

# The Effects of Globalization on Working Conditions: El Salvador 1995-2005<sup>1</sup>

**Authors:** Raymond Robertson (Macalester College), Alvaro Trigueros-Argüello (FUSADES)

## ABSTRACT

This paper investigates the effect of globalization on working conditions in El Salvador employing El Salvador's extensive household surveys from 1997 to 2005. Working conditions are defined by information on wages, hours of work, benefits (bonuses, vacations, meals, housing, transportation, health insurance, etc.) and details about the working environment (smog, dust, gases, noise, extreme temperatures, dangerous tools, etc.). These are analyzed on the light of structural shifts in the economy, identifying declining and expanding sectors associated with globalization (trade liberalization, migration, and foreign direct investment). Given El Salvador's uniqueness in the relative large role of migration and remittances, this paper assess also their impact on working conditions.

## 1. Introduction

Like many other developing countries, El Salvador's experience with globalization has been characterized by increases in foreign investment and total trade in the last 15 years. Also like other developing countries, these changes have been concentrated in relatively few sectors. While an ambitious privatization program has attracted foreign direct investment (FDI) in several key non-tradable sectors (banking and telecommunications, for example), much of the export-focused FDI has concentrated narrowly in the apparel sector. This sector generally imports intermediate inputs for assembly and re-export. In Spanish-speaking developing countries, this is often referred to as the maquila sector.

In the sections that follow, we first characterize globalization in El Salvador. In addition to the "usual" experience with globalization, El Salvador's globalization experience has been unique in the relatively large role of remittances. These remittances may have important, albeit indirect, effects on working conditions. In the next section, we employ El Salvador's extensive household surveys to estimate wage differentials for the apparel sector and to lay the foundation for a more detailed study of the possible effects of remittances.

## 2. Globalization in El Salvador

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<sup>1</sup> This paper was written for the World Bank--Social Protection Team, in the project "Globalization and Working Conditions".

*Globalization has many faces.* It deals with increase in values and volumes of trade in goods and services among countries. It also deals with development and spread of technologies, especially Information and Telecommunication Technologies (ICT), which allow access to information all over the world, and to connect with production, distribution and knowledge networks, increasing rapidly the potential for development around the globe. Very importantly, it also deals with international migration between developing and developed countries, and among themselves, changing economic relations and structures among and within countries.<sup>2</sup> It also deals with the spread of democracy and democratic institutions in the world.

All these faces can affect the behavior and the structure of labor markets within a country, depending on which of these features are more important for a particular country, and the particular (idiosyncratic) characteristics of the country that determines how it is prepared (or not) to take advantages of the new opportunities and challenges posed by globalization.

*Development is a process.* The other important idea that lies behind the specific effort of this paper is that development is a process. Even though a country experiences reform processes, the implementation of a reform is not the end of the story. Reforms come and go, each country has its own story and history. Also, to construct the economic and democratic institutions a country needs to reform many aspects of it, and politically and economically they are not all feasible at one moment, and it can take a lot of time to implement all of the needed reforms, in the specific form that best suits a country (not simply copying and pasting institutions from other countries).<sup>3</sup> Success depends on whether the country picks the right sequence to implement reforms, and how fast it can implement this sequence; which is not necessarily the result of a plan, but the result of multiple interactions between society and the state, hence, how good are governance institutions to deal with differences among individuals and groups of individuals is also very important.

Among Latin American countries, El Salvador has been one of the countries that have implemented liberalization reforms with more eagerness. In the 2006 Index of Economic Freedom El Salvador ranks second after Chile.<sup>4</sup> Also, El Salvador is among the only three countries in Latin America that enjoy investment grade risk rating in the region (see Figure 2.1). BID (2006) presents a general index of quality of public policies<sup>5</sup>, among Latin American Countries only Chile falls in the category of Very High, and six other countries falls in the category of High, Brazil, Colombia, Costa Rica, El Salvador, Mexico and Uruguay. El Salvador is one on those countries with

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<sup>2</sup> Williamson (2005) discusses the importance of migration and demographic transitions in the development process. He points that when a demographic shock affects a specific group of the population (i.e. young working age population), and when this shock is big, it has a long term impact on the economy.

<sup>3</sup> Hausmann, Rodrik and Velasco (2005) posed the problem of countries facing many policy goals against the feasibility to address all of them at one time. Since this is not possible, they suggest that the best thing to do is to identify those constraints that have a bigger impact on development in a particular country, and to focus efforts on those constraints.

<sup>4</sup> The Heritage Foundation and The Wall Street Journal (2006).

<sup>5</sup> The index is the average of six indicators describing the quality of public policies: 1) stability, 2) adaptability, 3) coordination and coherence, 4) implementation and effectiveness of application, 5) public interest orientation, and 6) efficiency. The scale ran from 1 to 4; higher values indicate better quality of public policies.

more stable policy framework, adaptability, implementation and effectiveness of application, and efficiency. In categories of coordination and coherence and public orientation, El Salvador falls the medium category.

In this section, we discuss the trade liberalization program in El Salvador, determine the relevant sample period, and then show changes in trade volumes, tariffs, and foreign direct investment. Clearly for El Salvador, remittances and migration are a stylized fact of the economy, which have considerable impact on labor markets, given the fact that this is a small open economy.

### **The making of a market economy in El Salvador**

In 1989 El Salvador initiated the process of constructing a market economy based on a democratic system and individual freedoms. The development agenda had two important components. First and foremost it was necessary to find a peaceful way to solve the problem of civil war that was breaking apart society since 1980, and to build the democratic institutions needed to create governance. These efforts concluded with the signature of the Peace Accords in 1992, which included important reforms to the Judiciary, the Police, the Army, the electoral system and disarmament and incorporation of guerrillas into the political system. This just meant the beginning of a process to build democratic institutions. Since then there have been other reforms, and more will happen as the country realizes which ones work better than others.

The second component was the socio-economic agenda. The purpose was to build a market economy based on the principles of individual freedom, decentralization of decision making processes, prices as basic economic signals, competition as a warranty of economic efficiency, and the supplementary role of the state.<sup>6</sup> The social agenda sought to make El Salvador a country of owners, prioritizing targeting of social expenditure towards poorest households, decentralization of social services, subsidies to demand, and private and communal participation in execution of projects.<sup>7</sup>

#### **2.1. Trade and Tariff Policy**

Within the context described above, we can divide the liberalization program of El Salvador into two stages. The first stage began in 1989, and it was predominantly a unilateral liberalization process, where tariffs were reduced according to a particular calendar (see Table 2.1).<sup>8</sup> This process, however, was accompanied by a policy program seeking to eliminate anti-export bias in the economy, and to provide incentives for export promotion. Beyond tariff reduction most import and export licenses were eliminated, although some of them still remain (i.e. jute, henequen, imported salt, sugar, wheat flour, saccharine), and some additional tariff protection for certain products such as sweetened drinks, alcoholic beverages, tobacco, and there are import quotas for rice. As another incentive, free trade zones were created for

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<sup>6</sup> See FUSADES (1989) for a proposal of an economic and social strategy for the country. The strategy proposed by FUSADES strongly influenced the agenda of the first ARENA government, headed by President Alfredo Félix Cristiani in the 1989-1994 period.

<sup>7</sup> For a description of initial reforms see Rivera-Campos (2000) and also Liévano (1996).

<sup>8</sup> This part relies on Alas de Franco (2002).

exporting firms with a new legislation passed in 1991, giving them a tariff free area to produce for exports, plus other tax incentives such as exemptions from income tax and local/municipal taxes for ten years, with possibility of extending the period. In addition, El Salvador has a policy of 6% drawback of value added to exports.

This resulted in important reduction in tariff protection, exposing the economy to international trade. Average tariff was reduced from around 21.9% in 1991, to 5.7% in 1994 (Figure 2.2). If we look at an indirect measure of tariffs protection, the percentage of revenue collected from import tariff over the value of total imports of goods, we observed that effective tariff protection actually increased between 1991 and 1994, even though nominal rates were falling (Figure 2.3). The reason for this is improvement in tax revenue management and customs. Since 1994, however, the tariff revenue ratio declined steadily from 6.6% of total imports in that year to 2.67% in 2005, showing that trade policy in El Salvador has been oriented towards opening to international competition.

The second stage of trade liberalization sought to obtain better access to international labor markets mainly through free trade agreements. Although the country enjoyed preferential access to U.S. and European markets through the Caribbean Basin Initiative (CBI) and the Generalize System of Preferences (GSP). In that sense

El Salvador has signed 5 trade agreements, shown in Table 2.2. To see how effective these are, we need to look at imports and exports with these countries, as well as the impact on FDI.

## **2.2. Investment Regime**

Foreign Direct Investment (FDI) has been an important component in the development strategy of El Salvador, and a key factor in the process of globalization. In 1990 a new legislation was passed, giving wide warranties to foreign investment.<sup>9</sup> In 1999 an improved version of this piece of legislation was passed,<sup>10</sup> giving freedom to invest in almost all sectors of the economy; freedom to redeem profits to country of origin, warranty for national treatment and non discrimination to FDI; access to domestic financing; registration through a single window to simplify all paperwork; intellectual property protection; tax incentives; and restrictions in very few activities.

There is also an increase in Bilateral Investment Treaties (BTI) with developed countries, such as The United States, some European countries and others from South America, and some of them have been enhanced within the framework of Free Trade Agreements (FTA). El Salvador has signed also de Multilateral Investment Guarantee Agreement (MIGA).

## **2.3 Trade and Foreign Direct Investment**

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<sup>9</sup> Alas de Franco (2002). The first FDI legislation was passed in April 1988. The bill was reformed before the first anniversary, in January 1989, and there was a second reform in December of the same year, with significant changes.

<sup>10</sup> FUSADES (2003). Ley de Inversión Extranjera (Decreto Legislativo no. 732, Noviembre 1999),

This section provides a brief description of trends in exports and imports in El Salvador, and their main composition in broad aggregates, as well as in FDI.

### **2.31. Trade Trends**

Overall El Salvador has experienced an accelerated rate of growth in trade of goods, increasing the ratio of exports to GDP from 10.8% in 1990 to 22.4% in 2000 (See Figure 2.4). Since 2000, however, the rate of growth of exports has declined considerably: total exports have remained close to 20% of GDP over the last five years. On the other hand, trade liberalization and abundance of foreign exchange (due to migration and remittances), have lead to even faster growth in total imports. Imports as percentage of GDP increased from 23.3% in 1990 to 39.9% in 2005.

#### **Composition of Exports and its Trends**

Over the past fifteen years El Salvador has undergone important changes in the composition of exports. In 1990, traditional exports, mainly coffee, sugar, cotton and shrimp, amounted to nearly 60% of total exports (see Figures 2.5 and 2.6). Their share in total exports declined steadily over the 1990-2005 period. Another major change is the rapidly increasing role of maquila exports (mainly apparel), which grew from US\$137 million in 1991, to US\$1.9 billion in 2005, reaching just past 60% of total exports. Finally, the other major change is an increase in non-traditional exports, which include some agricultural products and many kinds of light manufacturing, from US\$287 million in 1990 to US\$1.3 billion in 2005.

#### **Apparel (maquila exports)**

“Maquila”, also sometimes referred to as export processing, refers to activities involving the assembly of imported intermediate inputs and exporting the finished goods. In the case of apparel, for instance, this means importing cut and uncut fabric for assembly (sewing) into garments.

In case of El Salvador and other countries of the region, including Mexico, it is important to look into a historical perspective to understand the evolution of maquila exports. We have two clearly defined periods, before and after the expiration of the Multi-Fiber Agreement, which eliminated quotas regulating the flow in textiles in the world in January 1<sup>st</sup>, 2005.<sup>11</sup> We see that in El Salvador, after the first round in economic reforms and liberalization, maquila exports took off with great success, increasing from close to zero en 1990, to over \$1.5 billion in 2000. After that, growth in maquila (mostly apparel and textile) slowed down, and after January 1<sup>st</sup> 2005, maquila export became to languish, even to decrease, the loss in employment has been considerable (as shown below). Regarding employment growth in the sector, with see negative figures in 2001, 2002, 2004 and 2005, meaning the sector has been struggling. This may mean that even before the expiration of multifiber agreement, some companies started to shift to other coordinates in the world. See Figures 2.7 and 2.8.

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<sup>11</sup> See theWTO at [http://www.wto.org/english/tratop\\_e/texti\\_e/texintro\\_e.htm](http://www.wto.org/english/tratop_e/texti_e/texintro_e.htm).

El Salvador may find it difficult competing with other countries, such as India, Bangladesh, China, and perhaps Indonesia, due to differences in wages and productivity. It is therefore possible that before 2000, growth in the maquila sector may have had a positive impact on working conditions, but after that, and especially since 2005, the maquila sector is decreasing.

### **Composition of Imports and its Trends**

The four major import aggregates are maquila, consumption, intermediate and capital goods (Figures 2.8 and 2.9). Imports of intermediate goods are the main import aggregate, increasing from US\$629 million in 1990 to US\$2.3 billion in 2005. The second component in importance, are consumption goods imports, which increase from US\$399 million, to US\$2 billion in 2005, and increasing their share from 24.6% in 1991 to 29.8% in 2005.<sup>12</sup> Similar to maquila exports, maquila imports increased rapidly from 1991 to 2000, but during the 2000-2005 period, maquila imports grew at a very mild rate, even reducing the share in total imports. The fourth component are imports of capital goods, these increased rapidly between 1990 and 1995, afterwards they leveled at a lower value between, 1996-1999, and increased again in 2000, but stayed at similar level until 2005; decreasing in share since 1999.

### **2.3.2 Foreign Direct Investment**

Systematic data collection of foreign direct investment is available since 1997, when the Central Bank adopted the standards of the Fifth Balance of Payments Manual, published by the IMF. Table 2.3 contains FDI by country of origin for 1998-2006, and Table 2.4 contain FDI by economic sector. Overall, between 1997 and 2006 FDI (not including intercompany transactions) increased seven fold, from US\$480 million in 1997 to US\$4.37 billion in March 2006. New prospects to increase are very high given the new dynamics of CAFTA and large investments in the banking sector, which will close deals close to an additional US\$1 billion between 2006 and 2007 in FDI, mainly through acquisition of controlling equities of the three largest banks in the country by Citibank, HSBC and Bancolombia. The main partner in FDI is the United States, followed by Mexico (with large investment in the telecom sector) and Venezuela (with a large investment in the sector of distribution of electricity).

