



CREATING AN EQUITABLE EDUCATION FUNDING SYSTEM

Presentation at the 2018 conference of the Association of the Metropolitan School Districts

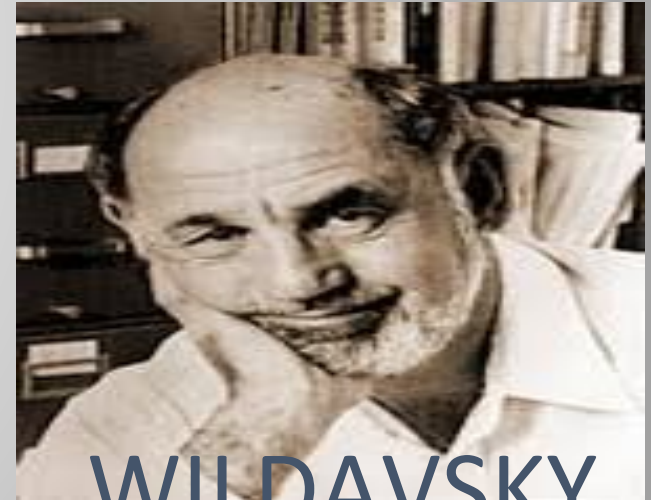
Nicola A. Alexander

November 28, 2018

GUIDE TO PRESENTATION

- I. Funding philosophies
- II. Goals of fairness in distribution
- III. Methods of distribution
- IV. Implications for equity
- V. The general case of Minnesota
- VI. Two empirical examples: (1) Location Equity and (2) Addressing Poverty and EL
- VII. Equity implications
- VIII. Concluding remarks

Budgets are human values with price tags.



WILDAVSKY

FUNDING PHILOSOPHIES AND THE ROLE OF THE STATE GOVERNMENT

- Need based – Primary role of State is to support need
- Output based – Primary role of State is to reward output
- Effort based – Primary role of State is to reward effort



GOALS OF DISTRIBUTION OF SCHOOL FUNDS

HORIZONTAL EQUITY

Equally situated entities are treated equally.

VERTICAL EQUITY

Differently situated entities are treated differently.

ADEQUACY

Invest enough so that most children reach high standards.

FISCAL NEUTRALITY

We should not be able to predict how much is spent on a child based on where a child lives.



METHODS OF DISTRIBUTING SCHOOL FINANCE DOLLARS

- Flat grants
 - State funds all jurisdictions at the same rate
- Foundation grants
 - State funds so that there is a floor of resources below which jurisdictions cannot fall.
 - Both state and districts contribute, where the level of district contribution depends on its wealth
- Guaranteed tax base
 - State funds districts so that district effort is rewarded
 - Both state and districts contribute, where the level of district contribution depends on its wealth and effort
- A combination of grant types (Minnesota model)

EQUITY IMPLICATIONS OF VARIOUS OPTIONS



- Flat grants
 - All jurisdictions will get funding regardless of differences in inputs
 - May be costly to fund all districts at high enough levels so that more wealth districts do not add on a lot more
- Foundation grants
 - Costs are shared between state and district
 - Basic funding levels may be higher and state can be more targeted in addressing needs and equalizing opportunities
- Guaranteed tax base
 - There may be widely different spending levels across the state since state is equalizing effort not spending levels
- Combination grants
 - You can try and balance the benefits of giving to all jurisdictions (horizontal equity) and still try and encourage basic behavior
 - Those who are better situated may be better able to respond to state incentives, so those who have more may still be getting more

EXAMPLES OF EQUITY IN MINNESOTA SCHOOL FINANCE

HORIZONTAL EQUITY AND ADEQUACY

Chart shows recent annual formula allowances and tax rates:

School Year	Basic Formula Allowance	Tax Rate
2005-06	\$4,783	0.00%
2006-07	\$4,974	0.00%
2007-08	\$5,074	0.00%
2008-09	\$5,124	0.00%
2009-10	\$5,124	0.00%
2010-11	\$5,124	0.00%
2011-12	\$5,174	0.00%
2012-13	\$5,224	0.00%
2013-14	\$5,302	0.00%
2014-15	\$5,831	0.35%
2015-16	\$5,948	0.33%
2016-17	\$6,067	0.30%

Basic general education revenue, a fixed dollar amount per average kindergarten pupils and \$459 for first through sixth grade pupils) must be used for financing or maintaining the district's average class size for kindergarten through sixth grade levels. The goal is to have average class sizes be 17 students to 1 full-time teacher.

