

Economic Freedom and Beauty Pageant Success in the World

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Abstract: Feminist thought has generally denounced the existence of beauty contests. Indeed the famous women's liberation protest at the 1968 Miss America Beauty pageant is considered one of the catalytic events of the modern feminist era, and to this day protests against beauty contests occur frequently. Beauty pageants are ubiquitous around the world and their importance in the many cultures is indisputable. In light of this and in light of the almost universally negative attention these contests receive from feminists, this paper examines empirically those factors that contribute to beauty pageant success in a cross-national setting. Our analysis pays particular attention to the role of market liberalism, i.e., economic freedom, in the process. The results indicate that nations with higher economic freedom scores are underrepresented among Miss Universe semifinalists after controlling for other relevant determinants.

JEL: P5, B54

Keywords: economic freedom, beauty pageants, feminism

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Introduction

Feminist thought has generally denounced the existence of beauty contests. Indeed the famous women's liberation protest at the 1968 Miss America Beauty pageant is considered one of the catalytic events of the modern feminist era, and to this day protests against beauty contests occur frequently. The scholarly feminist literature is filled with criticisms of degrading female beauty images in general and beauty pageants in particular. Most prominently perhaps, Naomi Wolf (1991, p. 87) laments,

The skepticism of the modern age evaporates where the subject is women's beauty. It is still – indeed, more than ever – described not as if it is determined by mortal beings, shaped by politics, history, and the marketplace, but as if there is a divine authority on high who issues deathless scripture about what it is that makes a woman good to look at.

This truth is seen in the way that God used to be – at the top of a chain of command, its authority linking down to His representatives on earth: *beauty pageant officials*, photographers, and, finally, the man in the street. (Emphasis added.)

While Wolf's view appears to be the majority view within feminism, not all are in agreement. For instance, Paglia (2004, p. 264) writes,

I was in love with beauty. I don't feel less because I'm in the presence of a beautiful person... What a ridiculous attitude to take! -the Naomi Wolf attitude. When men look at sports, when they look at football, they don't go [crying], "Oh, I'll never be that fast, I'll never be that strong!" When people look at Michelangelo's *David*, do they commit suicide?... When you see a strong person, a fast person, you go, "Wow! That is fabulous." When you see a beautiful person: "How beautiful..." We should not have to apologize for reveling in beauty. Beauty is an eternal human value. It was not a trick invented by nasty men in a room someplace on Madison Avenue.

It is with this interest in beauty pageants in mind that this paper investigates the determinants of pageantry interest and success across countries, as measured by semi-finalist representation by nationality at the Miss Universe competition. In particular, the research emphasis is placed on the role of economic freedom.

Beauty, Pageantry, and Economics

The role of physical attractiveness in economics has not been ignored. There is a large literature on the importance of physical attractiveness in a number of areas: earnings (Hamermesh and Biddle, 1994), game theory (Solnick and Schweitzer, 1999), retail car price negotiations (Ayres, 1991), election results (Rosar, Klein, and Beckers, 2008), and teaching evaluations (Lawson and Stephenson, 2005), to name just a few. Mankiw (2007) has recently highlighted the role of height going so far as to suggest, perhaps tongue in cheek, a tax on height. He also suggests that a similar recommendation could be applicable regarding physical attractiveness.

There is also a literature about what might be called the science of beauty; that is, attempts to quantify those physical traits, such as body mass index, waist/hip ratios, etc, that contribute to perceived beauty. (Pokrywka, Cabric, and Krakowiak, 2006; Grundl, Eisenmann-Klein, and Prantl, 2009; Swami, Furnham, Joshi, 2008; Swami, Einon, and Furnham, 2007.)

While there are dozens of citations to the so-called “beauty contest game” highlighted by Keynes, which has applications mainly in finance, we found just one article (Wilk, 1995), written by an anthropologist, in an Econlit-indexed journal dealing with the practice of actual beauty pageants in real life.

Beauty pageants are ubiquitous around the world and their importance in the many cultures is indisputable. Cohen, Wilk, and Stoektje (1996) offer an excellent scholarly

evaluation of the history and important national and cultural significance of beauty pageants around the world. In light of this and in light of the almost universally negative attention these contests receive from feminists, this paper examines empirically those factors that contribute to beauty pageant success in a cross-national setting. Our analysis pays particular attention to the role of market liberalism, i.e., economic freedom, in the process.