Evidence shows that FDI has a bias in El Salvador toward non-tradable sector.<sup>13</sup> Table 2.4 contains the breakdown of FDI by sector. As result of privatization of electricity and communications, the first large inflow of FDI went to services such as electricity, telecommunication in 1998, near US\$1.6 billion in that year alone. Figure 2.10 shows that the FDI share towards the nontradable sector went from 44.3% in 1997 to 71.1% in 1998, and it remained close to 70% until to 2004. Privatization of the banking sector and financial liberalization occurred in early nineteen nineties, but equity was mainly bought by local investors. However, recently, FDI has gone into the banking

<sup>12</sup> From 2003 to 2005 the increase in share of intermediate and consumption goods is strongly associated with the increase in oil prices.

<sup>13</sup> Among others, see World Bank (1996) (El Salvador: Meeting the Challenge of Globalization), and Rivera Campos (2000), and FUSADES (2003). For this section, in the tradable sector we include: Industry, Agriculture and Fishing, Mines, and Maquila; in the nontradable sector we include Sales, Services, Construction, Communications, Electricity, and Financial Sector.

sector, with acquisitions of national and regional (Central American) banks by General Electric Finance, Scotia Bank, and HSBC; Citibank, and Bancolombia by the end of 2006 have announce they have offered to buy all equities of the two largest banks in El Salvador. It is expected therefore, that FDI in the non-tradable sector will remain close or above 70% when these transactions become effective in 2007.

This does not mean the there is no FDI in the tradable sector, it has increased from US\$266 million in 1997 to US\$1.2 billion in 2005, more than fourfold. In the Maquila sector FDI has gone from US\$57.2 million in 1997 to US\$299 million in 2005. FDI in manufacturing have had good performance also, with steady growth, from US\$196.4 million in 1997 to US\$853.5 million in 2005, an increase of 4.3 times the initial value. The case of fishing is also worth mentioning, due to a Spanish investment for tuna fishing and canned tuna that received preferential treatment with CAFTA; FDI in this sector has increased from none in 1997 to US\$66 million in 2005.<sup>14</sup>

Investment in the service sector also has increased. Air Canada recently bought the branch of airplane maintenance from the Salvadoran national company AEROMAN, which is the only company in Latin America certified to service Airbus (and has contracts with Jet Blue and America West). Call centers also represent an important area for FDI, with investments from Dell, Skype, America Movil, and others.

#### **2.4 Macroeconomic Impact of Remittances and Migration**

Massive migration and flows of remittances have had a major impact on macroeconomic conditions in El Salvador. Remittances have reached almost 18% of GDP, totaling US\$3.32 billion in 2006 leading to an appreciation of the exchange rate (see Figure 2.11). This influx of income from abroad increases the demand for both tradeable and nontradeable goods. The price of tradable goods is checked by international prices as in any open economy<sup>15</sup>; on the other hand, non-tradable goods are not subject to international competition and supply is restricted by availability of resources (land, labor, capital). As a result, the relative price of non-tradable goods goes up, leading to a real appreciation of the exchange rate. Figure 2.12 depicts the relationship between the GDP deflator of the tradable sector and the GDP deflator of the non tradable sector for El Salvador between 1990 and 2005. As we can observe, the relative price of tradable goods versus non tradable goods has decreased steadily from 100 in 1990 to 79.5 in 2005.<sup>16</sup>

<sup>14</sup> This Spanish investment played an important role recently in pressuring El Salvador to ratify four ILO conventions: Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87), Right to Organise and Collective Bargaining Convention, 1949 (No. 98), Workers' Representatives Convention, 1971 (No. 135), Labour Relations (Public Service) Convention, 1978 (No. 151) (See Annex 1 for a List of Ratifications of International Labour Conventions by El Salvador). While the European Union threaten the country to withdraw El Salvador from the European General System of Preferences if the country did not ratify this conventions, Grupo Calvo (the tuna company) threaten to withdraw their investment from El Salvador because it would lose the preferential treatment in the European Union. El Salvador did everything a country can do to keep this preferences as a strategy to continue negotiation of an Economic Agreement with the European Union. In September 6, 2006, these four conventions were ratified, overcoming long lasting prejudices against labor unions. This is another way globalization affects labor conditions.

<sup>15</sup> Since 1991 to 2000 El Salvador kept a fixed exchange rate regime. Starting in January 1<sup>st</sup> 2001, the US dollar was adopted as a mean of exchange and legal tender, displaced the old currency, colon.

<sup>16</sup> GDP deflators were obtained dividing GDP at current prices by GDP at constant prices for each sector. The relative price was obtained dividing GDP deflator of tradable sector by GDP deflator of non

This appreciation makes exporting activities more difficult for the country, and gives an incentive to invest relatively more in the non tradable sectors of the economy. Figure 2.12 shows how the shares of both, tradable and non tradable sectors have evolved over the period. In 1991 the share of the tradable goods sector in GDP was 39.3%, and declined steadily to 32.5% in 2005. The decline is due mainly to the fall of the share in agriculture in total GDP, while manufacturing industry has evolved around an average of 22.2% over the period, meaning that it has managed to adapt to changes in international conditions and relative prices. The appreciation of the exchange rate (due to remittances) creates a problem like the Dutch Disease.

On the other hand, this appreciation of exchange rate means that relative prices stimulate non tradable sectors, such as services, real state, financial sector and sales. Financial and Insurance sector increased its share from 2.2% of GDP in 1990 to 4.5% in 2005; transportation, storage and communication sector increased from 7.3% of GDP to 9.2; sales, restaurants and hotels from 18.1% to 19.4%; construction from 3.5% to 4.2%; other services from 6.1% to 7.7%; and real state increase from 3.5% to 4.3%. However, not all non-tradable sectors have moved in the same direction; government services decline from 7.4% to 6.5%, reflecting the policy trend to keep the role of the state in the economy as small as possible; and the share of housing rents fell from 11.3% to 7.4%.

### **Changes in real wages.**

If we follow this classification, we observe that the two main tradable sectors, agriculture and manufacturing have experienced a deterioration in real wages over the 1991-2004 period, for workers in the formal sector (Figure 2.13). On the other hand, real wages in the tradable sector has mixed trends. In the cases of electricity, gas and water, and transportation and telecommunications, there was a positive trend up to 2001, declining in the 2000-2004 period. It is interesting to see that in the financial sector, though it has been one of the more dynamic sectors, real wages have declined steadily from 1991 to 2004. Similarly in the sales sector, though at slower rates. Real wages were stable in the personal service sector until 1996, there were important increases in 1997 and 1998, and a fall in 1999, however, the overall trend has been to increase see Figure 2.14).

## **3. Household Survey Analysis**

### **3.1 Data**

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tradable sector. GDP of the tradable sector is the addition of three sectors, as defined by national accounts in the Central Bank, a) Agriculture, fishing and hunting, b) Mines; c) Manufacturing Industry. GDP of the non tradable sector is the addition of nine sectors, as defined by national accounts in the Central Bank, d) Electricity, Gas and Water, e) Construction; f) Sales, Restaurants and Hotels, g) Transportation, Storage and Communications, h) Finance and Insurance, i) Real Estate and Services; j) Housing Rental, k) Communal, Social, Personal and Domestic Services, l) Government Services. Data and estimations are available in Annex 2, 3 and 4.

El Salvador has a history of collecting labor market and expenditure data through household surveys. El Salvador conducts the *Encuesta de Hogares de Propósitos Múltiples* approximately annually. The survey covers basic demographic information as well as labor market experience, housing, and other indicators.

While data are roughly available from 1989 until the present, survey and sample changes restrict the sample used here to 1995-2005. This period covers the process of trade liberalization and rising globalization in El Salvador.

To analyze the surveys together, the analysis focuses on workers with positive wage earnings (earnings from paid labor). The sample was further restricted to several key variables: age, gender, education, occupation, sector of employment, geographic area and remittances.

Table 3.1 contains sample characteristics. These simple statistics reveal several important features of the survey data. The first column contains the sample size. These numbers represent the number of workers in the sample who are between 10 and 65 years old (inclusive) and have positive earnings from wages. As the table clearly shows, there is a lot of variation in sample size over the 1995-2005 period. Most notably, there is a significant increase in sample size in 1998 over 1997, and again in 1999 and 2000 over the previous year. The sample size falls back to 1998 levels in 2001 and rises to 1999 levels in 2002-2005.

While mean age is relatively steady from 1995 to 2005, the female employment share falls through the sample, from just over 41% in 1995 to just under 37% in 2003, and around 30% in 2004 and 2005. Interestingly, average education remains roughly constant through the sample period, although the average of the last three years is higher than the average over the first two years, suggesting a gradual increase in average education levels.

Table 3.2 contains sector employment shares for 1995 and 2005. If these samples are representative, the samples indicate significant changes in employment patterns in El Salvador. The share of workers in agriculture, particularly food, falls from nearly 25% to just over 16%. At the same time, the share of workers in sales (retail and wholesale) rises from just over 22% to nearly 29.5%. In terms of manufacturing, perhaps the most significant change is in the textile and apparel sectors. The share of workers in textiles falls by nearly two-thirds, from about 2.1% to just over 0.5%. In contrast, the share in apparel rises from about 4.6% to 6.6% in 2003, but decreases to 4.7% in 2005. These patterns are similar to other small developing countries, particularly Honduras and Nicaragua, whose experiences with rising globalization coincided with the growth of apparel manufacturing. Note that other manufacturing sectors – food, beverages, and tobacco, wood, and other manufacturing - either contract or remain steady.

The various industries have very different demographic characteristics. These differences are illustrated in Table 3.3. Table 3.3 shows that, in particular, rather than being a low-skill sector, the average education level in apparel is above the national sample average. Agriculture, not surprisingly, has very low average education levels. Utilities, public administration and social services have relatively high education levels, but apparel has the highest average education of all manufacturing industries.

One of the main characteristics of apparel seems to be the large concentration of women. Over 70% of employment in the sector is female. Only other services have a higher concentration of female employment, and the female share of employment in apparel is nearly double that in the other manufacturing industries.

It may also not seem surprising that workers in apparel are younger than other sectors. Indeed, Table 3.3 shows that the average age in apparel is lower than in all other sectors. Thus, as in other countries, apparel in El Salvador is characterized by relatively young women. One key difference in El Salvador is that education levels in apparel seem to be relatively high.

### **3.2 Wage Differentials**

One measure of working conditions is the difference between the wage one earns in one's industry of employment and the wage one would earn if employed in another sector. This difference is known as a wage differential. These differentials are not usually explained by differences in demographic characteristics, such as gender, age, and education, and seem to represent a benefit to workers who can get jobs in high wage industries. Since we know that globalization in El Salvador has been concentrated in the apparel sector, it is important to first compare wages in that sector with other sectors within El Salvador. The household surveys described above contain information about monthly income from different sources. We focus on wage income here, which is reported as monthly wage from remunerated employment. However, we have adjusted the monthly wage by the number of hours that individuals have worked during the month, therefore we analyze wage per hour.

To get an idea of how wages differ across industries, we take the natural log of wage per hour as our wage variable, which is customary in labor market analysis because the natural log of wages is normally distributed. We first focus on 2000. The first column of Table 3.4 presents the percent difference from the overall average that workers earn in each industry in 2000, after controlling for demographic characteristics and key variables for labor market participation. This percent difference (the log difference) is known as the wage differential (or wage premium) earned in each industry.

Normally, studies of wage differentials limit the sample to workers in the private sector (non-military and non-government), workers who are not self-employed, and workers who work a certain number of hours (for example, full-time workers). Here we limit the sample to workers who are older than 9 years old. We include all sectors because we are interested the most comprehensive comparison.

At the top of the table we report the wage differentials earned for different demographic characteristics. Females, for example, in 2000 earned about 8.9% less than other workers when controlling for sector, age, education, urban area and whether the individual lives in a household receiving remittances. Older and more educated workers earn higher wages, also those living in urban areas and working in the public sector. Even after controlling for all demographic variables working in the public sector gives a wage differential of 57.6%. Is noteworthy that those receiving

remittances have a slightly higher wage, indicating they have higher reservation wages.

The primary industries (food agriculture through mining) all earn less than average. Food agriculture workers, for example, earn nearly 29.3% less than the average wage. Workers in the wood manufacturing industries earn below-average wages, -43.1%, while those in the food manufacturing industries (with beverages and tobacco) earn above-average wages (8.9%). Workers in utilities, construction, and Finance, however, earn well above-average wages, 50.4%, 13.8%, and 35%, all them considered non-tradable sectors and in case of utilities and finance, with important FID participations in the sectors.

Interestingly, workers in apparel earn about 12.4% more than the average wage. This premium is not large relative to other estimated differentials. In particular, workers in public administration and social services earn premiums of 16.5% and 23.1% respectively. In fact, of all the positive wage premiums, only the food and beverage industry and other agriculture and husbandry and fishing have a smaller premium.

The second and third columns in Table 3.4 present the results for 2004 and 2005. In agricultural food sector we observe that the negative wage differential falls considerable compared to 2000. The main reason for this is the large drop in coffee prices during the period 1997-2001, the main agricultural export crop in El Salvador. On the other hand, 2004 and 2005 were recovery years for that sector; nevertheless the wage differential is still negative.

The other interesting change related to international circumstances is in the apparel sector. Although the workers in apparel do not seem to earn any significant wage premium in 2003, this is not to suggest that these workers have not been affected by the rise in foreign investment and exports in the apparel sector. To get an idea of how this premium has changed over time, we estimate the same regression for each year between 1995 and 2005, including the same demographic controls described above.<sup>17</sup>

Figure 3.1 illustrates the results by graphing the annually-estimated apparel wage premium and the share of total employment in the apparel sector from 1995 to 2003. During this period the Multifiber Agreement was active, favoring countries in Central America, that had preferential access to the U.S. market through the Caribbean Basin Initiative. The two rise together, suggesting an increase in demand for these workers. The increase in demand for these workers seems to have resulted in a rising wage premium in this sector as this sector has expanded. By January 1, 2005 the Multifiber Agreement expired, and since this was known by 2004, many firms in the sector began to migrate to countries whom were going to have a comparative advantage after the elimination of quotas in the sector, mainly South Asian Countries and China. In table 3.4 we observe how the wage differential for apparel declined in those years, as well as employment industry shares (Table 3.2).

Interestingly, the rising wage premium coincides with a falling female share of total employment in apparel. Figure 3.2 illustrates that, while the average education level

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<sup>17</sup> We exclude 2001 from the analysis because an apparent coding error seems to affect the results. This anomaly is still under investigation.

has remained nearly constant, the female share of employment in the apparel sector has been falling as the wage premium and overall employment share has been rising.

## 4. Working conditions in El Salvador

This section presents some basic descriptive statistics, that shows us the main changes in labor markets in El Salvador. Afterwards we formalize an econometric model of wages (Heckman's selection model) and for labor conditions, specifically whether workers has signed a contract or whether they are social-security registered workers (Probit model). Finally, we present results for physical conditions in the working place for 2005, using information in the 2005 survey.

