April 29, 2013

Appendix: Detailed Methodology and Results

Methodology

Because children today will be the economic workforce of tomorrow, investments made during childhood have long-lasting implications not only for children but for our whole society. Thus, understanding the relations among state-level budget investments in children and subsequent child well-being suggests how well a state is doing to promote its future economic well-being. The goal of this study was to examine the associations between Texas' budget investments in children and the well-being of Texas children over the last two decades. Data came from various administrative sources and the KIDS COUNT data center. Complete budget data[1] was obtained for the years 1990 through 2010. Data for several of the child well-being indicators were also available from 1990 through 2010, but some were only available from 2000 through 2010 or for an even shorter time frame as was the case with the Texas Assessment of Knowledge and Skills (TAKS) standardized testing data, which were only available from 2003 through 2010.

Children's Budget Data

There are many state-supported programs that are entirely dedicated to families with children, or to children themselves. However, there are other programs in which children constitute only a small portion of the beneficiaries. The following methodology was used to determine the amount of investment in Texas children:

1. Money directly spent on children (e.g., expenditures on education or nutrition programs including the school lunch and breakfast programs) was counted in total.
2. Money spent on families (e.g., Medicaid, food stamps) was adjusted to reflect only the money spent on children by using estimates from the Texas Health and Human Services Commission of the proportion of caseloads that were children.
3. Money spent on programs in which children are necessary for a family to qualify for ANY benefits (e.g., WIC, cash assistance, child support enforcement, CHIP perinatal) were counted in total.

Several rules were employed for allocating state-level expenditures on Texas' children. State-level investments in children included federal dollars when the federal dollars are first channeled through the state budget, as is the case with Medicaid, food stamps (now known as Supplemental Nutrition Assistance Program—SNAP) and several other federally-funded but state-run programs. Money directly spent on children (e.g., expenditures on education or nutrition programs including the school lunch and breakfast programs) was counted in total. Money spent on families (e.g., Medicaid, food stamps, SNAP) was adjusted to reflect only the money spent on children by using estimates from the Health and Human Services Commission and predecessor agencies of the proportion of caseloads that were children. Money spent on programs in which children are necessary for a family to qualify for ANY benefits (e.g., WIC, AFDC/TANF, child support enforcement, CHIP perinatal) were counted in total.

State spending on children was calculated for each of the following categories of spending: education, health, nutrition, income support, juvenile justice, child protection and special needs. All dollars were adjusted for inflation into 2011 dollars. Texas' spending on children was examined in two ways: total spending in each category and per child spending within each category. With the exception of education spending in which annual education expenditures were divided by the total number of enrolled students[2], total spending on children across the remaining six budget categories were each divided by the annual Texas child population aged 0-17 to create estimates of per-child spending.

Education. Education spending was calculated as total school district expenditures (minus school meals and program spending on students with disabilities, both of which are captured in other budget categories) by academic year from Public Education Information Management System (PEIMS) Financial Standard Reports (1996-97 to 2009-10) and *Snapshot School District Profiles* (1989-90 to 1995-96) from the Texas Education Agency. The total includes all revenue sources (state, federal, or local) and all expenditure objects (operating and capital outlay). Education spending is the only budget category in which local-level spending is also included because Texas relies heavily on local property taxes for education funding.

Supplemental analyses examined education spending at the district-level rather than the state level from the 2002-2003 academic year through the 2010-2011 academic year. Total expenditures on instruction and estimates of the weighted average daily attendance (WADA) for each district in the state were requested from the Texas Education Agency. District-level per-student spending was calculated by dividing the total instructional expenditures for a given school year by the estimated WADA for that same school year.

Health. Child spending figures for Medicaid for federal fiscal years 1999 to 2010 are from the federal Centers for Medicare & Medicaid Services, Medicaid Statistical Information System State Summary Datamarts, Quarterly Cubes. For years 1990-1998, Medicaid estimates and all information for the Early Periodic Screening, Diagnosis, and Treatment (EPSDT) Program's Health Steps Medical, Health Steps Dental, and Comprehensive care are expended state fiscal year All Funds amounts from stateagency operating budgets and legislative appropriations requests.

