

Beker, Victor A.

**Working Paper**

## A case study on trade liberalization: Argentina in the 1990s

Economics Discussion Papers, No. 2012-3

**Provided in Cooperation with:**

Kiel Institute for the World Economy – Leibniz Center for Research on Global Economic Challenges

*Suggested Citation:* Beker, Victor A. (2012) : A case study on trade liberalization: Argentina in the 1990s, Economics Discussion Papers, No. 2012-3, Kiel Institute for the World Economy (IfW), Kiel

This Version is available at:

<https://hdl.handle.net/10419/54677>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



<http://creativecommons.org/licenses/by-nc/2.0/de/deed.en>

## **A Case Study on Trade Liberalization: Argentina in the 1990s**

*Victor A. Beker*

*University of Buenos Aires and University of Belgrano*

**Abstract** The link between trade and wages is embodied in the Stolper–Samuelson theorem and its generalizations. The Stolper–Samuelson logic is that trade affects relative factor rewards by changing relative prices. Since in Argentina non-skilled labor was neither as abundant a factor as land nor as scarce as capital it could not be expected to be the big winner in the opening-up process of the Argentine economy nor could it be expected to be a big loser. So, the huge amount of unemployment experienced by the Argentine economy in the 1990s as well as the widening wage gap between skilled and unskilled labor came as a complete surprise. This paper gives some reasons for this unexpected result. In Argentina, trade liberalization meant mainly import liberalization by lowering tariffs that protected labor-intensive industries like textiles. So, the short-run effect was massive destruction of jobs in non-skilled labor-intensive activities. The opening up of the economy significantly lowered the price of capital goods. This encouraged a drastic process of capital for labor substitution as well as promoting an increase in the demand for skilled labor. In those industries in which the import penetration increased the most, the wage inequality widened relatively more between unskilled and skilled workers. The reasons for the persistence of unemployment are discussed, the impact of the increasing unemployment and growing inequality in wage distribution on income distribution is analyzed, the alternatives of shock therapy vs. gradualism are discussed and finally some general conclusions are drawn from the analysis of the Argentine case.

Paper submitted to the special issue

[Responding to the Labour Market Challenges of Globalisation](#)

**JEL** F14, F16, J60

**Keywords** Trade liberalization; unemployment; skilled labor; inequality

**Correspondence** Victor A. Beker, E-mail: [beker@ub.edu.ar](mailto:beker@ub.edu.ar)

## Contents

Introduction .....	3
1. Argentina's economic performance in the 1990s.....	4
2. Trade and capital flow liberalization in economic theory.....	6
3. Trade liberalization in Argentina.....	7
4. The change in final-good relative prices.....	9
5. Causes of unemployment and wage inequality.....	10
6. Persistence of unemployment.....	15
7. What did Argentina do to cope with unemployment?.....	17
8. Income distribution after liberalization .....	18
9. The Argentine case and economic theory.....	19
10. Gradualism vs. shock therapy.....	20
11. Lessons from the Argentine case.....	21
References.....	23

The most destructive weapon of mass destruction in the world is poverty.  
(Ex-President Lula)

## Introduction

The link between trade and wages is embodied in the Stolper–Samuelson Theorem (hereinafter SST) and its generalizations. The Stolper–Samuelson logic is that trade affects relative factor rewards by changing relative prices. The SST predicts that trade liberalization will benefit an economy's relatively abundant factor and harm its relatively scarce factor. So, labor can be a loser in a trade liberalization process only in an economy in which labor is scarce.<sup>1</sup>

Since in Argentina non-skilled labor was neither as abundant a factor as land nor as scarce as capital, it could neither be expected to be the big winner in the process of opening up of the Argentine economy nor could it be expected to be a big loser. So, the huge amount of unemployment experienced by the Argentine economy in the 1990s under the liberalization program implemented in that decade as well as the widening wage gap between skilled and unskilled labor came as a complete surprise.

However, this was not the only surprise. Contrary to what was expected, relative prices shifted in favor of non-tradable goods, leading to a major overvaluation of the real exchange rate. As a result, imports became cheaper and exports were discouraged. The huge increase in imports led to massive job destruction in import-competing industries. The growing current account deficit was another consequence of the appreciation of the real exchange rate until the huge crisis the Argentine economy experienced at the end of 2001 forced a mega-devaluation of the peso.

This paper analyzes this process and gives some reasons for these unexpected results, focusing on the impact of trade liberalization on employment. The effects on wages and equality are also mentioned.

Before continuing, it is worthwhile mentioning the results obtained by other country studies. These empirical studies on the effects of trade reforms on employment show contradictory results. The comprehensive study of trade liberalization in developing countries by the World Bank in the early 1980s led to largely inconclusive results.<sup>2</sup> Rama's (1994) analysis of the Uruguayan manufacturing sector finds a significant negative impact of trade reform on employment: reducing the protection rate within a sector by 1% leads to an employment reduction of between 0.4 and 0.5% within the same year. Revenga (1995) finds a small reduction in aggregate employment in the Mexican manufacturing sector during the trade reform program implemented in the late 1980s. Currie and Harrison(1997) find that in Morocco employment in the average private sector manufacturing firm was basically unaffected by trade liberalization, although there were significant employment losses in exporting firms and in the most highly affected firms. Another study by the World Bank published at the beginning of this century recognizes that "a series of case studies on the effects of trade liberalization shows a considerable dispersion of the net impact on employment."<sup>3</sup> Dutt et al. (2009) as well as Felbermayr et al. (2011) find support for the hypothesis that trade openness reduces aggregate unemployment.

---

<sup>1</sup> Davis (1996) argues that if a country is very labor abundant relative to the global economy, but capital abundant relative to its own cone -a small set of countries with similar endowment proportions that produce the same range of goods-, trade liberalization may harm labor. Testing this hypothesis requires empirical work to identify international production cones.

<sup>2</sup> See Papageorgiou et al. (1990).

<sup>3</sup> See Dollar and Collier (2001).

The Argentinean case seems to be of special interest not only because the negative effect on employment that accompanied trade liberalization runs quite contrary to the standard theoretical framework, but also because of the fact that Argentina was considered in the 1990s the best pupil of the IMF, the World Bank and the USA Government, as the then Minister of Economy Domingo F. Cavallo recalls.<sup>4</sup> Argentina was a sort of laboratory for liberalization policies, so its results are highly representative of the outcomes of the experiment.

This paper is structured as follows. In Section 1, the evolution of the Argentine economy during the 1990s is presented. Section 2 is devoted to presenting what should have been expected to happen after trade and capital flow liberalization, according to the traditional economic theory. Section 3 presents how trade reform took place in Argentina during the 1990s. In Section 4, the evolution of tradable and non-tradable goods' relative prices is reviewed. Section 5 is devoted to an analysis of the possible causes of the rise in unemployment and inequality. Section 6 discusses the reasons for the persistence of unemployment. Section 7 considers the subsidy program the Argentine government implemented at the peak of the economic crisis. Section 8 presents evidence on income distribution in Argentina after the economic reforms. Section 9 provides an interpretation of the effects on unemployment of trade liberalization in Argentina in the light of economic theory. Section 10 discusses gradualist versus shock therapies. Section 11 concludes.

## **1. Argentina's economic performance in the 1990s**

The economic performance of Latin American countries in the 1980s was quite unsatisfactory. In what has been called the "lost decade," the region's economy was disrupted by the debt crisis and raging inflation.

This experience shocked the region; as a result, Latin America embraced structural economic reforms during the 1990s. All the countries liberalized international trade and external capital flows and privatized public utilities. Argentina was no exception. It was one of the countries where more aggressive economic reforms were implemented.

After the hyper-inflationary processes of 1989 and 1990, drastic economic reform took place in Argentina. The key measures that shaped this economic program were the Convertibility Law, the liberalization of external trade and financial flows and the privatization of public enterprises.

The Convertibility Law established a fixed exchange rate of one peso to one dollar. The Central Bank was obliged to sell foreign currency at that rate as required by the market. In order to fulfill this obligation, it had to keep international reserves equivalent to at least 100% of the monetary base. This meant the transformation of the Central Bank into a virtual Currency Board.

The openness of trade to the world economy was a central part of the stabilization strategy as it was meant to contribute to the convergence between domestic and international prices of tradable goods. The liberalization of financial flows aimed at encouraging foreign investment in Argentina. Most of the publicly owned enterprises were privatized between 1992 and 1994. As a result of this package, inflation was

---

<sup>4</sup> See Cavallo (2004).

drastically abated from a level of 5.000% per year in 1989 to just 0.16% in 1996. The GDP grew by 40% between 1990 and 1994.<sup>5</sup>

In spite of this huge increase in the GDP, the unemployment rate rose from 6.0% in October 1991 – immediately after the Convertibility Program was launched – to 12.2% in October 1994 – just before the Tequila effect – to 17.3% in October 1996 (see Table 1). Table 2 illustrates the magnitude of unemployment in the Argentine labor market in the 1990s.