### 4.1 General Labor Market Conditions

Given the trends described in part 2 of this paper, we will focus our attention in four specific years (three periods):

**1991-2000 Period:** continuation of first phase of trade liberalization with unilateral tariff reduction, export promotion efforts, and beginning of privatization process, with large FDI coming to utilities sector, and some to industry or manufacturing. Garment exports kept growing.

**2000-2004 Period:** Beginning of second phase of trade opening through signing of free trade agreements (Mexico, DR, Chile, Panama). Continuation of FDI inflows in nontradable and tradable sectors. Slowdown in Maquila exports. This period also suffered many shocks: coffee price shock, 2001 earthquakes, oil price shock. Large inflows of remittances increasing from 13.3% of GDP to 16.3%.

**2004-2005 Period:** Continuing efforts to sign a free trade agreement with the U.S., incoming flows in FDI in financial sector. End of Multifiber agreement, triggers fall in maquila exports, dominated by garment industry. Growth in nontraditional exports. Remittances keep increasing, to 17% of GDP. Recovery of coffee prices.

#### *Labor Force Participation*

Labor force participation, defined as all economically active population ten years and older divided by total population in the same age range, was close to 50% in 1997 and from 2000 to 2005 has remained around 52%, with little changes (See Table 4.1). However, labor force participation has decreased for men, from 68.5% in 1997, to around two thirds in 2000-2005, while for women it has improved, from 35.3% in 1997 to 38.7% in 2000 and 38.6% in 2004, showing another step upward in 2005 to reach 39.5%. The main reason being the loss in employment share in the agricultural sector (mainly men employment), and the gain in employment up to 2003 in the garment industry, which hire mostly women, and the sales sector which also hire more women than men.

A first approximation of the impact of remittances on labor markets and working conditions is shown in labor force participation. We compare labor force participation between those living in households that receive remittances, and those living in households not receiving them. In 2000, 2004 and 2005, participation in labor force was around 42% for those workers that reside in a household receiving remittances, while for those living in a household that does not receive remittances, labor force participation is around 55%, that is 13 percentage point above. In other words, the data show that remittances reduce labor force participation by 13% in the subset of population that receive remittances. Someone can think, that this could be biased if remittances are directed mainly to women, but specific calculations by sex show that for women and men labor force participation is 12% and 13% smaller for the subset of populations living in households that receive remittances (See Figure 4.1 and Table 4.1).

#### *Rate of Unemployment*

The rate of unemployment for total population declined between 1997 to 2000, but between 2000 and 2004 it remained close to 6.9%, and increased to 7.2% in 2005. The most important changes has occurred for women, where the rate of unemployment declined steadily between 1997 and 2000 from 5.3% to 3.7%; there was and upward jump to 5.2% in 2001, but afterwards the unemployment rate remained close to 3.5% until 2003, increasing to 3.8% in 2004 and 4.8% in 2005. Given that women's participation in the garment industry is much larger than men, it seems that women's rate of unemployment follows a pattern similar to what is happening in maquila exports, specially in 2004 and 2005, related to the end of quotas associated with the Multifiber Agreement (See Figure 4.2).

#### *Employment by economic sector*

Table 4.2 show four features about employment in El Salvador in 2005. First, employment opportunities are concentrated in large sectors, Sales with 29.5% of all employed, Agriculture, with 19.5% and Manufacturing (including Food and Beverages, Garment and Textile, and Other Industry) with 16.4%. Second, women participate mainly in Sales and services, but they also have high shares in manufacturing of food and beverages and garments and textiles; while men participate more in agricultural activities and Sales sectors.

Third, remittances do not change the overall pattern of distribution of employment by economic sector. And fourth, employment by firm size has a U-shaped distribution, where micro enterprises generate 61.2% of employment, and large firms 29%. Also is important to see that in the garment industry the employment share is larger in large firms, which tend to participate more in the regulated segment of the labor market.

#### *Average hours per week*

The average number of hours per week in their main job, for those that were employed is 42.2; the difference between men and women is very little, 42.6 compared to 41.7 on average, but it varies across sectors. For women, those working as maids have the longer week hour (they are not protected by contracts and legislation). Regarding the impact of remittances on average number of hours per

week, it is 40.2 hours for those receiving remittances, and 42.7 hours. And regarding firm size, the average hours per week increase with firm size, from 39.3 for micro enterprise, to 47.3 hours for large firms. Generally micro enterprises represent the informal sector, where they may enjoy more flexible hours, while large firms are subject to legislation enjoying less flexibility (See Table 4.3).

One of the main features of labor markets in El Salvador is a rigidity in the labor week in the regulated segment of the market, determined by labor legislation. Figure 4.2 shows density functions of the distribution of number of hours per week for employed population in their main job. Overall, the distribution is concentrated around 44 hours per week, which is the number of hours established in the labor code. However, there are differences between men and women. For women, the distribution has two peaks, one smaller one around 22 hours, and the normal one at 44 hours; this suggest that for many women it is important to keep a part time job. On the other hand, those workers living a household that receive remittances has a more spread out distribution, that is they show less concentration at the 44 hours peak, while those not receiving remittances show a pattern more similar to the general distribution, that is, high concentration at 44 hours.

#### **4.2 Wages and wage rates**

The following includes only those employed as wage laborers, whether temporal or permanent; does not include self employed, employers, cooperativists, non remunerated family members, trainees or domestic services (maids).

For those employed as wage laborers, the average wage rate per hour is \$1.51; the highest wage rate is found in the educational sector, followed by administration and defense, reflecting mainly jobs in the public sector. But in the private sector economy, highest wages are found in Services and Utilities (electricity, gas and water), and the lowest wages are found in agriculture, \$0.69 per hour. In the Sales sector, where most people is employed, the wage rate is \$1.25 per hour, and in manufacturing, the wage rate varies by sub-sector, \$1.08, \$1.48, and \$1.54, in Garment and Textile, Food and Beverages and Other respectively. Therefore, it is important to note, that where maquila sector is located the wage rate is lower than in the other two sub-sectors; but it is also true that in these two sectors, women's wage rate is lower than men, while in Other manufacturing, women's wage rate is higher.(see table 4.4).

Overall, those wage laborers receiving remittances have a higher wage rate per hour than those not receiving, \$1.63 compared to \$1.49 per hour, although that does not happen in all economic sectors. For instance, in the Garment and Textile Industry, it seems that remittances have a positive effect on the wage rate, but not in the beverage and Food sector, and in the Other Manufacturing sector, the impact is contrary to expected. In Sales, one of the more important sectors, the average wage rate is also smaller for those receiving remittances.

Regarding firm size, the average wage rate per hour, is almost twice as large in large firms compared to microenterprises, revealing that the quality of employment is better in the latter.

Another important feature in wage rates per hour, is that the distributions are skewed towards the left, meaning that the median wage is smaller than the average wage; that is, most employed workers earn less than the average wage.

### *Heckman's Selection Model*

Given the important role of remittances in El Salvador, we want to test how important they are for labor market participation and in the determination of wages. To do this we apply Heckman's selection model (Heckman (1979)). The decision to work or not work is made by the individuals. Thus, those who were not working constitute a self-selected sample and not a random sample. It is likely some of the workers receiving remittances would earn low wages choose not to work and this would account for part of the missing wage data. Thus, it is likely that we will over estimate the wages of the workers in the population. So, somehow, we need to account for information that we have on the non-working individuals.

The Heckman selection model is a two equation model. First, there is the regression model,

$$y = \mathbf{v}\boldsymbol{\beta} + \mathbf{u}_1$$

And second, there is the selection model,

$$z\boldsymbol{\gamma} + \mathbf{u}_2 > 0$$

Where the following holds,

$$\begin{aligned} \mathbf{u}_1 &\sim \mathbf{N}(0, \boldsymbol{\sigma}) \\ \mathbf{u}_2 &\sim \mathbf{N}(0, 1) \\ \text{corr}(\mathbf{u}_1, \mathbf{u}_2) &= \rho \end{aligned}$$

When  $\rho = 0$  OLS regression provides unbiased estimates, when  $\rho \neq 0$  the OLS estimates are biased. The Heckman selection model allows us to use information from non-working individuals to improve the estimates of the parameters in the regression model. The Heckman selection model provides consistent, asymptotically efficient estimates for all parameters in the model.

We assume that there is one model predicting wages and one model predicting whether a person will be working. We use a female dummy, remittances dummy, age, age squared and education to predict selection. We have estimated the model for three different years, 2000, 2004 and 2005 (See Table 4.5). The main determinants for sample selection are the female and remittances dummies; in both cases the probability of participation in labor markets is strongly reduced in all years. The result for the remittance dummy provides evidence that those receiving remittances have more discretion regarding their participation in labor markets, they can have longer periods searching for jobs, since they have remittances as a cushion, or simply they have higher reservation wages and take more time to find jobs.

After considering sample selection, we observe that except for 2000, education has a positive effect on wages, age has a hyperbolic impact, workers in urban areas and working in the public sector enjoy much higher wages, while women have lower

wages after controlling for the other variables. We would like to highlight the positive effect of the remittances dummy on wages, which is an indicator on how remittances have a positive impact on reservation wages. We observed therefore, that remittances reduces labor market participation, but also, once a worker decides to participate in the labor market, in closes the deal with a wage premium.

### 4.3 Other labor benefits

Table 4.6 show the main aggregates for working conditions in El Salvador in 2005, beyond wages. Overall, for those employed as wage laborers only 38.7% have signed a contract, the percentage is higher for women and for those receiving remittances, and it also increases with firm size. This pattern is followed in the percentage of those that are registered in Social Security, 51.8%, and that received the mandatory year-end payment (*AGUINALDO*). It is interesting that registration to social security and year-end payment increases with firm size, indicating that there are two segments in the market, those that are regulated by legislation, composed mainly by large firms, and those unregulated, mainly micro and small firms. It is worth mentioning that export oriented firms tend to be large firms, and therefore are more prone to comply with labor regulations and provide better benefits to workers. Below, using a Probit Model we test this hypothesis for social security registration and contracts, as function of individual characteristics, other control variables and industry dummies.

The remaining labor benefits, or extra payments are almost all voluntary and therefore the percentage is much smaller. About extra hours payment, the percentage is only 4.3%, which happens because the extra-hour wage rate is twice the normal wage, according to the Labor Code.

Table 4.7 presents the percentage of employed that have signed a contract or that are registered to social security (the mandatory health insurance) by industry for years 2000, 2004 and 2005. In general we do not observe major changes over time in the shares of workers with signed contract or with registration to social security across industries. On average, for 2005, close to 20% of workers had signed contract and close to 30% were registered to social security (health insurance). However, there are large differences across industries. For instance, workers in agricultural sectors are very unlikely to be registered in social security or to sign a contract, similarly for those in husbandry and fishing and women working as maids (domestic service); construction and sales workers with signed contracts and social security are below average. On the other hand, other manufacturing, textile and apparel sector have above average percentage of workers with signed contracts and social security registration. Furthermore, workers and four key non-tradable goods sectors enjoy more possibilities for signed contracts and registration to social security, those are utilities, education, public administration and financial services.

To test whether this differences are due to differences in workers characteristics, or differences in industry characteristics, we present Probit estimations for signing a contract, or registration to social security, as a function of individual characteristics,

such as education, age and sex, other control variables, such as area of residence (urban dummy), public sector dummy, and whether a worker's household receive remittances, and industry dummies.

Table 4.8 present the results for 2000, 2004 and 2005. We observe that control variables have similar impact as in wages. The likelihood of signing a contract and participate in social security insurance increases with age, education, in urban areas, working in the public sector. On the other hand, women have less access to signing a contract or to participate in social security insurance. However, remittances have an unexpected sign, and different from the one obtained in wage regression, that is, instead of increasing labor conditions (contracts or social security registration) like wages, those receiving remittances are less likely to signed a contract or the receive social security registration. This requires further exploration, but, one possibility is that those receiving remittances are better able to negotiate a higher wage, while on the other hand, are less demanding regarding health insurance or other type of security, because remittances are in a way a mean of diversifying risk, and in case of need, the sending relative can provide a sort of insurance. This could be an explanation, why employers are willing to pay a premium to those receiving remittances, with the trade off that on average the employer reduces the cost of hiring a worker by not contributing to social security health insurance.

About industry differences, after controlling for the aforementioned variables, the pattern is similar as to what was mentioned before. Workers in public administration, in utilities, financial intermediation, other manufacturing have higher chances of signing a contract and of registering to social security health insurance. For the case of the apparel industry, the story changes with respect to uncontrolled differences, but makes it more consistent with the analysis. While there was a positive impact on the probability of signing a contract and registering to social security in 2000, the sign of the marginal effect (discrete change) turns negative in 2005 for signing a contract and negative for 2004 for social security registration, reflecting the expiration of the Multifiber Agreement, and providing evidence how this structural change in the international market of apparel is having a negative impact on Salvadoran workers in the sector.

#### **4.4 Working environment**

The 2005 survey introduced a new question, for the first time in the EHPM surves, about physical conditions in the place of work, whether there is dust, smog, gas emissions, noise, extreme temperatures, with dangerous machinery, underground or heights activities, insufficient lightening, with chemicals or caring heavy load, and others not specified. Table 4.9 shows the outcomes by industry. The negative labor condition that is more typical are dusty conditions in the work place, with 41.8% of workers, this is specially high for construction workers, as expected. O the other hand, the percentage is lower in financial intermediation, and textile and garments sectors, close to 28%, showing they enjoy better conditions on average. The extreme case for dusty conditions, is fishing, with only 6.2%.

Focusing in the apparel sector, they have better working place than the average in aspects regarding dust, smog, gas emissions and carrying of heavy load or working with chemicals. On the other hand, more than the average of the percentage of

workers declared to be in a noisy place, working with dangerous machinery, with insufficient lightening. The percentage of workers complaining about extreme temperatures in the apparel sector is not different from the mean. These characteristics is what one would expect in this type of industry. Also, we note than on other, not specified negative working condition, apparel and textile industries have the largest percentages, well above the other industries and the average; this suggest there is an additional condition that should be further investigated which is special to this industry.

Table 4.10 present the marginal effect of belonging to a particular industry in the probability of working in an environment with some of these negative features, marginal effects were calculated after controlling for age, education, and a female dummy. The omitted sector was other manufacturing industry. The outcomes are similar to the uncontrolled differences. For instance, in the apparel sector, the problems that are mentioned more often than in the other manufacturing industry are noise environment, use of dangerous machine, bad illumination and “other”. The latter seems to be important for apparel and textile industries, but the survey does not allow to identified the problem.

