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Distortions, Factor Proportions and Efficiency Losses: Argentina in the Latin American Scenario

By

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I. Introduction

This paper reports some orders of magnitude of the employment and income gains from resource reallocation that could be expected from removal of policy-induced distortions in the Argentina manufacturing sector. The data used in the analysis is from the early 1970s when Argentina was following import-substitution policies.

The paper will focus attention on policy-induced distortions in factor markets. The results complement previous analysis regarding the employment effects of alternative trade strategies [Nogués, 1983]. It proves useful for the objectives of this paper to summarize these results. This is done in Section II. The framework which we use for simulating the effects of factor market distortions on factor proportions is presented in Section III. This section also discusses and presents estimates of factor market distortions. Section IV uses the results of Section III to simulate the employment effects of removing factor market distortions. Section V will present some estimates of income gains that could be obtained by removing policy-induced distortions quantified in this paper. Section VI compares our results with those obtained for other Latin American countries, and finally Section VII presents some concluding comments.

II. The Impact of Alternative Trade Strategies on Employment in the Argentine Manufacturing Sector

In this section I summarize findings showings the employment effects of alternative commercial policies in the manufacturing sector. In order to

Remark: The author is a World Bank staff member. The paper reflects the author's views alone and should not be interpreted to express those of the World Bank. I appreciate comments received from Professor A. O. Krueger while writing my doctoral dissertation from which this paper draws [Nogués, 1980].

estimate these effects, manufacturing industries were classified according to trade orientation between exportables and import competing (IC)[1]. We have also classified IC industries according to whether they compete with imports coming from developed or less developed countries (DC's and LDC's)[2]. This is done because countries like Argentina, whose manufacturing capital-labor endowment lies in between extreme values corresponding to capital abundant and labor abundant countries (DC's and LDC's), might have their IC industries competing with either of these groups of countries[3]. Also for these types of countries, exportable industries are expected to require techniques whose factor intensity characteristics lie in between those corresponding to these two groups of IC industries.

Table 1 shows estimates of employment per unit of domestic value added (L/DVA) and effective rates of protection (ERP's). We observe, not surprisingly, that the trade regime was clearly biased in favor of IC industries. While this

Table 1 – *Employment per Unit of Domestic Value Added and Effective Rates of Protection: Manufacturing Industries (1973)*[a]

Trade Orientation	Employment per Unit of Domestic Value Added (L/DVA)	Effective Rate of Protection (ERP)	Trade Balance (1,000 U.S. $)
A. Exportables	18.899	- 0.026	1,392
B. IC	14.555	1.302	- 1,074
1. With DC's	13.365	1.498	- 1,029
2. With LDC's	21.873	2.274	130
3. Other IC industries	11.574	0.470	- 175
C. Total Manufacturing	15.329	0.841	318

[a] ERP's have been estimated by weighing 1969 industry-specific rates with 1973 estimates of value added.

Source: Abridged from Tables 2 and 3 in Nogués [1983].

[1] The theory which has facilitated the empirical analysis of the employment effect of alternative trade strategies is presented in Krueger [1983, Ch. 4]. This is essentially a two-factor trade model extended to include many commodities and many countries.

[2] As a general rule, exportables (IC) industries were considered to be those having a positive (negative) trade balance, and/or low (high) effective protection. The group of other IC industries includes those where the origin of competing imports under a liberal trade regime is not straightforward, as well as industries enjoying protection from relatively high transport costs. A more detailed discussion of the classification of industries as well as of the analysis summarized in this section can be consulted in Nogués [1983].

[3] In Nogués [1980, App. to Ch. 1], I present quantitative evidence showing that the Argentine manufacturing capital-labor endowment lies in between extreme values observed in capital and labor abundant countries.

group of industries had a weighted average ERP of 130 percent, the corresponding figure for exportables was as low as -3 percent. From the standpoint of resource allocation and given the higher labor intensity of exportable industries, the bias in the trade regime was clearly worsening labor opportunities for employment. We conclude that the adoption of an export promotion policy which is characterized essentially by relatively uniform incentives for domestic and export sales together with the adoption and maintenance through time of a realistic exchange rate would increase labor demand for a given level of manufacturing activity.

In order to be more confident on this result, I have classified U.S. manufacturing industries according to trade orientation of Argentina industries. U.S. factors and goods markets are significantly less distorted than Argentina's markets. Therefore, for this country the reduction in the importance of distortions is expected to result in a structure of factor proportions across industries more similar to that observed in the U.S. [Nogués 1980, pp.126-129]. When estimating labor per unit of domestic value added for U.S. manufacturing industries I find that the group of industries which I have classified as Argentine exportables is 33 (26) percent more (less) labor intensive than the group of industries which in Argentina are classified as IC with DC's (IC with LDC's). Therefore, the factor intensity ranking according to these broad groups of industries is similar between the U.S. and Argentina. I take this result as an additional piece of evidence in favor of the predictions emanating from my findings on alternative trade strategies and employment in the Argentine manufacturing sector.

Nevertheless, in Latin American countries, import substitution policies have been accompanied not only by distortions in goods markets, but also by severe distortions in factor markets, including as we shall see, those occasioned by the trade regime on the price of capital goods. The next section will assess the quantitative importance of these distortions for Argentina during the early 1970s. These estimates will then (Section IV) be used to simulate the impact of these distortions on factor proportions.

III. Quantitative Importance of Factor Market Distortions

This section is arranged in the following way. In Subsection 1, I present a simple partial equilibrium framework which allows to simulate the employment effects of removing factor market distortions. Subsections 2 and 3 will then discuss and estimate policy-induced distortions in capital and labor markets.

Several distortions have been pointed out in the literature, and some of them have been estimated for other countries[1]. For example, it has long since

[1] See for example papers written for the National Bureau of Economic Research (NBER) project on Trade and Employment directed by Anne O. Krueger. Country specific papers of this project are published in Krueger *et al.* [1981].

been recognized that the trade regime may have important distortionary effects on the costs of capital goods. Quantitative restrictions, overvalued exchange rates, and an escalated structure of tariffs are all potential sources of distortions introducing a wedge between the actual cost of capital goods paid by different industries, and the one that would prevail in a more open economy. Financial policies can also have such effects if they create a wedge between the real market interest rate and the opportunity cost of financial capital. These topics are analyzed in Subsection 1 below.

Subsection 3 presents a brief discussion of some relevant characteristics of urban labor markets and shows estimates of distortions which have been introduced by policy measures in this market. Specifically attention is focused on old-retirement plans, and other earmarked taxes on wages. In both, Subsections 2 and 3, special attention is paid to differentiating effective as opposed to legal distortions[1].

