EDCHOICE BRIEF

PROJECTED FISCAL IMPACT OF PENNSYLVANIA SENATE BILL NO. 299

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EXECUTIVE SUMMARY

This paper reports results from a fiscal analysis of Pennsylvania SB 299, a proposal to expand the state's two tax-credit scholarship programs. Pennsylvania currently has two programs in operation, the Educational Improvement Tax Credit (EITC) Program and the Opportunity Scholarship Tax Credit (OSTC) Program.

Based on switcher rates of 60 percent to 90 percent, the Commonwealth of Pennsylvania's EITC and OSTC programs generated the following fiscal effects between 2002 and 2019:

- Under current BEF funding, the EITC and OSTC programs combined generated estimated cumulative net savings for the state and school districts worth between $3.0 billion and $5.0 billion, or between about $4,000 and $6,800 per scholarship. These estimates represent $1.1 billion net revenue reduction for the state ($1,500 per scholarship) and cumulative net savings for school districts worth between $4.0 billion and $6.0 billion.

- Had BEF funding been enrollment-based, the fiscal impacts would have been distributed more evenly between the state and school districts than under current BEF funding. Both the state and school districts would have experienced net fiscal benefits. The state would have incurred cumulative net savings estimated between $240 million and $900 million (up to $1,250 per scholarship). School districts would have experienced net savings estimated between $2.7 billion and $4.0 billion (up to $5,600 per scholarship).

Based on switcher rates of 60 percent to 90 percent, the projected fiscal effects of SB 299 from FY 2020 to FY 2022 follow:

- Under current BEF funding, the EITC and OSTC would generate an estimated net revenue reduction for the state worth between $144 million and $225 million each year over the period, or about $2,000 per scholarship.

- Under current BEF funding, the EITC and OSTC would generate estimated net savings for school districts worth between $500 million and $1.1 billion each year over the period, or up to $10,000 per scholarship.

- If BEF funding is enrollment based, then the EITC and OSTC would generate estimated net savings for the state worth between $20 million and $140 million each year over the period, or up to $1,300 per scholarship.

- If BEF funding is enrollment based, then the EITC and OSTC would generate estimated net savings for school districts worth between $340 million and $730 million each year over the period, or up to $6,800 per scholarship.

INTRODUCTION

This paper reports results from a fiscal analysis of Pennsylvania SB 299, a proposal to expand the state's two tax-credit scholarship programs. Pennsylvania currently has two programs in operation, the Educational Improvement Tax Credit (EITC) Program and the Opportunity Scholarship Tax Credit (OSTC) Program. Under the current law, the tax credit limit for the EITC and OSTC are $160 million and $50 million, respectively. The proposal would potentially expand these two programs by creating an escalator for tax credit limits to increase under certain conditions. Beginning in FY 2020, for any fiscal year in which the total aggregate amount of tax credits for the prior fiscal year is at least 90 percent of the total aggregate amount of all tax credits available for the prior fiscal year, then the tax credit limit would increase by 25 percent.

This paper is organized as follows. First, it provides context to help policy makers and stakeholders evaluate the fiscal costs and benefits of the state's two tax-credit scholarship programs and their expansion under SB 299. It then explains the data and methods used to conduct a fiscal analysis of the programs and SB 299. Next it reports results from the analysis. Finally, it provides concluding thoughts.

CONTEXT

This section discusses previous analyses of private school choice programs, the size of the state's two tax-credit scholarship programs programs in the context of the state's K-12 public education system, and the state's current school funding scheme.

Previous Analyses of Private School Choice Programs

To date, there have been 50 analyses of private school choice programs already in operation. Forty-five of these analyses found that these programs generated net savings for taxpayers and public schools, four found those programs were cost-neutral, and just one analysis estimated a very small net cost. [1]

Lueken (2018) estimated the overall fiscal effects on taxpayers and school districts for 10 tax-credit scholarship programs in seven states.[2] Pennsylvania's EITC program was one of the 10 programs included in the analysis. Depending on assumptions about students switching from district schools and number of students receiving scholarships from multiple scholarship organizations, he estimated that the EITC generated overall savings from FY 2002 to FY 2014 worth between $700 million and $1.7 billion, or up to almost $6,000 per scholarship student.