If we look at the figures in Table 1, we may notice that the increase in unemployment rates started immediately after the introduction of the Convertibility Plan in April 1991 and long before the eruption of the December 1994 Tequila crisis, which is why the pre-Tequila period (1991–1994) deserves special attention in the analysis. Due to the fact that the Argentine economy was badly hit by successive external shocks during the second part of the 1990s (the Asian, Russian and Brazilian crises), there is an extended wrong idea that those shocks bear the exclusive responsibility for the high unemployment rates in Argentina at the end of the past century. Those events only worsened an already-existing trend of higher unemployment.

Table 1: Unemployment rates in Argentina\*

<u>Year</u> **	<u>%</u>
1989	7.6
1990	7.5
1991	6.5
1992	7.0
1993	9.3
1994	12.1
1995	16.6
1996	17.3
1997	13.7
1998	12.4
1999	13.8
2000	14.7

\*Average of 28 urban centers, which represent 70% of the urban population.

\*\*October of each year.

Source: INDEC

Table 2: Unemployment in urban centers\*

<u>Year</u> **	<u>Working age</u> <u>urban population</u> (thousands)	<u>Unemployment rate</u> (%)	<u>Urban unemployed</u> <u>population</u> (thousands)
1993	11.673	9.3	1.086
1995	12.313	16.6	2.044
1997	12.503	13.7	1.712

\*Average of 28 urban centers, which represent 70% of the urban population.

\*\*October of each year.

Source: INDEC

<sup>5</sup> Although there is some discussion on the comparability of the GDP figures pre- and post-Convertibility Plan, the growth rates *within* each of the two periods have not been subject to dispute. The discussion relates to the absolute value of the GDP in the 1990s.

## 2. Trade and capital flow liberalization in economic theory

Traditional international trade theory assumes that factor supplies are fixed and wages are flexible. The link between trade and wages is embodied in the Stolper–Samuelson (1941) theorem and its generalizations (Ethier 1984).<sup>6</sup> The Stolper–Samuelson logic is that trade affects relative factor rewards by changing relative prices: abundant factors in an economy gain from trade liberalization while scarce factors lose.

Accordingly, Argentina's abundant factor – land<sup>7</sup> – should have been the winner and a scarce factor like capital should have been the loser after trade barriers were raised in the early 1990s. As far as non-skilled labor is concerned, it was in an intermediate situation: it could not be expected to be a clear winner as may happen in underdeveloped countries endowed with an abundant non-skilled labor supply,<sup>8</sup> nor could it be expected to be a big loser.

Trade liberalization was accompanied in Argentina by capital account liberalization. Although the two have usually been twin components of the liberalization package, until recently little research has been conducted on how they interact.<sup>9</sup> The Argentine case highlights the need for further research on the subject, showing how the predictions of international trade theory may be affected by the effects of capital flows.

Financial liberalization has been considered desirable and advisable because it leads to a Pareto optimum: with international financial freedom, the world product is maximized. Borrowers benefit from more capital formation and pay lower interest rates. Lenders gain because they have the chance to lend wealth abroad at a higher interest rate than the less productive domestic investment returns.

Controls that prevent investors from withdrawing capital from a country act as investment irreversibility. Their removal makes investors more willing to invest in a country, as it is easier to retrieve their money in the future.<sup>10</sup> Moreover, a regime of free capital mobility may signal that the imposition of controls is less likely to occur in the future,<sup>11</sup> thus encouraging capital to flow in.<sup>12</sup>

However, in spite of the theoretical arguments, no definitive view emerges in relation to the aggregate effects of capital account liberalization. Eichengreen (2001) overviews the literature, pointing out that it remains one of the most controversial and least understood policies. While Rodrik (1998b) finds no significant statistical association between capital account openness and growth, Fischer (1998) argues for the existence of positive effects of capital account liberalization on output, which is supported by evidence provided by Quinn (1997). The role of pre-existing policies,

---

<sup>6</sup> Echenique-Manelli (2003) provides a weak version of the SST for  $n$  goods. Their Theorem 13 states that if the price of good  $j$  increases, and the prices of all other goods either decrease or stay the same, then the owners of the factor intensively used in producing  $j$  will gain, and the owners of at least one of the other factors will lose.

<sup>7</sup> According to the Heckscher–Ohlin theory, Argentina's main exports – agricultural products – indicate that the abundant factor is land while the fact that the main imports consist of capital- and skill-intensive goods indicates capital and skilled labor as the scarce factors.

<sup>8</sup> This is the traditional point of view as stated, for instance, by Krueger (1983), who argued that developing-country trade liberalization should boost labor-intensive output and thus increase employment.

<sup>9</sup> Antras and Caballero (2009) is an almost isolated exception.

<sup>10</sup> See, for instance, Labán-Larraín (1993).

<sup>11</sup> Bartolini-Drazen (1997).

<sup>12</sup> The Convertibility Law, by which the peso was pegged to the dollar at a fixed rate, was an additional stimulus to encourage capital flows to Argentina.

particularly the absence of macroeconomic imbalances, in determining the effects of capital control liberalization on growth and investment is examined by Arteta et al. (2001), while Chinn and Ito (2002) investigate the empirical relationship between capital controls and the financial development of credit and equity markets.

In a comprehensive survey of the research on financial globalization, Prasad et al. (2003) include fourteen studies on developing countries, but find only three that document a significant positive relationship between international financial integration and economic growth. Prasad et al. (2003) conclude that "...an objective reading of the vast research effort to date suggests that there is no strong, robust, and uniform support for the theoretical argument that financial globalization per se delivers a higher rate of economic growth."

While most of the literature is devoted to the discussion of the effects of financial liberalization on growth, little reference is found to the effects on domestic prices or the real exchange rate,<sup>13</sup> aspects that were crucial in the Argentine case, as we shall see.

### 3. Trade liberalization in Argentina

Until mid-1989, the maximum Argentine import tariff was 50% and there was a tariff surcharge of 15% on all imports, which meant that the average tariff was 39% if we include that surcharge.

In July 1989, a significant unilateral reduction of external trade barriers took place. As a result, the maximum tariff was reduced to 35% (applied only to a few electronic goods), the average tariff declined to 12% and all import licenses were eliminated. The country proceeded with further liberalization thereafter. In 1990, the import licensing requirements were removed and tariffs were made uniform to 21% and thereafter progressively reduced further. The main exceptions to the general rule were IT goods with a 35% tariff, domestic appliances (30%) and the car industry (35%), due to their weight in the labor market as important employers. The average unweighted import tariff was 10.5% in 1995.<sup>14</sup> At the same time, many non-tariff restrictions were almost completely eliminated. Export duties, which affected the main agricultural exports, were also abolished.

As it was previously stated, the Argentine GDP grew by 40% between 1991 and 1994.

Table 3: GDP annual rates of growth

<u>Year</u>	<u>%</u>
1989	-7.0
1990	-1.3
1991	10.5
1992	10.3
1993	6.3
1994	8.5
1995	-4.6
1996	4.3
1997	8.4

<sup>13</sup>Calvo et al. (1993) and Urrutia and Meza (2010) are important exceptions.

<sup>14</sup>Ernst (2005: 2).



Source: Secretaría de Programación Económica

However, when analyzed sector by sector, this growth does not show an even distribution. It was biased towards the non-tradable goods producer sectors. In fact, during the period 1990–1994, while agriculture grew by 36%, the manufacturing industry grew by 35%, services by 41% and construction by 88%.

There are two surprises here. The first one is that the winners in terms of growth were the non-tradable sectors. We will return to this issue shortly. The second one is that despite the fact that the growth was led by two labor-intensive sectors – services and construction – employment lagged far behind.

In effect, the rate of employment, which measures the proportion of the total population currently employed, fell from 35.7% in May 1990 to 34.8 in May 1995 (see Table 4).<sup>15</sup> This suggests that the economic growth that took place during the period under analysis was accompanied by a significant increase in the average labor productivity. This phenomenon was favored by a drastic shift in the relative price between labor and capital: the radical reduction of import tariffs significantly reduced the price of imported capital goods and this induced a sharp process of capital deepening.<sup>16</sup> Meloni (1999) elaborates a time series for the reproductive capital stock, that is, the capital stock formed by non-residential construction and durable production equipment. It shows the process of capital deepening that took place in the 1990s (see Figure 1).