## 5. Conclusions

Globalization in El Salvador is mainly characterized by important efforts in trade liberalization, export promotion, and an attractive legal framework for FDI. At the same time, outward migration has been a widespread phenomenon in El Salvador, to the point that remittances play an important role in macroeconomic conditions and in individual decision making processes. Remittances may affect labor demand, and, by extension, working conditions, by increasing the reservation wage and by raising the prices of nontradeables relative to tradeable goods.

In terms of the maquila sector, globalization exhibits several distinct periods. During the 1990s, as liberalization progressed, the maquila sector expanded. Since 2000, the maquila sector leveled out and in 2004 began to contract given the expectation for elimination of the Multifiber Agreement. This paper has shown that previous to the expiration of the Multifiber Agreement, wage differential for the apparel sector was positive with respect to total average and maintained a positive trend, as well as the share of employment. On the other had, starting in 2004 the trend changed, and employment share decreased as well as the inter industry wage differential. Regarding other working conditions, econometric results show that in the apparel sector the percentage of workers with signed contract or with registration to the social security health care insurance was above average, after controlling for age, education, sex, public sector and remittances. This advantage does not declined during the falling years of maquila export, that is 2004 and 2005, indication that those keeping their jobs in the sector still enjoy this advantages as compared to working in other sectors, mainly because it is a regulated sector, dominated by large exporting firms.

Other conclusion is that, at the same time, employment in agriculture declined, suggestion a shift that may have represented an improvement in working conditions during the rising period of the maquila sector.

Regarding the impact of remittances in labor market in El Salvador, using a model of sample selection we were able to show that remittances has a negative impact on labor

market participation, and that those that decide to work as wage labor, manage to obtain larger wage, suggesting that remittances have a positive impact on reservation wages. However, when we tested for the impact of remittances on other working conditions, such as signing a contract or registering to social security, we found receiving remittances reduced the likelihood of receiving these benefits. A plausible explanation for this, from the perspectives of workers is that remittances are a sort of insurance, and diversification of risk, therefore they are less demanding on signing a contract or registering to social security. From the perspective of employers, they compensate the higher wages paid to workers with remittances, with lower benefits in terms of registration to social security.

## REFERENCES

- Alas de Franco, Carolina. 2002. "Política comercial y evolución del sector exportador durante los noventa en El Salvador". Serie de Investigación No. 2. FUSADES, DEES.
- Cox-Edwards, Alejandra. 2000. "Alternativas de política económica para agilizar la creación del empleo". Capítulo 3 en FUSADES (2000), pages 95-146.
- Cox-Edwards, Alejandra and Rodríguez Oreggia, Eduardo. 2006. "The effect of remittances on labor force participation: An analysis based on Mexico's 2002 ENET".
- FUSADES (1989) "Hacia una economía de mercado en El Salvador: Bases para una nueva Estrategia de Desarrollo Económico y Social", Departamento de Estudios Económicos y Sociales, El Salvador.
- FUSADES (2000) "Crecimiento con participación: una estrategia de desarrollo para el Siglo XXI", Volume II, Departamento de Estudios Económicos y Sociales.
- Hausmann, Ricardo, Rodrik, Dani and Velasco, Andrés. 2005. "Growth Diagnostics" Mimeo.
- Heckman, James J. 1979. "Sample Selection Bias as a Specification Error" *Econometrica* 47, 153-161.
- Inter American Development Bank. 2004. "Good Jobs Wanted: Labor Markets in Latin America", Social and Economic Progress in Latin America and the Caribbean, 2004 Report. 311 pp. Washington D.C.
- Rivera Campos, Roberto (2000) "La economía salvadoreña al final del siglo: Desafíos para el futuro", FLACSO-El Salvador.
- Pages, Carmen and Alejandro Micco (2006) "The Economic Effects of Employment Protection Laws," paper presented at the IZA/The World Bank Conference on Employment and Development, 25-27 May, Berlin.
- Robbins, Donald and T. H. Gindling (1999) "Trade Liberalization and Relative Wages for more Skilled Workers in Costa Rica," *Review of Development Economics* 3(2): 140-154.
- Robertson, Raymond (2007) "Globalization and Working Conditions: A Guideline for Country Studies". Macalester College. DRAFT
- Robertson, Raymond (2005) "Has NAFTA Increased Labor Market Integration between the United States and Mexico? *The World Bank Economic Review* 19: 425-448.

Robertson, Raymond (2004) “Relative Prices and Wage Inequality: Evidence from Mexico” *Journal of International Economics* **64**, 2:387-409.

Williamson, Jeffrey (2005). “Las migraciones en masa, los mercados mundiales de capitales y las transiciones demográficas”, Cuadernos Económicos de ICE No. 70, pages 11-24.

World Bank (1996). “El Salvador: meeting the challenge of globalization”, A World Bank Country Study. Washington D.C.

Figure 2.1

**Risk Ratings: El Salvador and other countries from the region (2005)**

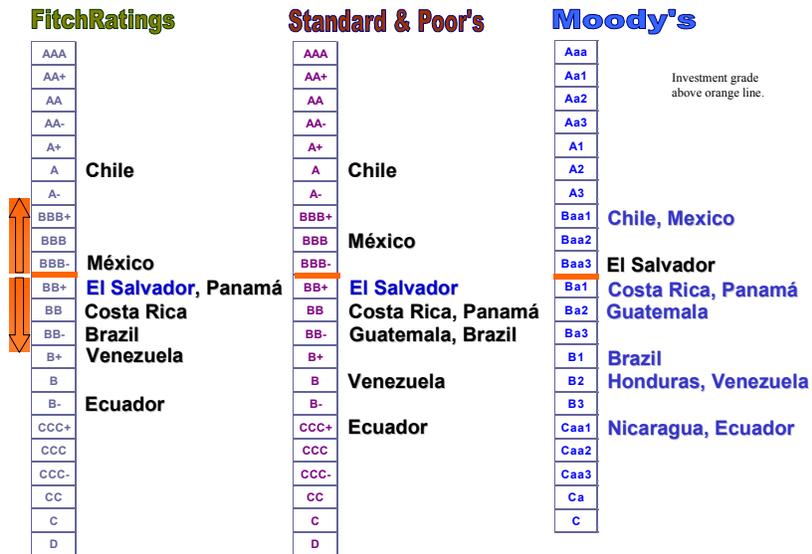
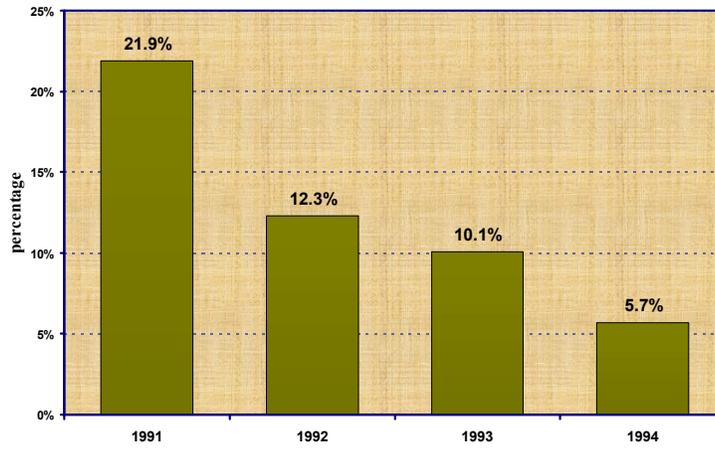


Figure 2.2

**El Salvador: Average Tariff 1989-1994**



Source: Alas de Franco (2002).

Figure 2.3

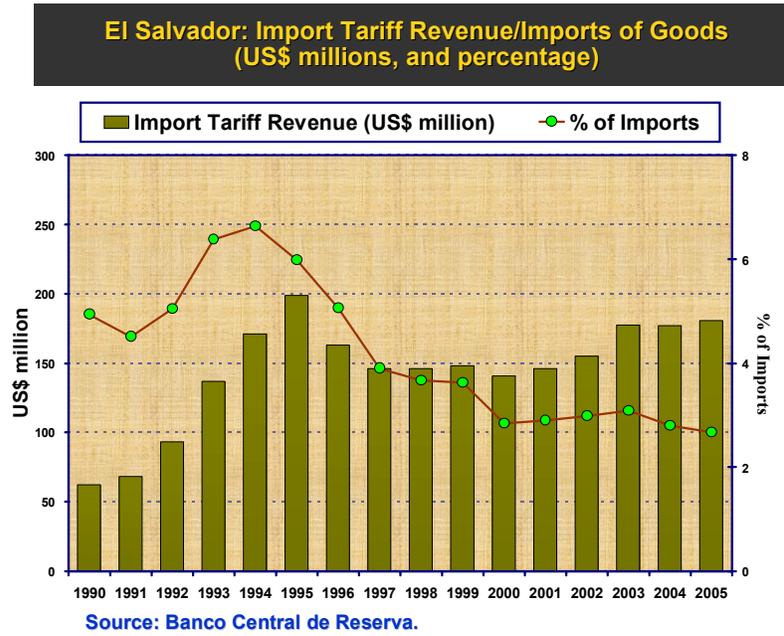


Figure 2.4

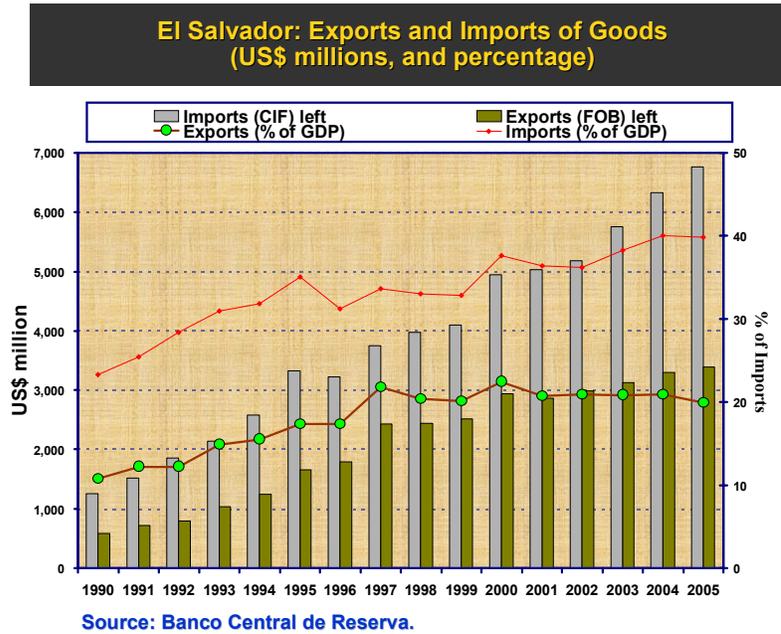
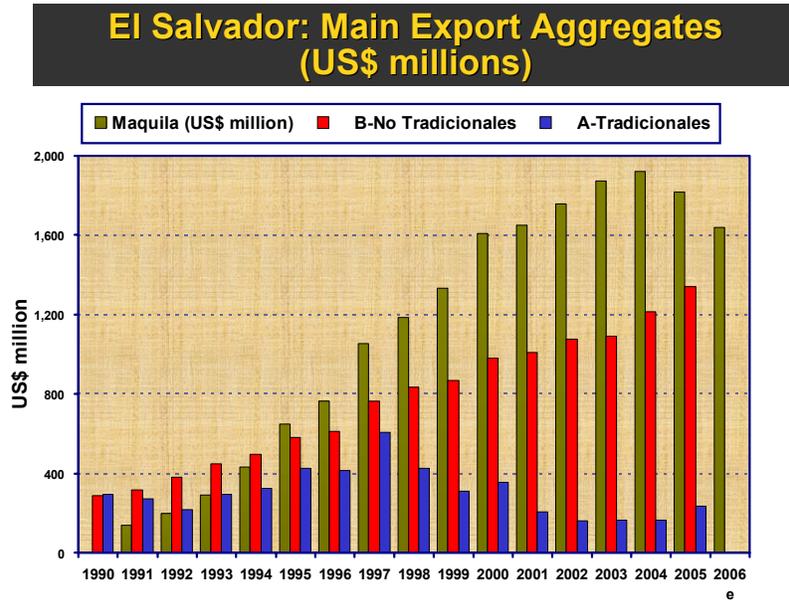


Figure 2.5



Source: Banco Central de Reserva.

Figure 2.6

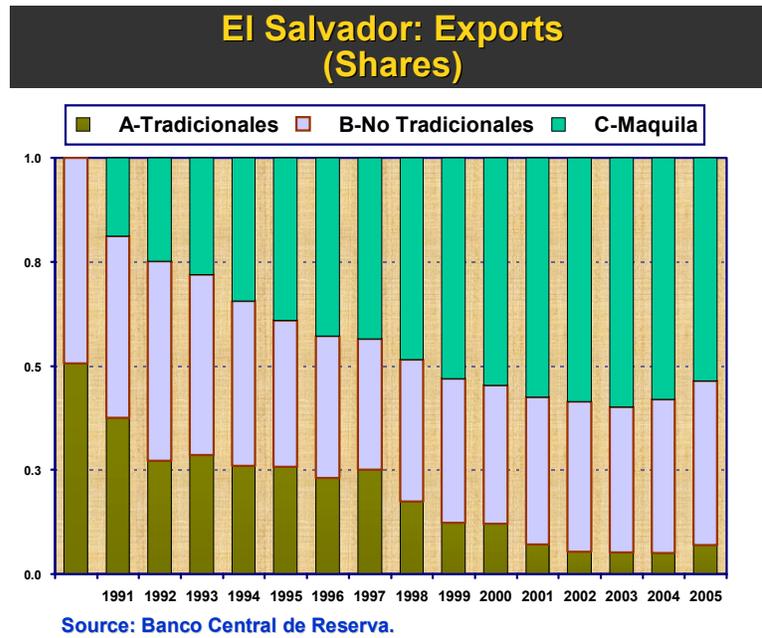
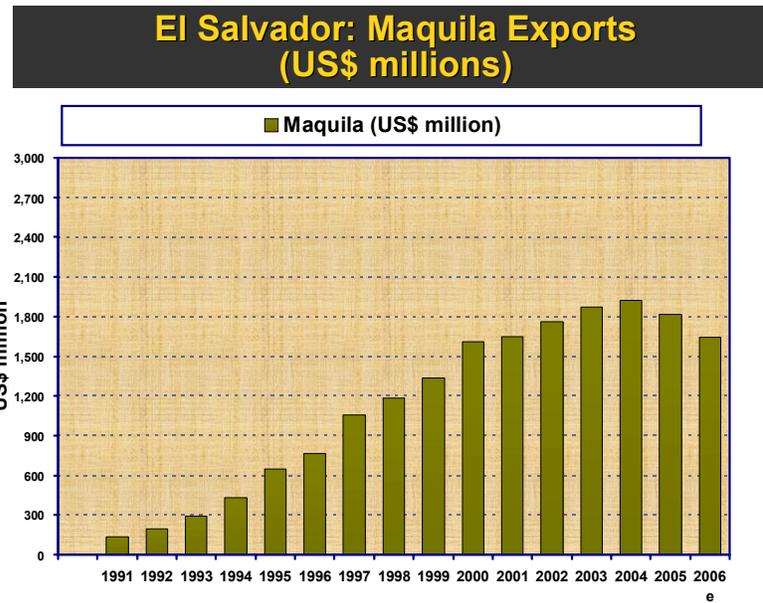


Figure 2.7



Source: Banco Central de Reserva.

