



Changes in the employment contract? Evidence from a quasi-experiment[☆]

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Abstract

Many authors have discussed an apparent shift to a new employment contract characterized by less commitment between employer and employee, and closer ties between wages within the enterprise and those in the external labor market. We study the issue of when people in the US and Canada feel pay cuts are fair. In contrast to much previous discussion, we find no evidence of increasing acceptance of pay cuts—a measure of whether external, not internal, labor markets are considered fair. These results suggest that new organizational forms might do well to preserve some features of the “old” employment contract. © 2002 Elsevier Science B.V. All rights reserved.

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1. Introduction

Since the mid-1980s, many authors have written about a change from a traditional employment contract based on long-term loyalty between employees and employers, to a “new employment contract” characterized by lower commitment between employer and

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employee coupled with increasingly portable employee skills. Many of these claims can be summed up as a move from strong internal labor markets (Doeringer and Michael, 1971) to a system where outcomes are more closely related to those in the external labor market. A number of knowledgeable observers have claimed that in the new system wages are much more flexible (e.g. Annable, 1997; Cappelli et al., 1997).

Substantial evidence suggests that organizations often find it costly to violate employees' perceptions of the fair employment contract. Thus, to understand the evolution of organizational forms, it is crucial to understand both the implicit employment contract and its changes over time. This study measures changes in the employment contract by comparing respondents' views on when pay reductions are fair in contemporary Canada and Silicon Valley with the results found by Kahneman et al. (1986) in Canada in the mid-1980s.

2. The employment contract: new and old

According to numerous authors (e.g. Hackett, 1996; Cappelli et al., 1997; and the authors noted in footnote 2), the old employment contract for core employees at large employers had the following provisions:

We expect loyalty from our core mid-level employees, and we provide loyalty in return. If you work hard, and receive satisfactory performance ratings, your job is secure (we might take exception if the financial health of the company is threatened).

At a small number of large and visible employers (most notably IBM, but also AT&T, Hewlett-Packard, and a few dozen others (Foulkes, 1980)), this contract was both generations old, and supplemented with provisions that managers and professionals agreed to move or be retrained.

Many authors have expressed the view that we are in the midst of a major shift away from internal labor markets and toward a new employment paradigm, characterized by greater employee mobility and diminished ties between employer and employee.² For example, the Academy of Management Executive recently devoted a special issue to the new employment contract and its effect on careers (AME, 1996). The new contract is said to be particularly prevalent in the professional and technical areas.

In contrast to the old contract, the new employment contract has the following provisions:

The work you do will be interesting, and you will learn new skills while you are here. Your employability will be high, although perhaps not at this employer. We work on great projects, but as each project ends, it is up to you to find a new place for yourself within the company—otherwise, you must find a new place for yourself outside the company.

² Typical quotes include: "The end of traditional notions of corporate loyalty" (Kiechel, 1987), "A dwindling sense of job security among middle managers and professionals," (Lee, 1987), "The new employment contract," (Kissler, 1994), "The dramatic breakdown of [the] tacit agreement [to] exchange hard work and loyalty for security" (Cashman and Feldman, 1995), and "Dramatically changed, and in many cases destroyed . . . employment relationships" (Burack and Singh, 1995).

These claims of a widespread change in the employment contract are supported by a subset of the relevant academic research. For example, there has been a decline in job stability for prime-aged men (Rose, 1995; Farber, 1996); on average employees perceive lower job security (Cappelli et al., 1997); several prominent large employers such as IBM and Kodak have weakened their commitment to long-term employment; and some evidence exists of more use of bonuses and other flexible forms of pay (O'Shaughnessy et al., 1999). Moreover, a number of published case studies report on companies that increased the flexibility of pay (e.g. Kanet, 1987; Manicattide and Virginia, 1992; Stiles et al., 1997).

At the same time, other studies have emphasized the relative stability of employment systems. Evidence against dramatic changes includes the relatively small changes in average job length for most demographic groups (e.g. Farber, 1995; Neumark et al., 1997). On the compensation side of the contract, several analyses find relatively constant level of "rigidity" of overall pay systems, using a number of measures of rigidity. For example, Belman and Levine (1999) and O'Shaughnessy et al. (1999) find no increased responsiveness of large-company wages to local wage patterns, and Groshen and Levine (1998) find no change in the variability or persistence of company wage levels or idiosyncratic patterns between 1980 and 1995.

Analysts (e.g. Cappelli et al., 1997) have posited two related sets of causes of the new employment contract. First, globalization, new technologies, and deregulation have created an environment that is increasingly complex and unstable. Second, and partly in response to the first set of factors, the new employment contract is often associated with new organizational forms such as networks, flexible specialization, or "virtual" organizations. In many cases, the new organizational forms directly affect the employment contract, as when employers increase hiring of temporary or contract employees.

