EXECUTIVE SUMMARY

School Funding Equity in Brazil

Risk and spending analysis of municipal school networks, nationally and by state

Bruce D. Baker · University of Miami · October 2026

A school finance system exists to deliver the resources schools need to give every child an equal opportunity to achieve common, adequate outcome goals (Baker, Atchison & Levin, 2026). Because children face different obstacles to reaching those goals, equal opportunity requires differentiating resources by need. Brazil's Constitution expresses the same commitment: it guarantees equal conditions of access and a standard of quality (Art. 206) and assigns the Union a redistributive role "to guarantee the equalization of educational opportunities" (Art. 211).

This summary applies the first step of that framework. **Risk analysis** identifies which measurable characteristics of students and communities most strongly predict lower school outcomes. **Spending analysis** asks whether spending is directed toward the networks where those risks are concentrated, after accounting for size, remoteness, labor costs and grade mix. It also asks whether spending depends on local revenue capacity (**fiscal neutrality**). The analysis links SAEB results, INSE, the Censo Escolar, the 2022 Census and Cadastro Único data for 50,000 municipal schools with SIOPE spending for 5,560 municipal networks, 2019–2023.

Bottom line

Need is large and well measured, but municipal spending does not follow it. Nationally, high-need municipal networks spend about two-thirds (0.65) as much per pupil as low-need networks. Most of that gap lies between states: within states, where FUNDEB pools revenue, spending is roughly neutral with respect to need (0.96) and instead tracks how much revenue each municipality raises.

Key findings

- **Student SES and poverty dominate risk.** INEP's school socioeconomic index (INSE) alone explains about half of the variation in early-primary outcomes; the municipal Cadastro Único poverty rate explains about a third. Racial composition adds independent risk. Schools at the 90th percentile of need score about two standard deviations below those at the 10th percentile.
- **The national gradient is steep.** In 2023 the highest-need fifth of networks spent about R$ 10,200 per pupil against R$ 16,000 in the lowest-need fifth.
- **Between states, spending falls with need.** State averages of need and spending per pupil correlate at −0.78. São Paulo's municipal networks spend about 45% above the national average, while Maranhão, Amazonas, Alagoas and Pará spend 25–30% below.
- **Within states, spending is roughly need-neutral but tracks revenue.** Among networks in the same state with similar need and costs, 10% more tax and constitutional-transfer revenue per resident brings about 2.6% more spending per pupil. The system is neither progressive nor fiscally neutral.
- **Teacher pay drives the national gap.** Teacher pay standardized to 40 hours in high-need networks is 0.74 times that in low-need networks nationally, while teachers per pupil are nearly equal (0.97).
- **The new FUNDEB helped within states.** The adjusted within-state ratio rose from 0.91 (2019) to 0.99 (2023) after the 2021 reform added VAAT complementation for the lowest-resourced networks; the national ratio improved only from 0.62 to 0.68.