1. Framework for Simulating the Effects of Factor Market Distortions on Employment

In this paper, I use a very simple framework for analyzing the employment effects of factor distortions in a partial equilibrium context[2]. This framework assumes that production functions in manufacturing industries are of the Cobb-Douglas type. In a two-factor world, labor (L) and capital (K), and assuming constant returns to scale[3], labor productivity in any industry can be represented by:

$$(1) \qquad \left(\frac{Q}{L}\right)_0 = A \left(\frac{K}{L}\right)_0^{\alpha}$$

where Q is output, is capital's share in output, and A is a scale factor.

Under the assumption of profit maximization the capital-labor ratio for a given factor-price ratio is given by:

[1] The estimates of the extent to which policy-induced distortions have affected the price of productive factors should be regarded as lower bounds. For example, and because we could not differentiate legal as opposed to effective incentives, the effects of tax deductions for investment purposes are not discussed. In many cases, these incentives have been of major importance in deciding whether or not to invest. For a discussion of legal as opposed to effective tax subsidies on the price of capital goods in the Argentine context see Nogués [1980, p. 206].

[2] It is obviously recognized that in a general equilibrium model, changing relative factor prices would affect not only factor utilization but also the composition of output and the vector of equilibrium prices. Due to these and other assumptions presented in the text, the estimates to be presented in Section IV should be regarded as possible orders of magnitude. The reader interested in general equilibrium estimates might consult Henderson [1982].

[3] Econometric evidence supporting the assumption of unitary elasticity of substitution between labor and capital and constant returns to scale is presented in work done for the NBER project by Behrman [1982].

$$(2) \qquad \left(\frac{K}{L}\right)_0 = \left(\frac{\alpha}{1-\alpha}\right)\left(\frac{P_L}{P_K}\right)_0$$

where P_L and P_K stand for unit prices of labor and capital respectively, and 0 represents the undistorted situation. Distortions in factor markets change P_{L0} and P_{K0} to P_{L1} and P_{K1} in such a way that:

$$P_{L1} = (1+\varepsilon)\,P_{L0} \quad \text{and} \quad P_{K1} = (1+\rho)\,P_{K0}$$

where ε and ρ stand for policy-induced distortions in labor and capital markets, respectively. Therefore, the labor-output ratio corresponding to a distorted situation can be represented by:

$$(3) \qquad \left(\frac{L}{Q}\right)_1 = \left(\frac{L}{Q}\right)_0 \left(\frac{1+\rho}{1+\varepsilon}\right)^{\alpha}$$

Finally, assuming output remains fixed, the change in employment can be represented by:

$$(4) \qquad \frac{L_1 - L_0}{L_0} = \left(\frac{1+\rho}{1+\varepsilon}\right)^{\alpha} - 1$$

For given prices and quantities observed in period 0, and assuming there are no substitution possibilities between productive factors and intermediate inputs we can apply the correction factor represented by (4) to simulate the effects on employment of eliminating factor market distortions. I stress the word simulate, because of the various assumptions needed to perform this exercise.

The purpose of the rest of this section is to discuss and quantify some of the various policy-induced distortions included in the parameters ρ (capital markets) and ε (labor markets). To the extent that data is available, these distortions will be differentiated according to the trade categories that were presented in the previous section. This will allow a preliminary analysis of the extent to which factor market distortions might have affected optimal factor proportions in different groups of industries, and whether they modify the results of the employment effects of alternative trade strategies, reported in the previous section.

2. Distortions in the Price of Capital Goods

a. Effects of the Trade Regime on the Price of Capital Goods

A relatively simple algebraic equation will serve to simplify the presentation of the various trade and exchange rate policies that have a direct impact on the price of capital goods. For any given group of industries i, the domestic value of investment (PI_i^D) is a weighted average of expenditures paid for domestically produced and foreign tradable capital goods and construction. The weights are given by the fraction of the international value of investment costs bought domestically and abroad. More concretely, for sector i we have:

$$(5.a) \qquad PI_i^D = PI_{Di} + PI_{Mi} + PC_i$$

where PI_{Di} and PI_{Mi} represent investment expenditures in domestic and imported tradable capital goods, and PC_i is the value of investment in construction. All variables are defined in pesos. In turn, PI_{Di} and PI_{Mi} can be expressed as:

$$(5.b) \qquad PI_{Di} = PI_i^{FD} \times k\,(1 + t_{Di})$$

$$(5.c) \qquad PI_{Mi} = PI_i^{FM} \times k\,(1 + t_{Mi})$$

where PI_i^{FM} stands for the international CIF dollar cost of imported capital goods; PI_i^{FD} is the international CIF dollar equivalent of investment in domestic capital goods; k the official exchange rate; t_{Mi} the average tariff rate paid on imports of capital goods, and t_{Di} the average implicit nominal rate of protection of domestically produced capital goods bought by industry i. Therefore, the peso value of investment undertaken by industry i (PI_i^D) can be represented by:

$$(6) \qquad PI_i^D = k[PI_i^{FM}\,(1 + t_{Mi}) + PI_i^{FD}\,(1 + t_{Di})] + PC_i$$

As we shall see $t_{Mi} < t_{Di}$ and therefore the higher the fraction of imported machinery and equipment in total investment costs the lower the average price paid for capital goods.

As we said, there are at least two important sources of distortions in the price of capital goods. The first refers to the different average nominal rates of protection (NRP's) on capital goods bought by different industries, and the second refers to the degree of overvaluation of the peso[1].

Let us first deal with the issue of tariff escalation. Ideally, we would like to have disaggregated data in order to compute t_{Di} and t_{Mi}. Unfortunately, such information is not available and at this stage it is necessary to assume $t_{Mi} = t_M$. In 1973 the weighted average tariff rate paid on imports of capital goods (t_M)

[1] These are quantifiable distortions working through the price mechanism. Additional welfare losses come from the use of scarce resources engaged in rent-seeking activities. In Argentina, during a great part of the 1970s the license regime for imports of capital goods was managed directly by entrepreneurs of the domestic capital goods industry. These entrepreneurs would decide whether a specific good in a license request could be produced domestically. Obviously, it was to the advantage of the investor to engage resources in trying to design a plant which would pass the "technical test" in order to try to reap the rents implicit in imported capital goods. But if the license was denied, the domestic producer was not legally constrained, in regard to timing, quality, and price of the capital good he would eventually deliver.

was 8.3 percent[1]. For t_{Di} we have somewhat more information. This refers to the breakdown between machinery and equipment, and transport equipment with estimated implicit tariff rates of 97.5 percent and 109.0 percent, respectively[2]. It is in this escalation together with the importance of different origins of tradable capital goods and the differential weight of construction costs that manufacturing industries pay different weighted average per-unit prices for investment goods.