Ideally, these new organizational forms offer organizations greater flexibility in response to (increasingly important) product-market and technological shocks. At the same time, new organizational forms may be less effective than proponents predict if the new forms violate the traditional employment contract and if the traditional contract remains widely held by employees. Conversely, an advantage of some organizational forms is that they make clear to employees when shocks are exogenous (i.e. not under control of management). In such organizations, management actions such as pay cuts may be increasingly perceived as fair because employees understand that the continuation of the enterprise is threatened. Thus, whether new organizational forms conform with or contradict the perceived fair employment contract is crucial for understanding their ability to flourish.

The employment contract can only influence organizational change if the contract affects outcomes that employers care about. In fact, substantial evidence and theory suggests that employees perceptions of fair treatment can have large effects on the organization (Barnard, 1938; Blau, 1964; Gouldner, 1954). To consider a single channel, numerous studies have found that organizational citizenship behavior (OCB, Organ, 1988) is higher when employees perceive more fairness, especially procedural justice (e.g. Farh et al., 1990; Konovsky and Pugh, 1994; Moorman, 1991). Other studies provide fairly consistent evidence that OCB relates to organizational performance (e.g. MacKenzie et al., 1991; Podsakoff et al., 1997). The implication is that organizations have an incentive to maintain what employees perceive to be a fair employment contract. More broadly, perceptions of fair treatment (particularly fair pay) can improve outcomes ranging from lower

voluntary turnover to higher product quality (see Cowherd and Levine, 1992, and references therein).

It is likely that attitudes toward the fairness of employment policies change more slowly than technology and organizational form. If there is a lag between the introduction of new implicit contracts and their widespread acceptance, implementation of new organizational forms can be slowed. From a managerial perspective, many traditional internal labor market policies may still be useful (at least until any transition is complete).

We examine the extent to which pay reductions are considered to be fair in contemporary Canada and Silicon Valley, comparing with the results found by Kahneman, Knetsch, and Thaler (henceforth KKT) in Canada in the mid-1980s. Contradicting press reports of greatly increased acceptance of market forces, we do not find that pay cuts were substantially more acceptable in the late-1990s than in the mid-1980s. We also find only modest differences in the current responses made in Canada and the US.

2.1. Perceptions of the fairness of pay reductions

Given that perceptions of fairness may matter, what evidence exists concerning community standards of fairness in the employment relationship? In the mid-1980s, Kahneman, Knetsch, and Thaler conducted a series of quasi-experiments to investigate perceptions of fair treatment in Vancouver and Toronto, outlining the circumstances under which respondents felt that pay cuts were or were not likely to be accepted by employees. One result was that reductions in wages due to slack labor markets were considered unfair for current employees much more frequently than identical cuts in pay for new employees. Another result indicates that pay cuts during times of unemployment were usually perceived as unfair, unless the employer was also losing money.

While the employment contract specifies economic responsibilities, it may also consider a form of social exchange, as much of the employment contract is implicit. Both firms and workers typically have expectations about behavior that is not explicitly treated in the formal contract; these expectations reflect a perspective of social justice. People like to be treated fairly, both in terms of the allocations made and the process used to determine these allocations. Seminal works by Homans (1961), Adams (1963), and Blau (1964) assert that social exchange is guided by considerations of fairness and social norms: (1) rewards should be allocated in proportion to contributions made; and (2) proportional rewards should be perceived to be similar to those received by a comparison entity.

If the norms for distributive or procedural justice have changed, we might expect to see changes in the perceived fairness of compensation policies. Homans (1974) suggest that one's social values are derived from one's experience and so these are likely to change rather frequently with changes in the social structure. On the other hand, Adams feels that these values are part of the society's cultural heritage and, therefore, change slowly. Generally, sociologists have taken the view that norms and values are rather "sticky". However, the common contemporary perception seems to be that our society and its values have recently been changing quite rapidly.

Dornstein (1991) suggested that different distribution rules may be applied in different circumstances and posited a dependency on the nature of the social relationships (patterns of interaction, interpersonal attitudes, and longevity), the goals pursued (e.g. conflict avoidance

or efficient resource allocation), and resource scarcity or abundance. At the same time, the literature on procedural justice emphasizes that not just the allocation (level of pay), but also the causes and processes for changing it can affect employees, reactions (Lind and Tom, 1988; Leventhal, 1976). Among other factors, theories of procedural justice emphasize that most respondents consider procedures more fair if the decision-maker treats the respondent with respect, has no vested interest in a decision that is harmful to the respondent, and has limited choice in making a decision.