Across and within states

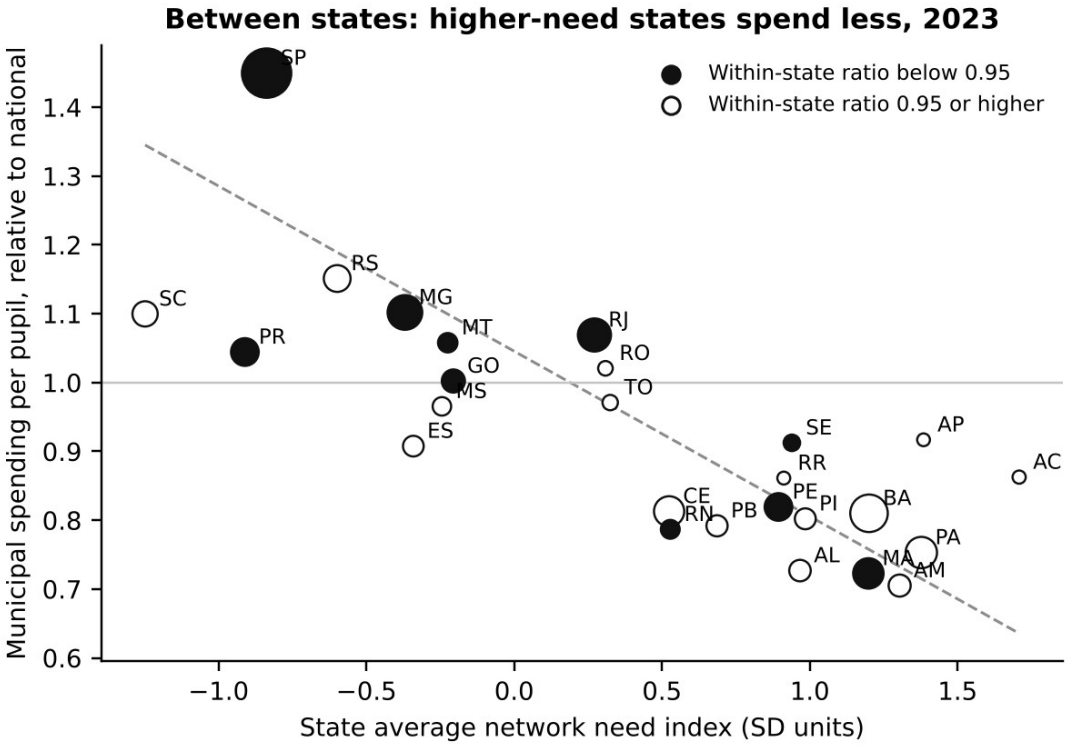


Figure. State average network need vs. municipal spending per pupil, 2023. Circle size is proportional to enrollment; filled circles mark states whose within-state high-need/low-need ratio is below 0.95.

State typology. States classified by municipal spending level and by within-state progressiveness.

	Neutral or progressive within state (ratio ≥ 0.95)	Regressive within state (ratio < 0.95)
Above-average spending per pupil	Santa Catarina, Rondônia, Rio Grande do Sul	Rio de Janeiro, Goiás, Mato Grosso, Minas Gerais, São Paulo, Paraná
Below-average spending per pupil	Amapá, Amazonas, Piauí, Tocantins, Paraíba, Acre, Mato Grosso do Sul, Ceará, Roraima, Bahia, Alagoas, Pará, Espírito Santo	Sergipe, Pernambuco, Maranhão, Rio Grande do Norte

Ratio = predicted spending per pupil at the 90th vs. 10th percentile of national need, comparing networks in the same state with similar size, remoteness, labor costs and grade mix. The Federal District has no municipal network.

What this analysis does and does not show

The risk and spending analyses show whether resources move with need, not how much more would be enough. Estimating how much additional funding would give high-need networks an equal opportunity to reach common goals requires the cost-modeling step that follows. That step would also give the Custo Aluno Qualidade, now the constitutional reference for minimum quality, an empirical basis. The analysis covers municipal networks only: state networks, which enroll most secondary students, report only state totals, and Brazil has no national school-level spending data.

Implications

- **Weight FUNDEB and VAAT allocations by measured need,** using INSE or Cadastro Único poverty in addition to enrollment, so that within-state distributions become progressive rather than neutral.

- **Strengthen the federal role between states.** The largest disparities are between states, and only federal complementation can close them.
- **Reduce the link between local revenue and spending** for the share of municipal education revenue that remains outside FUNDEB.
- **Publish school-level spending,** so that equity within networks can be assessed.

Scope and data: municipal basic-education spending (SIOPE function 12, subfunctions 361, 365, 366, 367, 306, 782, 122) per municipal-network pupil (Censo Escolar), nominal reais, 27,718 network-years, 2019–2023. Need: composite index of school INSE, enrollment composition and municipal Census 2022 and Cadastro Único measures, selected for its ability to predict a school outcome factor score built from SAEB 2017–2023 and approval rates. Full methods: "Risk and Spending in Brazilian Municipal School Networks."