The second important source of distortion refers to whether the official exchange rate could in 1973 be regarded as an equilibrium rate. There are essentially two reasons of why the exchange rate can depart from equilibrium. First, in the short run, the official exchange rate can be out of equilibrium because authorities have not adjusted exchange rate quotations to reflect changes in relative price levels. In the second place, it has long since been recognized that a protectionist trade regime pushes the equilibrium exchange rate below the rate that would preserve trade balance in an open economy (see e.g. Balassa [1982]).

Let us now analyze how these two different causes of currency overvaluation affect the price of capital goods. First, recalling that in 1973 there existed a regime of multiple exchange rates, I have compared a parity exchange rate of 11.53 pesos per dollar with the average exchange rate implicit in imports of capital goods. This last value was 9.85 pesos per dollar in 1973[3]. We conclude that in this year the short run overvaluation of the peso coming from inflation differentials was in the order of 17 percent, i.e., correcting this distortion would have implied a 17 percent increase in the price of imported capital goods.

On the other hand, it has been estimated that the free trade exchange rate was 40 percent higher than the equilibrium parity exchange rate of the Argentine protected economy [Berlinski, Schydlowsky, 1982][4]. With these figures in

[1] This rate is a weighted average of imports introduced under different regimes. On the one hand as said, capital goods not domestically produced are licensed. It is probably the case that public enterprises and relatively big enterprises within the private segment of the manufacturing sector are most favored by this regime. On the other hand, this rate also includes tariffs paid on imports of spare parts which as a general rule, were less controlled than finished capital goods, and also paid a higher tariff rate.

[2] Figures are estimated from price comparisons and have been computed by Berlinski and Schydlowsky [1982].

[3] This estimate is obviously subject to the usual caveats of PPP exchange rate estimates. (See for example Officer [1976].) We use 1969 as the base year when the trade balance was in equilibrium and black markets for foreign exchange had not developed. This estimate is an average of parity rates computed with cost of living and wholesale price indices using United States – which is Argentina's principal trading partner – as the reference country.

[4] This estimate, as well as the ERP's figures correspond to 1969. In Nogués [1980] I present evidence showing that between 1969 and 1973 the trade regime became more protectionist. Thus, the figures used in this study are in all likelihood underestimating the extent of protection and currency overvaluation in 1973.

mind, let us now estimate the joint effects of trade and exchange rate policies on the price of capital goods.

As said, in a relatively less distorted economy, manufacturing industries would face more uniform prices of capital goods. Under free trade, for example, the price of capital goods (PI_i^0) would be given by:

$$(7) \qquad PI_i^0 = PI_i^F \, k^0 + PC_i$$

where $PI_i^F = PI_i^{FD} + PI_i^{FM}$, and k^0 is the free trade equilibrium exchange rate.

In this case, the distortion in the price of capital goods is given by[1]:

$$(8) \qquad \beta_i = \frac{PI_i^0}{PI_i^D} - 1$$

Table 2 shows estimates of the composition of investment expenditures and of β_i for different groups of manufacturing industries classified according to trade orientation[2]. Keeping in mind the assumptions made, the estimates of β_i show that on average the direct effects of dismantling trade barriers on the price of tradeable capital goods is compensated by the devaluation that is necessary in order to preserve equilibrium in the trade balance.

Table 2 – *Composition of Investment Outlays (in Domestic Prices) According to Trade Orientation of Manufacturing Industries (1973)*

Trade Orientation	Construc-tion	Domestic Capital Goods		Imported Machinery and Equipment	Total	β_i
		Machinery and Equipment	Transport Equipment			
A. Exportables . . .	.306	.320	.111	.263	1.000	.025
B. IC	.259	.452	.063	.226	1.000	–.006
1. With DC's . .	.328	.400	.065	.207	1.000	.001
2. With LDC's .	.141	.512	.061	.286	1.000	.008
3. Other IC industries . .	.289	.532	.064	.115	1.000	–.074
C. Manufacturing .	.271	.418	.076	.235	1.000	.001

Source: Nogués [1980, Table 3.10].

[1] Whether construction costs would increase or decrease in free trade vis-à-vis the protected situation depends among other things on the relative importance of tradable intermediate inputs used in construction activities and their implicit NRP's. For lack of information on these aspects, we are assuming that these costs remain unchanged.

[2] The composition of investment outlays was estimated with data from the 1973 manufacturing census including observations from capital federal and the provinces of Entre Rios, Tucumán. These locations accounted for approximately 25 percent of manufacturing GDP.

b. Real Interest Rates and Credit Allocation

Except for recent years, negative and unstable real interest rates have been the rule in the Argentine economy. To be sure, this has not been the result of the market process but of intervention by the Central Bank setting nominal interest rates and letting price-level adjustments determine the real cost of credits.

As said, in this paper we are mainly interested in estimating the effects of this policy-induced distortion on the price of capital goods[1]. For doing so I assume *(i)* that the subsidy is proportional to the value of the long-term banking loans granted at a subsidized rate, and *(ii)* that the opportunity cost of capital is the average real rate of return to manufacturing activities[2]. The reason for using this opportunity cost comes from the fact that a great proportion of investment costs are financed from retained earnings[3].

Negative and unstable real interest rates have precluded the development of long-term capital markets. In Argentina, the bulk of loans for investment purposes have been granted by the Banco National de Desarrollo (BND)[4].

Table 3 presents in Column (1) estimates of the incidence of BND loans in total investment costs of manufacturing industries classified according to trade orientation. The figures show that the proportion of investment costs financed by BND loans did not differ significantly across broad categories of manufacturing industries.

In addition to the importance of long-term loans in total investment costs, the amount of interest rate subsidies is directly related to the length of the loan, the periodicity of installments, and the difference between the preferential interest rate and the opportunity costs of banking loans. BND loans have usually been granted for ten years and repaid in equal annual installments. The average rate of return to manufacturing activities – which as said we use as the opportunity cost – has historically been clustered around the 10 percent figure [Brodershon, 1973]. Finally, the preferential interest rate is assumed

[1] See Krueger [1983] for other effects of controlled interest rates.

[2] In theory, this rate should not differ significantly from the interest rates charged in black markets, where the credit market is cleared. Unfortunately, there has been no research on the characteristics of these markets.

