Introduction

Despite considerable progress in narrowing the gender pay gap in recent years, substantial differences in pay between men and women persist in all industrialized countries. However, the size of the gender pay gap varies considerably across countries. In my talk today I will first summarize the extent of gender pay differences in the advanced nations and then move on to consider explanations for the considerable international variation in the gender pay gap that we observe. I will close with some thoughts on the implications for public policy of the analysis of the sources of international differences in the gender pay gap presented here.

International Differences in the Gender Pay Gap

Figure 1 illustrates both the gains that women in most advanced nations have made in recent years in reducing the gender pay gap and also the differences in pay between men and women that remain. It shows the gender earnings ratio—that is the earnings of women divided by the earnings of men—giving the average for eleven to seventeen advanced nations and also for the United States and Canada separately. The ratio is shown at three points: around 1980, 1990, and 1996. The ratios are based on the weekly earnings of full-time workers and so net out, as far as possible, the differences in hours worked of men and women.¹

¹ Figures 1 and 2 are both based on unpublished OECD data presented in Blau and Kahn (2000).
The number of countries included in the average in each year depends on the availability of the data, but the trends are similar when we restrict ourselves to a consistent set of countries with information on earnings in each of the years shown. Looking first at the all-country average, we see that there was a substantial increase in the gender earnings ratio over this period. In 1980, women earned, on average, about 70 percent of what men earned; by 1996 they earned 78 percent. Of course, even the 78 percent figure falls considerably short of 100 percent. That is, while gender differences in pay have narrowed considerably, the gender pay gap remains substantial.

How did the United States and Canada fare during this period? In the United States, progress in reducing the gender gap was faster than average. Thus, while the gender earnings ratio in the United States was substantially lower than the average for all countries in 1980—63 percent compared to the overall average of 70 percent—by 1996 the figure for the United States of 76 percent was only slightly below the all-country average of 78 percent. Like the United States, Canada also started with a lower-than-average gender ratio of 63 percent in 1980s. However, unlike women in the United States, Canadian women advanced at about the same pace as the average for all the included countries. This meant that by 1996, the Canadian gender earnings ratio of 70 percent remained substantially below the all-country average of 78 percent.

Figure 2 gives further information on international differences in the gender pay ratio in 1996, the most recent year available. As may be seen in the figure, while in all countries women earn less than men on average, there is considerable variation in the gender pay gap across countries. France had the highest ratio, with women earning 90 percent of men’s earnings; Japan had the lowest ratio, with women earning 64 percent of men’s earnings.

One question we might raise is, what accounts for the international variation in the gender pay ratio shown in Figure 2? In particular, is the relative position of the United States at about the middle of the pack or of Canada towards the bottom what we would have expected? To address these questions we must first consider in general terms the fundamental determinants of the gender pay gap.
Determinants of the Gender Pay Gap: Qualifications and Discrimination

Economists have devoted considerable attention to analyzing the sources of the gender pay gap. Traditionally, they have emphasized two broad sets of explanations:

**Gender Differences in Human Capital Investments or Other Gender Differences in Qualifications.**

Explanations based on gender differences in qualifications have particularly focused on the gender differences in work force attachment that have resulted from women’s traditional roles within the family. While such gender differences in work force attachment have decreased in recent years, differences nonetheless remain. Thus, women in the work force have accumulated less work experience than men, on average, and are more likely to have had breaks in their careers to take time out for family responsibilities. Differences between men and women in educational attainment tend to be small in the advanced nations. However, there are significant gender differences in fields of study and in professional degrees that contribute to the gender pay gap. Differences in the preferences of women and men for different types of occupations may also be a factor.

**Labour Market Discrimination against Women, or Differences in the Treatment of Equally Qualified Men and Women.**

Economists have offered various possible motives for labour market discrimination, including personal prejudices of employers, co-workers, or customers or beliefs on the part of employers that women are, on average, less qualified or more apt to quit their jobs than men.

