The Workplace and Economic Crisis: Canadian Textile Firms, 1929–1935

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ROBERT LEWIS

The devastating conditions of the Great Depression forced manufacturers to rethink their approach to workplace control, economic policy, and production practices. Although we know a great deal about how industries responded to the depression, we know very little about the changes implemented by firms. This is unfortunate as firms in the same industry face quite different problems, possess dissimilar work cultures, construct an array of production formats, and have access to a range of financial resources. Based on a literature that documents the variety of strategies devised by industries and firms, this paper shows how four Canadian textile firms—two cotton and two hosiery and knitting—reacted to the economic crisis of the Great Depression. In the face of a different array of conditions, each firm devised different restructuring strategies. The large cotton corporations responded by combining mechanization, product line change, and a new division of labor. The smaller, more competitive hosiery and knitting firms, on the other hand, imposed either a harsh regime of scientific management or conservative, piecemeal changes. In the midst of restructuring the workplace, manufacturers reasserted their prerogatives of managerial authority, selectively took advantage of the opportunities opened up by economic crisis, and created a new regime of industrial-state regulations.

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Introduction

A major capitalist economic crisis forces politicians to create new political alliances and economic policies, and pushes industrialists to devise new paths for accumulation and firm survival. Such a crisis was the Great Depression. In the United States, Canada, Europe, and elsewhere, the scale of disruption was momentous and reached every corner of economic and political life.[1] Industrial output declined dramatically and unemployment soared. Distribution systems floundered as transportation, wholesaling, manufacturing, and retailing companies faced problems of unprecedented scale and scope. The domestic and international financial systems had to come to terms with, among other things, tumbling prices, soaring bankruptcies, and devalued currencies. While businesses struggled to make ends meet, nation states feared for their very survival. The sudden, severe, and long-lasting economic depression forced the state, industry, and labor to refashion their political and economic relations. National responses to the depression's common problems varied. The different political contexts in Europe, for example, "played a vital role in shaping each nation's distinct approach to the crisis."[2] It was no different in the United States and Canada. Dissimilar economic histories, political regimes, and social structures ensured that the responses to the profound crisis of the 1930s varied across time and space.

Even with the variation across national boundaries, the effects of and responses to the Great Depression were similar in Canada and the United States. Despite their historic ties to Great Britain, Canadian manufacturers and politicians looked south of the border for how to build economic policy, implement workplace control, and gain access to lucrative markets. Accordingly, while company and government practices may have differed in Canada and the United States, they nevertheless faced common challenges and responded in at least two similar ways: the forging of new relationships between industry, the state, and labor, and the restructuring of the workplace. The new state, industry, and labor relationships appeared slowly. Before 1933, the Canadian and American governments scrambled, ineffectively, to find ways to deal with what they believed were short-term problems. Little tangible action was taken and few new programs were implemented. Beginning with the passing of Roosevelt's National Industrial

1. Kindleberger, *The World in Depression*. For national histories of the depression, see Bernstein, *The Great Depression*; Levine, *Class Struggle and the New Deal*; Finkel, *Business and Social Reform*; Horn, *The Depression in Canada*; Thompson with Seager, *Canada, 1922–1939*; Clavin, *The Great Depression in Europe*.

2. Clavin, *The Great Depression in Europe*, 5.

Recovery Act in June 1933, and followed by welfare, housing, and labor legislations, the state began to intervene actively in economic and social matters in new ways. Similarly, in Canada, the "New Deal" of Prime Minister R. B. Bennett in 1935 and the policies implemented by his successor, William Lyon McKenzie King, refashioned the industry–state relations. In both countries, by enforcing codes of competition, the new industrial policy compelled industries to self-regulate, thus creating a new order of industrial labor relations.[3]

Even though we know a good deal about how government employees, politicians, and business people reshaped state policy, we know much less about how manufacturing firms experienced and responded to the deep economic downturn of the Great Depression and the particular ways that managers rationalized the eventual changes in the industrial workplace. Historians have had little to say about how manufacturing firms rather than industries refashioned the shop floor in order to get production back on a successful accumulation path. In his study of the reasons for the depression's long duration, Michael Bernstein focuses almost entirely on the experience of industries. While we get a richly documented analysis of many of these, we learn little about how individual firms responded to the travails of economic depression. This is also the case with Colin Gordon's study of business, labor, and politics between 1920 and 1935. We learn a great deal about industries, but little about firms. Similarly, Rhonda Levine's analysis of industrial capital and labor during the Depression barely touches upon the reality of workplace change in individual firms.[4]

There are exceptions to this, of course. During the Depression the Bechtel and Kaiser companies built construction and shipbuilding empires by combing a joint venture strategy with the skillful manipulation of public monies.[5] Despite the interwar vicissitudes of the textile industry, Spencer Love was able to turn Burlington Mills into one of the largest textile firms in the world by building a multiunit company that focused on an emerging line (rayon) and featured product diversification, vertical disintegration, and a responsive managerial

3. Cox, "The Limits of Reform"; Cox, "The Transformation of Regulation"; Cuneo, "State, Class and Reserve Labour"; Cuneo, "State Mediation of Class Contradictions"; Finkel, *Business and Social Reform*; Russell, "The Politics of Labour-Force Reproduction"; Storey, "Workers, Unions and Steel"; Struthers, "Prelude to Depression"; Struthers, *No Fault of their Own*; Bernstein, *The Great Depression*; Brinkley, *The End of Reform*; Galambos and Pratt, *The Rise of the Corporate Commonwealth*; Gordon, *New Deals*; Hawley, *The New Deal*.

4. Bernstein, *The Great Depression*; Gordon, *New Deals*; Levine, *Class Struggle and the New Deal*. Also see Edwards, *Contested Terrain* and Burawoy, *The Politics of Production*.

5. Tassava, "Multiples of Six."

structure.[6] Similarly, the fancy glassware producer, A. H. Heisey and Company, responded to the Depression by bridging government policy with new marketing programs and product designs.[7] In Canada, technical changes, minimum wage legislation, and gender relations were critical to the transformation of the Quebec cotton industry during the 1930s.[8] Other previous studies have delineated the recursive relations between firms, industries, and the economy, and linked firm behavior to the formation of lived-in and worked-in places.[9] These studies show that firms responded to the Depression in quite different ways. This was due in part to the different imperatives of each industry, and in part to the ways that the state intervened in economic matters.

Building on this work, this paper shows that Canadian textile firms responded to economic crisis by restructuring the workplace before the mid-1930s. The textile industry is a significant case in point. Its large size and historical importance shed light on the ways in which an old, once powerful, but now stagnant and conservative industry responded to adverse economic conditions. In the interwar period, the textile industry in the United States had become "resistant," as Gavin Wright notes, "to efforts to rationalize it." Conditions were very similar in Canada.[10] Despite this tradition, the Depression forced textile managers to rethink their businesses. As I show here, firm actions in the first years of the Depression were rational capitalist responses to the specific problems encountered, were heavily dependent on the firm's place within the industry, were part of a concerted effort to defend the prerogatives of managerial authority in the workplace, and were shaped by the creation of particular industry–state relationships.

