large crowd of people, emerged from working-class neighbourhoods, rioted for food. Argentina was virtually "state-less", no one knew the value of the currency. The stabilization of the currency depreciation was achieved in July 1989, when the wholesale price index (hereafter WPI) rose 209% and consumer price index (hereafter CPI) had jumped 197% per month, while in August the WPI increased 8,5% and the CPI rose 38% per month. The price stabilization came only after September (Cf. Canitrot, *op. cit*., p.45).

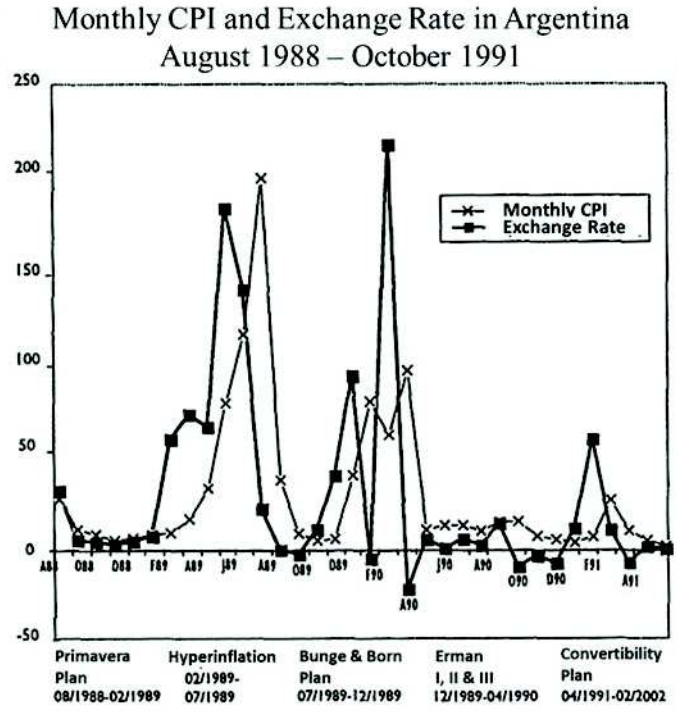
The explosive trajectory observed during the hyperinflation in 1989 was mainly explained by the inflationary sources presented in [13]. The State's weakness in controlling the exchange relation between the international currency and the domestic currency took place in a highly indexed contract.

The fourth Peronist administration (1989-1999) was based on a coalition composed by the political forces of both the labour movement (i.e. the union bureaucracy) and the capitalist class (i.e. the business chambers). In this sense the government capability to contain the distributive conflict, i.e. $\omega_t^d > \omega_t^s$, was particularly improved with respect Alfonsin's administration. Both, union leaders and business chambers were included and had influence in determining economic policies.

However, the need for foreign currency to stabilize the exchange rate led the economic board[196] to promote of structural reforms (i.e. Privatization, decentralization of the public spending) and

[196] Miguel Roig, firstly, and Nestor Rapanelli, secondly, were named Minister of Economy during 1990. Both were vice-presidents of Bunge & Born Corporations, a multinational enterprise.

seeking financial support. Following Canitrot, Menem's administration changed the focus from the political sphere, associated with the democratic consolidation, towards the economic re-structuration of the country (*op. cit.*, p. 45). The US Treasury and international capital markets sponsored this shift and the adoption of structural changes.



Source: Basualdo (2006), p. 282

Figure 1

The economic board liberalized State-controlled prices (e.g. petroleum products, electricity, transport, etc.), raising them from 200-640% and imposed a devaluation of the currency, $\dot{E}_t = 200\%$, as it can be appreciated at Figure 1. After such policies a second hyperinflationary episode was observed by the end of 1989. The explosive path followed by the price dynamic induced a political crisis that forced a change at the economic board. The accumulated increase in the consumer price index from March 1989 to March 1990 was about $\dot{p}_{1990-1991} = 20,594\%$ (Smith, 1991, pp.53).

The new chief of the economic board, Erman Gonzalez, applied a program to face the price spiral based on three measures: i) Erman I: the adoption of the floating exchange regime, ii) the Erman II: a compulsory swap of bank`s deposits at the Central Bank into10-year dollar-denominated bonds, with an annual interest rate equivalent to 6% (Damill and Frenkel, 1999, pp. 38-43) and iii) Erman III: strong spending cuts[197]. The compulsory swap, also called Bonex Plan, consisted

[197] The share of the Government expenditure in the GDP fell from 35.6% in 1989 to 29.8% in 1990 (Cf. Cavallo, 1996, p. 171).

on a re-structuration of public debt, absorbing a huge amount of short-term bonds, denominated in national currency, which were the root of the quasi-fiscal deficit of the State.