If a new employment contract has both spread and become accepted, we should see that community standards of fairness have changed. If the typical employment contract has, in fact, undergone important changes to more closely resemble the results in the external labor market, then more employees should report that they perceive employer behavior that mimics that market as “fair” in the late-1990s than in the mid-1980s. For example, employees should be more willing to judge pay cuts in times of excess labor supply as fair.

In her widely cited book *Psychological Contracts in Organizations*, Rousseau (1995) used this reasoning to identify trends in the employment contract. She used the same method that we did, adopting the Kahneman, Knetsch, and Thaler questions about when pay cuts are fair. Importantly, her respondents demographics were distinctive: her more recent sample was US executives and managers; the KKTs mid-1980s results were from a representative phone sample of two Canadian cities. She claimed that from the 1980s to the 1990s typical answers shifted so that pay cuts were more often perceived as fair (1995, p. 213). Given that both Rousseau’s research and that of Gorman and James (1992) find differences based on the occupation and industry of the respondents, these prior results emphasize the need to make comparisons using a sample comparable to that of KKT.

We conducted our study in the two Canadian cities surveyed by KKT: Vancouver and Toronto. One test is whether there is a change over time. Greater public acceptance of pay cuts due to the infusion of the new employment contract would lead to:

Hypothesis 1. Pay cuts will be considered more fair in contemporary Vancouver and Toronto than in the mid-1980s.

On the other hand, it is possible that the employment relation has not changed that much for most employees (as suggested by the relative stability of average tenure, noted above). It is also possible that at many companies managers have changed the implicit employment contract they offer, but that employees do not accept the new contract as fair. That is, norms of fair behavior may be lagging behind the behavior that is common. Consistent with the view that companies have changed the contract they offer, Kruse and Joseph (1998, p. 22) present survey evidence that in 1995 the majority of Americans believes employers were less loyal to employees than they were 10 years ago. At the same time, separate surveys did not find that Americans have lower trust in their employer in 1997 than in 1989 (Kruse and Joseph, 1998, p. 22–23).

Although the labor market institutions and culture are quite similar, it is possible that the stability of attitudes we find in Canada has not been matched in the US. Compared to the United States, for most of this century, Canada has been associated with a stronger welfare state, a more active government, and lower legitimacy for market forces (Lipset, 1990; Card and Freeman, 1993). Silicon Valley, in contrast, is an unusual region with a history of low

unemployment and high mobility among skilled engineers. Moreover, the rhetoric of the new employment contract was clearly enunciated by some Silicon Valley employers such as Apple Computers (e.g. Sculley and Odyssey, 1987, p. 92–99). These differences led us to:

Hypothesis 2. Pay cuts will be perceived as more fair in Silicon Valley than in Canada.

We chose Silicon Valley with the expectation that respondents there are probably more accepting of the new employment contract than would be the typical US respondent. Thus, the tests provide a one-sided test for US–Canada differences; even if respondents in Silicon Valley are more accepting the new contract than respondents in Vancouver and Toronto, most of the US respondents may hold attitudes more similar to those of Canadians.

Conversely, francophone Quebec has a very different history and somewhat different culture than the rest of Canada. In many studies, respondents in Quebec often are less accepting of the market and are more different from US respondents than are anglophone Canadians (Lipset, 1990). Thus, any findings of US–Canada similarity may not generalize to Quebec.

3. Method

Kahneman, Knetsch, and Thaler performed their survey between May 1984 and July 1985 in Vancouver and Toronto. We conducted our survey in those cities between March and September 1997 and then in Silicon Valley between October 1997 and March 1998. Following the standard within this literature, we refer to actions as “fair” when respondents report the descriptions of actions as fair.

The KKT protocols consist of a series of telephone surveys with questions about hypothetical situations relevant to price-setting and employment practices. We selected the questions relevant to labor markets from the KKT surveys, creating separate questionnaires for the interview purposes. Each separate survey had four or five questions about standards of fairness. Many of these questions related to the fairness of layoffs, and those results are presented in a companion paper (Charness and Levine, 1999).³ For each contrast we present, comparison questions were asked of different respondents; this between-subjects design minimizes respondents inclination and ability to answer based on guesses about the researchers hypotheses.⁴

We collected approximately 125 replies for each question. Trained interviewers placed telephone calls to random listings in area directories, using a standard script. Eleven different people conducted the survey, so that no single individual’s bias in elicitation method could greatly distort the results.

³ Both papers examine perceptions of the fairness of actions that adversely affect employees. The focus of the present paper is on changes over time (using the KKT study as a baseline) and in differences between the US and Canada in views toward pay cuts. In contrast, the companion paper investigates how the characteristics of the process by which layoffs are implemented affect whether the layoffs are perceived to be fair.

