

# **Exchanging Race for Religion? Interracial Unions and Religion in Brazil, 1980-2010**

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## **Abstract**

This paper presents a twofold objective. First, it analyzes interracial marriage rate differences according to religious affiliation. Secondly, it compares the most relevant interracial marriage changes from 1980 to 2010 using loglinear models. The first analysis focuses on results until 2000. They indicate that when spouses or partners have the same religion, the marriage percentage distribution remains practically the same as the total distribution. However, when analyzing marriages between religiously heterogamous partners, all racially homogamous marriages decrease, and all interracial marriages increase. Additionally, all the model association coefficients demonstrate that having the same religion is important not only for interracial marriages but also for all homogamous couples. In Brazil, the strength of religious belief is highly relevant to unions, even for interracial couples. Religion has considerable power over partner choice. Although interracial unions increased between 1980 and 2000, religious heterogamous unions changed at a different pace. In the last decade, changes in the Brazilian religious scenario and racial composition motivated the 2010 analysis.

## **Religion and interracial marriage in Brazil**

The Brazilian population has experienced important changes to its religious affiliation over the last four decades. In 1970, 92 percent of the population declared themselves as Catholic, and 30 years later, the proportion had fallen to 74 percent. In 2010, the figure fell even further to 64.6 percent. The proportion of Protestants almost tripled between 1970 and 2000 (5 percent to 15.4 percent) and reached 22.2 percent in 2010. Those who declared no religion increased from 1 percent to 8 percent between 1970 and 2010. In 2000, 53.7 percent declared themselves as “branco” (white), 38.5 percent considered themselves “pardo” (brown or mixed), and 6.2 percent reported themselves as being “preto” (black). Ten years later, the last two figures rose to 43.1 percent and 7.6 percent, respectively. For the first time in history therefore, more than half of Brazilians considered themselves either mixed or black. In addition, the country has the largest Afro-descendent population outside of Africa, around 15 million black and 82 million mixed race individuals as of 2010.

This paper presents a twofold objective. First, it analyzes interracial marriage rate differences according to religious affiliation. Secondly, it compares the most relevant interracial marriage changes from 1980 to 2010 using census data (IPUMS) and loglinear models.

Concerning interracial marriage, a key question is if a spouse of a lower social race/skin color status should offer some form of compensation for variations in religious affiliation.

The analysis was performed for all women from 20 to 29 years of age and their husbands/partners, differentiating between formally married women and those in consensual unions.

The results from 1980 to 2000 suggest when the husband/partner and his wife/partner had the same religion, practically no change existed in the marriage distribution percentage compared to the overall distribution. However, when analyzing marriages between partners of different religions, all homogamous marriages decreased, and all interracial marriages increased. Additionally, the model association coefficients show that having the same religion is important not only for interracial marriages but also for homogamous couples (Tables 1, 2, and 3). Therefore, the strength of religion is highly relevant to unions in general, and religion can be disconsidered as an “equalizer” of racial differences in Brazil. Although interracial unions increased from 1980 to 2000, heterogamous unions by religion have changed at a slower pace.

**TABLE 1: Selected odds ratios estimated to race and religion, adjusted model (Model A7) – Brazil, 1980, 1991, and 2000**