Table 4: Employment rates in Argentina

<u>Year</u> *	<u>%</u>
1990	35.7
1991	36.8
1992	37.1
1993	37.4
1994	36.7
1995	34.8
1996	34.0
1997	35.3

\*May of each year

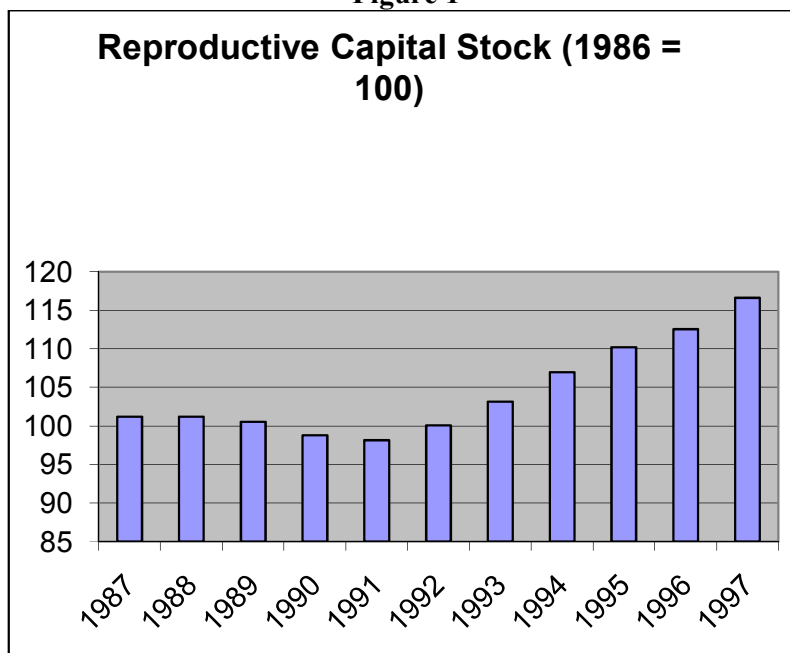
Source: INDEC

---

<sup>15</sup> There was a limited increase in the employment rate shortly after the Convertibility Program was launched in 1991. However, this only lasted until 1993. Before the Tequila crisis, employment began to fall, as the rate for 1994 shows.

<sup>16</sup> In an analysis that covers the whole decade, Coremberg (2003) finds that the increase in the stock of capital was the main source of economic growth during that period. Bour (2002) finds that along with the importance of physical capital investment, TPF explains more than one-third of the rate of growth in the period.

Figure 1



Source: Meloni (1999)

As a consequence of the change in the capital–labor relative price, there was a jump in the marginal capital–labor ratio. As an average, it was necessary to invest a larger amount of capital per additional unit of labor than had been required before the economic reform. The GDP elasticity of employment has been estimated as only 0.17<sup>17</sup> for the period 1990–95. This explains the small effect that economic growth had on employment.

At the same time, trade liberalization was reflected in a huge increase in foreign trade. Imports soared, from \$4.1 billion to \$21.6 billion in 1994, while exports rose from \$3.7 billion to \$20.1 billion in the same period. The participation of imports in the aggregate supply expanded from 5.6% in 1990 to 14.6% in 1994.

This increase in international trade was accompanied by substantial expansion in the deficit in the current account, which doubled between 1992 and 1994 (see Table 7).

#### 4. The change in final-good relative prices

Convertibility together with trade liberalization assured the stability of tradable goods prices. Domestic prices would not increase if international prices did not because imports could easily replace local production. However, this did not mean stability of prices for non-tradable goods.

As a matter of fact, the prices for non-tradables kept increasing until 1995. As shown in Figure 2, the prices of services – mostly non-tradables – increased by 71% between 1991 and 1995. On the contrary, the prices of goods – mostly tradables – increased by only 30% between 1991 and 1993 and from then on remained practically without change.

The result was a change in relative prices in favor of non-tradables. Thus, it should not come as a surprise that non-tradable production grew far ahead of tradable

<sup>17</sup> See Damill et al. (2002).

production, as pointed out before. So, relative prices favored a transfer of resources from tradable production to non-tradable production. Therefore, it was also natural that the current account deficit continued to grow and more and more capital inflows were needed to make up for it.

**Figure 2**



Source: Ministry of Economy

As a matter of fact, the net capital inflows<sup>18</sup> exceeded the current account deficit (see Table 7), thus allowing for a significant accumulation of foreign reserves, which expanded the monetary base and fed domestic credit creation.

Excess demand – fueled by this foreign capital inflow – resulted on one hand in an increase in the volume of imports and on the other hand in the price of non-tradable goods. This price behavior resulted in continuous erosion of the competitiveness of tradable sectors. The current account deficit increased from 5.4 billion dollars in 1992 to 10.1 billion dollars in 1997 – more than one-third of that year’s exports (see Table 7).

So, in order to work smoothly, the Argentine economy required a continuous and growing inflow of foreign capital. When it suddenly stopped, as happened during the Tequila crisis, imports abruptly shrank (see the figures for 1995 in Table 7); deep recession and high unemployment were the immediate consequence.

However, if we have a look at Table 1 we notice that unemployment started increasing in 1992, long before the Tequila crisis at the end of December 1994.

As stated before, from the point of view of the SST, labor was not an obvious candidate to be a loser in the process of trade liberalization. On the other hand, if relative prices moved in favor of non-tradables, which are usually labor-intensive products, labor should have been among the winners. Why were the results just the opposite?

## **5. Causes of unemployment and wage inequality**

Given the scarcity of capital, the closed Argentine economy had developed a labor-intensive manufacturing industry. In Argentina, trade liberalization mainly meant import liberalization by lowering tariffs, which protected labor-intensive industries. So,

<sup>18</sup>As Calvo et al. (1993) document, the surge in private capital inflows into emerging economies in the early 1990s was stimulated by the temporary decline in industrial country interest rates.

the short-run effect, from the very beginning of the economic reform program, was the increase in unemployment, especially in labor-intensive manufacturing industries like textiles.

However, real wages initially followed the trend of the rest of the non-tradables and increased until the huge level of unemployment reached with the Tequila crisis abated them. The growth in services and construction favored by the change in relative prices stimulated an initial rise in the average real wages (Table 5). Massive job destruction in the manufacturing sector offset this trend, although skilled workers and professionals proved to be better prepared to overcome the restructuring process.

Table 5: Average real wages – Argentina 1990/2000  
(1994=100)

1990	81.0
1991	87.0
1992	94.5
1993	100.1
1994	100.0
1995	94.4
1996	92.6
1997	92.1
1998	95.8
1999	94.5
2000	94.0

Source: González (2004: 22)

In fact, Table 6 shows the increase in relative wages during the 1990s in favor of professional and skilled positions. Since the manufacturing sector is more intensive in low-skilled labor, the aggregate demand of these workers is more affected by trade liberalization than the aggregate demand of professional and skilled labor.

Table 6  
Income from primary job by skill level  
(monthly income in 1998 constant prices, pesos)

Year	Wages			Relativewages		
	<i>Professional</i>	<i>Skilled</i>	<i>Unskilled</i>	<i>Prof./Skilled</i>	<i>Prof./Unskilled</i>	<i>Skilled/Unskilled</i>
1990	1176.7	570.2	366.2	2.1	3.2	1.6
1992	1483.6	685.2	438.9	2.2	3.4	1.6
1994	1715.8	725.4	424.4	2.4	4.0	1.7
1996	1661.9	632.5	354.5	2.6	4.7	1.8
1998	1794.1	644.8	356.2	2.8	5.0	1.8

Source: World Bank (2001). Poor people in a rich country: A poverty report for Argentina

As Galiani and Sanguinetti (2003: 505) point out, significant rises in import penetration ratios were observed during the 1990s in those sectors in which Argentina does not have comparative advantages.

Approximately 30% of the employment in the manufacturing sector was destroyed between 1992 and 1996.<sup>19</sup> Since the industries that experienced larger reductions in protection levels employed a greater proportion of low-skilled workers, trade liberalization is the obvious candidate to blame for that outcome.

Galiani and Sanguinetti (2003: 508) find that the sectors in which trade liberalization had larger effects were also the sectors in which, *ceteris paribus*, a higher increase in wage inequality was observed. They found that during the 1990s, in those industries in which the import penetration increased the most, wage inequality also widened relatively more in favor of the most skilled workers.

We have here two different effects of trade liberalization: first, a massive destruction of jobs in non-skilled labor-intensive activities; second, widening wage inequality positively correlated with the degree of import penetration.

---

<sup>19</sup>Galiani and Sanguinetti (2003: 505).