Figure 2.8

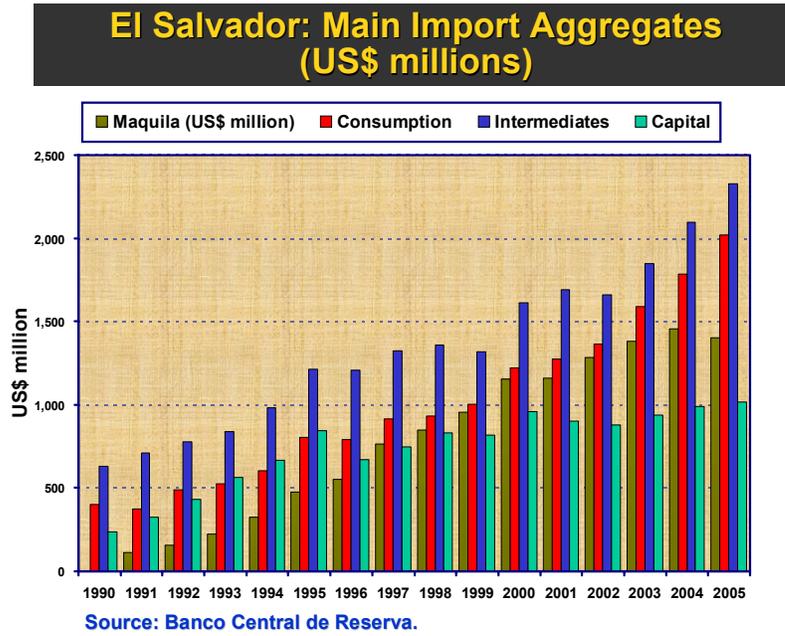
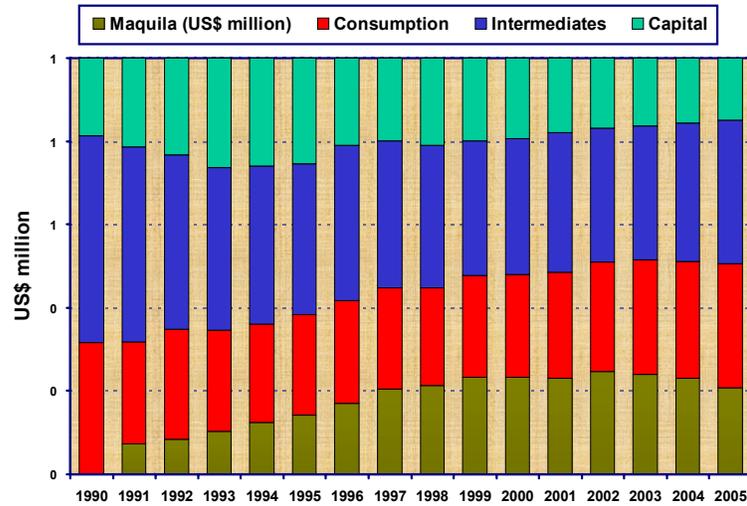


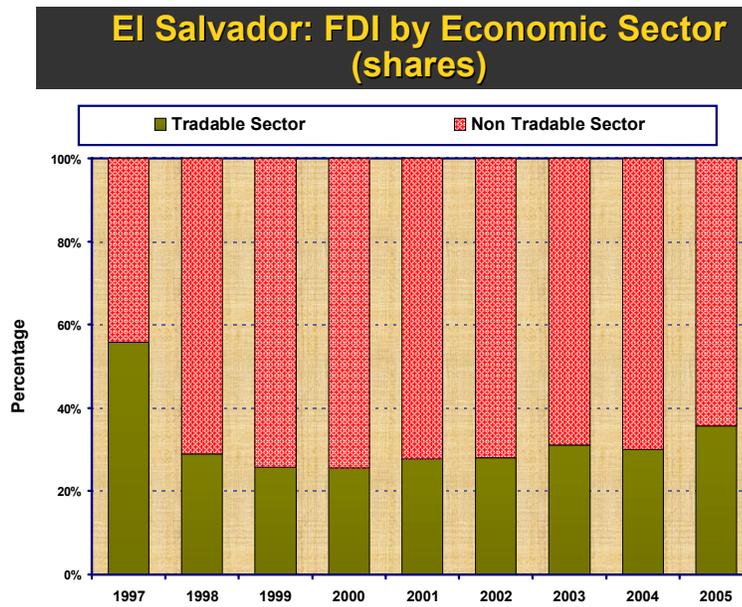
Figure 2.9

### El Salvador: Main Import Aggregates (shares)



Source: Banco Central de Reserva.

Figure 2.10 FDI by Economic Sector 1997-2005 (shares)



Source: Banco Central de Reserva.

Figure 2.11 Remittances 1990-2006 (US\$ millions and % of GDP)

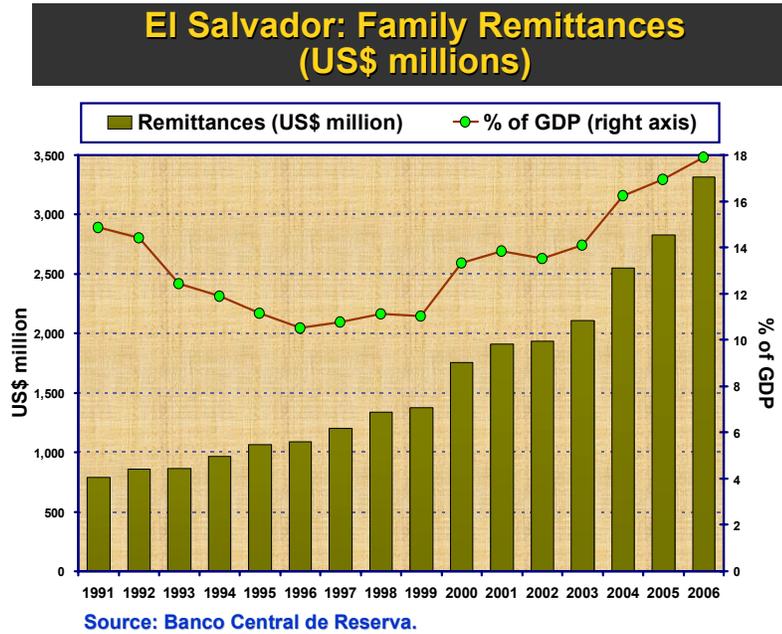
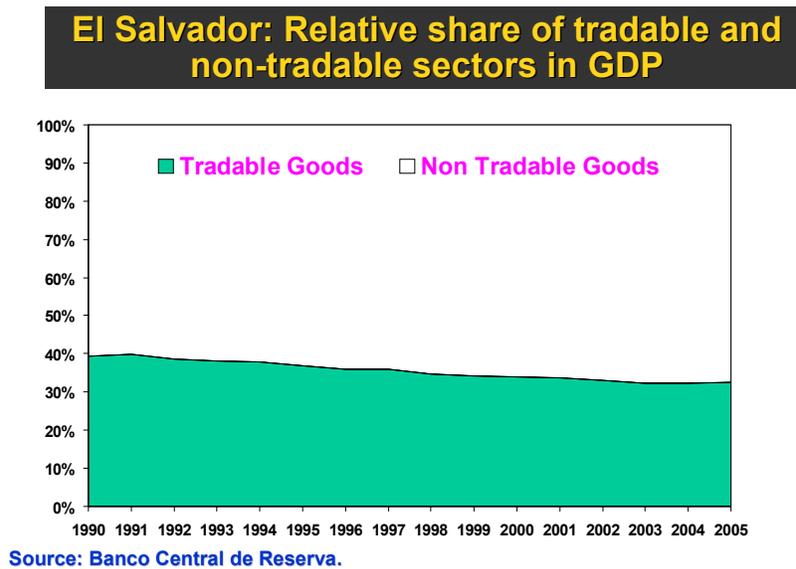
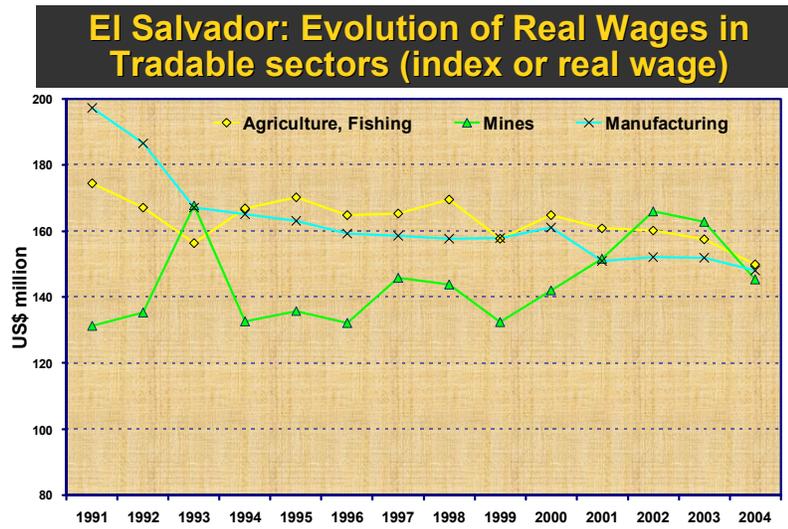


Figure 2.12: El Salvador: Relative share of tradable and non-tradables sectors in GDP

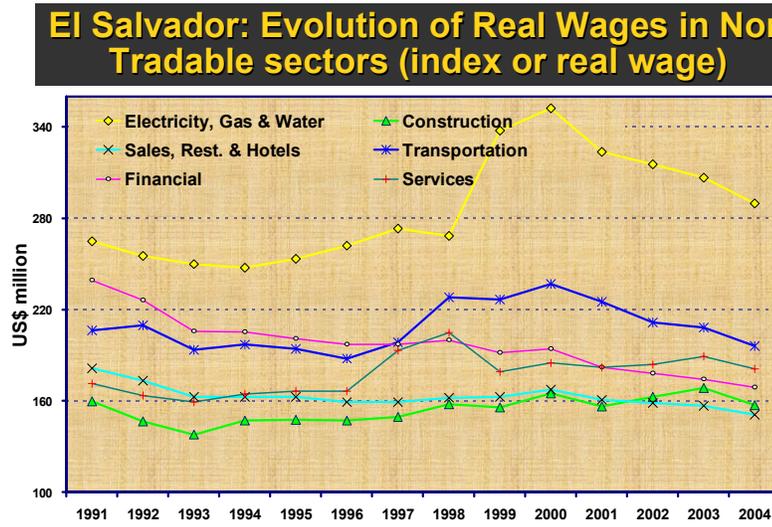


**Figure 2.13: Evolution of real wages in tradable sector**



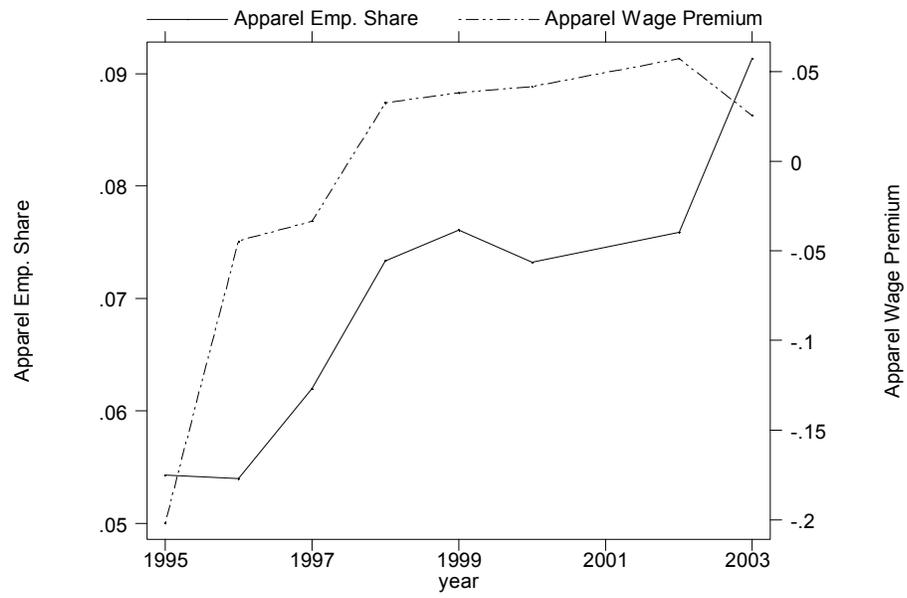
Source: Banco Central de Reserva.

**Figure 2.14: Evolution of real wages in non tradable sector**

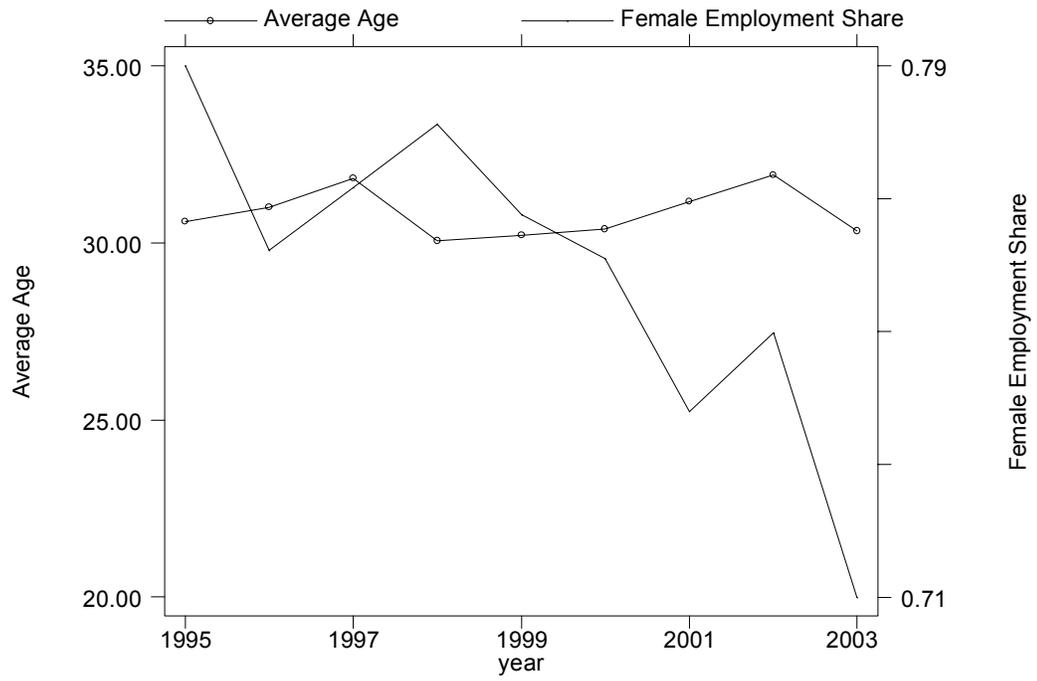


Source: Banco Central de Reserva.

