$\qquad$

# Do Americans Desire Homogeneity? Evidence from Names from 1900-2000 

Richard Woodward<br>Texas AMUniversity


#### Abstract

There has been a dramatic increase in market concentration in the retail sector in the United States. Although it is typically assumed that standard supply-side forces of returns to scale are behind this trend, it is also possible that demand-side forces have played a role, i.e., that consumers desire homogeneity. This paper evaluates the American demand for homogeneity as exhibited in parental naming choices over the century from 1900-2000. The evidence does not support the hypothesis of increasing demand for homogeneity in the U.S.


[^0]
## 1. Introduction

A number of recent papers have taken an economic look at the decision made by parents when they choose their children's names. Most prominently, Freyer and Levitt (2004) evaluated the naming choices among Blacks using data from the California Department of Health Services. Freyer and Levitt focus on the naming decision because a child's name can affect his or her prospects in the labor market. Beyond labor market implications, to the extent that a name will affect the child's identity, it is a very important choice. Akerlof and Kranton (2000, p. 717) argue, "choice of identity may be the most important 'economic' decision people make."

In this paper we use data on names to ask a basic question of economic preferences, Do people desire homogeneity or diversity? Sometimes it seems that Americans like homogeneity. Whether it is the stores in which we make purchases or the restaurants in which we eat, we all seem to be shopping at the same place. This is not just a vague impression. According the U.S. Economic Census, concentration in the retail sector has increase dramatically in the last 20 years. In 1977 the top 50 companies controlled $18.6 \%$ of all retail trade, a figure that jumped to $25.7 \%$ by 1997 (U.S. Dept of Commerce).

One might be left with the impression that this is how the consumers want it. However, it is not clear that this homogenization of the marketplace has arisen out of the preferences of consumers or the supply-side forces that drive market concentration. Is this concentration a result of standard economies of scale that give advantages to more concentrated firms, or do American consumers actually prefer less diversity? Because of simultaneity problems, it would be difficult to separate the demand-side factor from the supply-side factors - all that is observed is the final distribution of businesses in the economy.

The naming choice provides a unique opportunity to study consumer preferences with regard to diversity. While market behavior is constrained to the opportunities provided by the marketplace, there is no such constraint on naming choices. The "supply" of names has essentially not changed over the last 100 years. Choosing a name like Frances, the 16th most popular name for girls during the 1900s, was no more difficult in the 1990's, yet by the close of the century its rank had fallen to $987 .{ }^{1}$ Hence, although it represents a decision that is in many ways quite different from most other economic choices, it provides an interesting opportunity to see how Americans' preferences for diversity have changed over the last century. If there is growing preference for homogenization among consumers, then the trends in the retail sector should be mirrored in naming choices and we would expect to find decreasing diversity.

In the next section we present data that shows that exactly the opposite is found; diversity in names has consistently increased over the last half of the 20th century. This result and its implications are discussed in a concluding section.

[^1]Table 1: The most popular names throughout the century
(names that appear in all three periods are italicized)