The Texas Children's Health Insurance Program (CHIP), was calculated as expended All Funds amounts by state fiscal year as reported by the Texas Health and Human Services Commission. Spending figures for Texas CHIP were included in our annual estimates beginning in 2000.

Other health spending was calculated as expended state fiscal year All Funds amounts for the following state budget strategies: Immunize children and adults; Abstinence Education; Children with Special Health Needs (formerly Chronically Ill and Disabled Children); Women and Children's Health; Mental Health Services for Children; Reduce use of Tobacco Products; and Medically Dependent Children.

Nutrition. Food Stamps/Supplemental Nutrition Assistance Program (SNAP) spending was calculated as the value of benefits by state fiscal year, multiplied by the percentage of the caseload estimated to be children in that year, as reported by the state Department of Human Services and the Health and Human Services Commission.

The Special Supplemental Food Program for Women, Infants, and Children (WIC) figures came from state fiscal year expended All Funds amounts reported by the Department of State Health or State Health Services in operating budgets and legislative appropriations requests.

School meals (breakfast and lunch) came from state fiscal year expended All Funds amounts reported by Texas Education Agency for Child Nutrition Programs strategy. These figures are federal funds only, and do not reflect additional local school district spending on food/cafeteria services.

Income Support. Child support enforcement figures come from state fiscal year expended All Funds amounts reported by Office of the Attorney General. Estimates for spending on child care subsidies came from state fiscal year expended All Funds amounts reported by the Department of Human Services (1990 to 1995) and Texas Workforce Commission (1996 to 2010). Estimates for spending on cash assistance came from state fiscal year expended All Funds amounts for all recipients of Aid to Families with Dependent Children (AFDC)/Temporary Assistance for Needy Families (TANF) as reported by the Department of Human Services and Health and Human Services Commission. Estimates for investments in job training came from either state program or fiscal year expended federal amounts for Job Training Partnership Act Title IIB Summer Youth Program and Workforce Investment Act youth program, as reported by the U.S. Department of Labor and the Texas Workforce Commission.

Juvenile Justice. Spending on juvenile justice from 1990 to 2010 was calculated as state fiscal year expended All Funds amounts for the Juvenile Probation Commission and Youth Commission (all budget strategies).

Child Protection. Spending on Child Protective Services from 1990 to 2010 was calculated as state fiscal year expended All Funds amounts for Statewide Intake Services (adult or child) and for all Child Protective Services strategies (direct delivery staff, program support, purchased services, and foster care/adoption/relative caregiver payments), as reported by Department of Family and Protective Services and its predecessor agencies.

Spending totals on abuse/neglect/delinquency prevention came from state fiscal year expended All Funds amounts for programs administered by the Texas Employment Commission or Texas Education Agency (Communities in Schools), Department of Family and Protective Services and predecessor agencies, and Health and Human Services Commission (Nurse Family Partnership).

Spending on child care regulation was calculated from state fiscal year expended All Funds amounts for regulation of child day care and residential child care providers, as reported by the Department of Family and Protective Services and predecessor agencies.

Special Needs. Spending totals from 1990 to 2010 for early childhood intervention (ECI) services, habilitative services, and autism programs were calculated from state fiscal year expended All Funds amounts reported by Department of Assistive and Rehabilitative Services and predecessor agencies.

Special Education spending for the same time period was calculated from total local school district program expenditures by academic year for Students with Disabilities from PEIMS Financial Standard Reports (1996-97 to 2009-2010) and *Snapshot School District Profiles* (1989-90 to 1995-96) from the Texas Education Agency.

Spending for the School for the Deaf and the School for the Blind and Visually Impaired each came from state fiscal year expended All Funds amounts for all students, not just children.