Employing trade journals, government reports, and company records, this essay documents the workplace strategies implemented by four textile mills between 1929 and 1935.[11] The two cotton firms and two hosiery and knit goods firms faced different industry conditions, operated with varied internal resources, and had unique work cultures. The interplay between the firm, the textile industry, and

6. Wright, "Strategy and Structure."

7. Nutting, "Selling Elegant Glassware."

8. Brandt, "The Transformation of Women's Work," 125–29.

9. Brown, *The Baldwin Locomotive Works*; Lewis, "Productivity and Spatial Strategies"; Lewis, "Redesigning the Workplace"; Scranton, *Endless Novelty*; Meyer, "Technology and the Work-Place"; Winder, "Building Trust and Managing Business."

10. Wright, "Strategy and Structure," 46; Austin, "Life Cycles and Strategy," 351–63.

11. Other than Eaton Knitting, the absence of company records and detailed company histories forces me to rely heavily on trade journals and government documents.

the Canadian economy produced distinct responses from each firm. Canadian Cottons and Montreal Cottons with their large capital resources and significant market control responded by combining mechanization, product line change, and a new division of labor. Different strategies appeared in the more competitive hosiery and knit goods branch. Mercury Mills imposed a new and controversial speed up system, while Eaton Knitting implemented conservative and piecemeal changes.

This study of four textile firms builds on a literature that documents how firms devise a variety of strategies in response to economic conditions. The range of organizational forms, distribution methods, labor markets, and work practices available to firms shaped the way they responded to external economic changes.[12] The tensions associated with purchasing labor power, the extraction of value from the production process, and the realization of value from product markets produced responses varying in intensity over time and space. These included reducing operating costs, increasing the flexibility of fixed capital, raising the quality of product, and improving control over the labor process.[13] This literature points to a world in which firms have room to make their own histories. Firms construct different notions of what the prevailing industrial environment is, what the options are, and what is possible. This is not unproblematic of course. Information is not complete, poor decisions are made, and choices can, and often do, take firms down quite unexpected paths. Moreover, there is a great range in the quality and quantity of options open to individual firms. Firms matter because of the differences they face within the broad processes driving capitalist accumulation.

Firms may make their own histories, but only within the confines of a capitalist logic. Industries establish the parameters in which firms operate by mediating between the enterprise and its wider economic milieu. Although conceptually unproblematic, industries do have similarities: they provide the economic container for how government policy is constructed; they have the same suppliers and final consumers; they work within the constraints established by the same material base; they function within the same technological trajectory;

12. McGrath-Champ, "Strategy and Industrial Restructuring"; Schoenberger, "Corporate Strategy and Corporate Strategists"; Sunley, "'Tired Tims' and 'Valuable Assets'." For the U.S textile industry see Scranton, *Proprietary Capitalism*; Scranton, *Figured Tapestry*.

13. Child, "Managerial Strategies"; Hirst and Zeitlin, "Flexible Specialization Versus Post-Fordism"; Kelly, "Management's Redesign of Work"; Lewis, "Productive and Spatial Strategies"; Sabel and Zeitlin, "Historical Alternatives to Mass Production"; Scranton, *Proprietary Capitalism*, 3–71; Scranton, *Endless Novelty*, 3–24; Scranton and Licht, *Work Sights*; Walker, "The Geographical Organization of Production Systems"; Zeitlin, "Flexibility and Mass Production."

and they face the same problems with labor supply and demand.[14] In other words, the way firms respond to the socioeconomic environment is shaped by the industry they are part of, as is the ability of managers to control and command resources vis-à-vis the macroeconomy. When this is aligned with specific managerial and work cultures, it is possible to contemplate a dynamic picture of firm behavior. None of this is new, of course. But the ways in which firms reacted to the rigors of the economic depression after 1929 have been overlooked by historians.

Overlooking workplace restructuring during the Great Depression is an opportunity lost. As a contemporary noted, depression conditions "offer unusual opportunities for overseers and superintendents to study their plant for possible economies in manufacturing and eliminate avoidable waste of all kinds."[15] There are several reasons why historians have focused on industries at the expense of firms. One is the importance placed on charting the changing national contours of state–business relations. Another, and this despite the work of labor historians, is that most scholarly interest in economic restructuring "ends at the factory gate."[16] Individual firm behavior is typically viewed as determined by broad-based industrial changes and as a mirror image of imperatives established at the industry level. Firms merely play out larger industrial dynamics. A third reason is that the absence of detailed firm-level information creates a major barrier to analyzing workplace changes. Finally, historians have typically viewed firms as relatively inactive in refashioning the shop floor, reorganizing the labor process, and updating machinery.[17] Scholars view them as having concentrated their efforts on struggling to stay liquid in an environment where declining profits and sales, unused capacity, high overhead costs, depreciating machinery, and surplus labor power kept most managements glued to day-to-day problems. Compared to the importance attached to the politics of unemployment and corporate survival, workplace changes have regrettably been regarded, if not as epiphenomenal to what are considered more pressing issues, as relatively insignificant compared to the questions of immediate economic survival and labor reproduction outside the firm.

14. Walker, "The Geographical Organization of Production Systems."
15. "Canadian Mills Meet Abnormal Conditions," 26.
16. Maskell, "The Firm in Economic Geography," 329.
17. That most histories of the depression ignore workplace strategies during the 1930s reflects the lack of importance given to restructuring within firms. Both the standard history of the period and an important anthology have little to say about manufacturing workplace practices in the 1930s. See Thompson with Seager, *Canada 1922–1939* and Horn, *The Depression in Canada.*

Workplace Reorganization, 1929–1935

By the early 1930s Canadian textile manufacturers faced extremely depressed conditions.[18] While some branches of the industry did better than others, the industry as a whole suffered from product dumping from the United States, Great Britain, Japan, and Europe; poor raw material prices; a chaotic financial system; and plummeting demand. The profit-and-loss accounts of most textile firms were badly hit. Between 1928 and 1935 no firm passed even one year with a loss, while many had a number of loss years. Firms were buffeted on all sides: falling prices exacerbated existing problems with distribution networks; collapsing demand led to "hand-to-mouth" buying; the drying up of credit intensified the pressures on marketing; and an increasingly hostile labor force reminded decision-makers that quiescence on the shop floor or the dole line could not be taken for granted.

These problems were not new and had bedeviled Canadian textile firms for decades.[19] Great Britain's position as the world's major textile-producing nation declined after World War I, leading to a realignment of the industry's international division of labor. Its control over export markets diminished in the face of European, Japanese, and American competition. This reduced the Canadian industry's favored status with Great Britain, and further pushed domestic manufacturers into the ambit of American industry. Moreover, Canadian companies keenly recognized the problems associated with mechanization, overcapacity, and new tariff walls during the 1920s. Some textile branches, notably hosiery and synthetic cloth, competed quite successfully with the changing international and domestic market conditions. Others, despite the boom of the 1920s, fell victim to the fluctuating prices and declining demand, while productivity outran consumption. Finally, cutting tariffs in 1922 opened up the domestic market to a number of competing countries seeking to export all types of textile commodities. The ensuing flood of goods from low-cost American mills forced Canadian producers to cut prices, and disrupted traditional distribution networks.

