Labor Issues in Infrastructure Reform

A Toolkit

Modules 2–7
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A good understanding of the effects of private participation in infrastructure (PPI) on the work force is essential for managers in the implementing agency. The purpose of this module is to provide the implementing agency with an overview of the empirical evidence about what actually happens to workers in the process of PPI. This is valuable because the implementing agency has to deal with a variety of interest groups holding a range of beliefs and perceptions about what PPI will mean for them. Belief and perception are important because they drive the actions and reactions of all stakeholders and affect the political and labor relations environments. They are often informed, however, by partial, distorted, or even false evidence.

OVERALL TRENDS

PPI takes place in a changing global context that affects all businesses and national economies. There is, however, widespread concern regarding its impact on workers.

Public service workers and their unions often distrust PPI, fearing that it will have negative effects on employment numbers, pay, terms and conditions, and relationships with management. Set against a background in which many state-owned enterprises have provided their staff with employment security, and terms and conditions much better than those enjoyed by equivalent workers in the private sector, such anxieties are understandable. Moreover, there is no shortage of documented examples to show that these fears are well grounded.

Labor reductions in the enterprise are a reality, and some workers retained in some post-PPI enterprises have also experienced reductions in income and benefits, especially those with skills for which supply exceeds demand. Workers and unions have therefore generally opposed privatization, contracting, and other forms of PPI. And it is not only union leaders who believe that privatization has had a negative impact on labor and—more broadly—on income and wealth distribution. According to a recent study, such beliefs are growing and becoming more widespread (see IDB 2002 and box 2.1).

Does the evidence support such perceptions? In general, yes—but much depends on the initial conditions. In some cases workers have gained from privatization because new investments and dynam-
ic expansion have resulted in new job creation at
the enterprise or sectoral level, and because pro-
ductivity improvements have led to better terms
and conditions of service. Moreover, workers are
also consumers and their households will benefit
from improvements in access and services.

The review of sector impacts in subsequent sections
of this module also indicates that PPI itself is not
necessarily the only cause of adverse impacts on
labor. Any counterfactual assessment of the impact
of PPI on labor must take account of levels of
labor adjustment that would have taken place any-
way, perhaps as a result of new technology or
structural change in the economy through a shift to
services. Overall, the experience of the impact of
PPI on labor is more varied and nuanced than is
suggested by the stereotypes.

There are significant differences between sectors,
and underfunded public service organizations have
often been unable to provide their employees with
the capital investment and new technology to
enhance their work and productivity. Many public
employers have held back improvements in salaries
and wages rather than reduce staffing and pay
more to those who remain, and that practice has
often had an adverse effect on their ability to
recruit and retain key staff. Some employers have
difficulties paying salaries at all, and a few have
even looted employees’ pension contributions.

By introducing new capital and by restructuring
human resources PPI can improve the earnings and
working environment of many workers, albeit
often by reducing the number of people directly
employed, at least in the short term. In addition,
efficiency improvements often lead to longer-term
security of employment, and—in some sectors—
employment expansion.

Although it is important to be aware of the poten-
tial and negative impact of PPI on labor, it is no
less important to be aware of the wider picture so
that costs and effects can be accurately assessed
and fairly attributed. Moreover, without funda-
mental enterprise reform, infrastructure services
will continue to deteriorate in many cases, at high
cost to consumers and users.

EMPLOYMENT IMPACT

Job losses are the most obvious adverse impact on
labor. This section focuses on the impact of PPI on
the number of workers employed, beginning with a
brief introduction and then examining the evidence
sector by sector.

Factors in Employment Reduction

Private participation in state-owned enterprises has
a variable impact on job numbers. There are sever-
al reports of positive net impacts of privatization programs in general. In the infrastructure sector, however, PPI is seldom associated with short-term increases in employment in the enterprises directly affected and is more usually associated with short-run job losses. These losses can be substantial because of the large size of the enterprises concerned and the unusually high level of labor redundancy in many infrastructure enterprises (box 2.2).

Many factors play an important role in determining the extent, pace, and timing of employment reductions. Although there are numerous country- and enterprise-specific circumstances, some patterns exist. For example, sectors such as rail and ports have generally experienced higher levels of downsizing than have the telecommunications and water sectors.

Rail

Overall, the most severe impact of PPI on employment numbers has been felt in railway enterprises. There are five potential explanations for this:

1. There is increasing competition from road operators. As road networks have developed and improved, trucking and bus operations have become stronger competitors for rail operations. There are now few passenger or general freight railways that are not subject to competition from road transportation.

2. Technological change has brought a shift away from labor-intensive operations; for example, more efficient diesel and electric trains, improved ticketing systems, increased use of freight containers, or the mechanization of operations such as track tamping.

3. Some rail companies maintained their protected monopoly status for many years and when that was removed, profound changes in operations, costs, and staff numbers followed.

4. Rail workers (along with mine workers) are some of the oldest and most significant groups of organized labor. In some countries (Argentina, for example) the unions were successful in preserving high levels of employment until economic crisis enabled reform.

5. Rail has been often a vehicle for job creation and patronage.

The result has been high levels of downsizing. In Argentina, where the railway was restructured into several separate freight and passenger networks and concessioned in 1994 and 1995, employment fell from around 95,000 in 1989 to approximately 17,000 in 1997. (In 1960 it had been as high as 200,000.) The scale of job loss associated with rail PPI in Argentina is typical for Latin America. In Chile, where there had already been a cut of 75 percent in the railway labor force between 1973 and 1990, the number was halved again in the course of privatization from 1990 to 1995. Brazil’s experience was similar (see box 2.3).