VERTICAL EQUITY

- Compensatory revenue
- English language learner revenue
- Elementary sparsity revenue
- Secondary sparsity revenue
- Small schools revenue
- Transportation sparsity revenue

FISCAL NEUTRALITY

- Operating capital revenue
- Referendum revenue
- Equity revenue



Location Equity: Implications of a Location Equity Index for Minnesota School Finance

Nicola A. Alexander, Hyunjun Kim, and Samantha Holquist

LOCATION EQUITY?



- 66%(CA) ~ 7%(VT) of wage index disparities between top and bottom county within a state
- 25% of wage index disparities between top and bottom county in Minnesota*
 - Suburban average: \$45K
 - Urban average: \$42K
 - Rural average: \$30K
 - Minnesota average: \$41K

* Retrieved from: http://bush.tamu.edu/research/faculty/Taylor_CWI

RESEARCH QUESTIONS

1

- What are the average cost disparities among school districts within Minnesota?

2

- How is the purchasing power of school districts affected by these cost disparities?

3

- What are the implications for the state's overall school expenditures if they use a location equity index that captures geographic cost differences?

MEASURING LOCATION EQUITY

1

GEOGRAPHIC COST OF EDUCATION INDEX (GCEI)

$$\text{MN GCEI} = 0.23 + 77\% \text{ of } \frac{20\% \text{ of CAW 3 year average} + 80\% \text{ of RAW 3 year average}}{\text{SAW 3 year average}}$$

2

COMPARABLE WAGE INDEX (CWI)

- CWI 2013 – from Busch School of Government and Public Service at Texas A&M

RESEARCH QUESTION 1

What are the average cost disparities among school districts within Minnesota?

Using **GCEI**, **50%** of MN students live in a district with a lower than average purchasing power



each person represents 1,406 students

Using **CWI**, **60%** of MN students live in a district with a lower than average purchasing power



RESEARCH QUESTION 2

How is the purchasing power of school districts affected by these cost disparities?

- Geographic cost of Education index identifies 47 districts that have lower purchasing power for each dollar received because of higher labor costs. These costs range from 1 to 12 percent above the state average.

These numbers indicate the additional basic general education revenue these districts require to be able to buy the same services as those communities with an index equaling 1.0. For example, Bloomington needs \$638.68 per pupil more than districts with an index of 1.0 to purchase the same quantity and quality of goods or services.

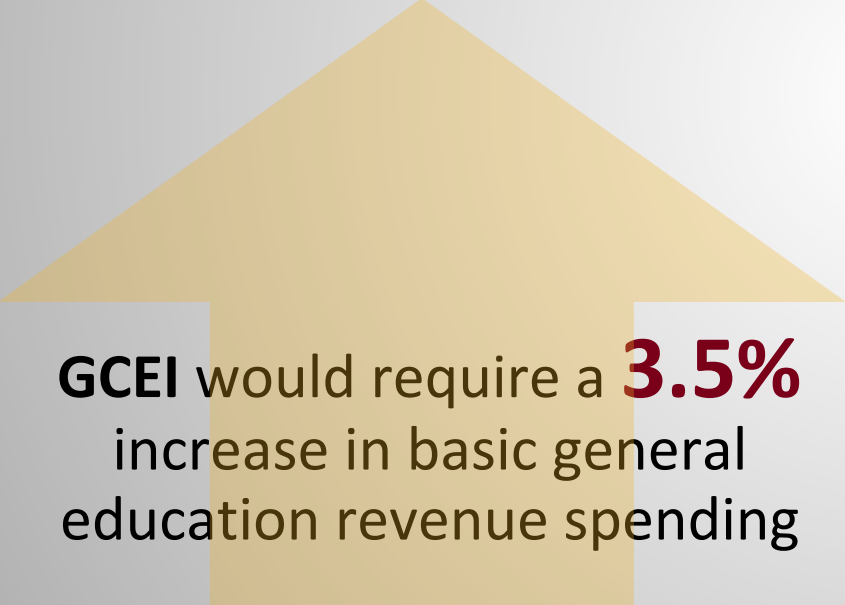
RESEARCH QUESTION 2

How is the purchasing power of school districts affected by these cost disparities?