EITC and OSTC Programs Share of Public K-12 Enrollment and Costs

Table 1 reports the participation and costs of the EITC and OSTC programs combined as a share of the state's total K-12 public school enrollment and costs for the period 2002-2017.

In 2002, 17,350 scholarships were awarded to students who applied to the EITC and OSTC programs. This participation represents 1 percent of the state's 1.8 million students enrolled in the public school system during this year. As these tax-credit scholarship programs expanded, the number of scholarships as a percent of public K-12 enrollment increased to 2.8 percent of K-12 students enrolled in public and private schools. During this period, while the number of scholarships awarded increased by about 32,000, public school enrollment declined by 6 percent, or more than 100,000 students statewide. Thus, although the EITC and OSTC might explain some of the decline in public K-12 over the period, it can potentially explain only one-third of this decline.

The share of tax credits awarded via the EITC and OSTC as a percentage of the state's total expenditures on its K-12 public school systems is even smaller, just 0.1 percent. In FY 2002, $17 million tax credits were disbursed to taxpayers for donations to private school scholarship organizations (SOs) via the EITC and OSTC programs, representing just 0.1 percent of the state's $19.8 billion K-12 budget that year. In FY 2017, this share increased slightly to 0.3 percent, with almost $104 million in tax credits disbursed to taxpayers compared to $30.5 billion in expenditures for K-12 public schools.

TABLE 1 Pennsylvania EITC and OSTC share of K-12 enrollment and costs

School Year Ending	Total scholarships awarded to K-12 students in EITC and OSTC programs	Students enrolled in public K-12	Private choice share of public K-12 enrollment	Tax credits distributed to taxpayers for K-12 private school scholarship, EITC and OSTC	Total expenditures on K-12 public schools, statewide	Private choice share of public K-12 costs
2002	17,350	1,821,627	0.9%	$17,000,000	$19,809,907,000	0.1%
2003	20,208	1,816,747	1.1%	$19,800,000	$20,808,760,000	0.1%
2004	25,875	1,821,146	1.4%	$25,200,000	$22,285,582,000	0.1%
2005	26,701	1,828,089	1.4%	$26,100,000	$21,462,670,000	0.1%
2006	29,638	1,830,684	1.6%	$28,900,000	$22,096,979,000	0.1%
2007	36,540	1,871,060	1.9%	$35,800,000	$23,601,794,000	0.2%
2008	44,334	1,801,971	2.4%	$43,500,000	$24,659,665,000	0.2%
2009	44,893	1,775,029	2.5%	$43,700,000	$28,173,293,000	0.2%
2010	38,646	1,785,993	2.1%	$37,800,000	$29,187,094,000	0.1%
2011	40,876	1,793,284	2.2%	$40,100,000	$29,961,876,000	0.1%
2012	45,100	1,771,395	2.5%	$44,500,000	$29,204,053,000	0.2%
2013	35,849	1,763,677	2.0%	$73,661,006	$31,332,091,000	0.2%
2014	45,879	1,755,236	2.5%	$85,472,003	$30,381,783,000	0.3%
2015	49,813	1,743,160	2.8%	$108,210,621	$31,495,115,000	0.3%
2016	41,886	1,717,414	2.4%	$93,476,448	$29,492,243,000	0.3%
2017	48,977	1,719,418	2.8%	$103,724,463	$30,495,441,765	0.3%

Author's estimates based on data from: Pennsylvania Department of Education; Pennsylvania Department of Community and Economic Development; National Center for Education Statistics, U.S. Department of Education; EdChoice

K-12 Public School Funding in Pennsylvania

Revenue for public schools comes from three sources: local (55 percent), state (37 percent) and federal plus other sources (8 percent).[3] In Pennsylvania, nearly all of school funding is based on factors other than student enrollment.[4] Federal revenue is mostly based on census track data or other factors instead of student enrollment while local revenue is based on a district's property wealth. State revenue for public schools in most states is based on student enrollment. In Pennsylvania, however, most state funding for school districts is based on factors other than student enrollment. This lack of student enrollment as a main factor in state funding is due to a "hold-harmless" provision which guarantees that each district receives at least the same level of state funding that it received the previous year, independent of any change to the district's enrollment.[5]

Basic Education Funding (BEF) comprises the largest portion of state revenue, or 52 percent in FY 2017.[6] There has been discussion over the years about making this portion of state funding for public schools in the Commonwealth student-centered.[7] While a discussion of the merits of school funding reform is beyond the scope of this paper, the current funding arrangement has important implications for the present fiscal analysis and how fiscal effects from school choice programs are distributed among state taxpayers and school districts.

