Program Evaluation
Criteria Applied to
Pay Equity in Ontario

Morley Gunderson, Paul Lanoie
CIRANO

Le CIRANO est un organisme sans but lucratif constitué en vertu de la Loi des compagnies du Québec. Le financement de son infrastructure et de ses activités de recherche provient des cotisations de ses organisations-membres, d’une subvention d’infrastructure du ministère de la Recherche, de la Science et de la Technologie, de même que des subventions et mandats obtenus par ses équipes de recherche.

*CIRANO is a private non-profit organization incorporated under the Québec Companies Act. Its infrastructure and research activities are funded through fees paid by member organizations, an infrastructure grant from the Ministère de la Recherche, de la Science et de la Technologie, and grants and research mandates obtained by its research teams.*

Les organisations-partenaires / The Partner Organizations

- École des Hautes Études Commerciales
- École Polytechnique
- Université Concordia
- Université de Montréal
- Université du Québec à Montréal
- Université Laval
- Université McGill
- MEQ
- MRST
- Alcan Aluminium Ltée
- Banque Nationale du Canada
- Banque Royale du Canada
- Bell Québec
- Développement des ressources humaines Canada (DRHC)
- Égis
- Fédération des caisses populaires Desjardins de Montréal et de l’Ouest-du-Québec
- Hydro-Québec
- Imasco
- Industrie Canada
- Microcell Labs inc.
- Raymond Chabot Grant Thornton
- Téléglobe Canada
- Ville de Montréal

© 1999 Morley Gunderson et Paul Lanoie. Tous droits réservés. All rights reserved. 
Reproduction partielle permise avec citation du document source, incluant la notice ©. Short sections may be quoted without explicit permission, provided that full credit, including © notice, is given to the source.

Ce document est publié dans l'intention de rendre accessibles les résultats préliminaires de la recherche effectuée au CIRANO, afin de susciter des échanges et des suggestions. Les idées et les opinions émises sont sous l'unique responsabilité des auteurs, et ne représentent pas nécessairement les positions du CIRANO ou de ses partenaires.

*This paper presents preliminary research carried out at CIRANO and aims at encouraging discussion and comment. The observations and viewpoints expressed are the sole responsibility of the authors. They do not necessarily represent positions of CIRANO or its partners.*

ISSN 1198-8177
Program Evaluation Criteria
Applied to Pay Equity in Ontario

Morley Gunderson†, Paul Lanoie‡

Résumé / Abstract

L'expérience ontarienne en équité salariale est évaluée à partir d'un ensemble de critères appartenant au domaine de l'évaluation du programme. Ces critères sont informatifs et permettent d'organiser de façon systématique la réflexion sur l'équité salariale en se servant de l'expérience vécue en Ontario comme toile de fond. Les critères d'évaluation sont d'abord présentés, puis appliqués à l'expérience ontarienne. Des illustrations provenant d'études de cas que nous avons réalisées viennent mettre en évidence certains « points chauds » de notre analyse. Le texte conclut par un résumé et quelques observations sur les leçons que nous pouvons tirer de l'expérience ontarienne.

The Ontario experience with respect to pay equity is evaluated based mainly on a set of program evaluation criteria. Such criteria are informative in their own right, but they also provide a systematic way of categorizing the issues that are involved in evaluating pay equity in general, with the Ontario experience providing a useful illustration of the evaluation principles. The program evaluation criteria are first outlined, with an application to pay equity in general and the Ontario experience in particular. Illustrations from some case studies are used to highlight some of the program evaluation issues. The paper concludes with a summary and concluding observations especially on lessons that can be learned from the Ontario experience.

Mots Clés : Évaluation de programmes, équité salariale

Keywords: Program evaluation, pay equity, comparable worth

† Corresponding Author: Paul Lanoie, CIRANO, 2020 University Street, 25th floor, Montréal, Qc, Canada H3A 2A5
Tel.: (514) 985-4020 Fax: (514) 985-4039 email: lanoiep@cirano.umontreal.ca
Without implicating him for any of the conclusions, the authors are grateful to Charles Taccone of the Ontario Pay Equity Tribunal for helpful comments and discussions.

‡ Morley Gunderson is the CIBC Professor of Youth Employment at the University of Toronto and Professor at the Centre for Industrial Relations and the Department of Economics. He is a Research Associate of the Institute for Policy Analysis, the Centre for International Studies, and the Institute for Human Development, Life Course and Aging, and an Adjunct Scientist at the Institute for Work and Health. During 1998/99, when this paper was written, he was a Visiting Fellow at the Hoover Institution at Stanford.

‡ École des Hautes Études Commerciales and CIRANO
INTRODUCTION

The previous chapter (Gunderson, this volume) highlighted the complexities that are involved in pay equity, especially with many of the design and implementation mechanics of the process. The importance of many of these seemingly innocuous design and implementation details has been emphasised in other studies. In this section, a set of generic program evaluation criteria are outlined and applied to pay equity in general and the Ontario program in particular. The intent is to provide a more systematic framework for highlighting the inevitable trade-offs that are involved in the design and implementation of any policy initiative, and to highlight some lessons that may be learned from the Ontario experience. The criteria pertain to: target efficiency; vertical equity; horizontal equity; allocative efficiency; administrative cost; transparent process and mechanisms; flexible, adaptable and reversible; and politically acceptable.

When appropriate, illustrations from three case studies are used to highlight some of the program evaluation issues. These case studies were conducted in three firms chosen to be representative of “typical” situations with respect to pay equity: 1) a traditional manufacturing firm with a large majority of male blue-collar workers; 2) a public hospital employing mainly women, and 3) a relatively new telecommunication firm with a mixed workforce. In each firm, we had a thorough discussion with the HR officer in charge of pay equity when the law was implemented, complemented by an examination of all the written documents available on the matter. The persons involved were then asked to validate the information contained in this chapter. Appendix 1 provides a comparison of the three cases under more than fifteen dimensions. These dimensions are grouped under four headings: 1) description of the firm; 2) description of its workforce; 3) description of the implementation of the pay equity process and 4) the outcome of this process. These case studies were supplemented with interviews of two consultants, each of whom were involved in the pay equity process of more than a hundred firms, mainly in the private sector.

