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## “The Gay Factor” – Exploring the Gay/Straight Wage Gap in Men

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Is there a wage penalty for being gay? Previous research has indicated a sizable wage gap between gay and straight men of up to 25%. At the same time, national polling indicates increasing acceptance of gay marriage and gay relationships in general. Using the most recent data available (American Community Survey, 2012), I find a gay premium of ~6%, a number which is robust across a number of sample limitations. This premium may be partially related to urban residence which is unobserved in the public use samples of the ACS.



## Introduction

The 2012 American Community Survey estimated that there are approximately 639,400 same-sex households in the United States. The data also suggest that the average household income for an opposite-sex household is \$66,516, while the number is significantly higher at \$95,913 for a female-female household and \$129,069 for a male-male household.

The policy debate for LGBT employment protection has been heated in recent months, due to the Supreme Court ruling against the Defense of Marriage Act and the proposal of the Employment Non Discrimination Act in Congress. Previous relevant literature suggests that gay and bisexual male workers earned anywhere from 11% to 27% less than their heterosexual counterparts. Previous studies on the subject of income penalty for men who exhibit same-sex behavior have indicated a significant wage penalty for being an individual who exhibits homosexual behaviors (Badgett, 1995 and Carpenter, 2007). More recent studies, however, indicate just the opposite, that the “gay” factor is now actually a premium on wages rather a penalty (Clarke, 2013). This paper seeks to explore the wage differentials between income of men in same-sex households and opposite-sex households using the 2012 ACS PUMS, to see if the wage differential moved in one way or the other.

## Relevant Literature

One of the most frequently referenced studies on the topic is that of Lee Badgett. Published in 1995, her study utilizes data from the 1980s and 1990s General Social Survey and finds that gay and bisexual male workers earned from 11% to 27% less than heterosexual male workers, *ceteris paribus*. (Badgett, 1995). Carpenter more recently conducted a study using data from the Third National Health and Nutrition Examination Survey (NHANES III), collected from 1988-1994. The study reports a similar income penalty for same-sex behaving men at 23% to 30% less than their heterosexual counterparts (Carpenter, 2007). What is worth noting about both of these studies is that the sample size for the same-sex behaving individuals is significantly smaller than the sample size of heterosexual individuals—with merely 44 observations in the Carpenter study.

A 2013 Gallup has shown that Americans have become more accepting of homosexuality over time, with 54% supporting gay marriage in July of 2013, as compared to a mere 37% in 2004. More recently, there have been a few studies suggesting that the gay penalty is disappearing (Clarke, 2013), but others show that the penalty is, in fact, still significant (Martell, 2013).

One explanation for a diminishing wage penalty for LGBT individuals is the increasing protection in the form of anti-discrimination policies. Gates (2009) shows that in states with active protection against employment discrimination based on sexual orientation, gay men experience 3% wage premium.

## Data Limitation

Very few data sources allow the identification of gay men and lesbian women. The sources that do allow self-identification of sexual orientation provide extremely small sample sizes (Gates 2009). The only two sources of data available that allow the identification of same-sex individuals are the United States Census and the General Social Survey (GSS).

The 2010 Decennial Census form includes the categorization of relationships between household members. These include the distinction between unmarried-partner, housemate/roommate, roomer/boarder, and other non-relatives. The Census, while possessing a larger sample and more detailed earning information, lacks data on single, homosexual men and

women. The American Community Survey (ACS), which provides the data for this study, is a survey also conducted by the U.S. Census Bureau, covering approximately 3 million households. Though it is smaller in size relative to the Decennial Census, the ACS contains almost all of the same information as the census itself.

Within the GSS, sexual history is used to identify same-sex behaving individuals. Studies by Badgett (1995), Blandford (2003), Berg and Lien (2003), Comolli (2005), and Black et al. (2001) all used sexual history data from various years from the GSS for identification of gay males in the database.