In Pennsylvania, when students leave a district, "hold harmless" places the state on the hook for funding those students' previous school districts at the same level as the prior year, even though the districts are no longer obligated to educate students who leave. In addition, education costs will decrease for districts when students choose to leave them. Thus, students redirected from districts will continue to generate a reduction in revenue for the state while at the same time representing a fiscal benefit for the districts – not only do costs go down, but districts will continue to

receive state funding as if those students were enrolled in them. The state, on the other hand, will incur the fiscal burden of both providing tax credits for taxpayers who donate to the EITC and OSTC and funding the state's hold-harmless law.

In short, the choice programs provide a great deal for school districts but comes with a hefty bill for the state.

Given the ongoing discussion on this issue, the present analysis estimates the net fiscal impact of SB 299 under two scenarios: 1) an environment where no state funding for K-12 is student-based (which is close to the current situation) and 2) an environment where all BEF funds are based on student enrollment.

I now turn to the fiscal analysis of SB 299 to study its potential fiscal effects on the EITC and OSTC programs.

DATA AND METHODS

Data

When possible, I used data reported on the Pennsylvania Department of Education's (PDE) website. For data that the PDE does not report on its website, I used financial data from the National Center for Education Statistics (NCES) in the U.S. Department of Education (USDOE). These data are reported annually by all state education agencies, including PDE, to the USDOE. Participation data for the EITC and OSTC programs are collected annually by EdChoice from the Pennsylvania Department of Community and Economic Development. Missing data were filled in with information obtained from the Commonwealth Foundation.

Methods and Assumptions

The present analysis estimates the fiscal effects of the OSTC and the private school segment of the EITC only. The EITC also has pre-kindergarten and public school segments, which are not included in the present analysis.

A proper fiscal analysis of any private school choice program weighs both the cost of the program to taxpayers and the savings associated with reduced education costs for public schools that have fewer students to educate. The net fiscal impact of a tax-credit scholarship program on taxpayers and school districts can be characterized by the following general formula:

$$\text{Net Fiscal Impact} = \left[\text{(Savings from students redirected from public schools}\right] - \left[\text{Tax credit disbursements}\right]$$

An important factor for estimating the fiscal effects of a tax-credit scholarship program on school districts is variable costs. Variable costs are those that districts can adjust in the short-run when enrollment changes. The analysis uses data from the USDOE to estimate short-run variable costs.[9] I cautiously estimate that roughly 55 percent to 60 percent of total education costs for Pennsylvania public schools are variable in the short run.[10]

Another important factor in the analysis is assumptions about the switcher rate. Switchers are students in the EITC and OSTC who would enroll in their residentially assigned district school without financial assistance from the tax-credit scholarship programs. They represent fiscal savings for school districts and the state. The analysis generates a range of estimates based on 60 percent and 90 percent switcher rate assumptions.[11] This range of assumptions about switcher rates is likely cautious for a number of reasons.

First, switcher rates tend to be high in private school choice programs, as demonstrated by recent random assignment studies of programs in Louisiana and Washington, D.C.[12] During 2015-16 of the Louisiana Scholarship Program, about 90 percent of students who applied for a scholarship, but who did not win the scholarship lottery, enrolled in public schools. During both years of the most recent D.C. evaluation, 9 percent of students who did not win the lottery either returned to the private school they were previously enrolled before applying to the program or moved from a public school to a private school, even though they did not receive a scholarship in the lottery. These findings suggest that about 90 percent of those who wish to access a choice program are truly switchers from public to private schools and would be enrolled in a public school if the choice programs did not exist.

