INTERDEPARTMENTAL PROJECT
ON STRUCTURAL ADJUSTMENT

Occasional Paper 14

Antonio Botelho and Caren Addis

Privatization of telecommunications in Mexico: Its impact on labour and labour relations

International Labour Office / Geneva

c ii

Interdepartmental Project on Structural Adjustment

The aim of the Interdepartmental Project on Structural Adjustment is to strengthen ILO policy advice in relation to structural adjustment policies in order to make those policies more consistent with ILO principles and objectives.

The project investigates various options to give a different focus to adjustment policies, emphasising major objectives as equitable growth, improved human resource development and social acceptability and it tries to establish how various ILO policies and policy instruments can contribute to such a different focus of adjustment policies.

The range of policy instruments encompasses labour market regulation, social security, wages policies, training policies, industrial relations as well as the employment and income effects of monetary, fiscal and price policies. Greater involvement of the ILO in the area of structural adjustment needs therefore to reflect the inter-disciplinary nature of the adjustment problem by combining activities from different departments in the ILO.

During the 1992-93 biennium, the project concentrates on developing policies for the following five main areas:

- the role of the public and private institutions in structural adjustment;
- the role of fiscal policy in generating employment and favouring equitable growth in a process of adjustment;
- the role and function of compensatory programmes and social safety nets during adjustment;
- public sector adjustment, including issues pertaining to privatization;
- the role and function of the social partners in the adjustment process.

Further information can be obtained from the Project Manager (Rolph van der Hoeven) or the Project Officer (Andrés Marinakis).

Privatization of telecommunications in Mexico: Its impact on labour and labour relations

Note: Occasional Papers are preliminary documents circulated in a limited number of copies solely to stimulate discussion and critical comment.

International Labour Office Geneva

November 1993

ISBN 92-2-109169-4

First published 1993

ILO publications can be obtained through major booksellers or ILO local offices in many countries, or direct from ILO Publications, International Labour Office, CH- 1211 Geneva 22, Switzerland. A catalogue or list of new publications will be sent free of charge from the above address.

Printed in Switzerland

Table of contents

Abbreviations

CC	Concertation Agreement (*Convenio de Concertación*)
CCT	Collective Labour Agreement (*Contracto Colectivo de Trabajo*)
CEN	National Executive Committee of STRM
CHCP	Public Credit and Finance Secretary
CT	Work Congress (*Congreso del Trabajo*)
CTM	Peak Labour Organization (*Confederación Nacional del Trabajo*)
FESEBS	Federation of Goods and Services Unions (*Federación de Sindicatos de Bienes y Servicios*)
Inttelmex	Telmex Technological Institute (1991)
ISDN	Integrated Service Digital Network
LVGC	Basic law on telecommunications
PIMES	Programme for the Improvement of Services (1987)
RDSI	ISDN network (*Red Digital de Servicios Integrada*)
SCT	Secretary of Communications and Transport
SPP	Budget and Programming Secretary
STRM	Mexican Telephone Workers' Union (*Sindicato de Telefonistas de la República Mexicana*)
Telmex	Teléfonos de México

1. Introduction[1]

The modernization of the Teléfonos de México (Telmex), of which the 1990 privatization was one important stage, has profoundly affected labour relations in the company. The goals of the April 1989 Harmonization Accord (hereafter CC) labour contract which paved the way for privatization were ambitious: union leaders and state officials sought nothing less than the forging of a new culture in which workers were intimately tied to the future growth of the firm, and a labour relations framework sufficiently flexible to accommodate new technologies and rationalization. The results have been mixed:

— the union is strong, although many workers argue divorced from the rank-and-file;

— massive lay-offs were averted, although, in exchange, the firm has unprecedented flexibility in transferring workers and labour has lost much of its ability to control the content and pace of changing working conditions;

— the company has not taken advantage of its newly won flexibility in an efficient and orderly manner, and labour reorganization is ad-hoc, disorganized, and demoralizing to workers;

— wage increases tied to productivity and a stock-option programme for workers have not generated the higher wages that workers sought, nor the new cultural identity that union leaders and state officials pursued;

— the union's ambitious strategy of tying wages to productivity and avoiding agreements centring on wage levels is under siege;

— the future growth of the union is also compromised. As the company rushes to modernize, it has accelerated its expansion and offerings of profitable services such as cellular telephony, ISDN network, and others by its non-unionized subsidiaries or increased its subcontracting to non-STRM companies.

The changes in TELMEX's labour relations have been held up as a model for new unionism in Mexico. We argue, however, that the peculiarities of the case are such that the experience is not replicable, either in other Mexican sectors or in telecommunications monopolies abroad. There are, however, interesting lessons for labour, both in developing and developed countries, which can be derived from the Mexican experience.

This paper is divided into six sections. The first presents a brief discussion of privatization in Mexico. The second summarizes the background of Telmex and of the sector's labour relations. The third examines the structural framework of changing labour relations - technological change, modernization, as well as changes STRM since the mid-1970s, the backdrop for the Concertation Agreement/Privatization. The fifth section is subdivided in various sub-sections, and each focuses on different components of the privatization agreement for labour and the financial health of the company: the Concertation Agreement, the worker-owned stock programme, and the emerging regulatory framework. The sixth section, based on a series of open ended interviews with labour leaders, workers, management, and academic observers, focuses on the impact of technological and the CC change on the day-to-day lives of workers. In the conclusions we argue that the Telmex-STRM agreements are not and should not be a model for restructuring of labour relations in privatized companies.

2. (Re)privatization

State intervention in the Mexican economy peaked during the 1970s and early 1980s when the total number of state-owned enterprises surpassed 1,000. The dramatic post-1982 privatization efforts have been referred to by one author as a process of reprivatization as the state divested itself of the many private firms that it had acquired (Gomez, 1992). In 1971 there were 322 parastatal organizations; by 1976 this number had climbed to 845, and in 1982 it reached 1,155. Since 1982, 864 state enterprises have been (re)privatized. When Salinas leaves office in 1994, the number of state-owned companies should drop to 195, less than one-fifth of 1982 levels.

The Mexican foreign debt, declining oil prices, and fiscal crisis of the state of the past decade provided the background conditions for the Mexican privatization programme. These factors constrained the state's capacity to finance and operate the parastatal sector, pushing state authorities to promote a new development model. The programme started in 1982, under President de la Madrid, but it gained momentum in President Salinas de Gortari's administration (1989-1994). The divestiture has been quite successful in economic terms - not only has the government been freed from pumping resources into money-losing enterprises, but in some cases, it has received two or three times the book value of assets. By one analyst's estimate, the revenues from privatization obtained in 1991 were used to retire almost 26 per cent of Mexico's internal public debt (Salinas,1992). Social expenditures in turn, have increased dramatically, reaching levels of the late-1970s.

Although there were some general rules and procedures guiding the privatization process, much of the process was one of trial and error, or one of tailoring the selling conditions to the peculiarities of the sector and its markets.[2] Regarding procedural rules, the government has tried to keep the public and enterprise labour force well informed of the privatization process. Potential investors have been preselected to eliminate unqualified buyers in preliminary screening, so that bidding can focus on price. Labour has received some protection in the procedures. Unions have the right of first refusal and once the selling price is known, they have the option of matching it and purchasing the enterprise (Tandon, 1992). Obviously, it is unlikely that unions will be able to raise the funds for most of these purchases, particularly the larger firms. A second safeguard for labour is an understanding that buyers are not to lay off workers, although the extent to which this is respected remains unclear (Tandon, 1992). Finally, the enterprises targeted for sale are transferred to the divestiture unit of the Secretary of Finance where, hopefully, they are turned around - via debt or company restructurings, renegotiated or new labour contracts, or other measures - so that the enterprise will command a higher price. The peculiarities of each case, however, are as important as the procedural and legislative similarities.

Regarding the decision about which firms to privatize, one analyst wrote:

> Although formally the sector ministry with administrative responsibility for an enterprise "proposes" it for disengagement [sale], the assumption now is that in principle all enterprises are to be disengaged, and the sector ministry actually has to justify retaining it. This subtle change in underlying attitude is partly

responsible for the fact that very large numbers of enterprises have been disengaged (Tandon, 1992).

Although Tandon's observations are apparently borne out by the large number of privatizations, one conservative observer noted that the decision to privatize firms boils down to political criteria:

> Despite all this progress, the Salinas government still refuses to privatize the so-called "strategic sectors" of the economy - oil, petrochemicals, and railroads.[3] The Mexican president continues to invoke Articles 25 and 26 of the Mexican Constitution, which endow the government with the right to administer economic affairs.
>
> ...the argument that complete state ownership of the these sectors is irreversible because they are strategic is unconvincing. Other strategic sectors of the economy, such as telecommunications, highways, airlines, and potable water distribution have been privatized. Why not railroads, electricity and oil? *The obstacles are not economic, but political...*(Salinas, 1992).

Regarding the turnaround process mentioned above, and the packaging of the enterprises, again, the criteria are selective and depend upon the particular condition of the firm and its market. For example, in the case of the sugar refineries and banks, to ensure that all the enterprises were purchased, one or two less desirable firms were bundled together with a desirable firm and sold as a package (Sanchez, et al., 1992; Shapiro, 1993). In other cases, turning around the enterprise meant micro-managing production and restructuring the labour force (Darling, 1991). In other words, the peculiarities and politics of each company and its market segment are decisive in shaping the impact of privatization on the firm and its workers.

3. Background

3.1 The status of Mexican telecommunications

Telecommunications was a neglected development priority in the early 1980s as the Mexican government edged towards a liberalization of the economy. The sector experienced a high average growth of 12 per cent until the early 1980s. After the 1982 economic crisis, growth slowed to an average of 6 per cent per annum until 1988. Only 16 per cent of Mexican households had a telephone in 1984. By the end of the decade the telecommunications system was plagued by poor basic service, high long-distance rates, uneven quality, continued disruptions, and rampant corruption.

In 1988, telephone density was just 5 telephone sets per 100 inhabitants for an installed capacity of 8.8 million telephone sets. Only 17 per cent of households had telephones and there were 1.5 million unfulfilled requests. Density began to climb before the 1990 privatization, reaching 5.4 sets per 100 inhabitants in 1989 and 5.8 in 1988. Similarly, growth rates of lines jumped from 5.53 per cent in 1987 to 10.36 per cent in 1990. Labour productivity measured in terms of workers per one thousand lines also improved since 1989 (see Appendix 1). Still, at the end of 1990, Telmex productivity was about half the average international standard (10.46 workers/1,000 lines against 6.02 for Telefonica Espanola).

