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# Capital restructuring and labour relations: the International Paper Company strike

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## Introduction

International Paper Company (IP) precipitated the bitterest dispute in the paper industry since the 1920s when it locked out union workers at its Mobile, Alabama, mill in March 1987, after they rejected a host of contract concessions the company said were necessary to make it competitive. A few months later locals in Maine, Wisconsin and Pennsylvania refused to accept the same demands and began a co-ordinated strike against IP. Management immediately hired permanent replacement workers and in relatively little time was producing at nearly full capacity. Sixteen months later, after several other IP locals failed to join the strike, the United Paperworkers International Union (UPIU) called it off and offered to return members to work under the company's terms. By March 1990, only a small number of strikers had been recalled to work and two of the locals had lost their right to represent workers through federal decertification elections. A third remains in jeopardy of being ousted.

The IP strike is an important example of heightened management opposition to unions and collective bargaining in the 1980s. In general, this behaviour is often explained as the consequence of excessive union wage premiums in increasingly competitive markets. Northrup (1989, p. 376) argues from an essentially neoclassical position that in several high fixed cost industries 'foreign competition, and in some, non-union competition, have been literally invited in by costs and prices that transcend what the market will bear'. This predicament, he says, is the result of management's past failure to challenge 'inordinate' union power effectively, which ultimately hurts the company, its employees and the union in the long run. Freeman (1986, 1988) maintains that management has aggressively opposed union organising drives (which has contributed to an overall decline in union bargaining power) because union wage premiums reduce American manufacturers' profit margins when they attempt to match foreign competitors' lower prices. As Hatsopoulos, Krugman and Summers (1988) have noted, cutting relatively high wages to solve competitive problems is the strategy to which many US firms and policy-makers turned in the 1980s. It presumes, however, that (1) recapturing competitiveness rests solely on

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attaining the appropriate world level of wages, (2) this level is relatively independent of other forces governing competitiveness in both the short and the long term, and (3) these other forces are more or less uniform across firms, industries and countries.

The results of a case study of changing labour relations at IP from 1979 to 1988 reveal that the nature of competitive problems and their solutions may be much more complex. The study was carried out using a 'productive systems' framework where the wage is viewed as the product of an evolving set of social, technical and power relationships (Tarling, 1981; Wilkinson, 1983). Under this approach, firm behaviour is analysed within the context of those economic, political and social forces that provide the basis for its strategic decisions and, therefore, explain the requirements for and consequences of wage change within the system. Section 1 of the study examines the evolving structure of the paper industry before and after important capital restructuring in 1979, including pricing practices, technology of production, and IP's position within the industry, followed by a discussion of the nature and sources of growing market problems during the 1980s and their consequences for IP in both product and financial markets. Section 2 examines the character of IP's labour relations prior to capital restructuring in 1979 and during the turbulent decade of the 1980s. It includes the effect of market problems on traditional bargaining practices in labour relations as well as the importance of capital restructuring and a changing social and political environment to more aggressive labour relations. Section 3 interprets the findings in this case based on previous theoretical work by Salter (1960) and Penrose (1959).

## 1. Oligopoly and competition in the paper industry

Because the demand for labour is a derived demand 'answers to some of the most compelling questions concerning wage determination and other aspects of the operation of the labour market are to be found in a comprehensive analysis of the factors that shape managerial behaviour and policies' (Segal, 1986, p. 302). Chief among them are those forces that directly or indirectly affect demand for the firm's product—product market structure, market strategy and technology—which in turn affect establishment and employment structure. The inherited capital stock and establishment and employment structure at IP by 1979 were importantly influenced by product market structure in the decades preceding the 1980s.

### *International Paper Company and the legacy of product market domination*[1]

Historically IP controlled 20% of US production of paper and forest products and dominated a stable, growing domestic paper market. Robust economic growth encouraged steadily rising consumption and production and relatively price-inelastic domestic demand between 1920 and 1975 (Guthrie, 1972; US Department of Commerce, 1988). Short-term fluctuations in demand reflected variations in income and business activity tied to the business cycle. Intense competition during the 1930s led papermakers to introduce technical innovations designed to increase the volume of output and reduce costs (Cohen, 1984). Massive, immobile, and non-

[1] Unless otherwise noted, information on International Paper Company is taken from its *Annual Stockholders Reports 1980–1987.*

resaleable capital equipment dominated production and generated high fixed costs. The relative expense and lead-time necessary to construct new mills and a limited number of profitable mill sites (sites close to necessary raw materials and transportation) prompted papermakers to rebuild sections of older machines to embody the latest innovations. This allowed them to extend the life of capital equipment and take advantage of shifts in demand more quickly by changing the grade of product produced with existing capital. By 1948, the capital–output ratio in paper was almost double that for manufacturing as a whole. Economies of scale 'captured through "small evolutionary engineering changes" ' (Cohen, 1984, p. 779) increased output-per-machine-hour and decreased average labour requirements per ton so that between 1947 and 1977 productivity grew at an average annual rate of 3·9% (Horvath, 1980; Cohen, 1984), while employee hours remained stable, increasing by only 0·2% over the same 30-year period.

The substantial size and capital expense of new facilities, the tendency of industry leaders to favour backward integration into markets for raw materials, and the dearth of profitable mill sites were formidable barriers to entry. Healthy market expansion, however, and a modest level of mergers and acquisitions kept paper markets monopolistically competitive, the level of concentration stable or declining slightly in most product lines (Guthrie, 1972). In general, papermakers did not follow the 1960s' trend towards diversification and conglomeration but remained along traditional lines, though many diversified vertically to gain access to cheaper sources of necessary raw materials.

Price leadership stabilised prices for most products, and price changes were rarely implemented industry-wide to increase demand (Rich, 1978). Rather, industry leaders practised target-return pricing: prices were set to minimise variations in sales revenues, hedge against future cost inflation,[1] and guarantee a specificed rate of return on capital for as many as five years into the future (Rich, 1978; Buongiorno, Fermani and Chuang, 1983). Price changes usually reflected changes in the estimated long-run unit cost of production and variations in the cost of capital. Acceptable rates of return on equity thus depended upon favourable prices and minimum costs of production, both of which required a sustained high level of sales and capacity utilisation (Rauch, 1976). When demand weakened and production fell below optimum capacity, the inelasticity of demand allowed price increases to restore profitability. However, papermakers were in the best position to raise prices when operating rates were above 92% (*Standard & Poors (S&P) Industry Surveys*, 1988). Strong demand and high operating rates and prices produced exceptional profits during the late 1940s and early 1950s (Rauch, 1976). After a slump in the late 1950s, profits recovered slightly during the 1960s but declined sharply in 1971–1972 as recession slowed demand and operating rates fell below optimum. Net profits as a percentage of stockholders' equity decreased almost continuously from 1946 to 1970, falling appreciably during recessionary periods, though the top six firms' returns usually remained relatively stable and well above the industry rate of return—10% on average between 1920 and 1970 (Guthrie, 1972). After 1973, paper prices exploded and industry profits improved, reaching record levels by 1979.

[1] For example, between 1972 and 1975 a difference of 5·7% between growth in hourly earnings and growth in output was more than absorbed by a 14·5% annual increase in price (Rauch, 1976).

IP's size allowed it to dominate paper markets but its performance was consistently poor when compared with that of its rivals (J. Gilliland, personal communication).[1] Between 1975 and 1979 when other industry leaders showed record earnings, IP's operating profits were flat (Wiegner, 1982). Unlike the others, IP had diversified in the late 1960s to improve its performance. The strategy failed, however, and a decade later the company was heavily debt-ridden and producing paper inefficiently with outmoded equipment, much of it over 30 years old by 1979 (Horowitz, 1983). In addition, because capital was so expensive during these years, management often opted to manufacture incompatible products in the same mill rather than expand, which meant expensive machine switchovers (Wiegner, 1982). Most papermakers, in fact, did not invest significantly in expansion during the 1960s and 1970s because of mediocre industry performance (Rauch, 1976). Stricter environmental regulations during the 1970s required that 25% of the industry's investment capital be used for pollution control equipment so that by 1975 net additions to the capital stock increased by only 1·9%—a 20-year low.[2] Except for the introduction of electronic controls in some mills and computerised moisture controls during the 1970s (J. Gilliland, personal communication), there were no major changes in the basic process of production for several decades (Horvath, 1980) and some firms regularly used machines built before 1900 (Rauch, 1976).