Target Efficiency

Target efficiency refers to the extent to which a program assists as many persons in the target group by as much as possible without having the benefits spillover into the non-target groups. In the case of pay equity, the target group would be persons in female-dominated jobs whose pay is "undervalued", although the real target is likely to be women in such female-dominated jobs. The appropriateness of this target could be questioned especially in light of the recent controversial evidence in Baker and Fortin (1998) indicating that females in Canada (unlike in the U.S. and unlike males in Canada) are not significantly penalized by working in female-dominated jobs.

---

1 That chapter is complementary to this chapter and should be consulted in reference to the mechanics that are evaluated in this chapter according to the different program evaluation criteria.
3 Application of similar criteria to poverty programs are given in Gunderson (1993) and for sector councils in Gunderson and Sharpe (1998).
By being proactive and requiring a pay equity plan to be in place whether or not there has been a complaint, the Ontario scheme certainly expands its scope beyond the complaints based systems, where complaints are likely to be rare because of the information problems, transactions costs, and fear of reprisals. Furthermore, the proportionate value and proxy comparisons, are designed specifically to assist those who otherwise would be bypassed because of a lack of male comparator groups. Nevertheless, substantial numbers can still be bypassed if they are in any of the following situations: mixed or even male-dominated jobs; small establishments that are excluded from coverage; private sector jobs that are excluded from proxy comparisons; gender-biased job evaluation procedures; and establishments that pay low wages to all of their employees. More important, given the complexities of the procedure, it very likely can be "managed" or manipulated to alter the coverage of the target group, especially in the private sector and in non-union environments.

Furthermore, if there is an adverse employment effect from the pay increases, then this will harm some as they move from an "undervalued" job to no job. Economists have been keen in denouncing such perverse effects that could theoretically result from pay equity. The nature of the empirical evidence (mainly U.S. and Australian) on these effects is, however, controversial (Gunderson 1989a, 1994). In a more recent study, based on estimating a complete system of public sector input demand equations for the state of Iowa, Matilla, Orazem and Turk (1996) found public sector employment to be more responsive to wage changes than found in most previous studies, and hence their simulation results indicated substantial reductions in employment from comparable worth increases. On this matter, one of the consultants we interviewed mentioned a case where pay equity had adverse employment effects: a marginally profitable organization, employing only women and constrained by a fixed-budget, had to reduce employment because of the pay increase resulting from the pay equity process. In the same vein, at the hospital included in our case studies, some respondents had the impression that the substantial pay increase given to regular nurses led the managers to reassess the ratio of regular versus auxiliary nurses required to perform certain duties, resulting in a reduction in nurse employment.

With respect to the dimension of assisting the target group by "as much as possible" the magnitudes of the pay increases for those receiving the pay equity adjustment can be substantial\(^4\). The adjustments are designed to close the full "undervaluation gap" of the difference in pay between male-dominated and female-dominated jobs of the same value. This is the case whether adjustment is based on the direct job-to-job comparisons or the indirect proportionate value or proxy comparisons. However, the adjustments may not close the undervaluation gap, even for those who receive the adjustments, if they are in the following situations: they had no male comparator group of the same value and had to use a lower value male comparator that has low pay because of its low value; there were multiple male comparators of the same value and it had to use the lower valued male job class; the particular male comparator group was undervalued

\(^4\) Adjustments in the early years of the Ontario legislation ranged from $400 to $13,500, averaging around $4,000 or 22 percent for those receiving an increase (Gunderson, 1995, p. 238), an amount that was similar to adjustments in several cases in the federal complaints based system (Gunderson, 1989b).
internally with respect to other male jobs (e.g., it would have been a negative deviation below a male payline), although it could also have been overvalued; the male job rate (which is the maximum male rate in the job class) was unusually low while the female job rate was unusually high. More important, given the complexities of the procedure, it very likely can be "managed" to yield small, token adjustments, as was the case with the coverage dimension. This is especially likely to be the case in the private sector, where the process can be managed with less public scrutiny than in the public sector, and where the profit constraint can be very binding\(^5\).

With respect to the dimension of minimising spillover benefits to non-target groups, pay equity can yield substantial benefits to males in the female-dominated jobs since they also receive the adjustment. This "leakage" can be very substantial in jurisdictions like Ontario that define female-dominated as 60 percent or more females, implying that up to 40 percent of the recipients can be male. Of course, this would not be considered as a leakage if such males were considered as discriminated against because they were in under-valued female-dominated jobs; nevertheless, it can be a substantial leakage in terms of closing the overall male-female wage gap. It is also possible that spillover benefits could go to non-target groups (e.g., those in mixed occupations within the same establishment, or non-covered groups elsewhere) if their pay is indirectly drawn up by pressure to restore former relative pay structures. The spillover effects could also be negative, however, if pay equity adjustments reduce the pool of funds that could be allocated elsewhere, or if persons who experience an adverse employment effect from pay equity create an excess supply of labour that reduces wages elsewhere.

**Vertical Equity**

Vertical equity refers to the degree to which a program assists the most disadvantaged groups. It requires the "unequal treatment of unequals" in the sense of targeting the benefits to the most disadvantaged.

Pay equity is not intended to be an equity or distribution oriented program to provide more redress to the most disadvantaged outside of the disadvantaged status associated with being in an undervalued female-dominated job. It is not intended to be an anti-poverty program or a program designed to reduce income inequality. Nevertheless, it would generally be considered a desirable side effect if it did this, and it may be considered an undesirable feature if it exacerbated poverty.