Our measure of beauty pageant success is the number of semifinalists by country in the Miss Universe pageant since 1952.¹ Each year, semifinalists are selected from the total pool of hundreds of participants from which five runners-up and one winner are determined. Since its beginnings, 99 different jurisdictions have sported at least one semifinalist. The United States leads the tally with a total of 54 semi-finalists, while Venezuela carries the second most at 36 as of 2009.

Economic Freedom and Gender

In recent years, empirical measures of the quality of institutions and policies have greatly enhanced the ability of researchers to examine the impact of the institutional environment on economic outcomes (IMF, 2005). One such measure is the Economic Freedom of the World (EFW) index by Gwartney and Lawson (2009). The EFW index is designed to measure the consistency of a jurisdiction's institutions and policies with economic freedom going back as far as 1970. In order to achieve a high rating, a jurisdiction must provide secure protection of privately owned property, evenhanded enforcement of contracts, and a stable monetary environment. It also must keep taxes low, refrain from creating barriers to both domestic and international trade, and rely more fully on markets rather than the political process to allocate goods and resources.

The index measures the degree of economic freedom present in five major areas; (1) Size of Government: Expenditures, Taxes, and Enterprises, (2) Legal Structure and Security of Property Rights, (3) Access to Sound Money, (4) Freedom to Trade Internationally, (5) Regulation of Credit, Labor, and Business. Within the five major areas, there are 23 components in EFW index. Many of those components are themselves made up of several sub-components. In total, the index is comprised of 42 distinct variables, and each component and sub-component is placed on a scale from 0 to 10 that reflects the distribution of the underlying data. The sub-component, component and five area ratings are averaged up to derive the overall rating for each country.

The EFW index has been shown to be highly correlated with economic growth and other measures of economic performance in dozens of studies (Berggren, 2003; De Haan, et al., 2006, Hall and Lawson, 2010-forthcoming).

The conventional wisdom suggests that feminists in general identify with the political left. Likewise, though there are notable exceptions like Deirdre McCloskey (2000), who argues that the market “the great liberator of women”, feminist economists are almost certainly less supportive of free markets than typical non-feminist economists. Cardiff and Klein (2005) indicate that female economists are far more likely to identify with the democratic party than male economists; see Table 1.² In part, this may be a result of the view that the underlying assumptions in economic theory are gender biased, differences which are outlined in Strober (1994) and Nelson (1995). Also, so long as no force or fraud are involved, an economically free society could allow for private discrimination and potentially poor treatment of women in the culture. As a result, most feminists appear to prefer strong government controls on private individuals to prevent discrimination and on markets processes more broadly to equalize both

opportunities and economic outcomes for women in society. The bottom line is that feminists as a group appear to be more likely to distrust the free market.

Empirically, however, free market societies may or may not underperform more heavily regulated societies when it comes to gender outcomes. After all, the same chauvinistic attitudes that afflict private individuals acting in markets are also likely to afflict these same individuals when acting as voters and politicians. Recently, a few studies have reported that economic outcomes for females are enhanced by increased economic freedom. Stroup (2008) for example finds that economic freedom is a much more powerful factor than democracy in fostering women's well-being and gender equality. Mixon and Roseman (2003) argue that life expectancy for females improves relative to males with greater economic freedom. If economic freedom improves the economic opportunities facing women, then the feminists' suspicions regarding free markets per se may be misplaced as a matter of practice.

Similarly, returning to the topic at hand, if we find that economic freedom reduces women's interest in beauty pageants, then those feminists hostile to beauty pageants may want to consider freer markets as a positive cultural force in this respect.

Theoretical considerations

If no institutional characteristics were important determinants of beauty pageant success, the distribution of semifinalists would largely be random. In fact, if all populations were of equal size, the ex-ante expectation would be for the distribution of the awards to be relatively uniform. However, nations differ in many dimensions that are likely to be influential determinants of the frequency of pageant success. For example, larger countries in terms of

population should see more beauty pageant semifinalists simply because they have a larger pool of people from whom to choose contestants.