These long-term problems, combined with the jolt of the Great Depression, pressed textile manufacturers to make several responses by the early 1930s. One well-known action was to lay off workers. The number of jobs lost is difficult to determine, and the evidence is bound

18. Bates, "A Bright Outlook for Textiles"; Bates, "Problems of the Textile Industries"; Canada, *Report of the Royal Commission*.

19. Austin, "Life Cycles and Strategy," 351–63, 359–63; Canada, *Report of the Royal Commission*, 32–50; International Labour Office, *Unemployment*, 65–135; Michell, "Production of Textiles in Canada."

to err on the positive side, but up to 20–25 percent of Canada's textile jobs disappeared in the early 1930s.[20] Although a few firms went out of business, most, especially large, integrated companies, such as Dominion Textile, were unwilling to close their mills; the bulk of employment loss occurred as firms downsized.[21] Ontario textile towns such as Preston, Galt, Hespeler, and Kitchener "suffered considerably" as factories dismissed workers.[22] Female workers suffered most, as employers laid off married women first.[23] Textile workers who kept their jobs faced limited hours. Canadian Cottons, for example, reduced work to four days a week by 1930, while Dominion Textile put their Magog (Quebec) mill workers on short-time.[24] Finally, as a *Canadian Textile Journal* editorial in fall 1930 stated, most manufacturers were "compelled" to cut wages. Workers in Hamilton's five knit good factories, for example, experienced an average annual wage drop of 17 percent between 1929 and 1933.[25]

Even though textile mills faced the same general conditions, the ability to implement a particular strategy varied between industrial branches and individual firms. International and domestic changes affected the cotton and hosiery branches differently. Variability of capital structure, scale, products, labor force, and distribution ensured that companies found unique solutions to their problems. Four textile firms—two large integrated cotton firms (Canadian Cottons and Montreal Cottons) and two smaller hosiery and knit firms (Mercury Mills and Eaton Knitting)—illustrate these points.[26] The common

20. According to Canada Statistics data, employment fell by 10 percent between 1929 and 1932, rising slightly in 1933. The 1934 Royal Commission on Price Spreads presents grimmer figures: knit goods fell by almost 14 percent between 1929 and 1933, cotton goods employment fell by more than 18 percent between 1930 and 1933 (it would have been higher if 1929 had been used as the base year), while employment in the hosiery branch remained relatively stable. Others put the number even higher. One industry observer, for example, estimated that during the summer of 1930, unemployment in the industry was about 25 percent. See "Unemployment and the Textile Industries"; Canada, *The Textile Industries in Canada*, various years; Canada, *Royal Commission on Price Spreads*.

21. While Dominion attempted to minimize plant closings, they did shut three mills in the 1930s: Kingston in 1930; St. Annes in 1934 and Verdun in 1935. See Austin, "Life Cycles and Strategy," 406–7, 417.

22. "Unemployment and the Textile Industries."

23. Brandt, "The Transformation of Women's Work"; Hobbs, "Gendering Work and Welfare."

24. Austin, "Life Cycles and Strategy," 406–7; "Current Operations in the Textile Industry"; Canada, *Royal Commission on Price Spreads*, 2864–65, 2930–31.

25. "Wage reductions," 18; Canada, *Royal Commission on Price Spreads*, 2864–65.

26. The variability faced by textile firms was paralleled by the broader economy. Some sectors such as primary products, construction, and manufacturing were hit hard, others were less so. Within sectors the impact was more uneven: clothing, for example, withstood the blast of the 1930s much more effectively

reactions in the form of job loss, short–time, and wage reductions were only one element of their strategic responses. While all implemented similar workplace changes, some decisive differences emerged from each firm's relationship to the wider socioeconomic environment, its own work practices, and its managerial culture.

Cotton Firms

The problems facing cotton manufacturing in the 1920s intensified and took on a new import after 1929.[27] By 1930 this trade division was operating at between 50 and 70 percent capacity, and suffering from falling profits and sales. These difficulties were familiar. An oligopoly patterned on the New England model of high volume, labor specialization, and mechanization, the Canadian cotton industry had been badly hit by international and domestic changes since World War I.[28] Switching to new product lines was critical, as styling became increasingly important and fashions altered more frequently. Adjustments to distributional channels had to be made as the traditional wholesaler became less important and as textile makers became more dependent on department and chain stores. Expansion of synthetic production after 1923 forced manufacturers to integrate synthetic materials with more traditional silk, cotton, and wool products. On top of this, tariff reductions weakened firms' ability to absorb increased competition from Britain (in fine lines) and the United States (in staple goods). By the early 1930s, earlier problems had combined with the troubles of the depression to force cotton companies to implement important changes. Along with building new cost-control systems and distribution channels, manufacturers also took the opportunity afforded by the depression to adopt "essential economies" in their workplaces.[29]

One way to obtain these essential economies was factory modernization, which is what Canadian Cottons did in their three Cornwall (Ontario) mills after 1930. Established in 1870, by the Great Depression the firm was Canada's second largest cotton company, employing three thousand eight hundred workers in seven Ontario and east coast mills. Canadian Cottons developed this modernization program

than the farm implement, electrical apparatus, and primary iron and steel. Cities were also affected unevenly as industrial structure and local conditions caused variations in unemployment. See Archibald, "Distress, Dissent and Alienation"; Brennan, "'Thousands of Our Men'"; Canada, *Royal Commission on Price Spreads*; Riendeau, "A Clash of Interests"; Taylor, "'Relief from Relief'."

27. Austin, "Life Cycles and Strategy," 351–68; Jones, "The Outlook in Textiles."

28. Scranton, *Figured Tapestry*.

29. "Canadian Mills Meet Abnormal Conditions," 26.

within a managerial culture common to other large textile corporations. As high-volume producers, they emphasized capital-intensive methods centered on modern machinery, economies of scale and scope, low skill content, minor product changes, elaborate marketing, and mass markets. Cotton executives were deeply embedded in the heart of Canada's corporate and political world. They used that position to bolster their place within domestic, rather than international, markets and relied on the state to maintain a hands-off regulatory position centered on increases to the tariff. Mixing long-term stability with short-term needs of the 1920s, cotton executives had sought acceptable profits and market share by gradual changes to technology and distribution methods. The Depression made them rethink their strategy.[30]

Despite the instability of the 1920s, Canadian Cottons posted decent profits. By 1928–1929, however, manufacturing returns were 50 percent lower than those six years earlier. They remained extremely low for several more years. As A. O. Dawson, the company's president, explained in his Annual Report, the enterprise earned "a very modest profit . . . quite inadequate for the work performed and the service rendered for the consuming public."[31] Manufacturing profits sank from an average of more than half a million dollars during the 1920s to as low as $75,000 in 1929–1930 and 1932–1933. The company failed to pay common dividends for five years beginning in 1930. Adding to the ailing profit margins were falling sales, a high of almost $10 million in 1925–1926, less than $8 million in 1929–1930, and not quite $5.8 million in 1932–1933.[32] Facing high production costs, low profits, and declining sales in the context of large-scale international restructuring, Canadian Cotton desperately sought ways to regain a modicum of control over markets and profits.