3.2 Employment growth and unionization trends

Trends leading to eroding union membership were evident well before privatization. Profitable services such as long-distance service grew from the late 1970s to the late 1980s. Employment increased correspondingly, at a 6 per cent annual rate, reaching almost 50,000 at the end of 1988.[4] Despite the increase in the workforce, many of the new jobs or new employees were not unionized. At the time of privatization, 64 per cent of Telmex labour force was affiliated to the Sindicato de Telefonistas de la República Mexicana (STRM), and about 18 per cent to other unions. Although operators and exchange maintenance personnel remain highly unionized, much of the growth in Telmex has been in areas where unionized workers were not predominant - administrative personnel, expansion, and engineering and construction. Table 3.1 reveals that these areas have experienced the greatest growth in the years preceding privatization. These trends have continued and even accelerated.

Table 3.1 Telmex labour distribution by category (%)

	1985	1986	1987	1988	1989
Traffic (operators)	32.0	30.6	28.4	27.6	26.5
Commercial	7.2	8.2	8.5	8.7	9.1
Maintenance	38.6	38.7	39.7	40.1	40.3
Client services	2.4	2.7	2.7	2.7	-
Administration	8.1	8.0	8.3	8.3	15.6
Expansion	11.7	11.8	12.4	12.5	-
Engineering and construction	-	-	-	-	8.5
Total	37 487	40 662	44 700	49 995	49 203

The planning and installation of the telephone network, external and subterranean, was carried out by third party firms, mainly Telmex subsidiaries. The installation of new digital exchange equipment was done by suppliers, often foreign companies such as Ericsson or by national contractors (Reintel, Telemontaje, Mactel). Telmex's construction department had 750 employees versus a total 5,000 workers in subcontractor firms performing construction work. In the area of digital exchanges, Telmex created a subsidiary, MITEL, exclusively staffed by non-unionized personnel, undercutting the work of the Exchange Department (Felix, 1989). Given that much of Telmex's growth took place in its non-unionized subsidiaries, it has been estimated that by 1989, out of 100 hours' work in telephone service, only 20 were executed by unionized personnel (Coparmex, 1989; Felix, 1989).

3.3 Telmex balance sheet

Analysts have categorized pre-privatized Mexican telecommunications as the cash-cow model of state enterprise in which the cards are stacked against improvements in basic service (Cowhey and Aronson, 1989). The model's characteristics are:

— Key users, particularly urban, and the federal treasury are subsidized;

— Services are cross-subsidized - local rates are kept artificially low while long-distance and international rates are high;

— Geographic universal service is a political priority;

— The government holds a monopoly in basic services;

— The firm has only moderate political clout so that its investment needs are not given a high priority; and

— Equipment suppliers are foreign but domestic production is encouraged.

In fact, Mexico's telephone taxes - value added, and special services and product tax - are among the highest in the world. Although overall telephone rates have not kept pace with inflation over the past fifteen years, international and domestic long distance rates have eroded the least. Basic local rates in 1984 were less than half of their 1970 real value. Local calls represented 52 per cent of costs and 15 per cent of revenues. In 1986, international long-distance accounted for almost 60 per cent of total revenues, followed by national long-distance (27 per cent) and local use which continued to fall (13 per cent) (Escamilla, 1989).

Telmex's average annual growth rate in the 1980s was about half that of the previous decade as the constraints of the cash-cow model, the debt crisis, and the domestic recession of the early 1980s slowed investment. From 1982 to 1987, Telmex's revenues and net profits stagnated (Mendoza, 1989). Similarly, between 1983 and 1988, the distorted tariff structure, the closing of foreign financial markets to Mexican companies as a result of the debt crisis, and the Treasury's reluctance to reinvest the company's tax receipts led to a decline in investment capacity.[5] During this period Telmex's average annual growth was just 6 per cent, far short of growing demand.

In the second half of the 1980s, Telmex was allowed to reduce the gap between rates it charged and marginal costs in the three types of telephone calls: international long distance; domestic long distance, and local. Real prices of basic service and domestic long distance increased while international long distance rates were reduced. Yet until 1989 the various taxes on local and (national) long distance telephone services[6] that Telmex paid to the National Treasury kept the company from investing in the modernization of its basic infrastructure. As of 1990, the various taxes on Telmex telephone services revenues represented 57 per cent of its operating expenses in that year, little of which was reinvested in the firm.

4. Technological change, modernization and the new unionism

4.1 Telmex's structural and technological transformation

For the last three decades the central axis of Mexico's telecommunications system has been Telmex.[7] The Mexican state gained control of the firm in 1972, although 49 per cent remained in private hands.[8] The government appointed the majority of the company's executive board and subjected the firm to multiple regulatory agencies and regimes. In 1976, the Secretary of Communications and Transport (SCT) extended Telmex's concession on the monopoly of basic telephone services for 30 years (until 1996), with the possibility of renewal for an additional 2O years. In addition the SCT was responsible for regulating the telecommunications sector, and the Budget and Programming Secretary (SPP) supervised

Telmex's annual budget. Rates for services were jointly decided by the Public Credit and Finance Secretary (CHCP) together with the SCT in accordance with the Law on the General Channels of Communication of 1939.

In 1980, Telmex embarked on a modernization programme centred on digital technology.[9] Its objectives were to digitalize 70 per cent of service by the year 2,000 and have an installed base of 30 million telephone sets. Although the first digital exchanges were installed in 1982, the programme was initially hampered by technical problems and investment shortages. By 1986, only 8 per cent of the local lines, 35 per cent of the local traffic exchanges, and 25 per cent of long-distance exchanges were digitalized.

By the mid-1980s it became clear to management that the slow pace of digitalization was not redressing Mexico's severe telecommunications problems. The growth in new lines was stagnating rather than accelerating, customer demand continued to outpace the supply of new lines, and the quality of service continued its downward decline. Other factors compounded the pressure on Telmex, in particular the country's growing communication needs, to support its ongoing modernization and external opening of the economy. Another was the significant destruction of the long distance public network caused by the 1985 earthquake.

In 1987, Telmex responded to these challenges with the Programme for the Improvement of Services (PIMES) based on a two-pronged strategy. On the one hand, it would concentrate on an overlay network which could rapidly provide needed and profitable high value-added services to large users. On the other, the modernization of the basic network would continue. This programme of structural change centred on three main axes: 1) growth; 2) modernization and diversification; and 3) quality. Objectives were delineated:

— A new financing framework eliminating cross-subsidization of services; establishment of rules for state re-investment; rationalization of service to government; and changes in the tariff and tax structures.

— Digitalization of 80 per cent of the local network and 100 per cent of the long distance network by the year 2,000.

— Direct modernization permitting the construction of an ISDN network capable of generating new services which would be a source of future growth for the firm.

— Adaptation of the regulatory framework, particularly regarding concessions as well as the role of the state and of the private sector in the development of new telecommunication services.

— Adoption of a decentralized administrative organization similar to that of equivalent international companies.

— Increased productivity and improvement in the quality of services through the constitution of Mixed Enterprise-Union Committees for Productivity and Modernization.

The 1987 strategy formalized some *de facto* trends, most notably the increasing use of digital technology which permitted Telmex to offer improved services customized to large users' needs. After the destruction of the long distance equipment by the 1985 earthquake, Telmex accelerated the substitution of outdated equipment with decentralized digital exchanges linked by a network of fibre optics and digital radios. In 1986, it began installing a digital network in the northern border regions, catering to the needs of the *maquiladora*[10] industries, and also began operating private packet switching data communication networks for large users in the principal cities of the country. In 1988, Telmex began installing dedicated digital networks for the Banking and Financial System, the Collective Transportation System (Metro), the Secretary of Communications and Transport, and multinational enterprises. In the same year, the first ISDN network and an independent Digital Superposed Network (voice, data, text and images) were installed and mobile telecommunication services based on cellular technology were offered.

The modernization of the basic network, the second component of Telmex's strategy, was predicated upon a far-reaching administrative reorganization, replacing a pyramidal and centralized structure with a modular and decentralized one to gain greater operational flexibility. The new organizational scheme consisted of 3 corporate directorates: Finance and Administration, Planning and Corporate Development, and Human Resources and Labour Relations; and 5 autonomous directorates or profit centres: long distance, telephone development, and three regional operations groups (North, South, and Metropolitan). A Centre for Advanced Telecommunications focusing on the development of new ISDN services was also created. In 1987, a programme focusing on automation as a means to improve services was launched. The programme aimed to automate management information systems, the service modules of large users, the testing systems for the pressurized network, the operating and administrative functions of work centres, manual traffic by operators, administrative and commercial data processing, and subscriber registration. In 1989 Telmex also introduced a long distance system (LADA 800), thus automating about 80 per cent of this service.

Telmex then had twenty-one subsidiaries organized in five activity groups, ranging from plant construction and engineering services to mobile communications and the production and marketing of telephone directories (for a list of Telmex subsidiaries see Appendices 2 and 2.1). The cellular telephony subsidiary (Radiomovel DIPSA), which held a monopoly concession in seven states in the country, accounted for about one-third of the total assets of the subsidiaries.

These structural developments quickened the pace of modernization, so that by 1990 almost 30 per cent of the lines were digital, as shown in table 4.1 below.

Table 4.1 Digital technology (%)

	Total lines	Long distance lines
1986	5	n.a.
1987	12	n.a.
1988	13	50
1989	21.7	54
1990	29	n.a.
1991	41	n.a.
1992	55	n.a.

Digitalization has presented workers with deep-seated challenges. Analogue equipment required eight people to operate one exchange controlling 10,000 lines, while digital equipment requires two workers per exchange of 100,000 lines (Dubb, 1992). Although this would appear to presage massive lay-offs, they have not occurred. The implantation, expansion, and debugging of lines has led to a slight increase in the number of workers. Although the union's efforts have not been successful, sustained retraining and rotation of workers would help protect them by enabling them to do many tasks and simultaneously giving them greater protection from lay-offs, boredom, and work-related injuries.