In Africa, rail PPIs have also been associated with significant reductions in employment numbers, although not on the scale of Latin America where overstaffing appears to have been particularly high. Figure 2.1 shows how the work force adjustment in the joint railway of Côte d’Ivoire and Burkina Faso took place at the time of a major restructuring exercise in 1988, and then again at the time of PPI in 1995.
Job losses apparently associated with PPI do, however, need to be seen in the context of the sector as a whole. There have been substantial reductions even where rail has remained in the public sector. In Denmark’s national rail company, for instance, employment fell by nearly 29 percent in one year, from 1996 to 1997, following RFFSA’s restructuring into six regional businesses, more than half of those workers left, 4,000 of them through voluntary redundancies and 18,000 through other means.

The privatization team recognized that these targeted reductions in labor force were by no means final. When all the regional areas had been privatized, the organization of each system would probably change and would likely lead to additional reductions in staff, changes in skills mixes, and improved productivity.

That proved to be true. The workforce was halved again, to a total of around 11,000, within a year of the start of concessions, meaning that since the beginning of the privatization process about 75 percent of the jobs had been cut.


Ports

The port industry has been heavily influenced by global competition, technological change, and containerization. Port workers’ trade unions have opposed port reform because both job losses, casualization of labor (the shift to individual temporary contracts with less legal protection for workers), and changes in working conditions are of great concern (box 2.4). Whether or not the comments made in box 2.4 are a fair reflection of what has happened in all ports, they are typical of the perceptions of union leaders in ports—and indeed other infrastructure sectors.

An International Labour Organisation (ILO) survey of ports suggested that overstaffing was most serious where there are port labor pools—a measure that protects against casualization of labor—and that overstaffing was greater in operations than in administration. There has been a dramatic decline in employment in such ports. For example, in the port of Buenos Aires, Argentina, the suspension of the existing labor agreements led to a 50 percent reduction of the number of workers. Port reforms in Australia, France, and the United Kingdom cut employment levels by 40 to 60 percent (ILO 1996).

The Public-Private Infrastructure Advisory Facility (PPIAF) Port Reform Toolkit is a comprehensive source of information on all aspects of port reform, including labor issues.
Increasing competition compels port stakeholders to assess their cost structures and labor force. Competition is one of the principal motivating forces behind labor reform in ports. Impacts on individual ports depend on a number of factors, not simply PPI alone.

- The nature of port operations—the extent of containerization, the nature of the cargo—and the emergence of regional hub ports will be one factor. In particular where containerization and privatization occur about the same time, it is difficult to distinguish clearly which factor is responsible for job losses.

- The national economy has an impact. The effect of privatization in ports, rail, and other transport services depends on overall economic and trade performance because much traffic will be demand driven. If the economy stalls, so will demand for port and other transport services.

- The performance of other related logistical (rail, road terminals) and trade facilitation (customs) operations can have a profound impact. They can influence port competitiveness, cargo types, and volumes—and thus employment levels.

- The nature of industrial relations is also pertinent in assessing the impact. Effective unions enable employees to better defend changes to jobs and work practices.

Many government-owned ports face these issues—often in combination—and that can affect employment conditions and labor–management relationships in various ways (see table 2.1 and the PPIAF Port Reform Toolkit). Where the right factors come together, however, there can be net job creation in the ports sector (box 2.5).

**Water**

Private participation in water infrastructure often involves investment plans that propose rapid expansion of the service area. This expansion helps protect employment numbers because any surplus can be absorbed. Nonetheless, many state-owned...
water companies have low labor productivity, and the need to improve performance may necessitate work force reductions.

In the Czech Republic, for example, privatization of water supply and sewerage utilities began in 1992 and within five years the number of workers in the water supply companies had fallen by 26 percent. Similarly, in Hungary there was a 46 percent reduction in staff in one water company (ILO 1999b).

Employment reductions of a similar scale and range are associated with water PPIs in Africa, Asia, and Latin America (table 2.2). In Buenos Aires the numbers of permanent employees fell by about half to around 4,000. The consortium that won the concession for the service also reported, however, that it increased its indirect employment through contracts associated with its infrastructure expansion by as many as 5,000, producing a net increase of about 10 percent (Aguas Argentinas, personal communication).

**Electricity**

In the electricity sector the need for rapid investment and expansion of infrastructure also reduces the extent of job losses. Nonetheless, the ILO reported employment cuts of more than 20 percent of the work force in a number of countries.

For example, in Côte d’Ivoire employment fell by 22 percent over a 5-year period following the start of a 15-year concession. The impact appears to have fallen particularly heavily on middle management. The new management decided to “flatten” the organization by reducing the number of hierarchical layers from 18 to 5.

As in other sectors, job losses also take place under public ownership, without PPI. In South Africa, for example, there was a 40 percent reduction in the number of workers employed by the publicly owned electricity utility Eskom over the six-year period from 1993 to 1999.

<table>
<thead>
<tr>
<th>Employment effect</th>
<th>Employment condition</th>
<th>Labor–management relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reclassification of posts</td>
<td>Greater job mobility</td>
<td>Greater emphasis on professionalism</td>
</tr>
<tr>
<td>New job patterns</td>
<td>Diminished guarantee of tenure and job security</td>
<td>More discretionary power in making management decisions and formulating enterprise policies</td>
</tr>
<tr>
<td>Labor retrenchment and direct job losses</td>
<td>Need for retraining and skill upgrading</td>
<td>More emphasis on strict implementation of those decisions and policies</td>
</tr>
<tr>
<td>Gender-biased employment policies</td>
<td>Longer working hours and/or increased workload</td>
<td>Marginalization of unions’ influence and bargaining power</td>
</tr>
<tr>
<td>Discrimination against shop stewards and other labor representatives</td>
<td>Payment by results schemes and pay freezes</td>
<td>More tedious wage bargaining with preferences for individual rather than collective agreements</td>
</tr>
<tr>
<td>Medium- and long-term employment gains resulting from increased investment, growth of privatized firms, and diversification of services</td>
<td>Loss of seniority and service grades</td>
<td>Tougher stance of management on workers’ performance and work discipline</td>
</tr>
<tr>
<td>Wider wage differentials with greater incentive components</td>
<td>Loss of pension rights</td>
<td>Efficiency arguments and profit making gain importance over social objectives</td>
</tr>
<tr>
<td>Loss of social benefits (for example, housing, transportation, child care, health insurance plans)</td>
<td>Abolition of the prohibition to undertake strikes and industrial actions.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Adapted from UNCTAD 1995.
In Latin America’s power sector the level of employment reductions appears to have been larger than elsewhere, which (as in other sectors) reflects the extent of previous overstaffing in those countries. In Argentina the ILO has reported that 22 percent of the workforce was cut in the run-up to privatization and another 28 percent was cut over a similar period following privatization (table 2.3).