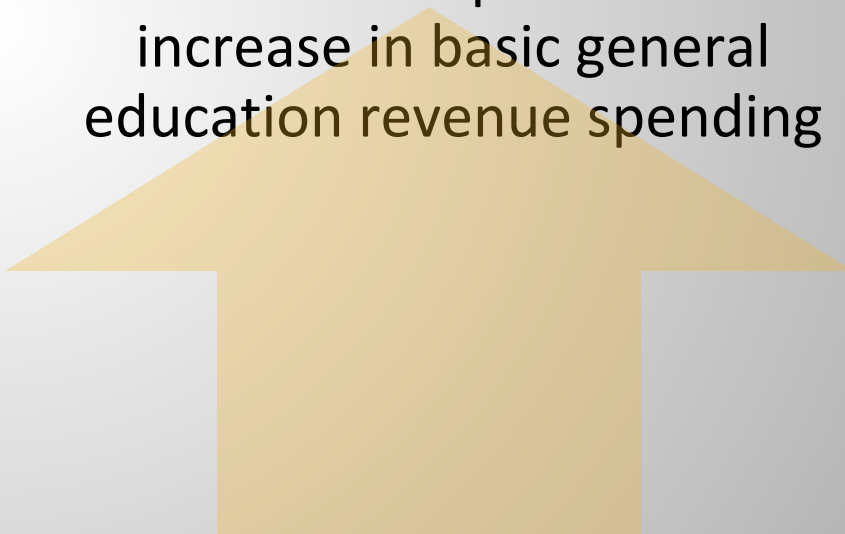
- The CWI method indicates that 76 districts would require additional support in order for their purchasing power to be equalized to that of districts facing average state costs. The labor costs ranged from 4 to 6 percent above the state average for higher-costs districts. Franconia district is excluded.
- These numbers indicate the additional basic general education revenue monies these districts require to be able to buy the same services as those communities with an index equal to 1.0. For example, Anoka needs \$298.16 per pupil more than districts with personnel costs mirroring the state average in order to purchase the same level of goods or services.

RESEARCH QUESTION 3

What are the implications for the state's overall school expenditures if they use a location equity index that captures geographic cost differences?



GCEI would require a **3.5%** increase in basic general education revenue spending



CWI would require a **2.6%** increase in basic general education revenue spending