4.2 The STRM and the new unionism

Labour relations in Mexican telecommunications underwent major changes beginning with Hernández Juárez' ouster of a coopted and corrupt STRM leader initiated in 1976. The next few years were marked by a series of labour confrontations, which in turn led to the gradual recognition of the Sindicato de Teléfonos de la Republica Mexicana (STRM) as an active and independent union, by both state officials and segments of labour.[11]

> The trajectory of the telephone workers union... has been intense, complex and controversial. No other national union has supported so many strikes in such a short lapse of time... Almost no other union faced so many obstacles to exercising its rights... [F]ew important unions, moreover, had a policy of alliances, and at the same time, have experienced internal problems as drastic as the STRM. (Delarbre, 1990, 527)

After the ouster, Hernández Juárez, consistent with his platform of democratization, sponsored statutory changes such as: the de-linking of the trade union from the official government party (PRI), limits on terms of union executive, greater financial transparency of union business, internal freedom of association, direct and secret balloting, and increased transfer of financial resources to regional offices. Work conditions and health revindication moved to the top of the agenda next to wage demands. Initial efforts to democratize the decision making process within the STRM were pursued through a decentralization of decisions to smaller assemblies aimed at mobilizing a larger labour base. The STRM is formed by a central section (in the capital Mexico City), with about 15 work centres, and 102 regional sections and sub-sections.

Although Hernández Juárez was elected on a platform of democratization and reform, he used his power to consolidate a "results-oriented approach" and reinforce his control over the union.[12] He managed to again change statutes, this time to extend his tenure in office and later permit his reelection as well as that of key officials. These actions belied the promises he had made in 1976. He successfully played off against each other opposing factions and managed to promote his own supporters within the union structure.[13] Until the early 1980s, the STRM focused almost exclusively on economic issues, principally wages.

In the early 1980s, the union's focus began to shift from wage demands to issues of protecting workers from technological change and improving working conditions, a reflection of internal union struggles, the management's growth plans, and national anti-inflation measures. The STRM accepted a management-drafted plan for the introduction of new technologies as well as its wage proposals. The company's expansion strategy focused on the digitalization of the system and the opening of the private PABX market to foreign companies. In 1981, maintenance workers led the first discussions on the impact of new technologies, and individual departments also increasingly demanded greater input in shaping the implementation of technological modernization.

In 1982 Hernández Juárez survived a rank-and-file challenge stemming from deep-seated technological challenges facing the firm and the union. In that year, Telmex introduced its modernization plan and laid off over 500 workers, alleging redundancy related to new technology. Union dissidents tried to use the firings to bolster their ranks and weaken Hernández Juárez's control. An opposition movement emerged in the union (*Movimiento Democrático Telefonista*) and contended that because it counted among its supporters many of the laid-off workers, the union leadership was not challenging the lay-offs. The opposition went even further and took over union headquarters, and Hernández Juárez resorted to calling in the police to forcibly remove the dissidents. Ultimately, Hernández Juárez survived the challenge and the fired workers were rehired, contingent upon their agreeing not to challenge the union's leadership. One analyst argues that the cost of Hernández Juárez's victory was high - the union began to lose its recently acquired independence vis-à-vis the government (Dubb, 1992).

A positive consequence of the internal struggles was that the union leadership, to defeat the opposition, was forced to give priority to the challenges of new technologies and began organizing around working conditions (hygiene and safety policies). The tendency to look at areas other than wages was further reinforced by the various national austerity plans that capped wage increases. The strategy was successful and in 1986 an agreement was signed stating that technological change would not lead to lay-offs. Later that year, Article 193 of the Collective Labour Contract (CCT) was revised. The Article regulated the mixed commissions dealing with modernization, new technology, restructuring, hygiene and security, training, and productivity. A mixed STRM-Telmex commission was created to negotiate the impact of the new technologies, which became the 1988 CCT Modernization Commission (Felix, 1989). More will be said about this later. Many of these advances have come under fire as a result of the Concertation Agreement (CC), the pre-privatization labour accord reached in 1989.[14]

The gains were hard won. In 1984, following Hernández Juárez' second reelection in April (effective in October), Telmex management attempted to divide the weakened union and threatened to lay off 255 workers, mainly middle-level STRM cadres and supporters of Hernandez Juárez. The leader was simultaneously pelted by government intervention and intimidation of union workers that led to a collapse of the wage negotiations. Hernandez Juárez responded by denouncing the violent methods employed by Telmex management and by accusing it of corruption.

Until the September 1985 earthquake, Telmex management had proceeded with modernization in a cautious and subtle way. New technologies were introduced gradually, and related support and administrative services were usually farmed out to subsidiaries and subcontractors to avoid a confrontation with the union. During this period, workers, with the implicit consent of the union leadership, were increasingly losing control of the labour process. The workers were kept in the dark by management about the overall direction and scope of the technological modernization plan (Felix, 1989). The 1985 earthquake laid bare management's strategy, leading to its challenge by labour. Telmex, forced to speed up the modernization programme (*Programma de Digitalización*), extended the practice of subcontracting to non-unionized firms. In light of this sombre picture and the growing demands on telecommunications by the country's modernization drive, labour, government and management hammered out a tripartite agreement in late 1987.[15] In that year, an anti-corruption agreement was also signed. The STRM executive committee also took a high-profile role in the efforts to revitalize the CTM, which failed due to conflicting objectives and a fragmented leadership.[16]

On the eve of the 1988 federal elections, some of the labour losses were reverted and the quality of services became the target of an intergovernmental productivity committee which included union participation. In August 1987, Hernández Juárez joined the government party, the PRI, and exhorted STRM workers to disregard the opposition and vote for the Party in the forthcoming elections. In April 1988, the PRI presidential candidate and assured victor in the national elections, Salinas de Gortari, visited the STRM. At the same time, the STRM used the opportunity to expand its external linkages to the national labour movement, through Hernández Juárez participation in CTM's executive committee. After the April 1988 strike, the STRM negotiated an 18 per cent wage increase. Successive CCT negotiations led to significant wage increases for the rank and file, particularly for the network workers - traffic, external network, regional centres - which made up the union leadership's base of support.[17] The following table presents a picture of the general upward evolution of wages after Salinas' ascension to power.

Table 4.2 Evolution of average real wages in Telmex*

	Wage level (1986=1.00)
1981	1.08
1982	1.16
1983	0.96
1984	0.83
1985	0.90
1986	1.00
1987	1.17
1988	1.04
1989	1.24
1990	1.46
1991	1.65

* The information does not disaggregate wages by type of job.

Source: Data on average wages from Tandon, 1992, Table S-9. Deflator from Banco de Mexico statistics.

In spite of the tripartite efforts of the previous years, by the end of 1988, Telmex changed its tack and began aggressively confronting the union. In the 1987 document spelling out its modernization plans, (Programme for the Improvement of Services - PIMES - described in section 3.1), the company publicly blamed workers for the increasingly poor quality of service.[18] The STRM, already politically flirting with the next president and negating any blame for the poor service, made a counterproposal to PIMES based on the continuous improvement of quality. It linked the improvements to technological modernization and to a simultaneous change in the pattern of labour relations. The ensuing negotiations under the aegis of the Secretaria de Trabajo y Prevision Social (STPS), had two main results: 1) the creation of a Mixed Enterprise-Union Productivity Commission; and 2) a more solid plan for negotiating the incorporation of new technologies, which was the basis for the revision of Clauses 136, 185 and 193 in the 1988 CCT (mentioned above).

To coordinate and support the union strategy and negotiations in these matters, STRM's National Executive Committee (CEN) created a Modernization Commission (Comisión de Modernización, 1988). The existing pact on the impact of new technologies was decentralized to the project level and minimum requirements for information on changes was instituted. The agreement was followed by a change in management and an organizational restructuring which sought a concerted modernization process predicated on the participation of labour and the state (Perez, 1989).

At the end of the 1980s, the bulwark of STRM's support was divided between operators (12,000) and maintenance workers (4,000) which together represented over one-third of Telmex's workforce. With their support, STRM's president Hernández Juárez effectively survived the opposition, many of whom were eventually coopted with administrative jobs in the union. Hernández Juárez's grasp on STRM's leadership was reinforced by the young average age of telephone workers, who are generally between 28 and 32 years old with an average seniority of about 10 years (Cavazos, 1988). Since 1989, the centre of the negotiations once again revolved around working conditions because of the inflation-fighting National Economic Solidarity Pact which strictly limited wages increases.

Internal union politics continues to remain a major force driving the STRM's negotiating strategy. The CEN's priorities coincide with the demands of its traditional base: of support, operators and maintenance workers. The only category-specific objectives of the Programme of Action presented at the September 1992 STRM General Assembly were for these groups. The union vociferously defeated the agreement hammered out with the company granting safeguards to operators threatened by technological change (for example, in relocation and retraining). The union also sought to conclude negotiations on the impact of technological change for workers in the switching (*centrales*) and maintenance areas. One worker summed up an increasingly pervasive sense of disappointment and suspicion regarding the future of the STRM: "the Union is becoming an employment agency rather than a union, and a centralized one, at that.[19]

4.3 The privatization of Telmex

Among the reasons given for the privatization of Telmex was a five-year investment shortfall of US$10 billion that could not be met by the government budget, whose priorities were social programmes. There were also important political motives - an effort to weaken labour and experiment with a new model for the post-Fidel Velazquez/Confederacion de Trabajadores Mexicanos period. Some surmise that Salinas's decision to privatize Telmex was influenced by symbolic considerations as well as his desire to use the revenues from the sale to finance the administration's ambitious social programmes (Tandon, 1992).

Privatization and labour reorganization were mutually reinforcing. In September 1989, during the STRM Annual General Assembly, President Salinas announced the impending privatization of Telmex. A new labour relations contract, which was codified in the 1989 Concertation Agreement (*Convenio de Concertacion*) was a prerequisite for the privatization and one reason the price paid for the firm was so high.