The company's answer was to combine upward tariffs revisions (introduced in September 1930) with workplace rationalization.[33] For Dawson the regulation of trade through duties was as far as the state

30. Austin, "Life Cycle and Strategy," 351–59, 447–49. For a discussion of managerial cultures in the U.S. textile industry, see Scranton, *Proprietary Capitalism*, 12–41; Scranton, *Figured Tapestry*, 1–16.

31. *Annual Financial Review 1931*, 339.

32. Canada, *Royal Commission on Price Spreads*, 2693–94, *Annual Financial Review*, various years.

33. While not unproblematic, the tariff was welcomed by manufacturers. As a historian of the Canadian Manufacturers' Association notes, the "philosophy of the tariff protection was a philosophy of industrial expansion. The tariff was viewed as the *sine qua non* of national welfare." See Clark, *The Canadian Manufacturers' Association*, 98. The tariff and unemployment relief were not new. Modern tariff policy goes back to the early post-Confederation period. Unemployment relief was provided during World War I and the early 1920s depression. At other periods of crisis municipalities provided emergency relief. The 1930s, nonetheless, represent

should be permitted to go in interfering with corporate prerogatives. As Tom Traves has noted, despite claiming a degree of autonomy, state officials listened to and were heavily influenced by corporate leaders.[34] President of Belding-Cortecelli (Canada's largest silk company) and Dominion Woolens and Worsteds, as well as a director of the Bank of Montreal and several insurance and commercial concerns, Dawson headed companies firmly embedded in the country's financial and industrial structures.[35] From this position atop the economic pyramid, Dawson had the ear of Ottawa's political mandarins and was prominent in industrial and financial circles. Not only by political conviction and training did he strongly support a hands-off industrial policy, he was able to help construct the rules shaping the industry in the Depression's first years.

As Dawson argued in the *Manual of the Textile Industry of Canada*, state intervention had to be targeted. Falling back on older traditions, he stated that higher tariff rates would provide adequate protection from the low-wage countries of Europe and high-volume American producers. What was needed to get the industry back on its feet, in his opinion, was to make use of the advantages Canadian mills possessed such as their "exceptionally efficient" workers and the ability to offer "services that foreign mills cannot duplicate."[36] Dawson was not alone. Managers, industrial engineers, financiers, industrialists and business commentators all sought, in the words of the day, 'production stabilization' by 'taking the situation in hand.' In response to worsening demand, prices, credit, and overcapacity, the call, in the words of one informed industrial observer, was for the "reorganization of the entire industry on a basis of the highest average efficiency in production and merchandising."[37] In effect, what Dawson and his contemporaries were doing was legitimizing the division between the internal and external realms while reinforcing managerial authority in the workplace. In this view, the state was to focus on the external

a new dimension through their sheer scale and depth as well as the manner in which industry and the state dealt with capitalist crisis. A 1931 survey suggested that the 1930 tariff it was responsible for six thousand five hundred new jobs, the opening of twenty new branch plants, the reduction of price competition from exports, plant expansion and reopenings. See Observer, "The Canadian Economic Situation," 101–2. Although strengthening tariff walls may have had a positive effect, we need to be careful in how much is apportioned to the tariff for several reasons. Commentators did not show how the tariff directly affected the industry's production conditions; the role that other factors may have had were ignored or downplayed. Despite increased rates, conditions after 1931 continued to be extremely tenuous.

34. Traves, *The State and Enterprise*.
35. "A. O. Dawson Elected Chairman," Austin, "Life Cycles and Strategy."
36. Dawson, "Reasonable Prosperity Ahead," 81.
37. Bates, "A Bright Outlook for Textiles," 72.

realm, while manufacturers were to control the workplace, the internal realm.[38] This was of course standard rhetoric; managerial rights had always been a central tenet of the factory owners' culture.

The unprecedented squeeze on profits, high unemployment, and labor discontent, however, created a climate of disquiet, if not fear, in corporate boardrooms and company offices. Severe economic decline also opened up the idea that the state might have to become more involved in industrial matters. For many textile executives, however, such intervention was at best problematic and at worst reprehensible. Managerial prerogatives in the factory had to be defended. Their ongoing campaign in the journals, newspapers, workplace, and halls of government insisted that not only should industrialists have absolute power on the shop floor, but also that they needed to initiate factory rationalization. This emphasis on maintaining the appropriate boundary of workplace control was further provoked by the growing pressure for state intervention outside the factory gate. While many business people came to realize the inevitability of welfare expenditures as a means to promote more stable work and home environments, concern grew that relief was not working to alleviate economic conditions.[39] Rather, as one commentator phrased it, relief was "sapping the very life-blood of the nation in poverty, idleness, graft and taxation."[40]

For Dawson and other leading textile magnates, the need to wield strong control over their workplace prerogatives and get their industrial empires back on track forced them to turn their attention to scientific control on factory floors. Like industrialists in other sectors, in the 1920s cotton managers became increasingly interested in time and motion studies, new machinery systems, and bonus schemes. These ideas percolated through the early years of the 1930s as manufacturers and industrial observers called for ever-greater control of production costs. During the Depression they believed that scientific

38. Much has been written about the relationship between the state and capital, and there is some agreement about the degree and efficacy of the relationship between state intervention and capitalist demands during the 1930s. See Cox, "The Limits of Reform"; Cox, "The Transformation of Regulation"; Cuneo, "State, Class and Reserve Labour"; Cuneo, "State Mediation of Class Contradictions"; Finkel, *Business and Social Reform*; Russell, "The Politics of Labour-Force Reproduction"; Struthers, "Prelude to Depression"; Struthers, *No Fault of Their Own*; Traves, *The State and Enterprise*. Questions about the Canadian state's role have followed a similar path as the debate in the United States. See Block, "The Ruling Class Does Not Rule"; Levine, *Class Struggle and the New Deal*; Skocpol, "Political Response to Capitalist Crisis."

39. Neatby, "The Liberal Way"; Struthers, *No Fault of Their Own*; Thompson with Seager, *Canada, 1929–1939*; "Domestic Credit Expansion."

40. "Unemployment/Re-employment," 12.

management, in the form of new work regimes allied with new machinery, would reduce costs and lessen the need to make large wage reductions or lay off large number of workers.[41] Of course, some manufacturers, as one observer noted in 1931, "have been most reluctant to put into practice those principles of scientific management which this age demands."[42] Nevertheless, other companies, building on their 1920s experiences and faced with the crisis of the 1930s, began to introduce various forms of scientific management into their firms.[43]

Canadian Cottons was one such firm. Beginning in spring 1932, the company sought to restructure the workplace in two major ways. First, it substituted new machines for obsolete ones, allowing the firm to implement greater production standardization.[44] The drastic decline in sales provided the company with the opportunity to readdress its underinvestment in fixed capital during the 1920s. New automatic looms and long-draft spinning machines arrived in the spinning, carding, dyeing, and picking departments. At the Dundas mill the number of ring spindles was reduced and the number of mule spindles and cards were increased so as to produce finer yarns, while there was an increase in narrow looms at the Stormont mill.[45] The rationale behind the extensive re-equipping was noted by one company executive: "New machines must be bought to keep pace with the times and since that is so we must be the first to have them to reap the benefits that come from modern installations."[46] The Depression not only allowed Canadian Cottons to replace its aging fixed capital, but it also gave the firm the opportunity to forge ahead of its competitors by introducing a particular workplace strategy.