*New interest in international markets and capital restructuring*

In the decades between World War II and 1980, American papermakers believed themselves to be virtually immune from foreign competition (J. Gilliland, personal communication). They enjoyed effective advantages in costs, prices and production technology in world markets; the consequence of a plentiful supply of raw materials—trees, the capital equipment necessary to harvest them, and control over the technology of papermaking. Export markets flourished and US firms faced no serious competition from Europe or the Third World. But by the late 1970s domestic papermakers began to oversupply their home markets when mills operated at capacity to ensure maximum productive efficiency. Domestic markets were maturing and US papermakers increasingly relied on export markets, especially in pulp and linerboard, to absorb the surplus.[3] Unlike the US demand, however, sales in international markets depended much more on competitive pricing (Buongiorno and Gilless, 1980).[4] To that end, industry leaders adopted ambitious

[1] IP's poor performance may be partially explained by evidence that indicates a limit to economies of scale in papermaking (Buongiorno, Stier and Gilless, 1981). While plant size explained most of the variation in productivity among firms, after a size over 500 employees was attained, productivity increases (and therefore cost advantages) reached a plateau. It is important to note that data limitations did not allow consideration of the age of capital stock, and therefore the level of technological advancement in the firms studied.

[2] As an example of the continued importance and expense of pollution control in this industry, when IP began construction of a state-of-the-art mill in Mansfield, Louisiana, in 1980 the cost of the environmental permits alone was $100 million (J. Gilliland, personal communication).

[3] For example, in 1981 exports accounted for 16% of domestic linerboard capacity (*Business Week*, 1981).

[4] IP's director of employee relations emphasised that now price is the most important variable in commodity paper markets because many firms can produce comparable quality products and brand identification is not an influential factor (J. Gilliland, personal communication). Thus, 'commodity producers attempt to be the low-cost producer of their commodities and fight to achieve dominant market share' (*S&P Industry Surveys*, 1988).

long-term capital investment programmes during the late 1970s to improve their competitive edge in both domestic and foreign markets.[1]

IP initiated what later became a seven-year, $6 billion capital investment campaign in 1979.[2] Its primary objective was to make IP's 'manufacturing costs lower than anyone else[s] (*Business Week*, 1981)[3] by rationalising production and improving its ability to take advantage of new market opportunities more rapidly (Hinton, 1983). Divestment of subsidiaries acquired in the 1960s would provide necessary finance capital and return the company's focus to its paper businesses. Capital restructuring at IP and in the paper industry during the late 1970s and 1980s followed the historical industry pattern: existing mills and equipment were overhauled more often than new plants were built. Again, relatively long lead-times, the cost and character of papermaking equipment, and a limited number of profitable sites led to such decisions.[4] Thus, papermakers assessed their mills to determine which to close and which to refurbish with 'state-of-the-art' technology—a systems engineering approach to production control that featured highly-automated, computer-monitored production (Yaeger, 1984). New, larger and faster papermaking machines required automated instrumentation for efficient operation, and equipment manufacturers offered complementary computer systems along with them (Giesen, 1986).[5]

IP's investment programme also introduced important changes in product mix to improve sales revenue growth. Production of pulp and containerboard (linerboard and corrugating medium) was expanded to capture a greater share of projected international market growth. Management invested more than $900 million between 1979 and 1983 just to expand and modernise linerboard production. It also converted substantial existing capacity to production of coated and uncoated white papers, high value-added products in a rapidly growing domestic market. By 1985 IP was the world's largest producer of uncoated white paper. Management completely abandoned newsprint production after it sold its Canadian International Paper (CIP) subsidiary for $900 million in 1981.

*Changing product markets during the 1980s: IP's problems with international competition*

IP's long-term capital investment plans were made in an economic environment that changed dramatically after 1979. At the end of that year the paper industry was producing at a record 98% of capacity and industry leaders anticipated strong future growth in domestic and international markets (*Pulp and Paper*, 1983). Historically, the paper industry had suffered from periodic excess domestic capacity, when

[1] These programmes were intended to upgrade aging capital stock and overcome the apparent limits to economies of scale as well as the external shock of OPEC oil prices (Rauch, 1976).

[2] IP's programme was later described as 'the largest capital program in the industry, both in absolute terms and relative to the size of individual companies' (*Wall Street Transcript (WST)*, 1986).

[3] During the 1970s energy costs averaged 12% of total production costs. Labour, wood, chemicals and other miscellaneous costs represented 24, 10, 26 and 28% respectively (IP, 1980).

[4] By the late 1970s the cost of overhauling an old mill was $200–400 million on average. IP's director of employee relations noted that in the 1960s it had cost the company $65 million to build a new mill at its Vicksburg site. By 1981 it cost IP almost 10 times more, in excess of half a billion dollars, to build a new mill in Mansfield, Louisiana (J. Gilliland, personal communication). He estimated that in 1990 a greenfield white mill would cost over $1 billion to construct.

[5] For discussion of the changing technology of papermaking and its effect on work in the mills, see Birecree (1991).

industry leaders responded to forecasts for increasing demand and/or rising prices by adding new capacity and bringing it on line simultaneously (Rauch, 1976; *S&P Industry Surveys*, 1987A). This occurred in 1980 and industry profits declined (Hicks, 1987A). But overseas markets for paper products, especially linerboard, were booming. Following predictions that linerboard exports would increase 50% by the decade's end, US firms continued to convert their excess capacity to take advantage of this growing market segment (*Business Week*, 1981). At IP, a 32% increase in exports that year was evidence of the industry's growing reliance on international sales.

In 1981, however, industry-wide capital restructuring aggravated growing market instability brought on by changing macro-policy. Tight monetary policies induced the worst domestic and international recession since the 1930s. At the same time, the dollar began to appreciate rapidly in foreign exchange markets (Hooper and Mann, 1989). Lower cost, higher quality imported paper products from Europe and the Third World began to invade formerly impenetrable US markets (J. Gilliland, personal communication). Cost advantages for Third World producers came from their ability to pay workers subsistence wages, use pulp produced from wood harvested in state-owned forests (essentially free raw materials), and the absence of pollution restrictions comparable to those in the US. In addition, modern papermaking equipment had become available in overseas markets and foreign producers were quick to upgrade their capital bases.

Domestic and foreign sales of US paper products declined. Continued domestic capacity expansion, improved productive efficiency and income-elastic demand added to a growing surplus of paper products that depressed domestic prices. Despite lower operating rates and sales and earnings in the final two quarters of 1981, IP reported sharply higher overall earnings for the year because of the CIP sale. A 3% increase in the cost of goods sold compared to a 13% increase in 1980 convinced management that capital improvements were already effective.[1] IP warned its stockholders, none the less, against expecting too much, too soon. Executives explained that in a capital-intensive industry if the equity base expands faster than earnings during the early years of investment, the company will temporarily experience declining returns.

Domestic and foreign demand for paper remained weak in 1982 and 1983. Domestic prices fell 8% to 1979 levels, which, in conjunction with low price elasticity of demand, depressed industry revenues and profits. Eroding profit margins exacerbated by 86% capacity utilisation slowed capital expansion and encouraged papermakers to continue to close older, high-cost mills (*Pulp and Paper*, 1983). IP's performance deteriorated. Falling prices and a 4% drop in production reduced sales revenues by 5%. Earnings fell 66% below their 1981 level, yielding a 4·2% rate of return on equity, the lowest in the industry.

The recession abated in late 1983 and by early 1984 domestic paper prices began to firm while production costs continued to decline (*Pulp and Paper*, 1984). But the gains were short-lived. Huge federal deficits kept real US interest rates relatively high, which constrained US economic growth and depressed demand for lumber and

[1] It is likely that a substantial part of this decrease in the growth of production costs was a consequence of lower prices for necessary inputs due to the recession.

paper products used in construction. High interest rates also attracted foreign capital into the US rapidly during the 1980s and increased demand for the dollar, which reached all-time high exchange values in currency markets governed by free-floating exchange rates. Overvaluation in 1984 and 1985 transformed costs and prices measured in foreign currencies for leading US papermakers from among the lowest to the highest in world markets. Despite strong domestic and international demand, US papermakers' markets fell apart. Export markets which were expected to absorb surplus product from increasingly efficient US mills were now inaccessible to IP. Containerboard and coated and uncoated white papers were particularly hard-hit.[1] Oversupply in these lines from declining export sales, growing import penetration and excess domestic capacity pushed their domestic prices below previous recessionary levels. Low prices and sales volume for most products meant further deterioration in revenues and profits for US firms. Net income for the six leading producers declined 44% and total US industry profits declined 32% in 1985 (Hicks, 1987B).

Given its new product mix, IP's performance was affected more severely than its rivals' (Wade, 1986). In 1984 its domestic prices were 10–15% lower and even increasing sales in some lines and declining costs of production overall did little to boost earnings. First quarter net income was 20% below IP's 1983 level. Foreign sales also suffered in 1985. In containerboard alone, exports declined 20% during the first nine months of the year (*Paper Trade Journal*, 1985). Again, moderate domestic sales growth and the introduction of more value-added products did little to offset the effect of depressed domestic prices and IP's earnings fell to a 14-year low. Profits were not enough to cover dividends in 1984 and 1985, which left no funds for the maintenance of expensive capital equipment (J. Gilliland, personal communication).[2] Nevertheless, IP continued the capital investment programme throughout this period, with expenditures running twice the company's cash flow (an average of $800 million annually) (*Barron's*, 1987).