Children's Well-Being Data

Child well-being was conceptualized as a multi-dimensional construct with a number of indicators across several domains. Indicators of children's well-being dating from 1990 through 2010 were collected from a number of data sources including both the National and Texas KIDS COUNT Data Centers and the Current Population Survey. Indicators were selected based on the availability of data dating back to 1990 and whether they represented a child well-being outcome. Enrollment in programs and services were not included as outcomes (e.g. the number of children receiving free or reduced-price lunch was not included as an indicator of well-being, but the percentage of children experiencing food insecurity was). A total of 19 indicators were selected across 6 domains of well-being: birth, safety, health, education, economics, and youth behaviors. A complete list of the 19 indicators of child well-being with definitions and sources is presented below.

Some child-well being data were available from 1990 through 2010, but some were only available for the most recent decade, from 2000 through 2010, or for an even shorter time frame, as was the case with the Texas Assessment of Knowledge and Skills (TAKS) data, which were only available from 2003 through 2010. The TAKS tests are "designed to measure the extent to which a student has learned and is able to apply the defined knowledge and skills at each tested grade level."[3]

Additional indicators of well-being for the education domain were obtained for supplemental analyses examining the relation between education spending and education outcomes at the district level. These indicators were not combined into an index because they were at the district-level rather than the state level. The proportions of Texas students in grades 3 through 11 who met standards and who achieved commended performance in reading and in math on the TAKS from the 2002-2003 through the 2010-2011 school years were obtained from the Texas Education Agency.

Index (Cronbach's Alpha)	Indicator[a]	Definition	Years Available	Source
Birth Outcomes (0.94)	% LBW Births (I)	Live births weighing less than 2,500 grams (5.5 pounds)	1990-2009	National KIDS COUNT: Centers for Disease Control and Prevention, National Center for Health Statistics.
	% Pre-term Births (I)	Babies born with a gestational age of less than 37 completed weeks	1990-2009	National KIDS COUNT: PRB & Child Trends analyses of NCHS and CDC, respectively
Child Safety (0.87)	Infant Mortality (I)	Deaths occurring to infants under 1 year of age per 1,000 live births	1990-2008	National KIDS COUNT: Centers for Disease Control and Prevention, National Center for Health Statistics.
	Child Death Rate (I)	Deaths to children between ages 1 and 14, from all causes (rate per 100,000)	1990-2008	National KIDS COUNT: Centers for Disease Control and Prevention, National Center for Health Statistics.
	Teen Death Rate (I)	Deaths to teens between age 15 and 19 (rate per 100,000)	1990-2008	National KIDS COUNT: Centers for Disease Control and Prevention, National Center for Health Statistics.
	Child Abuse Rate (I)	Rate per 1,000 of children ages 0-17 confirmed as victims of child abuse	1990-2010	TX KIDS COUNT: TX Department of Family and Protective Services
Child Health (0.80)	% Uninsured (I)	Percent of children under age 18 who were not covered by health insurance at any point during the year	1990-2009	National KIDS COUNT: Census Bureau, CPS (March Supplement)
	% Immunized (by age 3)	From 2002-2010: children who have 4:3:1:3:3:1 Series coverage; 4:3:1:3:3:1 Series Coverage is four or more doses of diphtheria and tetanus toxoids and pertussis (DTP) vaccine, three or more doses of poliovirus vaccine, one or more doses of measles-containing vaccine, plus three or more doses of Haemophilus influenzae type b (Hib) vaccine, three or more doses of hepatitis B vaccine (HepB), one or more doses of varicella vaccine. From 1995-2001, children who have 4:3:1:3:3 series coverage: Four or more doses of DTP, three or more doses of poliovirus vaccine, one or more doses of any MCV, three or more doses of Hib, and three or more doses of HepB	1995-2010	CDC: National Immunization Survey 1995-2010
	% Fair or Poor Health (I)	Percent of children reported by household head to be in fair or poor health	1996-2010	Census Bureau: Current Population Survey