| Race/color man | woman religion | man religion | Odds ratio  |             |             |
|----------------|----------------|--------------|-------------|-------------|-------------|
|                |                |              | white woman | black woman | pardo woman |
| White          | Catholic       | Catholic     | 1.000       | 1.000       | 1.000       |
|                |                | Protestant   | 1.000       | ns          | 0.135       |
|                |                | Pentecostal  | 1.000       | ns          | 0.421       |
|                |                | No religion  | 1.000       | 0.304       | ns          |
|                | Protestant     | Catholic     | 1.000       | ns          | 0.468       |
|                |                | Protestant   | 1.000       | 0.093       | 0.439       |
|                |                | Pentecostal  | 1.000       | ns          | ns          |
|                |                | No religion  | 1.000       | ns          | ns          |
|                | Pentecostal    | Catholic     | 1.000       | ns          | 1.327       |
|                |                | Protestant   | 1.000       | ns          | ns          |
|                |                | Pentecostal  | 1.000       | ns          | 1.154       |
|                |                | No religion  | 1.000       | ns          | 1.770       |
|                | No religion    | Catholic     | 1.000       | ns          | ns          |
|                |                | Protestant   | 1.000       | ns          | ns          |
|                |                | Pentecostal  | 1.000       | ns          | ns          |
|                |                | No religion  | 1.000       | ns          | 1.322       |
| Black          | Catholic       | Catholic     | 1.000       | 1.000       | 1.000       |
|                |                | Protestant   | ns          | ns          | ns          |
|                |                | Pentecostal  | ns          | ns          | ns          |
|                |                | No religion  | 0.466       | 0.440       | 0.637       |
|                | Protestant     | Catholic     | ns          | 0.062       | ns          |
|                |                | Protestant   | 0.284       | 0.115       | 0.125       |
|                |                | Pentecostal  | ns          | ns          | ns          |
|                |                | No religion  | ns          | ns          | ns          |
|                | Pentecostal    | Catholic     | ns          | 0.547       | 0.183       |
|                |                | Protestant   | ns          | ns          | ns          |
|                |                | Pentecostal  | ns          | 0.630       | 0.738       |
|                |                | No religion  | ns          | ns          | ns          |
|                | No religion    | Catholic     | ns          | ns          | ns          |
|                |                | Protestant   | ns          | ns          | ns          |
|                |                | Pentecostal  | ns          | ns          | ns          |
|                |                | No religion  | ns          | 1.678       | 1.545       |
| Pardo          | Catholic       | Catholic     | 1.000       | 1.000       | 1.000       |
|                |                | Protestant   | 0.103       | ns          | 0.125       |
|                |                | Pentecostal  | ns          | ns          | 0.509       |
|                |                | No religion  | ns          | 0.391       | 1.189       |
|                | Protestant     | Catholic     | 0.379       | ns          | 0.454       |
|                |                | Protestant   | 0.483       | ns          | 0.364       |
|                |                | Pentecostal  | ns          | ns          | ns          |
|                |                | No religion  | ns          | ns          | ns          |
|                | Pentecostal    | Catholic     | ns          | 0.314       | 1.310       |
|                |                | Protestant   | ns          | ns          | ns          |
|                |                | Pentecostal  | 1.317       | 0.458       | ns          |
|                |                | No religion  | 1.524       | ns          | 1.548       |
|                | No religion    | Catholic     | ns          | ns          | ns          |
|                |                | Protestant   | ns          | ns          | ns          |
|                |                | Pentecostal  | ns          | ns          | ns          |
|                |                | No religion  | 1.349       | 1.478       | 1.579       |

Source: Brazilian Census, 1980, 1991 and 2000 - IPUMS International Data  
ns = not significant

**TABLE 2: Selected odds ratios estimated to race and religion, adjusted model (Model B2) – Brazil, 1980, 1991, and 2000**

| Interaction  | Odds ratio |
|--|------------|
| <b>Race/color</b>  |            |
| 0 - Intraracial  | 1.000      |
| 1 - WP or PW or PB or BP   | 0.251      |
| 2 - WB or BW   | 0.094      |
| <b>Religion</b>  |            |
| 0 - Religious endogamy   | 1.000      |
| 1 - Cat./Prot. or Prot./Cat. or Cat./Pent. or Pent./Cat. or Pent./Prot. or Prot./Pent. | 0.018      |
| 2 - One partner "no religion"  | 0.001      |

Source: Brazilian Census, 1980, 1991 and 2000 - IPUMS International Data

ns = not significant; W=white; P=pardo; B=black

**TABLE 3: Selected odds ratios estimated to race and religion, adjusted model (Model B2) – Brazil, 1980, 1991, and 2000**

| Iteration  | Odds ratio - Consensual Union |       |       | Odds ratio - Married |       |       |
|--|-------------------------------|-------|-------|----------------------|-------|-------|
|  | 1980                          | 1991  | 2000  | 1980                 | 1991  | 2000  |
| <b>Race/color</b>  |                               |       |       |                      |       |       |
| 0 - Intraracial  | 1.000                         | 1.000 | 1.000 | 1.000                | 1.000 | 1.000 |
| 1 - WP or PW or PB or BP   | 0.233                         | 0.276 | 0.343 | 0.190                | 0.241 | 0.305 |
| 2 - WB or BW   | 0.079                         | 0.109 | 0.217 | 0.041                | 0.075 | 0.152 |
| <b>Religion</b>  |                               |       |       |                      |       |       |
| 0 - Religious endogamy   | 1.000                         | 1.000 | 1.000 | 1.000                | 1.000 | 1.000 |
| 1 - Cat./Prot. or Prot./Cat. or Cat./Pent. or Pent./Cat. or Pent./Prot. or Prot./Pent. | 0.005                         | 0.023 | 0.042 | 0.015                | 0.017 | 0.017 |
| 2 - One partner "no religion"  | 0.000                         | 0.001 | 0.002 | 0.000                | 0.001 | 0.001 |

Source: Brazilian Census, 1980, 1991 and 2000 - IPUMS International Data

ns = not significant; W=white; P=pardo; B=black

Changes in the Brazilian religious scenario and racial composition motivated the 2010 analysis. Did these changes also alter interracial and interreligious relations?