Table 7. Balance of payments. Argentina 1992/1997

	1992	1993	1994	1995	1996	1997
<b>Current Account</b>	<b>-5.462,0</b>	<b>-7.672,0</b>	<b>-10.117,0</b>	<b>-2.768,0</b>	<b>-3.787,0</b>	<b>-10.118,8</b>
<b>Commodities</b>	<b>-1.450,0</b>	<b>-2.426,0</b>	<b>-4.238,0</b>	<b>2.238,0</b>	<b>1.622,0</b>	<b>-3.194,6</b>
Exports	12.235,0	13.117,0	15.839,0	20.964,0	23.811,0	25.223,0
Imports	13.685,0	15.543,0	20.077,0	18.726,0	22.189,0	28.417,6
<b>Services</b>	<b>-2.257,0</b>	<b>-2.730,0</b>	<b>-2.941,0</b>	<b>-2.222,0</b>	<b>-2.495,0</b>	<b>-3.069,2</b>
Exports	2.454,0	2.454,0	2.599,0	2.860,0	3.226,0	3.271,0
Imports	4.711,0	5.184,0	5.540,0	5.082,0	5.721,0	6.340,2
<b>Income</b>	<b>-2.416,0</b>	<b>-2.927,0</b>	<b>-3.258,0</b>	<b>-3.216,0</b>	<b>-3.248,0</b>	<b>-4.205,0</b>
Interest	-1.289,0	-1.081,0	-1.136,0	-1.054,0	-1.326,0	-1.770,0
Earned	2.099,0	2.135,0	3.073,0	4.348,0	4.587,0	5.332,0
Paid	3.388,0	3.216,0	4.209,0	5.402,0	5.913,0	7.102,0
Profits & Dividends	-1.127,0	-1.846,0	-2.122,0	-2.162,0	-1.922,0	-2.435,0
<b>Transfers</b>	<b>661,0</b>	<b>411,0</b>	<b>320,0</b>	<b>432,0</b>	<b>334,0</b>	<b>350,0</b>
<b>Capital Account</b>	<b>8.567,3</b>	<b>12.152,0</b>	<b>10.678,0</b>	<b>2.699,0</b>	<b>7.569,0</b>	<b>13.180,8</b>
<b>I. Banking Sector</b>	<b>826,0</b>	<b>-1.528,0</b>	<b>1.895,0</b>	<b>4.360,0</b>	<b>-519,0</b>	<b>-1.794,0</b>
Central Bank	-177,0	-2.818,0	307,0	1.929,0	849,0	-800,0
Others	1.003,0	1.290,0	1.588,0	2.431,0	-1.368,0	-994,0
<b>II. Public Sector</b>	<b>1.285,0</b>	<b>7.121,0</b>	<b>4.097,0</b>	<b>5.945,0</b>	<b>8.731,0</b>	<b>7.331,0</b>
National Govt	1.853,0	6.473,0	4.471,0	6.435,0	8.583,0	6.495,0
Local Govt	31,0	889,0	189,0	374,0	612,0	1.231,0
Public Enterprises	-599,0	-241,0	-563,0	-864,0	-464,0	-395,0
<b>III. Private Sector</b>	<b>2.766,0</b>	<b>4.559,0</b>	<b>4.454,0</b>	<b>4.923,0</b>	<b>5.415,0</b>	<b>9.035,0</b>
<b>IV. Other Movts</b>	<b>3.690,3</b>	<b>2.000,0</b>	<b>232,0</b>	<b>-12.529,0</b>	<b>-6.058,0</b>	<b>-1.391,2</b>
<b>Variation in Reserves</b>	<b>3.105,3</b>	<b>4.480,0</b>	<b>561,0</b>	<b>-69,0</b>	<b>3.782,0</b>	<b>3.062,0</b>
<b>MEMO ITEM</b>						
<b>Imports</b>	14.873,0	16.783,0	21.590,0	20.122,0	23.761,0	30.323,6

Source: Ministry of Economy

As stated in Beker (1998: 14), while “the average job destruction rate in the U.S. is 10.3% ... for Argentina it is higher than 20% after 1990. About one in five manufacturing jobs disappeared every year. Only a little more than half of them were replaced.” During the 1990s, the job destruction in the manufacturing sector was constantly high, exceeding the rate of job creation by between 36% and 65%.

Table 8: Job flows. Manufacturing industry. 1990/1995

	1990	1991	1992	1993	1994	1995
Job creation (%)	9.53	12.57	16.3	13.25	12.85	13.23
Job destruction (%)	12.92	20.73	21.47	25.69	22.85	21.14
Job reallocation (%)	22.45	33.29	37.78	38.94	35.69	34.38
Net change	-3.38	-8.16	-5.17	-12.44	-10.00	-7.91
Excessreallocation	19.07	25.13	32.61	26.5	25.69	26.47

Source: Andreoli and Massot (1999)

It is interesting to look at the behavior of two opposite sectors: food and beverages on the one hand and textiles on the other. As reported by Beker (1998: 18), food and beverages demonstrated strikingly differential behavior. The rates of creation and destruction during the 1990s were the highest every year,<sup>20</sup> but the sectoral job creation rate was twice the average or more, although it was always lower than the destruction rate, as in the rest of the manufacturing industry. The gap between the two rates is the smallest in comparison with the rest of the sectors.

The food and beverages sector is one in which Argentina has comparative advantages. The foreign supply in 1999 in this sector was still a small proportion of domestic production (3.5% of value added). Its Index of Production grew by 34% between 1990 and 1995.

Sectoral real wages –deflated by the sectoral index of wholesale prices– increased by 53% over the same period. The drastic restructuring process the sector suffered implied high rates of job creation and destruction, which allowed productivity gains that were followed *pari passu* by the evolution of real wages.

The textile sector was badly exposed to foreign competition. The foreign supply participation in this sector in 1999 was 19.8%. Its rate of job creation was very low while that of destruction was second only to food and beverages for most of the years. In 1995, production was at the same level as in 1990. Labor productivity rose, however, by almost 50%, while real wages increased by only 10%.

For the manufacturing industry as a whole, the establishments that shut down accounted for only a small fraction of the total job destruction. Most job destruction

<sup>20</sup> The participation of some strongly seasonal activities may be only a partial explanation for these high rates.

took place in establishments that survived. This leads Beker (1998: 16) to conclude that large job destruction and job creation were the keys for the survival of continuing plants, which bore the main responsibility for the total job flows.

It seems that the continuing plants were precisely those that adapted themselves to the new environment through drastic changes in their human resources stock. On the other hand, as mentioned before, Galiani and Sanguinetti (2003: 511) find that the aggregate trends for wage differentials might be explained by the impact of trade liberalization on wages. Their research finds a positive and significant correlation between the import penetration and the wage premium of skilled workers in the manufacturing sector, although the identified effect of trade only explains a small portion of the rise in the skilled wage premium during the 1990s.

A plausible story for the positive correlation found by Galiani and Sanguinetti (2003) may run as follows. A growing amount of literature argues that technological change is responsible for the increase in wage inequality observed in many countries during the past years.<sup>21</sup> If we can find a reason why skill-biased technical change was associated with import penetration we could have a reasonable explanation.

We have seen that the opening up of the economy significantly lowered the price of capital goods. This encouraged a drastic process of capital for non-skilled labor substitution. There is a lot of evidence that skill and capital are complementary, so it should be no surprise to find that capital deepening is associated with an increase in the demand for skilled labor. It is not hard to imagine that this process of non-skilled labor substitution has been stronger in those sectors more subject to trade pressures.

On the other hand, firm survival might have been associated with the introduction of technical change. Technological change can exert upward pressure on the demand for skilled workers and thereby increase their wage premium over unskilled workers. It does not seem unreasonable to assume that the more exposed to import competition a firm was, the more its survival depended on cutting costs by a sharp increase in productivity.

Finally, there is a third, complementary, argument based on the existence of wage differentials across industries for workers with the same skills.<sup>22</sup> Each sector contains hundreds of goods and processes of varying skill intensity. If imports shrink the less skill-intensive activities, this would depress unskilled workers' real wages in direct proportion to import penetration and consequently contribute, *ceteris paribus*, to widening the wage differentials within each sector.

In synthesis, trade liberalization in Argentina meant a lower demand for unskilled labor. The unskilled labor supply elasticity determined the relative effect on wages and employment.

This result coincides with Wood's (1997: 15) assertion that greater trade openness in Latin America has been accompanied by increasing wage inequality due to the increase in the relative demand for skilled labor. Wood's argument is that in Latin America non-tradable sectors might be more skill-intensive than import-competing sectors. Similar results are reported by Vernengo (2004) for Brazil.

## **6. Persistence of unemployment**

Persistent unemployment has been a constant problem for economic theory. It has also been a big challenge for policy makers in many countries.