Figure 1

Author	Data Source	Total n	Gay n	Penalty
Badgett (1995)	GSS 1989 – 1991	948	47	-11%
Berg and Lien (2002)	GSS 1991 – 1996	1577	64	-22%
Black et al. (2003)	GSS 1989 – 1996	77	2,633	-21%
Carpenter (2007)	GSS 1988 – 1996	652	52	-23%
Allegretto & Arthur (2001)	Census 1990	150,032	4,427	-15.6%
Martell (2013)	GSS 1994 – 2010	5,538	199	-18%
Clarke (2013)	NHANES 1988–2007	3517	1747	2.5%*
Gates (2009)	Census 2000	654,589	52,580	3%*

\*Figure reflects a wage premium for gay men in 2002

\*\*Gates (2009) finds a 3% wage premium for men in states with some form of an Employment Anti Discrimination Act

Figure 1 shows a summary of studies in the past decades about wage discrimination for gay men. Studies using the GSS data (Badgett 1995, Carpenter 2007, Martell 2013b) use separate identification for gay men as followed:

- a. Same sex partners in the previous year
- b. Same sex partners in previous 5 years
- c. More than 1 same-sex partners since 18
- d. At least half of sex partners of same sex since 18

The different categories indicate increased same-sex sexual behaviors, which in turn add to the certainty of sexual orientation. The numbers reported in figure 1 for those studies are conducted from respondents in category d. Badgett 1995, Carpenter 2007, and Martell 2013b showed in their studies that the gay penalty diminishes with the stronger gay-behavioral indicator. In other words, the more “open,” or “out” a gay man is, the more likely he will experience a wage premium relative to a gay man who is more conservative regarding discussion of his sexual orientation. Many studies suggest that there is a correlation between self-identified “gays” and higher income. This study focuses only exploring the gay wage gap only in men.

Another point worth discussing is the degree of the individual’s “openness” about his sexual orientation. Looking at the degree to which the measure of sexual history and orientation reflects a “gay lifestyle,” Black (2003) defines a gay lifestyle as one that “differs from traditional family patterns, including marriage, or in which employers, co-workers, and customers might discover the person’s homosexual orientation.” Sexual history does not completely translate to

an apparent “gay lifestyle.” There is also no available data to allow the assessment of the direct link between the two.

## Data & Results

### Identification

This study uses the 2012 1-year ACS 1% public use microdata. Gay couples are identified using their cohabitation status as filed in the ACS. The questionnaire form includes a question that specifies whether a person is a head-householder, or if not, his relationship to the head-householder. Furthermore, since the sample can only identify co-habitation gay males, part of the result may be only of those who are “out” or openly gay, which could perhaps cause the “gay” coefficient to be more positive than it actually is, assuming the theory that “out” gay men tend to have higher wages holds.

In the previous years, the Census Bureau changes the relationship status of all married gay couples to “unmarried” before they publish the data for public use. The 2012 ACS, however, is the first to include a flag for reported married same-sex couples whose status has been changed.

Unmarried gay partners are identified using the relationship status they have relevant to the head householder. An individual is an unmarried gay partner if he is an “unmarried partner” to a male head householder. Married gay partners are the unmarried gay partners who have a flag indicating their marital status have been changed.

Unmarried straight partners are identified using the same relationship status. An individual is a straight unmarried partner if he is an unmarried partner to a female head householder or is male head householder to a female unmarried partner. Married men are easier to identify, using their marital status.

The gay sample consists of 4,894 unmarried and 1,850 married men. The heterosexual sample is made of 57,597 unmarried and 613,997 married men. Considerations should be reserved given that in the 2010 decennial census, the William Institute suspects almost 25% of same-sex households are, in fact, opposite-sex household. The error is attributed mostly to human errors made while filling out the form, and that perhaps the design of the forms may have caused some confusion for the participants (Cohn 2001). This miscategorization of same sex households as opposite sex households can bias the “gay” coefficient.