A similar pattern has been seen in Brazil (table 2.4 indicates the extent of reductions there). This also shows that workforce adjustments can be substantial even where there is no PPI.

**Telecommunications**

In the telecommunications sector the natural monopoly characteristics that underpinned state ownership have largely disappeared. Technology has brought dynamic changes, including increased convergence with computing and media, while the market has become more segmented among long-distance, data, mobile, and local telephone services, for example.

New service providers have entered the market since the mid-1980s, including specialist cellular operators and Internet service providers. Therefore, although typically there has been a reduction in the number of workers employed by privatized telecommunications companies, growth in the sector among new entrants has generated more jobs than the numbers lost in the former public monopoly enterprise.

A recent study showed that from 1990 to 1994, employment increased by an average of 21 percent in newly competitive telecommunications markets in 26 Asian and Latin American countries, whereas countries that retained a monopoly showed only a 3 percent increase (Petrazzini 1996a).

The nature of the new jobs in telecommunications—in terms of the skills, experience, and cultural approaches they require—has changed greatly. This means that retrenched workers from privatized telecommunications companies are not necessarily well equipped for the new jobs that have been created (box 2.6). A great deal of retraining can be required, and in some cases that challenge has been tackled in the context of PPI. In the case of Sri Lanka Telecom, for example, none of the 800 workers was retrenched but many were...

### Table 2.3: Argentina: Restructuring of Electricity Work Force after Privatization

<table>
<thead>
<tr>
<th>Company</th>
<th>Number of employees at time of privatization (1990)</th>
<th>Number of employees after privatization (1993)</th>
<th>Percentage change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Costanera</td>
<td>795</td>
<td>661</td>
<td>–16.8</td>
</tr>
<tr>
<td>Central Dock Sud</td>
<td>75</td>
<td>60</td>
<td>–20.0</td>
</tr>
<tr>
<td>Central Pedro de Mendoza</td>
<td>59</td>
<td>31</td>
<td>–47.5</td>
</tr>
<tr>
<td>Central Puerto</td>
<td>1,115</td>
<td>798</td>
<td>–28.4</td>
</tr>
<tr>
<td>Edelap</td>
<td>741</td>
<td>542</td>
<td>–26.8</td>
</tr>
<tr>
<td>Edenor</td>
<td>6,443</td>
<td>4,164</td>
<td>–35.3</td>
</tr>
<tr>
<td>Edesur</td>
<td>6,529</td>
<td>5,051</td>
<td>–22.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15,747</strong></td>
<td><strong>11,307</strong></td>
<td><strong>–28.4</strong></td>
</tr>
</tbody>
</table>

Source: de Luca 1998b, p. 194.
retrained in new skills suited to the new technologies. In India, too, a freeze on recruitment was linked to a program of retraining in the main telecommunications utility, Bharat Sanchar Nigam Limited.

Postal Services

A recent ILO review of employment trends in postal services suggests that experience in postal services varies—perhaps more than in other sectors. Among the main factors identified in job losses by the ILO are mergers and acquisitions, globalization, changing markets, new technologies, changing fashions, and structural and regulatory changes.

It is therefore difficult to separate the impact of the technologies from that of privatization and reorganization, but technological and related synergy effects and increased efficiency have influenced the quantity and quality of jobs in the postal service and the structure of the work force (ILO 2002).

In Malaysia in 1992 the Postal Services Department was transformed into Pos Malaysia, and nearly all employees chose to transfer to the new corporation rather than remain civil servants. Corporatization was accompanied by network expansion, new business, and services (advertising mail, courier services, printing, and express post, for example), so employment increased by 20 percent from 1992 to 2000.

On the other hand, Tanzania experienced a 45 percent decline in employment from 1994 to 1999 through attrition, voluntary separations, early retirements, and transfers, coinciding with an expansion in franchised operations. Improved productivity, performance, and business allowed a significant expansion (20 percent) of employment numbers in 2000.

In Latin America and the Caribbean employment remained stable or increased in several countries (Barbados, Brazil, Chile, Colombia, Jamaica, Mexico, Peru, and República Bolivariana de Venezuela) between 1995 and 1999, but declined in Argentina, Costa Rica, El Salvador, Panama, and Trinidad and Tobago. In Costa Rica, nearly a quarter of total staff took voluntary retirement in 1998 following the creation of an autonomous state postal firm, but in the following years recruitment to cover new demand and services largely restored employment numbers to their previous levels. In Argentina a program of voluntary departures led the permanent work force to fall by 25 percent from 1996 to 1999.

**LABOR PRODUCTIVITY**

PPI has enabled many governments to overcome long-standing problems of low labor productivity in public services. This has been done not only (and not always) through reducing the work force but also through capital investment and service expansion.
All infrastructure operations can identify methods for measuring labor productivity and international benchmarks in the infrastructure sectors that are based on those methods. The practical use of those labor productivity measurements and benchmarks is less simple, however, because many circumstantial factors have to be taken into account.

Improving labor productivity is a matter of combining quantitative information with qualitative judgment in the most effective ways. Module 3 addresses those issues more fully. For the purposes of this module, the issue to be stressed is that PPI typically is associated with increasing labor productivity measured in terms of output per employee. This is, in part, because labor productivity tends to be too low under state management.