---

<sup>21</sup> For example, see Autor et al. (2006).

<sup>22</sup> Galiani and Sanguinetti (2003: 508).



In Argentina, double-digit unemployment appeared in the 1990s to stay for a long time. Why was it so persistent? Was the persistence just the result of successive external shocks?

In standard neoclassical theory, resources are *assumed* to move instantaneously and without cost from activities in which the terms of trade are deteriorating to activities in which the terms of trade are improving. With full employment *assumed*, labor markets adjust to equate the wages in all the industries so there are no relative losers from a change in the terms of trade.

If labor mobility is not restricted, workers can be expected to switch between sectors until the wage differential between sectors exactly compensates for the utility change experienced by the marginal relocating worker (Rosen 1979). However, there are a number of reasons why labor may be imperfectly mobile. First, labor may be sector-specific – a bricklayer may not be trained to be a butcher. As Kriechel and Pfann (2005) point out, “specific human capital is usually measured through the tenure at the displacing firm. It is assumed that at least part of the learning on the job cannot be transferred across firms or industries. This part of the learning by working on the certain job is designated as the specific human capital.”

Lamo et al.(2010) model the reallocation of specialized labor across sectors following a relative demand shock in a two-sector Mortensen–Pissarides framework with wage rigidity and endogenous job destruction, augmented with specific human capital in which young agents initially are allocated to vocational or general education. They assume that general skills, which are provided by general education, are required to work in the modern sector. In order to work in the traditional sector specific skills, provided by vocational education, are sufficient. While general skills can be used in the traditional sector, vocational education cannot be used in the modern sector.

They show that large amounts of specific skills dramatically slow down the adjustment of labor markets. In their simulation they find that “in the absence of labor mobility, our model indicates that the period of convergence to a steady-state with no mismatch is of the order of magnitude of a generation, i.e. the necessary time for older workers with inadequate skills to have retired” (Lamo et al. 2010: 5). Finally, they use their model to analyze the developments in the labor market of Estonia and Poland after the enlargement of the European Union in 1998 and the Russian crisis; they confirm the role of specific skills in the speed of the labor market adjustment.

Second, there may be imperfections in the spatial organization of industry – fishing takes place near oceans and seas while farming takes place on the plains. Third, transport costs impose a limit on workers’ mobility. The higher the commuting costs are, the more restricted the market area for each single worker.

Fourth, legal restrictions that raise the cost of employment adjustment, notably those relating to employment protection, have twofold effects. On one hand, they reduce the inflow into employment as they make firms more cautious about hiring; on the other hand, the costs they impose on employers reduce the level of firing. Which effect is more important is a quantitative issue; it may be argued that the overall effect on unemployment may be small as these effects tend to cancel each other out (see Bentolila and Bertola 1990).

Fifth, wage rigidity may be an obstacle to clear the labor market. Competitive equilibrium theory *assumes* that all markets clear, including the labor market. If so, unemployment is not an excess supply of labor; it may only be a temporary mismatch between supply and demand.

In fact, if wages are flexible enough, unemployment is ruled out. Excess supply will depress wages until they reach the level at which the quantity demanded equals the

quantity supplied. So, unemployment needs to be explained through the existence of some rigidity in the labor market: nominal wage rigidity (the so-called Keynesian case<sup>23</sup>) or real wage rigidity (the classical case).

Keynes introduced the distinction between voluntary and involuntary unemployment. Unemployment is always voluntary in the classical model. Involuntary unemployment is the Keynesian case. Both are attributed to some form of market imperfection that prevents wages from clearing the labor market.

Of course, real wage rigidity will disappear in the long-run, but how long the longrun is strongly depends on the institutional characteristics of the labor market.

An explanation for downward wage rigidity must explain why the wages of both existing and new employees do not decline when there is high unemployment. The traditional approach has been to attribute wage rigidity to union power, minimum wages and normative traditions. Efficiency wage theory provides another set of arguments: the average labor productivity depends on the real wage paid by the firm. If wage cuts harm productivity, then cutting wages may end up raising labor costs. So, efficiency wage theory explains real wage rigidity and the existence of involuntary unemployment.

Caballero and Hammour (1996) point out that incomplete contracting difficulties impose a form of rigidity on real wages. The existence of specific investment is made responsible for the decoupling of job creation and destruction. Blanchard and Wolfers (1999) offer another potential suspect. Long-run unemployed workers may either stop searching or lose skills. In both cases they become irrelevant to wage formation. If labor institutions favor a long duration of unemployment the above result may be expected. In this respect, unemployment benefits have been held responsible for raising the reservation wage and so prolonging unemployment duration.

However, the lack of a well-developed social security system makes this last reason less relevant in the case of Argentina in the 1990s. Most unemployed people in the 1990s came from the informal sector and had no right to any unemployment benefit. Only in 2002 was an across-the-board subsidy for all unemployed heads of households established.

Moreover, the high reallocation figures shown in Table 8 do not seem to depict an inflexible labor market. For instance, if compared with other countries' figures reported by Davis et al. (1996: 21), they are only comparable with the high figures for New Zealand in the period 1987/92.<sup>24</sup>

All the aforementioned reasons as well as others may be responsible for long-run unemployment. It may be that each of them has no decisive influence on persistent unemployment, but in conjunction they cause it. None of these factors may have decisive importance to deserve a determinant theoretical status by itself but together they may be responsible for the phenomenon.

Although more theoretical and empirical work is necessary, it is more important to find ways to cure the illness. The doctor does not always have to know the causes of the disease to prescribe adequate medicine.

## **7. What did Argentina do to cope with high unemployment?**

At the peak of the 2001/2002 crisis Argentina implemented an across-the-board subsidy for all unemployed heads of households. Given the urgency of coping with the effects of

---

<sup>23</sup> Strictly speaking, wage rigidity was not a reason for unemployment in Keynes's General Theory. It was introduced by his followers to explain why the labor market does not clear.

<sup>24</sup> In 1984 New Zealand started a deep liberalization program that culminated in the labor market reform in 1991.

the crisis, the quest for mechanisms that could be set up quickly to transfer income to the poor in the most targeted way possible dominated any optimal design consideration. As it has been said before, most unemployed people came from the informal sector and had no right to any unemployment benefit. Nearly 2 million households— representing 13% of the labor force and 5% of the total population —received a social benefit of around 50 dollars a month in exchange for 4 hours of daily labor in community activities.<sup>25</sup>

Formal surveys indicate that the program is well-targeted to intended households (poor families with children) and is highly popular among participants. Studies by international researchers (including the World Bank) find that projects are generally well-run, completed on time, and provide needed services to poor communities. (Tcherneva and Wray 2005: 9)

The cost of the program was estimated at about 1% of GDP. As the economy began to recover, beneficiaries exited the program for work offered at higher remuneration in the private sector.

One of the most surprising results of the program was the large influx of women into it. Many households chose to designate the woman as the head so that she could participate in the program while the husband attempted to find private sector work, including work in the underground economy.<sup>26</sup>

Although it “was a limited employment guarantee scheme implemented as an emergency response to crisis, it provides a relevant example of successes and issues that emerge from the implementation of such an initiative. Domestic consensus, for instance, is a very necessary program element, as the initiative relies heavily on local/municipal government and the commitment of individuals for implementation” (Papadimitriou, 2008: 10).

## **8. Income distribution after liberalization**

We have seen that increasing unemployment and growing inequality in wage distribution characterized the Argentine economy in the 1990s. What happened regarding income distribution?

Gasparini et al. (2000: 2) point out that the Gini coefficient increased steadily from 40.0 in 1991 to a record level of 47.4 in 1998 (see Figure 2). This means that during the 1990s Argentina ceased to be one of the most egalitarian countries in Latin America as it traditionally had been and approached the Latin American simple average Gini coefficient of 49.0.<sup>27</sup>

Gasparini (1999: 125) concurs regarding the existence of “a shift of skilled and qualified labor demand at a higher rate than the shift in supply, which had implied a relative increase in wages (and employment) in groups with incomes higher than the rest.” So, greater wage inequality also meant greater income inequality. On the other hand, he also points out that “the participation of capital in total income increased, which probably had positively affected the global level of inequality.”

