The p. 1) to investigate the gender gap

The gender wage gap is defined as " the difference between themedian earnings of men and women relative to the median earnings of men" 1." The median wage of a woman working full-time is 85% that of a man" in rich andmiddle-income countries that the OECD consists of 2. This review will concentrate on five studies that allexamine the existence of the gender wage gaps in many countries, involving severalvariables that are tested, and different methods used to gather the data.

The inspirationfrom Chuang, Lin, and Chui (2017, p. 1) to investigate the gender gap in thefinancial industry derived from the part that industry plays in affectinggender wage gaps for export-oriented countries. Further, they state as Taiwanis a well know export-oriented economy, the analysis could serve as arepresentative case study. The sample chosen was taken from individual leveldata from the " Manpower Utilization Survey" from the years 1978 to 2013 whicheach year consists of approximately 18000 randomly drawn sample households. Thesample used in the analysis is restricted to paid employees in the privatesector.

Through the decomposition, examination, and the breakdown of theoverall gender wage gap, they examine the interindustry gender wage gap in Taiwan, particularly focusing on the financial industry. They found that during theperiod sampled, 2-14% of the overall gender wage gap can relate to workers'industry association. Chuang, H-L, etal., (2017, p. 4) state that they will use Mincer's human-capital earningsfunction as a theory underlying the wage equation specification and use it tocompute the log-wage for a representative male and female worker in industry j. Using the Oaxaca and Blinder (OB) strategy Chuang, H-L, et al., (2017, p. 5)decompose the gender

wage gap in industry j into the following explained andunexplained components.

The first fourterms on the right-hand side of the model display the unexplained componentsand the last two terms represent to the explained wage gap in the industry. However, the OB decomposition suffers from the index-problem that can be splitinto two identification problems (IP1 and IP2). Fields and Wolff defined theindustry wage gap for industry j as: The first term is present in the equation inorder to capture the effect of choosing the reference group but does not getrid of IP2. Horrace and Oaxaca suggested four alternatives to overcome IP2 asfollows;· · · · Both are free from identification problem 2 butstill are affected by identification problem 1. However, the two ranking measures, need to imitate the critical values to be able to perform a statisticalinference. Consequently, a measure that was developed by Lin (2007b, 2010) thatresolves both IP1 and IP2 is implemented. This further makes available astandard error for the significance test. is recognised as it is free from the choice ofthe non-discriminatory wage structure that is not observable as well as theleft-out reference group of any of the dummy variables.

Chuang, H-L, et al., (2017, p. 6) report that industry variables are of the most interest in studying the genderwage gap, with the mining industry as the reference group. In order to assessthe contribution of the industry dummies towards explainingthe gender wage gap the OB decomposition techniques are used. From the resultsit can be seen that a larger fraction of the explained component is due to thefemale-based calculation. This explained proportion rises when industry dummiesare present by 4-10% at 2-8% for

the female-based calculation and 5-14% when itcomes to the male-based calculation highlighting the importance of theincluding industry variables. The financial industry shows thesmallest gender wage gap with -0.

0483 based on and -0. 0494 based on while the biggest gap is portrayed through theservice industry at -0. 1659 based on . Previouslystated in the paper, if an industry has a ranking that is high, which means theranking number is small, then the wage gap for that particular industry issmall. Ranking 8th place based on both and from 1978 to 1991 (except for 1988), femalesfaced the largest gender wage gap in the mining industry. Year after yeardifferent industries rank highest before 1997, but the mining industry althoughit does not rank lowest has the lowest rankings since 1991. In 1978 agriculturein the most beneficial industry for women based on the -groupmeasures however from 1979 to 1997 excluding 1992 and 1995 it changes to theconstruction industry. Conversely, the -groupmeasures the trading industry as the highest-ranking industry in 1978 and after1996 the financial industry.

From 1998 excluding the year 2012, both groupssignal that the highest-ranking industry is the financial industry. When theratio of female employment across industries is studied further, after theincrease in female employment over time, almost all sectors have women employedin them. In the mining industry, between the period 1978-1991 and 1992-2013, average proportion of female employment rises by 1.

83% and 4. 12% in thefinancial industry. On the whole, the difference in wages for females and malesin the financial industry is very little.

Overall evidence shows that Femaleworkers overtime gain the most beneficial wages from the financial industry. L. N. Christofideset al (2013) focus their research on understanding the gender wage gap across26 European countries by using data from the European union statistics onIncome and Living conditions (EU-SILC) in 2007. The two samples that areexamined are the “ working sample” and the “ alternative sample”.