The set of policies designed by Gonzalez implied a huge recession. Also, the massive foreign currency sells at the exchange market pushed downwards the exchange rate, generating an appreciation of the national currency which induced the US dollar to loss 36% of its value in eight months. At the fiscal front, the economic activity contraction diminished the public income and the social pressure for the rise of the government expenditure induced the reappearance of the public deficit.

IV.II. The Convertibility Plan: The Economic Anomie as an Opportunity to state a Legitimated Class Domination

The substitution of Gonzalez by Domingo Cavallo coincided with the predominance of the conventional wisdom on inflation in Menem's administration. The idea that predominated in the authorities was that both over-issuing currency, led by the fiscal deficit, and indexation mechanism were at the very root of the hyperinflationary process.[198]Contrary to the stabilization plans during the eighties, whose nature was the avoidance of the hyperinflationary phenomenon, the Convertibility Plan, and the set of measures jointly adopted, were oriented towards the re-structuration of the Argentine economy in order to obtain the financial support of international banks. In this respect, by the early nineties, the price system anomie associated with observed hyperinflation created consensus in the civil society on the need to restructure the economic and political relations (Cf. Basualdo, *op. cit*, p. 310).

The so-called Convertibility Plan can be synthetized as follows (Cf. Perez-Caldentey & Vernengo, *op. cit.*, p. 152).

- It requires the Central Bank to back the entire monetary base with foreign currency reserves. The new plan drastically limited the scope of the monetary policy and the Central Bank's role of lander of last resource.
- The Central Bank's capacity to lend money to the Government was forbidden by law. An upper limit of 10% of the high-power money could be backed by dollar denominated government bonds. The latter differentiates the Convertibility Regime from the traditional currency board, in which there is no room for a discretionary monetary policy.
- A fixed exchange rate regime at one peso per dollar was imposed by law, i.e. $E_t = 1$ and $\dot{E}_t \leq 0$. The latter meant that the anti-inflationary policy was based on the

[198] For a representation of the main thoughts regarding the hyperinflation, Cf. Cavallo (1993,1996).

exchange rate as the anchor of the price dynamic. However, the law did not prohibit the revaluation of the new national currency, the peso.

- The capital controls were dismantled by Convertibility law and price controls were abolished.
- The agents were free in using the dollar or the domestic currency to settle monetary transactions. The latter deepened the *financial dependency*, this is, the inability of peripheral economies to borrow in international markets in their own currency (Cf. Tavares, 2003). By deregulating and liberalizing the exchange market, such inability was generalized to domestic capital markets.
- Indexation clauses were prohibited to be included among the contract terms. Analytically this means that the clause wage variation rate and exchange rate could not be adjust automatically to inflation.

The Convertibility Plan was adopted jointly with the other structural measures, which were conceived as "necessary preconditions" for the new monetary system.

i) Trade liberalization: A general protectionist tariffs reduction was imposed in order to decrease price variation and discipline domestic prices, i.e. $\dot{\tau}_I^* < 0$.

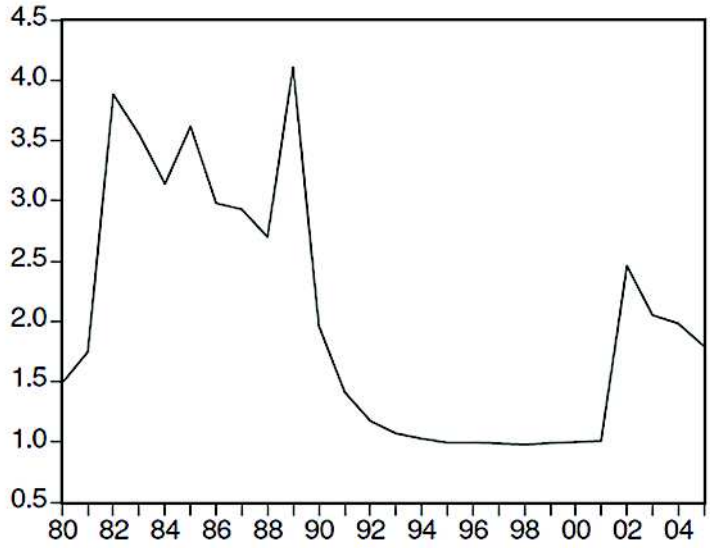
ii) Financial deregulation: Foreign financial institutions were freely allowed to compete with the domestic banks, such that the determination of the domestic interest rate would be mainly explain by the international interest rate, i.e. $i_t = i_t^*$, in a context in which no devaluation or debt default risk would be taken into account for investors.

iii) State reform: Privatization, tax reform and the re-organisation of Federal States' faculties in public spending and taxation.

The trade liberalization, applied during the Dictatorship (1976-1983) and being imposed to Alfonsin's administration as part of the IMF debt conditionality, was accelerated since 1991 with the Convertibility Law. In 1989, the tariffs were averaged over 30% and reduced to 0% for primary goods, to 11% for intermediate commodities and 22% for manufactured goods for final consumption. Quantitative restrictions were eliminated, except for automobile industry (Cf. Kregel, 2003, p. 20).