**Descriptive Statistics**  
(Standard Deviation in Parenthesis)

**Figure 2**

Variables	Married Gay	Unmarried Gay	Married Straight	Unmarried Straight
Wage	44,735 (79,827)	49,953 (69,361)	44,690 (64,504)	30,514 (40,938)
Age	53.443 (15.373)	46.606 (13.536)	53.98 15.117	40.930 (14.523)
White	0.826 (0.379)	0.867 (0.340)	0.846 (0.361)	0.772 (0.419)
Black	0.681 (0.252)	0.052 (0.222)	0.061 (0.240)	0.115 (0.319)
Asian	0.044 (0.206)	0.029 (0.167)	0.047 (0.212)	0.021 (0.142)
Other	0.061 (0.240)	0.052 (0.222)	0.046 (0.209)	0.092 (0.289)
HS or Less	0.293 (0.455)	0.167 (0.373)	0.341 (0.474)	0.436 (0.496)
Some College	0.181 (0.385)	0.230 (0.421)	0.206 (0.404)	0.232 (0.422)
Associate Degree	0.065 (0.247)	0.082 (0.274)	0.074 (0.261)	0.069 (0.253)
Bachelor	0.229 (0.420)	0.284 (0.451)	0.197 (0.398)	0.139 (0.346)
MA	0.121 (0.326)	0.133 (0.340)	0.090 (0.287)	0.037 (0.188)
Professional Degree	0.043 (0.202)	0.046 (0.210)	0.033 (0.178)	0.013 (0.114)
PhD	0.039 (0.195)	0.032 (0.177)	0.021 (0.144)	0.007 (0.086)
N	1,850	4,894	613,997	57,597

Figure 2 shows the descriptive statistics of the pool data. The gay sample exhibits a significantly higher percentage in terms of educational attainment at and above a bachelor degree.

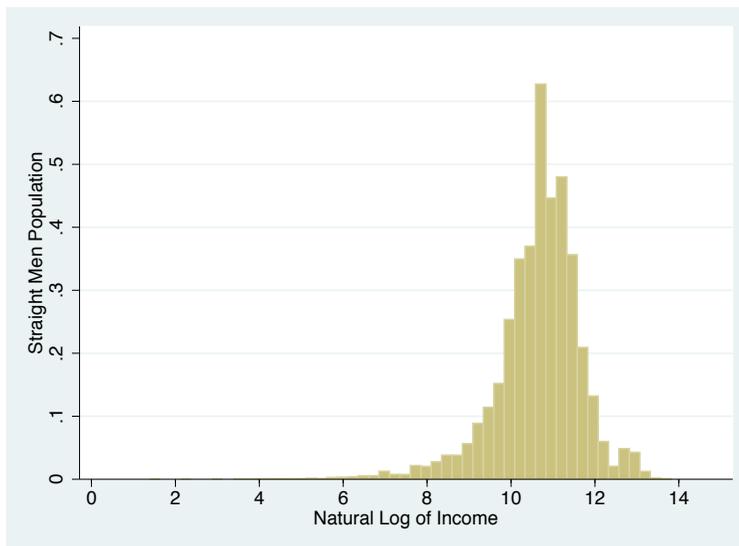
Black (2007) theorizes that gay men who realize early in life that they are unlikely to form traditional households, including having children, may “plan on specializing less intensely in market production than heterosexual men.” Perhaps the expectation of a future faced with additional prejudice causes gay men to not only sort into a certain occupation, but it also determines the geographical locations that appear to be more desirable according to their sexual orientation.

Table 1

	Unmarried Gay Partners	Married Gay Partners	Percentage
CA	358	828	18%
FL	122	520	10%
NY	168	342	8%
TX	98	336	6%
IL	58	198	4%
GA	54	188	4%
PA	62	148	3%
MA	94	104	3%
WA	44	150	3%
OH	46	146	3%
	1850	4894	

*Table 1* represents the ten states with the highest concentration of gay men. Black (2007) finds that approximately 90.2% of gay partners live in an urban area, with San Francisco, Fort Lauderdale, Los Angeles and San Diego listed as the most highly concentrated gay population. Unfortunately, the 2012 ACS data does not provide data on urbanism or city of residence; therefore, such geographical factors cannot be accounted for in the regression.