Continued on next page

Education (0.96)	Attrition Rate (I)	Percent of students from a class of 9th graders not enrolled in 12th grade four school years later. Year indicates the graduating year of the cohort.	2000-2011	TX KIDS COUNT: Intercultural Development Research Association
	% Passing TAKS Math	Overall percentage of students (grades 3-11) meeting panel recommendation for TAKS Math	2003-2011	Texas Education Agency
	% Passing TAKS Reading	Overall percentage of students (grades 3-11) meeting panel recommendation for TAKS Reading	2003-2011	Texas Education Agency
Economic Well-Being (0.83)	% Living in Extreme Poverty (I)	Percent of children age 18 and under who live in families with incomes less than 50 percent of the federal poverty level	1990-2010	Census Bureau: Current Population Survey
	% Living in Poverty (I)	Percent of related children 18 and under living in families with incomes below the federal poverty level.	1990-2010	Census Bureau: Current Population Survey
	% Low-Income (I)	Percent of children under age 18 who live in families with incomes less than 200 percent of the federal poverty level	1990-2010	Census Bureau: Current Population Survey
	% Food Insecure (I)	Percent of children living in households that were food insecure at some point during the year	1995-2009	National KIDS COUNT: CPS, Food Security Supplement
	% Housing Burdened (I)	Percent of children living in low-income households where more than 30 percent of the monthly income was spent on rent, mortgage payments, taxes, insurance, and/or related expenses	2000-2010	National KIDS COUNT: PRB analysis of Census Bureau, Supplementary Survey, ACS
Youth Behaviors (0.92)	Juvenile Violent Crime Rate (I)	Rate per 100,000 of total arrests of children ages 10-17 for the offenses of murder, manslaughter, forcible rape, robbery, and aggravated assault	1990-2010	TX KIDS COUNT: TX Department of Public Safety
	% Births to Teens (I)	Births to Teens Ages 13-19 out of all live births	1990-2008	TX KIDS COUNT: Bureau of Vital Statistics, TX DSHS
[a]The (I) after an indicator denotes that the indicator was inverted to represent positive child well-being prior to being included in the index.				

Indices of Well-being. Each of the 19 indicators of well-being was used to create 6 indices representing well-being. We standardized each indicator (converted into z-scores)[4] prior to combining them into an index to account for the following issues: (1) the indicators were measured in various units or on different scales (e.g. percentages, rates per 1,000), meaning they could not easily be combined into an index as they were; (2) the distributions varied widely across measures. That is, some indicators of well-being ranged from 6 percent to just over 8 percent (% low birth weight births) while others ranged from 50 percent to just fewer than 80 percent (% immunized); and (3) a high value on some indicators within domain (e.g., % uninsured) represented poor child well-being while a high value on other indicators (% immunized) represented positive child well-being.

Standardizing the indicators transformed each indicator into standard units, which allowed them to be combined and giving each indicator equal weight in the domain index. Standard scores were calculated by subtracting the mean across all available years of data for a particular indicator from the estimate for a particular year and then dividing by the standard deviation. To control for directionality, an indicator in which a high score represented negative well-being was inverted (multiplied by -1) so that it represented positive well-being. Thus, higher scores on each indicator represent better outcomes for children. Finally, an index value for each of the six domains was derived by averaging the standardized scores for the indicators in that domain. A higher score for each index indicates better child well-being.

Confirmatory Factor Analysis (CFA) and additional reliability analyses were done to evaluate how well the indicators fit the indices (i.e. how closely related the individual indicators are as a group). A high Cronbach's alpha value suggests that the items are closely related enough to be reasonably combined into a single factor or construct. Alpha varies from 0 to 1 and an alpha value of .70 or higher is considered acceptable. The alphas for the indices created in this study suggest good to excellent reliability. See table above for details.

Additional notes regarding the Index of Child Economic Well-Being. The percentages of children living in extreme poverty, at or below 100% of poverty, at or below 200% of poverty, living in families with a high housing burden, and the percentage of children who were food insecure were standardized, inverted, and averaged to create the index of child economic well-being. Cronbach's Alpha (0.83) indicated good reliability. Despite initial concerns that the percent of children living in extreme poverty are included in the percentages of children living below 100% and 200% of poverty, the confirmatory factor analysis yielded only a single factor from all five indicators. Additional reliability analyses in which only one of the three poverty measures was included with the percentage of children living in housing burdened families and the percentage of children who were food insecure confirm that a factor with all five indicators is the most reliable. A 3-indicator factor with just percent living in extreme poverty had a Cronbach's Alpha of 0.72. A 3-indicator factor with just percent living at or below 100% poverty had a Cronbach's Alpha of 0.62. A 3-indicator factor with just percent living at or below 200% poverty had a Cronbach's Alpha of 0.65. All three 3-indicator factors demonstrated lower reliability than the 5-indicator factor.