Almost invariably, labor productivity measured in terms of output per employee rises following PPI. In many cases, employment reductions are one means of driving up productivity, and in some cases they are indispensable. Increasing labor productivity does not, however, necessarily involve job cuts, and even when it does, there are other productivity-enhancing measures to be taken as well (see box 2.7). In fact, other ways of increasing labor productivity can be more important than employment reduction. Badly designed retrenchment programs that lead to the wrong workers leaving (the adverse selection problem) or to mass demoralization can even have the effect of reducing labor productivity.

**Box 2.6: ILO Analysis of the Labor Impact of PPI in the Telecommunications Sector**

The ILO has concluded that privatization and liberalization “have generally resulted in job losses among traditional telecommunications services operators in OECD [Organisation for Economic Co-operation and Development] countries, in which markets are considered mature, with generally satisfied demand for basic services, and competitive offers of new services. Job creation in industrialized countries is mainly due to the emergence of new enterprises or services.”

However, “in low-to-middle-income countries and those in transition, the supply of basic services has not yet reached saturation point and is sometimes far below it; employment creation is hindered by lack of solvent demand (demand in general is not lacking); and growth in the supply of telecommunications services is often impeded by local shortages of capital, although mobile communications are experiencing huge growth in many developing countries.

“While employment has fallen and continues to fall among the main traditional operators in mature markets, this situation is clearly not true for operators (whether privatized or not) in countries continuing to construct and/or modernize their network.

“Thus, in the Republic of Korea, the partial privatization of telecommunications and the termination of public employee status at the end of the 1980s did not result in staff reductions. For some years the opposite happened while the market underwent considerable expansion—in the years following privatization, the number of employees in Korea Telecom increased by 32 percent, but fell back by 12 percent following the period 1997–99, with the Asian financial crisis.

“In Mexico, the privatization of Telmex did not in itself result in job cuts—following an agreement with the trade unions there were no layoffs, and the work force increased (on paper at least) by 30 percent in the period 1997–99.”

As well as capital scarcity, many countries have also suffered from telecommunications skills shortages, which, says the ILO, “is often a consequence of lack of investment in training, or lack of basic information and communication technology (ICT) skills among potential recruits.”

As a result, foreign recruitment is a frequent option. “In Africa, where average teledensity is less than two telephone lines per 100 inhabitants, with most lines concentrated in urban areas, the lack of technical staff and expertise means that ICT-trained employees may well move to richer countries. Thus the principal employment preoccupation may be how to retain skilled staff and how to attract new ones, rather than a need to cut employment numbers, despite budgetary constraints.”

Source: ILO 2002, pp. 73, 84, 89.
PPI affects labor productivity in a variety of ways.

Box 2.7: Productivity Growth in Latin American Telecoms Following PPI

Ravi Ramamurti has reported “explosive growth” in labor productivity in utilities and telecommunications following privatization in Latin America. It was achieved not necessarily through cutting jobs, but often through expansion of coverage, deployment of new technology, and other means. Even when employment numbers are sharply reduced, that is not the only factor in productivity increases. Mexican telecoms increased the number of lines per employee by 13 percent a year in the first three years of privatization (which occurred in 1990), compared to a decline of two percent a year throughout the 1980s until the last two years before privatization when 10 percent increases were recorded each year.

Telecoms in República Bolivariana de Venezuela also recorded double-digit labor productivity increases in the first two years of privatization (beginning in 1991), and Argentina’s lines per employee rose by 19 percent in the first three years after privatization (1990) compared with 6.5 percent in the two years before.

Ramamurti explained how it was done: “The dramatic increases in labor productivity resulted from a deliberate effort to freeze the size of the work force even as the network expanded by double digits. In Argentina, where workers were not promised job security after privatization, the new owners shed almost 50 percent of the original work force, even as they hired younger persons with skills in areas such as information systems or marketing; companies recovered the US$15,000–$20,000 spent on severance compensation per employee in two years or less.”


Other ways in which enterprise restructuring—through PPI or public sector modernization—brings labor productivity improvements include the following:

- **Service expansion** prompts the output side of the output-per-employee ratio to increase—for example, more homes are connected to the water supply. In Brazil’s electricity sector, for example, it has been estimated that about three-quarters of a 10 percent productivity increase was attributable to service expansion, with only about a quarter the result of layoffs.

- **Capital investment**, especially in new technology, enables the same number of workers to produce more. This has been especially significant in the telecommunications sector, but has been instrumental in increasing productivity across other sectors as well.

- **Greater commercial orientation of enterprise managers**: This, is however, easier in a privatized environment. Public managers sometimes operate under conflicting sets of objectives—to provide an efficient service while employing surplus labor for political or social reasons—and often have been unable to tackle productivity problems in a sustained way.

- **Better management and faster decisionmaking**: Again, private sector managers are often able to make normal management decisions more quickly than are public sector managers. Delayed decisions on spending for critical repairs, small investments, or new recruitments hinder productivity. Public sector managers often have limited delegated financial authority, suffer from public sector liquidity shortages, and need to gain the approval of administrators in distant capital cities to make minor expenditures.

Of all the infrastructure sectors, railways have exhibited some of the highest levels of productivity improvements after PPI. This reflects the high level of surplus labor the railways have had to carry over the years and the subsequent high levels of work force downsizing. A review of six rail operations concluded that:

The most dramatic results of the involvement of the private sector in the concessions (or privatizations) are undoubtedly the significant improvements in labor productivity. In all but one case (Côte d’Ivoire/Burkina Faso—a 33 percent improvement in five years), labor output per employee (expressed as the sum of ton-km plus passenger-km per employee) at
least doubled and more often tripled or quadrupled. To some extent this was a result of traffic growth, but the greater share of the improvement must be attached to the programs which reduced the redundancy in the labor forces of the railways (Thompson, Budin, and Estache 2001, p. 10).

Figure 2.2 shows traffic units per employee—the standard measure of labor productivity in rail—in six Brazilian and two Bolivian freight concessions before and after PPI.