[3] Evidence of the growing incidence of retained earnings in total financial funds of the firms is presented in Brodershon [1973].

[4] In practice, the distinction between financing for production and investment purposes is complicated by the fact that different debt instruments might be substitutes. In particular, short-term banking loans might be substitutes for long-term loans. Unfortunately, there is no evidence of the extent to which this type of substitution was taking place. We have estimated the importance of interest rate subsidies only on the amount of long-term loans granted by BND. To the extent that short-term banking loans were being used to finance investment expenditures, our figures of the distortionary effects of interest rate subsidies on the price of capital goods are underestimated.

Table 3 – *Interest Rate Subsidies Implicit in Long-Term Financial Loans to Manufacturing Industries*

Trade Orientation	Incidence of BND Loans	Interest Rate Subsidies as a Fraction of Investments Costs (δ)
A. Exportables	0.179	0.118
B. IC	0.133	0.088
1. With DC's	0.122	0.084
2. With LDC's	0.159	0.105
3. Other IC industries	0.124	0.082
C. Manufacturing	0.142	0.094

Source: Abridged from Tables 3.9 and 3.12 in Nogués [1980].

to equal the average official real lending interest rate[1]. We assumed that this figure is similar to the average real interest rate during the period 1968–1977, i.e. −9 percent. Under this assumption the subsidy per peso of loan amounts to 66 percent[2].

Finally, the reduction in the price of capital goods as a consequence of this distortion is estimated by multiplying the interest rate subsidy per peso of loan (0.66) by the proportion by which BND loans finance investment costs (Column 1 of Table 3). This distortion which I label δ, is presented in Column (2) of Table 3.

3. Distortions in Labor Markets

In developing economies, distortions in the labor market have usually been considered to affect relatively more the less educated segment of the labor force. If policy-induced distortions in the labor market push the unskilled wage rate above levels that would prevail with undistorted labor markets (through minimum wage policies for example), and if uskilled labor can be readily substituted by physical and human capital, then these policies will lead to less employment of unskilled labor in the sectors for which the distortion is binding. Whether this will translate itself into open unemployment of labor or

[1] At the time of our estimates, the BND was charging interest rates below the officially stipulated lending rate. This was in fact the case for enterprises benefitting from industrial promotion loans [Nogués, 1980].

[2] We have applied the following formula for estimating the interest rate subsidy (S) per peso of loan:

$$S = \alpha \left[\Sigma_{t=1}^{10} \left(1 - \frac{t-1}{10}\right) \cdot \frac{e-f}{(1+e)^t} \right]$$

where α is the proportion of investment cost financed; e and f stand for real opportunity cost of capital and real preferential interest rate. Finally, t represents the amortization period.

disguised unemployment is an empirical question which must be dealt with by analyzing the labor market[1].

Unfortunately, in the Argentine case, there has been no attempt to analyze the labor market in this regard. Nevertheless, the few available data tend to support the above relationships[2]. In the first place, unemployment has historically hit harder the less educated segment of the urban labor force (see Meier [1978]). In the second place, available data shows within the manufacturing sector, factor substitutions have worked against labor especially of the unskilled type [Nogués, 1980, Ch. 3]. Also available data lends support to the hypothesis that factor substitution occurred not only between capital and labor but also between skilled and unskilled labor. For example, the ratio of employees having achieved less than complete primary education to the labor force in different economic sectors decreased between 1960 and 1970. This finding cannot apparently be attributed to a generalized upgrading of the labor force. For example, between 1960 and 1970 the increase in the labor force and that of the unskilled component of the labor force was similar, i.e., 20 percent. But during the same period manufacturing employment of unskilled labor decreased in absolute values.

These factor substitutions have obviously been accompanied by a significant increase in labor productivity of the manufacturing sector. According to national accounts statistics this increase was in the order of 52 percent between 1960 and 1970.

Figures also show that these substitutions have implied that the uneducated segment of the urban labor force has had to resort to other sectors in order to find a job. Demand for unskilled labor services has originated mainly in three sectors: construction, commerce and personal services. Employment in these sectors increased during 1960–1970 by 62, 167 and 243 percent,

[1] See Fields [175] for theoretical analysis of labor markets in LDC's.

[2] This in no way means that other aspects associated with characteristics of the populations are similar between Argentine and other LDC's. Most significant in the context of this study is to note that because *(i)* the annual rate of population growth is low, i.e., around 15/1000, and *(ii)* by 1970 the country had achieved a high degree of urbanization, the need for employment generation within the urban sector is less urgent in relation to other LDC's where the expected rate of growth of the urban labor force is significantly higher. In addition, the officially recorded open unemployment rates viewed on a long-run basis have been low in urban sectors. It should be pointed out that this by no means implies that disguised unemployment is unimportant. The contrary appears to be the case. First, casual observation lends support to the hypothesis of important levels of underutilized labor in the public sector. Secondly, and on an aggregate basis, recent estimates cast serious doubts on the proper interpretation to be given to the official unemployment statistics. This is so because these statistics do not take account of the variability in participation rates of secondary workers (women in general and men aged lower than 19 and higher than 59) to changing short-run conditions in the labor market. In a recent paper, Sánchez [1975] shows that full employment participation rates in recent years diverge considerably from observed participation rates. Assuming that the difference in numbers of people implicit between observed and potential participation rates can be considered as unemployed, the corrected unemployment figures increase substantially.

respectively. As a general rule, policy-induced distortions in the unskilled informal labor market are not enforced either because they are easy to evade or simply because legislation does not apply to workers in these sectors[1].

Summing up, the scanty available evidence shows that within the urban sector there is an important informal labor market to which unskilled workers have to resort in order to earn a living while they search for a better paid job in the modern sector[2]. This informal sector appears to have grown during the 1960s fueled not only by migration flows to the cities, but also and most relevant in the context of this study, by the growing capital-intensiveness (both human and physical) of the manufacturing sector. The underlying hypothesis in our work is that this characteristic has been in the long run[3] the consequence of two interrelated policies: *(i)* import-substitution industrialization favoring capital-intensive industries which we documented in Section II, and *(ii)* the adoption of capital-intensive techniques induced by factor-market distortions. In the labor market these distortions have increased labor costs above values which would have probably been observed in a less distorted scenario. We turn now to an analysis of these policy-induced distortions.