The second tactic involved redesigning the factories' internal structures. As one commentator noted, this required the "regrouping of machines in order to ensure continuity of process" and promoting the "pronounced flexibility of operation."[47] This reorganization entailed refurbishing the mills, developing more efficient processes, rearranging machinery, and introducing individual electric motors, replacing group drive and overhead belting, for example. In Cornwall, as elsewhere, reordering factory layout allowed for a smoother and more efficient material flow between machines, and for redrawing the plant's division of labor in accordance with the new physical layout,

41. Jacoby, *Employing Bureaucracy*; Nelson, *A Mental Revolution*; Brandt, "The Transformation of Women's Work."

42. Technical Contributor, "Modern Management," 19.

43. "Standard Cost Systems," Austin "Life Cycles and Strategy," 380–81; Brandt, "The Transformation of Women's Work," 122–25.

44. King, "Canadian Cottons Limited," 21.

45. *Manual of the Textile Industry*, various years.

46. King, "Canadian Cottons Limited," 22.

47. Ibid., 21.

machinery, and production standardization.[48] While these changes were associated with job loss—the Cornwall mills' work force declined from 1503 to 1219 between 1929 and 1933—fear of labor unrest forced the company to introduce the changes slowly. As one observer noted, "it was necessary in departing from established customs to proceed somewhat cautiously."[49]

Just as cautious was a competitor, Montreal Cottons, which implemented a significant plant reorganization in the first year of the Depression.[50] A separately operated subsidiary of Dominion Textile, the firm ran one of the largest mills of its kind in the world with several acres of buildings and three thousand five hundred looms at Valleyfield (Quebec), just outside Montreal. Its niche in the domestic cotton industry centered on the production of white and cotton goods, muslins, lawns, and cambrics. During the 1920s management had neglected to invest in the plant, and at decade's end it was run down. By 1929 profits had collapsed and the following three years delivered large losses. Montreal Cottons was hit particularly hard by the dramatic decline of its major market, the automobile industry. Sales fell from more than $5.6 million in 1926 to $2.7 million in 1932; the plant operated at 60 percent capacity. As early as 1930, its president, Sir Charles Gordon, told shareholders that conditions were "not very encouraging," and as a result the company was forced to draw upon its Contingent Fund for almost $1.5 million between 1930 and 1934.[51]

Hence Montreal Cottons, like Canadian Cottons, carried out a major overhaul of its workplace practices. With the advice and supervision of the industrial efficiency specialists, J. R. Sirrine, the company implemented a $1.5 million restructuring of its Valleyfield complex between late 1930 and 1932. The reasoning behind its strategy, however, differed from that at Canadian Cottons. The Valleyfield changes were aimed at upgrading product lines from "multitudinous variety of cotton fabrics" (white and dyed standards) to a more focused range of lines in "fine, fancy and coloured goods."[52] Rather than attending to fixed capital and workforce, the firm moved from a volume-oriented productive strategy with an assortment of staple lines to a much more specialized and, they hoped, profitable one. The firm's main objective was to produce a range of new fine cloth fabrics, which, according to one observer, were "becoming increasingly popular as a result of

48. Biggs, *The Rational Factory*; Lewis, "Redesigning the Workplace."
49. Canada, *Royal Commission on Price Spreads*, 2693.
50. Austin, "Life Cycles and Strategy," 416–17; *Annual Financial Review*, various years.
51. *Annual Financial Review 1935*: 823–24.
52. "Montreal Cottons," 24.

changes to the public taste."[53] Unlike the independent Canadian Cottons, which sought to maintain a diversity of textile products, Montreal Cottons was forced into a more specialized niche by its controlling firm, Dominion Textile, and by the drying-up of its major market, the automobile industry.

Another factor contributing to the rationalization was the tremendous growth of Canada's artificial yarn production during the 1920s. In 1923 the British firm, Courtaulds, established a large viscose rayon yarn factory in Cornwall (Ontario). Three years later, Canadian Celanese boosted synthetic output by opening an acetate filament yarn plant. Large and capital-intensive, these firms quickly established a significant position in the Canadian market. As synthetic fibers became a staple, many processing firms commenced using it to produce new and old lines. This development could be beneficial for firms downstream from the primary producers. For firms such as Montreal Cottons, however, synthetics were a threat.[54] While primary producers weathered the 1920s, the growth of the synthetic branch combined with the depression of the 1930s forced them to rethink their production strategy. In the case of Montreal Cottons this consisted not only of switching lines but also bringing synthetic cloth into their production processes.

The switching of Montreal Cottons to different lines involved reorganizing the carding, spinning, weaving, dyeing, and finishing departments from as early as 1931. Operational redesigns extended in 1933 when the plant was re-equipped for the manufacture of rayon yarn. Technical problems associated with frequent changes in fabrics and styles, ineffective production flows, and inadequate labor specialization also spurred the company's changes. Montreal Cottons not only modernized its existing range of machinery, but also bought new machines to accommodate its new product lines. It reorganized the internal routing of goods and created new forms of labor specialization to achieve greater economies, while reducing the labor force in order to lower production costs. The firm also established new departments (statistical, records, cost, and styling) to oversee the changes that it was putting into place.[55]

Canadian Cottons and Montreal Cottons could undertake extensive workplace restructuring during the early 1930s because they could take advantage of large capital reserves, low capacity rates, and a

53. King, "Modern in Every Respect," 23.

54. Austin, "Life Cycles and Strategy," 357–59; Canada, *Report of the Royal Commission*; Daniels, "The Merchandising Problem,"; Michell, "Production of Textiles."

55. "Montreal Cottons"; Canada, *Royal Commission on Price Spreads*, 2693.

weak labor movement. The state's reluctance to interfere with the prerogatives of capitalist control at the point of production allowed the large cotton corporations to rationalize their workplaces unchallenged. Canadian manufacturers successfully maintained strict control over issues that they considered to be their autonomous terrain and kept the state at arms-length. In part, Canadian Cotton corporate executives' workplace control was facilitated by their close relationships with financiers, government officials, and politicians. Sir Charles Gordon of Dominion Textile had a long history as a director and president of the Bank of Montreal, and served on the Imperial Munitions Board during World War I. Gordon, like Dawson, voiced his concerns in the corridors of power about the course of industrial policy and the appropriate role of the state.[56] In his view, the state was to take responsibility for a restricted set of economic policies aimed at providing breathing room for manufacturers unable to compete with foreign companies and relief modeled after the British poor laws. Apart from these matters, there was no need for more regulation.

