**Supplemental Table 1**.Description and source of the independent variables.

|  |  |  |
| --- | --- | --- |
| **Variables** | **Description** | **Source** |
| Urban population\* | Percentage of the population residing in urban areas | DATASUS TabNet(1) |
| Gross Domestic Product (GDP) per capita | Total sum in Brazilian real (R$) of all final goods and services produced divided by the municipality’s population | IBGE Automatic Retrieval System(2) |
| Expected years of schooling\* | Mean number of years of schooling a generation of children entering school will have completed by age 18 if the current patterns maintain throughout their schooling life | Atlas of Human Development in Brazil(3) |
| Unemployment rate\* | Percentage of the population over 16 years old out of work | DATASUS TabNet(1) |
| Family Health Strategy (FHS) coverage | Percentage of the population covered by FHS teams, considering a parameter of 3,450 individuals covered per team | DATASUS e-Gestor(4) |
| Household crowding\* | Percentage of the population residing in households with more than two individuals per bedroom | Atlas of Human Development in Brazil(3) |

\* Variables estimated by linear interpolation and extrapolation from 2000 and 2010 demographic census.

**Supplemental Figure 1.** Mean prevalence of stunting (HAZ <-2 SD) and overweight (WHZ> +2 SD) among children enrolled in Bolsa Família Program in Brazilian municipalities, 2008-2014 (n=4,443).

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**Supplemental Figure 2.** Mean prevalence of stunting (a) and overweight (b) among children enrolled in Bolsa Família in Brazilian municipalities by geographic region, 2008-2014 (n=4,443).

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**Supplemental Figure 3.** Mean prevalence of stunting (a) and overweight (b) among children enrolled in Bolsa Família in Brazilian municipalities by population size, 2008-2014 (n=4,443).

**Supplemental Table 2**. Demographic and socioeconomic characteristics of all municipalities with available data, 2008-2014 (n=5,507).

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variables** | **2008** | | **2010** | | **2012** | | | **2014** | | **% change** |
| **Median** | **IQR** | **Median** | **IQR** | **Median** | **IQR** | **Median** | | **IQR** | **2008-2014** |
| Urban population (%)\* | 63.8 | 35.3 | 65.0 | 35.0 | 66.2 | 34.8 | 67.6 | | 34.7 | 6.0 |
| GDP per capita (R$) | 7,414 | 8,282 | 9,249 | 10,023 | 11,479 | 12,349 | 13,816 | | 14,861 | 86.3 |
| Expected years of schooling (years)\* | 9.2 | 1.6 | 9.5 | 1.5 | 9.7 | 1.4 | 9.9 | | 1.5 | 7.6 |
| Unemployment rate (%)\* | 6.8 | 4.5 | 5.9 | 4.3 | 5.0 | 4.5 | 4.0 | | 4.9 | -40.5 |
| FHS coverage (%) | 100.0 | 34.7 | 100.0 | 28.8 | 100.0 | 27.4 | 100.0 | | 16.3 | 0.0 |
| Household crowding (%)\* | 25.9 | 17.8 | 23.1 | 17.2 | 20.5 | 16.5 | 17.7 | | 16.0 | -31.7 |

\* Variables estimated by linear interpolation and extrapolation from 2000 and 2010 demographic census.

IQR: interquartile range; FHS: Family Health Strategy; GDP: gross domestic product.

**Supplemental Table 3**. Demographic and socioeconomic characteristics of the municipalities included in the models, 2008-2014 (n=2,670).

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variables** | **2008** | | **2010** | | **2012** | | | **2014** | | **% change** |
| **Median** | **IQR** | **Median** | **IQR** | **Median** | **IQR** | **Median** | | **IQR** | **2008-2014** |
| Urban population (%)\* | 61.0 | 33.8 | 62.2 | 34.0 | 63.2 | 34.0 | 64.5 | | 33.8 | 5.8 |
| GDP per capita (R$) | 6,101 | 6,580 | 7,642 | 8,104 | 9,472 | 10,350 | 11,347 | | 12,050 | 86.0 |
| Expected years of schooling (years)\* | 9.0 | 1.5 | 9.3 | 1.4 | 9.6 | 1.4 | 9.8 | | 1.5 | 9.2 |
| Unemployment rate (%)\* | 6.9 | 4.5 | 6.1 | 4.3 | 5.2 | 4.7 | 4.4 | | 5.1 | -36.4 |
| FHS coverage (%) | 100.0 | 34.1 | 100.0 | 26.4 | 100.0 | 26.0 | 100.0 | | 13.1 | 0.0 |
| Household crowding (%)\* | 28.8 | 18.2 | 25.9 | 17.5 | 23.0 | 17.4 | 20.2 | | 16.9 | -30.0 |

\* Variables estimated by linear interpolation and extrapolation from 2000 and 2010 demographic census.

IQR: interquartile range; FHS: Family Health Strategy; GDP: gross domestic product.

**Supplemental Table 4**. Demographic and socioeconomic characteristics of the municipalities dropped from the models, 2008-2014 (n=1,773).

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variables** | **2008** | | **2010** | | **2012** | | | **2014** | | **% change** |
| **Median** | **IQR** | **Median** | **IQR** | **Median** | **IQR** | **Median** | | **IQR** | **2008-2014** |
| Urban population (%)\* | 72.8 | 36.2 | 73.7 | 35.8 | 74.5 | 35.4 | 75.3 | | 34.5 | 3.5 |
| GDP per capita (R$) | 7,519 | 8,495 | 9,359 | 10,304 | 11,832 | 12,984 | 14,079 | | 15,444 | 87.2 |
| Expected years of schooling (years)\* | 9.2 | 1.4 | 9.4 | 1.3 | 9.7 | 1.2 | 9.9 | | 1.3 | 7.3 |
| Unemployment rate (%)\* | 7.4 | 4.1 | 6.4 | 3.8 | 5.3 | 4.0 | 4.3 | | 4.2 | -41.9 |
| FHS coverage (%) | 94.8 | 44.8 | 96.5 | 39.9 | 99.4 | 36.7 | 100.0 | | 28.0 | 5.5 |
| Household crowding (%)\* | 27.0 | 15.1 | 24.1 | 14.5 | 21.3 | 14.3 | 18.7 | | 14.0 | -30.8 |

\* Variables estimated by linear interpolation and extrapolation from 2000 and 2010 demographic census.

IQR: interquartile range; FHS: Family Health Strategy; GDP: gross domestic product.

**Supplemental References**

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