⁴ Gorman and James (1992) mailed KKT questions to US executives, but used a within-subject design. Frey and Pommerehne (1993) asked the KKT questions relating to fairness in pricing decisions in Switzerland, obtaining results similar to KKT. Neither study was able to examine changes over time.

4. Results

Table 1 shows the results for 10 questions asked about decreases in compensation. Following KKT, we report the proportion of respondents who claimed the action was unfair. The results support qualitatively the KKT findings of how the context of the pay cut (e.g. the profitability of the employer) affected perceptions of fairness.

Contradicting press reports of greatly increased acceptance of market forces, we do not find that pay cuts were substantially more acceptable in the late-1990s than in the mid-1980s. As discussed here, these results do not support Hypothesis 1.

Although the mean level of agreement that pay cuts are unfair has been constant, the gap between the levels of perceived fairness of “more” and “less” fair pay cuts has narrowed between 1984–1985 and 1997–1998. That is, respondents were a little more accepting of pay cuts when the employer had no “justification”, and a little less accepting when the employer had an excuse (e.g. low profits, cutting bonus not basic pay).

Although we chose a region in the US frequently associated with the new employment contract, the differences across nations were minor and do not tend to support Hypothesis 2. Unless US residents were much more resistant to pay cuts than Canadians were in the past (an unlikely situation), these results suggest that employees views of fair employer actions has been stable in the US as well.

4.1. Changes over time in Canada

Our results were broadly consistent with those of KKT. Specifically, respondents thought pay cuts solely due to the presence of unemployment were unfair: between 63 and 76 percent of respondents thought pay cuts were unfair in questions 5, 6 and 7 in the new surveys, similar to the results of KKT. Respondents were more willing to accept a reduction in pay when it was accomplished by a nominal increase less than inflation, when replacing a worker, when changing lines of business, or when the business was losing money. Specifically, 21 percent thought a 5 percent nominal wage increase was unfair during times of 12 percent inflation (Q2), but 76 percent thought a 7 percent nominal pay cut was unfair in times of no inflation (Q5). In addition, when a company is making a small profit and there was high unemployment and an inflation rate of 12 percent a year, 63 percent of respondents felt it was unfair to cut an incumbent workers pay from US\$ 15 to 12 an hour (Q7). In contrast, only a fourth of respondents thought a similar pay cut was unfair if the worker quit and a new worker received the lower pay (Q4). An intermediate proportion thought the pay cut was unfair if the painter switched to a new business, and retained the incumbent worker (48 percent, Q1). If the firm is losing money instead of making a small profit (Q9 rather than Q7), 53 percent of the respondents thought the pay cut was unfair.

There is no consistent trend in responses over time, in contrast to Hypothesis 1. Two questions had large and statistically significant changes, but one change showed decreased tolerance for pay cuts, the other showed increased tolerance. Specifically, the proportion who thought the pay cut in question 5 was unfair (cut nominal wages with no inflation) rose 14 percentage points (change significant at the 5 percent level), while the proportion reporting unfair in question 7 (cut wages with high unemployment) declined 20 percentage points (significant at the 1 percent level). Other changes were small and not significant.

Table 1
The KKT scenarios in Canada and Silicon Valley: percent stating action is unfair (sample size)

		Canada 1984/1985 (KKT)	Canada 1997	Silicon Valley 1997	Canada 1997–1984/1985	Canada 1997–Silicon Valley
Q1	Painter goes into landscaping; lower wages. Wages reduced from US\$ 15 to 12	37 (94)	48 (107)	37 (164)	11	11
Q2	Substantial unemployment; 12 percent inflation. Wages increased only 5 percent	22 (129)	21 (108)	51 (175)	–1	–30**
Q3	Business has not increased as before. Wages reduced by 10 percent	61 (100)	72 (109)	61 (153)	11	11
Q4	Business ok; unemployment. Employee earning US\$ 15 quits and replacement paid US\$ 12	27 (125)	24 (105)	33 (143)	–3	–9
Q5	Substantial unemployment and no inflation. Wages decreased by 7 percent	62 (98)	76 (100)	66 (149)	14*	10
Q6	Business ok; workers available at lower wage. Wages reduced by 5 percent for current workers	77 (195)	76 (144)	63 (136)	–1	13*
Q7	Business ok; much unemployment. Wages reduced from US\$ 15 to 12	83 (98)	63 (119)	67 (141)	–20**	–4
Q8	Business losing money; workers available at lower wage. Wages reduced for current workers by 5 percent	32 (195)	34 (122)	27 (139)	2	7
Q9 ^a	Business losing money, much unemployment. Wages reduced from US\$ 15 to 12	50 (153)	53 (142)	56 (128)	3	–3
Q10	Business has not increased as before. Total pay + bonus = market level. Eliminate usual 10 percent annual bonus	20 (96)	44 (100)	41 (127)	24**	3

^a Question 9 asked whether the action was completely fair, acceptable, slightly unfair, or very unfair. We classify the first two categories as fair and the last two categories as unfair.