The privatization process was completed on 20 December 1990. The Mexican group Carso led an international consortium which acquired a 26.7 stake in the company giving it effective control. At the time, Telmex was the largest company listed on the Mexican Stock Exchange, the third largest company in Mexico, and the second largest telecommunications company in Latin America (next to that of Brazil). In this context, the December 1990 privatization of Telmex was significant. First, the US$1.76 billion paid for 20.4 per cent of Telmex preferred stock by a consortium formed by Southwestern Bell (United States), France Telecom (France), and Grupo Carso (Mexico) was the highest ever paid for a public enterprise in the privatization programme since its inception.[20] Second, the Telmex privatization involved the largest and most diverse number of employees among privatized companies, about 65,000 employees (including subsidiaries) and preparing for privatization required protracted and far-reaching changes in the collective labour contract which will be discussed below. Third, the Telmex privatization was the largest involving a service sector company.

The objectives of the privatization of Telmex as defined by the government were to retain regulatory control by the government as a means of: 1) ensuring radically improved services; 2) promoting a sustained and modern expansion of the system; 3) reinforcing technological research and development; 4) guaranteeing the rights of workers and giving them a participation in the company; and 6) guaranteeing majority control by Mexican nationals.

Under the privatized Telmex, the Mexican CARSO group is responsible for human resources and labour relations. Its foreign partners in the consortium, Southwestern Bell and France Telecom/FCR are responsible for commercial affairs, marketing, mobile phones and directories; and network modernization, including long distance and international circuits, respectively.

5. The privatization of Telmex and labour relations

5.1 The concertation agreement

A true modernization of telephone services in Mexico would have required new workplace rules. Impending privatization, however, was a catalyst and an important influence in "Convenio de Concertacion," (CC) which brought about a new framework for labour relations. Many of the formalized rules however, were already *de facto* in effect, the result of previous modernization efforts.

The CC was signed in April 1989 between the STRM, Telmex, and the Mexican government. In exchange for a commitment to modernize and improve its services, Telmex demanded greater labour mobility, freedom to hire new workers, and leeway in the implementation of new technologies. This radical revision of the collective contract agreement (CTC) was hailed by political observers as a national model for labour relations.

While the price paid by labour in Telmex was less than in restructuring in other companies such as the bankrupt-cum-privatized AeroMexico,[21] the form in which the CC was negotiated comprised the future vitality of the union. One sceptic argued that the winner in the CC was the union leadership which, by reducing the number of departments and department-level agreements, effectively reinforced its control of negotiations with management and the government. In the past, new leaders (and challengers to existing ones) gained experience and visibility by negotiating departmental-level agreements. The reduction in the number of departments has pared opportunities for new leaders to emerge. These restrictive tendencies have been reinforced as the union tightly controlled access to these positions.[22] Dissidents saw the CC as a sell-out and claimed that the union negotiated selective wage increases, for example by bringing regional workers' wages up to those of the capital, to coopt workers into supporting the agreement.[23]

A general labour agreement covering all unionized workers replaced the 57 previous departmental-level agreements which *de facto*, constituted separate labour contracts.[24] The departmental-level agreements were many pages long and were very detailed, often setting the exact punch-in and punch-out times of workers. Job descriptions (*perfiles de puesto* or work profiles) became more general, delineating workers' responsibilities in broad terms such as "maintaining equipment, running tests, writing reports." The job descriptions are also much shorter, often only a few sentences or paragraphs.

The number of work categories, at least on paper, was drastically reduced from 585 to 134 which were in turn classified into 31 specialties. The 585 salary levels were reduced to 41. General work areas were reduced from seven to five: 1) telephone operations; 2) commercialization; 3) maintenance; 4)administration; and 5) new services. In fact, actual rationalization lags.

Management obtained greater flexibility in hiring, replacing, and transferring workers. Transfers could now be done at the discretion of the firm and it gained new freedom to hire non-unionized personnel, hereafter referred to as "discretionary hiring", who usually had supervisory and administrative responsibilities. Regarding transfers, the syndicate designated the workers to be transferred. If after two attempts the syndicate could not identify a worker willing to be transferred, then the firm could designate the transferee. Furthermore, the transfers, did not automatically mean that the old worker was replaced, which effectively limited job creation. A new job was created only in the event that the transferred worker was relocated on the basis of his/her particular skills. Finally, the required time management had to replace workers, was extended to two weeks from the previous limit of 3 days.

Regarding the issue of modernization, the union lost its prerogative to review new technologies and their implementation, and training was centralized and offered at the discretion of the firm. Management was required to provide information regarding the new technologies it introduced for training and information purposes only, rather than as a matter for negotiation. Management refused to accept the formation of a New Technology Commission and eliminated a clause in the earlier CCT calling for advance access to this information by the union.

5.2 Worker-owned stock programme

To forge a new firm-based identity among workers and provide them an incentive to increase productivity, workers were offered stock options. The government guaranteed a low-interest loan of US$352 million to the STRM to acquire 4.4 per cent of Telmex public shares. Unionized workers bought 3 per cent as individuals, and the remaining 1.4 per cent was purchased by the union's retirement fund. Non-unionized employees were also authorized to purchase a certain number of shares through an additional fund established by the government.

The union did not acquire a seat on the Telmex Board but it was agreed that workers would be allowed to continue purchasing stock and when they reached 10 per cent share they would be entitled to a seat. The union leadership's goal of participating in Telmex's Board, however, is a distant dream. Control of 10.1 per cent of company shares is elusive as many workers cash in on their shares and others choose to exert direct control over their shares rather than consign them to the union's share fund management.

5.3 The emerging regulatory framework

As part of the privatization agreement, Telmex became a private monopoly in supplying many telecommunications services. State regulation was to supplant the market and ensure that a privatized Telmex would continue to pursue social goals, such as geographically extending service and developing rural telecommunications. The regulations of the monopoly have important implications for the union, and so far have done little to improve its strength as the firm continues to farm out profitable services to non-unionized Telmex subsidiaries.

The government set a number of investment and performance targets:

— annual growth of 12 per cent between 1989 and 1994 (equivalent to doubling the existing number of lines in service);

— extension of rural telephone service to provide all villages with more than 500 inhabitants access to telephone services by 1994;

— installation of 80,000 public phones in popular urban areas (equivalent to a four-fold increase);

— expansion of the long-distance infrastructure by 60 per cent, including augmentation of the digital network to 8,500 kilometres, installation of 3,500 kilometres of fibre optics, replacement of 480,000 obsolete lines with the aim of reaching a level of 65 per cent of digitalization.

The existing monopoly which grants the company exclusivity in providing international long distance service through 1996 remained in place. Telmex, however, lost its monopoly on the sale of integrated telephone services and equipment. The sales of equipment to final users was opened to foreign firms, as was the provision of value-added services: equipment for interconnection, data transmission equipment, private networks, fibre optics, satellite support services, cellular telephony, digital exchange, television and broadcasting equipment. Only satellite transmissions and telegraphic services remained closed to foreign capital.

Changes in the telephone services concession title extended Telmex's monopoly on basic telephone services an additional twenty years (until 2026 rather than 1996) and created limited regulated competition in certain areas of activity - cellular telephony, private networks, equipment manufacture, and earth stations for satellite communication. Telmex has experienced the greatest competition in the area of cellular telephony, where the private company Iusacel (a rival of Telmex's cellular subsidiaries) has experienced a dramatic expansion.[25] Furthermore, the state became the regulator of negotiations between Telmex and value-added service suppliers for interconnection; Telmex and its competitors were freed to broadcast any type of signal in their networks, except radio and television; and the process of technical homologation of equipment was modernized. The government retained the regulatory control over tariffs, through a system of ceiling prices.[26]

At the fiscal level, some previous taxes (IEPS) were incorporated in the new rate structure and a new tax on telephone services revenues (29 per cent) was created. An investment deduction for the company of up to 65 per cent of this new tax was allowed. The general impact on Telmex's revenue structure was to increase the weight of the local basic and national long distance services and diminish the share of international long distance.[27]

Notwithstanding the new regulatory framework and telecommunications code, the basic law on telecommunications, the LVGC, was not changed, preserving the discretionary power of the STC over Telmex and the telecommunications sector in general. For example, the STC retained the discretionary power to regulate rates in the "open" value-added services areas (ISDN), private circuits, directory assistance, and new subscriber services such as call waiting, etc., if it concluded that the price liberalization was not working and/or that Telmex was unfairly exercising its monopoly power.

The regulatory framework of the newly privatized company compromises the future size and strength of the union which in many ways is tied to the fate of the basic network. The basic network continues to deteriorate and lag behind the country's telecommunications needs. Although 55 per cent of lines are digitalized, a figure which surpasses the international average, Telmex continues to outstrip other companies in complaints reported to the Consumer Protection Agency.[28] In 1992, 84,000 complaints were registered in the metropolitan area, up from 72,000 during the previous year.[29] Telephone lines continue to go dead or cross, particularly during the rainy season, and improper billing has escalated, requiring users to stand in long lines for hours before they can talk to company employees and resolve the problems (Katz, 1993). The basic network is not being sustained and efforts to modernize and opportunities for profitable services are focused on subsidiaries outside of the union's purview. This strategy, concentrating on the modernization of service to large firms and industrial zones areas, serves two goals: it creates more streamlined service firms and simultaneously sidesteps organized labour.

6. The impact of privatization

6.1 Service targets

Telmex and the STRM worked together to detect the bottlenecks to productivity growth. The problematic areas in decreasing order of importance are: material resources, external plant, exchanges and support, and infrastructure. The efforts appear to be paying off, as productivity has improved markedly over the past couple of years (Appendices 1 and 4). In the two years since privatization, Telmex installed 1.5 million new digital lines, reaching a level of digitalization of 55 per cent. In 1992, it also substituted obsolete analogic lines with 400,000 digital ones for a net gain of 34 thousand lines, which is still far below demand. Similarly, in 1991, Telmex fulfilled one of its targets and increased considerably the number of rural communities connected to the telephone network.[30] In mid-1991, Telmex affiliate Telnor began installing a fibre optic network linking the U.S. border cities. This northern digital network is to be integrated into the ISDN national digital network (RDSI). By the end of 1991, this network was 97 per cent digitalized.

Telmex investment plans for 1993, the last segment of its 3-year plan (1991-1993) include: 1) expansion of telephone network by 846 additional lines; 2) installation of 30,000 public phones; 3) incorporation of 2,500 rural communities into the telephone network; 4) extension of the digital overlay long distance trunk network with 6,000 kms of optical fibres (part of the 13,500 kms network) which will link the 56 most important cities and extend advanced telecommunication services to firms); and 5) expansion of cellular phone service to 30 cities reaching 115,000 new users.