The workingsample consists of workers that are between the ages of 25 and 54 who are notstudents, handicapped, retired, doing compulsory community or military service, or have given up a business. The alternative sample that is also known as theFTFY sample comprises of workers that must have worked full-time for the wholeof the previous year as well as the requirements of the working sample. Ordinaryleast squares (OLS) is used by L. N. Christofides et al (2013 p. 89) to estimatean hourly earnings equation by gender which includes the characteristics thatare relevant and available from the EU-SILC data. Results obtained from OLSshow that the actual gender wage gap is equal to the predicted total gap and generally, the selection-adjusted gap is even larger indicating positive selection is atwork. Secondly, the average difference in male andfemale earnings is decomposed following Oaxacaand Ransom (1994) as follows, M -F =(M -F)N +M(M – N)+ F(N -F)Thefirst term ((M -F)N)measuresthe explained component, the second (M(M – N))the male advantage and the third (F(N -F)) the femaledisadvantage.

The addition of both the male advantage and female advantage representsthe unexplained part. For a number of countries, the unexplained part of thetotal is found to be larger than the explained component implying

that theremay be an existence of female disadvantage and the data that is accessible doesnot explain the behaviour of earnings. Theportion that is explained is negative in Belgium, Greece, Hungary, Iceland, Italy, Luxembourg, Poland, Portugal, Slovenia, and Spain proposing that femalecharacteristics are greater than that of males. Furthermore, in the majority ofcountries, the offered and total wage gaps are smaller in the working sample ofpart-year and part-time workers compared to that of the FTFY sample. In tencountries of the 26, the public sector of the working sample has a largerfemale disadvantage and in the case of the private sector, eight countries havea smaller gender wage gap. In the alternative sample, nine countries have areduced gender gap in the public sector and is ten when there is a largerdisadvantage. These results are only slightly coherent with the understandingthat where FTFY jobs are involved, the public sector is more progressive (N.

L. Christofideset al., 2013, p. 92). As the analysis of possible “ stickyfloors” and “ glass ceiling” effects are not allowed for by the decomposition ofthe mean variations, Melly (2005) uses a method call the quantile regressionmethodology that decomposes along quantiles of the wage distribution thataddressed any selection issues that may occur. This method lets thecharacteristics of workers at different points of the wage distribution havedifferent effects and in turn affect the decompositions at each point. Whencomparing the mean values in the Oaxaca and Ransom decompositions with thequantile regression total and unexplained gaps at the 50thpercentile, more countries have unexplained components that surpass the totalwage

gaps. However, evidencefrom Austria, Estonia and the UK show that the total exceeds the unexplainedgap for all the quantiles.

Hence, the quantile results highlight the conclusionthat a considerable portion of the earnings gap continues to be unexplained. Evidence of sticky floors in twelve countries is present with the strongestresults from Cyprus, France, Italy, Luxembourg, Slovenia, and Sweden. Prominentglass ceiling effects are demonstrated in eleven countries that are Denmark, Germany, Hungary, the Netherlands, Norway, the Slovak Republic, the CzechRepublic, Finland, Iceland, Slovenia, and the UK. In the FTFY sample, stickfloor behaviour is present in twelve countries as well but instead of Belgium, Spain is added. Countries exhibiting glass ceiling effects conversely haveincreased to twenty-one instead of eleven. Cyprus, Estonia, Lithuania, Portugal, and Spain do not show evidence of glass ceiling behaviour. Theprevalence of this behaviour in the FTFY sample is coherent with theinterpretation that women are more likely to be at a disadvantage in FTFYpositions, specifically when they are high-paying ones. Generally, in thepublic sector, female employees have a lower disadvantage than in the economyin eight countries and are at a higher disadvantage in ten countries and innine countries a lower gender disadvantage is present compared with the privatesector.

All findings indicate that gender gaps are bigger when individuals mustbe in full time and full year employment. D. Antonczyk et al.(2010, pp. 835-847) concentrate their study on exploring the link between therecent rise in wage inequality between 2001 and 2006 in West Germany, as wellas the fall in collective wage bargaining and the progression of the genderwage gap for

West Germany. The focus ofthis review will be more on wage inequality and the gender wage gap.

The sampleinvolves repeated cross-sections of the earnings of 440, 000 employees, betweenthe ages of 25 and 55, in 17, 000 establishments in 2001 and 750, 000 employeesin 22, 600 establishments in 2006 taken from the employer-employee data set. Allemployees are full-time workers. There are significant changes in the wagedistribution over the years, for example, for both males and females' realhourly wages fall below the median whereas they rise for the quantiles that arebeyond the median. Overall, this leads to an growth in wage distribution. Womenare able to achieve most comparatively to men in the bottom part of the wage distributionfrom 2001 to 2006. D. Antonczyk et al.