Service expansion and capital investment form a substantial part of the productivity increase in some cases, such as Trinidad and Tobago Post (box 2.8). Another example is Côte d’Ivoire electricity, which was privatized in 1990. By 1995 labor productivity (kilowatt hours per employee) rose by nearly 25 percent. The number of consumers per employee showed a slightly slower rate of increase, from 128 in 1990 to 156.7 in 1995, a rise of about 22 percent. Over the same period the number of workers employed fell by less than 5 percent (ILO 1999b, Plane 1998).

PAY

As with employment numbers, the impact of PPI on pay can be seen as an outcome of underlying and historical factors rather than of PPI as such. Privatization and other forms of PPI have tended to expose pay determination more to market forces, but this has been offset to varying degrees by legal provisions, collective agreements, and labor union strength. Therefore, the impact of PPI on earnings has varied in accordance with the net influence of these various factors.

In some sectors and grades publicly employed workers have received higher compensation than equivalent workers in the private sector. In these cases competitive pressures will encourage the agencies implementing labor programs to reduce costs and bring compensation more into line with market conditions. Equally, where public employees have been paid too little to enable recruitment and retention of some grades of skilled workers, market forces will push pay upwards.

Labor unions are able to take advantage of tight market conditions to negotiate pay and benefit increases for the workers whose skills are in short supply. They also may seek to extend the same improvements to unskilled workers or others in less demand.

In addition to the general tendency for PPI employers to relate pay more to market conditions, there are four other trends that can result from PPI across a range of sectors and countries:

1. The first trend is monetization of compensation (pay and benefits) packages as the non-wage benefits are converted to monetary amounts, bought out, reduced, or eliminated. Private investors are reluctant to take on the wide range of fringe benefits often found in state-owned enterprises (especially in tran-
Changes in pay and compensation depend not only on private sector initiatives but also on labor laws and contracts.

Box 2.8: Service and Productivity Improvements at Trinidad and Tobago Post

Under the 1999 Postal Act, following poor performance by the public operator, Trinidad and Tobago Postal Corporation (TTPost) was created, in consultation with the trade unions. A management contract was awarded to New Zealand Post, intended to enhance the reach of the universal service in TTPost as well as to improve revenues, profits, and customer satisfaction and reduce transit time.

According to World Bank reports TTPost has:

- Opened new, better-equipped outlets offering improved customer service
- Expanded home delivery to previously poorly served areas
- Established a wider range of products and services (including inland courier services) and expanded their availability
- Enhanced customer satisfaction
- Improved the reliability, speed, and security of mail delivery
- Increased revenue, productivity, and financial performance
- Improved working conditions and staff motivation.


1. In some cases, where state-owned enterprises had supplied a wide range of social services. In some cases pay and benefit structures are so complex that managers can hardly assess and compare the total compensation that workers receive. Monetization and restructuring of remuneration packages are then essential, simply to make compensation and pay more transparent.

2. The second trend is an increase in pay differentials, partly in response to labor market conditions and especially to attract and provide incentives in the recruitment and retention of experienced and skilled technicians and managers.

3. The third trend is the erosion of national-level collective bargaining, with a shift to enterprise-level bargaining or individual pay determination, a trend intensified by the increased use of subcontractors and casualization of labor.

4. The fourth trend is the change that pay systems undergo after PPI as new managers seek to relate earnings more directly to productivity performance.

In practice, the impact of these market trends can be constrained by rigidities in the pay revision process. These rigidities may be set out in labor laws, collective bargaining agreements, or labor contracts, some of which may predate the PPI transaction by many years.

In the utility and infrastructure companies of the former East African Community (EAC), for example, pay and benefits were very different between workers originally employed by the EAC and later recruits. These differentials have persisted in the years following the dissolution of the EAC, but more recent PPI reforms are now allowing the opportunity to revisit and harmonize pay systems so that they are more equitable. In some Mexican ports, longshoremen who had previously been paid by the ton of cargo handled were paid by the day after privatization. In the electricity privatization process in Pakistan, an agreement with the All Pakistan State Enterprises Workers’ Action Committee in 1991 provided for a 35 percent increase in basic pay and for allowances to be paid at the new rate.

In some cases PPI has produced “two-tier” work forces in which the pay (and other conditions) of retained workers is protected to some degree and new employees are recruited on different terms. An example is Cote d’Ivoire rail, where new recruits have lower basic wages than those retained from before PPI, but they also have bonuses mostly related to performance. Average pay in Cote d’Ivoire rail has increased following PPI, but so have differentials; therefore, the effect on different grades varies greatly.

In some cases, as employment has expanded in the longer term, the success of PPI has made pay increases above the rate of inflation affordable. For example:
Following privatization, staff numbers in the Guyana telecommunications enterprise were cut in half, but the salaries of retained employees increased by 90 percent (Hinds 1995).

In Argentina the real wages and salaries of employees of Entel and the Buenos Aires water concession increased by 45 percent in the three years following privatization (Kikeri 1998).

In Chile the new owners of the electricity companies (Chilgener and Enersis) increased wages and introduced profit-sharing plans.

In Orissa, India, retained employees in the privatized power sector received pay increases as well as improved promotion opportunities (Ray 2001).

Workers at Malaysia’s Port Kelang who remained with the partly privatized company received compensation increases averaging 12 percent.

In Mexico wages in a sample of privatized firms increased far in excess of rates elsewhere in the economy, with larger gains for blue-collar workers than for white-collar workers (Kikeri 1998).

Workers’ pay has improved following private participation in a number of cases.

Pensions can be a major issue, especially where enterprises have offered generous defined-benefit (final salary) plans.

**BENEFITS**

Public employees often enjoy a range of nonwage benefits that tend to be both greater in quantity and different from those that are more typical of the private sector. As mentioned in the pay section, PPI tends to lead to monetization of nonwage benefits as they are bought out. In addition, pension arrangements and other social provisions tend to change with PPI, and new benefits, such as employee shares, are sometimes introduced.