6.2 The transformation of the workplace

Rather than the privatization per se, the introduction of new (digital) technologies since the early 1980s, and particularly after 1987, has had considerable impact on the definition of work categories and tasks. It should be noted at the outset, however, that the introduction of new technologies has proceeded at contrasting paces and with distinctive implications for different groups of workers. While all workers note that the intensity of work has increased and that they are often poorly trained to meet the challenges, the new technologies pose threats as well as opportunities for workers and their union.

As the modernization of the company has progressed, labour has lost much of its ability to control the content and pace of changing working conditions, whether the result of changes in technology or recent administrative restructuring. The operators, in particular, have suffered from intensification of work, while maintenance workers' are insufficiently trained to work with digital switches. The future of wage increases is uncertain as they have been linked to productivity increases, but the rules for defining these increases have been stalled. New work related hazards have emerged, yet they remain unrecognized by the firm. Furthermore, retraining and its attendant promise of improvement in workers' futures has not materialized.

6.2.1 Operators

The operators, constituting over 20 per cent of the workforce, are the group of union workers most threatened by new technologies, but despite the changes, the expected lay-offs have not materialized. Although one operator can now handle many more calls, the number of calls has increased as more lines have been installed. Additionally, many generations of equipment exist side-by-side and the need for old skills has not been eliminated. The majority of the over 13,000 operators, for example, use a switchboard, which limits them to processing about 7 calls simultaneously.

One international long-distance operator, an area where substitution of equipment has advanced the furthest, summed up the changes from the switchboard to the digital technology in putting through calls to customers:

> The changes are radical. [Under the old system,] you would normally be seated in a fixed position, answering the calls and blinking lights at your own pace, which you controlled manually. Now, with the new operator's job, the only thing you do is receive the information about the subscriber on a table appearing on the computer screen. You do not write any more, and part of the information is already on the screen. It reduces the quantity of data you put in the computer to the minimum. This has led to problems because when it is time to bill the caller, since you did not put in the name of the person and other information that you used to put, there are problems in finding the source of the call, who called, and other information needed to investigate it....You become an appendix to the computer, you are not answering at your will, the calls come one after the other, automatically...
>
> You do not work at your will any more. The machine is assigning the work, it is doing the accounting - the time it takes to make a call, how many calls you do, the

time you take to get a drink of water to go to the bathroom, etc. It is more depersonalized. When you were at the old switchboard, the analogue one, you had the opportunity to help a subscriber who wanted to call Cuba...or for example, Iraq during the war. You did not have only one possibility, but seven or eight possibilities to dial in many places, with many operators, and to try to help the caller. Now in this job with the computer, you can only press a button and if no one answers, you have no more options.

In other words, technology has cut down the time it takes to make a call which has improved service. However, the price of efficiency has been limits to alternatives to consumers and the company. Operators can no longer reroute calls if the routing established by the computer does not lead to a connection and billing problems continue to proliferate. Finally, many of the skills that operators previously needed were displaced by the computer and the workplace identity has been destroyed. A new one, however, has not emerged to take its place:

> The seniority privileges that you had earned are in jeopardy... Anyone can acquire the knowledge that you needed to use the "little machine" [computer], it does not require a lot of time. With the analogue equipment, it took you a month and one half to learn, in addition to the practice you needed. With the new equipment, in a week and one-half, any *companera* that speaks English, any one from the street can do it. You no longer need experience as an operator, you learn the equipment and operate it quickly.[31]

These trends toward automation will accelerate because the rate structure makes direct international dialling cheaper than operator-assisted calls.

Other issues are work-related injuries and retraining. Operators are under increasing stress as the number of calls has increased. They suffer from other injuries such as Carpal Tunnel Syndrome, eye strain, and other problems related to poorly installed lighting, poorly adjusted chairs and other equipment. Few studies are made, and the way the firm and the union address these problems is symptomatic of the increasing loss of contact with the rank-and-file. The union leadership and management cut a deal regarding the installation of new lighting or the purchases of new chairs, but the workers that use the equipment were barely consulted.

Regarding training, although an agreement has been signed between the Technological Institute of Telmex (Inttelmex) and France Telecom to train workers, workers complain that the courses are excessively theoretical rather than practical, and training begins only after new equipment has been installed, rather than before.[32] As a result, workers are penalized for mistakes stemming from inadequate training.

6.2.2 External plant

Digital systems are capable of automatic self-diagnosis and correction, and maintenance takes place in a modular and centralized manner. Whereas old crossbar telephone exchanges required 7-10 technicians per an exchange with 10,000 lines, the new digital exchanges require just one technician per 60,000 lines (Dubb, 1992). Finally, since 1979 a variety of administrative and financial services were computerized, a trend that intensified after 1987 (Coparmex, 1989). Yet the debugging of the system and the persistent problems of old lines has led to a 10 to 15 per cent increase in the number of maintenance workers. As in the case of the operators, predictions that the number of maintenance workers would fall by 25 per cent between 1980 and 1995 never materialized. In fact, the number of maintenance workers has probably increased by about 10 per cent since 1982.[33]

In the "external plant" (installation and repair), according to one departmental delegate, the principal change is the intensification of work and the need for a previously specialized worker to do many tasks. In the past, for example, one person installed lines, another repaired them, and another injected gas. Although the installation of fibre optic cables is similar to the installation of the copper ones,[34] installation is very different from maintenance and gas injection. Now, workers are given two weeks' training and are supposed to be able to do all the tasks. Another change is that several maintenance centres can now control one exchange, and there is no longer a dedicated relationship between a centre and an exchange.

Work has been intensifying since the early 1980s with the firm's modernization plan. Since privatization, however, repair work has increased by 30 or 40 per cent and as the rules tying wages to productivity are being hammered out, the rhythm of work has intensified again. Most urgently, repair people are not given the training and even tools they need to do their jobs.

While technological change has not had the same impact as it has had with the operators, the rationalization of jobs has not taken into account many of the needs of the area. The organizational changes mean that workers are responsible for more tasks, yet they are not properly trained. Furthermore, even though workers are organized into teams, the rationalization levelling of wages undermines the functioning of the teams. It has granted the lowest increases to the more skilled workers who become leaders and are responsible for coordinating the teams. At the same time that their responsibilities have increased, their relative wages have decreased. The new post-Concertation Agreement worker identity that was to have emerged and could have justified the change has not materialized, leaving workers frustrated and with the sensation of being unfairly treated.

6.2.3 Non-union hiring by Telmex

The firm acquired more liberty to hire non-unionized workers, generally administrative and supervisory personnel (*personal de confianza*), who in turn, acquired more authority over workers. One critic argues that the union made a strategic error by not negotiating stricter limits on discretionary hiring (Felix, 1989). In interviews, workers have complained that the discretionary personnel in Telmex are often too new or ill-prepared to meet the challenges of setting up the framework for tying wages to productivity, a key aspect of the new era of labour relations. Conversely, they claim that the discretionary personnel that are best trained to implement and use the new technology are in the subsidiaries and their expertise is unavailable to Telmex workers.[35]

6.3 The retraining mirage

There is a widespread perception among workers that the retraining agreements established in the CC and CLT have not been implemented.[36] For example, retraining of workers to install and maintain the fibre optics network has been too selective. Retraining courses have been too short and too late, while the work pace and scope has increased. There is a generalized feeling of disorientation and frustration. Furthermore, training has not motivated workers enough to embrace a new technological culture.

In spite of Telmex's repeated pledges to continue the Intensive Programme of Permanent Quality,[37] the experience appears to show otherwise. Workers are poorly prepared for participating in quality circles. When the circles are started, they are strictly controlled and issues are limited to ones that workers consider insignificant, or believe generally skirt the fundamental problems. Workers, both unionized and low-level supervisory, are unaware of the firm's compromise with quality, and perpetuate traditional forms of labour organization. A damaging consequence of this generalized ignorance, mixed with mistrust about quality, is that middle-level line managers have increased their power and tightened supervisory practices rather than decentralizing control.

6.4 Productivity agreements

In so far as the political opportunities for significant wage gains have been limited, in light of government directives toward wage restraint and the political compromises between the union leadership and key government political actors, productivity agreements have gained crucial importance. General wage negotiations are part of the collective contract negotiations which take place every two years and every year increases are established by government authorities. Sustained productivity increases are fundamental to mobilization of the base by the union leadership, and for an effective and durable pattern of labour relations.

Although productivity increases have theoretically increased the possibilities for workers to attain considerably higher remuneration, there has been considerable disparity across areas. Up to now (January 1993), only the traffic area has received productivity incentives, and negotiations on measuring parameters and economic incentives have stalled in most of the other areas. In some areas, such as maintenance centres, after one year of negotiations, management has made politically unviable demands that have practically grounded the process. In some regional areas, after a long and extensive process, negotiations of productivity incentives have been unilaterally called off by management, who argued that workers were already performing at or above the negotiated level. A dangerous consequence of the productivity drive noted by workers and union is the intensification of work. Workers express a legitimate concern of being caught in a vicious circle of intensifying work just to defend fair wage levels.

At the root of these problems with productivity incentives is the fact that the parties involved jumped onto the bandwagon without really knowing what it was all about. As a member of the STRM executive committee put it:

> The negotiation of productivity incentives was done a bit in the dark, as its characteristics weren't very well known. So the idea was to jump in to learn and to get the incentives, and to try to solve the problems as they appear.

Workers and union delegates involved in the actual negotiation process at the activity level confirm this impression, and explain that their management counterparts are often even less informed and aware of the criteria and implications of the process. A top level union-company commission, the Analysis Commission, is responsible for discussing these productivity problems as well as issues related to quality. However, Telmex fears that such a commission acquires a too central and embracing role by linking issues it would have preferred to negotiate separately

Compounding the problem, the top level negotiations between the union and Telmex did not set general criteria, but rather attempted to ground particular ones within the individual specialties (total of 31 specialties - see section 5.1). When these specialty-grounded criteria were transposed to diverse labour processes with differing characteristics and labour relations traditions (i.e. mechanics in different areas of the company), intractable problems surfaced. Finally, the top level negotiations were done in a very short period of time and were overshadowed by the then politically more salient problem of the acquisition of shares by workers. Telmex initially wished to link productivity incentives only to improvements in services with direct contact with subscribers such as external plant and commercial areas. Secondary priority areas were subscriber registry and telephone exchanges. The area where productivity incentives began implementation (November 1992) was the external plant because it already had historical record of improvements which helped to set up measurement parameters.