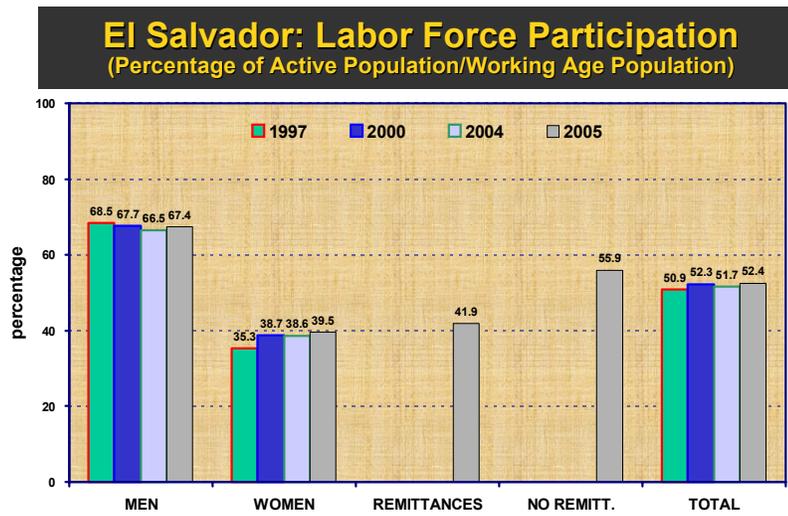
**Figure 3.1 Apparel Employment Share and Wage Premium 1995-2003**



**Figure 3.2 Average Age and Female Employment Share in Apparel**

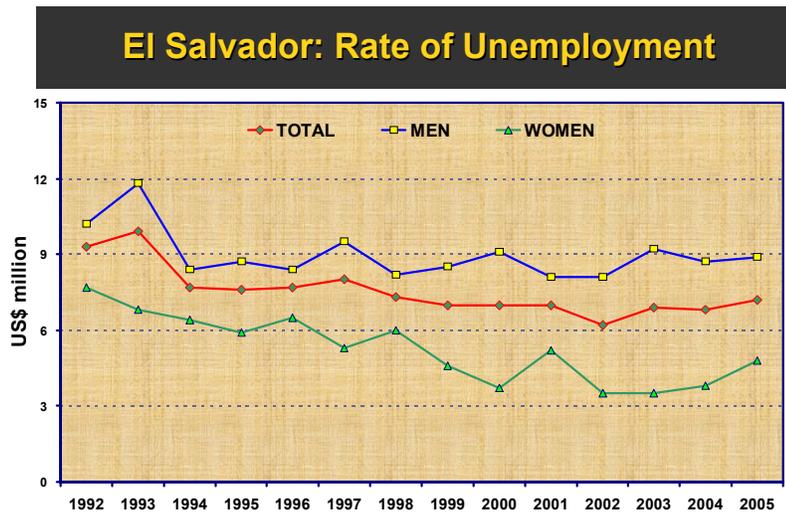


**Figure 4.1 Percentage of Active Population over Working Age Population**



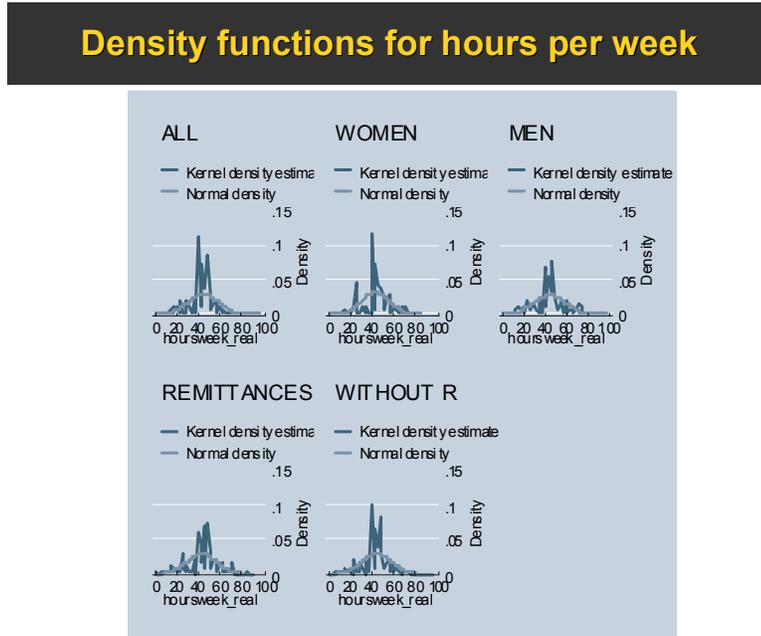
Source: EHPM, DIGESTYC.

**Figure 4.1 El Salvador: Rate of Unemployment by Sex, 1992-2005**

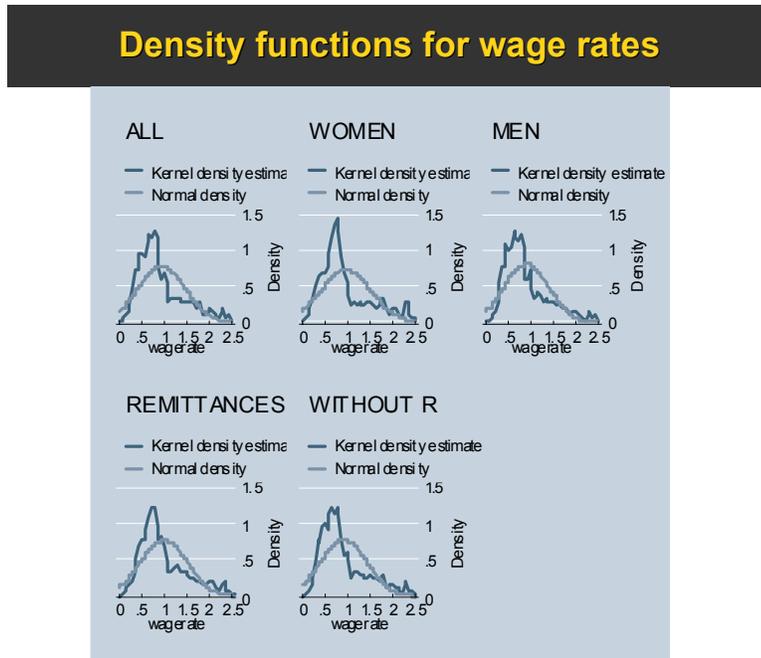


Source: EHPM, DIGESTYC.

**Figure 4.4 El Salvador: Distribution of hours per week for employed population 2005**



**Figure 4.5 El Salvador: Distribution of wage rate per hour for employed population 2005**



**Table 2.1****El Salvador: Tariffs Reduction 1989-1994**

Year	Number of "tramos"	Tariffs
1989 Before September	25	0-290
1989 September	9	1, 5, 10, 25, 30, 35, 40, 50
1990 April	6	5, 10, 20, 25, 30, 35
1991 June	5	5, 10, 20, 25, 30
1991 December	4	5, 10, 20, 25
1992 March	5	5, 10, 20, 25, 30
1994 December	4	5, 10, 15, 20

Source: World Bank, "Meeting the Challenge of Globalization".

**Table 2.2****El Salvador: Free Trade Agreements With Other Countries.**

<b>Free Trade Agreements</b>	<b>Signed</b>	<b>Rattified</b>	<b>Published</b>	<b>Effective</b>
Mexico	Jun-00	Dic-00	Dic-00	Mar-01
Chile	Oct-99	Oct-01	Nov-01	Jun-02
República Dominicana				Oct-01
Panamá	Mar-02	Oct-02		Abr-03
Estados Unidos	Ago-04			Mar-06

In negotiation Canada, Taiwan, Colombia, European Union.

Source: Ministerio de Economía.

**Table 2.3**

**Foreign Direct Investment By Country of Origin**  
Saldos anuales y trimestrales  
US\$ Millions

PAÍS	1998	1999	2000	2001	2002	2003	2004/1	Ene/Mzo.	
								2005/2	2006/2
EEUU	463.4	606.3	715.8	822.7	880.1	950.1	1015.5	876.5	878.0
Venezuela	296.9	296.9	309.5	309.5	309.5	309.5	309.5	309.5	309.5
Francia	208.9	212.9	212.9	214.5	214.7	214.7	5.8	5.8	5.8
Chile	91.2	91.2	91.3	91.5	91.5	91.7	92.2	87.7	107.4
México	80.5	66.7	66.7	69.0	72.7	84.7	616.3	647.8	647.8
Panamá	66.0	72.6	79.6	85.6	100.7	102.3	105.1	144.5	216.7
España	29.3	68.4	68.4	120.5	159.0	161.4	194.9	195.2	195.2
Bahamas	63.0	64.5	64.8	65.2	71.4	72.8	74.2	68.6	68.6
Alemania	41.9	41.9	44.0	75.7	78.7	84.8	84.9	89.4	92.1
Costa Rica	25.4	42.5	47.6	63.3	69.6	70.3	70.4	67.4	67.4
Singapur	32.1	32.1	32.1	32.1	32.1	32.2	32.5	36.5	37.3
Holanda	26.1	26.1	32.2	32.2	34.8	39.1	39.1	55.0	56.3
Perú	17.1	22.2	22.2	22.3	22.3	22.3	22.3	22.3	22.9
Nicaragua	15.4	17.6	20.7	25.0	32.9	33.2	33.2	21.3	21.3
Ecuador	21.0	21.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Canadá	14.2	17.3	17.7	44.6	45.8	46.6	56.6	130.3	153.2
Guatemala	10.7	15.2	25.5	32.0	38.7	48.2	52.1	70.4	76.2
Aruba	14.6	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Corea del Sur	12.2	12.9	14.5	14.9	14.9	22.9	23.8	26.0	22.1
Suiza	11.7	11.7	11.7	11.7	11.7	11.7	15.6	16.8	16.8
Japón	11.2	11.2	11.3	14.0	14.2	14.2	14.2	14.2	14.2
Bermudas	10.6	10.6	10.6	10.6	10.6	11.2	12.4	12.3	12.3
Taiwán	3.6	5.3	27.2	40.2	42.1	56.9	57.5	58.6	58.6
Inglaterra	4.8	4.8	6.4	6.4	6.4	6.4	7.4	8.2	9.4
Honduras	4.7	4.7	6.5	9.3	9.3	19.4	21.0	21.6	21.8
Islas Británicas	4.2	4.2	4.2	4.2	23.1	29.2	56.2	356.2	356.2
Italia	3.3	0.0	0.0	0.0	26.6	26.6	26.6	26.6	26.6
Israel	0.0	0.0	0.0	0.0	8.5	10.4	22.9	1.0	1.5
Otros	0.0	4.0	5.9	11.0	14.0	19.9	27.2	27.0	29.5
	1,583.9	1,799.7	1,973.1	2,252.1	2,460.0	2,616.5	3,113.1	3,420.2	3,548.5
Préstamos entre empresas de inversión extranjera	n.d.	n.d.	n.d.	n.d.	673.6	686.2	659.4	752.7	820.2
<b>Total</b>	<b>1,583.9</b>	<b>1,799.7</b>	<b>1,973.1</b>	<b>2,252.1</b>	<b>3,133.6</b>	<b>3,275.4</b>	<b>3,655.5</b>	<b>4,172.9</b>	<b>4,368.7</b>

1/ Cifras revisadas

2/ Cifras Preliminares

Fuente: Departamento de Balanza de Pagos; Banco Central de Reserva

Los datos reportados corresponden a acciones y participaciones de capital y utilidades reinvertidas de las empresas de inversión extranjera directa, no incluyen préstamos que las empresas de inversión extranjera adeudan a su casa matriz o filiales

Table 2.4

El Salvador: Foreign Direct Investment (position data)									
US\$ Millions									
	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>INVERSION EXTRANJERA TOTAL</b>	<b>480.1</b>	<b>1,583.9</b>	<b>1,799.7</b>	<b>1,973.1</b>	<b>2,252.1</b>	<b>3,133.6</b>	<b>3,275.4</b>	<b>3,655.5</b>	<b>4,172.9</b>
<b>Equity Capital and Reinvested Earnings</b>	<b>480.1</b>	<b>1,583.9</b>	<b>1,799.7</b>	<b>1,973.1</b>	<b>2,252.1</b>	<b>2,460.0</b>	<b>2,589.2</b>	<b>2,996.1</b>	<b>3,420.2</b>
1 Industry	196.4	286.9	304.6	336.5	401.1	447.8	496.1	536.9	853.5
1.1 Manufacturing	196.4	286.9	304.6	336.5	401.1	447.8	496.1	536.9	853.5
2 Sales	106.0	124.6	142.0	169.1	190.2	225.9	239.2	278.3	305.0
3 Services	54.1	60.3	66.0	70.0	90.0	109.4	110.9	110.8	125.2
4 Construction	11.1	11.1	11.8	12.2	12.3	12.3	12.4	12.4	12.4
5 Communications	3.5	254.5	288.6	291.0	352.6	401.2	411.3	746.0	793.8
5.1 Telecommunications	1.2	251.1	285.1	287.4	338.4	379.3	386.8	722.3	766.1
5.2 Others	2.4	3.5	3.5	3.6	14.2	21.8	24.4	23.7	27.8
6 Electricity	0.0	598.4	723.5	806.9	821.5	848.2	848.2	800.2	712.3
6.1 Generators	0.0	3.4	128.5	199.0	213.6	240.3	240.3	192.4	104.4
6.2 Distributors	0.0	595.0	595.0	607.9	607.9	607.9	607.9	607.9	607.9
7 Agriculture and Fishing		21.0	21.0	10.0	40.0	48.5	46.8	68.6	67.1
7.1 Agriculture				0.0	0.0	8.5	5.7	2.3	1.1
7.2 Fishing		21.0	21.0	10.0	40.0	40.0	41.1	66.3	66.0
8 Mines and "Canteras"	14.0	15.6	0.0	0.0	0.0	0.0	0.0	0.0	1.5
9 Financial	37.8	77.2	104.6	120.4	161.8	173.9	161.1	148.1	250.4
9.1 Pension Fund Managers		13.5	14.5	14.5	20.3	20.5	25.4	2.5	2.5
9.2 Banks	37.8	60.3	82.0	97.8	132.2	143.8	128.0	139.3	241.5
9.3 Insurance		3.4	7.9	7.9	9.0	9.4	9.4	7.9	8.1
9.4 Credit Cards			0.3	0.3	0.3	0.3	-1.7	-1.7	-1.7
10 Maquila	57.2	134.4	137.6	156.9	182.6	192.7	263.3	294.7	298.9
10.1 Apparel	31.6	104.1	107.3	126.0	151.7	161.8	232.4	263.8	263.1
10.2 Electronic Chips	25.6	30.2	30.2	30.8	30.8	30.8	30.8	30.8	34.8
10.3 Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
	480.1	1,583.9	1,799.7	1,973.1	2,252.1	2,460.0	2,589.2	2,996.1	3,420.2
Change over previous year		1,103.7	215.8	173.4	279.0	207.9	129.2	406.9	424.1
<b>Intercompany Transactions</b>						673.6	686.2	659.4	752.7
	480.1	1,583.9	1,799.7	1,973.1	2,252.1	3,133.6	3,275.4	3,655.5	4,172.9