NATIONAL EDUCATION FINANCE CONFERENCE

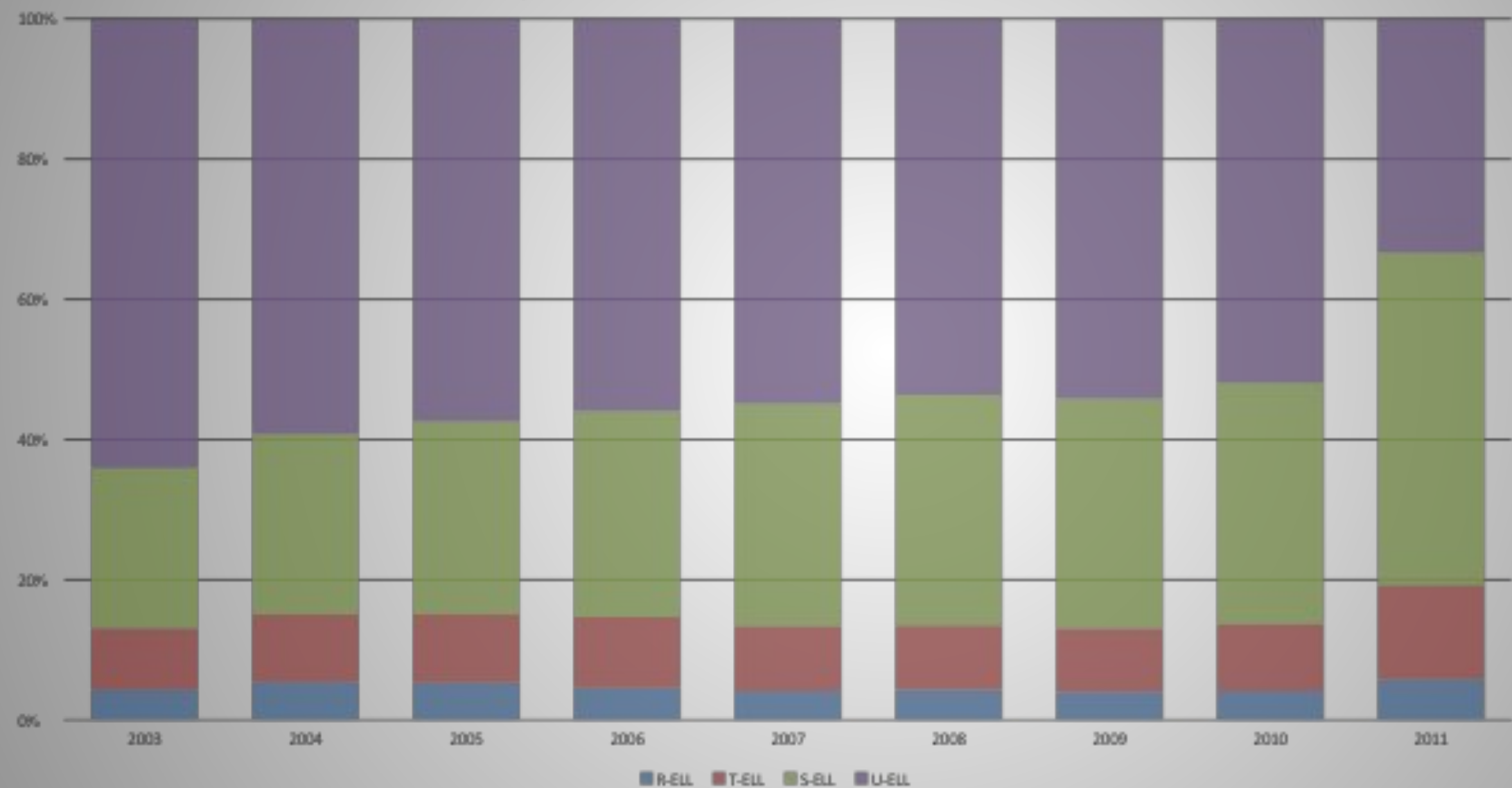


BALANCING ACT: EFFICIENCY AND EQUITY IN MINNESOTA OVER THE PAST DECADE

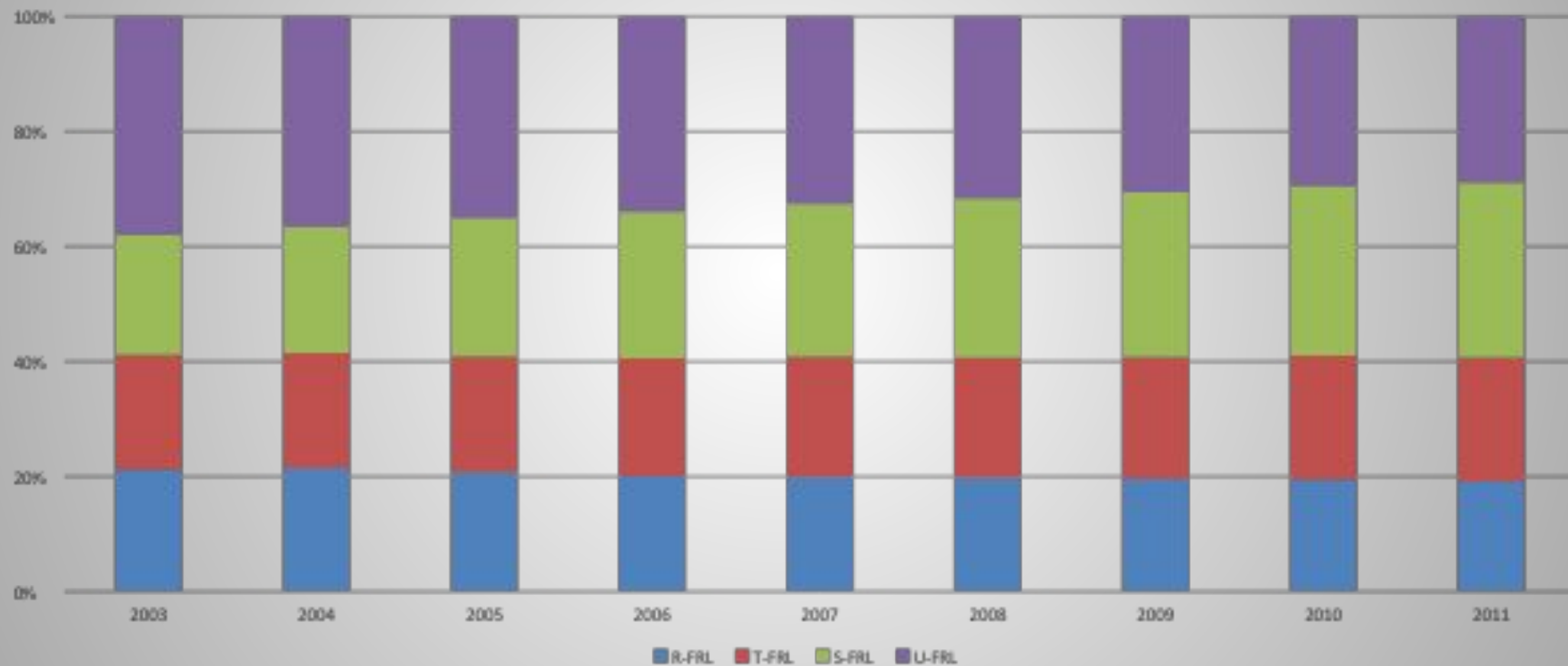
A longitudinal study in Minnesota

Nicola A. Alexander and Sung Tae Jang

Distribution of ELL Students Across Community Context in Minnesota, 2003 to 2011