The dollar began to decline in 1986, however, and prices for most US paper products firmed domestically and internationally, although imports continued to make inroads into some market segments.[3] In addition, US papermakers still felt the effect of the mid-1985 peak in the value of the dollar on their relative prices during most of 1986. IP noted in its 1987 *Annual Stockholders Report* that foreign firms were aggressively trying to maintain or increase their share of the domestic white paper market by offsetting the cheaper dollar with lower profit margins rather than higher

[1] Historically white paper markets have been more volatile than those for other paper products (J. Gilliland, personal communication). The bulk of the US paper trade deficit between 1983 and 1985 has been attributed to increased imports of paper grades used for computer paper and office correspondence. European and Scandinavian suppliers, operating at capacity to meet growing demand, captured 5·5% of the market for printing and writing paper. Imports of uncoated free sheets doubled in 1984. Imports of computer and office paper increased 87% between 1985 and 1986 (Briggs and Snitzer, 1986). These products are distributed largely through an independent wholesale and retail distribution network, which may make their domestic market segments more vulnerable to imports than others. Further, the Justice Department had forced some major US producers to sell or reduce their distribution/wholesaling interests during the 1970s (Rauch, 1976).

[2] Even with no new additions to productive capacity, it still costs hundreds of thousands of dollars annually to maintain existing equipment, which the company views as continued capital investment.

[3] In printing and writing papers, a segment that accounted for 28% of industry sales, imports doubled again in 1986 (Briggs and Snitzer, 1986).

prices.[1] Consequently, industry profits fell 3·7% in the first half of 1986; but they increased 30% in the last two quarters due to rapidly rising sales due to the dollar's declining exchange rate (Hicks, 1987B). IP's operating earnings doubled, yielding a 9% return on equity—the highest since 1981.

As the dollar depreciated in 1987, industry exports of pulp and paper hit all-time highs, as did earnings and profits. Export sales and domestic prices for containerboard, bleached board and pulp improved. Linerboard prices alone increased 30% (Hicks, 1987B). Prices for white papers failed to rebound to the same extent, however, because new domestic capacity produced an excess domestic supply and foreign papermakers sustained their 12% share of the domestic market. Higher prices and sales in most lines accounted for 8% of a 22% increase in revenues at IP. Its 1986 acquisition of the Hammermill Company, which furthered expansion into value-added products, made up the rest (Hicks, 1987A). Completed capital improvements reduced costs per finished ton another 8%. IP's rate of return approached the industry's 10% average in 1986, but its new objective had become a 15% rate of return on equity (Kole, 1987).

*Corporate performance and pressures in financial markets*

IP's massive capital investments during the early 1980s 'created [its] own hurdle for return on equity' (IP, 1987B, p. 10). In deciding to undertake Major Capital Investment (MCI) projects, IP evaluated each project to determine whether its discounted cash flow would exceed a required minimum rate of return—the company's cost of capital (Hinton, 1983).[2] Future cash flows were calculated by subtracting projected costs (including income taxes, non-cash charges and adjustments—investment credits, deferred income tax) from estimated sales revenues. These figures were based upon forecasts of prices, product mix, volume, inflation and other factors affecting supply and demand. Assumptions underlying these projections were critical to the overall economic valuation of IP's projects.

Unanticipated product market problems between 1982 and 1985 which reduced earnings as well as the temporary effect of capital restructuring on initial operating costs depressed IP's realised returns on its massive investments and affected its performance in financial markets. Not only did returns fall short of mangement's expectations, but they disappointed financial analysts as well (Wade, 1986; *WST*, 1986). Paper companies were ranked unattractive by the mid-1980s and IP was considered an especially controversial, cyclical company (Marcial, 1984). Its shares sold at historically low levels when compared with both the market as a whole and other paper stocks (*WST*, 1986).[3] Analysts suggested, however, that higher rates of

[1] A recent study confirms this response by foreign producers in several US industries, including paper (Hooper and Mann, 1989). It is not surprising then that in 1986 'Finnish companies could buy pulp made from Maine trees, ship it home, convert it to paper, ship it back to the United States and still undersell American paper companies' (Berry, 1989).

[2] IP made this determination using three different indicators: (1) the estimated rate of return on investment (average annual income/average capital employed), (2) the discounted cash flow return (average annual percent profit on the unrecovered capital over the life of the project), and (3) the net present value (cash flow discounted at the cost of capital), all over an estimated payback period (usually a five-year period to recover the total investment commitment before start-up).

[3] While most paper stocks appreciated 170% between 1982 and 1986, IP's rose only 75% (Sandler, 1986). In 1982 it sold at 54% of book value and by 1986 it was still undervalued at 85% of book (Wiegner, 1982; *WST*, 1986).

return on equity would enable IP to overcome its market slump. They projected that in improved product markets IP was capable of achieving a 15% return by 1990 (*WST*, 1986; Blais, 1987), which would raise its standing in financial markets and its share price over the long term.

The undervaluation of IP's assets, particularly its vast timber holdings, made it a potential target for corporate raiders. Industry analysts interpreted IP's move to allow the market to revalue its timber assets in 1985 by putting them into a limited partnership, IP Timberlands, and adding $1 billion to the value of its shares in an effort to discourage such attempts (Simon, 1985; Barker, 1986).[1] Some also viewed the 1986 Hammermill acquisition as an attempt to ward off raiders, this time by increasing debt $2·8 billion and making the company a much more expensive target (Sandler, 1986; *Business Week*, 1986). Finally, in 1987, IP considered instituting a 'poison pill' anti-takeover device that would allow shareholders to buy additional securities cheaply and thereby increase the company's purchase price in the event of a takeover attempt (Anders, 1987). This vulnerability in financial markets held important consequences for IP's labour policies in the late 1980s.

## 2. Unions and collective bargaining

*Labour relations before 1979*

Market performance for many industry leaders after World War II was relatively mediocre and declined slowly over the years. None the less, paperworkers received wages slightly above the average for manufacturing (Guthrie, 1972). Wage gains reflected rising labour productivity, effective trade union organisation of the relevant workforce,[2] and industrywide administered pricing. Over time collective bargaining narrowed occupational differentials, increased the number of job classifications and titles, and created an elaborate employment structure which raised the relative wage level of unskilled labour. Few workers received the minimum base rate for common labour. Satisfactory returns to both capital and labour certainly contributed to the peaceful labour relations that prevailed during these years but the close, if not collusive, relationship between international union officials and industry leaders was also a factor (Graham, 1970). Such had not always been the case, however. In 1921 industry leaders' efforts to install the open shop, win a 30% wage cut and eliminate premium pay for overtime prompted paperworkers into 'the greatest strike that ever took place in the paper industry' (Graham, 1970, p. 7). IP, where 20 locals walked out, was central to the dispute. Management hired strikebreakers to maintain production but in the first year its struck mills operated at only 8–18% of capacity. Three years into the strike operating rates were still only 60% on average. With replacement workers in scarce supply, management violated immigration laws and imported workers from Canada; it finally broke the unions in 1926.

From 1921 (the beginning of the strike) to 1937 IP's mills were operated on an open shop basis. After 1937 in exchange for wage concessions to relieve continuing pressure from the Depression, IP allowed the reorganisation of its mills. Thereafter collective bargaining was characterised by mutual accommodation—union proposals

[1] The success of this strategy to improve its standing in financial markets depended upon future tax reform that threatened to remove substantial tax breaks and reduce timber's income (Barker, 1986).

[2] By 1968, 97% of paperworkers and 100% of pulp mill and related workers were covered by union contracts (Guthrie, 1972).

varying insignificantly from the company's final offer.[1] IP's director of employee relations explained that prior to 1975, in his opinion, profit levels did not always justify union wage increases. However, because profits were declining at a slow pace and labour cost increases could easily be passed along through higher prices, union demands met with relatively little resistance. In fact, company negotiators rarely went into negotiations with any formal bargaining agenda. The UPIU effectively directed bargaining and IP responded (J. Gilliland, personal communication). It also appears that the major papermakers offered little resistance to union organising drives in new mills during this period. More often than not the favoured union was invited into a new mill to organise the relevant workforce (G. Brehm, personal communication).

Thus, at the industry level, there was little significant disruption of production between World War II and 1970. In all but three years work time lost to strikes and stoppages was less than 0·005% considerably lower than in all of manufacturing (Guthrie, 1972). Industrywide developments in bargaining during the 1970s, however, began a pattern that would continue and become more important during the 1980s. Most major papermakers sought to reduce the number of cold days (holiday shutdowns) and reorganise maintenance work (J. Gilliland, personal communication). The growing complexity of the papermaking process made disrupting production for holiday closure increasingly costly. Historically, maintenance costs had always been high because papermaking was so capital-intensive. Thus, many companies demanded and often won language changes to reduce job restrictions among the crafts in maintenance.[2] These demands were early attempts to reduce labour costs and foreshadowed events to come in the next decade.

