INTERNATIONAL COMPARISONS OF MALE WAGE INEQUALITY; ARE THE FINDINGS ROBUST?[1]

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Abstract

According to Blau and Kahn (1996) international differences in male wage inequality cannot be explained by a simple model of supply and demand for skill. We argue that this conclusion may be due to employing an inappropriate measure of skill. Their measure is based on the strong assumption that years of schooling and years of experi ence are comparable across countries. This paper employs a different skill measure obtained from an international comparative literacy test. Using this alternative measure of skill, we find that international differences in male wage inequality by skill between the U.S. on the one hand, and Canada, Germany, the Netherlands, Sweden and Switzerland on the other hand, are consistent with relative differences in demand and supply of skill.

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1 Introduction

In a recent study Blau and Kahn (1996) analyze international differences in male wage inequality. The key conclusion of their paper is that the large degree of wage inequality in the U.S. relative to other countries is primarily attributable to the more decentralized labor market institutions in the U.S. rather than to market forces.

In their paper, Blau and Kahn (B&K in the sequel) apply a methodology developed to analyze changes in wage inequality within one country over time, to analyze differences in wage inequality across countries at a particular point in time. Instead of having a base year, now a certain country serves as reference. Most country-specific studies in this line of research investigate to what extent developments in the demand for and supply of different skill categories may have caused the observed changes in wage inequality. Skill categories are defined in terms of level of education or number of years of work experience. B&K follow this method by estimating a world-wide wage equation and use the estimated coefficients for schooling and experience (squared) as weights to calculate for each observation in their sample the variable SKILL. Based on the value of this variable, people are assigned to the low, intermediate or high skill categories.

But while years of schooling and years of experience are correct measures to describe the development of demand and supply of skill within a particular country over time, we think that this might not be the case when comparing supply and demand for skill across countries. The reason is that the measure assumes comparability of years of schooling and years of experience across countries. This ignores possible complications with international comparisons of education and training systems. Moreover, the way in which the skill measure is constructed might not be suitable because the weights attached to the schooling and experience terms can be interpreted as prices of these attributes thereby reflecting demand and supply factors. This is inappropriate for a measure that is used to determine the quantities supplied and demanded. In this paper, we use a unique data set which includes for individuals in 7 different countries scores on literacy and numeracy tests which have been developed with the explicit aim of being comparable across countries. We use these test scores as an alternative measure of skill; this measure makes no assumptions about comparability of education and training systems across countries, nor does it use implicit prices of skill components to proxy parameters of a skill production function. The main purpose of this paper is to test whether the conclusion that a simple demand and supply model cannot explain international differences in wage inequality, still holds when this alternative skill measure is employed.

To make sure that different results are due to the use of a different skill measure and are not caused by any peculiarity of our data set, we start this paper with a replication of the relevant parts of B&K's analysis, using the skill measure obtained from a world-wide wage equation. In addition to serving as a benchmark for our analysis, the replication results are interesting for their own sake. The data set used in this paper has been collected in 1995. This enables us to see whether the differences in wage inequality documented by B&K for the 1980s, are still present in 1995.

The paper proceeds as follows. Section 2 provides more details about the procedure developed by Blau and Kahn and their results. Section 3 describes the data set used in this paper. Section 4 presents and discusses the results from our replication of the B&K paper.

Section 5 deals with the sensitivity of the results when a different skill measure is employed. Section 6 summarizes and concludes.

2 Methodological framework

During the past decades, many western countries have witnessed growing wage inequality. In the economic literature this started a debate about whether this development has been caused by shifts in demand and supply, or whether institutions play a dominant role. Empirical studies in this field, typically investigate what happened to inequality within a country during a specific period. Many of these country-studies conclude that a simple demand and supply model does a good job in explaining the observed trends (examples are: Katz and Murphy (1992) for the U.S.; Schmitt (1995) for the U.K.; Edin and Holmlund (1995) for Sweden).