6.5 Technological change and worker participation

Clauses in the CC regarding worker participation have become dead letter, as commissions are frequently re-organized and remain centralized within the upper echelons. Moreover, the 1987 administrative reorganization which was supposed to have produced greater decentralization and increased responsibility at the lower levels never materialized. Workers explain that channels to administration/management that were opened for worker participation in confronting technological change are now blocked (see section 4.1).

6.6 STRM-Telmex labour relations

According to members of the Executive Committee, there have not been any major structural changes in these relations. In terms of the negotiating framework, they argue that the 1987 decentralization transformed the structure of power relations within the firm, strengthening the negotiating power of individual department managers vis-à-vis the management executive committee negotiating team. They fail to observe, however, what has been noted by several workers and departmental delegates, that the decentralization has not had a similar effect in the union negotiating structure, where workers at the departmental level have been in fact weakened due to the new job classifications, vis-à-vis both their immediate management superiors and the union executive committee. This discrepancy in the power and negotiating structures of labour and management could have negative consequences for the long-term negotiating strength of labour as the base loses its negotiating power, without a corresponding increase in the effective power of the union leadership.

7. The non-replicability and shortcomings of labour relations in Telmex

The deep-seated changes in labour relations in Telmex are part of a larger process of technological change, increasing international competition, and national and internal union politics. Privatization and the Concertation Agreement are two turning points in the tortuous and often unpredictable trajectory. We argue that the Telmex/STRM agreements are particular to the political conjuncture in which they unfolded and therefore are not generalizable to other sectors of the Mexican economy.

Telmex's record in maintaining employment and wares has been stellar compared to restructurings in other Mexican companies. This can be a attributed to a few factors including the recent growth and investment in the company, the privatization safeguards for labour, STRM president's Hernández Juárez's centralizing leadership, and also the personalistic ties between Hernández Juárez and President Salinas as both strove to forge a new model of labour relations to support the country's drive to modernization and advance their political goals. As a result of the successful gains, the STRM is in the enviable position of having not only survived, but strengthened itself. The record on created a committed and dedicated workforce capable of confronting the daunting challenges, however, is less laudable. The increasing centralization of the STRM and corresponding rift from the demands and needs of the rank-and-file may compromise the extent to which the union can credibly maintain its role as spokesman and channel of communication between the firm and the labour force.

In 1991, TELMEX reported a huge profit of US$2.3 billion on revenues of US$5.4 billion, posting an annual growth of 20 per cent. The turnaround from the sluggishness of the 1980s was spectacular by any measure.[38] Rate increases in accordance with the regulatory mechanisms of the privatization agreement permitted the new investments which fuelled investment and growth.[39] Telmex's US$8 billion modernization programme will be completed in 1993. The substitution of analogue with digital lines speeds ahead, although its efficiency is hampered by the poor condition of the basic network.[40] The modernization of the basic network continues to require massive resources, well beyond the millions of dollars already spent. In 1991 only about half of all calls were completed.[41] The poor quality of the domestic telecommunication service system pushes Telmex and other firms to high value services which are served by non-unionized firms. Telmex has also given high priority to the overlay network which serves the largest domestic and foreign companies.[42] Although the STRM succeeded in including in the 1992 CTC an article requiring the firm to contract unionized personnel through the STRM when it creates new subsidiaries (negotiated as part of the privatization settlement), by and large, the path to modernization is not a unionized one.

The CC, which reduced the number of labour categories and work areas, was to bring about a more efficient allocation of labour resources. Without disputing that the number of categories and work areas was excessive and that a measure of flexibility was needed, it appears that Telmex management has been unable to take real advantage of this newfound flexibility, and as a result, the reorganization of work tasks is a stumbling and ad-hoc process. Workers complain that there is no coherent strategy and they are deployed in an unorganized manner. More importantly, they note that their efforts to organize quality circles have been stunted by management, as they pursue short-term but limited efficiency gains rather than address structural problems. The limited efficiency gains that have been achieved by the company can be attributed to a long overdue policy of sustained equipment investment, rather than on the establishment of a modern framework of labour relations and its attendant flexibility.

Although an ownership share of TELMEX was to be another column in the structure of cooperative and profitable growth, the underlying reality is quite different. Studies arguing that the lack of union opposition to the sale and the subsequent changes in the collective contract (CCT) can be attributed to the profit sharing agreement, are mistaken.[43] Although the STRM embraced the CC, it was only after bitter internal struggles where dissidents were defeated. Furthermore, as interviews with workers and union delegates revealed, the profit sharing plan did not produce the expected identification of the workers with the firm that is so important to successfully negotiating deep-seated transitions in defining a new role for labour.

The STRM leadership's strategy was to accept management's plans for implementing new technology without lay-offs. In exchange, it would mobilize the rank and file to work toward productivity incentives and leave behind old-line wage demands. It would also bargain to regain jobs lost to third party subcontractors and personnel appointed by Telmex (*personal de confianza*). If successful, the strategy would have been a self-reinforcing one, promoting productivity and increasing unionization. But union leaders, despite their rhetoric of co-responsibility, cooperation for productivity and profits have not only been unable to establish rules for productivity increases, upon which increases in wages are based, but they have increasingly closed off input from the rank-and-file. The negotiations to define the productivity increases stalled as management dragged its feet in an effort to sabotage them. The January 1993 strikes by metropolitan external plant area personnel is only the latest manifestation of growing discontent with the union's handling of the emerging work rules and productivity incentives. This was the first strike to protest the way in which the March 1992 productivity programme is being implemented. Workers complained that there was little discussion about it and criticized the methodology for measuring productivity.

The ties between the government, the union, and its workers are straining to the point where workers demand the old-style collective action centring on wages rather than the leaders' aspirations of an alliance of productivity. The CEN's response to these trends has been three-fold. First, it is strengthening its traditional basis of support at the same time it calls for a new union identity that aggregates a larger number of workers. Second, it is modernizing its structure from the top down, by training new union cadres in modern industrial relations techniques and establishing a centralized system of documentation and information. Third, it has multiplied and intensified its external actions: it sponsored the creation of a new union movement, FESEBS; pursued alliances with domestic and foreign unions and other external entities.[44] Yet these overtures are usually perceived by workers as superficial and a palliative that will not correct the erosion of real wages.

The STRM signed the Concertation Agreement (CC) in part because it was forced to - it was losing strength as more profitable services were farmed out to non-unionized Telmex subsidiaries and technology was eliminating many skilled professions and industrial restructuring in other firms was taking its toll on labour.[45] The enthusiasm with which the union leadership embraced policies that compromised the future growth of the union and produced no guaranteed wage agreements further aggravated the growing schism between the rank-and-file who perceived the union's enthusiastic support as a political cooptation, narrow, and short-term. The signing of the CC saved the union but many of its provisions mortgage STRM's long-run growth and bargaining power. Profitable services go to non-unionized companies; identities are eroding which complicates negotiations; the centralized union leads to a growing disaffection of the base. A union that is more responsive to rank-and-file needs may be able to reverse some of these trends. It must struggle for advance information on the introduction of new technologies to be able to inform its members about what they will confront and to devise strategies minimizing negative impacts. It must strive for continual education and rotation of workers as a means of not only protecting workers from lay-offs and alleviating boredom and hazards of repetitive tasks, but also as a means to create a wider company-level identity. It must continue to maintain control over assignments and transfers, but permit these decisions to be made at the lower echelons. And it must create institutional structures that permit the flow of information between workers and the union executives. In other words, centralization for negotiation and decentralization in response to workers needs must reinforce each other.

Appendix 1

Telmex labour productivity

	Total number of lines (1,000)	Workers/ 1,000 lines
1980	2 617	10.3
1981	2 870	10.3
1982	3 034	10.3
1983	3 221	10.0
1984	3 383	10.3
1985	3 574	10.5
1986	3 776	10.8
1987	3 985	11.2
1988	4 261	11.7
1989	4 702	10.4
1990	5 189	9.6

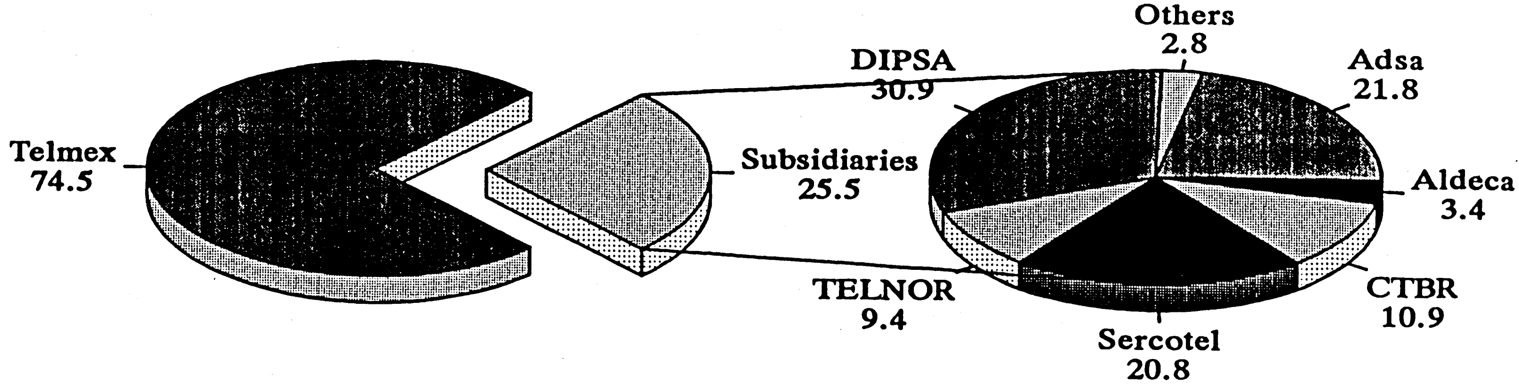
Appendix 2

Telmex subsidiaries

Sector	Firm
Telephone	— Radiomovel DIPSA
Real estate	— Compania de Teléfonos y Bienes Raices (CTBR) — Alquiladora de Casas (ALDECA) — Fincas Coahuila — Immobiliaria Aztlan
Marketing	— Anuncios en Directorios (ADSA) — Imprenta Nuevo Mundo (INMSA) — Editorial Argos — Operadora Mercantil (OMSA)
Construction	— Construcciones y Canalizaciones (CYCSA) — Teleconstructora (TELECO) — Construcciones Telefonicas Mexicanas (CONTELMEX) — Canalizaciones Mexicana, S.A. de C.V. (CAMEX)
Services	— Renta de Equipos (RESA) — Impulsadora Mexicana de Telecommunicaciones (IMTSA) — Servicios y Supervision (SESUSA) — Industrial Afiliada (IASA) — Fuerza y Clima (FYCSA)
Finance	— SERCOTEL

Total assets of Telmex and its subsidiaries, 1989

(% total)



Total US$11,956 million, 1989

Total US$3,048, 1989

Source: Sanchez et al., 1992, graph 5.2.