**Pensions**

Most public sector pension plans are of a defined-benefit type, usually guaranteeing the worker a fixed percentage of final salary at retirement, as well as a lump-sum payment. Such arrangements also exist in the private sector in some countries, but are on the decrease; the trend is toward pension plans in which more risk is borne by the beneficiary and less by the employer (see module 5).

Privatization and major downsizing can have profound effects on the pension plans. Those workers who are close to retirement and who are made redundant would be entitled to immediate benefits, while the amount of contributions that flow into the plan in the future are significantly reduced. This could seriously affect the financial viability of the fund. Where the private investor is required to set up a pension plan for the work force taken over, as well as for new employees, the likelihood is that an accumulation-type plan will be established that is subject to investment risks and that has less guaranteed benefits than are provided under defined-benefit arrangements.

Pension arrangements are often a key issue in labor negotiations in the context of PPI. A report of an ILO bipartite meeting on privatization of municipal services (including electricity, water, public transportation, and other infrastructure sectors) noted that privatization often “entailed a lot of distress” for the workers affected:

*The disappearance or reduction of pension schemes for which new employers had little regard represented one of the most dramatic consequences. Even where pension schemes were maintained, new upper limits had been set to qualify for benefits in countries such as Kenya, resulting in workers with fewer years of service leaving employment with no benefits (ILO 2001, p. 27).*

However, the same meeting also heard that “social dialogue would provide agreed solutions to this dilemma in the form of provisions on early retirement, limited redundancy, aid to unemployed workers, and retraining.” An example was given:

*Prior to privatization of the electricity sector in Hungary, the trade unions had negotiated an agreement with the Government. It would transfer five percent of privatization revenue to*
a trade union managed fund in support of workers who left public companies in order to pay the differences between pensions and salaries in case of early retirement, and for a time to supplement unemployment funds beyond state provisions. Steps had also been taken to develop tailor-made training schemes, and the results had been so positive that Hungary had become a model for other countries of Central Europe (ILO 2001, p. 27).

Other examples of changes in pension arrangements both before and during PPI are described in module 5.

Other Benefits
Workers in infrastructure enterprises may derive not only wage income from employment but also a “social wage” composed of many elements. Housing; health care; childcare and preschool education; and sports, recreational, and cultural facilities have been provided. The introduction of PPI may lead to changes in these arrangements.

For example, as part of their remuneration, railway workers in Côte d’Ivoire were covered by a health insurance program. The concessionaire who won the contract under the railway privatization program did not wish to inherit the plan, but was agreeable to establishing a new one. Under the latter plan, the cost of contributions is shared between the workers and the company, and the workers pay a larger share than they did before. Although on paper it is a worse arrangement for the workers, in practice the state employees’ funds had been heavily in debt because the government failed to pay its contributions. Most employees no longer even applied to the fund for reimbursement of medical expenses. Now their entitlements are smaller on paper but they can rely on their being honored.

Also in Côte d’Ivoire the electricity concession company CIE set up three funds for its employees:

- Firstly, there is a social fund designed to provide allowances for family events. Hundreds of workers have benefited from it each year since

1991.... There is [also] a savings and loan fund, which offers interest-free loans over periods of 12 to 15 months to workers who have saved for at least four months. Finally there is a collective investment fund by means of which compulsory wage deductions finance the acquisition of CIE shares. The shares are kept in an account which remains blocked until the employee leaves. The funds were widely shunned at the outset because the unions saw them as a kind of paternalistic balsam. However, the annual report for 1995 talks of growing use. The savings and loan fund alone has made 9,000 loans (Plane 1998).

The extent of the challenge has been much greater in the “transition” (formerly centrally planned) economies and especially in one-company towns and rural areas. In Russia, for example, enterprises were responsible not only for a range of mandatory benefits, such as sick pay, maternity allowances, and paid vacations, but also for a number of in-kind benefits (for example, kindergartens and recreational facilities). In the case of in-kind benefits, or “social assets” as they are known, the general policy has been to “municipalize” them. The results, and the impact on workers, however, have varied greatly (box 2.9).

WORK PRACTICES

The various forms of PPI tend to result in changes to working conditions and practices. The way this is done and the extent to which workers are involved in shaping new arrangements vary among employers, just as they do in the private sector more generally.

Working Conditions
As with other aspects of PPI’s effect on labor, there are some general trends, namely:

- PPI tends to produce flatter organizations by removing layers of middle management.
- Labor contracts tend to be simplified, often allowing the work force to be deployed in more flexible ways (as in the case of Telmex, presented in box 2.10).
Pre-PPI restructuring often means disposal of noncore assets or withdrawal from noncore operations and thus the elimination of some jobs. In several sectors, infrastructure companies have sought to establish greater flexibility (increased use of part-time work and fixed-term contracts, redeployment, and decentralization of labor relations) and other changes in working methods, employment, and industrial relations. For permanent staff, however, PPI often brings greater investment in training, as in Côte d’Ivoire’s electricity concession (box 2.11) and Mexico’s railways.

The impact of PPI on working hours varies. Influencing factors include labor market conditions, the legal framework, union strength, and attitudes. Attempts to increase labor productivity do not necessarily entail longer hours of work—indeed, they can involve reducing hours and intensifying work—but hours certainly have increased in some cases. For example, prior to the privatization of Entel, the Argentine telecommunications company, the government changed the work week from 35 to 40 hours. At times, however, government and the PPI partner work together to maintain standards of worker competence and protect safety through regulation.

**Box 2.9: Municipalization of In-Kind Social Benefits in Russia**

The Russian privatization legislation required that in-kind benefits, such as housing, health care, kindergarten, and a range of sports, recreational, and cultural facilities, transfer to the municipality (which had the discretionary power to privatize them instead). The policy was intended to maintain services seen as important to social justice while it relieved entrepreneurs of responsibilities to which they were not suited and that would have undermined their financial competitiveness. Enterprises were expected to increase wages as a result of the savings achieved.