These two sets of explanations—gender differences in qualifications and labour market discrimination against women—are not necessarily mutually exclusive. Both may play a role in explaining the gender pay gap. Indeed, empirical research for the United States, Canada, and other advanced countries provides considerable support for each set of factors in explaining the gender pay gap. Moreover, there may also be important feedback effects if discrimination in the labour market reduces women’s incentives to invest in their qualifications and women’s lower qualifications reinforce statistical discrimination against them.

Determinants of the Gender Pay Gap: Wage Structure

Following the reasoning in the previous section, we might look to the two explanations—gender differences in qualifications and labour market discrimination—to understand the sources of the international variation that we saw in the gender ratios in Figure 2. And some of the rankings in Figure 2 do make sense from this perspective. For example, two of the countries with exceptionally high ratios of female-to-male earnings, Australia and Sweden, have had specific policies that might account for their position. Australia has instituted a form of comparable worth on a national level. A comparable-worth policy realigns pay in predominately female occupations so that incumbents receive equal pay for work of ‘equal value’ to the firm. By reducing the wage penalty to employment in traditionally female jobs, it might be expected to reduce the gender pay gap. Sweden has adopted a number of policies related to family leave and child care that are designed to equalize gender roles in the family and men’s and women’s outcomes in the labour market. However, other rankings in Figure 2 seem odd. Taking the U.S. ranking as an example, is it likely that Italian or French women are better qualified relative to their male counterparts than U.S. women? Is it likely that they encounter less discrimination?

I want to be perfectly clear in the question I am raising. I do not dispute that differences in qualifications between men and women and labour market discrimination help to explain the gender pay gap within countries at a point in time. However, from the examples noted here it seems a bit unlikely that these factors could fully account for the variety of outcomes across countries shown in Figure 2.

2 For evidence on the United States and Canada see, for example, Blau and Kahn (2000) and Drolet (2001) and the references therein.
Indeed, comparing women in the United States to those in other countries where the gender pay gap is considerably smaller, there seems to be little reason to believe that American women are either less well qualified or that U.S. women encounter more discrimination than women in these other countries. Let me briefly summarize some evidence that would support this claim.

While data on actual labour market experience are not generally available, other evidence suggests that American women tend to be relatively more committed to the labour force than women in many of the other countries. Female labour force participation rates are relatively high in the United States, as is the share of employed women working full-time. Occupational segregation by sex tends to be lower in the United States than elsewhere (Blau and Kahn 1996; Blau, Ferber, and Winkler 2002). This suggests either that U.S. women have greater labour force attachment and job skills than women elsewhere or that American women encounter less discrimination than women in other countries in gaining access to traditionally male jobs.

Nor does it appear that gender-specific policies account for the relatively modest United States gender pay ratio. Virtually all OECD countries had passed equal pay and equal opportunity laws by the mid-1980s, but the United States implemented its anti-discrimination legislation before most other countries (Blau and Kahn 1996). Motivated in part by such anomalies, my colleague Lawrence Kahn and I have proposed a third factor, one not traditionally considered in economic analyses of the gender pay gap, which might help us to better understand international variation in the gender pay gap, as well as the determinants of the gender pay gap in general (Blau and Kahn 1996). That factor is overall wage structure. Wage structure refers to the rewards that the labour market generally offers to workers for various skills and the premiums paid for employment in high-paying industries or occupations.

Upon further reflection, it might be argued that both the human capital and discrimination explanations of the pay gap suggest an important role for wage structure in explaining international differences in the gender pay gap. For example, as I have noted, despite important recent gains, women still have less experience than men, on average. This means that if the market return to experience (that is, the increase in wages associated with each additional year of experience) is higher in one country—let’s call it country A—than in another country—let’s call it country B—then country A will tend to have a larger gender pay gap. In addition, both the human capital and discrimination models suggest reasons why women are likely to be employed in different occupations and perhaps in different industries than men. This implies that higher rewards for employment in ‘male’ occupations or industries in one country, say country A, will also place women at a greater earnings disadvantage.