\(^5\) In the private sector in Ontario, for example, pay equity adjustments were much smaller than in the public sector, in spite of the evidence that wage discrimination is likely to be larger in the private compared to the public sector (Gunderson, 1989a, p. 52). In the private sector, for example, only about 20 percent of the female-dominated jobs received an adjustment amounting to less than 1 percent of payroll, compared to about 40 percent of female-dominated jobs in the public sector, amounting to about 2.2 percent of payroll (Gunderson, 1995, p. 240). From a survey of 27 private firms, McDonald and Thornton (1998) report that 57% of the firms in their sample gave adjustments to 10 percent or fewer of their female employees. The data we gathered in our case studies also reflects this reality. Wage adjustments were modest in private firms (one category of job received a 30$/month adjustment in the manufacturing firm; 300 persons - out of 2000 - received a 200$-500$/year adjustment in the telecommunication firm). In the hospital, wage adjustment were more substantial (from 0.40 to 2.42$ an hour), with more than 50% of the workforce being affected.
or widened the distribution of income.

Pay equity may assist the more disadvantaged groups to the extent that female-dominated jobs are at the lower end of the wage spectrum. Furthermore, it does provide "unequal treatment for unequals" because it provides an adjustment for female job classes that have unequal pay relative to comparable male job classes, and the adjustment is larger the greater the inequality in pay. The proportionate value method is likely to disproportionately help the more disadvantaged since they are in jobs of low pay and low job evaluation scores that do not have a lower valued male comparator group. The same applies to the proxy method since it tends to apply to low paying establishments (e.g., homes for the aged, halfway houses, day-care centres, food or laundry services for hospitals).

Yet these are at best exceedingly blunt instruments to reduce poverty or income inequality since such individuals may well be in higher income families. Furthermore, as discussed above, any adverse employment effect is likely to exacerbate poverty. As well, to the extent that pay equity applies more to the public sector than to the private sector or it is more effective in unionised environments, then it is being applied more in areas that already reduce wage disparity.

Overall, it is difficult to judge pay equity according to the extent to which it facilitates vertical equity. It does not help the most disadvantaged, nor does it appear to be regressive in the sense of protecting the privileged position of high-income persons.

**Horizontal Equity**

Horizontal equity refers to the degree to which a program provides equal treatment to persons of equal status -- the "equal treatment of equals." It corresponds to our notion of fairness in the sense of people in similar situations being treated similarly not subject to arbitrary procedures.

Pay equity is specifically designed to provide horizontal equity between persons in male-dominated jobs and female-dominated jobs in the sense of providing "equal pay for work of equal value." If the jobs are judged of equal value they are to be given equal treatment in terms of pay. Furthermore, the proportionate value and proxy comparisons are designed to ensure that groups are not bypassed simply because they do not have male comparator groups. In fact, the Ontario Court decision (*Service Employees’ International Union, Local 204 v. Attorney General of Ontario*) that restored proxy comparisons can be regarded as having done so for reasons of horizontal equity to ensure that groups that could not find male comparators still had a means of redress that was available to otherwise similar groups that had male comparators.

---

6 Based on U.S. evidence, Smith (1988) finds that pay equity widened the wage gap within the overall female workforce in spite of the fact that female-dominated occupations tend to pay lower wages to women than do mixed or male-dominated occupations. This widening of the wage gap within the overall female workforce occurred mainly because the very low wage women (e.g., in service jobs in the private sector) were simply not covered by pay equity initiatives. Based on her consultations across Ontario, Read (1996, p. 18) cites impressionistic evidence that "better results had been achieved in unionized, public sector, and larger workplaces, and for women in higher paying jobs." O’Neil, Brien and Cunningham (1989) and Orazem and Matilla (1990), however, both find that pay equity reduces the returns to education, training and experience, which should reduce wage inequality.
Nevertheless, pay equity can involve strong elements of horizontal inequities whereby similar groups can receive vastly different treatment\(^7\). An individual who is an occupation that is, say, 58 percent female in Ontario could be in a job that is just as likely to be undervalued than an otherwise similar person in an occupation that is 60 percent female, and yet that person may miss a wage adjustment in the neighbourhood of $5,000 per year in perpetuity. An individual who is in the private sector, and therefore ineligible for proxy comparisons, may miss a similar adjustment that could go to an otherwise similar person who just happens to be in the public sector and hence eligible for proxy comparisons. This "notch" problem or sharp discontinuity can occur every time there is a discrete eligibility rule such as being in the public sector, or having 10 or more persons in the establishment, or the occupation being 60 percent or more female. Such rules obviously serve other purposes, but they can create severe horizontal inequities, especially when such large wage adjustments can be involved.

Similar horizontal inequities can be involved if there is, as discussed above, an adverse employment effect from the wage fixing aspect of pay equity. Amongst a set of otherwise very similar people, some may have a job at a considerably higher wage, and others may have no job at all.

Similar issues can arise under the various possible wage adjustment procedures. Under a job-to-payline adjustment procedure (including the proportionate value adjustment of Ontario) considerably different adjustments can be involved depending upon the degree to which the female-dominated jobs deviate from the female-payline if one were to have been constructed. In other words, such a female-job to male-payline adjustment eliminates not only the systematic difference between female-dominated and male-dominated paylines, but also the random deviations around the female payline. (Such random deviations around the female payline presumably do not reflect discrimination since they all occur within female-dominated jobs, and such deviations also remain around the male payline). The elimination of random deviations around the female payline means that the adjustment can be quite different for individuals within the female-dominated jobs, even if they are very close to having the same job evaluation point scores. A female job with a job evaluation score of 600, for example, could receive an adjustment of $6000 per year, while an otherwise similar female job with an evaluation score of 550 could receive no adjustment or a very small adjustment. It is not likely that the latter group will take solace in the fact that their job was overpaid relative to the otherwise similar female job prior to pay equity, since they will regard pay equity as dealing with the systematic undervaluation of female jobs, and not with the attaining of internal equity within female jobs.