But while a demand and supply framework explains fairly well what happened to wage inequality in a particular country, its usefulness to explain international differences in wage inequality is less clear. Freeman and Katz (1995, p.5-6) argue that because developed countries operate in the same world markets with similar technology, demand forces have similar impacts across countries. Supply patterns of skilled labor may be different across countries, but these different patterns are "unlikely by themselves to explain cross-country variation in changes in wage inequality fully". Contrary to this, are the results from an analysis of changes of wage inequality across countries by Gottschalk and Joyce (1995). They conclude that "the existence of wage setting institutions does not necessarily imply that these institutions impose binding constraints", and "we have shown that market forces provide a better explanation for changes in wages, earnings and unemployment in several of these countries" (p.19/20).

The statement by Freeman and Katz is, however, supported by the results from the study by Blau and Kahn, who conclude that "differences in relative supplies and demands for skill in other countries compared to the United States are not broadly consistent with the observed pattern of relative wages by skill in other countries compared to the United States" (p.823), while "labor market institutions ... provide the most persuasive explanation for these patterns" (p.791). Note that the empirical studies by Gottschalk and Joyce, and Blau and Kahn are not strictly comparable as the first deals with differences in changes of wage inequality across countries, while the findings by Blau and Kahn refer to differences in levels of wage inequality across countries. Nevertheless, it seems fair to conclude that different studies dealing with the role of demand and supply factors to explain patterns of wage inequality across countries, provide conflicting results.

B&K's conclusion regarding the inconsistency of the demand and supply framework is based on applying a method proposed by Katz and Murphy (1992). The larger spread in the U.S. can be explained by demand and supply factors if net supply of low skilled workers is larger in the U.S. than elsewhere. B&K find exactly the contrary; the average net supply index for the low-skill group is smaller than that for the intermediate skill group. This cannot explain why lower-skilled workers have higher relative wages in other countries than in the United States. Also for high-skilled workers results are inconsistent with a demand and supply framework. High-skill workers are less scarce relative to low-skill

workers in the U.S. than elsewhere, but they earn more relative to low -skill workers in the U.S. than in the other countries.

The method through which the results of the demand and supply analysis of different skills categories were obtained, is the following. First, a world -wide wage equation is estimated using years of schooling, experience, experience squared and country dummies as regressors. Then, for each case in the sample a variable SKILL is calculated using the estimated coefficients of schooling, experience and experience squared. Next, based on the distribution of the variable SKILL in the U.S., observations in other countries are allotted to the low, intermediate or high -skill category. A person who has a SKILL score below the value of the 33th percentile in the U.S. is assigned to the low -skill group. Observati ons with SKILL values between the 33th and 67th percen tiles of the U.S. distribution of skills are allocated to the middle -skill group. While the remaining cases go into the high -skill group.

The demand index for skill group k in country j is defined as $\ln(1+\Delta D_k)$, where:

$$\Delta D_k = \Sigma_o c_{ok} \frac{\Delta E_o}{E_k}.$$

c_{ok} is the share of skill group k in occupation-industry cell o in the U.S. [5], ΔE_o is the difference between country j's and the U.S. shares of total labor input employed in cell o, and E_k is the share of total labor input accounted for by skill group k in the United States. The demand index measures the degree to which the occupation -industry structure in country j favors skill group k relative to the United States.

The expression of the supply index for skill group k in country j is:

$$\Delta S_k = \ln E_{kj} - \ln E_{ku},$$

where E_{kj} and E_{ku} are the shares of country j's and the U.S. total labor input consisting of skill group k, based on the skill group cutoffs in the United States. The supply index expresses the relative share of each skill group in a country's workforce relative to the reference country.

Combining the two indexes gives the net supply index for skill group k in country j as:

$$\Delta NS_k = \Delta S_k - \ln(1+\Delta D_k).$$

Although simple and intuitive, there are two problems with this procedure which are both related to the way in which skills are measured. First, the assignment of observations to skill categories is based on the results of the world -wide wage equation. But wage equations are usually interpreted (in a hedonic vein) as the reduced form of underlying demand and supply factors. As a result of that, the coefficients obtained from that equation which are used as weights in the SKILL index, are prices of the different human capital compo nents

[5] B&K distinguish 3 occupations (managers and professionals; clerical and sales workers; craftworkers, operatives, laborers and service workers) and 6 industries (agriculture; mining, manufacturing and construction; transportation, communication and public utilities; trade; finance, insurance, real estate and services; government); hence 18 occupation-industry cells.

and are not the technological parameters of a SKILL production function which they are implicitly assumed to be. A second problem with the procedure is that the results heavily depend on the comparability of years of schooling and years of experience across countries. It is well-known (cf. Steedman 1996) that in the field of education, internatio nal comparability is a controversial issue. [6] Furthermore, the contri bution of years of working experience to the level of skill is likely to vary in line with the intensity of work-related training. Recent evidence indicates that intensities of work-related training differ across countries (Leuven and Oosterbeek 1997).