(2010, p. 840-842) propose a sequential decomposition from both thecross-sections of data in 2001 and 2006. Suggested in DiNardo et al. (1996) anddeveloped further in Chernozhukov et al. (2008) and Antonczyk et al. (2009), the decomposition aims to capture wage structure that may be influenced by wagebargaining, firm characteristics, and personal characteristics. The decompositionis split into coefficient effects (personal, firm and bargain coverage) theresidual change in overall wage level overtime and characteristic effects (bargaincoverage, firm and personal).

The most significant component that increases thewage inequality is shown by the changes in the firm coefficients. In addition, changes in residual wages and personal coefficients lead to the rise in wageinequality whilst personal characteristics work against this trend. Even thoughthese personal

characteristics add to the inequality of wages mainly forfemales at the bottom, the effect is typically irrelevant. Changes of wagedifferences within and between industry mainly push inequality up which couldimply that the changes of firm wage policies may have increased within andbetween industries, perhaps due to the more extensive use of irregular paymentschemes. Wage inequality for both females and males could result from theunexplained time trends with wages at the top of the distribution escalating andwage at the bottom declining. This trend causes a consistent reduction in wagesfor females of approximately 1. 3 percentage points, which is however, quiteinsignificant. Overall, all workplace related effects add to the strong increasein wage inequality.

S. Machin, P. A. Puhani (2003) assess the relevance of subject of degree in explaining a sizeableproportion of the gender wage differential amongst graduates. With data takenfrom the labour force surveys of both the UK and Germany in 1996, they estimateseparate log (earnings) functions for men and women graduates that do and donot control for subject degree. The log wage difference is slightly smaller inthe UK than it is in Germany at 0.

208 and 0. 280 respectively. This could coincidewith the view that in Germany, women are not as advance in the wage hierarchy comparedto Britain. However, another reason for this could be that the data collectedfrom the German labour force survey only measures net income whereas in the UK thedata consists of gross wages. Decomposition of theearnings is used (S.

Machin, P. A. Puhani 2003, p. 396) in three specifications. The first specification controls for age and age squared like the typical Mincerianwage equation. Specification two adds a number of other components that are expectedto influence wages, specifically, industry, region, and dummies for part-timeand public-sector employment.

Finally, the third specification includesoccupation. Although, there is potential endogeneity meaning it could correlatewith the error term. From specificationone, the results produce analogous results for both countries withapproximately 21%-24% of the gender wage gap between graduates explained by age.

The explained gap almost more than doubles when the subject of degree is added forboth countries. Additionally, by controlling for less detailed degreecategories the explained component of the gap increases from 24% to 43% for theUK and from 21% to 36% in Germany. However, if detailed degree types arecontrolled for then the explained gap further increases to 56% and 41% in theUK and Germany respectively. This explained increase is statisticallysignificant in explaining the differentials of wage between females and males. Whenthe same analysis is undertaken with specification two which incorporates morevariables, a moderately large effect of controlling for subject degree ispresent. In both countries, combined subject of degree categories account for a2% wage premium, doubling to 4% in the UK.

However, for this model there is notmuch extra impact from detailed degree subject in Germany. The percentage point increase of the gap explainedby

degree type is 7 and 16 for Germany and UK respectively in specification 3showing that even with occupation, subject degree still matters. On the whole, theresults for both countries are very similar and shows the importance of subjectdegree in explaining the wage gap differences between male and female graduates. S. Brown et al.(2011) study data from the British household panel survey between 1991 and 2008of over 5000 private households to examine whether there is a gender wage gapand if so does the presence of children play an influential role in determiningthe gap.

The sample consists of 12, 921 observations with 53% of the samplegathered being female. S. Brown et al. (2011, p. 89) decompose the reservationwage gap into an equation with five different samples used to investigate theeffect of children on the gender reservation wage gap. The results show thatthe reservation wage gap is statistically significant and positive and 78% ofthe difference in wages continues unexplained.

From the explained component, the number of children is the most important factor. Children alone can explainwhy women have higher reservation wages than men, as the negative coefficienton the variable proposes that it reduces the gap between reservation wagesbetween men and women. Without the presence of children, the unexplained partof the gap rises to 99% portraying, observed discrimination for those withchildren may have a large influence here. A variable that leads to thereservation wage gap widening is education.

The results indicate that there isan existence of a reservation wage gap between males and females and thepresence of children plays a substantial

role in determining this gap. Without childrenalmost none of the gap is explained.