|  | Boys names |  |  |  | Girls names |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | 1900's | 1950's | 1990's | 1900's | 1950's | 1990's |  |
| 1 | John | Michael | Michael | Mary | Mary | Ashley |  |
| 2 | William | James | Christopher | Helen | Linda | Jessica |  |
| 3 | James | Robert | Matthew | Margaret | Patricia | Emily |  |
| 4 | George | John | Joshua | Anna | Susan | Sarah |  |
| 5 | Joseph | David | Jacob | Ruth | Deborah | Samantha |  |
| 6 | Charles | William | Andrew | Elizabeth | Barbara | Brittany |  |
| 7 | Robert | Richard | Daniel | Dorothy | Debra | Amanda |  |
| 8 | Frank | Thomas | Nicholas | Marie | Karen | Elizabeth |  |
| 9 | Edward | Mark | Tyler | Mildred | Nancy | Taylor |  |
| 10 | Henry | Charles | Joseph | Alice | Donna | Megan |  |
| 11 | Walter | Steven | David | Florence | Cynthia | Stephanie |  |
| 12 | Thomas | Gary | Brandon | Ethel | Sandra | Kayla |  |
| 13 | Harry | Joseph | James | Lillian | Pamela | Lauren |  |
| 14 | Arthur | Donald | John | Rose | Sharon | Jennifer |  |
| 15 | Harold | Ronald | Ryan | Gladys | Kathleen | Rachel |  |
| 16 | Albert | Kenneth | Zachary | Frances | Carol | Hannah |  |
| 17 | Paul | Paul | Justin | Edna | Diane | Nicole |  |
| 18 | Clarence | Larry | Anthony | Grace | Brenda | Amber |  |
| 19 | Fred | Daniel | William | Catherine | Cheryl | Alexis |  |
| 20 | Carl | Stephen | Robert | Hazel | Elizabeth | Courtney |  |

## 2. Data and results

The data used in our analysis reflects names chosen by parents in the United States from 1900-2000. Compiled by the United States Social Security Administration, the data identify the top 1000 names in each decade during the last century based on a $5 \%$ sample. The twenty most popular names at the beginning middle and end of the century are presented in Table 1. With a few exceptions, such as John and Elizabeth, there is quite a bit of variation in these lists. The focus of our study here is on the diversity of names within this sample. Using Lorenz curves, Gini coefficients and the percentage of names held by those that are most popular we evaluate whether the overall diversity of names chosen has changed over the century.

Lorenz curves are the most basic indicator of diversity in a population. Figure 1 presents the Lorenz curves for the distribution of boys names in the U.S. during two distinct periods,

1900-1950 and 1950-2000. ${ }^{2}$ The closer these Lorenz curves are to the diagonal, the more equal the distribution of names among the top thousand in the population. At the other extreme, if almost all the boys were given only a few names, the curve would be far from the diagonal. Hence, lines that are closer to the diagonal indicate more diversity in the names chosen.

The naming trends during the century are presented in two distinct periods. The first half of the last century, figure 1A, was a period of increasing name homogeneity in the U.S. During this period, the Lorenz curve for each decade is below that of the preceding decade, indicating that fewer names made up a higher percentage of all names given. The concentration peaked in the 1950s however, and the trend reversed in the second half of the century (figure 1B). From the 1950s to the 1990s diversity in the names chosen increased uniformly from one decade to the next.

Figure 1: Lorenz Curves for Boys Names in the United States 1900s-1950s and 1950s-1990s


A: 1900s - 1950s


B: 1950s-1990s

Changes in the concentration of names can also be seen in the percentage of all names taken up by the most popular names in each period (tables 2 and 3). For example, in 1940s the three most popular boys names, James, Robert, and John, made up $15.3 \%$ of all names given to boys in U.S. By the 1990s, the top three names, Michael, Christopher, and Matthew, made up only $6.8 \%$. This indicator does not show a trend during the first half of the century as the concentration among the top few names remained relatively constant, never taking up less than $14 \%$ of all boys names in the U.S. For girls the most popular names were never as common as
${ }^{2}$ The trends were similar, though not quite as pronounced for girls' names. The diversity of names for girls is consistently greater than that for boys, as is seen in the Gini coefficients discussed below and in Table 3.
for boys, but this indicator also declined for them. Between 1900 and 1950 an average of $11.3 \%$ of all girls were given one of the three most popular names, but this fell to $7.6 \%$ in the second half of the century, and reached a low of $5.9 \%$ in the 1990s.