Analysis
Correlation analysis, a common method used in the social sciences to estimate the degree to which two variables are related, was used to examine the relationships between Texas' spending on children and child well-being over the last two decades. Correlation analysis produces a coefficient, known as the Pearson product-moment correlation coefficient, also known as *r*, which ranges from -1 to 1. The Pearson correlation coefficient is a measure of the strength and direction of the linear relationship between two variables. An *r* coefficient equal to 0

essentially means there is no relationship between the two variables being examined. A negative *r* coefficient means that high values on one variable are related to low values on the other variable. In other words, the two variables have a negative correlation. A positive *r* coefficient means one of two things: (1) a high value on one variable is related to a high value on the other variable or (2) a low value on one variable is related to a low value on the other variable. Correlation analysis also tests whether the positive or negative relationship is statistically significant from zero and produces a p-value, or the probability that the found association is in fact a true association or due to random chance. A p-value of less than 0.05 is considered statistically significant, meaning it is extremely unlikely that the found association is due to chance. A p-value between 0.05 and 0.10 is considered a "trend", or a moderately significant relationship.

The number of observations is equal to the number of years for which we have data. The budget data and some indicators of children's well-being are available for all 20 years from 1990 through 2010. Other well-being indicators are only available for the last 10 years from 2000 through 2010 or for a shorter time frame. As such, the link between Texas' financial investments in children and children's well-being will be evaluated over the period of time for which complete data is available, which for the majority of child well-being indicators will be either 10 or 20 years. Given the relatively small number of observations in the present study, correlation analysis is a useful tool to examine the relations between sets of variables when other statistical analyses such as regression analysis are less reliable because of methodological issues.

Following the methodology used in similar analyses done by the Foundation for Child Development[5] to link a child well-being index to state-level variables, we conducted a correlation analyses cross-sectionally such that the analyses sought to determine whether spending in a given year was related to child well-being in that same year. Though a cross-sectional analysis may be a conservative analysis in that it may be more likely to find a significant relation between spending in one year and child well-being one or two years later (in other words, there may be a lag between the money a state invests in child-directed programs and the time it takes to have an influence on well-being), several studies have found significant associations between state-level policies and child well-being using cross-sectional analyses.[6]

The methodology for the correlation analyses for the district-level supplemental analyses linking education spending to children's performance on the TAKS differed slightly. The district-level analyses were statistically more complex than the state-level analyses because of the non-independence of observations across time within each district. As a result, the relations between district-level spending and children's performance on the TAKS were analyzed within year instead of across years.

Results

**Examining trends in Texas' investments in children**
Texas' investments in children over the last two decades are presented in the line graphs below.

Texas' total per-child (0-17) investment remains flat after a decade-long increase
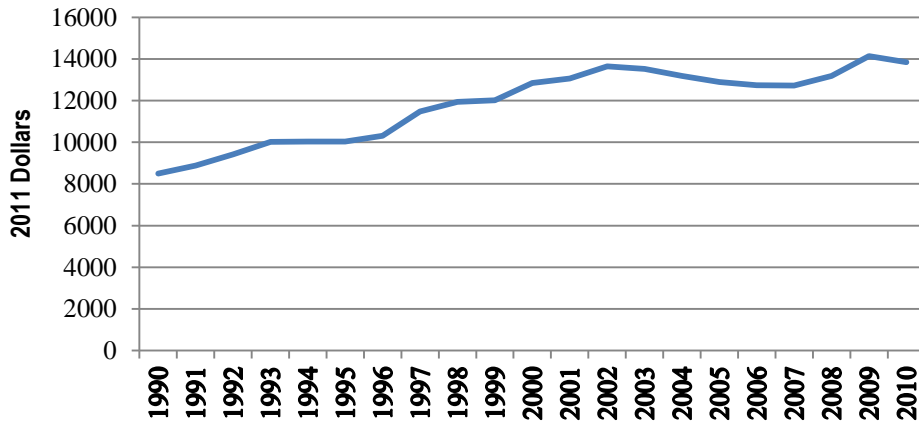
Source: CPPP analyses of spending data from state and federal agencies and the Legislative Budget Board, population data from the Texas State Data Center, and inflation calculations from the Bureau of Economic Analysis