Distribution of FRL Students Across Districts by Community Type, 2003 to 2011



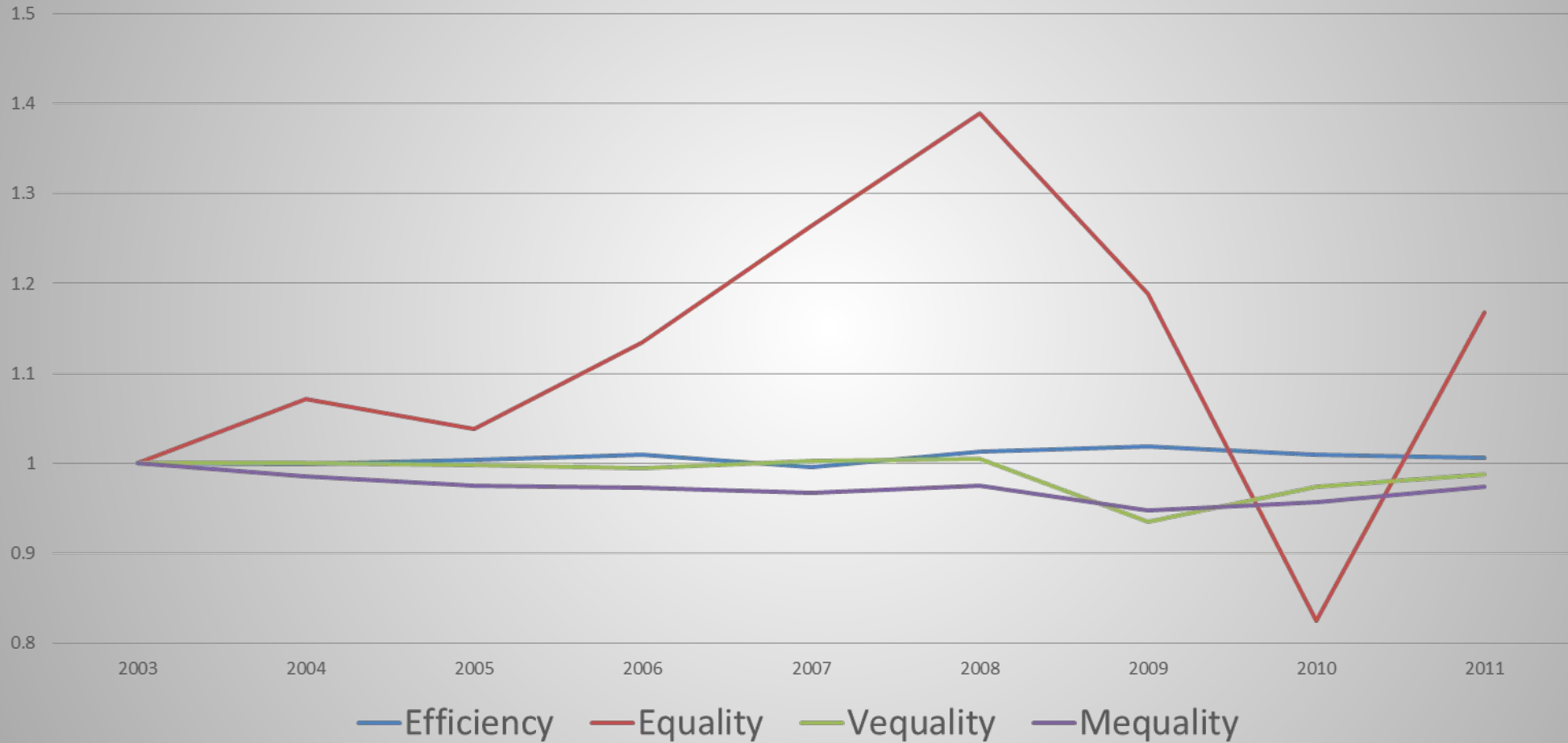
VERTICAL EQUITY: REGRESSION ANALYSIS TOTAL EXPENDITURES PER PUPIL IN
 CONSTANT \$2011 WITH PORTION OF FRL STUDENTS AND PORTION OF ELL STUDENTS
 (CONTROLLING FOR SCHOOL SIZE, COMMUNITY CONTEXT, AND PORTION OF BLACK
 AND HISPANIC STUDENTS)