In general, however, municipalities lacked the funds to maintain the same levels of services, or in some cases to maintain them at all. This lack was dealt with in a variety of ways. In some cases the enterprises continued to fund the services, at least in part. In many of those cases they did so willingly, perceiving some of the services concerned to be a better financial option than shedding them, in which case pressure for higher wages would have been correspondingly greater. To do this while complying with the legislation requiring transfer to municipalities, some enterprises rented services back from the municipalities.

From 1992 to 1996, this scheme proceeded quite rapidly but with a variety of effects, and in the latter part of the 1990s the difficulties that had arisen led to increasing numbers of conflicts between enterprises and municipalities and a slowing down of the process of transition. One frequent difficulty was the decline in the scale and quality of services because of the lack of resources. A survey of 92 enterprises in five Russian cities, conducted by the European Union’s Technical Assistance to the Commonwealth of Independent States project, revealed that workers in most of the surveyed enterprises experienced their access to housing as having declined—“markedly” in 44 percent of cases. About half of the workers said cultural services had declined, and about a third felt their health, kindergarten, and sports services had deteriorated. In most cases, however, enterprises said they had not realized savings that enabled them to increase wages.

The principal source of these problems was that municipalities did not have the resources to keep the services going properly or even at all. At the same time a large minority of the enterprises that had yet to transfer the assets said they would prefer to keep them, and most wanted to keep recreational, sports, and cultural facilities, in both cases because they represented important benefits in lieu of wages. However, fewer enterprises wanted to retain responsibility for health services and childcare services.

According to one account, “The survey shows that, contrary to earlier expectations, municipalization of the social assets of the majority of enterprises has not translated, in the current economic environment, into a significantly improved financial state and higher competitiveness. Only 15 percent of enterprises which divested their social assets estimated the subsequent positive changes as significant.”

Subcontracting and Outsourcing

In recent years public and private sector organizations have increasingly outsourced noncore operations that can be provided more cheaply or at a higher quality by external specialists. Subcontracting can also be a redeployment mechanism. Subcontracts are one way for newly privatized infrastructure firms to reduce labor costs and change working practices and conditions while providing a transition for workers into new private sector employment and retaining some access to their specialist skills and knowledge (box 2.12).

In Côte d’Ivoire, the rail concessionaire, SITARAIL (Société Internationale de Transports Africains par Rail), agreed in principle to favor companies created by retrenched former state railway workers when looking for subcontractors. In practice, track maintenance, company car fleet management, and printing of timetables and tickets have been contracted out to firms set up by employees of the former state rail company.

Other PPI companies in Africa have also subcontracted to companies set up by their own former employees. In Guinea’s water PPI, for example, some 250 retrenched workers were given subcontracts through 20 small cooperatives. The subcontracted workers organized into 20 small enterprises that took over responsibility for installing new connections, maintaining canals, and landscaping. The concession company gave them training, logistical support, and initial working capital.

Sometimes, PPI leads to less rather than more subcontracting because nontransparent agreements are cancelled:

In Côte d’Ivoire…the new Compagnie ivoirienne d’électricité (CIE) contracts out much less than its predecessor, the EECl…. Electrical firms, which were often set up by members of the public enterprise’s staff (moonlighting), have collapsed after enjoying prosperous years when the process of privatization had not yet started (Plane 1998; see also Plane 1999).

Gender Impacts

In recent years among other political and social trends there has been increasing commitment by governments, employers, and unions to promote workplace equality between women and men. This has taken a variety of forms in practice, such as government commitments to ending discrimination of various types and combating sexual harassment, business commitment to retaining skilled and knowledgeable workers after maternity leave, and
union campaigns for equal pay for work of equal value.

There is little hard evidence of the extent to which PPI has affected women workers differently from men, but what little there is, taken together with evidence from other sectors (see box 2.13), suggests that the impact often falls harder on women than on men, particularly in transition economies where female participation in the labor force is high. Sector impacts will vary, however. In Vietnam overstaffing of state enterprises was concentrated in male-dominated sectors, such as construction, mining, and transportation (Rama 2001a).


In the case of telecommunications the ILO notes that:

changes in work organization and job specification are more likely to be detrimental to women given that they are disproportionately represented in part-time work and are therefore less visi-

Box 2.11: New Working Practices in Côte d’Ivoire Electricity

After Côte d’Ivoire concessioned its electricity services to a company called CIE, the major shareholders of which were the French companies SAUR and EDF, the organization was flattened hierarchically by reducing the number of grades by half, from 18 to 9, and later to 5. A “management by objectives” approach was also instituted, with workers reorganized into “cost centers,” each with a defined list of tasks but with considerable autonomy about how to achieve them. Performance was closely monitored in terms of achieving targets, and bonuses of between 0.75 and 1.25 times one month’s salary could be earned. In the main, bonuses were awarded (or not) to the groups as a whole, with a small additional incentive payment also available to individuals.

The geographic decentralization of distribution is an illustration of this effort to make individuals responsible within their group. CIE is divided into a number of full autonomous regional boards. They in turn are subdivided into geographical sectors, each managing about 15,000 consumers. These sectors have great freedom of initiative, so they can be regarded as profit centers. By means of computerized comparative analyses, management can detect immediately where gains in economic efficiency can be made. Through privatization, the whole internal organization of the firm has been metamorphosed.

The arrival of the concessionaire was accompanied by a transfer of technical and organizational know-how. New work procedures codifying the duties of employees at their post were introduced and helped raise the efficiency of the firm’s operations. In support of this strategy, a great deal of effort was put into training further the already proficient workers.

CIE also brought back in-house the training operation that had previously been contracted out because it wanted to develop a new enterprise culture among its staff. So it set up a training division that offers two-year courses to all African electricity companies and that issues a vocational certificate in public utility management approved by the Ministry of Higher Education, plus short courses. Four years after the beginning of the concession, more than 2,000 CIE staff had been through courses there, and the company’s training budget had risen to a level equivalent to four percent of its wage bill.