Inspection of the results presented by B&K suggests that the conclusions regarding the demand and supply explanation, may be very sensitive to changes in this respect. For instance, B&K report a supply index for the 67-100 SKILL group in Germany equal to minus 1.172; this implies that (assuming no differences in hours worked) only 10 per cent of the German workforce would belong to the top 33 percentiles in the U.S. skills distribution. Though possible, such a low percentage is remarkable and warrants further investigation. It is unfortunate therefore, that B&K do not report any tests regarding the robust ness of these results. This paper attempts to fill this gap. A unique feature of the data set employed in this paper is that in addition to the usual labor market information, it also includes indepen dent measures of individuals' skills which are comparable across countries. This survey, the International Adult Literacy Survey, was especially designed to collect comparable data about the numeracy and literacy of the adult populati ons in the participating countries.

3 Data

The International Adult Literacy Survey (henceforth IALS) [7] is the offspring of a unique initiative to collect comparable data about the numeracy and literacy skills of the adult populations in 7 countries: Cana da, Germany, The Netherlands, Poland, Sweden, Switzerland and the United States. [8] Researchers and statistical offices in these countries developed an instrument that is believed to be capable of comparing individual performances on literacy tests between countries with different languages and cultures. In each of

[6] This is nicely illustrated by the following quote from a recent issue of *The Economist*: "Up to now, education professionals have tended to resist comparisons even of apparently similar schools within neighbourhoods. Such are the subtleties of their craft, they say, that exercises of that sort are meaningless. In Britain, where the government has begun to publish league tables of schools' results, teachers and local-authority bureaucrats remain intensely sceptical of such information. To go further, and compare a school in Manchester with one in Tampa, say, or Seoul, would strike them as simply ridiculous" (The Economist March 29th 1997, p.15).

[7] For a more extensive description of the IALS data, and for first results, we refer to OECD/Statistics Canada (1995).

[8] For their study Blau and Kahn use data from 10 countries: Germany, Britain, Austria, Switzerland, Sweden, Australia, Hungary, Italy, Norway and the United States. All country data sets were collected in the 1980s (ranging from 1980 for Sweden to 1989 for Austria, Britain, the U.S. and Norway). This sample of countries partially overlaps with the IALS countries. Britain, Austria, Norway, Australia, Hungary and Italy are replaced by Canada, the Netherlands and Poland. But although the sample is different it allows to compare the U.S. with a number of relevant other countries.

the countries between 2,000 and 4,500 individuals participated in the survey. In addition to the literacy tests, all participants responded to a questionnaire that gathered information about attitudes and behavior relevant for the performance on the literacy tests. This questionnaire also included questions about labor market status, earnings, education and demographic characteristics. Besides the comparable information about literacy, a unique feature of the data set is that the questions in the background questionnaire were intended to be the same in all countries and also that the coding of the answers is comparable. Thus, the IALS data set is close to what Gottschalk and Joyce (1995) refer to as "the ideal of a single survey instrument applied to all countries". Because the information of the literacy tests is important for the results in this paper, we elaborate on these tests in the next two paragraphs.

The IALS data set includes three scales to measure individuals' literacy levels. These scales relate to prose, document and quantitative related skills. Instead of measuring literacy on a dichotomous scale literate vs. illiterate, each of these scales ranges from 0 to 500. Only very few respondents in the 7 countries have the maximum score of 500. To give an impression of how actual literacy levels translate into scores on the IALS literacy scales, we give descriptions of the requirements of some threshold levels. [9] To obtain a prose score below 225, a respondent should be unable to perform tasks that "tend to require the reader to locate one or more pieces of information in the text, but several distractors may be present, or low-level inferences may be required. Tasks at this level (above 225 but below 276) also begin to ask readers to integrate two or more pieces of information, or to compare and contrast information". In contrast to this, to obtain a score above 375 on the prose scale, tasks "require the reader to search for information in dense text that contains a number of plausible distractors. Some require readers to make high-level inferences or use specialized knowledge" (Kirsch 1995, p.29).