Appendix 3

Telmex business profile (US$ millions)

	1985	1987	1989	1991
Revenues	1 032	1 047	2 070	5 400
Net profits	175	289	687	2 300
Telephone lines (x 1,000)	3 575	3 985	4 700	6 782

Sources: Escamilla, 1989; Mendoza, 1989; PTTI, 1992.

Appendix 4

Telmex performance, 1985-1992

	Density (lines per 100 inhabitants)	Growth in service lines (%)	Productivity (workers per 1,000 lines)	Assets (1988 constant billion pesos)
1985	n.a.	n.a.	10.5	9 129
1986	n.a.	n.a.	10.8	11 125
1987	n.a.	5.53	11.2	12 485
1988	5.0	6.44	11.7	13 286
1989	5.4	10.77	10.4	15 043
1990	5.8	10.36	9.6	17 449
1991	n.a.	30.67	8.5	-
1992	-	11.61*	8.0*	-

* Estimated.

Appendix 5

Telmex employment growth, 1981-1991

	Total employees (000s)	Unionized (%)
1981	29.6	88.5
1982	31.4	87.8
1983	32.5	87.3
1984	34.7	87.6
1985	37.5	86.4
1986	40.7	86.0
1987	43.0	88.6
1988	50.0	85.4
1989	49.2	84.3
1990	49.9	84.4
1991*	49.5	85.5

* Estimated.

Source: Telmex, *Annual Reports*, cited in Lara Sanchez, 1992.

List of interviews

Members of National Executive Council (CEN) of the STRM, December 1992

Department delegate of Maintenance Centre, December 1992

Female department delegate of Maintenance Centre, December 1992

International operator, December 1992

Worker at Maintenance Centre, December 1992

Department delegate of external plant area, January 1993

Department delegate of traffic area, Hermosillo, Sonora, January 1993

Worker at traffic area, International Long Distance, January 1993

Dr. Enrique de la Garza Toledo, January 1993

Bibliography

Cavazos, Jorge Sandoval. 1988. "El sistema digital en Telefonos de Mexico," in *Reconversion industrial y lucha sindical*, Esthela Gutierrez Garza, ed., Mexico, Editorial Nueva Sociedad, pp. 121-126.

Clark, J.; McLoughlin, I.; Rose, H.; King, R. 1988. *The process of technological change: New technology and social choice in the workplace*. Cambridge, Cambridge University Press.

Comisión de Modernización. 1988. *Comision de Modernizacion - Proyecto (propuesta)*. Informe presentado por la Comisión de Modernización a la XIII. Convención Nacional Ordinaria Democrátioca de Telefonistas, Septiembre.

Coparmex. 1989. "El sindicato de telefonistas de la Republica Mexicana (STRM): Una muestra de reestructuración tecnológica y flexibilización del contracto colectivo," México, D.F., mimeo.

Corro, S.; Correa, G. 1991. "De como se plegaran tres combativos gremios: Petroleros, telefonistas y electricistas," Proceso 769, Julio 29.

Cowhey, P.F.; Aronson, J.D. 1989. "Trade in services and changes in the world telecommunications system," in Peter F. Cowhey, Jonathan D. Aronson and Gabriel Székely (eds.). *Changing networks: Mexico's telecommunications options*. Monograph Series, 32. San Diego, Centre for U.S.-Mexican Studies/University of California. pp. 5-49.

Darling, J. 1991. "On the ground floor of Mexico's privatization: Alfredo Lelo de Larrea is the government's turnaround expert, and he's doing just that, turning troubled firms into companies that will sell quickly in the private sector," in *Los Angeles Times*, 10 September.

Delarbre, R.T. 1990. *Crónica del Sindicalismo en México, 1976-1988*. México, D.F., Siglo Veinteuno Editores.

Denton, D. 1992. "Selling cellular: Competition is fierce, but there are plenty of customers to go around (Mexico)", in *Business Mexico*, 2 July, pp.26-7.

Escamilla, J.R.P. 1989. "Telephone policy in Mexico: Rates and investment," in Cowhey, Aronson and Székely (eds.), op. cit., pp. 101-123.

—; Aceves, R. 1990. "La privatización en México y America Latina," Instituto Tecnologico Autonomo de México, Jan., mimeo.

Espinosa, E.M. 1992. "Privatización de la administración pública paraestatal en México," in *El Cotidiano*, No. 50, septiembre-octobre, pp. 24-29.

Félix, R.E. 1989. "La pérdida de la materia de trabajo en el sindicato de telefonistas," in Garza, E.G., coordinadora, 1989. *Reconversion industrial y lucha sindical*. Mexico, D.F., Fundación Friedrich Ebert-México/Editorial Nueva Sociedad, pp. 135-142.

Ferrer, O.H.V. 1991. "The political economy of privatization in Mexico," in Glade, W.P. (ed.) *Privatization of public enterprises in Latin America*. San Francisco, ICS Press, pp. 35-58.

Garza, E.G., coordinadora, 1989. *Reconversión industrial y lucha sindical*. México, D.F., Fundación Friedrich Ebert-México/Editorial Nueva Sociedad.

Goméz, M.A.G. 1992 "La reprivatización en México" in *El Cotidiano*, No. 45, Jan.-Feb.

Grant, J. 1991. "Mobile mania (cellular phones increasingly popular in Mexico)" in *Business Mexico*, 1 June, pp. 23+.

—. 1990. "Going Mobile (Mexico)" in *Business Mexico*, No. 7, Sep., pp.44+.

Juárez, F.H. 1990. "Privatización de empresas: Perspectiva de la reforma del estado," in *Seminario internacional: La privatización, un diálogo necessario*, mimeo.

—. n.d. "Reforma economica popular: Nuevos empleos, nueva productividad, nuevo sindicalismo," mimeo.

Katz, G. 1993. "Promise of Mexico's phone system. Unfufilled problems plague Telmex despite its privatization," in *Dallas Morning News*, 6 March.

Kim, E.M.; Hamilton, N. 1992 "Democratization and economic liberalization in Mexico and South Korea". Paper prepared for presentation at the Latin American Studies Association Annual Meeting, Los Angeles, CA., 24-26 Sep. 1992, mimeo.

Mendoza, A.P. 1989. "Teléfonos de México: Development and perspectives," in Cowhey, Aronson and Székely (eds.), op. cit. pp. 91-99.

Middlebrook, K.J. (ed.) 1991. *Union, workers, and the state in Mexico*. La Jolla, California, Centre for U.S.-Mexican Studies, University of California, San Diego.

"Modelo para el esfuerzo de calidad," n.d., Telmex, mimeo.

"Modelo de Capacitacion Telmex," n.d., Telmex, mimeo.

Ortiz R.M.; Iriarte, R. 1988. "Reconversion industrial y lucha obrera," in *Revista Brecha*, Mar.

Perez, R.R. 1989. "Antecedentes y resultados de una modernización concertada en teléfonos de México". seminario Historia del Movimiento Obrero, Professor Francisco Zapata. México, D.F., mimeo.

Postal Telegraph and Telephone International (PTTI). 1992. *Multinationals in telecommunications: Up-date*, Spring 1992, mimeo.

Ramirez, A. 1992. "Woes at Telmex not of its making," in *The New York Times (Business Section)*, 18 Sep.

Restaurador. 22 de abril (organo oficial del Sindicato de Telefonistas de la República Mexicana), several issues.

Rogozinski, J. 1992. "Learning the ABCs of Mexico's privatization," in *Wall Street Journal*, 15 May.

Romo, R.C. 1992. "Teléfonos de México," in Gonzales, M.S., coordinador. *El processo de privatizacion en México: Un estudio de casos*. Washington, DC, Inter-American Development Bank.

Rubio, P.V. 1989. "Los cambios tecnológicos y la democracia sindical: Están interrelacionadas?" Paper presented to the Latin American Studies Association (LASA) meeting, Dec. mimeo.

Salinas, R. 1992. "Privatization in Mexico: Much better, but still not enough," in *Heritage Foundation Reports*, 20 Jan.

Sanchez, L.; Angel, M. "Productividad y trabajo. El Caso de Telmex," Serie Analisis del Trabajo, Centro de Investigaciones del Trabajo y Estudios Economico Sociales, A.C., Julio 1992.

Shapiro, H.D. 1993. "A year of new boundaries. Privatization in Mexico gets out of the banking business" in *Institutional Investor*, Jan.

Solís, V. 1992. "La modernización de teléfonos de México," in *El Cotidiano*, No. 46, Mar.-Apr., pp. 60-68.

SHCP (Secretaria de Hacienda y Credito Público, Unidad de Desincorporación de Entidades Paraestatales). *El Processo de Enajenación de Entidades Paraestatales*. México, D.F.

STRM. 1990a. "Circulares informativas de la Comission de Modernización de fechas: 1° de Noviembre, 21 de Julio, 16 de Diciembre, [1990] y 7 de Diciembre de 1989," mimeo.

—. 1990b. *Estatutos del Sindicato de Telefonistas de la República Mexicana*, México, D.F.

—. 1990c. *Contracto Colectivo de Trabajo celebrado entre Teléfonos de México, S.A. de C.V. y el Sindicato de Telefonistas de la República Mexicana*, México, D.F.

—. 1992. *Contracto colectivo de trabajo celebrado entre Teléfonos de México, S.A. de C.V. y el Sindicato de Telefonistas de la República Mexicana*, México, D.F.