The present analysis's range for switcher rates is also likely cautious because private schools face strong incentives to attract new students and expand enrollment. In addition, SOs are arguably mission oriented around maximizing student participation in tax-credit scholarship programs given that many private schools tend to be mission-oriented themselves.[13]

In projecting the potential fiscal effects of SB 299, the analysis makes the following additional assumptions for both programs:

- Each student receives one scholarship (i.e., there is no scholarship stacking);[14]
- Taxpayers receive 90 cents in tax credits for every one dollar donated to SOs;[15]
- Total tax credits approved equals 90 percent of total tax credits available, thereby activating the escalators under SB 299 which increase the programs' respective tax credit caps by 25 percent starting in FY 2021;
- The average scholarship award amount increases by 5 percent;[16]
- School costs (including variable costs) grow at 1 percent each year;[17]
- BEF funding increases at 2 percent annual rate. [18]

Please note that the estimates reported in this paper may differ from estimates from other fiscal analyses. For example, estimates discussed below differ from Lueken (2018), who analyzed the EITC in that paper. The present analysis uses different data, some different assumptions, a different time period, and it includes the OSTC in the analysis.

State Fiscal Effects

The fiscal effect on the state is the difference between savings generated by students redirected from public schools and the amount of tax credits disbursed to taxpayers for donations to private school scholarship organizations.

I estimated the state's net fiscal impact under two different scenarios:

1. state revenue is not based on student enrollment at all, and
2. all BEF funding is based on student enrollment (I also refer to this scenario as simply "enrollment-based funding" throughout this analysis).

Under the first scenario, there is no offset for the state, meaning that the fiscal impact on the state equals the number of tax credits awarded for donations to SOs. Under the second scenario, there would be an offset for the state.

District Fiscal Effects

The fiscal effect on school districts will be the difference between variable cost savings generated by students redirected from public schools and the reduction in revenue associated with those students.

RESULTS FROM THE FISCAL IMPACT ANALYSIS

Fiscal Alignment

It is instructive to first examine the fiscal alignment between costs for public K-12 schooling and costs for the private school choice programs. Figure 1 displays the fiscal alignment between costs for K-12 public education in Pennsylvania and the state's two tax-credit scholarship programs between 2002 and 2016. The solid black line displays the trend for total spending per student, the thick dashed red line shows estimates for districts' average variable costs per student, the dotted blue line displays the average BEF allocation per student, and the thin dashed green line shows the average amount of tax credits disbursed to taxpayers per scholarship.

Note the gaps between the cost for incentivizing donations for private scholarships and public school costs. In FY 2016, the average tax credit awarded per scholarship was nearly $15,000 less than the statewide

average cost to educate a student in a district school. This suggests that the EITC and OSTC programs generated significant cost savings, though it's not possible to determine the distribution of savings simply by looking at this difference.