A payline-to-payline adjustment procedure would take care of this horizontal inequity by giving the same adjustment to all female jobs (assuming a similar slope to the male and female

---

\(^7\) Based on her consultations across Ontario, Read (1996, p. 17) referred to "the disappointment felt by women who received small or no adjustments," and "differing pay equity outcomes amongst workforces in the same sector," and perceptions of pay equity outcomes being "inconsistent". Similar comments were reported by the people we interviewed in a hospital where the pay equity process was fairly extensive. In particular, many workers had problems understanding the difference between job evaluation and performance evaluation, and felt that low wage adjustments reflected a poor appreciation of their performance.
paylines). But this would create a different horizontal inequity since the female jobs that were previously paid above the female payline (i.e., positive deviations) would be above the male payline and female jobs that were previously below the female payline (i.e., negative deviations) would be below the male payline and hence still underpaid relative to male jobs of the same value. The argument can be made that this underpayment reflects only internal inequities within female jobs (i.e., deviations about the former female payline) since the systematic inequities have been removed by the payline-to-payline adjustment. Such internal inequities remain within male jobs as reflected by deviations around the male payline, just as they remain within female jobs as reflected by deviations around the female payline (that now has been adjusted to the male payline). Nevertheless, this may still be perceived as an inequity amongst otherwise similar people who have similar job evaluation scores but very different pay.

The job-to-job adjustment (as is the conventional practice in Ontario) can also create horizontal inequities in that huge adjustment differences can go to groups who are otherwise very similar in the sense that they have very similar job evaluation scores, but are matched to unusual male comparators. A large adjustment could be involved, for example, for a female job that was unusually low paid not only relative to male jobs but also relative to female jobs, and if it had a male comparator that was unusually high paid not only relative to female jobs but also relative to male jobs. In essence, an unusually large negative female deviation around a female payline could be compared to an unusually large positive male deviation around the male payline. The adjustment would effectively remove not only the systematic difference between male and female paylines (which is the real target of pay equity) but also the random deviations around paylines (which is not the target of pay equity since they reflect internal inequities).

In contrast, an extremely small adjustment or even no adjustment could occur if a positive deviation around the female payline were compared to a comparator that was a negative deviation around the male payline. This differential adjustment could occur across female jobs that are otherwise very similar in the sense of having very similar job evaluation scores, but are compared to male comparators that are unusual deviations within the male jobs.

In effect, job-to-job adjustments remove not only the systematic difference in the undervaluation of female jobs (as represented by the differences in the paylines) but also the random deviations (as represented by the deviations around each payline). When the random deviations are added to the systematic differences, the adjustments obviously can be quite different even amongst otherwise similar groups.

A further and even more complex horizontal inequity can occur with the proportionate value calculation as used in Ontario. That procedure essentially projects the male payline below the sample range of the male jobs and into the range of lower job evaluation scores to provide a hypothetical or phantom male comparator line that indicates the expected wage that male jobs would get if they also had those low job evaluation scores. It is the case, however, that the prediction error about that line increases as the projection moves away from the mean of the male data, which is obviously the case when it is projected to the lower value scores where there are no male jobs. This means that the uncertainty around the appropriate adjustment for those female
jobs could be quite high. They may get an adjustment say of $4000 as they are moved to the projected male payline, but it could be the case that the appropriate adjustment should have been $1000 or $10,000. The horizontal inequity occurs in so far as there is greater uncertainty around their correct adjustment simply because they happen to be in a range of job evaluation scores where there is a large prediction error around the hypothetical male payline.

The proxy comparison method can also involve horizontal inequities for the *proxy organisations* that are picked for comparison purposes. They are required by law to incur the cost of providing the information to the seeking organisation, and they are not reimbursed for these costs. As such, a proxy organisation would incur such costs, while an identical organisation that did not happen to be picked as a proxy organisation would not have to incur such costs.

**Allocative Efficiency**

Allocative efficiency refers to the degree to which a program minimises distortions to the efficient allocation of resources. Advocates of pay equity tend to argue that pay equity fosters the efficient allocation of resources by ensuring that persons in female-dominated jobs are paid the "worth" of their job, where worth is established by job evaluation procedures.

Economists tend to argue that job evaluation procedures involve an administrative concept of value (akin to the concept of value in "use") rather than the economic concept of value as determined by the interaction of supply and demand (akin to the concept of value in "exchange"). This is analogous to the diamond-water paradox where water has high value in use but little value in exchange given its abundance, while diamonds have little value in use but high value in exchange. The example that is often used in the pay equity area is that of translators. Job evaluation schemes would value the jobs done by French and Spanish translators the same if the skill, effort, responsibility and working conditions were the same. This would mean that French and Spanish translators would have to be paid the same in Canada and in Miami even though the demand for French translators would be higher in Canada and the demand for Spanish translators higher in Miami.

Economists tend to emphasise that price fixing above the competitive norm (including any wage fixing legislation like pay equity) interferes with the efficient allocation of resources. It discourages persons from leaving the so-called undervalued jobs, and it discourages employers from hiring more of such persons. In other words it discourages the very market forces (respectively, reductions in supply and increases in demand) that would otherwise reduce discriminatory wage differentials. Obviously, this view of the market as "part of the solution" conflicts with the view of the "market as part of the problem" to the extent that the market gave

---

8 Evidence of this is found in Kahn (1992) based on U.S. data, although it is the case that such jobs are no longer undervalued. Orazem and Matilla (1998), however, indicate that comparable worth can raise the portion of females in both male-dominated and female-dominated jobs because the elasticity of female labour supply is greater than the elasticity of male supply in female dominated jobs, but less in male dominated jobs. Therefore as real wages increase in female-dominated jobs, females disproportionately enter those jobs, and as real wages decrease in male-dominated jobs, males disproportionately leave.
rise to discriminatory wage differentials in the first place.