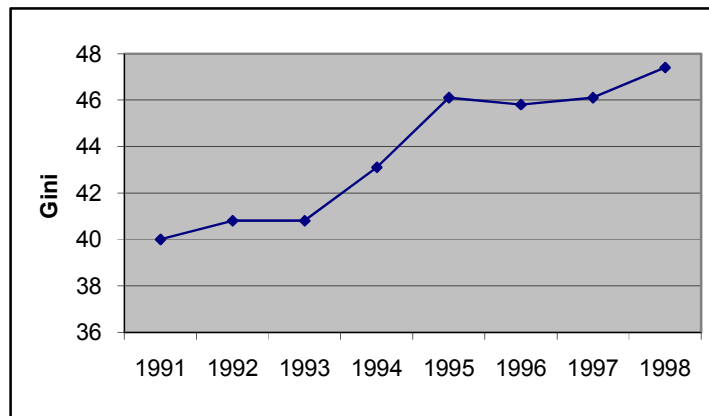
---

<sup>25</sup> Details of this program can be found in Kostzer (2007).

<sup>26</sup> Tcherneva and Wray (2005: 9).

<sup>27</sup> See Londoño-Székely (1998).

**Figure 2**  
Gini coefficient  
Equivalent household income distribution  
Greater Buenos Aires, 1991–1998



Source: Gasparini et al. (2000)

So, both labor income and capital income behavior favored a more unequal distribution after the economic reforms of the 1990s. This result is consistent with Rodrik's (1998a) view that globalization tends to favor the more mobile factors relative to the less mobile ones.

Strange as it may sound, according to Gasparini et al. (2000: 17), unemployment had only a mild effect on household inequality. An important reason for that is that those who became unemployed during the 1990s had extremely low individual labor incomes at the beginning of the decade. Thus, the change in labor status (from employed to unemployed) of some individuals would not have a very strong effect on household inequality.

### 9. The Argentine case and economic theory

As we have seen, there are some difficulties when one tries to put the analysis of economic liberalization effects in Argentina into the economic theory framework.

Traditional trade models assume the existence of only tradable goods. In reality, however, many of the goods consumed in an open economy are non-tradable.

Opening up a small economy makes the supply elasticity of tradable goods infinite since a small open economy can buy/sell as many tradable goods as it wants at a given world price. Any excess demand for tradable goods is met by importing more of them from abroad with no impact on prices.

The story is different for non-tradable goods. Any excess demand for non-tradable goods will require an increase in their relative price to clear the market.<sup>28</sup>

In this context, trade liberalization – through tariff and non-tariff barrier reductions – makes imports cheaper, which leads to greater consumption of them. The fall in the price of imports also has an income effect increasing the demand for exportables and non-tradables as well.

<sup>28</sup>See Végh (2011: 45).

Let us see what happens if trade liberalization is accompanied by financial liberalization, as it was the case in Argentina. If the restrictions on capital flows are removed, the subsequent capital inflow will increase the domestic demand for tradables and non-tradables. This will result in an increase in consumption of tradable goods – their prices will remain fixed at the international level – and in a rise of the relative price of non-tradables to meet the excess demand for them. This increase in the price of non-tradables may even offset the initial effect in favor of the exportable good prices.

So, there will be a change in relative prices in favor of the non-tradable sectors and against the import-competing sector. In the short run the real income of the factor used intensively in the rising-price industry will grow and the real income of the factor used intensively in the falling-price industry will shrink. However, now the rising-price industry is not necessarily the export industry as in the SST; it may be the non-tradable goods one. In the Heckscher–Ohlin approach the factors of production are assumed to be mobile. So, in the long run the implications for factor incomes depend on the factors demanded by the expanding sector relative to the factors released by the contracting industry. In the Heckscher–Ohlin approach full employment is assumed; so, gains and losses in the long run are only in terms of income. Even so, when analyzing a real-world case, there remains the issue of how long the long run may be.

What happens if some factors are specific to sectors? Then, the big winners in the long run will be the factors that are tied to the expanding sector of the economy while the losers will be those factors that are tied to the economy’s import-competing sector. In the Argentine case, the net loser has been non-skilled labor – intensively used in the import-competing industries – while land –intensively used in export activities – has not been a clear winner as it should have been if export prices had been the gainers in the opening-up process.

In line with the conclusions of Larch and Lechthaler (2010: 33), this result indicates the importance of policies to stimulate the training of unskilled, unemployed labor as part of an economic opening-up strategy that inevitably produces winners and losers.

## **10. Gradualism vs. shock therapy**

As previously seen, Argentina’s abrupt trade liberalization resulted in a huge increase in unemployment, especially in labor-intensive manufacturing industries. One may ask why a slower path was not preferred, which would have allowed a gradual adjustment by manufacturers to the elimination of protection. For instance, this was the choice in the case of Mercosur (the South American Common Market), in which tariffs were lowered according to a pre-announced timetable, thus minimizing casualties.

The answer is that in Argentina trade liberalization was part of a shock therapy, which was very popular in the early 1990s. The shock therapy model derived its name from Poland’s stabilization and liberalization program, initiated on January 1, 1990. Most Eastern Europe countries – including Russia – followed suit.

The main idea is that reforms should be introduced simultaneously. Fragmented changes are ineffective. Only a big-bang strategy can overcome the resistance to change. Speed, the argument goes, is essential because governments should seek to take advantage of the “window of opportunity” to establish reforms as quickly as possible and attempt to create irreversibility for these reforms.<sup>29</sup> Sachs (1993) is emphatic in maintaining that this is the *only* strategy that works.

---

<sup>29</sup> The convertibility straightjacket pointed to the creation of such a sort of irreversibility: that is why the rate of exchange was fixed by law.

The neoclassical benchmark is Mussa (1982: 1986). His key proposition is that the mere presence of adjustment costs is not a sufficient condition for gradualism: if the private costs of adjustment reflect the true social costs and agents correctly anticipate the future expected returns, governments should set distorting instruments to zero immediately and allow individuals to adjust at their optimal pace. Gavin (1993), Desai (1995) and Rodrik (1996) can be mentioned among those who provide arguments in favor of a gradualist approach to reform.

The experience in Eastern European countries has not been a success story, nor has the Argentine case. On the contrary, the gradualist reform path followed by China has resulted in a 30-year-long record of extremely high rates of growth. China is the great success story among the transition economies in terms of having avoided a deep recession and moved quickly to a rapid growth path. “Crossing the river by feeling for stones” was Deng Xiaoping’s favorite motto.

Chinese gradualism meant that every measure was first subject to testing on a small scale. Only if the results were satisfactory was it implemented on a large scale. This was the case with the household-based contract responsibility system, which was tried out in very restricted regions before being gradually introduced to other parts of the country. The same can be said of the “double-track price system,” which very slowly faded out to give way to a market price system. Trade and capital liberalization were implemented at first in very restricted areas and gradually extended to other regions.

Gradualism also meant starting with the reforms that had the highest probability of being successful. “The relatively easier aspects first and the difficult ones later” was one of the principles applied in Chinese economic reform. The link of least resistance was always chosen for a breakthrough and followed by a step-by-step reformist procedure. So, economic reform in China started with price reforms that improved prices for peasants, who represented at that time 80% of the total population, thus creating constituencies for further reforms. So, a virtuous pro-reform circle was created as they turned out to be successful.

Gradualism has an option that shock therapy does not have, namely the possibility of early reversal at a lower cost. The big-bang strategy implies that, due to path dependency, it may be very difficult to reverse some steps after the reform package is introduced. So, errors may turn out to be very costly.

The practical impossibility of leaving the Currency Board in Argentina, even when all the facts pointed to a very substantial real exchange rate misalignment, illustrates this sort of difficulty.<sup>30</sup>

Far from being a minor issue, the sequence and speed at which the economic reforms are implemented have proven to be the key to determining whether the outcome will be a success or a failure. In this respect, China is the best example of the former, and Argentina and many Eastern European countries of the latter.<sup>31</sup>

## **11. Lessons from the Argentine case**

---

<sup>30</sup> See Escudé (2002).

<sup>31</sup> “The performance of the former Soviet bloc economies during the first twelve years of the transition has been disappointing” (Svejnar 2002: 23).

Trade liberalization has been seen as an important component of a “pro-poor” development strategy.<sup>32</sup> However, the Argentine case suggests some important points that should be considered when launching a trade reform program.

1) If trade liberalization is accompanied by capital account liberalization, the latter may have faster and deeper effects on relative prices. Consequences may be quite different from the ones expected to follow trade liberalization alone.

In particular, it is likely that an important inflow of capital and consequently real exchange rate appreciation will take place. If the country has a fixed exchange rate regime this real exchange rate appreciation will take the form of an increase in the prices of non-tradables. The real exchange rate appreciation will result in an adverse effect on the current account balance as well as in a shift of resources from tradable to non-tradable goods.

2) Trade liberalization will cause job losses in formerly protected sectors. If these protected sectors consist of labor-intensive activities and exports are associated with non-labor-intensive activities, job destruction may exceed job creation. Capital account liberalization may reinforce this effect by stimulating imports.