The comparable requirements on the quantitative scale read as follows. For a score above 225 (and below 276) "tasks typically require readers to perform a single arithmetic operation (frequently addition or subtraction) using numbers that are easily located in the text or document. The operation to be performed may be easily inferred from the wording of the question or the format of the material (for example, a bank deposit or an order form)". To obtain a quantitative score above 375 "tasks require the reader to perform multiple operations sequentially, and they must disembed the features of the problem from the material provided or rely on background knowledge to determine the quantities or operations needed" (Kirsch 1995, p.29).

Table 1 provides some descriptive information about the sample. Average years of schooling per country vary from a low 11.6 in Poland to a high 13.8 in the United States and the Netherlands. For the IALS quantitative test score, the range of country averages is 248 in Poland and 317 in Sweden. Measured by the average score, Canada and the U.S. do worse than Germany, the Netherlands and Switzerland. Noticeable is also that the dispersion of the IALS quantitative score is much higher in the U.S. and Poland than in the other countries. In all 7 countries, the average levels of potential work experience are around 20 years.

[9] The information is taken from Kirsch (1995); this publication provides also examples of questions and exercises at the different levels.

Table 1 also shows that the number of observations per country is not very large [10]; a compensating factor here is that all results are obtained using proper sample weights.

<Table 1: Descriptive statistics of the sample: means and standard deviations of selected variables>

4 Results

Table 2 presents summary measures of wage inequality in the 7 countries included in this paper.[11] The inequality measures are the standard deviation of log wages and the distances of the 50th percentile and 10th percentile in log wages, and of the 90th percentile and 50th percentile in log wages.

<Table 2: Summary measures of wage inequality >

Measured by the standard deviation of log wages, wage inequality is largest in Canada, Poland and the U.S., where these standard deviations are between 0.65 and 0.72, while the western European countries in our sample (Germany, Netherlands, Sweden and Switzerland) all have standard deviations of log wages in the vicinity of 0.55. The differences in the standard deviations of log wages between the U.S. and other countries reported here, are smaller than the differences reported by B&K. There the differences between the U.S. and Germany, Sweden and Switzerland are 0.301, 0.248 and 0.223 respectively, while here the comparable figures are 0.113, 0.083 and 0.070.

Informative are also the figures about the 50-10 and 90-50 percentile differences in log wages. In Canada and the U.S. the larger wage dispersion is mainly caused by a larger spread at the bottom of the wage distribution, while in Poland the spread at the top of the wage distribution is largest. In the western European countries the 50-10 and 90-50 differences are of about similar size. The finding that in the U.S. the dispersion of earnings at the bottom is larger than in other countries is consistent with the results reported by B&K. But again, the sizes of the differences are smaller. B&K report differences in the 50-10 differential in log wages between the U.S. on the one hand, and Germany, Sweden and Switzerland of about 0.6, while in table 3 these figures are about half of that. The 90-50 and 50-10 log wage differentials can also be compared with some statistics reported in the OECD Employment Outlook 1996 (OECD 1996). When the 90-50 and 50-10 ratios reported there (p.61-62) are converted into log wage differentials, we find that the 90-50 differentials from the two sources are very similar, while the 50-10 differentials in our data set are for all countries somewhat higher than the figures reported in the Employment Outlook. The implied differences in the 50-10 differentials between the U.S. and the other countries are in both sources, however, rather equal.

[10] These numbers of observations cannot be compared by those included in the study by B&K as they don't report such information.

[11] The wage variable in this paper is constructed analogously to the procedure described by B&K (p.804/5).

Based on the results from a world-wide wage equation with years of schooling, experience (squared) and country-dummies as regressors, the variable SKILL is calculated. The values of this variable are used to assign each observation in each country to one out of three skill groups: low, intermediate or high. Two variants are feasible here. As cutoff levels for the assignment of observations to skill levels, it is possible to use the cutoffs of the country to which the observation belongs, in that case skill is a relative concept. Alternatively, B&K also use the cutoffs from the U.S., in which case skill is an absolute concept. For their demand and supply analysis, B&K use the absolute skill concept. Table 3 reports wage differentials by skill group using that skill concept. [12] These differentials are calculated as the differences in the means of log wages between skill groups.