To the extent that pay equity does interfere with the efficient allocation of resources, its most egregious effects in this area are mitigated somewhat by the allowable exemptions that usually exist. This is the case, for example, with the exemptions for merit, or skill shortages or temporary training or development assignments as exist in the Ontario legislation.

It may also be the case that pay equity can have positive efficiency effects in such areas as work organisation or pay structure. In our interviews, we were able to document certain positive effects in this line. For instance, one consultant we interviewed mentioned that, in two places, through the job description process involved in pay equity, people discovered that certain tasks were performed by two persons. More than one person we talked with mentioned that, because of the job description and job evaluation schemes, people understand each other's job better. The consultants also pointed out that in most firms where they intervened, the managers chose to evaluate all the jobs and not only those that were “female-dominated” or “male-dominated”, which in their opinion, has improved the overall coherence of the pay system in these firms. In the same vein, in the hospital, the HR manager we interviewed told us that the pay equity process made them more conscious about the “compensation consequences” of their decisions. For instance, in a recent re-engineering process, they asked themselves at the outset how the new distribution of responsibilities would affect compensation, a preoccupation they would not have had without the pay equity experience. McDonald and Thornton (1998) report similar effects from interviews they conducted in 27 private firms in Ontario. Although such effects are interesting, one has to keep in mind that they were mentioned by HR managers for whom pay policy is "bread and butter". Top managers may have a different opinion.

Certain analysts (Rhoads, 1993) have also talked about positive efficiency effects such as reduced turnover or improved morale. It is of course very difficult to verify the existence of such effects, although one example was given to us by the HR manager we interviewed in a manufacturing firm. He perceived that, in his plant, the pay equity process has improved employee loyalty. Indeed, the fact that the wage adjustment was minimal (30$/month for one category of workers) reinforced employee feeling about the fairness of the treatment they received. Of course, all these positive efficiency effects we just discussed beg the question of why employers did not institute them in the first place if the adjustments "paid for themselves." At the contrary, in a recent contribution, Kay (1999) presents evidence of deterioration of the interactions between employees after the implementation of pay equity in certain firms.

Minimise Administrative Costs

A program is generally considered desirable if it attains its objectives with a minimum of real resources being used up in the administration of the policy. In that vein, it is important to make a distinction between transfer costs and real resource costs. With transfer costs, what one group loses another gains. There is no direct loss to the system as a whole; the pie is simply redistributed. Real resource costs in contrast use up real resources that are therefore not available
for other purposes. They are lost from the system; the size of the pie itself is shrunk.

Pay equity can certainly involve transfer costs. The positive adjustment that goes to recipients comes from employers. They in turn ultimately pass much of it forward to consumers in the private sector or taxpayers in the public sector. As well, some may be passed backwards to other workers if there is a relatively fixed wage bill to distribute. The costs to employers (and ultimately to consumers, taxpayers and other workers), however, are transfer costs since they are benefits to the recipients. What one group loses another gains. The size of the pie remains the same except for indirect losses that may come from second-order efficiency effects.

Pay equity, however, can also involve substantial real resource costs in designing, implementing, administering and litigating the system. This can be the case at each and every step in the pay equity process, given the complexities and technical expertise that is involved. Real resource costs are involved in every aspect: pay equity committees and their training; job evaluation procedures; consultants; lawyers, experts and Tribunal resources if cases are contested; time spent by the parties preparing for and participating in any hearing process; revamping the compensation structure; administering the adjustment process; and managerial time devoted to managing the process. These real resource costs are "eaten up" in the process; they represent shrinkage in the pie that can otherwise be distributed to the parties. As aptly stated by Fudge and McDermott (1991, p. 255): "that is the final beauty of pay equity: it consumes so many resources there is little left for anything else."

These costs are likely to be particularly large in a system like Ontario where separate pay equity plans are established for each organisation and within each organisation, separate plans are required for each bargaining unit and for non-union employees in organisations covered by collective agreements. This is in contrast, for example, to the situation in Manitoba and most U.S. cases where a single plan was negotiated for the relevant government employees (Gunderson, 1995, p. 241, Manitoba Civil Service Commission, 1988). The costs are also likely to be disproportionately large for smaller organisations that tend not to have more formal job evaluation procedures or compensation policies.

Solid evidence on the extent of the administrative costs associated with pay equity is extremely scarce, in part because of the difficulty of quantifying the different activities and separating out the component attributable to pay equity alone. Nevertheless, some figures have been cited. Based on evidence from the mid 1980s, Robb (1987, p. 453) cites job evaluation costs per employee to be in the neighbourhood of $200 to $300 for large employers and $300 to $400 for small employers. Survey evidence of Ontario employers indicates the "administrative cost of developing their plan", on a per employee bases to be: $173 for public employers; $88 for large private employers with 500 or more employees; $168 for medium size employers with 100 to 499 employees; and $150 for small employers with 50 to 99 employees. These are likely to be lower bound estimates since it is not clear as to whether they also include the actual cost of the

---

9 The figures for public and large employers are from SPR Associates (1991), for medium size employers from Canadian Facts (1992, p. 45), and for small employers from Canadian Facts (1993, p. 43).
job evaluation procedure — a cost that can be substantial as indicated in Robb (1987) discussed above.

Based on these figures, in some back-of-the-envelop calculations, Gunderson (1994, p. 88) estimated the administrative costs for the 20 percent of the persons in an establishment who may receive an award, to be approximately $750 or about 20 percent of the average award of around $4,000. That is, about 20 cents of every dollar transferred is "eaten-up" in the employer’s cost of administering the system. This may be an underestimate to the extent that it does not include the actual cost of the job evaluation procedure, or the hidden indirect cost (e.g., managerial time) or the cost to other parties. It may be an overestimate to the extent it does not net out other benefits that may result from the process. Furthermore, many of the administrative costs may be one-time only, while the pay equity adjustments may continue.