Source: Banco Central de Reserva

**Table 3.1 Sample Characteristics for Employed Workers**

Year	Freq.	Mean Age (years)	Female Share	Mean Education (years)
1995	10,703	33.97	41.53%	7.20
1996	10,863	34.28	40.96%	7.36
1997	7,859	33.72	38.40%	8.08
1998	9,746	31.82	37.88%	8.21
1999	13,736	31.31	36.13%	7.90
2000	14,009	32.14	35.61%	8.18
2001	9,973	32.93	34.99%	7.76
2002	12,820	33.16	36.56%	8.10
2003	12,769	32.54	36.89%	7.53
2004	12,467	31.95	29.89%	7.98
2005	12,721	32.51	30.72%	8.25

**Table 3.2 Industry Employment Shares**

INDUSTRY	TOTAL					
	1995	2000	2003	2004	2005	
Sales	22.2	26.3	27.4	29.3	29.5	
Ag Food	25.0	20.8	17.4	18.4	16.1	
Social Services	5.3	6.7	6.0	6.8	6.9	
Construction	6.8	5.1	7.1	6.4	5.7	
Food Bev	6.1	5.8	5.2	5.3	5.6	
Mfg Other	5.3	5.4	4.3	5.1	5.0	
Financial Interm.		3.8		4.1	4.7	
<b>Apparel</b>	<b>4.6</b>	<b>6.0</b>	<b>6.6</b>	<b>5.5</b>	<b>4.7</b>	
Transport	4.3	4.7	4.4	5.0	4.7	
Domestic Service		4.3		4.7	4.3	
Public Admin.	4.1	5.3	3.9	3.9	3.9	
Education		3.0		3.4	3.8	
Ag Other	2.1	0.1	1.6	0.0	3.4	
Textile	2.1	1.0	0.7	0.5	0.5	
Husb. & Fishing	1.3	0.7	1.5	0.7	0.5	
Utilities	0.2	0.4	0.1	0.4	0.3	
Wood	0.5	0.5	0.6	0.3	0.3	
Mining	0.1	0.1	0.1	0.1	0.1	
Others		0.1		0.0	0.0	
INDUSTRY	MEN			WOMEN		
	2000	2004	2005	2000	2004	2005
Sales	17.9	20.3	20.8	38.5	42.3	41.7
Ag Food	32.7	29.0	24.7	3.6	3.2	4.0
Social Services	3.6	4.4	4.4	11.1	10.3	10.5
Construction	8.5	10.6	9.5	0.2	0.5	0.2
Food Bev	4.0	3.5	4.1	8.4	8.1	7.8
Mfg Other	7.3	6.8	6.8	2.6	2.5	2.5
Financial Interm.	4.4	5.0	5.5	2.9	2.7	3.6
<b>Apparel</b>	<b>2.5</b>	<b>2.8</b>	<b>2.0</b>	<b>11.1</b>	<b>9.5</b>	<b>8.6</b>
Transport	7.3	7.5	7.2	0.9	1.3	1.1
Domestic Service	0.5	0.7	0.7	9.9	10.5	9.3
Public Admin.	6.3	4.9	4.7	3.9	2.4	2.7
Education	1.9	2.0	2.1	4.6	5.5	6.1
Ag Other	0.1	0.0	5.3	0.0	0.0	0.7
Textile	0.6	0.5	0.5	1.6	0.5	0.6
Husb. & Fishing	1.1	1.0	0.9	0.1	0.2	0.1
Utilities	0.6	0.6	0.4	0.0	0.1	0.1
Wood	0.5	0.3	0.3	0.5	0.4	0.3
Mining	0.1	0.1	0.2	0.0	0.0	0.0
Others	0.1	0.0	0.0	0.0	0.0	0.0

**Table 3.3 Industry Employment Characteristics 2003**

Industry	Education	Female	Age
Ag Food	3.37	11.42%	33.82
Ag Other	4.67	10.31%	31.09
Husb. & Fishing	4.54	6.58%	30.82
Textiles	8.06	28.93%	33.44
Mining	4.91	8.70%	30.09
Food Bev Tob	7.13	36.57%	31.68
<b>Apparel</b>	<b>8.13</b>	<b>70.50%</b>	<b>27.94</b>
Wood	3.16	34.62%	34.23
Mfg Other	8.01	17.16%	30.73
Utilities	11.56	14.81%	33.63
Construct	5.75	3.31%	33.50
Sales	8.13	44.23%	29.71
Transport	7.71	8.95%	32.37
FIRE	9.73	31.37%	33.86
Public Admin	10.37	25.98%	36.07
Soc Services	13.32	62.58%	36.43
Other Services	5.30	76.96%	33.34
Overall	7.53	36.90%	32.54

**Table 3.4: Inter Industry Wage Differential in 2000, 2004 and 2005  
With Demographic Characteristics**

	<b>2000</b>	<b>2004</b>	<b>2005</b>
Age	5.5%	3.7%	3.9%
Age Squared	-0.1%	0.0%	0.0%
Years of Education	1.3%	5.6%	5.7%
Urban dummy	18.9%	8.2%	6.9%
Female	-8.9%	-13.6%	-13.2%
Public Sector dummy	57.6%	34.1%	37.1%
Remittances dummy	1.8%	2.6%	4.5%
Ag Food	-29.3%	-13.4%	-15.4%
Ag Other	6.4%	24.8%	-8.3%
Husb. & Fishing	9.3%	30.6%	28.4%
Mining	17.3%	28.9%	24.3%
Utilities	50.4%	46.0%	33.2%
Construction	13.8%	17.0%	20.0%
Sales	-5.1%	-8.7%	-7.0%
Transport	27.5%	28.1%	21.2%
Financial Intermed.	35.0%	7.4%	4.3%
Public Admin.	16.5%	15.3%	6.5%
Education	60.2%	41.3%	38.8%
Social Services	23.1%	15.5%	14.0%
Domestic Service	-79.8%	-56.5%	-52.5%
Others	91.6%	36.6%	
Food Bev	8.9%	0.4%	0.8%
Mfg Other	14.6%	3.2%	8.2%
Textile	-17.6%	-14.4%	-9.5%
Apparel	12.4%	7.3%	7.1%
Wood	-43.1%	-41.4%	-29.5%

**Notes:** Wage differentials represent the percent (log) difference from the mean wage for each sector.

**Table 4.1: Labor Force Participation 1997-2005**

	MEN	WOMEN	ALL	NO REMI	REMITT	WOMEN		MEN	
						NO REMI	REMITT	NO REMI	REMITT
1997	68.5	35.3	50.9						
2000	67.7	38.7	52.2	54.6	42.9	40.9	30.84	69.73	58.73
2004	66.5	38.6	51.7	54.6	41.7	41.3	30.00	68.94	57.21
2005	67.4	39.5	52.4	55.9	41.9	42.8	30.48	70.44	57.33

**Table 4.2**

Table 4.1: El Salvador: Employed by economic sector in 2005

Economic Sector	Men	Women	Total	No remittances	Remittances	Distribution by Firm Size				Total
						Micro	Small	Medium	Large	
Comercio, hoteles y restaurantes	20.8	41.7	29.5	29.1	31.1	81.5	6.3	1.1	11.1	100
Agricultura, ganadería, caza y silvicol	30.0	4.7	19.5	18.5	23.4	81.3	9.7	4.0	5.1	100
Servicios comunales, sociales y salud	4.4	10.5	6.9	7.1	6.5	54.1	8.4	1.8	35.8	100
Construcción	9.5	0.2	5.7	6.0	4.4	66.2	10.8	1.7	21.3	100
Alimentos y bebidas	4.1	7.8	5.6	5.8	5.1	71.7	5.6	1.4	21.3	100
Textil y Confeccion	2.5	9.1	5.3	5.3	5.1	34.7	4.6	1.7	59.0	100
Otra Industria Manufacturera	7.0	2.8	5.3	5.5	4.1	50.0	11.1	4.2	34.8	100
Intermediación financiera e inmobiliaria	5.5	3.6	4.7	5.0	3.6	33.3	12.4	2.7	51.6	100
Transporte, almacenamiento y comunicacio	7.2	1.1	4.7	4.7	4.4	63.3	9.2	2.9	24.6	100
Hogar con servicio doméstico	0.7	9.3	4.3	4.5	3.6	0.1	0.0	0.0	99.9	100
Administración y defensa	4.7	2.7	3.9	3.9	3.8	0.8	2.5	0.4	96.3	100
Enseñanza	2.1	6.1	3.8	3.7	4.1	4.3	12.4	2.7	80.6	100
Pesca	0.8	0.1	0.5	0.6	0.4	94.9	3.4	0.0	1.8	100
Suministro de electricidad, gas y agua	0.4	0.1	0.3	0.3	0.2	8.4	2.4	0.0	89.2	100
Explot. Minas y Canteras	0.2	0.0	0.1	0.1	0.1	57.3	18.6	3.5	20.6	100
Total	100.0	100.0	100.0	100.0	100.0	61.2	7.7	2.1	29.0	100

**Table 4.3**

Table 4.2 Average hours per week in main job or activity

Economic Sector	Gender		Remittances		Firm Size				Total
	Men	Women	No	Yes	Micro	Small	Medium	Large	
Agricultura, ganadería, caza y silvicol	36.6	35.6	37.4	33.5	34.6	43.5	45.3	45.7	36.5
Pesca	32.6	22.2	31.7	32.1	31.1	44.3		37.3	31.8
Explot. Minas y Canteras	41.1	44.0	47.2	26.4	42.9	25.3	54.0	48.7	41.2
Otra Industria Manufacturera	44.0	40.1	42.9	44.6	40.6	45.4	46.8	45.6	43.1
Suministro de electricidad, gas y agua	44.2	40.4	44.1	40.5	47.1	42.2		43.3	43.6
Construcción	42.7	40.3	43.1	40.5	40.7	46.7	52.5	46.2	42.7
Comercio, hoteles y restaurantes	46.5	43.5	45.1	43.5	43.8	49.0	49.4	48.9	44.7
Transporte, almacenamiento y comunicacio	46.3	41.8	46.4	43.1	43.4	53.8	56.2	47.5	45.8
Intermediación financiera e inmobiliaria	51.1	42.2	48.4	47.2	41.5	45.8	54.1	53.0	48.3
Administración y defensa	47.4	41.3	45.9	44.6	38.8	43.7	48.6	45.7	45.6
Enseñanza	37.2	32.6	34.0	34.5	27.1	33.5	41.1	34.3	34.1
Servicios comunales, sociales y salud	42.1	33.6	36.5	37.5	30.6	40.8	52.5	44.1	36.7
Hogar con servicio doméstico	46.2	56.4	55.9	53.0	37.4			55.4	55.4
Alimentos y bebidas	44.8	36.9	40.9	37.0	36.3	45.8	54.7	51.1	40.2
Textil y Confeccion	43.3	41.5	42.6	39.4	34.0	40.4	46.0	46.5	42.0
Total	42.59	41.74	42.7	40.2	39.3	45.2	48.3	47.3	42.23

**Table 4.4**

Table 4.3: Average Wage per Hour by Sector and Sex, Remittances and Firm Size

Sector	SEX		REMITTANCES		FIRM SIZE				Total
	MEN	WOMEN	No	Yes	Micro	Small	Medium	Large	
Agricultura, ganadería, caza y silvicol	0.71	0.56	0.68	0.75	0.72	0.58	0.53	0.90	0.69
Pesca	1.86	1.59	1.77	2.27	1.24	4.23		3.26	1.85
Explot. Minas y Canteras	1.51	0.84	1.07	2.15	0.81	0.97	0.62	3.12	1.50
Otra Industria Manufacturera	1.48	1.75	1.56	1.39	1.28	1.26	1.18	1.83	1.54
Suministro de electricidad, gas y agua	1.99	2.61	2.05	2.30	1.80	2.09		2.11	2.08
Construcción	1.19	1.30	1.22	1.04	1.02	1.16	1.04	1.61	1.19
Comercio, hoteles y restaurantes	1.37	1.08	1.27	1.16	0.91	1.28	1.21	1.71	1.25
Transporte, almacenamiento y comunicacio	1.54	1.67	1.47	1.98	1.28	1.33	1.28	2.04	1.55
Intermediación financiera e inmobiliaria	1.75	1.86	1.85	1.43	1.53	1.84	1.95	1.84	1.78
Administración y defensa	2.12	3.68	2.48	2.98	1.40	1.28	0.80	2.63	2.58
Enseñanza	2.71	2.97	2.85	3.00	1.19	1.73	1.08	3.18	2.88
Servicios comunales, sociales y salud	2.40	1.91	2.17	1.99	2.01	2.07	2.88	2.15	2.13
Alimentos y bebidas	1.77	0.91	1.48	1.46	0.71	0.99	1.02	2.22	1.48
Textil y Confeccion	1.44	0.93	0.99	1.56	0.63	1.75	0.94	1.08	1.08
Total	1.43	1.67	1.49	1.63	0.99	1.24	1.09	2.02	1.51