<Table 3: Wage differentials by skill group, skill measured by SKILL>

Some interesting inferences follow when we compare the results in tables 2 and 3. First, we note that the large differential in the U.S. is mainly caused by the difference between the middle and the bottom tertiles. The difference between the top and the middle in the U.S. is comparable to the figures obtained for other countries. Furthermore, while the western European countries in our sample have fairly similar standard deviations of log wages, their skill wage differentials differ considerably. In the Netherlands the differential between the top and the bottom 33 percentiles is 0.515, while in Sweden it is only 0.368. These results indicate that similar levels of wage inequality may coincide with quite dissimilar wage differentials by skill. Apparently, in some countries wages are more closely tied to skill than in other countries. The wage differentials by skill groups reported here are a bit, but not very much, smaller than the figures obtained by B&K; for instance, they find a 67-100 vs. 0-33 differential in the U.S. equal to 0.795, while the comparable number with the IALS data is 0.701. [13]

Based on the variable SKILL obtained from the world-wide wage equation, B&K use the equations presented in section 2, to calculate demand and (net) supply indexes. Table 4 presents the results for these indexes based on IALS data. The results presented here are based on calculations in which labor is measured in hours. Alternatively we also performed calculations with labor measured in bodies and in efficiency units. These results are equivalent to the results presented here.

<Table 4: Demand, supply and net supply indexes by skill group relative to the U.S., skill measured by SKILL>

Panel A gives the demand indexes. A positive number indicates that demand for the relevant skill group is larger in country j than in the United States. Hence, demand for low skilled labor is larger in Canada and Poland than in the U.S., while in these countries, together with Germany, demand for high skilled labor is lower than in the United States.

[12] Demand and supply indexes for each country are presented and discussed below.

[13] Using the own country's skill cutoffs instead of the U.S. skill cutoffs gives a very similar picture.

According to the figures in panel B of table 4, supply of low skilled labor is higher in other countries than in the U.S., while supply of high and intermediate skilled labor is lower. These patterns emerge for all separate countries with the exceptions of the Netherlands and Poland. These results are similar to those reported by B&K, although in that paper the absolute figures are a bit larger and no single country produced a deviating picture.

Based on the results in panels A and B, we calculate net supply indexes as the difference between the supply indexes and the demand indexes. For all individual countries we find that relative net supply of low skilled labor is higher than in the U.S. while relative net supply of high skilled labor is lower. Again the findings are similar to those reported by B&K. The net supply figures in panel C should be confronted with the wage differentials by skill groups given in table 3. The wage differential between skill groups low (0-33) and intermediate (33-67) is larger in the U.S. than in all other countries. The demand and supply framework then predicts that in all other countries relative net supply of the low skill group must be smaller than relative net supply of the intermediate skill group. The net supply indexes in table 4 show, however, that this condition is never fulfilled; for each country relative net supply of the low skill group exceeds relative net supply of the intermediate skill group. Likewise we can confront the wage differentials between the high and intermediate groups and the high and low groups in the different countries with the respective differentials in the United States. For the high-intermediate comparison relative net supplies have the proper sizes in Poland and Germany, while the magnitudes are wrong for the other four countries. For the high-low comparison, only Poland has net supply indexes for these skill groups consistent with the demand and supply framework. Out of the 18 possible comparisons of wage differentials and relative net supply differen tials, no more than 3 cases show the predicted pattern. Hence, with a different data set and the same skill measure, we reach the same conclusion as B&K did: the demand and supply framework does a poor job in explaining internation al differences in wage inequality. This establishes that any differences we may find below, are due to the different skill measure, and are not caused by any peculiarities of our data set. Now we turn to the results that were obtained using a different skill measure.

5 Using a direct skill measure

Tables 5 and 6 are the analogons of tables 3 and 4; the only difference is that instead of a skill measure obtained from a world-wide wage equation, these results are based on the direct skill measures included in the IALS data set. [14]

<Table 5: Wage differentials by skill group, skill measured by IALS quantitative score>

Table 5 gives a picture very similar to table 3; wage differentials by skill groups are (in most cases) larger in the U.S. than in other countries.