**Wage Structure and International Differences in the Gender Pay Gap**

How does wage structure relate to international differences in the gender pay gap? Wage inequality is much higher in the United States than elsewhere. This reflects higher returns to skills as well as larger premiums for employment in high-wage occupations and industries in the United States than in other countries.4

Institutional factors appear to be important in explaining higher U.S. returns to skill and sectorial differentials. Among the OECD nations, the United States stands at an extreme, with an especially low rate of collective bargaining coverage, pay setting which is often determined at the plant level even within the union sector, and an absence of formal or informal mechanisms to extend union-negotiated pay rates to nonunion workers.

3 We draw on an analysis proposed by John, Murphy, and Pierce (1991) for analyzing trends over time in the black-white pay gap in the U.S.

4 A more dispersed distribution of productivity characteristics in the United States than in other countries also plays a role (Blau and Kahn 2002).
Further, minimum wages are lower relative to the median in the United States than in most other Western countries (Blau and Kahn, 2002). Union pay-setting and high legislated minimum wages have the effect of bringing up the bottom of the wage distribution. In all countries, women workers tend to be disproportionately clustered at the bottom of the wage distribution. Thus, wage-setting institutions that compress the wage distribution and bring up the bottom will disproportionately benefit women and tend to lower the gender pay gap.

In our research, Lawrence Kahn and I have found considerable evidence that this factor—the more laissez-faire labour market in the United States and the resulting higher wage inequality—is sufficient to fully account for the relatively mediocre ranking of the U.S. gender ratio. Putting this somewhat differently, the United States would have a gender pay ratio as high as Australia or Sweden if it had their compressed wage distributions with their lower returns to skills and smaller sectorial differentials. We have also found that wage structure is an important factor accounting for international differences in the gender pay gap across a broad range of countries.5

What do our findings imply about Canada? On the one hand, our findings suggest that wage structure might be a factor contributing to the relatively low gender pay ratio in Canada compared to the other OECD countries that we saw in Figure 2. While Canada has a higher rate of unionization and collective bargaining coverage than the United States, it still stands towards the laissez-faire end of the continuum compared to the other OECD countries.6 Likely for this reason, Canada has a relatively high level of wage inequality—close to the U.S. level (Blau and Kahn, 2002). On the other hand, wage inequality is no higher in Canada than in the United States, yet the gender pay ratio in Canada is a good bit lower than the U.S. gender ratio.7 This suggests that the factors traditionally considered by economists, gender differences in qualifications and labour market discrimination, might help to explain the difference between the United States and Canada in the gender pay gap.

**Trends over Time in the United States Gender Pay Gap**

While these findings provide useful insights into the sources of international differences in the gender pay ratio, they raise a question about the large increase in the gender ratio in the United States in recent years. During the period that this increase in the gender pay ratio occurred, wage inequality in the United States was increasing. Our analysis implies that in the face of rising wage inequality, American women were essentially swimming upstream in a labour market growing increasingly unfavourable for workers with below-average skills. In the face of rising rewards to labour market skills and increasing returns to employment in male occupations and industries, it should have been harder for women in the United States to narrow the gender pay gap. Yet the gender pay gap did decline. How can we explain this apparent contradiction?

A study that I did with Lawrence Kahn (Blau and Kahn 1997) indicates that U.S. women were able to more than overcome the effect of adverse shifts in overall wage structure (that is rising labour market returns to skills and to employment in high-paying sectors) on their relative wages by improving their qualifications relative to men’s. So, although women continue on average to have lower skills than men, particularly

---

5 See Blau and Kahn (2000) and references therein.
6 In 1994, union density was 38 percent and collective bargaining coverage was 36 percent in Canada compared to union density of 16 percent and collective bargaining coverage of 18 percent in the United States, and union density of 40 percent and collective bargaining coverage of 68 percent in the OECD, on average (Blau and Kahn 2002).
7 Note that the difference in the U.S. and Canadian gender earnings ratios might be a bit smaller than shown in Figure 2. Data published by Statistics Canada put the gender ratio for the 1994–98 period at 71.5, slightly higher than the 69.8 figure that we obtained from the unpublished OECD data.
It is the differences in qualifications and in the labour market treatment of men and women that constitute the basic cause of the gender pay gap.