3) The need to catch up with the rest-of-the-world technology will cause an adoption of new technologies. This will probably increase the demand for skilled labor, thus widening the gap between skilled and non-skilled workers’ wages. In order to cope with this increase in the wage premium to skill access to education for all should be a priority.

4) Trade liberalization may also mean a shift in relative prices between labor and capital because of the reduction in import tariffs on capital goods, thus inducing a process of capital deepening. Capital for labor substitution may be another source of higher unemployment.

5) Policies to stimulate the training of unskilled, unemployed labor should necessarily be part of an economic opening-up strategy.

6) The sequence and speed of reforms is a first-order element in defining their success or failure.

Gradualism has an option that shock therapy does not have, namely the possibility of early reversal at a lower cost. Gradualism allows countries to start with the reforms that have the highest probability of being successful. If so, they create constituencies for further reforms.

As far as further research is concerned, several subjects may be underlined. The interaction between trade and financial liberalization is clearly an area that deserves much more theoretical effort, including the effects on factor relative prices and their consequences for the labor market. Persistent unemployment from both the theoretical and the empirical points of view is also an area that should be given priority in research. The option gradualism versus shock therapies should be assessed in the light of the recent experience in emergent and Eastern European countries.

---

<sup>32</sup>Winters et al. (2004: 108).

## REFERENCES

- Andreoli, D. and Massot, J. (1999). Evidencia de creación y destrucción de empleo en la industria manufacturera argentina en el periodo 1990/1995. Universidad de Belgrano. Mimeo.
- Antras, P. and Caballero, R. J. (2009). On the Role of Financial Frictions and the Saving Rate during Trade Liberalizations. *Journal of European Economic Association Papers and Proceedings*. Vol. 8, No. 2-3, April/May 2010, pp. 442-455.
- Arteta, C., Eichengreen, B. and Wyplosz, C.(2001). "When Does Capital Account Liberalization Help More Than It Hurts?" NBER Working Paper No.8414. URL: <http://time.dufe.edu.cn/jjwengcong/156.pdf>
- Autor, D. H., Katz, L. F., and Kearny, M. S. (2006). The Polarization of the U.S. Labor Market. *American Economic Review Papers and Proceedings*, 96:189–194.
- Baer, W., Elosegui, P. and Gallo, A. (2001). The Achievements and Failures of Argentina's Neo-Liberal Economic Policies. U. of Illinois, Research Working Paper No. 01-0114. URL: <http://ssrn.com/abstract=279383>
- Bartolini, L.and Drazen, A. (1997) . "Capital-Account Liberalization as a Signal." *American Economic Review*, 87(1), 138-154.
- Beker, V.A. (1998) "Globalization and Unemployment: The Case of Argentina." Universidad de Belgrano. Buenos Aires. URL: <http://cdi.mecon.gov.ar/biblio/docelec/dp1110.pdf>
- Beker, V. A. and Escude, G. (2008). Vida, pasión y muerte de la Convertibilidad en Argentina. *Estudios Económicos* vol.25, no.50, Bahía Blanca. URL: [http://bibliotecadigital.uns.edu.ar/scielo.php?script=sci\\_arttext&pid=S0425-368X2008000100001](http://bibliotecadigital.uns.edu.ar/scielo.php?script=sci_arttext&pid=S0425-368X2008000100001)
- Bentolila, S. and Bertola, G. (1990). "Firing Costs and Labor Demand: How Bad is Eurosclerosis." *Review of Economic Studies*, 57(3), 381-402.
- Blanchard, O.and Wolfers, J. (1999). The role of Shocks and Institutions in the Rise of European Unemployment: The Aggregate Evidence. NBER Working Paper Series, Working Paper 7282. URL: [www.nber.org/papers/w7282](http://www.nber.org/papers/w7282)
- Bour, E. A. (2002). Productivity, Competitiveness and Enterprises in Argentina: The Convertibility Period. Asociación Argentina de Economía Política. URL: <http://www.aape.org.ar/anales/works/works2002/boure.pdf>
- Caballero, R. J.and Harmour, M. L. (1996). "On the Timing, Pace, and Efficiency of creative destruction." *Quarterly Journal of Economics*. August, 111(3), pp. 805-852.
- Calvo, G., Leiderman, L. and Reinhart, C.(1993), "Capital Inflows and Real Exchange Rate Appreciation in Latin America," *IMF Staff Papers*, v 40, pp.108-151.
- Cavallo, D. (2004). "Clase N° 6. Argentina hasta la crisis brasileña". Harvard University. URL: <http://www.cavallo.com.ar/wp-content/uploads/C6.pdf>.
- Chinn, M. D. and Ito, H. (2002). "Capital Account Liberalization, Institutions and Financial Development: Cross Country Evidence," NBER Working Paper No.8967. URL: <http://www.nber.org/papers/w8967.pdf>
- Coremberg, A. A.(2003). "El Crecimiento de la Productividad de la Economía Argentina durante la Década de los Noventa: Mito o Realidad". Asociación Argentina



- de Economía Política. URL:  
<http://www.aaep.org.ar/anales/works/works2003/Coremberg.pdf>
- Currie, J. and Harrison, A. (1997): "Sharing the Costs: The Impact of Trade Reform on Capital and Labor in Morocco", *Journal of Labor Economics* 15(3), p. S 44-S71.
- Damill, M., Frenkel, R. and Maurizio, R. (2002). Argentina: una década de convertibilidad. ILO. URL:  
<http://ilomirror.library.cornell.edu/public/spanish/region/ampro/buenosaires/info/lectura.htm>
- Damill, M. and Frenkel, R. (2011). Macroeconomic policies and performances in Latin America 1990-2010. Mimeo.
- Davis, D.R.(1996). "Trade Liberalization and Income Distribution." NBER Working Paper No. 5693. URL: <http://www.nber.org/papers/w5693>
- Davis, S. J., Haltiwanger, J. C. and Schuh, S. (1996). *Job Creation and Destruction*. MIT Press, Cambridge, Mass.
- Dollar, D. and Collier, P. (2001). *Globalization, growth and poverty: Building an inclusive world*. Oxford University Press, New York, for World Bank, Washington, DC.
- Desai, P. (1995). "Beyond Shock Therapy." *Journal of Democracy*, vol. 6, Nº 2, April.
- Dutt, P., D. Mitra, and P. Ranjan (2009): "International trade and unemployment: theory and cross-national evidence," *Journal of International Economics*, 78(1), 32{44.
- Echenique, F. and Manelli, A. M. (2003). « Comparative Statics, English Auctions, and the Stolper-Samuelson Theorem,» Working Papers 1178, California Institute of Technology, Division of the Humanities and Social Sciences. URL:  
<http://www.hss.caltech.edu/SSPapers/wp1178.pdf>
- Eichengreen, B. (2001). "Capital Account Liberalization: What Cross-Country Studies Tell Us?" *World Bank Economic Review*, 15: 341-365.
- Ernst, C. (2005). Trade liberalization, export orientation and employment in Argentina, Brazil and Mexico. Employment Analysis Unit. ILO. URL:  
[http://www.ilo.org/wcmsp5/groups/public/@ed\\_emp/@emp\\_elm/documents/publication/wcms\\_114031.pdf](http://www.ilo.org/wcmsp5/groups/public/@ed_emp/@emp_elm/documents/publication/wcms_114031.pdf)
- Escudé, G. J. (2002). Lessons from Argentina's recent experience: The mirage of Convertibility. Central Bank of Argentina. URL:  
<http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=801541>
- Ethier, W. (1984). "Higher Dimensional Issues in Trade Theory". in Jones, R. and Kenen, P. (eds.) *Handbook of International Economics*, V.1. Amsterdam: North-Holland, pp. 131-184.
- Felbermayr, G., J., Prat H. and Schmerer, J. (2011). Trade and unemployment: What do the data say?" *European Economic Review*, 55(6), 741{758.
- Fischer, S. (1998). "Capital-Account Liberalization and the Role of the IMF", in *Should the IMF Pursue Capital-Account Convertibility?* Princeton Essays in International Finance, 207: 1-10. Princeton University, International Finance Section.
- Gaisford, J. D. and Kerr, W.A. (1999). "Labour Market Adjustments to International Trade Shocks." *The Current State of Economic Science*, vol. 4, 2011-2034.