Figure 3



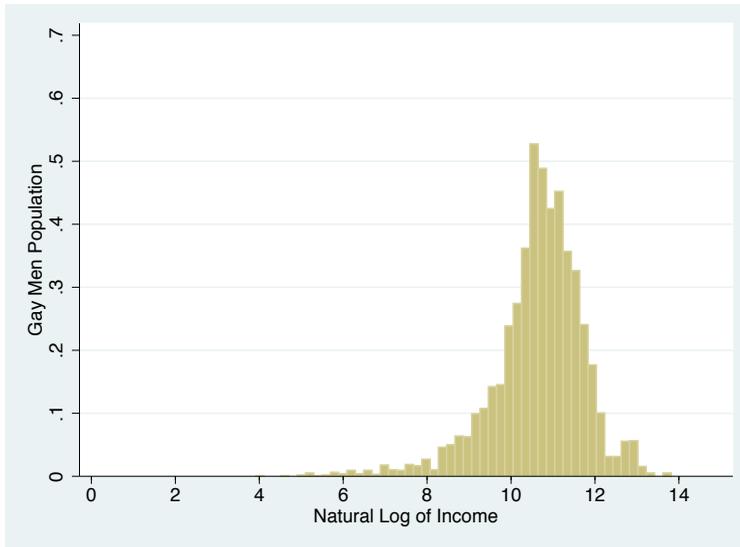


Figure 3 is the histogram of income distribution between straight and gay men, showing a slightly higher density in gay men as income increases.

**Regression Analyses**

The simplified econometrics model can be given by:

$$\text{Log [Annual Income]} = \alpha + \beta_1 X + \beta_2 (\text{Gay Indicator}) + \epsilon$$

X represents the various demographic variables that include: age, race, education, state, marriage, children, and employment status... Dummy variables are used to signal the age group (18-24, 25-34, 35-44, 45-54, 55-64, 64+), which level of educational attainment based on highest degree achieved, currently married, currently employed, average weekly work hours more than 40, currently living in a state with ENDA, English proficiency, and regionality (one dummy variable for each region in the US).

**Table 2**

OLS Regression Results (Absolute Value of t-statistics in parentheses)	
Ln(Income)	Coefficient
Gay	0.0646 (5.58)
Married	0.139 (32.70)
Currently Employed	0.991 (203.14)
English Proficiency	0.395 (62.02)
ENDA States	0.081 (29.19)
Children	0.071 (26.67)
Age Race Education	Yes Yes Yes
Adj. R <sup>2</sup> SSE N	0.4228 274,871 458,434

**The gay coefficient**

The sample shows that when controlling for factors such as age, race, education, work hours, states with Employment Non-Discrimination Act, children, and region, gay men are more likely to experience a 6.46% wage premium than their heterosexual counter-part.

Various studies on characteristics of same-sex households show high concentration of gay men in urban areas. The lack of data prevents the control for urban and city, which is crucial given the historically higher living standards in cities such as San Francisco and New York, where there is a substantial concentration of gay men. This drawback potentially causes the gay coefficient to be higher than it actually is.

The coefficient is applied cross industry and occupation. While controls for occupation can paint a clearer picture of the gay wage gap, Antecole (2008) argues that occupational sorting, however, does not explain the wage penalty experience by gay men in earlier studies.

**Table 4**

n	Gay Coefficient
All partnered men	.0646 (5.58)
Unmarried men only	0.126 (9.07)
English Proficient workers only	0.068 (5.83)
With Occupational Fixed Effects	0.057 (5.27)

Table 4 includes the gay coefficient when the regression is taken using different samples of men. This also suggest that unmarried gay men are likely to make 12% more than their straight counter part.

## Children

Many studies have explored the effect of parenthood on income. Studies by Anderson, Binder, and Krause (2003); Budig and England (2001); and Crittenden (2001) suggest a 3-8% wage gap between women with and without children. Men, however, appear not to experience the same effect. Peplau and Fingerhut (2004) finds no significant effect on fatherhood and income, regardless of sexual orientation. Baumle (2009) examines the effect of parenthood on gays and lesbians and finds that while parenthood explains 35% of the wage differentials between lesbians and straight women, it only explains 18% of those between gay and unmarried heterosexual men.

A dummy variable was included in this study to control for whether or not children are present in a household. The effect of having children accordingly accounts for a 7.1% wage premium.

## Regionality

As of 2013, the following states have passed laws banning employment discrimination based on sexual orientation: California, Colorado, Connecticut, Delaware, Hawaii, Illinois, Iowa, Maine, Maryland, Massachusetts, Minnesota, Nevada, New Hampshire, New Jersey, New Mexico, New York, Oregon, Rhode Island, Vermont, Washington, and Wisconsin (HRC). Gates (2009) finds that anti-discrimination policies contribute to a 3% premium for men in same-sex couple in those states.