Table 2: Percentage of boys named one of most popular names by decade

|  | Top 3 | Top 10 | Top 20 | Top 50 | Top 100 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| 1900's | $14.1 \%$ | $30.0 \%$ | $41.8 \%$ | $58.9 \%$ | $72.4 \%$ |
| 1910's | $14.4 \%$ | $31.2 \%$ | $42.3 \%$ | $59.9 \%$ | $73.5 \%$ |
| 1920's | $15.4 \%$ | $33.3 \%$ | $44.8 \%$ | $61.6 \%$ | $74.4 \%$ |
| 1930's | $15.6 \%$ | $33.8 \%$ | $45.1 \%$ | $61.6 \%$ | $74.8 \%$ |
| 1940's | $15.3 \%$ | $34.0 \%$ | $47.8 \%$ | $63.8 \%$ | $77.2 \%$ |
| 1950's | $12.5 \%$ | $31.9 \%$ | $45.4 \%$ | $63.8 \%$ | $77.1 \%$ |
| 1960's | $11.9 \%$ | $28.7 \%$ | $42.3 \%$ | $61.3 \%$ | $74.4 \%$ |
| 1970's | $10.2 \%$ | $26.3 \%$ | $39.3 \%$ | $59.2 \%$ | $72.3 \%$ |
| 1980's | $9.5 \%$ | $23.4 \%$ | $37.8 \%$ | $59.8 \%$ | $72.9 \%$ |
| 1990's | $6.8 \%$ | $17.9 \%$ | $31.1 \%$ | $52.0 \%$ | $66.6 \%$ |

Source: Calculations using data from Social Security Administration (2004).

Table 3: Percentage of girls named one of most popular names by decade

|  | Top 3 | Top 10 | Top 20 | Top 50 | Top 100 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| 1900's | $10.5 \%$ | $21.4 \%$ | $31.9 \%$ | $52.4 \%$ | $69.3 \%$ |
| 1910's | $11.8 \%$ | $23.6 \%$ | $33.5 \%$ | $52.5 \%$ | $68.9 \%$ |
| 1920's | $11.9 \%$ | $23.6 \%$ | $33.1 \%$ | $51.1 \%$ | $67.8 \%$ |
| 1930's | $11.3 \%$ | $23.7 \%$ | $33.5 \%$ | $51.2 \%$ | $67.5 \%$ |
| 1940's | $11.3 \%$ | $24.6 \%$ | $36.3 \%$ | $54.8 \%$ | $69.7 \%$ |
| 1950's | $8.9 \%$ | $22.1 \%$ | $33.9 \%$ | $51.2 \%$ | $67.7 \%$ |
| 1960's | $6.6 \%$ | $16.0 \%$ | $26.2 \%$ | $46.9 \%$ | $63.2 \%$ |
| 1970's | $8.0 \%$ | $18.5 \%$ | $27.9 \%$ | $44.7 \%$ | $60.5 \%$ |
| 1980's | $8.7 \%$ | $19.9 \%$ | $30.0 \%$ | $49.0 \%$ | $62.5 \%$ |
| 1990's | $5.9 \%$ | $15.2 \%$ | $24.9 \%$ | $42.3 \%$ | $58.0 \%$ |

Source: Calculations using data from Social Security Administration (2004).


Source: Calculations using data from Social Security Administration (2004) following Gini coefficient equation Boadway and Bruce (1984).

Finally, the trend of increasing diversity can be seen in Table 4, which presents the Gini coefficients of the population of names during the period. A Gini coefficient is an index of inequality in a population and ranges from zero, perfect equality, to one, complete inequality. In our case, a decline in the Gini coefficient indicates increasing diversity among the names given to children. The trend toward less diversity in the population during the 1900-1950 period is reflected in the Gini coefficient for boys, which rose from 0.796 in the 1900 s to a peak of 0.836 in the 1950s. Diversity then increased as the boys and the Gini coefficient fell sharply reaching 0.749 by the 1990s. For girls there is no clear trend during the first half of the century, but between the 1950s to the 1990s a sharp increase in diversity is seen as the Gini coefficient decreases from 0.768 to 0.663 .