The new demand indexes, presented in panel A of table 6, are not very different from those

[14] The results in this section are based on the IALS scores for quantitative literacy. Results based on the other two literacy scores are very similar.

presented in table 4. Supply indexes based on the IALS quantitative score are given in panel B. Here we observe important differences with table 4. Table 4 led to the conclu sion that relative supply of low skilled labor is larger in other countries than in the U.S.; table 6 indicates the reverse. Relative supply of both low and high skilled labor is larger in the U.S. than elsewhere, while supply of intermediate skilled labor is larger in other countries.

<Table 6: Demand, supply and net supply indexes by skill group relative to the U.S., skill measured by IALS quantitative score>

Taking demand and supply together gives the new net supply indexes by skill group; these are presented in panel C of table 6. Again, these relative net supply indexes ought to be compared with the wage differen tials by skill groups reported in table 5. The largest differential between the low and intermediate skill groups is found in the United States. Hence, for all other countries we should have relative net supply indexes for the low skill smaller than that of the intermediate skill group. With the exception of Poland, this condition holds for all countries. Comparing the high and intermediate skill groups, correct magnitudes of the net supply indexes are found for Poland, Canada and Sweden. For the high versus low comparison the net supply indexes of these two skill groups have the correct ranking in Canada, Germany, the Netherlands, Sweden and Switzerland. So, again with 18 possible cases, we now have 13 correct predictions from the demand and supply model. When we restrict the comparison to the U.S. on the one hand, and Canada and the western European countries (Germany, the Netherlands, Sweden and Switzerland) on the other hand, the demand and supply model does even better. In that case 12 out of 15 pairwise comparisons turn out to be consistent with the demand and supply explanation of international differences in wage differentials by skill. This conclusion is entirely different from the one we reached earlier. Using a direct skill measure instead of a skill measure constructed from a world-wide wage equation, turns the results completely upside down. The one country in our sample for which the demand and supply explana tion performs poorly, is Poland. This is not unexpected since this is a country which is currently making the transition from a central planning model towards a market economy. Appar ently, the process of implementing a market system for labor skills is not finished (or has perhaps not even begun).

It might be argued that replacing B&K's SKILL-measure by the IALS quantitative score, makes our results extremely dependent on this particular instrument. Perhaps the influence of the western European representatives in the development of the test employed in the IALS project, has been too big, thereby favoring respondents from these countries relative to others. That could have led to relatively high proportions of high skilled workers in these countries. A bias in this direction is, however, not very likely given the history of the project. IALS can be considered as a follow-up of the so-called National Adult Literacy Survey, which was held earlier in the United States.

As a further test of the robustness of our findings, we used a skill measure which combines the B&K SKILL score and the IALS score; we estimated a world-wide wage equation where the IALS quantitative score, experience and experience squared were included as regressors (hence the IALS score is used as an instrument for schooling). The results obtained from that exercise are almost similar to those reported above, thereby

suggesting that it is the incomparability of years of schooling across countries that causes the differences between B&K's findings and ours.

6 Conclusion

In this paper we used a recently collected international data set to investigate international differences in male wage inequality. Reference point for our work is the analysis presented by Blau and Kahn (1996), which documents the situation pertaining in the 1980s. We challenge the conclusion drawn by B&K that international differences in male wage inequality cannot be explained by a simple model of supply and demand for skill. We make the case that this conclusion may be due to employing an inappropriate measure of skill. Instead of using a skill measure which requires comparability of years of schooling and work experience across countries, we use a direct skill measure. The results show that using this alternative measure indeed affects the conclusions. To explain the difference in male wage inequality between the U.S. on the one hand and Canada, Germany, the Netherlands, Sweden and Switzerland on the other hand, a demand and supply model does a good job. This is the key result of this paper. It should be stressed that this finding does not depend on any peculiarity of our data set. When we use B&K's skill measure, we obtain results similar to theirs.

We do not interpret this finding as evidence that demand and supply factors are the only forces relevant for explaining international differences in male wage inequality, thereby denying the relevance of institutions. But opposed to Blau and Kahn who argue that institutions tell the whole story, our results show that demand and supply factors also play a role. The relative contributions of institutions and market forces are, however, still unknown.