Tandon, P.; Abdala, M. 1992. "Teléfonos de México," in Tandon, P. (ed.). *World Bank Conference on the Welfare Consequences of Selling Public Enterprises - Case Studies from Chile, Malaysia, Mexico and the U.K.* (CDP Summary Volume) Washington, DC, 11-12 June, 1992, Chapter 16: Telmex, pp. 1-42.

Telmex-STRM. 1990. *Convenio sobre calidad, productividad y capacitación, para la modernización integral de Teléfonos de México, S.A. de C.V.*, 9 de Diciembre, mimeo.

VOCES de Teléfonos de México, several issues.

Notes

1. We gratefully acknowledge discussions with Steve Dubb, Pankaj Tandon, and Kevin Middlebrook on, respectively, the STRM, the intricacies of privatization, and future trends in Mexican labour. Special thanks to Norma Veluz for her excellent research assistance. All errors and omissions are ours.

2. On the mechanics of privatization, see Tandon, 1992; Rogozinki, 1992; Darling, 1991.

3. Other sectors where the state plans to remain include the corn and bens distribution networks and the development banks (Darling, 1991).

4. From 1984 to 1988, employment growth continued to accelerate, reaching an annual rate of 8 per cent, only to slow down during the year prior to the privatization.

5. Public phone rates were frozen from 1952 until the early 1980s, representing a decline in real terms of almost 100 per cent. In 1975, local and national long distance rates in Mexico were the lowest among 21 countries with more than 2 million lines, and the real cost of the basic service infrastructure was twice the revenues it brought in.

6. The IEPS and value-added taxes (IVA).

7. Teléfonos de México, a private firm, was created in December 1947 through the incorporation of the assets and concessions of Teléfonos Ericsson, S.A. A few years later, Telmex acquired its sole competitor and became the single most important telephone services firm in the country, controlling 95 per cent of all lines. During the 1950s an investment programme based on the acquisition of shares by subscribers began. However, until August 1958 the company's majority capital was in foreign hands. In that year a Mexican investment group acquired the majority of shares in Telmex.

State participation in Telmex capital began in 1963 through credits derived from taxes on telephone services. Finally, in 1972, the state became the majority shareholder with 51 per cent of the company's social capital. In 1984, Teléfonos de México S.A. became a corporate entity, Teléfonos de México, S.A. de C.V. and in 1987 it became the only national enterprise of telephone services when it absorbed two smaller regional companies.

8. In the 1940s and 1950s, Ericsson de Mexico, a subsidiary of the Swedish company, was the majority partner in Telmex.

9. In 1979, Telmex installed experimentally the first digital exchange in operation in Latin America.

10. Maquilas are firms that assemble products destined primarily for export markets. They are often located near the Mexican-U.S. border and are among the largest foreign exchange earners in Mexico.

11. In 1978, following a strike, a new labour contract for the traffic personnel (operators) was signed, the first since 1948. Another strike around the implementation of the labour agreement led to new contractual clauses on work conditions. However, the 1979 strikes for better wages failed.

12. For an insightful and detailed analysis of the period, see Dubb, 1992.

13. Hernández Juárez was first elected in 1976 with 86.36 per cent of the votes. After he changed the union's statutes to allow his own reelection, he was reelected three more times, strengthening his electoral power particularly from the mid-1980s, as shown in the table below.

STRM Elections Votes

	Hernández Juárez	Opposition	Abstention/Nuls
1980	7,979	5,177	n.a.
1984	17,000	6,000	1,800
1988	25,396	8,249	n.a.

Source: Delarbre, 1990, pp. 336-37.

14. Interview with delegate from central maintenance department.

15. The first modernization plans, based on the adoption of electronic switching technology, date from the late 1970s. While electronic switching systems were adopted in a piecemeal fashion during the 1980s, a systematic and comprehensive modernization strategy in this direction was not launched until then.

16. Hernández Juárez became vice-president of the CTM in 1986, and became its president in January 1987.

17. Maintenance workers who were at the top of the wage scale experienced a slower progression in real wage increases. Interview with maintenance centre male worker, December 1992.

18. Between January and July 1987 the number of complaints not attended went from 16,000 to 44,000 and productivity of repairs declined by 55 per cent.

19. Interview with network maintenance worker, December, 1992.

20. Not even the privatization of one the most important banks, Banamex, brought so much money into the coffers of the Mexican treasury.

21. AeroMexico was in poor financial condition. It was declared bankrupt by the government, and its assets were transferred to another company which was sold to a group of private investors. The bankruptcy proceedings gave the government the leeway to fire workers and the workforce was cut in half.

22. Interviews with various, p.33; p.41. Also see Dubb, 1992.

23. Interview with international operator, January 1993. Also see Dubb, 1992 on this point.

24. Analysis based on Solis, 1992; Coparmex, 1989; Interviews.

25. The market has been open to firms competing with Telmex and had 200,000 subscribers at the end of 1991 (Denton, 1992; Grant, 1990 and 1991).

26. The regulatory system of prices and tariffs is based on the real prices of a basket of all services offered by Telmex, weighted by consumption levels per service in the preceding period. After 1996, prices will be reduced by 3 per cent per year to transfer to users the benefits of progress in productivity and efficiency. After 1999, the SCT will adjust ceiling prices, so that they will at least give the company a constant return based on its capital costs. This system, in principle, gives Telmex the flexibility to set competitive rates for specific services.

27. At a general level, a telecommunications rule incorporating the elements of technological change and aligned to international codes (ITU) was drawn.

28. "Instalacion de un millon y medio de nuevas lineas Telmex se moderniza con nueva tecnologia digital," in *La Jornada*, 2 January, 1993.

29. "Telmex, primer lugar en demandas por incumplimiento y mal servicio," in *La Jornada*, 22 January 1993.

30. This expansion had started in 1990, when the number of communities served reached 10,221 in comparison with just 7,322 in 1989. By June 1991 the number was 11,107.

31. Interview with a long distance operator who had previously been a union delegate, January 1993.

32. The Instituto Tecnológico de Telmex (Inttelmex) was created in 1991. In that year 5,701 operators, 500 supervisory personnel, and 110 technicians participated in intensive courses.

33. Interview with a union delegate from the external plant, December 1992.

34. In addition to installing cable, workers install a diagnostics system which lets subscribers check their own lines. If there are problems, subscribers who have bought a repair service with Telmex call the company. The repair can also be done by outside companies.

35. Interview with a union delegate from the maintenance department.

36. The training programme is an elaborate one, incorporating the Mixed National Commission on Training. It reviews and defines training needs for new technologies. Theoretically, it also decides which job specialities should be involved, the course description and its contents, the number of participants, and when and where the course will be given (Modelo de capacitacion Telmex, n.d.).

37. In the April 1992-1994 CCT, a "General Programme of Incentive for Quality and Productivity" was signed between the STRM and Telmex. It was an outgrowth of the March 1992 Permanent Quality Programme. The General Programme is modeled on programmes pioneered by Japanese firms. They include statistical process control, methods for analysing and solving problems, quality circles, cost analysis systems, among other techniques that strive for continual and self-reinforcing increases in quality, productivity, and lower costs. The programme explicitly states that increases in productivity are intimately tied to quality considerations.

38. Between 1987 and 1991 revenues grew five-fold and profits leaped ten-fold.

39. Real tariff increases in the first trimester of 1991 fully reflected the accumulated inflation from June to November 1990. Further tariff adjustments, according to revisions in the concession title were below inflation gains.

40. In 1992, almost 180,000 analogue lines were substituted with digital technology, permitting a wider range of service.

41. In 1991, only 55 per cent of calls were completed, a small hike from 47 per cent in 1987 (PTTI, 1992; Ramirez, 1992).

42. Telmex invested US$400 million to further develop the overlaid network RDSI to serve the telecommunications and data transmission needs of the country's 700 companies.

43. Romo contends that the profit sharing plan is one of the most important elements of labour relations negotiations leading to the successful privatization (Romo, 1992).

44. Other external alliances include operationalizing a new worker-campesino pact; participating in the government pact to improve productivity and in the corresponding evaluation commission; participating in the government-sponsored Solidarity Institute and in the creation of a research centre for the study of unionism, modernization, and productivity; and strengthening its ties with the government, principally around the social and micro-economic reforms of the state.

45. For a discussion of the threats to unions from industrial restructuring and the climate of uncertainty and fear prevailing in the 1980s, see Ortiz and Iriarte, 1988.

Interdepartmental Project on Structural Adjustment

Occasional Papers

1. *Stabilisation, structural adjustment and social policies in Costa Rica: The role of compensatory programmes*. Report of an interdepartmental mission, 4-9 May 1992 (Geneva, October 1992).

   also published in Spanish:

   Estabilización, ajuste estructural y políticas sociales en Costa Rica: El papel de los programas compensatorios, Informe de una misión interdepartamental, 4 al 9 de mayo de 1992 (Geneva, April 1993).

2. P. Egger: *Travaux publics et emploi pour les jeunes travailleurs dans une économie sous ajustement: L'expérience de l'AGETIP au Sénégal* (Geneva, November 1992).

3. A. Marinakis: *Public sector employment in developing countries: An overview of past and present trends* (Geneva, December 1992).

4. D. Tajgman: *Structural adjustment and international labour standards: A case study of Ghana* (Geneva, March 1993).

5. J. Gaude: *Système de compensation sociale et ajustement structurel: Etude de cas au Honduras* (Geneva, March 1993).

6. A. Marinakis: *Wage indexation, flexibility and inflation: Some Latin American experiences during the 1980s* (Geneva, April 1993).

7. R. Plant: *Labour standards and structural adjustment in Hungary* (Geneva, April 1993).

8. G. Pyatt: *Fiscal policies which support adjustment and balanced development* (Geneva, May 1993).

9. A.N. Mathur: *The experience of consultation during structural adjustment in India (1990-92)* (Geneva, May 1993).

10. R. Plant: *Labour standards and structural adjustment in Mexico* (Geneva, July 1993).

11. P. Egger, P. Garnier and J. Gaude: *Ajustement structurel et compensation sociale: Etudes de cas au Honduras, Madagascar et Sénégal* (Geneva, July 1993).

12. Y. Park: *Public sector adjustment through privatization: The Republic of Korea* (Geneva, September 1993).

13. J. Oliveira: *Training and privatization in Eastern European countries: Suggestions for an oeprational agenda* (Geneva, September 1993).

ISBN 92-2-109169-4