## 3. Discussion and Conclusion

There are a variety of factors that come into play when parents make naming choices. Cultural and family heritage, associations with famous individuals, and simple tastes all play a role. Freyer and Levitt (2004) find that for Blacks in California naming conventions changed radically during the 1970s: "The median Black female in a segregated area went from receiving a name that was twice as likely to be given to Blacks as Whites to a name that was more than twenty times as likely to be given to Blacks." For whatever reasons, Black parents during this period decided to use names as a way to differentiate their children from the rest of the population. As we have found, this trend is also seen when one looks also across the entire population. For whatever reasons parents are choosing more diversity in names.

This trend in the diversity of names is exactly counter to the trend in the retail sector in the United States, where here has been a dramatic increase in market concentration. Fewer and fewer vendors are dominating more and more of the markets. In the marketplace homogeneity is
on the rise. ${ }^{3}$ There are, no doubt, many reasons for this, from basic economies of scale to advantages in terms of search and information costs. Nonetheless, this empirical fact raises the question, Is this how the American consumers want it? Or, asked more generally, Do Americans desire homogeneity?

We believe that the trends in the names provide some evidence as to the answer to this question. When choosing names, where supply is not constrained and choices are not influenced by price, the population is choosing more diversity. Using a variety of indicators, we show that between the 1950s and 1990s there was a consistent increase in diversity of names chosen in America.

Certainly, it would be wrong to draw blanket conclusions about preferences from this single choice. The reasons behind the trends in names that we present are manifold: cultural forces, changing ethnic patterns (Figure 2), the birth of the Internet, and many other factors no doubt impacted the names that were chosen by parents in the last century. Attempting to determine the causes for this trend is beyond the scope of the current paper. For whatever reason however, when choosing names for their children, Americans demonstrated increasing diversity during the second half of the twentieth century. We can, therefore, provide a partial answer the question raised in the title of this paper. When it comes to names, Americans increasingly desire diversity, not homogeneity.

Figure 2: Percentage of U.S. population of different race and ethnic categories and the percentage of foreign-born residents, 1900-1990

${ }^{3}$ We admit that concentration in the retail sector is only a partial measure of diversity in the marketplace. We have no evidence on the actual number of products available to a typical consumer.

## References

Akerlof, George A, and Rachel E Kranton. 2000. Economics and Identity. Quarterly Journal of Economics 115(3):715-53.

Boadway, Robin W. and Neil Bruce. Welfare Economics. Cambridge, Mass.: Basil Blackwell, 1984.

Fryer, Roland G Jr., and Steven D Levitt. 2004. The Causes and Consequences of Distinctively Black Names. Quarterly Journal of Economics 119(3):767-805.

Social Security Administration. 2004. "Popular Baby Names" www.ssa.gov/OACT/babynames
U.S. Bureau of the Census. 1999. Table 8. Race and Hispanic Origin of the Population by Nativity: 1850 to 1990. http://www.census.gov/population/www/documentation/twps0029/tab08.html.
U.S. Department of Commerce, Bureau of the Census. 1977 Census of Retail Trade: Establishment and Firm Size (Including Legal Form of Organization).
U.S. Department of Commerce, Bureau of the Census. 1997 Census of Retail Trade: Establishment and Firm Size (Including Legal Form of Organization).


[^0]:    I acknowledge helpful comments from George Davis, Alan Love, Rudy Nayga, Douglass Shaw, and David Bessler. Any remaining errors are the responsibility of the author.
    Citation: Woodward, Richard, (2005) "Do Americans Desire Homogeneity? Evidence from Names from 1900-2000." Economics Bulletin, Vol. 4, No. 9 pp. 1-6
    Submitted: August 29, 2005. Accepted: August 31, 2005.
    URL: http://www.economicsbulletin.com/2005/volume4/EB-05D10041A.pdf

[^1]:    ${ }^{1}$ In one sense, of course, costs did change over the century. The cost of identifying unusual names declined because information was more accessible in 2000 than it was in 1900.