*International Paper takes the initiative*

At the outset of its modernisation program in 1979 IP warned the unions that it would bargain hard for co-operation with its plans (Wiegner, 1982). As the capital investment campaign moved forward productivity improved in those mills modernised and/or reconfigured. As early as 1980 work hours per ton at many mills began to fall and reduced the requisite workforce. IP's internal evaluation of its facilities and recession (1981–1983) brought about the permanent closure of others, which cost the union more jobs.[3] IP's director of employee relations claimed that management handled workforce reductions primarily through attrition; something accomplished with relative ease because annual turnover rates in production were high (J. Gilliland, personal communication).[4] In most cases UPIU did not resist workforce reductions because wages and benefits for those who remained employed were left intact or improved.

[1] The international's willing participation in this relationship is attributed, in part, to the memory of the 1920s' bitter struggle (Graham, 1970).

[2] For more details about these developments in bargaining, see Birecree (1991).

[3] At the industry level, American Paper Institute and government statistics reveal that employment declined by 65,000 jobs—over 9%—between 1979 and 1983, primarily because of the permanent closure of eleven mills in 1982 alone (*Paper Trade Journal*, 1983). While employment in paper normally fell during recessions, other data indicate that it failed to regain its pre-recession level after 1983 (US Department of Commerce, 1988).

[4] This process continued as the capital investment program progressed. For example, in 1986 modernisation of IP's Georgetown, South Carolina, and Mobile, Alabama, mills cut labour requirements by 400 and 900 jobs. In these cases, however, workforce reductions involved some lay-offs in addition to normal attrition (J. Gilliland, personal communication).

In 1982 IP moved to continue an industry pattern begun during the 1970s and asked the locals at its Vicksburg and Pineville mills to cut the number of cold days (J. Gilliland, personal communication). Union members refused and, after working for six months without a contract and then striking for two, ratified a contract with no concessions in 1983 (*Paperworker*, 1983).[1] A June 1983 *Business Week* article reported more problems between IP and the UPIU. Union anger over IP's demands for more concessions after costly lay-offs and its success in thwarting union organising drives at its new Mansfield, Louisiana, mill[2] prompted the UPIU to begin a corporate campaign against IP (*Business Week*, 1983). The article further indicated, however, that the parties had resolved their differences and averted a possible strike by 6000 members of the Southern Kraft Group [or Southern Kraft Multiple (SKM)] who were covered by a common agreement.[3] Overall, despite the economic distress of the period, IP workers remained among the highest paid in manufacturing, with their paid holidays and vacations, attractive life and health insurance plans, and pension programs intact (Larson, 1984).

UPIU's executive assistant to the president indicated that the union's greatest concern during 1983 negotiations with the SKM was the continued operation and modernisation of existing mills, which would guarantee the survival of existing locals, protect the jobs of union members, and reduce the number of protracted campaigns in which the union might have to engage to organise workers in new mills (G. Brehm, personal communication). These concerns were critical to the outcome of an extraordinary round of negotiations in 1984 that culminated in an agreement between IP and the UPIU in December to dissolve the SKM. At the end of the 1970s, the SKM included about a dozen southern mills. It represented the UPIU's only success in centralising bargaining within the IP system over the years, but its power at times extended beyond the mills included. While bargaining was fragmented for the rest of IP's mills, many of their contracts, especially for southern mills, reflected patterns determined in IP's negotiations with the SKM. By 1980, because some member mills had been sold or closed, only seven remained in the SKM.[4]

[1] Supervisors attempted to maintain production on one of the linerboard machines at the Vicksburg mill during the strike, but Pineville remained idle.

[2] In 1981, IP hired 250 employees six months before the official opening of the Mansfield mill for training that included education about the benefits of non-union status (*Business Week*, 1983). All workers were hired on salary and paid wages and benefits equal to the industry average. The mill presently remains non-union (G. Brehm, personal communication).

[3] Workers at IP's Mobile, Alabama, Moss Point and Natchez, Mississippi, Pine Bluff, Arkansas, and Bastrop, Louisiana, mills were included under the SKM at this time. Information about these negotiations reported in the press and in interviews with both union and company officials is contradictory. IP's director of employee relations described negotiations with the SKM that year as uneventful and denied any knowledge of a dispute or any agreement of the nature reported by *Business Week* (J. Gilliland, personal communication). The article suggested that IP agreed to drop its anti-union activities, overhaul existing unionised mills to expand its white papers capacity rather than construct new ones, and grant annual wage increases totalling 17% over three years. In return the union accepted a cheaper pension formula, the elimination of July 4 and 5 cold days, changes in production and maintenance work rules to improve flexibility and an end to the corporate campaign (*Business Week*, 1983). A spokesperson for the union claimed that reductions in premium pay and changes in production and maintenance work rules as well as management's commitment to modernise older mills were important features of the 1983 negotiations (G. Brehm, personal communication).

[4] For further analysis of important changes in bargaining structures at IP, see Birecree (1991).

In the autumn of 1984 IP management told union officials that it was in the best interests of the remaining mills that the multiple be broken up and all future negotiations conducted on a mill-by-mill basis (J. Gilliland, personal communication). Officials argued that diversity in size, vintage of capital stock, products produced and performance of these mills made it impossible to deal with the needs of each with respect to growing product market problems when all were covered by a common agreement. Arguments for future investment in any of them could not be made unless they were considered separately.[1] The UPIU agreed to dissolve the multiple to protect the interests of existing locals and union members. Contract expiration dates for those mills involved were staggered beginning in 1985. No binding commitments were made regarding specific investments at individual mills as part of the final agreement to disband the multiple, however.

A final development in bargaining prior to 1985 is also noteworthy. IP accelerated demands for increased flexibility in production in its mills during the early 1980s (G. Brehm, personal communication), and argued in several cases that such flexibility would 'create an environment where future capital investment would make more sense' (J. Gilliland, personal communication). These demands were made most often in negotiations with locals that represented workers in mills where substantial investment in modernisation and/or reconfiguration was essential to the future viability of the mill (G. Brehm, personal communication). As a consequence of these pressures, the reorganisation of work in some mills began before capital investment was undertaken.[2] Further, UPIU president Wayne Glenn has claimed that the union agreed to the SKM break-up and concessions that granted management greater flexibility in job assignments with the tacit understanding that IP would not demand wage cuts in the future (Getman, 1991).

*The move to aggressive labour relations*

Though productivity had improved by the mid-1980s, unexpected market problems prompted IP management to begin its deepest cost cutting drive in 28 years (J. Gilliland, personal communication) as well as a campaign to transform the 'culture of the company' (Getman, 1991) in an effort to attain 'acceptable profits' and an improved stockholder return on investment (IP, 1987). These efforts began in 1984 in areas over which management had immediate control. Salaries were frozen for non-union personnel, intervals between merit increases were lengthened, company aircraft and the New York headquarters were sold, non-production employment was streamlined through early retirements and attrition, contracts with raw material suppliers were renegotiated to cut input prices, and marginal facilities continued to be closed.

In mid-1985 management began an in-depth assessment of production labour costs, broken down by phase, to determine what demands to put on its bargaining

[1] In 1981 a similar argument had convinced the union at IP's Georgetown mill to leave the SKM in 1982 and be considered on its own merits to avoid closure.

[2] The most extreme example of the relationship between flexibility and capital investment involved the Georgetown mill. There management tied investment in reconfiguration directly to the acceptance of demands for increased flexibility (J. Gilliland, personal communication). For discussion of the evolution of IP's demands for increasing flexibility, see Birecree (1991).

agenda for negotiations later that year. IP's director of employee relations explained that across-the-board wage cuts were considered undesirable because benefit packages were tied to them and thus employees would be affected disproportionately (J. Gilliland, personal communication). Management sought items where such would not be the case and settled on eliminating 'frills' agreed to when market conditions were significantly different. Thus, IP became the first company in the industry to move to cut premium pay for holiday and Sunday work. Management estimated that Sunday premium pay alone accounted for 46% of total overtime pay and that its elimination would reduce labour costs by as much as $30 million dollars annually (J. Gilliland, personal communication). IP's director of employee relations maintains that once the decision was made to make these cuts company representatives met with UPIU president Wayne Glenn and a regional vice president and informed them of their intentions. The UPIU was not asked for its approval; officials simply made it clear that these demands would be made in future negotiations at all mills regardless of the market conditions at the time. In essence, management was changing permanently the way papermakers were to be paid to guarantee lower labour costs in the long term (J. Gilliland, personal communication).