The *laissez-faire* trade policy changed the relative prices, since decreased the capital goods, inputs and textile commodities in relation to the agricultural goods. The imports were doubled from 1990 to 1991, the capital goods imports were tripled while the consumption goods imports quintupled (Cf, Canitrot, *op. cit*, 52). Similarly, to anti-inflationary experience between December 1978 and May 1982, the trade liberalization was exacerbated in their price-disciplining effects by inducing real appreciation of the domestic currency. In other the anchored anti-inflationary policy. As it can be appreciated in Figure 2, the real exchange rate, i.e. ϵ, sharply reduced since 1992.

Real Exchange Rate in Argentina (1980-2004)



Source: Perez Caldentey & Vernengo (2007), p. 155

Figure 2

The liberalization of the financial system was aimed in the integration of Argentine economy to the international capital market and the strengthening of the external determinants of the domestic interest rate. Such insertion presupposed the re-establishment of the external debt payments in favour of international banks, which were partially interrupted since April 1988[199]. The 1990s brought to Latin American countries inflows of capital, attracted by high interest rates and privatization opportunities. These flows were preceded by the rise of "Brady's bonds," a secondary market in commercial bank loans for Latin American countries' debts established to "relieve U.S. banks of non-performing loans" (Cf. Medeiros, 2008, p. 93). In synthesis, the Brady Plan, in which Argentina was finally included by 1993, implied both the issuing of dollar-denominated bonds (purchased by American pension and mutual funds) and the financial support by IMF to guarantee the re-payment to defaulted-bonds holders, mainly American banks (Cf. Smith, *op. cit.*, p. 65).

[199] More precisely, the external debt default was maintained since April 1988 to April 1989 when all payments scheduled within the period were interrupted. From April 1989 to February 1991 the State monthly paid US$ 40 million to the debt bond holders in term of debt services (Cf. Basualdo, op. cit., p.346). Moreover, the privatization was used to contain the demands by the bondholders through the capitalization of defaulted bonds during the acquisition operation of the public enterprises (Cf. Canitrot, op. cit., p. 51).

The State reform was based on two fundamental issues: a) The improvement of public income by taxation and b) the transfer of the public services and productive activities commanded by the State to private sphere.

The increase of the tax income was specially sought by Cavallo's administration since the abstaining of public financing through domestic credit was a requirement for the sustainability of the quasi-currency board. In this sense, the aliquot of the value added tax was progressively rose up to 18%, and the public incomes coming from this taxation were doubled with respect 1990 (Cf. Canitrot, op. cit. p. 52). However, as it was observed in past stabilization programs (e.g. the Austral Plan) the shock policy in controlling the explosive price trajectory improved the fiscal result by increasing the purchasing power of the tax resource, i.e. the so-called Olivera-Tanzi effect.

The privatization program was the second sphere of the State reform during Menem's administration. Such massive transfer of basic productive sectors from public to private sphere meant the generalization of the cost-minimizing logic, and therefore the maximization of profit rate, as the guiding principle of the productive organization of Argentine economic system. During industrialization by means of import substituting, public enterprises in wage-goods producing sectors played a key role in income distribution.

The privatization included oil public enterprise, both power-producing and distributing companies, gas enterprise, the ports and state steel company. By 1995, the state had received almost US$ 10,000 million dollars and had cancelled public debts by receiving national bonds for an amount equivalently to US$ 14,000 million (Cf. Belini & Korol, *op. cit*., p. 253).

IV.III. The Convertibility Plan's Consequences: Price Stabilization, Technological and Financial Dependences and Hegemony

The inflation rate, having reached a peak in 1989, i.e. $\dot{p}_{1989} = 3000\%$, and more than 2000% in 1990, was reduced to less than 50% in 1992 and disappeared in 1996 (Cf. Kregel, 2003, p.19). This had the implication of in increasing purchasing power of wages and therefore the effective demand associated with consumption of working class and popular sectors.

The growing purchasing power of wages and the trade liberalization generate a worsening in the current account and, therefore, the necessity of capital inflows or foreign debt to face the external imbalances. The commercial balance deteriorated from 1992 to 1994 reaching a trade deficit around US$ 4,500 million. By 1997 share of imported goods in GDP had doubled from 6%, in 1989, to 12%, while the share of exports remained stable around 10% (Cf. Kregel, op. cit., p. 20).