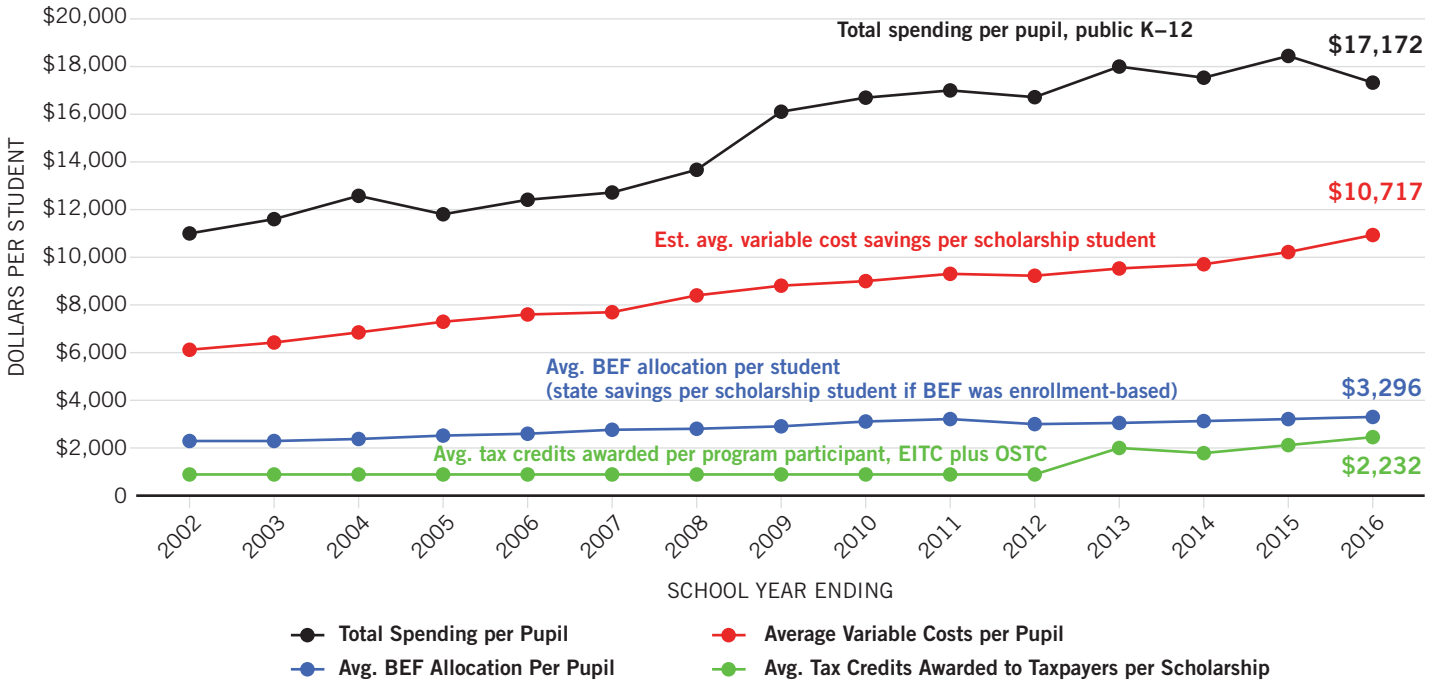
Average variable costs for districts is roughly $11,000 per student. When students choose to leave district schools, districts would be able to offset any reduction in revenue from students leaving by this amount, on average. In Pennsylvania, revenue for school districts would be reduced by a relatively small amount because of hold harmless. As a result, the amount of resources that districts retain for fewer students mean that students who remain in district schools have access to more resources per student, more so than it would under enrollment-based funding.

Under enrollment-based funding, where all BEF funding would be determined by students, state revenue for a school district would decrease by about $3,300 on average when a student chooses to leave. If all state revenue were enrollment-based, then districts' revenue from the state would decrease by about $6,500, on average, when a student leaves.[19] The district would have $11,000 with which to offset this reduction, a net benefit of about $4,500 to $8,000.

Because of hold harmless, awarding incentives to generate donations for private school scholarships reduced state revenue, on average, by about $2,200 per scholarship in FY 2016. Under enrollment-based funding, the state would incur net savings worth about $1,000 for each student choosing to leave a district school via one of the tax-credit scholarship programs.

The fiscal effects of the tax-credit programs to date on the state and school districts will depend on the number of scholarships awarded to students who switch from district schools. The fiscal analysis accounts for this important factor.

FIGURE 1 Fiscal Alignment of Public K-12 and Tax-Credit Scholarship Programs in Pennsylvania, SY 2001-02 to SY 2015-16



Author's estimates based on data from: Pennsylvania Department of Education; Pennsylvania Department of Community and Economic Development; National Center for Education Statistics, U.S. Department of Education

Fiscal Effects to Date

Table 2 and Table 3 summarize the results of the fiscal analysis by reporting a range of estimates, starting in FY 2002, for fiscal effects of the EITC and OSTC on the state and school districts. They also report estimates under current BEF funding and enrollment-based funding. Table 2 reports estimates based on a 60 percent switcher rate assumption, and Table 3 reports estimates based on an assumed 90 percent switcher rate. Table A1 and Table A2 in the appendix include additional details about estimated costs and savings under current BEF funding and enrollment-based funding and are based on a 90 percent switcher rate assumption.[20]

Under current BEF funding and assuming a switcher rate of 60 percent (Table 2), the combined state and district net cumulative fiscal effect of the EITC and OSTC programs from FY 2002 to FY 2019 was about $3 billion in savings, or over $4,000 per scholarship. This reflects a cumulative net benefit of $4.0 billion for school districts (about $5,500 per scholarship) and a net revenue reduction of $1.1 billion (about $1,500 per scholarship) for the state. Had these programs operated under enrollment-based funding for BEF, the distribution of fiscal effects would have been more even, with both the state and school districts experiencing cumulative net savings worth $238 million ($330 per scholarship) and $2.7 billion ($3,700 per scholarship), respectively.