Box 2.12: Outsourcing in Argentine Telecoms

Telecom and Telefónica (the two companies which replaced Entel) also implemented voluntary retirement plans, which saw the departure of approximately 5,000 workers, or 10 percent of Entel’s work force…. Interestingly, Telecom and Telefónica rehired a considerable number of those workers as contract employees. In this way, the companies obtained skilled labor while reducing their costs, such as pension contributions, vacation time, health insurance, and other fringe benefits. This maneuver also reduced the number of unionized employees.”

to showcase their skills and exercise their rights. Moreover, the main jobs that have declined in number in that sector—such as those of telephone operators—were mainly done by women. Commonly, overstaffing occurs in administrative and clerical positions, rather than in the more technically skilled jobs.... The same obstacles that hinder the access of women to management positions can also disadvantage them in downsizing.... At the individual level, women might lack the appropriate education, training or experience to be retained during restructuring, particularly when managers are competing for fewer positions, and criteria such as seniority and “last in, first out” considerations are used. Structural and cultural factors can also be an obstacle. Women managers might not have the same professional networks and personal contacts to enable them to compete for the remaining positions. Restructuring involving flatter management structures often affects women workers more than their male counterparts, with low-level and middle-management positions being most likely to disappear (ILO 2002, pp. 124–5).

The ILO cites restructuring at the Tanzania Telecommunications Company in support of its argument, but also notes evidence of increases in the percentage of women employed in some public and private post and telecommunications enterprises, and the redeployment of women into management and customer service functions (ILO 2002). Overall there have been few empirical studies of the variable impact of PPI on women and men in these sectors.

In energy and water utilities, most of the work force tends to be male, but unions claim that job losses still affect women disproportionately because they tend to be concentrated in administrative and clerical functions. New owners are more likely to integrate such functions into their existing operations after privatization to achieve economies of scale (Belser and Rama 2001). Unions also point out that many social protections geared toward women only exist because unions fought for them, so if unions are weakened then it is likely that these protections also will be weakened.

SUMMARY
Evidence shows a diversity of labor effects resulting from PPI. Nonetheless some key trends and factors affecting outcomes in particular situations can be abstracted from the available information. The main comments that can be made are these:

- Analysis of impacts is confounded by the wide range of factors that affect the labor adjustment at the country, sector, and enterprise levels. Box 2.14 provides a generalized summary of some of those factors.
- The fact that job losses occur at the time of PPI does not necessarily mean that PPI is the direct, or only, factor causing those job losses. Significant job losses have also been
Box 2.14: Key Factors Affecting the Labor Impact of PPI

- The sector concerned, and especially the nature of the market in that sector, a category that in turn has two key variables: whether and to what extent the market is expanding or contracting, and whether and to what extent the market is competitive.
- The extent to which PPI is associated with changes in technology that significantly affect the sector’s labor intensity.
- The existing level of labor redundancy and productivity in terms of relevant international and national benchmarks.
- National and local labor market conditions and social protection provisions.
- The relative costs of labor and capital in the economy concerned.
- The nature of the legal framework governing labor issues, and whether (and how) that is changing.
- The content of existing formal agreements (for example, labor contracts and collective bargaining agreements).
- Government policy regarding employment protection and creation.
- The balance of influence between interest groups in the labor relations environment.
- The nature of the political relationship between the government and the relevant labor unions.
- The attitudes and strategies of government, investors, and labor leaders.
- The capacity and preparedness of government, investors, and labor in support of their strategies.

Some global agreements between trade unions and investors have been established.

- Employment reductions drive productivity improvements in many sectors. Expansion of services, however, can also improve labor productivity when employee numbers remain stable.
- Changes in work practices and worker representation are often of as great a concern to trade unions as is job loss, particularly where this is associated with greater use of so-called atypical work practices (for example, casual employment and outsourcing).
- Although there is a general belief that women are more adversely affected by PPI-related changes than are men, there is little empirical evidence of a differential impact.

recorded in infrastructure enterprises even where there is restructuring without PPI (for example, Eskom South Africa’s 40 percent reduction over six years).

- Higher levels of job loss can occur in the infrastructure enterprises than in privatizations in general. Reductions in the work force of 50 percent or more have been reported.
- The greatest impact on jobs occurs in sectors where demand is declining because of competition from other modes (for example, rail worldwide and fixed line telephone services in industrialized nations); sectors where traditions of overstaffing have suffered following introduction of new technologies (such as port labor pools following containerization); and enterprises that have been shielded from the need to adjust for many years.

- Fewer job losses occur in sectors where demand is rising rapidly (such as fixed and mobile phone services in developing countries) or where there is demand for expansion of the network (for example, water and sanitation).

- Many of the analyses of job loss have been limited by their focus on the impact at the enterprise level rather than at the sector level. There is little information on the net effects on employment when taking account of growth in other modes (for example, trucking, bus, and rail operations; mobile and data telephony as well as fixed line services); the overall trend toward outsourcing of services in the sector because outsourced employment is not recorded by enterprises; and expansion of ancillary services (for example, distribution and supply chain logistics businesses at terminals of port and rail operations).

- Employment reductions drive productivity improvements in many sectors. Expansion of services, however, can also improve labor productivity when employee numbers remain stable.
- Changes in work practices and worker representation are often of as great a concern to trade unions as is job loss, particularly where this is associated with greater use of so-called atypical work practices (for example, casual employment and outsourcing).
- Although there is a general belief that women are more adversely affected by PPI-related changes than are men, there is little empirical evidence of a differential impact.


ILO: www.ilo.org. (Site offers a collection of papers on privatization and restructuring that can be downloaded at www.ilo.org/public/english/employ/ent/papers/privat/pub.htm.)

PPIAF: www.ppiaf.org. (Site provides information on other PPIAF resources and toolkits.)

PSIRU (Public Services International Research Unit): www.psiru.org. (The site publishes research on the impact of privatization on workers and trade unions.)

Rapid Response Unit: http://rru.worldbank.org. (This site is a gateway to a range of information on infrastructure, privatization, and private sector development policies.)