The discussion that follows will be simplified if we first present the typical items which add up to total labor costs. These are shown in Table 4. Typically, the gross wage of a worker includes a basic wage, paid holidays, an extra monthly wage (aguinaldo), and whatever premiums he is entitled to. This gross wage does not correspond either with the worker take-home pay nor does it represent labor costs as evaluated by the entrepreneur. It is in these wedges – between gross wages, take-home pay, and labor costs – where there are clear indications of distortions introduced in the labor market[4]. The task at hand is to try to quantify as closely as available data allows us the importance of these distortions. In what follows we analyze alternatively issues raised by

[1] Thus workers providing domestic services are not covered by minimum wage legislation.

[2] According to survey estimates, 60 percent of persons working in the informal sector of the city of Córdoba were willing to accept a job as employee in the manufacturing or public sector. This is additional evidence showing that at prevailing wages the unskilled labor market was in excess supply (see Llach [1978]).

[3] In the long run both unemployment of labor and underutilization of the capital stock can be explained by factor market distortions. In the short run, which this paper is not addressing, unemployment of labor has sometimes been linked with low effective aggregate demand, i.e. with a Keynesian view of the world.

[4] Table 4 shows the most significant items in the structure of labor costs. For a description of other relatively minor items see Frediani *et al.* [1977]. According to the structure in Table 4, take-home pay is equal to: $D - E + \lambda F_4$ where λ depends on the characteristics of the workers family, i.e., for a given job category, married workers earn more than single workers, and workers with children earn more than those who have no children. On the other hand, labor costs as evaluated by the entrepreneur is equal to $D + F$. Assuming $\lambda = 1$ (an optimistic assumption from the standpoint of the worker), and disregarding minor legal deductions and contributions (E_4 and F_8) take-home pay and labor costs were 1.8 percent below and 37.8 percent above gross wages, respectively.

Table 4 – *Structure of Labor Costs in the Manufacturing Sector (%)*

I. Total Labor Costs (D + F)	137.75
II. Take-Home Pay[c] (D – E + λ F_4)	98.20
A. Basic Wages	Variable
B. Premiums and Vacations	Variable
C. Extra Monthly Wage (Aguinaldo)	.083 × (A + B)
D. Gross Wages = A + B + C	100.00
E. Legal Deductions on Gross Wages	
1. Old Age Retirement (Jubilación)	11.00
2. Social Institutions (Obras Sociales)	3.00
3. National Fund for Tourism[a]	.17
4. Others	Variable
F. Contributions Paid by Entrepreneurs	
1. Old Age Retirement	15.00
2. Social Institutions	4.50
3. National Housing Fund (FONAVI)	5.00
4. Family Allowances (Asignaciones Familiares)	12.00
5. Technical Education	1.00
6. Ministry of Labor[a]	.17
7. National Fund for Tourism[b]	.08
8. Others	Variable

[a] Two percent rate on extra monthly wage. – [b] One-percent rate on extra monthly wage. – [c] Assuming λ = 1. This coefficient depends on characteristics of the workers family.

Source: Nogués [1980, Table 3.4.].

distortions introduced by characteristics associated with institutional arrangements in the old age retirement plans (Sistema Previsional) and the quantitative importance of other taxes applied on labor.

a. Old Age Retirement Plans (Sistema Previsional)

Old age retirement plans go back at least to the early years of this century. In 1945 these plans were extended to workers in the trade and manufacturing sector, and therefore, it is reasonable to assume that since then the majority of urban workers in the modern sector are covered by old age retirement schemes.

These plans are financed by enforced contributions from workers and entrepreneurs. The rates on a gross wage base were 11 and 15 percent paid by workers and entrepreneurs, respectively. In 1970 the rate charged to workers was 5 percent. The increase in the tax rate is due in part to the higher proportion of retired workers in relation to the working population. Therefore, the first question raised refers to the distributional implications of these plans, i.e., why should the working population finance the difference between what

retired workers contributed during their active life and what they actually receive? To be sure, this is not the only source of distortion introduced by these schemes.

According to law, retired workers are entitled to receive between 70 and 82 percent of wages paid to active workers. The real world is apparently working quite far from these legally imposed costs and benefits. Recent estimates show that between 1972 and 1977 the income of a retired person was on average 46 percent of that corresponding to active workers. Under the assumption of financial equilibrium of the plan, observed benefits could be satisfied by contributions in the order of 12 percent of gross wages. Adding administrative costs and other secondary benefits provided by actual schemes, the rate could have increased at most to 16 percent[1]. This figure contrasts with the legal rate of 26 percent on gross wages. The main explanation of the difference between actual legal rates and equilibrium rates is due to the evasion of contributions. Estimates of evasion rates show values ranging from 91 percent in the primary sector to 2 percent in finance, and 27 percent for the manufacturing sector[2].

Ideally it would be desirable to know the distribution of evasion rates for different manufacturing industries. Unfortunately, available data does not allow such a computation. Therefore, assuming a) that the ratio of average income of retired workers to that of active workers in the manufacturing sector is similar to the average figure commented i.e., 46 percent, b) that evasion rates in manufacturing industries is uniform and similar to the average estimated figure, 27 percent, then the actual net (of evasion) rate paid by the manufacturing sector is estimated to be in the order of 22.0 percent[3]. The difference between this figure and the theoretical equilibrium figure of 16 percent, i.e., 6 percent, is an estimate of the rate by which labor costs could be reduced without affecting workers' (both active and passive) take-home pay in the manufacturing sector. To be sure this is an average figure bound to have variance of unknown magnitude among manufacturing industries[4].

In our simulation exercise of the employment effects of distortions due to characteristics of old age retirement funds we will use our estimate of 6 percent as the amount of extra taxation on wages. We will also use a figure of the net rate paid, i.e. 22 percent. In this second exercise, we are simulating the

[1] These estimates are presented in Fernández [1979], assuming that *(i)* real wages grow at 2 percent per annum; *(ii)* retired workers are entitled to receive 46 percent of income received during the last three years of active life, i.e., what they were actually receiving between 1972 and 1977; and *(iii)* 3.5 percent discount rate.

[2] See Nogués [1980, Table 3.6] for estimates of evasion rates for other economic sectors.

[3] Eleven percent paid by workers (Table 4) and eleven percent (.15 x .73 = .11) paid by entrepreneurs.

[4] One such source relies on the distinction between the private and public sector. For example, in 1974 the public sector evaded on average 42 percent while the corresponding rate for the private sector was 11 percent. On this account, it is possible to conjecture that public enterprises in the manufacturing sector face on average lower labor costs than their private counterparts. On the other

employment effects of eliminating compulsory retirement plans and letting the worker decide with whom to insure himself for the provision of retired income.

b. Other Taxes on Labor

In addition to the distortions presented above, several other taxes levied on gross wages are increasing the opportunity cost of labor above values that would be observed in a less distorted labor market. These taxes are earmarked for specific funds and are applied on both the employer and employee (Table 4). The destiny and rates on a gross wage base in 1973 were: *(i)* National Housing Fund 5 percent; *(ii)* Ministry of Labor 0.17 percent; *(iii)* National Fund for Tourism 0.25 percent and *(iv)* Technical Education 1 percent.

