Statement of Janice Fanning Madden Professor of Sociology, University of Pennsylvania Labor and Industry Committee Public Hearing Commonwealth of Pennsylvania Harrisburg September 18, 2014

Thank you for giving me the opportunity to address the very important issue raised by HB1890 and the gender pay gap in Pennsylvania. My name is Janice Fanning Madden. I am a labor economist with extensive experience in the analysis of labor markets. I am tenured as a Professor of Regional Science, Sociology, and Real Estate at the University of Pennsylvania ("Penn"). I hold a Ph.D. in economics from Duke University. I have also served as Vice Provost for Graduate Education at Penn, the chief academic officer for graduate education, from 1991 to 1999. I was recently chair of the Doctoral Program in Demography and associate chair of the Department of Sociology at Penn. I am also currently chair of the board of the American Academy of Political and Social Sciences. I teach courses dealing with economics, labor markets, and the relevant statistics for both graduate and undergraduate students at Penn.

My research dealing with the effects of race, gender, and urban location on labor market outcomes and metropolitan variations in income distribution has been published in the most prestigious economics journals. I have written five books: The Economics of Sex Discrimination (1972, reprinted 1975); Post-Industrial Philadelphia (1990); Work, Wages and Poverty (1991); Changes in Income and Inequality within U.S. Metropolitan Areas (2000); and Mommies and Daddies on the Fast Track: Success of Parents in Demanding Professions (2004). I have lectured at the Federal Judicial Center on the use of statistics in discrimination litigation. More recently, I served on the National Research Council's Committee on Measuring and Collecting Pay Information from U.S. Employers by Gender, Race and National Origin. As a consultant for almost forty years, I have been retained as an expert by both plaintiffs and defendants in discrimination litigation involving ethnicity, race, age, and gender. These cases have involved complex statistical analyses involving thousands of employees, including the racial discrimination class action lawsuits against The Coca-Cola Company, the Federal Deposit Insurance Company, and Merrill Lynch and the gender discrimination lawsuits against Salomon Smith Barney, Merrill Lynch, Livermore Labs, and Los Alamos Labs.

In 2012, the most recent data available for the gender wage gap, women working full year full time earned 21.4% less than their male counterparts. This is substantially better than comparable women were doing fifty years ago, when they earned 39.9% less than their male counterparts. Women's gains in the labor market over the last fifty years are enormous, as they have entered jobs that were previously denied them and earned more over their lifetimes, contributing to their families and to the entire economy.

Today's national gender pay gap of 21.4% is still far too large. And, the even larger 24.3% gender pay gap in Pennsylvania for 2012, as shown in the table below, which ranks us 35th out of the 51 states and DC, is even more disturbing. Pennsylvania's gender pay gap is

larger than in every bordering state, other than West Virginia. Pennsylvania also has a lower proportion of adult women in the work force (58.2%) than does the nation (58.8%) or every bordering state, other than West Virginia, which has the poorest performance of any state. On average, Pennsylvania's women fare worse than the nation's. There is no reason for anyone to think that the earnings ability or productivity of Pennsylvania's women relative to men is less than for the rest of the country or our neighboring states.

			Proportion of Women in the	
	Gender Pay Gap		Labor Force	
Location	Percent	Rank	Percent	Rank
Pennsylvania	24.3%	35	58.2%	32
USA	21.4%		58.8%	
Neighboring States				
New Jersey	20.0%	14	60.8%	21
New York	14.0%	4	59.1%	29
Delaware	18.0%	12	60.1%	23
Maryland	17.2%	11	65.2%	5
Ohio	24.1%	32	58.9%	31
West Virginia	33.3%	49	49.6%	51
Best "State"				
DC	7.7%	1	66.9%	1

Source: Institute for Women's Policy Research, IWPR #Q024, August 2014, based on analysis of the 2012 American Community Survey, Integrated Public Use Microdata Series

Of course, the gender pay gaps listed in this table are not necessarily entirely due to discrimination. The gender pay gaps shown potentially include pay differences that arise from gender differences in education, experience and training, as well as differences associated with occupations and industries. Gender discrimination in pay occurs, however, when employers pay women, who make the same contribution to the productions of goods or services as men, a lower rate.