What does the 2010 Census say?

Concerning interracial marriage, a key question is if a spouse of a lower social race/skin color status should offer some form of compensation for this difference. One compensation could be having the same religion. Table 4 shows the 2010 data results. For example, in a marriage involving a white woman and black man, the chances of an endogamous Protestant union are higher than in endogamous black couples. However, in a marriage involving a black woman and white man, the chances of an endogamous Protestant union are lower than in endogamous black couples. When comparing endogamous unions among pardos, the chances of an endogamous Protestant union among white-“pardo” and “pardo”-white couples are higher.

This result shows that having the same religion may be an unimportant exchangeable feature in interracial marriages, at least Protestant ones.

When at least one partner has no religion, interracial marriage chances increase. On the other hand, interracial marriages increase the chances of exogamous marriages by religion.

In 2010, it became evident that religious compensation failed in interracial marriage.

**TABLE 4: Selected odds ratios estimated to race and religion, adjusted model (Model A7) – Brazil, 2010**

| Race/color man | woman religion | man religion | Odds ratio  |             |             |
|----------------|----------------|--------------|-------------|-------------|-------------|
|                |                |              | white woman | black woman | pardo woman |
| White          | Catholic       | Catholic     | 1.000       | 1.000       | 1.000       |
|                |                | Protestant   | 1.000       | ns          | 0.895       |
|                |                | Pentecostal  | 1.000       | 1.308       | 1.349       |
|                |                | No religion  | 1.000       | 1.940       | 1.269       |
|                | Protestant     | Catholic     | 1.000       | 1.422       | 1.147       |
|                |                | Protestant   | 1.000       | 1.070       | 0.930       |
|                |                | Pentecostal  | 1.000       | 1.496       | 1.371       |
|                |                | No religion  | 1.000       | 2.872       | 1.737       |
|                | Pentecostal    | Catholic     | 1.000       | 1.876       | 1.673       |
|                |                | Protestant   | 1.000       | 1.622       | 1.456       |
|                |                | Pentecostal  | 1.000       | 1.353       | 1.258       |
|                |                | No religion  | 1.000       | 3.087       | 2.126       |
|                | No religion    | Catholic     | 1.000       | 2.396       | 1.597       |
|                |                | Protestant   | 1.000       | 2.482       | 1.624       |
|                |                | Pentecostal  | 1.000       | 3.693       | 2.193       |
|                |                | No religion  | 1.000       | 1.942       | 1.401       |
| Black          | Catholic       | Catholic     | 1.000       | 1.000       | 1.000       |
|                |                | Protestant   | ns          | 0.730       | 0.777       |
|                |                | Pentecostal  | 1.823       | 1.365       | 1.569       |
|                |                | No religion  | 1.872       | 1.427       | 1.750       |
|                | Protestant     | Catholic     | 1.193       | ns          | 1.147       |
|                |                | Protestant   | 1.239       | 1.081       | 1.184       |
|                |                | Pentecostal  | 1.613       | 1.604       | 2.036       |
|                |                | No religion  | 2.352       | 2.468       | 2.741       |
|                | Pentecostal    | Catholic     | 1.639       | 1.512       | 1.797       |
|                |                | Protestant   | ns          | 1.888       | 1.370       |
|                |                | Pentecostal  | 1.628       | 1.370       | 1.566       |
|                |                | No religion  | 2.544       | 2.793       | 3.614       |
|                | No religion    | Catholic     | 1.609       | 1.617       | 2.330       |
|                |                | Protestant   | 2.762       | 2.101       | 2.045       |
|                |                | Pentecostal  | 3.046       | 2.816       | 3.947       |
|                |                | No religion  | 1.820       | 2.375       | 2.219       |
| Pardo          | Catholic       | Catholic     | 1.000       | 1.000       | 1.000       |
|                |                | Protestant   | 0.875       | ns          | 0.580       |
|                |                | Pentecostal  | 1.491       | 1.372       | 1.095       |
|                |                | No religion  | 1.330       | 1.803       | ns          |
|                | Protestant     | Catholic     | 1.064       | 1.410       | 0.817       |
|                |                | Protestant   | 1.060       | ns          | 0.764       |
|                |                | Pentecostal  | 1.550       | ns          | ns          |
|                |                | No religion  | 1.692       | 3.168       | 1.510       |
|                | Pentecostal    | Catholic     | 1.509       | 2.222       | 1.402       |
|                |                | Protestant   | 1.252       | 1.553       | ns          |
|                |                | Pentecostal  | 1.407       | 1.461       | 1.171       |
|                |                | No religion  | 1.886       | 3.983       | 2.009       |
|                | No religion    | Catholic     | 1.222       | 2.492       | ns          |
|                |                | Protestant   | 1.420       | 3.157       | ns          |
|                |                | Pentecostal  | 2.282       | 4.070       | 1.855       |
|                |                | No religion  | 1.292       | 2.341       | 1.389       |

Source: Brazilian Census 2010

ns = not significant

The large proportion of religious endogamous marriages may complicate analyzing unions for social status compensation.