These taxes amounted to around 6 percent of gross wages. Together with the distortion implicit in the functioning of old age retirement plans, they add to a tax rate on gross wages that ranges from 12 to 22 percent depending on whether or not we include enforced retirement plans. Again we should stress that these are average figures. There is a lack of knowledge on *(i)* the characteristics of enterprises able to evade contributions; *(ii)* the variance in income of retired workers in different industries; *(iii)* the allocative efficiency of different services provided to the worker[1]. Finally, there is scope for variations in the structure of labor costs in different enterprises according to differential specific non-monetary benefits provided to workers.

IV. Domestic Factor Market Distortions and Employment: A Simulation Exercise

Eq. (4) provides the basis for simulating the employment effects of removing factor market distortions. With the analysis and data presented thus far, two simulation exercises are of interest. In the first place, we will simulate the

hand, it is of interest to point out the existence of evidence showing that this extra taxation on workers in the manufacturing sector is used to finance income of retired workers in sectors with deficits in their old age retirement funds [Nogués, 1980, p. 170].

[1] Although these services vary from industry to industry, probably the most important is medical assistance which in general is provided by social institutions (obras sociales). These social institutions are financed by compulsory deductions from the workers' gross income and by contributions charged to enterprises. Between 1970 and 1977 the proportional incidence on a gross wage base has increased from 4 to 7.5 percent (3 percent deducted from workers' gross income and 4.5 percent contributed by the employer, Table 4). Distortions from the working of social institutions can arise on two accounts. In addition to the allocative efficiency of medical services provided by these institutions – a topic on which there is complete lack of knowledge – there is also the issue that the compulsory nature of the system implies a loss in relation to the alternative where actual contributions are transferred to the worker letting him decide with whom to insure himself.

effects of removing factor market distortions and leaving unchanged the trade regime. This analysis includes removal of distortions in labor and financial markets, and also the short-run overvaluation of the domestic currency.

If in addition we simulate the elimination of trade distortions, two modifications would have to be made. First, labor intensity would have to be measured in relation to international value added. Also in this case, removal of distortions in the price of capital goods forthcoming from the trade regime would have to be included. This section presents results from the first simulation exercise, while the next section will discuss issues related with the elimination of trade barriers.

Table 5 presents in Columns (1) – (5) our estimates of factor market distortions. Columns (A) – (D) present various simulation estimates of (4) resulting from removing different sets of domestic distortions. Two broad results are worth pointing. First, for the manufacturing sector as a whole, the impact effect of removing domestic distortions on proportional changes in employment goes from 16.2 to 47.4 percent. The first estimate (simulation A) corresponds to a removal of excessive taxes on wages (12 percent) and the short-run currency overvaluation (17 percent). The other estimate (simulation D) removes all

Table 5 – *Proportional Effect of Removing Factor Market Distortions on Labor-DVA Ratios in Manufacturing Industries Classified According to Trade Orientation*

Trade Orientation	Labor Market Distortions ε		Capital Market Distortions: Financial Market δ	Capital Market Distortions: Short-Run Currency-Overvaluation	Capital Market Distortions: Trade Barriers	Alternative Estimates of Eq. (4)[a]					
	1	2	3	4	5	A	B	C	D	E	F
A. Exportables ...	–.12	–.22	.118	.17	.025	.180	.357	.302	.496	.320	.516
B. IC	–.12	–.22	.088	.17	–.006	.157	.328	.279	.468	.274	.463
1. With DC's ..	–.12	–.22	.084	.17	.002	.149	.313	.266	.446	.267	.448
2. With LDC's .	–.12	–.22	.105	.17	.008	.162	.327	.278	.459	.283	.465
3. Other IC industries ...	–.12	.22	.082	.17	–.074	.177	.379	.321	.547	.359	.475
C. Total Manufacturing .	–.12	–.22	.094	.17	.001	.162	.334	.283	.474	.176	.474

[a] Financial market distortions are eliminated in all simulations (Columns A–F). The low (high) estimate of labor market distortion is incorporated in Columns A, C, and E (B, D, and F). In addition Columns (C) and (D) simulate the elimination of short-run currency overvaluation. Columns (E) and (F) include the effect of the elimination of trade barriers on the price of capital goods, together with the adoption of a free trade exchange rate.

taxes on wages (22 percent) and the distortions eliminated from the capital market include short-run currency overvaluation, and also interest rate controls. Keeping in mind the shortcomings associated with undertaking a partial equilibrium analysis, and the whole set of assumptions necessary for arriving at these estimates, the figures are illustrative of the employment opportunities that Argentine workers could have lost because of distortions in factor markets.

In the second place, it is of interest to note that the proportional changes on employment expected from removal of factor market distortions do not differ significantly among groups of industries classified according to trade orientation. This result is reassuring in that a change in the trade strategy from import substitution to export promotion should result in the expansion of exportable industries which even after removal of factor market distortions are on average more labor intensive than IC industries. Our previous comments regarding the structure of factor intensities across U.S. manufacturing industries provides greater support for this finding.

V. Labor Intensity per Unit of International Value Added

Section III presented estimates of trade policy induced distortions on the price of capital goods. Total removal of these distortions is to be achieved in a free trade regime. Nevertheless, when such a regime is simulated, the conclusion is reached that Argentine IC industries under import-substitution policies generate important efficiency losses.

Table 6 presents estimates of labor intensity per unit of international value added (IVA) for Argentina and the U.S.[1] IVA can be taken as a proxy for the amount of foreign exchange saved by IC industries and foreign exchange earned by exportables[2]. According to this definition of value added, Column 1 of Table 6 shows that Argentine IC industries are more labor intensive than exportables. This finding appears to contradict results presented in Section II and also similar estimates presented in Column (2) of Table 6 where U.S. manufacturing industries have been classified according to the trade orientation of Argentine industries. The apparent paradox has a straightforward

[1] These estimates are computed according to:

$$\frac{L_j}{IVA_j} = \frac{L_j}{DVA_j} \times (1 + ERP_j)$$

where L is employment; IVA is international value added; ERP is effective rate of protection; and j stands for a grouping of manufacturing industries by trade orientation.