Numerous scholarly studies over the years have decomposed the overall gender pay gap into the proportion arising from gender differences in experience, education, training, work hours, occupations and industries, and other traits of value to employers. Generally, these scholarly studies show that about half of the gender pay gap remains when only men and women with the same education, experience, training, work hours, occupations and industries are compared. These studies also generally acknowledge that measuring the gender wage gap only among men and women in the same occupations and industries (as opposed to having the same personal characteristics like education and work hours) may "underestimate" the gender pay gap arising from discrimination because this calculation excludes gender wage differences

due to discrimination in hiring and in promotions.¹ For example, if an employer were to hire women with bachelor's degrees in accounting as "bookkeepers" and men with the same credential as "accountants," and then pay accountants more than bookkeepers, employers would "explain" the gender differences in wages as based on different jobs. In this example, however, job or occupation should not be allowed to be an explanatory factor because the job title itself is being discriminatorily assigned by gender. To my knowledge, no study has ever been able to explain away the entire gender pay gap in the economy by measuring the effects of all of the traits, subtracting their effects, and then computing a "corrected "gender pay gap.²

HB 1890 uses the standards widely accepted by economists and sociologists to measure the role of gender in pay disparities. The so-called bona fide factors of education and prior work experience affect productivity, and therefore wages, in virtually all jobs and may differ by gender for reasons outside the control of any individual employer. Training that is not provided by the employer is another worker trait that affects productivity and wages and is also outside the control of the employer.

Job specific requirements may provide a non-discriminatory reason for a gender difference in wages in some jobs but not all jobs. In some (but certainly not all) jobs, narrower types of skills, such as physical agility or willingness to travel may also be "bona fide" factors. The willingness to travel across a sales region is important to a job selling pharmaceuticals, but not for a marketing or customer service analyst in the same pharmaceutical company. The ability to run and scale obstacles is important for a job as a police officer, but probably not for a security firm supervisor.

Some job specific requirements that disadvantage women can be changed and should not be used to justify pay differences. Not too long ago, pharmacists were mostly men. Today they are mostly women. The average hours worked by pharmacists used to be long, but are now quite flexible. Computer technology has allowed pharmacists to share information about patients with one another, reducing the need to have the same pharmacist available during all opening hours of an establishment. The move to more flexible hours came as women increased their representation in the job. The willingness to work long hours is no longer a contributor to

Examples of summaries of this extensive research include: Weichselbaumer and Winter-Ebmer, "A Meta-Analysis of the International Gender Wage Gap" *Journal of Economic Surveys*, Vol. 19, pp. 479-511, July 2005: 479-511; Joni Hersch, "Sex Discrimination in the Labor Market," *Foundations and Trends in Microeconomics*, 2(4), pp. 281-361, 2006; Stanley and Jarrell, "Gender Wage Discrimination Bias? A Meta-Regression Analysis," *Journal of Human Resources*, 33(4), pp. 947-973, Fall 1998.

There are a handful of studies that involve a narrowly selected group of men and women, unmarried women and men of relatively young ages, where no statistically significant gender pay gap occurs. These studies are not evidence that there is no gender pay gap, however, because the selection of persons into marriage, rather than into labor market opportunities, likely account for the finding of no, or smaller, gender gap. Simply, women "select" higher earning men to marry because they have higher earnings while men do not select wives based on their earnings capacities. As a result of how women select husbands and men select wives, higher earning men are removed from comparisons of the unmarried, leaving a group of unmarried men who include more employment "losers" than is the case for women.

greater productivity (per hour worked) by a pharmacist. Therefore willingness to work long hours is not a justification for gender wage differences among pharmacists.

If any characteristic is not necessary to perform a job, even though one gender may be more likely to have the characteristic, economists and sociologist generally agree that characteristic should not be used to justify a gender pay gap.

By clarifying the factors that contribute to compensation and using those factors alone to determine whether any gender pay gap in a job is warranted, HB 1890 stops employers from using actual or expected gender differences that are not relevant to job performance to support discriminatory attitudes and gender differences in wages. I urge passage of HB1890. This bill uses knowledge produced with our best science to achieve the public policy goal of gender equity in the workplace.

September 15, 2014