IP demanded the elimination of premium pay for holiday and Sunday work and contract language changes to broaden subcontracting rights and introduce full flexibility between production and maintenance in 1985–1986 bargaining rounds. And, for the first time since the 1920s, management returned to a more aggressive approach—the threat of lock-outs or the use of permanent replacements during strikes—to win the desired concessions (G. Brehm, personal communication).[1] During the autumn of 1985 and throughout 1986 Sunday premium pay was eliminated in 37 separate negotiations at IP mills across the country with relatively little difficulty (J. Gilliland, personal communication) so that by 1987 concessionary contracts were in place in two-thirds of IP's primary and one half of its converting mills (IP, 1987). UPIU officials maintain that, for the most part, the union did not resist concessions at this time because they were understandable given IP's product market problems (G. Brehm, personal communication). Bargaining during these rounds, outside of those mills formerly included in the SKM, was mostly with smaller, weaker mills where the economic arguments were obvious. The union had already accepted some flexibility as a necessary pre-condition for modernisation at most of them by this time. However, union officials claim that the company's demands for concessions were not perceived as the beginnings of a pattern that would continue into the future when markets recovered. As a consequence of the relative ease with which IP won these concessions at so many of its mills, other major papermakers began to make similar demands in 1986 and bargained aggressively with their unions to win them (J. Gilliland, personal communication). The most aggressive among them were primarily commodity paper producers—Georgia-Pacific, Stone Container, Champion International, Great Northern Nekusa and Boise-Cascade. All threatened to hire or eventually hired permanent replacements when union members

[1] From the union's perspective, the move to more aggressive concession bargaining can be traced to CEO John Georges' arrival at IP. Employees at IP's Jay, Maine, mill have claimed that labour relations there began to deteriorate after senior labour relations personnel were encouraged to retire in 1985 and replaced by a new personnel manager and director of human resources (Getman, 1991).

refused to grant similar concessions (G. Brehm, personal communication; Berry, 1989; Austin, 1987B).[1]

*The 1987–1988 lock-out and co-ordinated strike*

IP management continued its aggressive pursuit of concessions in 1987. Its CEO explained that 'to compete effectively world-wide throughout an economic cycle, we need to improve operating flexibility and cost efficiency in all our facilities' (IP, 1987). In negotiations with locals at its Jay, Maine, Mobile, Alabama and Lock Haven, Pennsylvania mills, contracts not reopened in 1985 or 1986, IP insisted on concessions similar to those already in place at other mills. Management also demanded language changes to improve flexibility through team-manning in production, introduce full flexibility between production and maintenance, and to broaden subcontracting rights.[2] Despite strong paper markets and healthy profits, company negotiators justified their demands by pointing to the relative competitiveness of these mills compared to those where workers already had agreed to them. Without the elimination of Sunday premium pay, company officials argued, they were competitive on neither a companywide nor an industrywide basis (G. Brehm, personal communication; J. Gilliland, personal communication).

IP's director of employee relations explained that the continued reorganisation of work in these mills was necessary to create an environment in which capital investment made the most sense: one in which efficiency was maximised and the company realised an acceptable return on its investment (J. Gilliland, personal communication). When questioned about the ultimate source of IP's competitive predicament, he did admit, however, that the entrance of foreign producers into domestic and foreign paper markets, not labour inefficiencies due to a unionised workforce, was the central problem. He further explained that in capital-intensive industries inefficiencies cannot be blamed solely on labour because often outdated or outmoded equipment is equally if not more responsible for competitive problems.

Workers at the Mobile mill were the first to resist IP's demands. In March 1987, seven weeks after their contract had expired, IP locked them out, claiming that the UPIU intended to 'co-ordinate bargaining at Mobile with contract expiration at other company mills' (IP, 1987B). The Jay, DePere and Lock Haven locals all offered to work under the terms of the old contract, and in some cases to accept concessions in return for a stock option or profit sharing plan (*Lewiston Daily Sun*, 1987) but IP refused. In response the UPIU began a co-ordinated strike. All locals with contracts

[1] While IP may have been the industry pattern-setter when it came to aggressively pursuing concessions, it is not clear that it was the first to follow through on threats to hire permanent replacements. It appears that the first use of permanent replacements in a dispute with a UPIU local came in a conflict involving Georgia-Pacific. After two months of threatening to hire permanent replacements during a strike which began in July 1985, the company finally made good its promise in September and hired 130 permanent replacements, after which the union capitulated to its demands (G. Brehm, personal communication).

[2] With regard to the latter, the requested language changes would allow certain production, maintenance or power plant work to be contracted out 'when economic conditions made it advisable to do so' (Austin, 1987A). Teamwork was central to IP's 'Project Productivity' and called for the reorganisation of jobs into composite classifications, workers to train and take responsibility for all jobs in a classification (as many as 30 in all) and the removal of contract barriers between production and maintenance work (Morin, 1987; Josephson, 1987; IP, 1987A).

that expired thereafter were expected to join the strike, 'pool' their ratification votes, and remain off the job until each local received a contract without the proposed concessions. The Jay, Lock Haven and DePere mills were first in the pool, with others expected to join when their contracts expired later that autumn.[1] To the union, the economic necessity that had justified previous concessions had disappeared by 1987. Members expected to be rewarded for their co-operation and rising productivity, as in the past, by sharing in IP's increased earnings. UPIU thus actively opposed concessions that it estimated would take an average of $5000 from each member annually, decrease the number of union jobs and hours worked, increase individual workloads, and risk moving members to lower tiers in the wage structure (Josephson, 1987; Chase, 1987; Bailey, 1987; Getman, 1991).[2]

IP temporarily replaced the Mobile workers and permanently replaced workers at the struck mills. IP's director of employee relations explained that product market conditions provided the threshold for these decisions (J. Gilliland, personal communication). The long-term cost advantage that would accrue to IP from implementing the concessions outweighed the costs involved in operating during the strikes and lock-out—costs associated with using temporary replacements at Mobile, hiring and training permanent replacements at the others,[3] and the lost investment in the union workforce. There simply was no choice. That continued operations were imperative was a decision the individual mills' business managers ultimately made given their knowledge of product market conditions, inventory levels, etc. IP had to protect its market shares from further erosion by foreign competitors who were in paper markets to stay.[4]

*Capital restructuring, a changing socio-political environment and their implications for labour relations*

IP's modernised capital base was a critical factor in the dispute, for it allowed management to continue production effectively throughout the strike, something it had never before been able to do. Before, the union was able to impose substantial costs on IP almost immediately after a strike began because supervisors could not adequately operate and maintain equipment (Austin, 1987B). Now, in all the modernised facilities, computer automation diminished the number and altered the skill content of jobs formerly requiring years of shopfloor experience, which made it possible for

[1] Initially there were to be four locals in the pool; however, shortly before the co-ordinated strike was to begin the Moss Point Leadership buckled under the threat of being locked out or permanently replaced and accepted a concessionary contract instead (G. Brehm, personal communication). UPIU adopted the co-ordinated approach because it had worked to defeat Champion International's demands for concessions in 1986. For details, see Birecree, (1991).

[2] In fact, after the strike began IP eliminated 127 union positions at the Jay mill through the introduction of teaming, although the company's diretor of labour relations explained that the reduction would have been accomplished through attrition rather than lay-offs if the strike had not taken place (J. Gilliland, personal communication).

[3] He claimed that temporary replacements could not be hired at the struck mills because workers were not willing to give up permanent jobs, even at lower pay, to take temporary jobs (J. Gilliland, personal communication). On the other hand, permanent replacements' contracts indicated that their employment status could be temporary, depending upon the terms of the final agreement between the union and the company (Getman, 1991).

[4] Reportedly, some firms put forth this same argument to explain the necessity of operating during strikes as early as the 1960s (Perry, Kramer and Schneider, 1982).

skeleton crews of supervisors to maintain satisfactory levels of production (G. Brehm, personal communication; *S&P Industry Surveys*, 1987A).[1] Nevertheless, their output levels were insufficient for the long term because it was necessary for mills to run at no less than 90% capacity utilisation in order to be profitable (Rauch, 1976). Therefore, the company depended upon an outside construction/labour contractor, Burke, Edmonds and Kennedy (BE&K), to achieve and sustain capacity production at the huge Jay and Mobile mills. BE&K workers maintained equipment and helped train replacements at Mobile and Jay for the duration of the strike (Chase, 1987).[2] As permanent or temporary replacements were hired and adequately trained to take over responsibilities, the BE&K workforce was reduced. IP claimed production levels at or above 90% of capacity at its Jay and Mobile mills within a few months. At the smaller Lock Haven and DePere mills, where BE&K was not used, supervisors and local replacements achieved satisfactory output levels on their own.[3]

UPIU's executive assistant to the president claims that prior to the mid-1980s it was IP's policy for some 25 years to operate during strikes using supervisory personnel, and at times union members who had functioned as temporary supervisors (G. Brehm, personal communication). IP's director of employee relations, however, maintains that before the late 1970s operating during strikes at IP was virtually unheard of. Whatever the case, it had not been the company's policy to employ temporary or permanent replacements during labour disputes. However, external economic, social and political forces well underway by the late 1980s facilitated a more aggressive approach to labour relations because they allowed management to recruit and substitute permanent replacements quickly and effectively.

IP's advertisements for replacements emphasised that previous experience was desirable but 'a willingness to work in a team environment' was the only real requirement for most positions.[4] New workers started at union wage rates but with no premium pay for Sunday or holiday work (G. Brehm, personal communication; J. Gilliland, personal communication). Even so, given the structure of local labour markets these wages were relatively high, meaning that IP did not need high levels of local unemployment to fill the vacated positions.[5] Nevertheless, record high levels

[1] At Jay alone, 187 of the 650 workers replacing strikers at the mill when the strike began were Jay supervisors and 175 others were supervisors brought in from 20 other mills (Chase, 1987). For a more detailed discussion of the importance of technology to IP's ability to operate during strikes, see Birecree (1991).