Policy Implications

I have argued here that overall wage structure—the rewards that the labour market generally offers to workers for various skills and the premiums paid for employment in high-paying sectors—is a major determinant of the gender pay gap. A potential policy implication that follows from this is that outcomes for women are affected not only by policies specifically targeted at them but also by wage structure in general. This means that policies designed to alter wage structure, such as the promotion of more centralized wage determination, the extension of collective bargaining agreements to the nonunion sector, or the establishment of relatively high minimum wages, constitute possible approaches to improving wage outcomes for women. While narrowing the gender pay gap is a potential benefit of such policies, it is important to bear in mind that such policies also have costs that need to be balanced against this benefit. These costs may be substantial.

First, there is the concern that the imposition of relatively high wage floors through union wage-setting or minimum-wage legislation may create unemployment. Some evidence suggests that the inflexible labour market institutions in many of the OECD countries have contributed to their relatively high unemployment rates and created employment problems for groups like youth and older workers. Second, centralized wage setting may allow firms too little flexibility to respond to differences in market conditions across industries or at the local level. Moreover, the compression of wage premiums for skills may dampen workers’ incentives to acquire appropriate training. Finally, overly ambitious attempts to regulate the labour market may result in the growth of an uncovered sector.

These potential costs to direct government intervention in wage setting suggest caution in using this approach to attack gender differentials. An additional issue is that developments in the 1980s and 1990s have led to some movement towards the decentralization of bargaining in many industrialized countries (Katz 1993). As the protection of centralized wage structures falls away, women who continue to have less human capital than men, on average, and who continue to encounter labour market discrimination are left exposed to downward pressures on their relative wages. Thus, the fundamental answer to reducing the gender pay gap may well rest with more conventional policies specifically designed to increase women’s human capital and reduce discrimination against them. In a way, this conclusion is not entirely surprising, in that it is the differences in qualifications and in the labour market treatment of men and women that constitute the basic cause of the gender pay gap. Were there no such differences, men and women would be similarly affected by overall wage structure and by changes in it.

What about Comparable Worth?

In closing, I would like to say a few words about one particular policy that combines elements of a policy targeted at wage structure in general and a policy specifically targeted at women. This policy is known as comparable worth, which, as I noted previously, is designed to
raise the relative pay of women by realigning pay rates in predominantly female jobs to guarantee equal pay for work of equal value to the firm. Since predominantly female jobs tend to pay less than predominantly male jobs, even for workers with similar qualifications, comparable-worth pay adjustments hold considerable potential for reducing the gender pay gap. And indeed such policies appear to have contributed to a narrowing of the pay gap in Australia, a country that has a large role for government and unions in wage setting. One concern raised by economists about such an approach, however, is that it might have negative effects on women’s employment. Thus far, the evidence suggests that such adverse employment effects are small, although this issue still remains a concern.

Another question that might be raised about comparable worth is whether it would be feasible to implement such a policy in a more decentralized, market-oriented labour market like that of Canada or the United States. In this respect, a recent study that focused on the consequences of Ontario’s pay equity initiative, that began in the early 1990s, may be instructive (Baker and Fortin 2000). The results of this study suggest some caution in implementing comparable worth in such circumstances. Substantial lapses in compliance and implementation of the law were found. These tended to centre on small firms that lacked the resources to undertake the necessary job evaluation programs and often did not have a sufficient sample of male and female jobs to make meaningful comparisons. Since such small firms employed the majority of both male and female workers in Ontario, little evidence was found of a positive impact of the pay equity policy on women’s relative pay overall. Even among large firms, where compliance was fairly complete, estimated positive effects on women’s pay in female jobs were modest and typically statistically insignificant. Though more will undoubtedly be learned as this legislation is in place longer, the results of this study reinforce the point I made above. That is, the fundamental answer to reducing the gender pay gap may well rest with more conventional policies specifically designed to increase women’s human capital and reduce discrimination against them.

References