Per-pupil (pre-K through Grade 12) investments have remained relatively flat for last decade
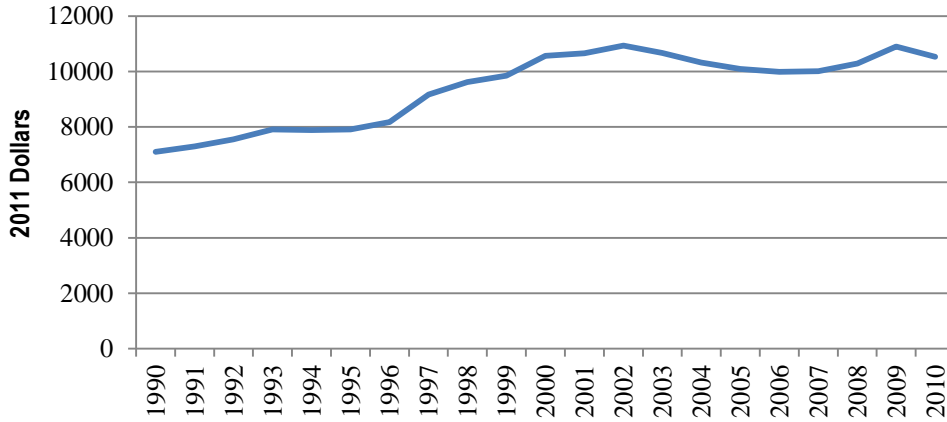
Source: CPPP analyses of ISD expenditure data and student enrollment data from the Public Education Information Management System (PEIMS) and estimates for inflation calculations from the Bureau of Economic Analysis

Trends in per-child (0-17) investments in Texas over time are mixed: some have seen increases, others decreases, and still others relative stagnation

CPPP analyses of spending data from state and federal agencies and the Legislative Budget Board, population data from the Texas State Data Center, and inflation calculations from the Bureau of Economic Analysis
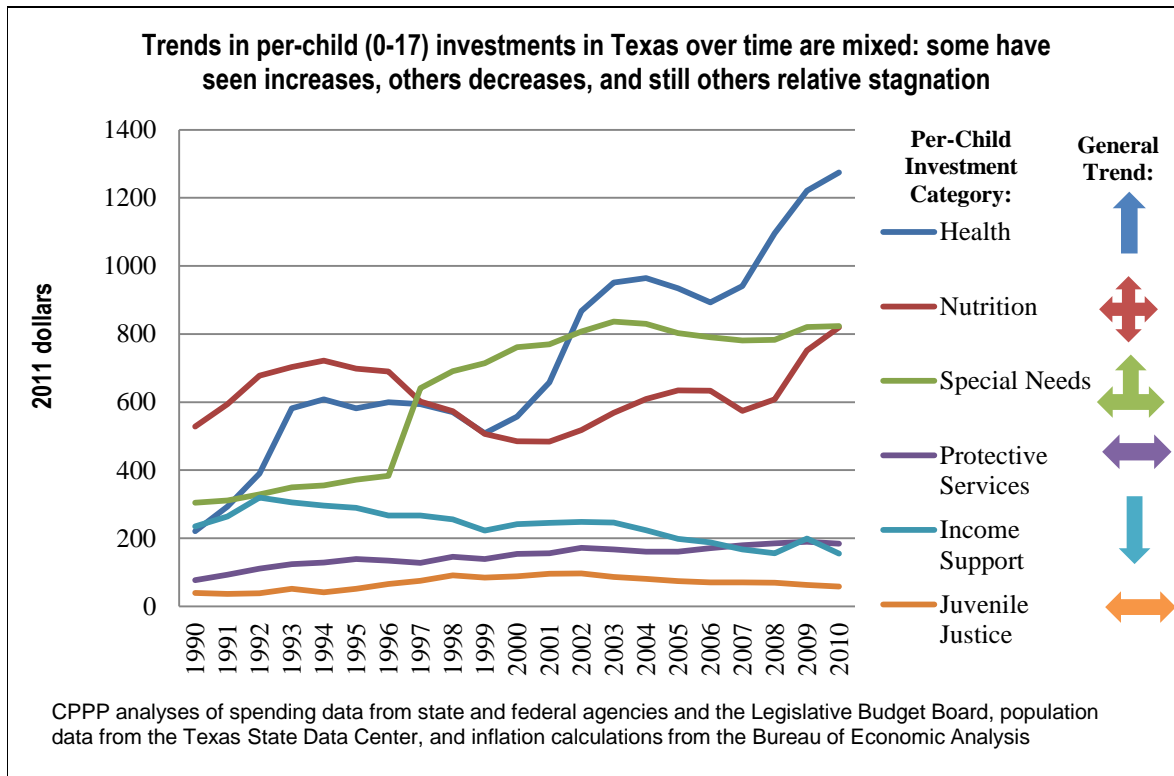
Linking Texas' investments in children to Texas child well-being