* Statistically significant differences at the 5 percentage level on the test of the equality of proportions (normal approximation to the binomial distribution, two-tailed test).

** Statistically significant differences at the 1 percentage level on the test of the equality of proportions (normal approximation to the binomial distribution, two-tailed test).

4.2. Comparing Canada with Silicon Valley

The results in Silicon Valley also support the presence of most of the fairness rules that KKT identified. Although pay cuts merely due to unemployment were not usually thought fair, pay cuts were also more acceptable when replacing a worker, when changing lines of business, or when the business is losing money. Specifically, when a company was making a small profit and there is high unemployment and an inflation rate of 12 percent a year, 67 percent of respondents felt it was unfair to cut an incumbent workers pay from US\$ 15 to 12 an hour (Q7). In contrast, only one-third of respondents thought a similar pay cut was unfair if the worker quit and a new worker received the lower pay (Q4), and 37 percent thought the pay cut was unfair if the painter switched to a new business, and retained the incumbent worker (Q1). If the firm was losing money (Q9) instead of making a small profit as in Q7, 56 percent of respondents thought the pay cut was unfair. Respondents were also more willing to accept cuts in bonuses (51 percent felt unfair in Q3) than in basic pay (61 percent thought were unfair in Q10).

The largest difference between Canada and Silicon Valley was lower acceptance of real pay cuts accomplished with a nominal pay increase of 12 percent and inflation of 5 percent. Among the respondents 51 percent of the Silicon Valley respondents felt this situation was unfair, compared with only 21 percent of the Canadians in 1997 and 22 percent of KKTs earlier Canadian sample. A real pay cut accomplished with a nominal pay cut but no inflation was considered unfair by even more respondents (66 percent of Silicon Valley respondents, close to the Canadian responses), so the KKT finding of inflation illusion was supported (but more weakly) in the Silicon Valley sample as well.

There was little difference between Canada 1997 and Silicon Valley on the other “illusion” manipulation—acceptance of pay cuts accomplished by the elimination of a customary bonus that was needed to bring compensation to the market level (Q3 versus Q10). While there was a substantial effect for all samples, the bonus illusion was much stronger in Canada 1984–1985 than in either contemporary study (20 percent unfair versus 44 or 41 percent).

4.3. The effects of justifications

While we qualitatively duplicate KKT results, the effects of the justifications on perceived fairness were consistently weaker in the newer samples (Table 2). For example, KKT found a 55 percentage point difference with respect to whether a real pay cut was achieved by a nominal increase or nominal decrease in wages (Q5 versus Q2). That gap declined to 39 percentage points in our Canadian survey, and to only 15 percentage points in Silicon Valley. The effects of the justifications were larger for all six comparisons in the original KKT study than in Canada in 1997. KKT found typical effect sizes of 43.5 percentage points, which shrunk by about 0.33 to 24–31 percentage points in our surveys. The shrinkage was due to trends toward accepting pay cuts when the company did not have the justification of low current profits, trends against accepting pay cuts when the company had low current profits, and a substantial difference for justifications not related to the firm’s profitability. In short, the fairness and framing effects that KKT identified, remain prominent in the data, but became meaningfully smaller.

Table 2
Effects of justifications in Canada and Silicon Valley difference in percent unfair

	Canada 1984/1985 (KKT)	Canada 1997	Silicon Valley 1997/1998	Canada 1997–1984/1985	Canada 1997–Silicon Valley
The importance of inflation illusion (Q5 versus Q2)	40**	55**	15**	15**	40**
The importance of bonus versus wage distinction (Q3 versus Q10)	41**	28**	20**	–13*	8
20 percent lower wage; same employee versus new employee (Q7 versus Q4)	56**	39**	34**	–17**	5
20 percent lower wage; same employee in new business versus old business (Q7 versus Q1)	46**	15**	30**	–31**	–15**
20 percent lower wage; business ok versus losing money (Q7 versus Q9)	33**	10*	11*	–23**	–1
Reduce wage by 5 percent; business ok versus losing money (Q6 versus Q8)	45**	42**	36**	–3	6

* Statistically significant differences at the 5 percentage level on the test of the equality of proportions (normal approximation to the binomial distribution, two-tailed test).