Also, we suspect that as the prosperity of a nation increases, its greater wealth allows people to consume more leisure goods like pageantry. Furthermore, greater wealth allows for greater access to resources that can increase one's cosmetic appearance, such as nutritious foods and health care. These are income effects that we will capture with a purchasing power parity measure of the nations' per capita GDP.

As suggested above, we propose that increases in economic freedom will increase the opportunity cost for women to engage in acts focused only on celebrating physical appearances, such as beauty pageants. Thus we expect a negative relationship between our measure of beauty pageant success and economic freedom.

These insights motivate the following econometric model that estimates the number of semifinalists in Miss Universe (MUSF) contests by country of origin (denoted with the subscript i).

$$MUSF_i = \alpha + \beta_1 Population_i + \beta_2 Income_i + \beta_3 Economic Freedom_i + \gamma X' + \varepsilon_i \quad (1)$$

The expected signs for the coefficients are: $\beta_1 > 0$, $\beta_2 > 0$, and $\beta_3 < 0$. The X variable is a matrix of other variables that may be important, such as indicators for the region of the planet the country may be found. Also, some researchers have proposed a correlation between female sociosexuality and the ratio of men to women (Pedersen, 1991; Schmitt, 2005) so this is added as a control variable.³

Empirical results

After combining the Miss Universe data with the EFW index data as well as the other control variables, there are observations for 132 nations, of which 59 have at least one semifinalist in the Miss Universe pageant. Table 2 reports summary statistics on the variables employed in the analysis. Although the Miss Universe data reflect the period from 1952-2008, our explanatory variables in the cross-section are all from the year 2007. Many of these variables, including the EFW index, are not available as far back as 1952, and in any case, they are fairly stable over time.

Insert Table 2

Because the dependent variable is left-censored at zero, the Tobit model is employed to obtain unbiased estimates of the parameters and non-negative fitted values. Table 3 presents the Tobit estimates from some alternative specifications of equation (1). In the first column, both economic freedom and the male/female ratio are excluded. Economic freedom, the variable of interest to this paper, is introduced in columns two and three, while the male/female ratio is introduced in the final column. The estimates for the control variables differ little across specifications, suggesting that omitted variable bias is not significant problem.

Insert Table 3

The results in Table 3 indicate primarily the sign of the variables' effect and their respective statistical significance. As expected, countries with larger populations tend to grab a

larger number of the semifinalists, as do those with higher standards of living as measured by per capita GDP. Regional fixed effects are also reported, but only those with p-values lower than 0.90 were included in the estimation.

The number of Miss Universe semifinalists is inversely related to both economic freedom and the male/female ratio in the final column of Table 3. These both fit with the expectations in the sign, but the statistical significance for both is missing at the ten percent confidence level. The EFW index carried a p-value of 0.11, whereas the male/female ratio p-value was 0.20.

To obtain a view of the quantitative significance of the variables, Table 4 reports the marginal effects on the expected value of the number of Miss Universe semifinalists. These marginal effects are “censored and uncensored,” as they are not conditional on the dependent variable being greater than zero. Furthermore, these results are calculated at selected points for economic freedom and the mean of the other variables. Specifically, the economic freedom variable is calculated at its mean (EF=6.68), and both one standard deviation below (EF=5.72) and above (EF=7.62) the mean.

Table 4 demonstrates that, qualitatively, economic freedom has a larger marginal effect on the expected number of Miss Universe semi-finalists than population or per capita GDP. While the point estimate on the economic freedom index ranged from -1.46 to -1.04, the point estimates for population (in millions) and per capita GDP (in thousands) ranged from 0.012 to 0.009 and 0.355 to 0.253, respectively. A 0.01 increase in the male/female ratio is correlated with a 0.19 to 0.13 decline in the expected number of pageant semi-finalists.

Insert Table 4

In fact, the results suggest that a one point increase in economic freedom when evaluated at a standard deviation below the mean (EF=5.72) would roughly offset the increase associated with a one standard deviation increase in the population, which is about 149 million people. The same calculation would also offset about one-third of the estimated impact of a standard deviation increase in per capita GDP, which is about \$13,500.

Interestingly, economic freedom has a larger economic impact at lower levels, but the statistical significance increases at the higher levels. Specifically, economic freedom becomes significant statistically at about EF=6.9, which is the median of the sample.