Results from correlation analyses suggest where Texas' investments in children are working and where they are not. To account for child population growth over the last two decades, only the relations between Texas' spending per-child in each budget category and children's outcomes are presented, though the associations between total spending on children in each budget category and children's well-being were relatively consistent with the associations between per-child spending and children's well-being. In general, total per-child spending across budget category over the last 20 years has been significantly related to improvements in children's health, safety, and youth behaviors. In contrast, per-child spending on children over the last 20 years has not been associated with improvements in children's birth outcomes or their economic well-being. The correlations between Texas' investments across budget categories and children's well-being across domains are presented in the table below.

Significant correlations (positive and negative) between Texas' per-child spending and child well-being								
	Texas' Per-Child Budget Investments in Children							
	Education	Health	Nutrition	Special Needs	Protective Services	Income Support	Juvenile Justice	Total Per-Child Spending
Education Index		.70	.71		.79	-.87	-.98	
Health Index	.73	.85		.73	.92	-.76		.83
Birth Index	-.81	-.89		-.87	-.86	.83	-.53	-.88
Safety Index	.86	.58	-.46	.87	.75	-.57	.91	.83
Economic Well-Being Index		-.94	-.91		-.78	.72	.87	-.83
Youth Behavior Index	.84	.79	-.49	.89	.77	-.84	.63	.86

Notes. '+' represents a statistically significant positive correlation between two variables (increases or decreases in both); '-' represents a statistically significant negative correlation between two variables (increase in one and decrease in the other); gray boxes represent non-significant correlations

Green boxes represent relationships between similar domains.

Yellow boxes are the well-being domains positively related to overall spending.

Domain-Specific Spending & Related Outcomes

For a number of budget categories, Texas' per-child spending was related to improvements in a related domain of well-being. Texas' spending on children's health was related to the health index ($r = .85$; $p<.01$) and Texas' spending on protective services was related to the child safety index ($r = .75$; $p<.01$). Investments in income support programs were related to improvements in children's economic well-being ($r = .72$; $p<.05$). Finally, Texas' spending on juvenile justice programs was related to a decrease in negative youth behaviors ($r = .63$; $p<.01$).

Per-student spending on education was statistically related to children's education outcomes when examined at the district-level, but was not statistically related to the education index when examined at the state-level. This was true for all school years between 2002-2003 and 2009-2010. The most recent school year (2010-2011) for which data was available was an exception. In the 2010-2011 school year, district-level spending was related to the proportion of students meeting commended performance standards in both reading and math, but was unrelated to the proportion of students meeting the standard. Results from correlation analyses are presented in the following table.