**Table 4.5: Heckman's Selection Model for Wages**

	2000		2004		2005	
	Coef.	z	Coef.	z	Coef.	z
logwage						
Years of Education	-0.01	-0.91	0.06	11.33	0.06	11.23
Age	0.01	0.67	0.01	0.77	0.02	1.09
Age Squared	0.00	-0.25	0.00	-0.19	0.00	-0.48
Urban dummy	0.34	27.55	0.12	11.13	0.10	9.05
Public Sector dummy	0.87	55.21	0.52	32.21	0.50	30.31
Female	0.10	1.14	-0.12	-1.4	-0.11	-1.47
Remittances dummy	0.17	4.39	0.10	2.67	0.12	3.43
_cons	2.03	4.63	-0.76	-1.78	-0.79	-2.03
select						
Female	-0.67	-51.54	-0.72	-54.99	-0.72	-55.12
Remittances dummy	-0.27	-15.75	-0.31	-19.15	-0.34	-21.04
Age	0.10	51.97	0.12	62.41	0.13	65.2
Age Squared	0.00	-51.69	0.00	-59.52	0.00	-61.91
Years of Education	0.07	42.52	0.05	33.32	0.05	37.88
_cons	-2.18	-66.48	-2.51	-75.35	-2.67	-78.32
mills						
lambda	-0.72	-3.95	-0.33	-2.03	-0.30	-2.14
rho	-0.82		-0.52		-0.47	
sigma	0.88		0.63		0.65	
lambda	-0.72		-0.33		-0.30	

**WEIGHTED ONE STEP MODEL**

	2000		2004		2005	
	Coef.	z	Coef.	z	Coef.	z
logwage						
Years of Education	0.02	10.22	0.07	0	0.08	21.07
Age	0.06	19.28	0.03	0	0.04	5.52
Age Squared	0.00	-16.84	0.00	0.011	0.00	-4.4
Urban dummy	0.41	28.24	0.14	0	0.10	6.02
Public Sector dummy	0.85	39.13	0.53	0	0.46	18.33
Female	-0.20	-11.39	-0.22	0	-0.22	-5.48
Remittances dummy	0.06	2.74	0.07	0.015	0.06	2.27
_cons	0.45	7.18	-1.35	0	-1.61	-7.72
select						
Female	-0.66	-38.94	-0.71	0	-0.70	-38.59
Remittances dummy	-0.26	-11.54	-0.30	0	-0.32	-15.12
Age	0.11	30.95	0.13	0	0.14	33.61
Age Squared	0.00	-27.97	0.00	0	0.00	-29.02
Years of Education	0.07	31.88	0.04	0	0.05	26.71
_cons	-2.23	-45.38	-2.51	0	-2.78	-46.35
/athrho	-0.07	-2.52	-0.20	0.191	-0.06	-0.48
/lnsigma	-0.43	-39.21	-0.54	0	-0.50	-32.44
rho	-0.07		-0.20		-0.06	
sigma	0.65		0.58		0.61	
lambda	-0.04		-0.12		-0.03	
Wald test of	indep. eqns	6.33	indep. eqns	1.71	indep. eqns	0.23

**Table 4.6:****Table 4.4: Working conditions and benefits for wage laborers in El Salvador**

Working conditions or benefits			REMITTANCES		FIRM SIZE				ALL
	MALE	FEMALE	NO	YES	MICRO	SMALL	MEDIUM	LARGE	
Percentage of Workers that:									
Signed Contract	32.1	52.5	38.3	40.6	38.7	24.4	31.6	69.4	38.7
Registered in Social Security	43.7	68.5	51.2	54.7	10.1	46.0	50.2	85.1	51.8
Received payment for end of year holiday	39.5	64.9	47.4	49.6	13.7	42.7	49.0	74.8	47.8
Received Payment for vacations	11.1	18.3	13.4	13.5	2.6	16.1	15.5	20.6	13.4
Received payment for food or refreshments	8.4	14.7	10.6	9.7	17.0	8.0	7.2	6.5	10.4
Received payment for uniform	8.8	11.2	9.4	10.5	0.9	6.0	9.4	17.2	9.6
Received payment for bonus or commissions	5.7	10.3	6.6	10.0	1.4	7.1	5.9	11.7	7.2
Received payment for extra hours	3.3	6.2	4.2	4.5	0.5	1.7	4.2	7.8	4.3
Received payment for transportation	1.8	1.6	1.7	2.1	0.5	2.3	1.4	2.6	1.8
Received payment for housing	1.3	0.5	1.1	0.7	1.4	1.2	1.0	0.7	1.0
Received payments in kind	0.9	0.7	0.9	0.8	0.6	0.7	1.4	1.0	0.9
Received payment for private health insuranc	0.0	0.1	0.0	0.1	0.0	0.0	0.3	0.1	0.0

**Table 4.7: Percentage of employed with signed contract and with social security by industry**

INDUSTRY	Percent with signed contract			Percent with social security		
	2000	2004	2005	2000	2004	2005
Ag Food	1.2	0.9	0.6	2.7	2.3	1.4
Ag Other	12.2	0.0	4.7	37.5	0.0	6.6
Husb. & Fishing	0.9	5.8	0.9	2.9	9.5	1.0
Mining	15.9	15.2	11.9	29.3	37.7	25.6
Utilities	39.8	35.0	78.7	86.6	84.2	90.4
Construction	11.1	8.0	10.8	26.1	18.0	19.0
Sales	<b>8.6</b>	<b>7.8</b>	<b>9.3</b>	<b>18.2</b>	<b>19.3</b>	<b>18.0</b>
Transport	14.0	13.3	17.1	28.7	29.4	30.0
Financial Interm.	37.4	32.2	42.7	66.3	65.4	67.8
Public Admin.	40.5	28.3	96.5	91.1	90.6	90.4
Education	42.6	28.9	84.6	83.9	85.0	87.4
Social Services	19.2	16.7	34.3	39.4	38.3	40.1
Domestic Service	0.0	0.0	0.0	0.0	100.0	0.0
Others	66.2	16.6		70.7	100.0	
Food Bev	17.2	12.7	12.9	27.5	25.7	23.4
Mfg Other	24.3	21.5	29.6	43.7	42.6	46.4
Textile	24.7	30.9	36.4	38.9	45.9	50.7
Apparel	<b>32.4</b>	<b>33.5</b>	<b>38.0</b>	<b>60.5</b>	<b>65.5</b>	<b>60.2</b>
Wood	1.1	0.0	4.2	2.3	4.7	13.5
Total	14.6	12.1	20.2	29.0	29.7	29.3

**Table 4.8: Probit Models for Signed Contract for employed workers (marginal effects)**

Dependent Variable ==> Explanatory Variables	CONTRACT			SOCIAL SECURITY		
	2000	2004	2005	2000	2004	2005
<b>Years of Education</b>	0.7%	0.9%	2.0%	2.1%	3.3%	3.2%
<b>Age</b>	0.7%	0.3%	1.3%	1.3%	1.3%	1.6%
<b>Age Squared</b>	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Female</b>	-2.7%	-2.4%	-3.3%	-7.4%	-7.6%	-6.6%
<b>Urban dummy</b>	6.4%	0.6%	3.1%	13.7%	4.1%	1.7%
<b>Public Sector dummy</b>	10.9%	1.9%	90.2%	50.6%	43.5%	51.3%
<b>Remittances dummy</b>	-1.8%	-1.1%	-2.5%	-20.0%	-3.6%	-2.7%
Ag Food	-11.5%	-8.4%	-17.4%	-31.7%	-30.1%	-19.1%
Ag Other			-7.7%		-17.3%	-8.5%
Husb. & Fishing	-8.5%	-3.2%	-13.4%	-22.4%	13.4%	-18.4%
Mining	1.0%			-8.2%		15.9%
Utilities	3.6%	2.0%	27.2%	17.8%	-18.2%	59.2%
Construction	-4.5%	-4.0%	-5.7%	-15.5%	-22.4%	1.1%
Sales	-6.6%	-5.4%	-8.3%	-22.8%	-16.8%	0.4%
Transport	-4.3%	-3.5%	-4.8%	-17.0%	0.0%	5.8%
Financial Interm.	8.5%	1.8%	11.2%	8.5%	-2.1%	34.7%
Public Admin.	1.2%	-1.5%	31.3%	1.7%	-3.4%	23.6%
Education	7.9%	-2.3%	21.6%	12.3%	-16.2%	30.4%
Social Services	-1.9%	-2.6%	-4.0%	-13.5%	-12.9%	5.6%
Domestic Service		-7.1%				
Others	29.9%	-0.8%	-2.1%	-1.1%		10.3%
Food Bev	-0.1%	-2.0%	7.8%	-12.6%	-8.5%	23.7%
Mfg Other	1.1%	-0.4%	21.5%	-7.7%	3.6%	39.4%
Textile	8.7%	7.9%	20.6%	1.0%	16.3%	46.3%
Apparel	8.3%	7.6%	-10.4%	10.7%	-19.9%	
Wood	-8.4%			-22.7%		

**Table 4.9: Percentage of workers that declared special physical conditions in the work place by industry**

Industry	Dusty	Smoggy	Gases	Noisy	Temperature	Machine	Underground	Heights	Poor light	Chemicals	Heavy Loads	Other
Ag Food	71.9	12.9	2.0	8.0	39.7	39.3	2.2	2.2	7.1	11.7	24.7	1.6
Ag Other	52.0	14.6	3.9	19.2	35.5	36.9	0.8	0.6	7.4	7.6	22.6	1.8
Husb. & Fishing	6.2	5.3	2.0	9.0	41.2	33.2	0.0	0.8	7.1	0.0	17.8	4.2
Mining	60.0	29.6	8.9	20.3	23.4	41.3	2.0	0.0	6.1	19.7	32.4	0.0
Utilities	34.5	24.1	11.1	26.1	22.4	15.4	3.0	11.0	9.1	10.3	8.7	1.8
Construction	73.6	19.4	7.5	29.0	30.2	39.7	6.1	13.6	8.8	8.5	39.5	1.7
Sales	32.4	27.7	15.5	27.2	18.1	15.8	0.3	0.9	8.7	6.0	15.6	0.9
Transport	51.2	46.8	19.9	31.7	21.6	13.5	0.9	1.8	9.3	2.8	17.8	1.0
Financial Interm.	23.1	14.3	5.1	13.8	10.8	21.2	0.3	1.7	9.0	3.0	3.3	1.3
Public Admin.	29.7	19.4	11.1	20.3	16.5	21.9	0.7	1.4	7.0	5.4	4.9	2.1
Education	27.4	8.3	3.4	30.3	11.9	2.8	0.2	0.7	8.2	1.1	0.4	1.1
Social Services	20.3	12.0	6.0	17.4	13.7	11.6	0.4	0.3	8.9	9.3	3.8	0.6
Food Bev	33.3	35.2	14.4	30.0	30.3	20.5	0.4	1.9	10.0	5.2	20.9	0.2
Mfg Other	43.8	27.2	15.4	42.8	32.5	40.6	1.0	1.4	10.7	18.7	20.0	0.4
Textile	25.9	5.8	2.8	35.9	15.6	28.6	0.0	1.5	10.4	9.4	14.3	15.8
Apparel	28.3	14.1	4.9	44.9	25.5	31.9	0.6	0.7	13.8	4.3	8.0	16.5
Wood	45.7	10.2	0.0	39.8	32.7	65.8	0.0	4.0	0.0	9.5	14.9	0.0
<b>Total</b>	<b>41.3</b>	<b>20.9</b>	<b>9.4</b>	<b>25.4</b>	<b>23.3</b>	<b>24.3</b>	<b>1.2</b>	<b>2.4</b>	<b>8.9</b>	<b>7.2</b>	<b>15.6</b>	<b>2.3</b>

**Table 4.10: Probit Models of workers that declared special physical conditions in the work place by industry after controlling for individual characteristics**

Industry	Dust	Smoggy	Gases	Noisy	Temperature	Machine	Underground	Heights	Light	Chemicals	Heavy Loads	Other
Ag Food	17.6%	-12.8%	-8.5%	-25.3%	3.7%	-5.0%	0.3%	0.4%	-1.7%	-1.7%	-2.4%	1.5%
Ag Other	2.0%	-12.6%	-5.7%	-16.4%	-2.2%	-8.7%	0.3%	-0.6%	-1.9%	-3.7%	-3.4%	2.4%
Husb. & Fishing	-40.1%	-17.8%	-6.4%	-19.9%	14.4%	-8.1%		-0.2%	1.3%		-1.2%	4.9%
Mining	-0.5%	-3.9%	1.6%	-7.3%	-0.7%	-5.6%	3.2%		9.8%	3.7%	4.9%	
Utilities	-8.3%	-7.9%	-2.2%	-11.0%	-6.8%	-13.3%	1.8%	8.4%	-1.0%	-4.1%	-5.7%	0.9%
Construction	24.8%	-9.1%	-6.0%	-10.6%	0.8%	-6.4%	2.2%	5.5%	-0.2%	-4.6%	9.5%	1.2%
Sales	-8.0%	2.2%	0.9%	-7.4%	-6.0%	-14.2%	-0.6%	-0.4%	-0.8%	-5.8%	-1.6%	0.2%
Transport	7.3%	16.9%	4.1%	-4.4%	-4.4%	-19.8%	-0.5%	0.0%	-1.0%	-6.5%	-1.8%	-0.9%
Financial Interm.	-18.0%	-9.3%	-5.3%	-19.5%	-14.6%	-10.8%	-0.6%	-0.2%	-0.4%	-6.4%	-11.5%	1.5%
Public Admin.	-5.4%	-3.8%	-1.4%	-12.8%	-6.5%	-7.7%	-0.4%	-0.4%	-2.9%	-6.4%	-8.9%	3.3%
Education	2.6%	-10.7%	-6.3%	-3.5%	-9.4%	-24.1%	-0.4%	-1.1%	-2.4%	-7.2%	-13.0%	1.3%
Social Services	-13.0%	-8.6%	-2.7%	-12.3%	-8.8%	-14.2%	-0.5%	-1.2%	-1.2%	-3.8%	-8.8%	0.3%
Food Bev	-10.2%	8.2%	-0.1%	-7.7%	3.2%	-13.6%	-0.7%	0.0%	0.9%	-5.4%	-0.6%	-0.4%
Textile	-18.5%	-16.8%	-5.1%	-2.0%	-8.1%	-9.3%		-0.3%	-1.3%	-1.4%	-3.3%	22.1%
Apparel	-12.6%	-10.2%	-4.9%	8.8%	1.2%	3.0%	-0.2%	-0.6%	2.6%	-5.9%	-5.5%	17.8%
Wood	-4.3%	-16.4%		-2.1%	-7.7%	18.5%		1.6%		-4.4%	-5.5%	
<b>Total</b>												