This tangle of possibilities for interpreting these parameters shows the importance of relying on topological models which allow analyzing a particular behavior data pattern.

The Table 5 topological model consists of two arrays, one for associations between race/skin color and the other for the religion association of couples. Their sum shows the effect of combining the four interest variables. A stronger barrier exists between religion and no religion. “W” represents the white race/skin color, “P” is “pardo” (brown), and “B” is black.

As expected, the odds of interracial marriage are much lower among whites and blacks than endogamous racial unions and marriages between whites and “pardos”. The religious endogamy is so high that the chance of an exogamous religious marriage is much lower than

an interracial marriage. Furthermore, the union barrier is strong among Catholics, Protestants, and Pentecostals who have partners with no religion. The summed effects of both arrays reveal that the chances of union are smaller with higher barriers of race/skin color and religion.

**TABLE 5: Selected odds ratios estimated to race and religion, adjusted model (Model B2) – Brazil, 2010**

| <b>Interaction</b>   | <b>Odds ratio</b> |
|--|-------------------|
| <b>Race/color</b>  |                   |
| 0 - Intraracial  | 1.000             |
| 1 - WP or PW or PB or BP   | 0.335             |
| 2 - WB or BW   | 0.241             |
| <b>Religion</b>  |                   |
| 0 - Religious endogamy   | 1.000             |
| 1 - Cat./Prot. or Prot./Cat. or Cat./Pent. or Pent./Cat. or Pent./Prot. or Prot./Pent. | 0.047             |
| 2 - One partner "no religion"  | 0.003             |

Source: Brazilian Census 2010

ns = not significant; W=white; P=pardo; B=black

Table 6 shows that interracial marriages are more common among consensual unions than among formal marriages. However in 2010, consensual unions increased less than formal marriages. Although less common, marriages between white women and black men and black women and white men presented the highest growth.

This may be an indication that informal couples are also more tolerant of religious differences. These couples could generally share nonadherence to formalizing their civil and religious unions. Exogamous unions with at least one nonreligious spouse are also very rare and practically unchanging.

This model showed one of the best adjustments and provided a strong barrier to religious exogamy and interracial marriages, especially when one spouse is nonreligious. Thus, religion and race/skin color are statistically associated, and religious endogamy weighs heavily in interracial marriages, regardless of race/skin color. In other words, the color barrier influence weighs less than the religious barrier. When the effect of religious differences is added to the effect of racial differences, the chance of union will be lower for white-black and black-white couples, especially if one partner is nonreligious.

**TABLE 6: Selected odds ratios estimated to race and religion, adjusted model (Model B2) – Brazil, 2010**

| Iteration  | Odds ratio – 2010 |         |
|--|-------------------|---------|
|  | Consensual union  | Married |
| <b>Race/color</b>  |                   |         |
| 0 - Intraracial  | 1.000             | 1.000   |
| 1 - WP or PW or PB or BP   | 0.344             | 0.331   |
| 2 - WB or BW   | 0.263             | 0.225   |
| <b>Religion</b>  |                   |         |
| 0 - Religious endogamy   | 1.000             | 1.000   |
| 1 - Cat./Prot. or Prot./Cat. or Cat./Pent. or Pent./Cat. or Pent./Prot. or Prot./Pent. | 0.075             | 0.029   |
| 2 - One partner "no religion"  | 0.004             | 0.002   |

Source: Brazilian Census 2010

ns = not significant; W=white; P=pardo; B=black

In summary, the strength of religious belief is highly relevant to unions, even for interracial couples. Religion has considerable power over partner choice.

This paper contributes to the body of research on marital status by showing that quite relevant and precise variances still exist between formal and informal unions in Brazil. These variances may mask other issues affecting partner choice, even if the differences have been legally minimized or mitigated. The unique value of this study is showing the ongoing religious influence on family formation, primarily union types. As religious beliefs significantly affect partner selection, understanding this influence can help demographers better evaluate marital choices.