Based on her consultations across the province, Read (1996, p. 4) also indicated: "For some smaller private sector employers, the cost of compliance sometimes exceeded the actual adjustment made." That is, more than 100 percent of the adjustment would get "eaten-up" in the real resource cost of administering the system. She cites (p. 38) survey evidence from the Canadian Federation of Independent Business indicating that for small businesses the total cost of consulting fees 10 averaged around $5,400, which was considerably higher than the total amount of around $4,000 that went into wage adjustments.

As an illustration of the costs incurred, we present the process that was involved in the hospital that served as one of our case studies. First, a job description had to be done for all occupations by people of the HR services. The job description was then presented to the supervisors who submitted them to all workers for approval. Four pay equity committees (one for every bargaining unit and one for non-unionised workers), each of them involving 5 or 6 persons then proceeded to the job evaluation. This took many weeks, involving a countless number of meetings. The results of the job evaluation and the consequent wage adjustment were then presented to supervisors before being posted. Once the plan was posted, HR officers had to meet a large number of workers to discuss the results and the wage adjustment they received. The pay equity law also requires that firms maintain pay equity, which means that every time a job description is changed (because of a re-engineering, because a worker uses a new equipment, etc.), the pay equity process has to be done again.

When the pay equity system was first conceived in Ontario, it is not likely that the complexities and "litigation nightmare" were anticipated 11. Nor were the long delays and legal wranglings of the Tribunal over seemingly simple, but inherently complex and important matters 12. Examples

---

10 Experts in the area have indicated to us that consultants costs would be typically in the neighborhood of $10,000 to $15,000 if mostly internal people were involved in the evaluation, with the figure being more in the neighborhood of $25,000 for the larger consulting firms. In general, a consultant’s intervention involved: 1) training and explanation of the requirements of the law; 2) assistance for job description; 3) suggestion of a job evaluation method and assistance to implement it; 4) participation in the pay equity committee and 5) suggestions of wage adjustments.

11 These litigation issues are discussed in Fudge (1991), Fudge and McDermott (1991), and McDermott (1991).

12 From April 1, 1996 to March 31, 1977, 113 files were active at the Tribunal, with 73 carried over from the
of issues dealt with by the Tribunal include\textsuperscript{13}: the definition of the establishment and the employer; gender composition of the job; gender bias in job evaluation; appropriateness of certain male comparators; exemptions for bargaining strength; retroactivity in the wage adjustment; language difficulties in understanding the pay equity plan; disclosure of documents; the possibility of an "officially induced error" if a Review Officer gives an opinion; and the rights of employees to paid time off to participate in the Tribunal hearing.

The job-to-job comparison procedures were likely utilised because of the apparent simplicity of comparing one job to another once the appropriate comparison group was established -- not anticipating the complexity of selecting the comparison group. This could be minimised by allowing the estimation of paylines, but that too can give rise to endless technical wrangling. The problem of a lack of male comparator jobs was not likely anticipated, nor was the complexity of proportionate value methods (with their paylines) or proxy comparisons to close those loopholes. Regulations beget further regulations to close the loopholes, with the process often bordering on the impenetrable to all but a few. Of course, there is money to be made by such complexities, but that money does not go to those for whom the system was designed to assist.

**Transparent Process and Mechanisms**

In general, it is desirable that a program be transparent, with its processes well understood. This facilitates the implementation as well as "buy-in" by the stakeholders, and it reduces that suspicion that is natural to arise when new programs are introduced.

In one case before the Tribunal\textsuperscript{14}, the employer retained the services of a major consulting company to provide the parties with consultative services and to draft material necessary for the pay equity plan. Even with that material, in their decision the Tribunal indicated: "What is not clear from the evidence is how the parties arrive at the gender dominance of the job classes." (p. 3). "The parties did not consider benefits in the calculation of job rates." (p. 3). "The parties agreed to develop a banding system of 30 points per band. We have no evidence as to why a banding structure of 30 points was agreed to especially when the total maximum number of points in the system is 1000." (p. 4). "The parties also agreed to a pay policy of $0.96 job rate differential from band to band. This pay policy or wage line, was developed by simply identifying the highest paid job and the lowest scored job – both of which happened to have been male-dominated job classes – and connecting the two points disregarding the rest of the

---

\textsuperscript{13} These issues are based on a perusal of the cases on file in the Pay Equity Commission. Kelly (1994, Appendix) outlines issues involved in early pay equity cases, and the annual reports of the Commission contain summaries of key Tribunal decisions.

\textsuperscript{14} Essex, November 15, 1996.
evaluated jobs. We do not have any evidence as to what formula, if any, was used to determine the job rates for each band." (p. 5). Clearly, when the transparency of the process is not evident to the Tribunal, it will not likely be evident to the person on the shop floor or to the lay public.

The complexities of the pay equity process as described above make it doubtful that the process is transparent and well understood. This is certainly the case for the person on the "shop floor" and it is even likely to be true for higher level personnel. At the hospital that served as one of our case studies, the HR manager said that the implementation of the pay equity process would not have been possible without the training provided by the Pay equity commission. At the telecommunication firm, a consultant was hired specifically to understand the requirements of the law.

Furthermore, the parties involved in administering and litigating the system can have a vested interest in making the system complex since it can increase the demand for their services. Complexity tends to be a natural by-product of the involvement of lawyers and economists. As stated by Willborn (1989, p. 157): "This complexity should be expected. Many lawyers and economists are interested in comparable worth, and if there is one universal truth, it is that the complexity of an issue increases in direct proportion to the number of economists and lawyers dealing with it."

This complexity makes the program vulnerable to being interpreted only by "experts". It is also likely to raise suspicion even by those who receive an adjustment. Recipients may not even know that their wage adjustments emanated from pay equity. Evidence from the Minnesota experience indicated, for example, that few knew that the substantial wage increase they received was from a pay equity adjustment15. Apparently neither the union nor management wanted that known because then they could claim credit for the increase.