** Statistically significant differences at the 1 percentage level on the test of the equality of proportions (normal approximation to the binomial distribution, two-tailed test).

Table 3
Aggregated results^a

	Canada 1984/1985 (KKT)	Canada 1997	Silicon Valley 1997/1998	Canada 1997–1984/1985	Canada 1997–Silicon Valley	Silicon Valley–Canada 1984/1985
Mean proportion unfair: all 10 questions	47.1	51.1	50.2	4.0	0.9	3.1
Mean proportion unfair: 8 questions excluding illusion questions 2 and 10	53.6	55.7	51.1	2.1	4.6*	–2.5
Mean proportion unfair when a pay cut was not based on the firm's difficulties	74.0	71.7	65.3	–2.3	6.4*	–8.7*
Mean proportion unfair when the business is not doing well	36.5	39.7	38.2	3.2	1.5	1.7
Mean change in percent unfair between matched scenarios with versus without a justification	43.5	31.5	24.3	–12.0**	7.2*	–19.2**

^a The 3rd row includes Q5–Q7. The 4th row includes Q1, Q4, Q8, and Q9. The 5th row is the average of $(Q5 - Q2) + (Q7 - Q4) + (Q7 - Q1) + (Q7 - Q9) + (Q6 - Q8) + (Q3 - Q10)$. “Justifications” include low profits, change in employee, and the other conditions noted in Table 1.

* Statistically significant differences at the 5 percentage level on the test of the equality of proportions (normal approximation to the binomial distribution, two-tailed test).

** Statistically significant differences at the 1 percentage level on the test of the equality of proportions (normal approximation to the binomial distribution, two-tailed test).

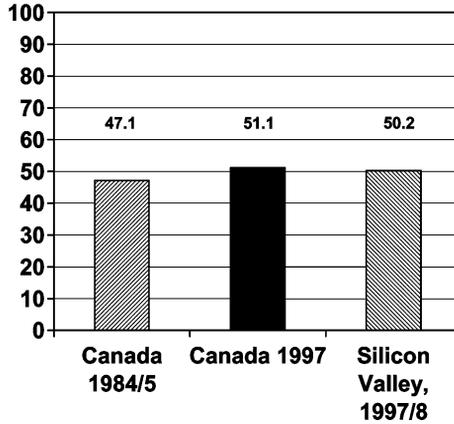


Fig. 1. Mean percent responding a pay cut was unfair (pooling across 10 questions).

A summary of the comparisons is presented in Table 3. The main result of this paper is that in general, Canada showed no time trend in accepting pay cuts as unfair. In fact, the small differences indicate *less* acceptance of pay cuts in 1997 than in 1984–1985 (column 4, rows 1 and 2 and Fig. 1).

There is no overall difference between Canada 1997 and Silicon Valley (column 5, row 1). At the same time, if we eliminate the questions on bonus and inflation illusion (Q2 and Q10), we see that respondents in Silicon Valley were slightly more accepting of pay cuts than were the Canadian respondents (column 5, row 2). All of this difference was due to questions where a pay cut either was not based on the firm's difficulties or where there was a shock to the employment relationship. When the company had low profits, replies in the two nations were almost identical.

These results suggesting slightly higher acceptance of the market in Silicon Valley are roughly consistent with previous research on US–Canada attitudes referred to above. To a certain limited degree, the new employment contract, with its concomitant acceptance of market forces, may be more slightly prevalent in Silicon Valley than in Toronto and Vancouver.

In Canada, the gap in percent unfair between replies with and without a justification declined by 12 percentage points, suggesting that the justifications were somewhat less important in contemporary Canada. For Silicon Valley, the effect of justifications diminishes a further 7.2 percentage points.

5. Discussion

In general, our results do not support the hypothesis that market forces have become more legitimate justifications for wage reductions. Canadians were not increasingly likely to state that the pay cuts in the scenarios were fair. In Silicon Valley, market forces are sometimes a bit more acceptable than in Canada, but this effect is modest. While we confirm that

circumstances affect pay fairness norms, we do not find that these norms have changed much since the mid-1980s.

For managers, the results suggest that traditional internal labor market policies such as avoidance of nominal pay cuts are still useful in promoting high levels of effort. For policy-makers, these results do not imply that labor market policy should abandon a focus on creating stable jobs (North American labor markets have high mobility, so policies should perhaps promote a system with lower costs of mobility; e.g. by encouraging portability of pensions and health insurance, and certifications for general skills. This recommendation is based on the high level of mobility, regardless of any recent increases Levine, 1998).

Our results also suggest that new organizational forms (particularly ones invoking a degree of trust in the employment relationship) preserve some buffering from some of the implications of the new employment. While the implicit labor contract may eventually need to change, public acceptance has not yet arrived. The panoply of studies on the costs of violating the employment contract should caution managers against implementation of policies employees perceive as unduly harsh.