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Table 1: Descriptive statistics of the sample: means and standard deviations of selected variables							
variable	Canada	Germa-ny	Neth-erlands	Poland	Sweden	Switzer-land	United States
years of schooling	12.6 (3.3)	11.9 (3.5)	13.8 (4.4)	11.6 (3.0)	11.7 (3.7)	13.6 (3.5)	13.8 (3.6)
IALS quanti-tative score	287.5 (55.4)	299.4 (48.2)	303.8 (44.5)	248.4 (68.3)	317.4 (54.7)	300.8 (49.0)	284.7 (70.4)
years of experience	19.5 (12.5)	20.9 (12.1)	21.7 (10.6)	22.0 (10.6)	23.9 (12.2)	20.9 (11.9)	20.7 (11.6)
number of cases	1003	470	940	671	760	800	789

Table 2: Summary measures of in wage inequality				
country	standard deviation of log wages	50-10 differential of log wages	90-50 differential of log wages	90-10 differential of log wages
Canada	0.689	0.997	0.587	1.584
Germany	0.534	0.566	0.622	1.188
Netherlands	0.532	0.668	0.594	1.261
Poland	0.722	0.772	0.853	1.626
Sweden	0.564	0.534	0.452	0.986
Switzerland	0.577	0.557	0.668	1.224
United States	0.647	0.929	0.699	1.628

Table 3: Wage differentials by skill group; skill measured by SKILL			
	33-67 vs. 0-33	67-100 vs. 33-67	67-100 vs. 0-33
Canada	0.358	0.271	0.630
Germany	0.092	0.422	0.514
Netherlands	0.233	0.282	0.515
Poland	0.191	0.600	0.791
Sweden	0.176	0.192	0.368
Switzerland	0.281	0.216	0.497
United States	0.404	0.297	0.701

Table 4: Demand, supply and net supply indexes by skill group relative to the United States; skill measured by SKILL			
	0-33	33-67	67-100
	A. Demand indexes		
Canada	0.122	0.050	-0.211
Germany	-0.003	0.033	-0.119
Netherlands	-0.062	-0.014	0.075
Poland	0.176	0.036	-0.283
Sweden	0.001	-0.013	0.013
Switzerland	-0.095	-0.006	0.078
	B. Supply indexes		
Canada	0.373	-0.051	-0.552
Germany	0.545	-0.208	-0.834
Netherlands	-0.017	-0.007	0.025
Poland	0.401	0.130	-1.095
Sweden	0.429	-0.172	-0.508
Switzerland	0.132	-0.018	-0.140
	C. Net supply indexes		
Canada	0.251	-0.101	-0.341
Germany	0.548	-0.241	-0.715
Netherlands	0.044	0.008	-0.050
Poland	0.225	0.094	-0.811
Sweden	0.428	-0.159	-0.521
Switzerland	0.227	-0.012	-0.218
See text for details			

Table 5: Wage differentials by skill group; skill measured by IALS quantitative score			
	33-67 vs. 0-33	67-100 vs. 33-67	67-100 vs. 0-33
Canada	0.032	0.322	0.357
Germany	0.143	0.113	0.256
Netherlands	0.134	0.146	0.280
Poland	0.106	0.331	0.437
Sweden	0.114	0.073	0.187
Switzerland	0.093	0.240	0.334
United States	0.350	0.281	0.631

Table 6: Demand, supply and net supply indexes by skill group relative to the United States ; skill measured by IALS quantitative score			
	0-33	33-67	67-100
	A. Demand indexes		
Canada	0.131	0.039	-0.240
Germany	0.074	-0.051	-0.128
Netherlands	-0.213	0.078	0.128
Poland	0.171	0.075	-0.382
Sweden	-0.056	0.016	0.046
Switzerland	-0.160	0.006	0.139
	B. Supply indexes		
Canada	-0.018	0.218	-0.299
Germany	-0.286	0.270	-0.059
Netherlands	-0.645	0.407	-0.007
Poland	0.476	-0.037	-1.170
Sweden	-0.813	0.189	0.358
Switzerland	-0.547	0.406	-0.072
	C. Net supply indexes		
Canada	-0.149	0.179	-0.059
Germany	-0.360	0.321	0.069
Netherlands	-0.432	0.329	-0.135
Poland	0.305	0.112	-0.788
Sweden	-0.758	0.173	0.312
Switzerland	-0.387	0.400	-0.211
See text for details			