[2] IP did not employ BE&K replacements at Lock Haven or DePere because its labour reserves were relatively stretched given its involvement at Jay and Mobile and also because Pennsylvania and Wisconsin labour law discourage the use of labour contractors during strikes (G. Brehm, personal communication).

[3] IP claimed in a report to financial analysts that supervisors operated the Mobile mill at 70% of capacity during the first month and that production reached 98% there within seven months (IP, 1987B). They reported that Jay was at 70% within two months and 90% by October, 1987. DePere ran at 50% in the first month and 90% by October 1987. Lock Haven had four machines operating at 100% by October 1987 and a fifth machine scheduled for start-up shortly thereafter. Other reports, however, indicated that replacements, either managers or outsiders, could not be expected to be as productive as the usual workers and production was lost and paper damaged at these mills because replacements were relatively inexperienced (*S&P Industry Surveys*, 1987C).

[4] One BE&K worker who left the Jay mill during the dispute reported that only one quarter of the replacements were qualified to work in a paper mill, and the rest unskilled (Chase, 1987).

[5] Of 127 industries in 1987, the Bureau of Labor Statistics ranked pulp and paper eighth in term of wages and benefits (IP, 1987B).

of structural unemployment during the 1980s had relegated many highly skilled workers, formerly employed in the primary sector, to secondary jobs; other workers, who were less skilled but trainable were anxious to fill year-round, full-time jobs in primary industries.[1] IP's director of employee relations reported that there were thousands of applicants for strikers' jobs and pointed to two important structural factors (J. Gilliland, personal communication). During the course of the 1980s a significant number of mills were closed, which left many highly skilled papermakers working in convenience shops and waiting for an opening in a paper mill. These workers were willing replacements for strikers, along with others who found themselves in secondary jobs in highly segmented local labour markets. In many of the towns where paper mills are located, as one worker put it, 'there is only the mill or McDonald's' (Bailey, 1987A). In Maine, for example, about 80% of the labour force in the towns surrounding Jay worked in the service sector. IP's director of employee relations claimed that union paperworkers in big mills often made as much as $40,000 annually while the annual salary in other occupations averaged around $16,000 (J. Gilliland, personal communication).[2]

The economic insecurity that resulted from structural unemployment, underemployment and supply-side fiscal policies that shredded the social safety net in the US during the 1980s made these workers increasingly amenable to the demands of capital. They were willing to trade traditional values attached to family and community for those of the 'corporate culture' which stressed increasing loyalty, mobility, and flexible labour standards in the interest of 'international competitiveness'. The average worker therefore revised downward his or her expectations about wages, benefits, working conditions and standard of living (Mehaut, 1988).[3] The economics and politics of the 1980s also significantly diminished public support for union struggles. Reagan's firing of federal air traffic controllers in 1980, his populist but conservative free market ideology (ironically supported by many union members), and the National Labor Relations Board shift in support of traditional management positions in labour disputes in the early 1980s encouraged employer aggression, seriously discredited organised labour and accelerated the decline in union bargaining power during the 1980s. Paperworkers, fighting to preserve previous union gains, thus were perceived as members of a shrinking industrial elite, 'foolish people who

[1] Even by 1989, with unemployment at its lowest in 15 years, 6·7 million uemployed workers and one million discouraged workers composed a reserve labour force of some 8 million, not including future entrants and the underemployed (*Business Week*, 1989B). For detailed discussion of these issues see: Barry Bluestone, 'The impact of schooling and industrial restructuring on recent trends in wage inequality in the United States', *American Economic Review: American Economics Association Papers and Proceedings*, May 1990; Lawrence Mishel and Jacqueline Simon, *The State of Working America*, Economic Policy Institute, 1988; Paul Osterman, *Employment Futures: Reorganization, Dislocation and Public Policy*, (especially chapter 2); Oxford University Press, 1988; Frank Wilkinson, 'The restructuring of labor markets,' *Labour and Society*, vol. 13, no. 4, October 1988.

[2] UPIU's executive assistant to the president reported interesting evidence of the importance of labour market segmentation to the dynamics of collective bargaining. He claimed that in August 1985, the Miami Paper Company in Ohio, a subsidiary of Pentair, Inc., demonstrated its blatant willingness to replace permanently 270 union members in a UPIU local there and the potential consequences for union workers if it did so. During contract negotiations members of the company's bargaining team handed union negotiators applications for employment at Burger King when they indicated an unwillingness to accept concessions (G. Brehm, personal communication).

[3] For example, by 1987 it was no longer necessary for IP to pay wage premiums in order to coax workers into the mills on Sundays.

abandoned some of the best paying jobs in the state' (Rankin, 1988 p. A3). The editorial pages of local newspapers were filled with letters either condemning or applauding union resistance, which reflected the divisions, or segmentation, that characterised local labour markets. Those who disapproved of union militance claimed union members did not appreciate their superior jobs and privileged economic status. Union supporters, mostly relatives, bemoaned the widespread ignorance of actual working conditions in the mills, e.g. swing-shift work, the years of struggle to obtain decent wages, and unfair company demands in view of current profit levels and executive salaries. Others, afraid of reprisals from either side, feigned indifference. Thus, the socioeconomic environment of the 1980s both encouraged and condoned 'scabbing' on strikers and hundreds of local replacement workers willingly crossed picket lines in order to fill the highly desirable union jobs.[1]

The four mills continued to operate for the duration of the 16-month strike so that despite having labour problems IP earned a 10% rate of return on equity in 1987. By April 1988, the focus of negotiations had shifted from IP's initial demands to the rights of replacement workers to permanent jobs. The company proposed continuation of all terms it had unilaterally imposed during the strike in implemented contracts, retention of all replacement workers, and preferential hire of strikers as needed, except at Mobile where locked-out workers were to return to work.[2] All unfair labour practice charges were to be dropped, which would allow pending decertification elections to go ahead at the DePere, Jay and Lock Haven mills (*Paperworker*, 1988). Some papermaking firms disapproved of IP's aggressive policies, but they understood that if the leading firms persisted in setting a confrontational, concessionary pattern, they too might have to follow (*Lewiston Daily Sun*, 1988). Indeed, it was reported that in 1988

> the industry and the unions continue to clash over the issues of premium pay for Sunday and holiday work and flexible work rules. Carryover confrontations from long-term 1987 strikes set the tenor for other negotiations in 1988 . . . paper industry companies continue to negotiate contracts that contain lump-sum payments instead of larger wage increases . . . (U.S. Department of Commerce, 1988).

In October 1988, UPIU officials abruptly ended the co-ordinated strike because they believed that locals in the non-struck mills were not in support.[3] Many locals whose contracts expired thereafter chose to work under unilateral terms rather than

[1] The recent experience with air traffic controllers where replacement workers voted to form a new union in the mid-1980s is evidence that replacement workers are not opposed to unions *per se* but rather they are willing to replace strikers because the jobs are so attractive relative to alternatives in segmented labour markets. Interestingly, a study of employers who attempted to operate during strikes in the 1960s and 1970s noted that 'all firms that sought outside replacement labor reported surprising success in that search in terms of the number of applications received and the number of applicants willing to cross a picket line to file applications' (Perry, Kramer and Schneider, 1982), which may indicate that some of the forces that produce such behaviour may have been in effect well before the 1980s.

[2] Strikers not rehired at their home mills would be relocated elsewhere in the IP system no later than April 1989. Workers choosing not to relocate could cash in their pension entitlements and take advantage of a company job-assistance program, including reimbursement for relocation when a new job was found elsewhere.

[3] For discussion of the failure of union strategy, see Birecree (1991).

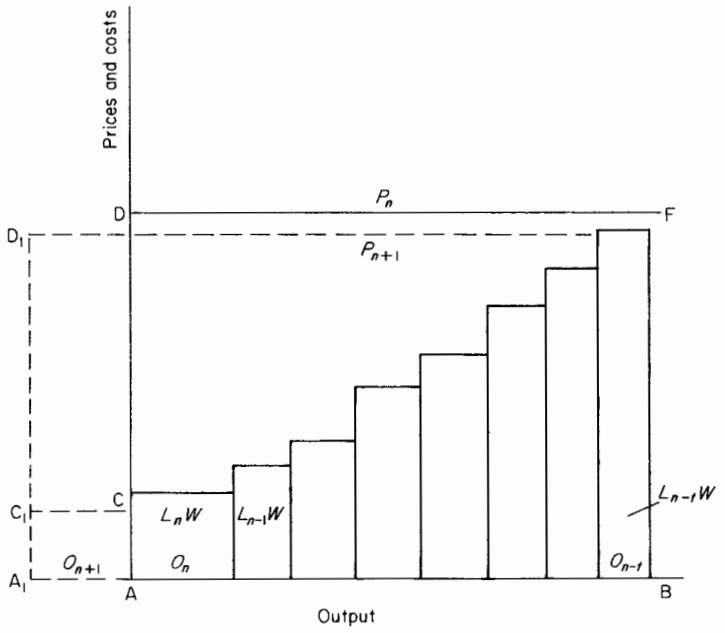


**Fig. 1**

risk losing their jobs to permanent replacements. By early 1988, potential union decertification of three striking locals was enough to convince most local members and officers that strikes were ineffective.