At the same time, all of the justifications that KKT described had weaker effects in 1997–1998 in both Canada and Silicon Valley than in the KKT study. KKT wrote a timeless and placeless paper: a model of human cognitive and emotional processing. They treated fairness as cognitive psychologists have often treated heuristics such as framing (Tversky and Kahneman, 1986); i.e. as hard-wired in. In fact, fairness is a perception that is shaped by culture (e.g. Roth et al., 1991). Our results show that the specific features that determine respondents perceptions of fairness depend on both time and place.

5.1. Limitations and future research

Many people perceive what is common as fair. Should the new employment contract become widespread, it will probably become more acceptable. At the same time, the persistence we find of the norms that KKT identified may slow the diffusion of new contracts.

In addition, the 13-year span, we study is not long, even in a rapidly changing economy. It is worth examining changes in the perceived fair contract over greater spans of time.

For social scientists, these results emphasize the need for understanding the foundations of fairness judgments. Consider the many reasons why the wage–bonus distinction might matter more in one region than in another region. People in one region might view the bonus as more of an entitlement—where the creation of entitlement is socially constructed (i.e. traditional bonuses may become normative more rapidly in some nations than others). Alternatively, respondents in one region could put more value on all entitlements—a difference in underlying social values. Thirdly, a cognitive difference might drive the results if respondents in the second region were less influenced by a change in framing. For example, citizens who have experienced inflation probably understand the real versus nominal distinction better.

Furthermore, salience may differ, as people who have experienced a cut in pay or bonus may reply differently than others. In addition, individual differences ranging from gender to religion to political beliefs can affect perceptions of the fairness of pay cuts and of other elements of the employment contract. For example, top-level managers endorse pay cuts more readily than others (Gorman and James, 1992; Rousseau, 1995, p. 213).

Future research should look at wider differences in space (e.g. more countries), analyze more of the individual differences underlying responses (e.g. responses of managers versus low-level employees), and investigate more of the rationales and justifications underlying the responses.

References

- Academy of Management Executive, 1996. Special Issue on Careers in the 21st Century.
- Adams, J.S., 1963. Toward an understanding of inequity. *Journal of Abnormal Social Psychology* 67, 302–320.
- Annable, J., 1997. Insecure executives make the economy grow. *The Wall Street Journal*.
- Barnard, C., 1938. *The Functions of the Executive*. Harvard University Press, Cambridge, MA.
- Belman, D., Levine, D.I., 1999. Have internal labor market wage structures declined in large employers? University of California, Mimeo.
- Blau, P.M., 1964. *Exchange and Power in Social Life*. Wiley, New York.
- Burack, E.H., Singh, R.P., 1995. The new employment relations compact. *Human Resource Planning* 18 (1), 12–19.
- Cappelli, P., et al., 1997. *Change at Work*. Oxford University Press, New York.
- Card, D., Freeman, R., 1993. Small differences that matter: labor markets and income maintenance in Canada and the United States. NBER Comparative Labor Markets Series. Chicago and London: University of Chicago Press.
- Cashman, K., Feldman, J., 1995. Reengineering the employment contract. *Executive Excellence* 12 (2), 15–16.
- Charness, G.B., Levine, D.I., 1999. When are layoffs acceptable? Evidence from a quasi-experiment. University of California, Mimeo (forthcoming in *Industrial and Labor Relations Review*).
- Cowherd, D., Levine, D.I., 1992. Product quality and pay equity between low-level employees and top management: an investigation of distributive justice theory. *Administrative Science Quarterly* 37 (2), 302–320.
- Doeringer, P., Michael P., 1971. *Internal Labor Markets and Manpower Analysis*. Heath Lexington Books, Lexington, MA.
- Dornstein, M., 1991. *Conceptions of Fair Pay: Theoretical Perspectives and Empirical Research*. Praeger Press, New York.
- Farber, H., 1995. Are lifetime jobs disappearing? Job duration in the United States: 1973–1993. NBER Working Paper No. 5014.
- Farber, H., 1996. The changing face of job loss in the United States, 1981–1993. NBER Working Paper No. 5596.
- Farh, J.L., Philip, M.P., Dennis, W.O., 1990. Accounting for organizational citizenship behavior: leader fairness and task scope versus satisfaction. *Journal of Management* 16 (4), 705–721.
- Foulkes, F., 1980. *Personnel Policies in Large Nonunion Companies*. Prentice Hall, Englewood Cliffs, NJ, 1980.
- Frey, B.S., Pommerehne, W.W., 1993. On the fairness of pricing—an empirical survey among the general population. *Journal of Economic Behavior and Organization* 20 (3), 295–307.
- Gorman, R., James, B.K., 1992. Fairness as a constraint on profit-seeking: comment. *American Economic Review* 82 (1), 355–358.
- Gouldner, A., 1954. *Patterns of Industrial Bureaucracy*. Free Press, New York.
- Groschen, E., Levine, D.I., 1998. The rise and decline of internal labor markets. Federal Reserve Working Paper, New York.
- Hackett, B., 1996. The new deal in employment relationships, Conference Board Publication No. 1162.
- Homans, G., 1961. *Social Behavior: Its Elementary Forms*. Harcourt Brace Jovanovich, New York.
- Homans, G., 1974. *Social Behavior: Its Elementary Forms (revised Edition)*. Harcourt Brace Jovanovich, New York.
- Kahneman, D., Jack, K., Richard, T., 1986. Fairness as a constraint on profit-seeking: entitlements in the market. *American Economic Review* 76, 728–741.
- Kanet, R.M., 1987. From Status to Contribution: Some Organizational Implications of the Changing Basis for Pay. *Personnel*, Vol. LXIV, pp. 12–37.
- Kiechel Jr., W., 1987. Your new employment contract. *Fortune* 116 (1–6), 109–110.
- Kissler, G.D., 1994. The new employment contract. *Human Resource Management* 33 (3), 335–352.