The *technological dependence*[200] had been strengthened after the structural changes introduced as necessary condition for price stabilizing. The privatizations of productive strategic sectors, e.g. oil, gas and steel public enterprises, as main source of foreign capital inflows to implement the exchange rate policy, implied to leave the command of the productive methods that were at the hand of the State to the control of capitalist class and, particularly, the international fraction of the bourgeoisie. In this sense, the activated productive methods were oriented according to the cost-minimizing criteria and, the exchange rate policy incentivized the substitution of domestically produced inputs by imported means of production. In this sense, the total requirement of foreign means of payments in order to purchase inputs were amplified while the exports followed a dynamic explained by external factors, i.e. the global economic growth.

A similar phenomenon can be found in the financial dependence during Convertibility Regime. It must be stressed that Convertibility was not a full-currency board, since there were some instruments held by the monetary authority incompatible with the latter monetary system. For instance, the so-called "*Contingent Repo Faculty*" allowed to the Central Bank to sell national bonds denominated in dollars to international banks subject to a repurchase clause in the case of banking crises. The monetary authority could also participate in doing sterilization operation and intervene in the interbank market by setting the riskless interest rate. Such capabilities provided to the Monetary Authority during the Convertibility with the narrow margin to accommodate the endogenous liquidity demand (Cf. De Lucchi, 2013, p. 323).

In a context of worsening trade balance and no free availability reserves, the capability of the Argentine Central Bank to accommodate the liquidity to the financial effective demand depended essentially the ability of the State to obtain funding in foreign currency by selling external public debt. As it is presented by Serrano, dollarization (or, as in this case, a bi-monetary system in which each domestic means of payment must be backed in dollar) is mainly adopted by economies suffering chronic shortage of foreign exchange caused by technological dependencies. However, under such monetary system, the domestic demand for foreign currency is exacerbated by multiple purposes beyond the traditional payment of imports without implying a systematic increase in the provision of foreign currency through exports (Cf. 2003, p.3).

The combination of external indebtedness (led by commercial deficit and quasi-fiscal deficit, in other words, the technological dependence), and dollar-denominated financial assets and securities (the financial dependence) reached no precedent levels during Cavallo's plan since

[200] The technological dependence can be defined as the necessity to include imported inputs to produce commodities that enter directly or indirectly in the production of all commodities by the cost minimizing technique, or even imported products include among the wage baskets or the consumption goods imported by capitalists (Cf. Dvoskin & Feldman, 2018)

1930. The deposits in dollars and the share of loans denominated in dollars displaced completely the domestic currency from its function of value reserves.

By revisiting Convertibility experience, it is possible to appreciate the importance of price anomie during hyperinflation at the beginning of 1990s in generating the consensus among civil society to re structure the Argentine economy. In this respect, not only the distributive determinants and the exchange rate were controlled in order to force the stabilization of the price growth path, but also international prices and interest rate were empowered in disciplining the domestic prices. Finally, the structural reforms in privatizing strategic sectors and deepening the financial dependence of the economy were backed by central economies, particularly American State, by providing financial support and temporal relaxation of the foreign currency scarcity. The latter played a key role in maintaining the real appreciation of the domestic currency and stabilize prices.

V. Conclusions

The historical revision of the Argentine Political Economy for the 1980s shows that, after the dictatorship (1976-1983), the external determinants of the price growth trajectory, i.e. the exchange rate and the capacity of the State to guarantee the exchange stability, ended up gaining importance in explaining the price dynamic with respect of domestic determinants, i.e. the distributive conflict and the capacity of the State to coordinate distributive aspirations. In a context of widespread indexation, initiated by the dictatorship salary policy and deepened during the return of democracy, both the exchange policy of crawling peg and the liberalization of the exchange rate seem to be the trigger elements of an explosive trajectory of the index of prices.

The growing importance of the exchange rate and its stabilization demonstrated the external vulnerability of the Argentine economy and the growing need of Alfonsin's Administration to refinance its external commitments. In this way, the success of the economic policy associated with the stabilization of the price growth trajectory was suggest to the availability of international means of payments and, therefore, of external financial assistance (e.g. IMF and the US Federal Treasury) for an anti-inflation policy in which the exchange rate acts as an anchor for domestic prices.

In a context of successive hyperinflationary bursts (1989-1990) and high relative price variability, the distributive claims of the working class were subordinated to institutional stability, especially after the rise of the Peronist government (1989-1999) and the growing union fragmentation. The historical reconstruction offered suggests that such political withdrawal of the working class was essential for the formation of a general consensus in civil society about the need for the application

of measures that deepen the structural changes initiated with the 1976 coup and imposed as conditions for access to external financial assistance.

The 1991 Convertibility Plan can be characterized as a stabilization strategy that faced the three fronts associated with the determinants of cost inflation. In the case of the distributive conflict, the third Peronist government as a political expression of class alliance enabled the coordination of distributive aspirations in the context of economic anomie. In the case of inflationary inertia, the Convertibility Law eradicated the indexation of contracts. In the case of exchange rate inflation, structural reforms made it easier to alleviate the external restriction with the paradox of deepening the technological and financial dependence of the Argentine economy.

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