Under current BEF funding and assuming a switcher rate of 90 percent (Table 3), the combined state and district net cumulative net fiscal effect of the EITC and OSTC programs from FY 2002 to FY 2019 would have been an estimated $5 billion in savings, or $6,800 per scholarship. This reflects a cumulative net benefit of $6 billion for school districts and a cumulative net revenue reduction of $1 billion for the state. Had these programs operated under enrollment-based funding, the distribution of fiscal effects would have been more even, with both the state and school districts experiencing cumulative net savings worth about $900 million and $4.0 billion, respectively.

Projected fiscal effects under SB 299

The next segment of the analysis projects estimates for the fiscal effects of SB 299 on the state and school districts from FY 2020 to FY 2022. Results are reported in the bottom panels of Table 2 and Table 3 for 60 percent and 90 percent switcher rates.

Under current BEF funding, the state would incur a net revenue reduction equal to the amount of tax credits disbursed to taxpayers for donations to SOs, worth between about $144 million and $225 million annually (roughly $2,000 per scholarship). If 90 percent of scholarships are awarded to switchers, then districts would incur net fiscal benefits each year estimated between $760 million and $1 billion (roughly $10,000 per scholarship). If 60 percent of scholarships are awarded to switchers, then districts would incur net fiscal benefits each year estimated between $500 million and $730 million (roughly $7,000 per scholarship).[21]

Under enrollment-based funding, the fiscal impact of SB 299 would be more evenly distributed. Based on 60 percent or 90 percent switcher rate assumptions, the state would incur estimated net savings worth between roughly $20 million and $140 million each year (up to $1,300 per scholarship). Despite experiencing a reduction in BEF revenue, school districts would continue to experience significant net fiscal benefits from reduced costs, estimated at between $340 million and $730 million each year (up to $6,800 per scholarship).

Under current BEF funding and enrollment-based funding, the combined estimated fiscal effects of SB 299 would be between an estimated $360 million and $870 million annually, or up to about $8,100 per scholarship.

TABLE 2 Estimated combined net fiscal impacts of EITC and OSTC under current BEF and enrollment-based funding for BEF, 60 percent switcher rate