- Kruse, D., Joseph, B., 1998. The new employee/employer relationship. Mimeo, Rutgers.
- Konovsky, M.A., Pugh, S.D., 1994. Citizenship behavior and social exchange. *Academy of Management Journal* 37, 656–669.
- Lee, C., 1987. The new employment contract. *Training* 24 (12), 45–56.
- Leventhal, G.S., 1976. The distribution of rewards and resources in groups and organizations. In: Berkowitz, L., Walster, E. (Eds.), *Advances in Experimental Social Psychology*. Vol. 9, Academic Press, New York, pp. 91–131.
- Levine, D.I., 1998. *Working in the Twenty-First Century*. M.E. Sharpe, Armonk, NY.
- Lind, E.A., Tom, R.T., 1988. *The Social Psychology of Procedural Justice*. Plenum Press, New York.
- Lipset, S.M., 1990. Labor and Socialism in Canada and the United States. Larry Sefton Memorial Lecture, Woodsworth College, University of Toronto, Toronto.
- MacKenzie, G.B., Podsakoff, P.M., Fetter, R., 1991. Organizational citizenship behavior and objective productivity as determinants of managerial evaluations of salespersons performance. *Organizational Behavior and Human Decision Processes* 50, 123–150.
- Manicattide, M., Virginia P., 1992. Key developments in compensation management. *HR Focus*, LXIX, pp. 3–4.
- Moorman, R.H., 1991. Relationship between organizational justice and organizational citizenship behaviors: do fairness perceptions influence employee citizenship. *Journal of Applied Psychology* 76 (6), 845–855.
- Neumark, D., Daniel, P., Daniel, H., 1997. Has job stability declined yet? New evidence for the 1990s. NBER Working Paper No. 6330.
- Organ, D.W., 1988. *Organizational citizenship behavior: the good soldier syndrome*. DC Heath, Lexington, MA.
- O’Shaughnessy, K.C., Levine, D.I., Peter, C., 1999. Changes in managerial pay structures 1986–1992. Working Paper No. 67B, Institute of Industrial Relations, UC Berkeley.
- Podsakoff, P.M., Michael, A., Scott, B.M., 1997. Organizational citizenship behavior and the quantity and quality of work group performance. *Journal of Applied Psychology* 82 (2), 262–270.
- Rousseau, D.M., 1995. *Psychological Contracts in Organizations: Understanding Written and Unwritten Agreements*. Sage Publications, Thousand Oaks.
- Rose, S., 1995. The decline of employment stability in the 1980s. National Commission on Employment Policy, Washington, DC.
- Roth, A.E., Prasnikar, V., Okuno-Fujiwara, M., Zamir, S., 1991. Bargaining and market behavior in Jerusalem, Ljubljana, Pittsburgh, and Tokyo: an experimental study. *American Economic Review* 81 (5), 1068–1095.
- Sculley, J., Odyssey, N.Y., 1987. Harper and Rowe.
- Stiles, P., Lynda, G., Catherine, T., Veronica, H.H., Patrick, M., 1997. Performance management and the psychological contract. *Human Resource Management Journal* VII, 57–66.
- Tversky, A., Kahneman, D., 1986. Rational choice and the framing of decisions. *Journal of Business* 59 (4), S251–S278.