Significant correlation coefficients from district-level per-student instructional expenditures analyses				
School Year	% Met Standard in Reading	% Met Commended Performance in Reading	% Met Standard in Math	% Met Commended Performance in Math
2002-2003	0.09	0.17	0.14	0.22
2003-2004	0.25	0.28	0.27	0.28
2004-2005	0.21	0.22	0.24	0.23
2005-2006	0.16	0.14	0.18	0.18
2006-2007	0.16	0.19	0.19	0.16
2007-2008	0.17	0.17	0.20	0.21
2008-2009	0.12	0.13	0.16	0.16
2009-2010	0.06	0.10	0.10	0.11
2010-2011	Non-significant	0.06	Non-significant	0.09

Cross-Domain Relationships

One of the most prominent findings to emerge from the correlation analyses was that Texas' spending in a single budget category (e.g., spending on children's health) was related not only to improvements in a related domain of well-being, but also to improvements in children's outcomes across domains of well-being. Significant associations between health spending and children's health, safety ($r = .58$; $p<.01$), and youth behavior outcomes ($r = .79$; $p<.01$) and a moderately significant association between health spending and children's education outcomes ($r = .70$; $p<.10$) suggests that the dollars Texas invested in children's health over the last two decades not only helped keep kids healthy, alive, and out of trouble but also helped promote their educational success. Similarly, a significant relation between spending on nutrition programs and education outcomes ($r = .71$; $p<.05$) suggests that Texas' investments in keeping children fed were associated with kids who did better in school. Spending on education was significantly associated with healthier kids ($r = .73$; $p<.01$), safer kids ($r = .86$; $p<.01$) and more positive youth behaviors ($r = .84$; $p<.001$) suggesting that investing in children's education also works to promote their well-being across multiple domains.

A negative association emerged between spending on nutrition programs and children's economic well-being. Though it is unfortunate that children's economic well-being has not responded to increases in nutrition spending, it is not surprising. The relationship between economic security and the use of food and nutrition programs is complex, as noted by the U.S. Department of Agriculture.[7] These programs are designed to reduce the experience of hunger, but are not factored into our traditional measures of economic security (e.g., the child poverty measure).[8] Thus, because economically insecure households are the very ones that are likely to seek assistance from food and nutrition programs, it is not surprising to see this relationship in our analyses.

ENDNOTES

[1] State-level investments in children included federal dollars when the federal dollars are first channeled through the state budget, as is the case with Medicaid, SNAP and several other federally funded but state-run programs. Education spending is the only budget category in which local-level spending is also included because Texas relies heavily on local property taxes for education funding. For more details, see methodology details in the Appendix.

[2] The number of students is defined by the Texas Education Agency as the number of students who have an average daily attendance that is not equal to zero as of October 30 in any academic year, at any grade, from early education through grade 12. Retrieved from: http://ritter.tea.state.tx.us/perfreport/snapshot/2010/itemdef.html

[3] Texas Education Agency. Retrieved from http://www.tea.state.tx.us/student.assessment/taks/

[4] O'Hare, W., Mather, M., & Dupuis, G. (2012). Analyzing state differences in child-well-being. Foundation for Child Development.

[5] http://fcd-us.org/sites/default/files/Analyzing%20State%20Differences%20in%20Child%20Well-Being_1.pdf

[6] Several studies have used cross-sectional analysis to link state-level policy and children's outcomes. Most notably are the Foundation for Child Development report on analyzing state differences in child well-being in 2007 (http://fcd-us.org/sites/default/files/Analyzing%20State%20Differences%20in%20Child%20Well-Being_1.pdf) and a Princeton University Working Paper that analyzes the relations between public expenditures and child outcomes across all 50 states in 1996 (http://crcw.princeton.edu/workingpapers/WP03-02-Harknett.pdf)

[7] USDA (2012). Household Food Insecurity in the United States in 2011. Retrieved from http://www.ers.usda.gov/publications/err-economic-research-report/err141.aspx

[8] Deviney, F. P. (2013). A Different Look at How to Measure Poverty. Retrieved from http://bettertexasblog.org/2013/01/a-different-look-at-how-to-measure-poverty/