- Galiani, S. and Nickell, S. (1998). "Unemployment in Argentina in the 1990s." Working Paper DTE 219, Instituto Torcuato Di Tella.
- Galiani, S. (2000). "Wage determination in Argentina: An econometric analysis with methodology discussion." Universidad Torcuato Di Tella.
- Galiani, S. and Sanguinetti, P. (2003) "The impact of trade liberalization on wage inequality: evidence from Argentina." *Journal of Development Economics* ,72, 497–513
- Gasparini, L. (1999). "Un análisis de la distribución del ingreso en Argentina sobre la base de descomposiciones." In FIEL, *La distribución del ingreso en la Argentina*.
- Gasparini, L., Marchionni, M. and Sosa Escudero, W. (2000). Characterization of inequality changes through microeconomic decompositions. Mimeo. Universidad Nacional de La Plata. URL: <http://www.depeco.econo.unlp.edu.ar/doctrab/doc25.pdf>
- Gavin, M. (1993). "Unemployment and the Economics of Gradualist Reform." Columbia. Mimeo.
- Gonzalez, M. (2004). Fuentes de información sobre salarios: Metodologías y series. CEPED. URL: [http://www.econ.uba.ar/www/institutos/economia/Ceped/publicaciones/dts/DT1\\_Gonzalez.pdf](http://www.econ.uba.ar/www/institutos/economia/Ceped/publicaciones/dts/DT1_Gonzalez.pdf)
- INDEC (1996). "Industria manufacturera: Producción, ocupación y salarios. 1990-1996". Instituto de Estadísticas y Censos. Buenos Aires.
- Kriechel, B. and Pfann, G. A. (2005). "The Role of Specific and General Human Capital after Displacement", *Education Economics*, 13, pp. 223-236.
- Krueger, A. (1983) *Trade and Employment in Developing Countries, Synthesis and Conclusions*, Chicago, University of Chicago Press.
- Labán and Larráin (1993). "Can a Liberalization of Capital Outflows Increase Net Capital Inflows?" *Universidad Católica de Chile Working Paper* N° 155.
- Lamo, A., Messina, J. and Wasmer, E. (2010). Are specific skills an obstacle to labor market? IZA Discussion Papers 5250, Institute for the Study of Labor (IZA). Reprinted in *Labour Economics*, vol. 18, pp. 240-256.
- Larch, M. and Lechthaler, W. (2009). Comparative Advantage and Skill-Specific Unemployment. CESIFO Working Paper no. 2754. URL: <http://www.cesifo-group.de/portal/pls/portal/docs/1/1186104.PDF>
- Kostzer, D. (2007). "Argentina: A Case Study on the Plan Jefes y Jefas de Hogar Desocupados, or Employment Road to Recovery." The Levy Economics Institute of Bard College." Working Paper No. 534. URL: [http://www.levyinstitute.org/pubs/wp\\_534.pdf](http://www.levyinstitute.org/pubs/wp_534.pdf)
- Leonard, J. S. (1987). "In the Wrong Place at the Wrong Time: The Extent of Frictional and Structural Unemployment." In *Unemployment and the Structure of Labor Markets*. (Ed.: Lang, K. and Leonard, J.), Basil Blackwell, New York.
- Londoño, J. and Székely, M. "Sorpresas Distributivas Después de una Década de Reformas: América Latina en los Noventa", Chapter 5, *IDB-Pensamiento Iberoamericano*, Madrid, 1998.

- Meloni, O. (1999). "Algunas estimaciones del producto potencial de Argentina". *Revista de la Escuela de Economía y Negocios*, August.
- Mussa, M. (1982), "Government Policy and the Adjustment Process," in *Import Competition and Response*, ed. by Jagdish Bhagwati, University of Chicago Press.
- Mussa, M. (1986), "The Adjustment Process and the Timing of Trade Liberalization," in A. M. Choksi and D. Papageorgiou (eds.), *Economic Liberalization in Developing Countries*, Basil Blackwell.
- Papadimitriou, D. B. (2008). Promoting Equality Through an Employment of Last Resort Policy. The Levy Economics Institute of Bard College. Working Paper No. 545. URL: [http://www.levyinstitute.org/pubs/wp\\_545.pdf](http://www.levyinstitute.org/pubs/wp_545.pdf)
- Papageorgiou, D., Choksi, A.C. and Michaely, M. (1990): "Liberalizing Foreign Trade in Developing Countries – The Lessons of Experience." World Bank, Washington, DC..
- Prasad, E. - Rogoff, K. - Shang-Jin, Wei, - Kose, M. A. (2003). "Effects of Financial Globalization on Developing Countries; Some New Evidence," IMF Occasional Paper No. 220. URL: <http://www.imf.org/external/np/res/docs/2003/031703.pdf>
- Quinn, D. (1997), "The Correlates of Change in International Financial Regulation," *American Political Science Review*, Vol.91, No.3,(September), pp.531-51.
- Rama M. (1994). The labor market and trade reform in manufacturing. In: Connolly, M. and de Melo, J. (eds.), *The Effects of Protectionism on a Small Country*, World Bank, Washington, DC.
- Revenga A. (1995). Employment and wage effects of trade liberalization: The case of Mexican manufacturing. *World Bank Discussion Paper*, 1542. URL: [http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/1995/10/01/000009265\\_3961019150349/Rendered/PDF/multi0page.pdf](http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/1995/10/01/000009265_3961019150349/Rendered/PDF/multi0page.pdf)
- Razin, A and Rose, A.(1992). "Business-Cycle Volatility and Openness: An Exploratory Cross-Sectional Analysis" in *Capital Mobility: The Impact on Consumption, Investment and Growth*. Leiderman, L. and Razin, A. (Eds.). Cambridge University Press, Cambridge.
- Roberts, M.J. and Tybout, J. R. (Eds.)(1996). *Industrial evolution in developing countries: Micro patterns of turnover, productivity, and market structure*. Oxford University Press, Oxford and New York.
- Rodrik, D. (1996), "The Political Economy of Trade Policy," 1996, in G. Grossman and K.Rogoff, (eds.), *Handbook of International Economics*, Vol. III, North-Holland, Amsterdam.
- Rodrik, D. (1998a). *Has Globalization Gone Too Far?* Institute for International Economics, Washington, D.C.
- Rodrik, D. (1998b), "Who needs Capital-Account Convertibility?" *Princeton Essays in International Finance*, 207: 55-65.
- Roland, G.(2002). "The Political Economy of Transition." *Journal of Economic Perspectives*, Winter, vol. 16, N° 1, 29-50.
- Rosen, S. (1979). "Wage-Based Indexes of Urban Quality of Life." In Mieszkowski, P. and Straszheim, M. (eds.), *Current Issues in Urban Economics*. pp. 74-104. John Hopkins Press, Baltimore.

- Rozenwurcel, G. (2003). "The collapse of the currency board and the hard way back to normality in Argentina." School of Politics and Government, U. of San Martin, Argentina. Mimeo.
- Sachs, J. (1993). *Poland's Jump to the Market Economy*. MIT Press.
- Siebert, H. (1997). "Labor Market Rigidities: At the Root of Unemployment in Europe." *The Journal of Economic Perspectives*, Summer, 37-54.
- Svejnar, J. (2002). "Transition Economies: Performance and Challenges." *Journal of Economic Perspectives*, Winter, vol. 16, N° 1, 3-28.
- Tcherneva, P. - Wray, L.R (2005). Gender and the Job Guarantee: The impact of Argentina's *Jefes* program on female heads of poor households. Center for Full Employment and Price Stability, University of Missouri - Kansas City. Working Paper No. 50. URL: <http://www.cfeps.org/pubs/wp-pdf/WP50-Tcherneva-Wray.pdf>
- Tommasi, M. and Sturzenegger, F. (1998), "Introduction" in *The Political Economy of Reform*, M. Tommasi and F. Sturzenegger (eds.), MIT Press.
- Tommasi, M. and Velasco, A. (1995), "Where Are We in the Political Economy of Reform?," *Journal of Policy Reform*, 1.
- Urrutia, C. and Meza, F. (2010). Financial Liberalization, Structural Change, and Real Exchange Rate Appreciations. IMF Working Paper.
- Vegh, C. (Forthcoming). *Open Economy Macroeconomics in Developing Countries*. Chapter 4. MIT Press.
- Vernengo, M. (2004). External Liberalization, Stabilization, and the Labor Market in Brazil. *Latin American Perspectives*, Issue 137, Vol. 31 No. 4, July, pp.62-75
- Winters, L.A., McCulloch, N. and McKay, A. (2004). "Trade, Liberalization and Poverty: the Evidence So Far." *Journal of Economic Literature*, vol. XLII, N° 1, March.
- Wood, A. (1997). "Openness and wage inequality in developing countries." *World Bank Economic Review*, 11 (1), pp. 33-57.

Please note:

You are most sincerely encouraged to participate in the open assessment of this discussion paper. You can do so by either recommending the paper or by posting your comments.

Please go to:

<http://www.economics-ejournal.org/economics/discussionpapers/2012-3>

The Editor