Knitting and Hosiery Firms

Knitting and hosiery firms drew upon different strategies than those employed by cotton firms. These sectors' relatively dispersed ownership pattern made it more competitive than cotton, and ensured that individual firms had limited access to large chunks of capital. In 1935, while two firms accounted for more than 70 percent of cotton's sales, it took nine and eleven firms, respectively, to reach that level of concentration among hosiery and knitwear manufacturers. Another difference was that the 1920s were relatively prosperous years for hosiery and knit goods producers. As prices and demand increased, employment and capital investment rose.[57] Finally, the fact that knitting and hosiery were much more internally varied than cotton guaranteed a greater range of responses to economic crisis. Cotton's bulk production formats forced firms along a narrow range of pathways. In contrast, hosiery and knit goods manufacturers relied on a variety of production formats, providing a greater array of options. As the experience of two Hamilton (Ontario) firms, Mercury Mills and Eaton Knitting, show, this ranged from dynamic, entrepreneurial strategies that refashioned the workplace in decisive ways to conservative, ad hoc strategies centered on maintaining the status quo.

56. Finkl, *Business and Social Reform*; Struthers, *No Fault of Their Own*.

57. Canada, *The Textile Industries of Canada*; Canada, *Report of the Royal Commission*, 51–54; Parr, *The Gender of Breadwinners*.

By the late 1920s, Mercury Mills, a fairly large hosiery firm, was looking to capture a more substantial share of the domestic market. Feeling strapped by the trade's narrow horizons and wishing to take advantage of the expanding market, firm managers implemented a two-pronged strategy in 1928. The first step involved widening its share of the domestic underwear market by acquiring a rival, Oxford Knitting of Woodstock (Ontario). The second entailed diversifying product lines by purchasing P. K. Mills, a knitted outerwear manufacturer in Listowel (Ontario). In both cases Mercury planned reinvestments in the newly acquired plants. But the Depression intervened, Mercury was hit hard, and its profit rates declined. In 1930 it had lost more than a quarter of a million dollars; the next year was even worse, as losses totaled more than half a million.[58]

Mercury rethought its industrial strategy and dropped the pre-Depression expansion program. Operating in a competitive branch of the industry and having modest capital resources, Mercury had to find another way of coping with the new production realities. On the advice of a consulting industrial engineering firm, Mercury initiated a two-fold rationalization in 1931. First, management rearranged the plants' functions by moving most departments and machinery from Woodstock to Hamilton: concentrating the spinning operations at Listowel; switching the knitting and finishing operations from Listowel to Hamilton; and centralizing accounting and office functions in Hamilton. The aim, according to the company's vice-president, R. S. Williams, was to provide "more flexibility to manufacturing and merchandising which should result in the elimination of duplication in certain lines."[59] While this may have been successful, the changes certainly had the effect of concentrating production and control in Hamilton at the expense of the smaller textile towns.

The more controversial rationalization was introducing the Bedaux system at the Hamilton factory. Bedaux, a wage incentive system that differed in some important ways from other time management systems devised by Taylor and Emerson, centered on standardized labor units measured according to a single index incorporating both work and rest. The firm was established in Grand Rapids, Michigan in 1916 by a Frenchman, Charles Bedaux, who had moved to the United States in 1906. With many years of experience and a salesman's charm, Bedaux developed a multimillion-dollar business. Beginning with several leading American corporations, such as Kodak, Gillette, General Electric and Swift, the company added an international

58. *Annual Financial Review*, various years.

59. "Important Operating Changes Made," 14. Also see "Mercury Mills Limited."

clientele in the 1920s, opening offices in Europe, Australia and Canada. The depression was good news for Bedaux and the business grew rapidly as the firm took advantage of the pressing need for workplace rationalization.[60]

As a form of rationalization at Mercury, the Bedaux system had mixed results. It was an effective tool for workplace intensification and speed-up. The system put into place at Mercury required workers to perform in 60 minutes what had previously taken 80 minutes, assigned one worker to tend three machines instead of two, and reduced wages. Introduced slowly and section by section, it had been installed in six departments by 1933. The company believed the system was successful. A Mr. Hommel, the firm's general manager, told the *Hamilton Spectator* that the system would increase production and reward "efficient employees," and that Mercury had enough work coming in to employ close to a full labor force.[61] While impossible to verify in the absence of company records, the new system did act as a lightening rod for workers' discontent. Even though managers introduced it incrementally, workers did not accept the new system without a fight. Two one-day strikes in late 1932 and early 1933 gave the foretaste of a long and bitter strike in summer 1933.[62]

Although all levels of government shared an interest in the strike, officials left the conflict's outcome to the workers and management. This response was part of the task division that envisioned the state taking responsibility for the industrial unemployed while industry controlled wage and employment levels, organized production, and maintained workplace authority. Most manufacturers were happy that Prime Minister Bennett focused on tariffs and unemployment relief, not on the battle for workplace control. Given a hostile management intent on imposing its control over the workplace and a state unwilling to intervene, Mercury workers stood little chance of gaining compromises, let alone victory. The firm won the strike, and the Bedaux system with its new regime of production costs, work practices, and labor control was stitched into the fabric of the factory.

In contrast to the dynamic and cutting rationalization enforced at Mercury, changes implemented at the Eaton Knitting Company were much more conservative, unsystematic, and sporadic. Established in 1917 in Hamilton by T. Eaton Co. Ltd., the large, Toronto-based department store chain, Eaton Knitting, supplied knitted outerwear,

60. Christie, *The Price of Power*, 50–54, 59–60, 87; Kipping, "American Management Consulting Companies," 197–99.

61. For the quote see *Hamilton Spectator* (June 23, 1933). Also see June 26, 1933 and July 3, 1933.

62. Canada, "Inventory of Strikes and Lockouts Records"; Littler, *The Development of the Labour Process*.

underwear, and hosiery to the chain's retail stores. Although department stores sold only 30 percent of Canadian firms' knitted goods in 1933, 96 percent of this knitting company's output went to T. Eaton.[63] Whereas the founder's son, Colonel W. F. Eaton, managed everyday concerns at the plant, the T. Eaton head office in Toronto controlled major decisions and large financial outlays.