[2] Foreign investment in Argentina is concentrated in IC industries, i.e., cars, tractors, chemicals, and petrochemicals [Nogués, 1980]. If foreign exchange remittances abroad of multinational companies are higher in IC industries, then the foreign exchange savings of IC industries are, as measured by our estimates of IVA, overestimated.

Table 6 – *Labor per Unit of International Value Added: Argentina and the U.S.*[a]

Trade Orientation	Argentina	U.S.
A. Exportables	18.414	78.953
B. IC	33.371	–
1. With DC's	33.382	50.824
2. With LDC's	73.897[b]	96.986
3. Other IC industries	16.611[c]	–

[a] IVA is measured in millions of pesos for Argentina and millions of dollars for the U.S. The U.S. figures on employment and output are for 1972 and the ERP's are from Basevi's [1966] study. – [b] Excludes sugar factories which had a negative IVA. – [c] Excludes petroleum and rubber products both with negative IVA's.

Source: Computed with figures presented in Tables 2.A and 3.2 in Nogués [1980].

explanation, i.e., IC industries are on average absolutely inefficient. They use more (in physical terms) of every productive factor per unit of foreign exchange saved than do exportable industries per unit of foreign exchange earned.

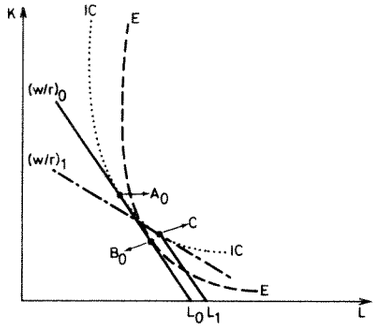
The finding is particularly true for the group of IC industries competing with imports from DC's (IC with DC's). This is the group of industries which we have shown above to be more capital intensive than exportables and for which our finding of labor per unit of IVA provides the most clear evidence of the existence of absolute inefficiencies.

The welfare implications from these estimates are straightforward. A marginal reduction of one million pesos (1973) of IVA produced by the group of IC industries competing with imports from DC's would release 33.4 units of labor. This labor would in the exportable industries produce 1.82 million pesos of IVA, i.e. a marginal gain of 82 percent in foreign exchange[1]. This figure is probably underestimating the marginal gains because IC industries competing with DC's are vis-à-vis exportables more capital (both human and physical) intensive than exportables[1]. Thus, after the proper labor reallocation process from IC into exportables has taken place, some capital resources in IC industries would remain idle at the existing factor proportions. These could probably be used not only by exportables but also by efficient IC industries, thus increasing still further foreign exchange availability.

[1] Recall that this is just part of the gains that would be obtained in Argentina from proper resource reallocations. We are not including the resource allocation effects coming from taxation of the agriculture sector, nor the consumer gains, nor the reduction in the importance of rent-seeking activities.

There are several causes that may help to understand the origin of these efficiency losses. An explanation within the factor proportions model is presented in the Figure. Here IC and E represent the unit cost isoquants of IC and exportable industries. At a wage-rental ratio given by $(w/r)_0$ both industries would be profitable to operate. At other wage-rental ratios only one industry would be profitable to operate under an efficient allocation of resources. Both industries could nevertheless operate provided adequate protection were granted to the higher cost industry. If in addition to protection factor market distortions are introduced, then absolute inefficiencies could be explained. For example, if exportables and IC industries face wage-rental ratios given by $(w/r)_0$ and $(w/r)_1$, then the IC industry could operate, if it received a minimum rate of protection equal to $(L_1 - L_0)/L_0$. In this case, the optimal factor use per unit output for the IC industry would be C. But here, this industry uses more of both labor and capital per unit output than the exportable industry whose equilibrium factor use is given by point B_0.[2]

Figure



A different explanation for the findings of absolute inefficiencies comes not from the structure of distortions across industries, but from the way import-substitution policies have been implemented, and the effects this has had on competitive pressures. It has not been uncommon for authorities to provide prohibitive protection to those processing activities whose owners have had the ability, contacts, and power to influence policymakers. This protection sheltered domestic enterprises from foreign competition, and given the reduced size of domestic markets in protectionist countries, oligopolistic and monopolistic industrial structures grew as a consequence. This reduced, and sometimes eliminated completely, competitive pressures from the market

[1] The evidence of human capital intensity comes from average wages. In 1973, workers in IC industries competing with imports from DC's were receiving an average wage 54 percent higher than that received by workers in exportable industries [Nogués, 1980, Table 2.10].

[2] An alternative explanation of absolute inefficiencies is offered by Krueger [1983, Ch. 6].

mechanism. While this was occurring with IC industries, exportables were being heavily taxed both by overvaluation of the exchange rate and by direct export taxes. Exportable industries, therefore, confronted a structure of incentives that obliged them to maintain high levels of factor productivity in order to be able to compete abroad. The structure of incentives confronted by these two groups of industries were radically different, and so has been the degree of allocative efficiency.

VI. Argentina in the Latin American Scenario

Argentina's experience with the effects of policy-induced distortions on employment and welfare is shared by other Latin American countries who in the late 1960s and early 1970s were also highly protected. This section briefly presents data for Argentina and four other Latin American countries: Brazil, Chile, Colombia, and Uruguay.

Table 7 summarizes findings regarding the labor intensity of the domestic patterns of production. When the estimates are performed using the structure of domestic distorted prices (domestic value added), exportables, with the exception of those in Chile were more labor intensive than IC industries[1]. Figures in Column 2 show the relative labor intensity of exportable industries after simulating the removal of trade distortions, i.e., by using estimates of labor intensity per unit of international value added. The figures show that the absolute inefficiencies of IC industries which characterized the Argentine manufacturing industries is also present in Uruguay and Chile.

Table 7 – *Ratio of Labor per Unit of Value Added between Exportables and IC Industries in Some Latin American Countries*

Countries	Ratio of Labor per Unit Value Added of Exportables to IC Industries	
	(1) Domestic Value Added	(2) International Value Added
Argentina (1973)	1.30	0.55
Brazil (1970)	2.02	–
Chile (1966–1968)	0.80	0.47
Colombia (1973)	1.88	1.63
Uruguay (1968)	1.53	0.66

Source: Column 1: Argentina Tables 1 and 6 of this paper. For other countries Krueger *et al.* [1981] as indicated: Brazil (Carvalho, J. L., and L. S. Haddad) Tables 2.13 and 2.14; Chile (Corbo, V., and P. Meller), Table 3.21; Colombia (Thoumi, F.) Tables 4.7 and 4.13; and Uruguay (Bension, A., and J. Caumont) Table 11.12; Column 2 is taken from Krueger [1983] Table 6.4.