Year	<i>Portion of FRL Students</i>	<i>Portion of ELL Students</i>
2003	97.10***	-167.66
2004	108.93***	-236.64*
2005	129.91***	-134.89
2006	163.55***	-184.22
2007	140.31***	-259.29**
2008	134.31***	-183.19*
2009	140.41***	-174.30
2010	172.23***	-350.02*
2011	135.58***	-214.41

VERTICAL EQUITY: REGRESSION ANALYSIS INSTRUCTIONAL EXPENDITURES PER PUPIL IN CONSTANT \$2011 WITH PORTION OF FRL STUDENTS AND PORTION OF ELL STUDENTS (CONTROLLING FOR SCHOOL SIZE, COMMUNITY CONTEXT, AND PORTION OF BLACK AND HISPANIC STUDENTS)

Year	<i>Portion of FRL Students</i>	<i>Portion of ELL Students</i>
2003	56.45 **	-102.11
2004	70.42***	-163.17*
2005	86.16***	-130.86
2006	107.81***	-166.66
2007	90.4902***	-237.18**
2008	85.68***	-179.47*
2009	97.70***	-139.97
2010	132.10***	-314.43*
2011	88.94***	-195.95*

Relationship Among Efficiency, Overall Equality, Equality for High-Spenders, and Equality for Low-Spenders, 2003 -2011, with 2003 as Reference



SOME TAKEAWAYS FOR EQUITY DISCUSSIONS FROM TWO EMPIRICAL STUDIES

- State efforts to achieve vertical equity vis a vis poverty seem to be paying off for total and instructional expenditures per pupil. The magnitude of those associations are more pronounced for total expenditures.
- State efforts to achieve fiscal vertical equity vis a vis English language learners needs improvement. For the most part, districts with higher portions of ELL have lower expenditures per pupil, not more AND EL funding continues to comprise a small part of general education funding in Minnesota.
- Minnesota has provisions to address additional costs for districts with high student need, such as poverty, but these efforts are somewhat muted in metropolitan schools because of relatively high labor costs. Thus, urban and suburban districts incur higher educational outlays not only because of student demographics but also because the cost of providing education programs is higher in these communities than for districts in lower-cost markets

LOOKING TO THE FUTURE

- Given that resources spent on instruction may have more direct implications for students' schooling experience, state policymakers could explore policy designs that result in stronger positive associations between student poverty concentration and funding for instruction.
- Our school finance system typically looks to ensuring no new wrongs (procedural) but is less focused on addressing wrongs of the past (what Crenshaw calls expansive view of distributive justice). What would a more expansive definition of equity look like?
- We have typically focused on fiscal neutrality; maybe it's time to explore how to achieve results neutrality.