The variable ENDA shows that being in a state with ENDA can account for up to 8.1% in additional wages. Part of this premium may be accounted for by the increasingly progressive view of firms about diversity and inclusion with respect to the recruitment of members of the LGBT community. The Human Rights Campaign establishes an annual Corporate Equality Index (CEI), which reports the treatment of companies on their LGBT employees and apply pressure on firms to include protection for LGBT employees in areas where they are unprotected under federal law.

## Marriage Premium

Black (2003) suggests that one reason that single and partnered gay men are likely to make less than married straight men is the difference in the way they make human capital investment choices under their expectation of forming a traditional household.

Previous studies that use the US Census (Allegretto 2001, Gates 2009) all include married gay males in their sample of unmarried same-sex partner. This error is due to the fact that the data released for public use by the Census Bureau group both married and unmarried same-sex couples into one single category. Without the distinction between the two, and the suggested marriage premium, it is possible that the wage penalty between unmarried gay and heterosexual men is smaller than as predicted.

Figure 4

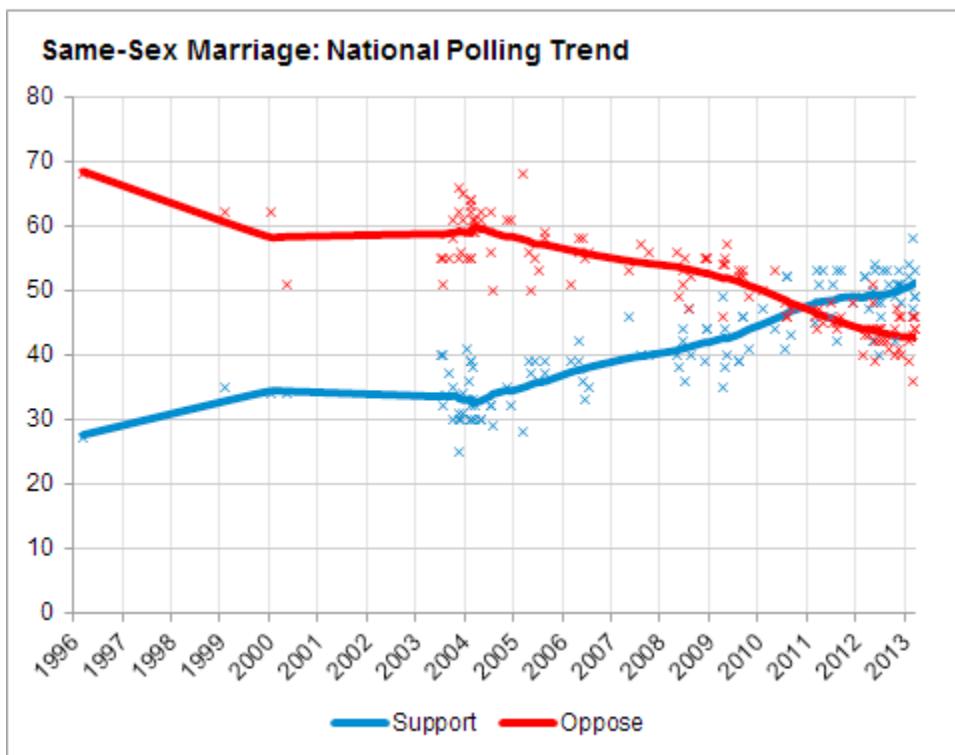


Figure 4, a national polling trend from Nate Silver's Five Thirty Eight blog, shows the increasing support of Americans for same-sex marriage. The drastic change in the past decade shows a promising future for gay and lesbian couples.

## Conclusion

While this study shows a 6.46% wage premium in favor of gay men, it does not consider other forms of discrimination that can indirectly affect an individual's life. Basic rights (as defined by who ... maybe include UN's statement), such as the freedom to marry and protection against discrimination, for the LGBT community are still being denied at the federal level in the United States.

Relative to earlier studies employing data from 1990 – 2000, the wage gap has indeed shrunk. The quest for the reason as to why it changes so quickly remains uncertain. Is it because of certain laws imposed by the government, or is it simply because America is quickly becoming more accepting of homosexuality?

Even though the fight for equality is well on its way, with many important victories this past year, including the historic Supreme Court ruling on the Defense of Marriage Act and California's Proposition 8, the journey has only just begun, and it is far from finished.

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