Flexible, Adaptable and Reversible

In general, it is desirable for a program to be flexible and adaptable so that it can adjust to a changing environment, and even dissipate if the need dissipates. Programs can develop a life of their own, especially if bureaucratic empires and vested self-interests develop around them. Even those who are regulated, and who initially strongly resisted the program, often support their continuation in part because they have already adjusted to the program, and they want to make sure that new competitors will also have to comply.

The Ontario pay equity program has some built-in checks in this area. It has a "sunset" clause since, according to our information, the Pay Equity Office is not registering any new pay equity plan since the beginning of 1999. Thus, it can be repealed (as was Ontario’s short-lived Employment Equity law), although subcomponents like proxy comparisons cannot be repealed if

---

15 Evans and Nelson (1989) report that almost half (43 percent) of the employees who received a pay equity wage adjustment were not aware that they received one, in spite of the substantial magnitude of the adjustment (averaging US $2,200 per recipient).
such changes have a disparate impact on particular subgroups. The Tribunal and the Human Rights Board of Inquiry have recently merged, and the library of the Commission (along with the libraries of the Ontario Labour Relations Board) were merged into the library of the Workplace Safety and Insurance Appeals Tribunal. Both the Read (1996) report and the Red Tape Review (Sheehan, 1997) recommended reverting back to a complaints-based approach, and the Read report recommended that the Pay Equity Office become a specialised, but separate Board of the Ministry of Labour. She also recommended elimination of the requirement that the Tribunal be tripartite. The effective implementation can also be affected by budget changes. In essence, the policy does not appear cast in stone if needs change. Furthermore, there is no evidence that the original needs for the program have dissipated over time in that the discriminatory pay gap that could be reduced by pay equity has now been closed.

Politically Acceptable

In general, it is considered desirable if a program is politically acceptable to the main stakeholder so as to facilitate "buy-in" or at least reduce resistance that can otherwise thwart the establishment and implementation of the program. This can be especially important in programs like pay equity since the complexity provides ample opportunity for thwarting the intent. Of course, there is a trade-off since political acceptability can also lead to compromises that effectively emaciate the program, especially since the "powers-to-be" that have to be placated presumably gave rise to the problem in the first place.

The Ontario pay equity program has numerous features designed to facilitate political acceptability. Union "buy-in" was presumably facilitated by various features: separate pay equity plans for each bargaining unit and for non-bargaining units; exemptions for pay differences arising from seniority or bargaining strength (the latter after pay equity has been achieved); the potential "deemed" approval by the Pay Equity Commission of plans that are negotiated by an employer and union. Unions may also have regarded pay equity as a mechanism to enlarge the pool of funds available for bargaining. This can especially be the case in the public sector, where there may have been the hope that special pay equity funds would become available from the funding units. Even some public sector employers may have regarded pay equity as a mechanism to simply expand their budget if special funds would be forthcoming. Resistance on the part of employers was also likely reduced by a number of other features: exemptions for merit, skill shortages, red-circling, temporary training and development, and casual employees; phasing first into the public sector then into large private employers and then smaller employers; optional development of a pay equity plan for employers with 10 to 49 employees and exemptions for employers with fewer than 10 employees; maximum adjustment of 1 percent of payroll per year until pay equity is achieved; exemption of private sector employers from proxy comparisons; and the fact that the plans only had to be posted, but not filed with the Commission. Of course, there is also the possibility that employer resistance was reduced by the fact that the complexity of the legislation would make it near impossible to enforce in a systematic fashion.

---

16 In general, the recommendations of the Read report have been put "on hold" at least for the time being.
SUMMARY AND CONCLUDING OBSERVATIONS

Pay equity can be a complex procedure even if it is intended to be simple. That very complexity can give rise to negative features when judged according to program evaluation procedures. Not all persons in the target groups are assisted and in a manner sufficient to fully redress their problem. Significant spillover benefits can leak to non-target groups. Otherwise similar groups can receive very different treatment. The process may foster rather than break down the sex segregation of jobs. Significant real resources can be used up in the administration and implementation of the complex procedures. Such procedures are not transparent and well understood by the parties.

Our assessment is that these negative features especially associated with the complexity of the policy are a significant barrier to the effective implementation and wider adoption of the policy. Pay equity runs the very real risk of "imploding" under its own weight. The problem is exacerbated by the fact that simple rules for its application are elusive. Rather than closing loopholes, further regulations seem to add more complexity, begetting even further regulations. The pie gets eaten up in the process of administering the pie.

These problems appear to be inherent in the nature of the policy, at least when it is applied proactively and on unit-by-unit bases, as is inevitable when applied to the private sector. This raises the danger that the legislation will be ignored because it is unwieldy, a possibility enhanced by the fact that settlements have been much smaller in the private sector than the public sector.

Pay equity was instituted in large part because of the limitations and ineffectiveness of conventional equal pay policies in reducing the male-female wage gap. Unfortunately, we know remarkably little about the overall effectiveness of initiatives like Ontario’s pay equity initiatives. We know that Ontario is a leader in the world in the area of pay equity, and we know that its system has turned out to be complex, but we do not have an answer to the bottom-line question: has pay equity been successful in closing the wage gap or in achieving other social objectives?