With the protection afforded by their relationship with the department store, Eaton Knitting's managers had greater liberty to adopt a more conservative approach to plant rationalization. The company did not opt for Mercury-style managerial strategies even though Toronto executives pressed Hamilton managers to increase productivity and maintain profit levels. As James McCaughey, the plant superintendent and one of the two most powerful people working in the knitting factory, told Mr. Elliott, head of Eaton's statistical office in Toronto, I "have no faith in these cost reduction experts."[64] Furthermore, Eaton Knitting's depression response contrasted sharply with the extensive re-mechanization, product line switching, and workplace refashioning deployed by the two cotton firms. The firm also did not favor a massive infusion of capital into new plant layouts and machinery. Nonetheless, management did institute changes to deal with declining profits, low prices, and fierce competition. Unlike Mercury, Canadian Cottons, and Montreal Cottons, Eaton Knitting's strategy centered on piecemeal changes in response to short-term, and immediate problems, as an examination of the company's sweater department illustrates.[65]

The late 1920s had not been good years for the sweater department: profits were low and output fell. Declining demand for jersey cloth, its main staple, had a detrimental impact as manufacturing sweaters alone could not carry the department. Throughout the early 1930s Toronto executives repeatedly sought to close the sweater unit. Only McCaughey's actions prevented this from happening. An across-the-board pay cut in July 1931 solved neither the department's immediate concerns nor ongoing issues such as old machinery and its style assortment. Slow to instigate changes, the company's management was reluctant to renovate its knitting technologies, following the timeworn practice of numerous Philadelphia manufacturers.[66] McCaughey told R. Y. Eaton shortly before the pay reduction that "we do not want to

63. Canada, *Royal Commission on Price Spreads*, 2914–16.
64. McCaughey, Letter to J. Elliott, dated April 15, 1930.
65. Although the sweater department was Eaton Knitting's least successful unit during the 1930s, the same ad hoc changes were implemented in the firm's other departments in this period.
66. Scranton, *Proprietary Capitalism*; Scranton, *Figured Tapestry*.

scrap machinery as these styles may come into fashion again."[67] A year later, however, conditions had become so bad that reorganization was unavoidable if the firm was to stay afloat. To this end, the managers aimed to add new lines that are "produced only by one or two other Mills in Canada." Under the control of a new supervisor, Noel Eaton, the Colonel's son, some old machines were scrapped and replaced by new ones.[68]

Even after this change, conditions continued to be poor. Other forms of rationalization were introduced: January 1933 brought cuts in department expenses (such as telephone calls and wages) and staff was "reduced to a minimum."[69] Two months later merging the sweater and hosiery departments was seriously considered. At McCaughey's insistence and despite a $30,000 overhead, the department was saved. The solution involved lowering wages "to an irreducible minimum," cutting out all fancy styles, and concentrating on staples.[70] Unwilling and unable to introduce large-scale rationalization, the Eaton Knitting management tacked together an ongoing series of small, ad hoc changes. This response differed from Mercury's, which involved a spatial rearrangement operating at two different levels. Mercury created a new logic of manufacturing control, consisting of a redefinition of the roles of the company's different plants, and a remaking of the amount and nature of work done at the Hamilton factory. Unlike the other textile mills examined here, Eaton Knitting implemented few changes. Content to make piecemeal alterations, Eaton limped through the rigors of the Depression.

Conclusion

This paper has shown that textile firms implemented notably different workplace practices in early 1930s. All of them faced a common economic and political environment that encouraged restructuring: intense competition, diminished demand, a weak labor movement, and a hesitant state unwilling to intervene. The common changes implemented by the textile industry, as in other industries, included wage cuts, layoffs, and reduced hours. But the actual form that restructuring took depended upon how individual firms responded to

67. McCaughey, Letter to R. Y. Eaton, dated June 29, 1931.

68. N. Eaton, Letter to W. F. Eaton dated January 19, 1932; McCaughey, Letter to J. Elliott, dated January 19, 1932.

69. McCaughey, Letter to R. Y. Eaton, dated January 25, 1933.

70. R. Eaton, Letter to J. S. McCaughey, dated December 28, 1932; R. Eaton, Letter to D. E. Startup, dated January 12, 1933; Stuart, Letter to F. Rostance, dated March 7, 1933.

the array of options open to them. Just what these were for each sector and each firm emerged from a number of factors: the industry's historical trajectory, the organization of the industry, firm scale, market concentration and capital reserves, market conditions, and managerial culture. For all, the conditions of the 1930s demanded that management impose measures to maintain market share and profits, and to uphold their control over the private realm of the factory. To this end, textile firms implemented various strategies, such as modernizing machinery, refashioning production space, switching lines, introducing scientific methods, laying off workers, and, in extremis, closing the factory gate.

The Great Depression forced many firms to undertake improvements that they may not have otherwise initiated. It is true that earlier interwar conditions were not favorable to all Canadian textile firms. Nevertheless, strong economic conditions, especially in the rapidly growing hosiery and oligopolistic cotton sectors, were employed to ensure that managers focused on expanding production, while neglecting machinery and workplace modernization. The sheer scale and length of the economic crisis after 1929, however, compelled the textile industry to shift its focus away from capacity expansion to seeking answers to key production and distribution problems.

One important answer was to take advantage of the window of opportunity offered by the Depression to forge ahead of the competition. As one company told William King in 1932, the crisis allowed innovative firms to "to reap the benefits" that came with being the first to implement new forms of rationalization. To this end, the large cotton firms, Canadian Cotton and Montreal Cottons, sought to get a head start over their competitors by installing new machinery, new production methods, and new spatial configurations. This was not easy. As one commentator noted for the New England and English industries, it was difficult to "discard the machines and methods" upon which success had been built.[71] Canada's cotton oligopolies were no different. From the nineteenth century they had built a successful competency on a proven strategy. In the 1920s they achieved large output and relative success around a particular production strategy centered on a specific regime of machinery and labor deployment. Yet by 1929 their mills were run down, and the machinery was old and obsolete. The Depression provided mill managers with an opening to replace machinery and to rethink labor needs. In the process they hoped to build a new production platform that would allow them to create a new cycle of growth.

71. Technical Contributor, "Modern Management."

The harsh conditions of the economic crisis also allowed companies to reconfigure their production practices, seeking new markets by switching production lines and finding ways to streamline production and distribution methods. As shown by Montreal Cottons and Mercury Mills, this involved, respectively, shifting away from high volume to specialized production, and the implementation of new, more stringent scientific methods of squeezing labor. In both cases, changes revolved around redefining the functional specialization of production space. Older methods were replaced with approaches centered on deploying labor and space in new ways. The result was the implementation of a different regime of functional specialization of production space.

It is necessary, however, to be cautious about just how deep the rationalization actually was. Managers had difficulty departing from their 'established customs,' as one witness noted at the hearings of the 1934 Royal Commission on Price Spreads. While the Depression allowed managers to make broad changes and to replace older forms of doing business with new ones, many of the paths they followed had been detailed in previous generations. Neither scientific management nor replacing labor with machines was novel. At the same time, some managers proved unwilling to take advantage of the Depression window of opportunity to reform production processes, distribution networks, or work cultures. Eaton Knitting, for example, only implemented piecemeal changes. The combination of a relatively safe market, given its relationship with a parent company, and a very conservative management that scorned fleeting fashion led the firm down a less than dramatic path of rationalization. McCaughey was impervious to the charms of industrial engineers, machine dealers, and consumer advocates. Surely many managers were deeply embedded in the existing paths of production and long-standing managerial cultures. These were not easily changed. Nevertheless, the weight of the evidence from the firms under study here and from extant reports is that most firms did initiate substantial workplace reorganizations early in the Great Depression.