[1] The unexpected result for Chile is explained by the importance of this country's paper and pulp industry, which is relatively capital intensive and carries a relatively important weight within the set of exportable industries.

The findings are not surprising given the fact that during the late 1960s and early 1970s these three countries were among the most protected countries in Latin America and probably in the world[1]. On the other hand, Colombia had liberalized its import regime by 1973, the year for which the data underlies the estimates. Therefore, its structure of relative prices was not as distorted as that of the Latin American countries. As a result, Colombian entrepreneurs must have faced by that time more competitive pressures than those in other countries where domestic markets have been sheltered from outside competition.

Finally, I conclude with some very brief reflections of factor market distortions. Unfortunately, estimates of these distortions for other Latin American countries are quite scanty. Nevertheless, a similar pattern as that presented for Argentina appears to repeat itself. First, the trade regime has favored the use of capital-intensive techniques. Imported capital goods, whether licensed (Argentina and Uruguay) or not (Chile) have been allowed to enter the country duty free or paying very low tariffs. The implicit subsidy has been increased in times where domestic currencies were overvalued.

Second, interest rate subsidies and fiscal incentives for investment purposes have been pervasive policies in the Latin American scenario. For example, among countries for which some estimates are available Brazilian financial policies of controlled interest rates and credit rationing implied on average a 4 percent reduction in the cost of capital goods bought by the manufacturing sector [Krueger, 1983, Table 7.1].

Third, policy-induced distortions in labor markets have increased labor cost above levels that would presumably be observed in a less distorted situation. For Brazil, these distortions have increased on average labor costs by 27 percent [Krueger, 1983].

VII. Conclusion

This paper has presented estimates of the employment and efficiency gains which can be expected from a reduction and/or removal of policy-induced distortions with particular attention being paid to the Argentine manufacturing industry.

The findings show, for Argentina and other Latin American countries as well, that important employment opportunities have been lost by the adoption of commercial policies that on average favored domestic production of capital-intensive industries. These policies associated with the import-substitution strategy for economic development were also accompanied by others which in effect distorted factor markets. This second type of policy-induced distortions have on average increased the wage-rental ratio well above values which would have been observed in less controlled scenarios. As

[1] See Krueger [1983, Ch. 3] for a discussion of the structure of protection in these countries.

a consequence, additional non-negligible employment opportunities have been lost. Simple simulations reported in this paper show that the direct impact of removing some of these distortions would at the minimum increase by 16 percent the labor-value added ratio of the manufacturing sector.

These policy-induced distortions led to resource misallocations and therefore must have reduced significantly the consumption possibilities of these economies. While several sources of reduced welfare could be listed, this paper has reported and summarized important efficiency losses which in some cases – including Argentina and other Latin American countries – have favored the production of goods in import substitute industries characterized by relative absolute inefficiencies, i.e., these industries use more (in physical terms) of every factor of production per unit of foreign exchange saved than what the exportable industries are actually using per unit of foreign exchange earned. A simple exercise shows that reallocating productive resources from import substitutes to exportables industries would result in a marginal gain of 82 percent in foreign exchange produced by the manufacturing sector. Similar estimates summarized here have been reported for other Latin American countries.

While income-distribution considerations have not been the focus of the analysis, the evidence presented suggests that dismantling the protective regime, as well as reducing the intensity of factor market distortions, will provide an important stimulus to relatively labor-intensive industries and the adoption of more labor-intensive techniques. But these policies will also reduce the monopoly profits and rents that few but relatively important and powerful enterprises have enjoyed for decades. Such evidence suggests that more uniform and optimal policies (i.e. policies that do not discriminate between types of productive factors and/or groups of industries) do not appear to be in the long run in conflict with income distribution considerations.

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Zusammenfassung: Verzerrungen, Faktorproportionen und Effizienzverluste: Argentinien im lateinamerikanischen Szenario. – Dieser Aufsatz verfolgt einen doppelten Zweck. Erstens werden Faktormarktverzerrungen quantitativ geschätzt und ihre Auswirkungen auf die Beschäftigung mit einer Simulation ermittelt, wobei eine einfache Verhaltensgleichung des partiellen Gleichgewichts benutzt wird. Zweitens wird eine aggregierte Schätzung des Effizienzverlustes vorgelegt, der auf Verzerrungen auf den Faktor- und Gütermärkten zurückgeführt werden kann. Die Analyse bezieht sich auf den gewerblichen Sektor Argentiniens. Anschließend werden die Schätzungen mit ähnlichen Schätzungen für andere lateinamerikanische Staaten verglichen. Die Ergebnisse deuten darauf hin, daß von der Wirtschaftspolitik hervorgerufene Verzerrungen in signifikantem Ausmaß die Beschäftigungsmöglichkeiten verringert und außerdem zu beunruhigend hohen Effizienzverlusten geführt haben.

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Résumé: Distorsions, proportions de facteur et pertes d'efficacité: L'Argentine en scénario latinoamericain. – Le but de cet article est de deux sortes. D'abord, l'auteur présente des estimations quantitatives des distorsions au marché de facteur et il simule leurs effets sur l'emploi en applicant une simple équation de comportement de l'équilibre partiel. Puis, l'auteur donne une estimation agrégée de la dimension de la perte d'efficacité qu'on peut attribuer aux distorsions aux marchés de bien et de facteur. L'analyse est faite pour le secteur manufacturier argentin, et les estimations sont comparées avec des similaires analyses faites pour d' autres pays latinoamericains. Les résultats suggèrent que les distorsions induites par la politique ont réduit des possibilités d'emploi d'une manière significative et de même causé des pertes d'efficacité aux dimensions alarmantes.

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Resumen: Distorsiones, proporción de factores y pérdida de eficiencia: Argentina en el contexto latinoamericano. – El objetivo de este trabajo es doble. Primero se presentan estimaciónes cuantitativas de distorsiones en los mercados de factores y se simula su impacto sobre el empleo, utilizando una simple ecuación de comportamiento de equilibrio parcial. En segundo lugar se provee una estimación agregada de la magnitud de la pérdida de eficiencia atribuída a distorsiones en el mercado de factores y en el de bienes. El análisis comprende el sector manufacturero argentino; las estimaciónes son comparadas con estimaciónes similares para otros países latinoamericanos. Los resultados obtenidos sugieren que las distorsiones inducidas por la política económica redujeron las oportunidades de empleo de manera significativa, y que también dieron lugar a pérdidas de eficiencia alarmantes.