---

17 Conventional equal pay policies in Ontario were found to be ineffective in reducing the male-female pay gap, whether comparisons were made across establishments before and after the initiation of the policy (Gunderson, 1975) or based on longer time series comparisons surrounding the implementation of the policy (Gunderson, 1985a).
### APPENDIX 1

**SOME FACTS**\(^a\) about the FIRMS\(^b\) in our CASE STUDIES and IMPLEMENTATION of PAY EQUITY

<table>
<thead>
<tr>
<th></th>
<th>Firm 1</th>
<th>Firm 2</th>
<th>Firm 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Description of the FIRMS</strong></td>
<td>Metallurgy</td>
<td>Telecommunication</td>
<td>Medical Services / Public Sector</td>
</tr>
<tr>
<td>Sector</td>
<td></td>
<td></td>
<td>37</td>
</tr>
<tr>
<td>Age</td>
<td>58 years</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Localization</td>
<td>Northeast Ontario</td>
<td>Northeast Ontario</td>
<td>Northeast Ontario</td>
</tr>
<tr>
<td>Markets/clientele</td>
<td>75% of the sales in United States</td>
<td>North America</td>
<td>Northeast Ontario</td>
</tr>
<tr>
<td><strong>II. Description of the WORKFORCE</strong></td>
<td></td>
<td></td>
<td>700 Nurses, professionals in medical services, clerks</td>
</tr>
<tr>
<td>Number of employees</td>
<td>500</td>
<td>2000</td>
<td></td>
</tr>
<tr>
<td>Principal types of jobs</td>
<td>Blue collars manufacturing jobs, technicians, engineers</td>
<td>Assembly workers/blue collars Engineering level. group.</td>
<td></td>
</tr>
<tr>
<td>% of female</td>
<td>Less than 10%</td>
<td>55%</td>
<td>70%</td>
</tr>
<tr>
<td>Presence of an union</td>
<td>Yes, for all workers except managers and engineers</td>
<td>For blue collars</td>
<td>70% of workers, 3 unions are represented</td>
</tr>
<tr>
<td><strong>III. Implementation of Pay Equity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wage adjustments paid in</td>
<td>1990</td>
<td>1990</td>
<td>1990-91-92</td>
</tr>
<tr>
<td>Cooperation between plants</td>
<td>Discussion with other Ontario plants of the company</td>
<td>Cooperation between the different plants of the company</td>
<td>local</td>
</tr>
<tr>
<td>Pay equity committee</td>
<td>No</td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>Existence of a job evaluation system</td>
<td>Two systems existed, one for clerical, one for non-clerical</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Hiring of a consultant</td>
<td>Yes, to evaluate the job evaluation system</td>
<td>Yes, to better understand the requirements of the law</td>
<td>No</td>
</tr>
<tr>
<td><strong>IV. Outcome</strong></td>
<td>One category of workers received a 30$ adjustment/month</td>
<td>300 persons received a 200-500$/yr adjustment</td>
<td>40¢ - 2.42$/hour</td>
</tr>
<tr>
<td>Litigation</td>
<td>No</td>
<td>A dozen complaints settled at the local level</td>
<td>Complaints settled at the local level, many info. request about the evaluation process</td>
</tr>
<tr>
<td>Other costs</td>
<td></td>
<td></td>
<td>Long process for job description and job evaluation</td>
</tr>
<tr>
<td>Other benefits</td>
<td>«Given that a very small wage adjustment was required, the pay equity process was an occasion to reinforce employees’ loyalty by showing them they were treated fairly»</td>
<td>Increase awareness about the way women are treated</td>
<td>Pay equity has helped to improve the job evaluation system</td>
</tr>
</tbody>
</table>

\(^a\) Information is related to the period when pay equity was implemented (1990).

\(^b\) In the case of firms 1 and 2, our information is relevant for one plant of the firm.
REFERENCES AND WORKS CITED


Baker, Michael; Fortin, Nicole. 1998. "Gender composition and wages: why is Canada different than the United States?", CIRANO working paper no. 98s-34, Montreal.


---. Forthcoming. “The evolution and mechanics of pay equity in Ontario”, This Volume


Matilla, J. Peter; Orazem, Peter; Turk, Alex. 1996. "Identifying state government factor demands from comparable worth adjustments." Iowa State University working paper.


Liste des publications au CIRANO *

Cahiers CIRANO / CIRANO Papers (ISSN 1198-8169)

99c-1 Les Expos, l'OSM, les universités, les hôpitaux : Le coût d'un déficit de 400 000 emplois au Québec — Expos, Montréal Symphony Orchestra, Universities, Hospitals: The Cost of a 400,000-Job Shortfall in Québec / Marcel Boyer
96c-1 Peut-on créer des emplois en réglementant le temps de travail ? / Robert Lacroix
95c-2 Anomalies de marché et sélection des titres au Canada / Richard Guay, Jean-François L'Her et Jean-Marc Suret
95c-1 La réglementation incitative / Marcel Boyer
94c-3 L'importance relative des gouvernements: causes, conséquences et organisations alternative / Claude Montmarquette
94c-2 Commercial Bankruptcy and Financial Reorganization in Canada / Jocelyn Martel
94c-1 Faire ou faire faire : La perspective de l'économie des organisations / Michel Patry

Série Scientifique / Scientific Series (ISSN 1198-8177)

99s-41 Travail pendant les études, performance scolaire et abandon / Marcel Dagenais, Claude Montmarquette, Daniel Parent et Nathalie Viennot-Briot
99s-40 Recursive Intergenerational Utility in Global Climate Risk Modeling / Minh Ha-Duong et Nicolas Treich
99s-39 Transition vers le marché du travail au Canada : Portrait de la situation actuelle et perspective historique / Daniel Parent
99s-38 Program Evaluation Criteria Applied to Pay Equity in Ontario / Morley Gunderson et Paul Lanoie
99s-37 Optimal Justice in a General Equilibrium Model with Non Observable Individual Productivities / Tarek M. Harchaoui et Pierre Lasserre
99s-36 Déterminants du recours au travail atypique : Une étude des travailleurs à statut précaire dans les organisations québécoises / Michel Tremblay, Patricia Bielman, Gilles Simard et Denis Chênevert
99s-35 Testing the Option Value Theory of Irreversible Investment / Tarek M. Harchaoui et Pierre Lasserre
99s-34 A Resource Based View of the Information Systems Sourcing Mode / Vital Roy et Benoit Aubert
99s-32 Tax Incentives: Issue and Evidence / Pierre Mohnen

* Vous pouvez consulter la liste complète des publications du CIRANO et les publications elles-mêmes sur notre site World Wide Web à l'adresse suivante :
http://www.cirano.umontreal.ca/publication/documents.html