Canadian textile firms' restructuring did not happen in a vacuum. By the 1920s, despite a history of strong British connections, the domestic industry was shaped primarily by the expertise, information, and technology diffused from south of the border. The introduction of Sirrine and Bedaux's scientific methods into Montreal Cotton and Mercury Mills was part of the larger flow of managerial control ideas from American industrial efficiency consultants. Every issue of the *Canadian Textile Journal*, the industry's most vital voice, relayed a seemingly incessant flow of information about events in the United States, from the growing importance of consumer preferences in cotton goods to shifting labor conditions in southern mills, the latest changes to knitting technologies and federal regulations on tariffs and duties. Poaching from American trade journals and federal publications, the *Canadian Textile Journal* was the medium for circulating critical American knowledge to domestic textile operators, who also attended American trade shows and conferences. Among other things, Canadian managers obtained recent news about processes, products, markets, and machinery at important gatherings such as those of the National Association of Cotton Manufacturers.

For some, this dependence on American influences represented a problem. Using the textile trade journal as well as the various federal commissions and surveys of the industry and their influence in the halls of power, they argued that the domestic industry, which had its "own peculiar needs," ought to create national "facilities for the dissemination of textile knowledge."[72] Critics formulated several ways to strengthen Canadian self-reliance, such as developing a 'Produced-in-Canada' campaign, legislating higher tariffs, establishing a domestic textile machinery industry, and creating federal and provincial research institutions.[73] But little changed in this regard. Canadian manufacturers continued to depend on securing machinery from New England's major industrial centers. The United States supplied more than three-quarters of the $40 million of machinery imports for the ten years running from the 1922–1923 fiscal year through the 1931–1932.[74] Such relationships shaped the way that the Depression-era domestic producers viewed what had to be done and how it could be achieved.

This article has shown that Canada's Great Depression was characterized by a tense and contradictory renegotiation of business-state relations and the development of a hands-off regulatory environment. Even in the face of horrific conditions, manufacturers adamantly insisted that their authority over the workplace was sacrosanct. Many did realize that to maintain the existing control and to impose new forms of control was not a straightforward process. Despite the resources available for restructuring, the rhetoric of taking control, and state's reluctance to intervene decisively, manufacturers offered contradictory responses to the depression. There was no simple, singular solution to overcapacity, stagnant prices, falling profits, and rising unemployment. As the experience of the 1920s made clear, large-scale mechanization, while yielding cheaper products and promoting

72. Ibid.
73. Dawson, "Brighter Prospects"; Goodings, "Textile Research."
74. King, "Canadian Market for Textile Machinery"; "Imports of Textile Machinery, 12.

greater competition, spawned unemployment and overcapacity. Nor was lowering wages unproblematic. By 1931 operators recognized that reducing wages could not be done without intensifying labor conflict. Firms were also caught in another bind. Whereas strong competition forced them to look for ways to reduce labor costs, high unemployment and underemployment shrank consumption, which in turn only increased the pressure to cut wages and introduce more machinery. Industries faced serious problems, and the accepted ways of doing business were not necessarily helpful.

Accordingly, some manufacturers were open to rethinking state regulation. When George Sloan, president of the Cotton Textile Institute of America, outlined the reasons why the Institute had accepted the textile codes of the newly established National Industrial Recovery Act, his comments were warmly received by many in Canadian textile circles. His statement, with its references to gaining control over a chaotic industry and eliminating "destructive industrial warfare," struck a sympathetic chord.[75] Taking the situation in hand was closely linked to older ideas of industrial associationalism in the United States and Canada promulgated respectively by Herbert Hoover and William King in the 1920s.[76] Any post-1929 reconsideration of managerial authority was tied to the controversial, earlier notion of the state's role in economic management, yet the scale of the downturn forced manufacturers to reconsider their relationship with the state. Was the state to intervene in bailing out business or was the economy to be left to winnow out the weakest firms? Was the state to regulate labor costs or to allow the market to determine the 'fair' price of a worker? Was the state to intervene directly in the functioning of the workplace?

There was no clear answer to these questions. Despite Sloan's enthusiasm, many manufacturers continued to believe that managerial control of production had to be absolute, and that state intervention, however minimal, was heresy. A representative voice was Edward Bates, editor of the *Canadian Textile Journal* and a major industrial figure. In his opinion, "everywhere there is repugnance of the idea of legislative control of industry."[77] For him, as well as others, even a little state "interference" in the workplace would prove extremely dangerous. To be sure, capital has always looked for ways to create, assert, and maintain control over the workplace. From the second half of the nineteenth century, this had become increasingly wedded to the hegemonic symbols of science, national interest, and individual

75. Sloan, "A Necessary Foundation," 15–17.
76. Gordon, *New Deals*, 128–65.
77. Bates, "Control of Industrial Relations," 15.

responsibility, and industry had implemented a series of innovations within the workplace, which cumulatively stabilized its control over prices, production, and labor. Moreover, by the 1920s a new industrial culture that separated manual from mental work, imposed standardized goods and methods, developed systematic cost accounting methods, created new distribution systems, and introduced new mechanical innovations, was firmly in place in many industries and provided the basis for a hierarchical system of control over both the work process and the marketing of commodities.

Nevertheless, by the depths of the depression some Canadian managers reluctantly began to accept that the state should have a greater role in economic regulation. The difficulty was how to juggle business and political leaders' need to forge a national recovery policy with manufacturers' need so as to maintain substantial control in the workplace. The answer was to maintain a division between the responsibilities of manufacturers and the government officials. While not unproblematic, the state was to enact policies to deal with the world external to the workplace, while manufacturers were to concern themselves with the firms' internal realm. Governments were to respond to unemployment, low wages, and poor working conditions by providing relief measures based on archaic poor laws, the inadequate social wage measures, the intense coercive power of the state, and greater macroeconomic regulation, most notably restructuring credit facilities and the introduction of new tariff rates.[78]

The changes introduced in the depression's first years built upon this basic divide between the state and private capital. New regulations after 1929 aimed to alleviate the harshness of unemployment, while intervening as little as possible with the prerogatives of private capital. Along with federal relief policies, provincial governments maintained and monitored existing legislation such as the Minimum Wage Act. At the local level, governments were crippled by the need to cope with the immediate day-to-day problems of the Depression. Government's concern was with those expelled by industry, the victims of 'stabilized employment.' In other words, the various forms

78. Cuneo, "State Mediation of Class Contradictions"; Heron, "Working-Class Hamilton"; McCallum, "Corporate Welfarism in Canada"; MacDowell, "Relief Camp Workers"; Russell, "The Politics of Labour-Force Reproduction"; Storey, "Workers, Unions and Steel"; Struthers, *No Fault of Their Own*; Traves, *The State and Enterprise*. The changes that firms introduced in the early 1930s were embedded in a state regulatory system. Even though the state interfered very little in the day-to-day affairs of firms, by the time of the depression a superstructure of governmental measures regulating the development of capitalist industrialization, including controls on price competition, tariff, and patent legislation, and the abetting of informal agreements between producers, was in place.

of rationalization implemented by firms were facilitated through the (in)actions of the various layers of the state. Each government level performed a particular role in the development of a regulated political economy, which allowed manufacturers to pursue their own private ends relatively unhindered. In the early years of the Depression, the common ideology binding the varied responses to economic downturn was a belief in the natural rights of manufacturers to control the workplace.

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