## Findings and interpretations

Earlier work by Salter (1960) and Penrose (1959) helps integrate the various institutional sources of change—economic, political and social—uncovered using the productive systems approach into a theoretical model that clearly illustrates the important interrelationships among them and their importance in labour relations, and thus, wage determination. Our analysis reveals that, contrary to the accepted wisdom of the 1980s, excessively high union wage rates may not always be the ultimate source of competitive problems. None the less, firms may view reducing labour costs, by force if necessary, as the most expeditious solution to competitive problems. When they do so, however, they risk creating an entirely new set of long-term problems for the industry, the economy, and thus, for themselves.

*The nature of market problems and the role of aggressive labour relations*

A modified version of Salter's (1960) analysis of the long-term process of technological change under perfect competition allows us to pinpoint the sources and consequences of wage change in the IP system. Figure 1 duplicates Salter's theoretical interpretation of the process of replacement investment. It represents a cross-section of the operating costs of plants of varying vintages in a hypothetical industry. Plants constructed most recently, $O_n$, embody current best-practice techniques of production and realise the lowest possible operating costs, AC. Among other components

AC includes labour costs defined as unit labour requirements, $L_n$ multiplied by the wage, $W$. Best-practice total costs, AD, include operating costs, AC, plus capital costs (including normal profits), CD, and determine the current market price for the product, $P_n$. At the opposite extreme, the oldest plants, $O_{n-t}$, embody the most outmoded production technique and have operating costs, BF, approaching the market price, $P_n$. Once their production costs exceed $P_n$, they either will be replaced by new facilities or their equipment will be scrapped and replaced with new capital stock (modernised). In Fig. 1, a new best-practice technique is introduced in the industry in the next time period, $O_{n+1}$, with total costs $A_1D_1$. Costs associated with the new technique ($A_1D_1$) determine a new market price $P_{n+1}$. Operating costs of plants of vintage $O_{n-t}$ therefore exceed the new price and either have to be replaced or modernised. The extent and speed of capital reorganisation depends upon movements in relative factor prices, the overall age of the capital stock, and the rate of technical progress, which lowers operating costs relative to the capital cost of new equipment embodying the latest technique and therefore makes the latest vintage feasible. Restructuring often occurs under these conditions because the price of labour rises relative to that of capital, which also puts upward pressure on the operating costs of older plant and equipment, renders them obsolete and encourages management to replace them with the latest best-practice technique.

This analysis is readily applicable to US papermaking in the last two decades. Market control and pricing behaviour in the industry, in conjunction with the rising cost of capital, especially during the 1970s, explains not only the outmoded status of the current capital stock in the late 1970s, but the flurry of investment necessary for US firms to penetrate growing international paper markets with their price-elastic demand for product. In the period before 1980 administered pricing allowed industry leaders to deflect pressures that otherwise would have required them to make substantial replacement investments. In addition, intense rivalries among the largest firms in the industry, which may also induce technological innovation and capital restructuring (Penrose, 1959), were absent as well. Salter's original model, modified for analysis at the firm-level and including a number of features of the imperfect market structure in paper, helps explain IP's predicament (and perhaps that of other major papermakers) in the mid-1980s as it completed a massive capital investment program.[1]

Figure 2 represents a cross-section of how IP might have envisioned its operating costs in the mid-1980s, with almost two-thirds of its plant and equipment in place for seven years or less, when making its investment decisions earlier in the decade. This view differs from that in Fig. 1 because the firm now can set the product price $P_s$ to reflect total production costs—operating costs (AC) plus capital costs (CD), including a target (and not necessarily the industry average) rate of return on capital. $P_s$ is calculated by multiplying an average expected minimum unit cost of production (muc) by one plus the target rate of return ($r$): $P_s = \text{muc} \times (1+r)$. The firm assumes that sales will be adequate to support $P_s$ at optimum capacity utilisation so that all plants realise their expected minimum operating costs (AC). As in Fig. 1, operating

[1] The level of abstraction in this analysis and its preliminary nature does not allow us to build a model which embodies all of the details presented in the text, but we have attempted to extrapolate reasonable generalisations from them.

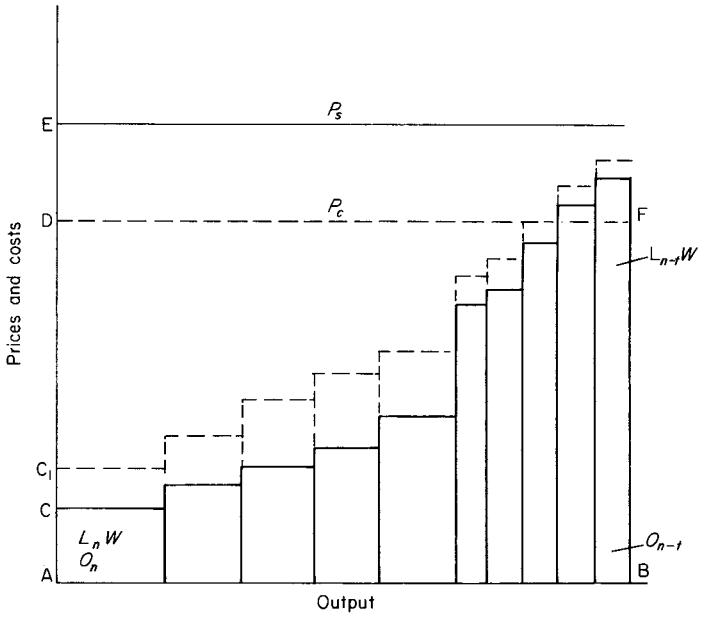


**Fig. 2**

costs include labour costs. They are not, however, determined solely by demand and supply in the labour market, but rather reflect elaborate employment structures established through bargaining and hence are subject to shifts in the relative bargaining power of capital and labour. We further assume segmented local labour markets, where labour standards may vary substantially across market segments and entry into those segments featuring higher labour standards is relatively restricted.

At the outset of its capital investment program in 1979, IP management anticipated neither the important changes that would occur in product markets between 1982 and 1986 nor the effect they would have on its ability to set domestic prices and realise expected rates of return, especially in product lines where it had invested heavily. In Fig. 2, price $P_c$ represents industry leaders' loss of price control and the subsequent fall in actual product price by the mid-1980s. The pressures on the firm in this case are different and more complex than those on firms in the industry in Fig. 1, where only marginally obsolete plants come under significant pressure when a new best-practice technique is introduced and product price falls.[1] In Fig. 2 all of the firm's plants, regardless of vintage, are affected. Lower prices combine with lower sales to reduce expected revenues significantly for all plants. Lower sales also require plants to operate at less than optimum capacity, which in turn raises their operating costs ($AC_1$) above the expected minimum (AC) and in that way reduces anticipated gains from capital improvements. In addition, product price cannot be increased as in the past to protect profit margins from the effects of lower sales and less than optimum plant utilisation. Changing product markets thus lead to less-than-expected rates of return for the period.

[1] By contrast, returns on non-marginal plants continue as price decline is offset by lower capital costs in the next time period.

By 1985 these lower returns produced financial pressures on management to achieve and maintain an 'acceptable rate of return over an economic cycle'.[1] This necessitated increasing future rates of return to compensate for unanticipated low returns in earlier years. The original administered price formula can be rearranged to reflect the need to control and increase the target rate of return in an environment where it is no longer possible to manage prices: $(1+r) = 1/\text{muc} \times p$. A drop in product price lowers profits unless minimum unit operating costs fall, which suggests that when product market (and price) control is lost, increasing returns can be realised only through accelerated declines in unit costs. Under these circumstances and barring prohibitive capital costs, Penrose (1959) and Salter (1960) expect firms in either competitive or oligopolised market structures to quicken the pace of technological innovation and replacement investment in order to improve productive efficiency and future returns. But in the mid-1980s IP was on the verge of completing the industry's most expensive capital investment program, although one in which improved productive efficiency was not yet enough to justify the cost of investment. In addition, this program increased IP's reliance on product lines (white papers) where sales and prices were historically more volatile. Therefore, instead of undertaking further substantial capital investments, and in the tradition of market control to which it had become accustomed, management chose to offset the loss of control over product pricing with greater control over operating costs, including labour. Piore (1986, p. 163) has suggested that 'the development of flexible and productive organisational structure is not the only response to [a] new business climate available to the firm. There are at least two other options: financial diversification and sweating'. In this case it appears that improved efficiency from capital improvements and increased flexibility were not enough to allow IP to attain its target rate of return so management resorted to 'sweating'—wage cuts—to make up the difference.