School Year Ending	Current BEF Funding				Enrollment-Based Funding for BEF				Combined Net Fiscal Effect	
	State		District		State		District			
	Total	Per Scholarship	Total	Per Scholarship	Total	Per Scholarship	Total	Per Scholarship	Total	Per Scholarship
2002	($17,000,000)	($980)	$62,927,223	$3,627	$6,166,601	$355	$39,760,622	$2,292	$45,927,223	$2,647
2003	($19,800,000)	($980)	$76,725,967	$3,797	$7,699,957	$381	$49,226,010	$2,436	$56,925,967	$2,817
2004	($25,200,000)	($974)	$105,923,371	$4,094	$11,344,272	$438	$69,379,098	$2,681	$80,723,371	$3,120
2005	($26,100,000)	($977)	$115,337,469	$4,320	$14,479,747	$542	$74,757,722	$2,800	$89,237,469	$3,342
2006	($28,900,000)	($975)	$133,618,537	$4,508	$17,894,008	$604	$86,824,529	$2,930	$104,718,537	$3,533
2007	($35,800,000)	($980)	$167,118,963	$4,574	$25v191,401	$689	$106,127,562	$2,904	$131,318,963	$3,594
2008	($43,500,000)	($981)	$217,305,623	$4,902	$29,639,974	$669	$144,165,649	$3,252	$173,805,623	$3,920
2009	($43,700,000)	($973)	$229,747,893	$5,118	$35,055,466	$781	$150,992,427	$3,363	$186,047,893	$4,144
2010	($37,800,000)	($978)	$206,812,032	$5,351	$34,300,700	$888	$134,711,333	$3,486	$169,012,032	$4,373
2011	($40,100,000)	($981)	$225,172,598	$5,509	$39,898,006	$976	$145,174,592	$3,552	$185,072,598	$4,528
2012	($44,500,000)	($987)	$247,201,786	$5,481	$38,062,935	$844	$164,638,851	$3,651	$202,701,786	$4,494
2013	($73,661,006)	($2,055)	$203,338,686	$5,672	($7,302,844)	($204)	$136,980,524	$3,821	$129,677,680	$3,617
2014	($85,472,003)	($1,863)	$267,222,254	$5,825	$1,933,915	$42	$179,816,336	$3,919	$181,750,251	$3,962
2015	($108,210,621)	($2,172)	$302,521,100	$6,073	($12,566,997)	($252)	$206,877,476	$4,153	$194,310,479	$3,901
2016	($93,476,448)	($2,232)	$269,342,304	$6,430	($10,651,859)	($254)	$186,517,715	$4,453	$175,865,856	$4,199
2017	($103,724,463)	($2,118)	$318,089,428	$6,495	($2,977,531)	($61)	$217,342,496	$4,438	$214,364,965	$4,377
2018	($125,265,232)	($2,402)	$342,044,627	$6,560	($15,858,470)	($304)	$232,637,865	$4,461	$216,779,395	$4,157
2019*	($144,000,000)	($1,817)	$525,140,761	$6,625	$25,635,178	$323	$355,505,583	$4,485	$381,140,761	$4,808
Total (2002-2019)	**($1,096,209,773)**	**($1,514)**	**$4,015,590,621**	**$5,547**	**$237,944,459**	**$329**	**$2,681,436,389**	**$3,704**	**$2,919,380,848**	**$4,032**
Projected Fiscal Effects Under SB 299										
2020 (projected)	($144,000,000)	($1,908)	$505,135,399	$6,691	$20,788,459	$275	$340,346,940	$4,509	$361,135,399	$4,784
2021 (projected)	($180,000,000)	($2,003)	$607,365,182	$6,758	$20,100,272	$224	$407,264,910	$4,532	$427,365,182	$4,755
2022 (projected)	($225,000,000)	($2,103)	$730,284,326	$6,826	$17,978,901	$168	$487,305,424	$4,555	$505,284,326	$4,723
Total (projected)	**($549,000,000)**	**($2,016)**	**$1,842,784,906**	**$6,766**	**$58,867,632**	**$216**	**$1,234,917,274**	**$4,534**	**$1,293,784,906**	**$4,751**

Sources: Author's calculations using data from the Pennsylvania Department of Education; Pennsylvania Department of Community and Economic Development; National Center for Education Statistics, U.S. Department of Education; The Commonwealth Foundation; EdChoice

**Note: for current school year (2018-19), the analysis assumes that 90 percent of the $110 million credit cap is reached, generating donations to provide scholarships whose average amount is about $1,800.*

TABLE 3

Table 3: Estimated Combined Net Fiscal Impacts of EITC and OSTC Under Current BEF and Enrollment-Based Funding for BEF, 90 Percent Switcher Rate