Conclusion

This paper proposes a link between national pageantry success and economically free countries and tests it using data from the Miss Universe contest. A Tobit regression on the number of semi-finalists in the Miss Universe contest indicate that, after controlling for population and per capita GDP, countries with higher levels of economic freedom have been underrepresented among the semifinalists. The marginal effects of this regression indicate that the magnitude of an increase in economic freedom is substantial when compared to those of population and income, though it is only statistically significant at and above the median country in terms of economic freedom. This relationship suggests that countries with high levels of economic freedom have more potential opportunities for women, and are therefore less likely to compete for social and economic status with sociosexuality.

Table 1: Party Affiliation of Economists by Gender

Affiliation	Male Economists		Female Economists	
	Frequency	Percentage	Frequency	Percentage
Democratic	62	29.7%	23	46.0%
Republican	28	13.4%	2	4.0%
Green	1	0.5%	0	0.0%
Libertarian	2	1.0%	0	0.0%
Decline to State	23	11.0%	4	8.0%
No Party	9	4.3%	3	6.0%
AI	1	0.5%	1	2.0%
Not Found	59	28.2%	15	30.0%
Indeterminate	24	11.5%	2	4.0%
TOTAL	209	100.0%	50	100.0%
D:R Ratio	2.2		11.5	
DG:RL Ratio	2.1		11.5	

Table 2: Summary Statistics

Variable	Mean	Std. Dev.	Min	Max
Miss Universe Semi-Finalists	4.65	8.20	0	54
Population (mills)	44.89	149.80	0.29	1318.31
Per Cap GDP (thous)	12.61	13.55	0.28	72.78
Economic Freedom	6.68	0.96	2.89	8.97
Male/Female Ratio	1.00	0.10	0.84	1.83
Asia	0.15	0.36	0	1
Latin America	0.18	0.38	0	1
Austroceania	0.02	0.14	0	1
North America	0.01	0.12	0	1

Table 3: Tobit Regression Results

Dependent Variable: Miss Universe Semi-Finalists			
Population (mills.)	0.017 ** (0.005)	0.017 ** (0.005)	0.018 ** (0.005)
Per Cap GDP (thous.)	0.450 ** (0.066)	0.524 ** (0.084)	0.528 ** (0.085)
Economic Freedom		-1.847 (1.289)	-2.175 (1.368)
Male/Female Ratio			-28.438 (22.267)
Asia	0.659 (2.623)	1.406 (2.629)	2.152 (2.721)
Latin America	12.582 ** (2.200)	13.086 ** (2.201)	13.932 ** (2.335)
Austroceania	1.049 (5.498)	2.432 (5.465)	3.558 (5.577)
North America	22.084 ** (6.337)	22.695 ** (6.236)	23.092 ** (6.286)
Intercept	-7.813 ** (1.652)	3.499 (7.962)	33.072 (24.448)
pseudo-R ²	0.429	0.448	0.442
Sample Size	132	132	127

Notes: Standard errors reported in parentheses. Statistical significance indicated at the five (**) and ten (*) percent level.

Table 4: Marginal Effect on the Censored and Uncensored Expected Value of Miss Universe Semi-Finalists

	EF=5.72	EF=6.68	EF=7.64
Population (mills.)	0.012 ** (0.004)	0.010 ** (0.003)	0.009 ** (0.003)
Per Cap GDP (thous.)	0.355 ** (0.081)	0.302 ** (0.050)	0.253 ** (0.035)
Economic Freedom	-1.461 (1.055)	-1.244 (0.790)	-1.041 ** (0.535)
Male/Female Ratio	-19.100 (15.254)	-16.268 (12.675)	-13.606 (10.463)

Notes: Standard errors reported in parentheses. Economic Freedom level (EF) used in calculating marginal effects indicated by column header. All other variables estimated at the mean. Statistical significance indicated at the five (**) and ten (*) percent level.

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Notes:

¹ Data source: <http://www.tpmum.com/mostmu.html>

² It seems reasonable to assume that the party differences between female and male economists are at least indicative of differences between feminist and non-feminist economists. We are unaware of any survey of feminist economists as such.

³ The source on the ratio of men-to-women is the CIA World Factbook:
<https://www.cia.gov/library/publications/the-world-factbook/>