Beginning in 1985 IP adopted a policy of what Wilkinson calls 'price-minus costing', which is the mirror image of traditional target-return pricing.[2] Rather than realise a desired rate of return by passing costs on to consumers in the form of higher prices, it is achieved by passing price decreases back to labour in the form of lower wages and benefits. Under this variation of the administered pricing practices that characterised most US basic industry in the post-war decades, variable prices and target rates of return dictate 'acceptable' unit labour costs rather than negotiated increases in labour costs simply being incorporated into cost-plus product prices and target returns. In essence, just as technological innovation is expected to improve labour productivity and thus reduce unit labour costs, forcing intensified work effort and a lower standard of living on workers will lower unit labour costs even further and artificially increase labour productivity and improve firm performance.

The concessions IP demanded on economic items and in contract language between 1985 and 1987 were central to this costing policy. Proposed language changes would enable IP to take better advantage of its modernised capital base and

[1] As Penrose (1959, p. 140) suggests, 'the real difficulties arise when fluctuations in demand are not easily predictable; in this case not only are the problems of financial management intensified, but the unknown profitability of the peak periods and the unknown duration of the lean periods forces the firm to calculate earnings over a "cycle" '.

[2] Frank Wilkinson's characterisation of IP's behaviour was based on a preliminary presentation of this paper: Third Annual Conference on Labor Market Segmentation, University of Notre Dame, April 1989.

reduce unit labour requirements beyond what had already been achieved through capital restructuring.[1] Lower labour requirements combined with lower wages for Sunday, holiday and overtime work meant lower overall operating costs. Furthermore, in 1986 and 1987 when product markets had firmed, prices began to rise and optimum capacity utilisation was achieved in most lines, continued concessions meant that operating costs could fall below the minimum attainable from capital improvements alone. In such a case, the increase in IP's returns would be even greater than that realised from capital restructuring and expanding paper markets. Although labour costs represented at most only one-quarter of IP's total costs of production, they held greater potential for reduction than other factors, e.g. energy and materials, because they were determined through relative power in collective bargaining.

To overcome union resistance to the new costing policy IP returned to the aggressive labour relations policies of the 1920s, which were increasingly viable in the environment of the 1980s. The comparative ease with which the new technology allowed the struck firm to continue production using supervisors and inexperienced replacement workers enabled management to implement unilaterally its terms and conditions of work and to continue to reorganise work processes in its mills. The effects of a restructured economic, political and social environment on workers in historically segmented labour markets also contributed to management's success. Under the pressure of heightened economic insecurity, growing numbers of workers were willing to work in a system where the number and quality of jobs as well as labour's share had become less a function of the characteristics of labour supply—skills, labour productivity, worker organisation—than of 'the social costs of reproduction and the relative power of the firm' (del Marcato, 1981; also see Wilkinson, 1983). In the final anlysis, IP's enhanced power in the labour market made it possible for management to compensate for its diminished power in the product market and bolster its overall performance by changing the functional distribution of income between capital and labour in its favour, as opposed to the division that might have resulted from capital restructuring alone under unionised production processes.

*Implications for future economic performance*

Developments in industrial relations at IP in the 1980s support the generalisation that 'the long-term class interest of capital requires an overall decrease in trade union strength to enable the economy to restructure to meet competitive conditions' (Rubery, Tarling, and Wilkinson, 1984). The IP case suggests that even in the face of improved labour productivity and declining unit labour costs managers may view increasing control over labour markets and unit labour costs as the most expeditious path to higher returns and an ideal solution to unanticipated or continuing market problems, or both. But just as excessive product market power may create competitive problems for the firm, the industry and the economy in the long run (Penrose,

[1] As Penrose (1959, p. 140) explains, 'The less accurate the firm feels its predictions are, the more uncertain are profit expectations; consequently the firm will give more weight to the possibilities of obtaining a more complete utilisation of its resources . . .'. It is generally recognised that the most efficient use of new technology often requires reorganised labour processes (Hirschhorn, 1984; Sorge and Streeck, 1988; Rainbird, 1988; Osterman, 1988; Hoerr, 1989).

1959), so, too, may excessive employer power in labour markets, especially if it encourages price-minus costing. Years ago Penrose identified the problem:

> Here is the basic dilemma: competition is the essence of the struggle among the large firms that induces and almost forces the extensive research and innovation in which they engage and provides the justification for the whole system; at the same time the large firms expect reward for their efforts, but this expectation is held precisely because competition can be restrained. ... They may be expected to insist on retaining the power to protect themselves against competition, but so far as they get such protection by means other than their superior ability to produce, innovate and to attract consumers ... not only will their dominant position be maintained but the growth of the economy itself may be kept down (Penrose, 1959, p. 220).

The outcome of aggressive labour relations at IP, born of and supported by structural and technological change, and aimed at improving competitive advantage, has no doubt contributed to 'an enormous vacuum [in the] 1980s where organized labour once functioned as pattern-setter for the entire economy on wages, benefits and working conditions' (*Business Week*, 1989A). As a consequence of capital's increasing power in the labour market that vacuum is being filled by growing employer discretion. This development helps explain the recent growth in earnings inequality in the US (Bluestone and Harrison, 1988; Loveman and Tilly, 1988) in ways that changing characteristics of the labour supply and shifts in industrial and occupational mix of employment do not.

In this case, not only did restructuring weaken or remove the union as an effective bargaining agent, but in the process the very nature and quality of employment in the system was transformed. To the extent that the IP experience is repeated in other industries and/or in public sector employment, employer discretion can result increasingly in significant changes in labour standards that historically have characterised primary jobs, making them more like those traditionally associated with secondary employment—lower wages, less job security, little to no benefits, and limited advancement opportunities. In short, occupational classification may remain the same, but processes and labour standards attached to the jobs in specific industries may not.[1] This may not be the case in all industries or in all firms in a given industry because not all will opt for aggressive price-minus costing, which may help explain the reported growth in earnings inequality within industries and occupations (Loveman and Tilly, 1988). To the extent that firms do adopt this costing policy across industrial sectors in the US, earnings inequality may continue to increase commensurately, which means that the real incomes of growing numbers of workers will stagnate or fall.

If workers' real living standards are partly responsible for the structure of aggregate demand and supply, consequently in part for the rate of economic growth (Wilkinson, 1988), then a continued redistribution of income from labour to capital will have a significant negative effect on macroeconomic performance. Indeed, Hatsopoulos, Krugman, and Summers conclude that:

> [B]eing competitive requires more than balance in our foreign trade; it requires an improving standard of living. The long-term U.S. competitive problem is largely caused by low savings,

[1] Robert Kuttner (1989) notes that 'the fraction of jobs that are part of the "secondary labor market" ... has increased relative to those in the primary market. The steady decline in the fraction of unionised workers and the diminished ability of workers to bargain for higher wages is part of the pattern.'

high costs of capital, and the resulting inadequate level of both visible and invisible investment . . . because labour income is most of national income, lagging wages are central to the relative decline in the U.S. position (1988, pp. 299–300).

Just as power in the product market discouraged oligopolised firms from making adequate capital investments in the 1950s–1970s, power in the labour market in the 1980s could discourage future investments. Proliferation of low-wage and price-minus costing labour policies allows firms to circumvent the competitive pressures that encourage, even force, continued capital investment, innovation and economic growth. Such policies therefore run the risk of leaving firms with outmoded capital stocks at a relative competitive disadvantage. Although IP's director of employee relations insisted that investment in technological innovation would have to continue in the future given the permanent presence of foreign competition (J. Gilliland, personal communication), price-minus costing could none the less affect the pace and continuity of such investment.

If this happens, as it has in the past, firms may periodically undertake massive capital investment and find themselves enmeshed in the dynamics that characterised IP's experience in the 1980s. One significant aspect of that dynamic may reoccur, all other institutional forces remaining the same. As noted elsewhere (Hatsopoulos, Krugman and Summers, 1988, p. 303), '[corporate] raiders have cited excessive investment as the reason for the [hostile] takeover. Acquirers have been able to substantially increase corporate market values by *scaling back investment and concentrating on increasing current profitability*' (emphasis added). Moreover, with labour costs already significantly lower than desirable for the reasons cited above, and in the face of technical limitations to further labour cost reductions, price-minus costing may no longer be a viable solution for firms' product market difficulties.

Therefore, future economic growth and productive potential rest not only on economic policies that encourage and support long-term planning and investment, but on labour policies that foreclose or effectively discourage firms from solving competitive problems by reducing worker living standards. Labour law reform and national labour policies are needed to rectify the growing imbalance of power in labour markets. Specifically, as this case suggests, management should be prohibited from hiring permanent replacement workers during industrial disputes. Furthermore, the feasibility of expanded union participation and industrial co-determination should be examined for possible advantageous effects on productive investment and labour efficiency within a larger framework of economic democracy.

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