School Year Ending	Current BEF Funding				Enrollment-Based Funding for BEF				Combined Net Fiscal Effect	
	State		District		State		District			
	Total	Per Scholarship	Total	Per Scholarship	Total	Per Scholarship	Total	Per Scholarship	Total	Per Scholarship
2002	($17,000,000)	($980)	$94,390,835	$5,440	$17,749,902	$1,023	$59,640,933	$3,438	$77,390,835	$4,461
2003	($19,800,000)	($980)	$115,088,951	$5,695	$21,449,935	$1,061	$73,839,015	$3,654	$95,288,951	$4,715
2004	($25,200,000)	($974)	$158,885,056	$6,140	$29,616,409	$1,145	$104,068,647	$4,022	$133,685,056	$5,167
2005	($26,100,000)	($977)	$173,006,204	$6,479	$34,769,621	$1,302	$112,136,583	$4,200	$146,906,204	$5,502
2006	($28,900,000)	($975)	$200,427,805	$6,763	$41,291,011	$1,393	$130,236,794	$4,394	$171,527,805	$5,787
2007	($35,800,000)	($980)	$250,678,445	$6,860	$55,687,102	$1,524	$159,191,344	$4,357	$214,878,445	$5,881
2008	($43,500,000)	($981)	$325,958,434	$7,352	$66,209,961	$1,493	$216,248,474	$4,878	$282,458,434	$6,371
2009	($43,700,000)	($973)	$344,621,840	$7,677	$74,433,199	$1,658	$226,488,641	$5,045	$300,921,840	$6,703
2010	($37,800,000)	($978)	$310,218,048	$8,027	$70,351,050	$1,820	$202,066,999	$5,229	$272,418,048	$7,049
2011	($40,100,000)	($981)	$337,758,896	$8,263	$79,897,009	$1,955	$217,761,888	$5,327	$297,658,896	$7,282
2012	($44,500,000)	($987)	$370,802,680	$8,222	$79,344,403	$1,759	$246,958,277	$5,476	$326,302,680	$7,235
2013	($73,661,006)	($2,055)	$305,008,029	$8,508	$25,876,237	$722	$205,470,785	$5,732	$231,347,023	$6,453
2014	($85,472,003)	($1,863)	$400,833,381	$8,737	$45,636,874	$995	$269,724,503	$5,879	$315,361,378	$6,874
2015	($108,210,621)	($2,172)	$453,781,649	$9,110	$35,254,815	$708	$310,316,213	$6,230	$345,571,028	$6,937
2016	($93,476,448)	($2,232)	$404,013,455	$9,646	$30,760,435	$734	$279,776,572	$6,679	$310,537,007	$7,414
2017	($103,724,463)	($2,118)	$477,134,142	$9,742	$47,395,935	$968	$326,013,744	$6,656	$373,409,679	$7,624
2018	($125,265,232)	($2,402)	$513,066,940	$9,839	$38,844,911	$745	$348,956,797	$6,692	$387,801,708	$7,437
2019*	($144,000,000)	($1,817)	$787,711,142	$9,938	$110,452,768	$1,393	$533,258,374	$6,728	$643,711,142	$8,121
Total (2002-2019)	**($1,096,209,773)**	**($1,514)**	**$6,023,385,932**	**$8,320**	**$905,021,575**	**$1,250**	**$4,022,154,584**	**$5,556**	**$4,927,176,159**	**$6,806**
Projected Fiscal Effects Under SB 299										
2020 (projected)	($144,000,000)	($1,908)	$757,703,098	$10,037	$103,182,689	$1,367	$510,520,410	$6,763	$613,703,098	$8,130
2021 (projected)	($180,000,000)	($2,003)	$911,047,773	$10,138	$120,150,408	$1,337	$610,897,365	$6,798	$731,047,773	$8,135
2022 (projected)	($225,000,000)	($2,103)	$1,095,426,489	$10,239	$139,468,352	$1,304	$730,958,137	$6,832	$870,426,489	$8,136
Subtotal (projected)	**($549,000,000)**	**($2,016)**	**$2,764,177,359**	**$10,150**	**$362,801,448**	**$1,332**	**$1,852,375,911**	**$6,802**	**$2,215,177,359**	**$8,134**

Sources: Author's calculations using data from the Pennsylvania Department of Education; Pennsylvania Department of Community and Economic Development; National Center for Education Statistics, U.S. Department of Education; The Commonwealth Foundation; EdChoice

**Note: for current school year (2018-19), the analysis assumes that 90 percent of the $110 million credit cap is reached, generating donations to provide scholarships whose average amount is about $1,800.*

CONCLUSION

SB 299 would add escalators to the EITC and OSTC programs and expand educational opportunity for families and children in Pennsylvania by increasing the potential for these programs to serve more students and improve the likelihood of creating better matches between students and the type of school they attend.

A common concern among skeptics of taxpayer funded programs such as the EITC and OSTC is that it would harm students and increase taxpayer costs. Overall, the ETIC and OSTC programs have generated significant fiscal benefits for taxpayers and school districts during their lifetimes. The question of how these benefits are distributed among different taxpayers and schools, however, is complicated.[22] This is obscured by the fact that nearly all dollars for public K-12 that flow to districts in Pennsylvania are allocated based on factors other than student enrollment.

Overall, expansion of the EITC and OSTC program would generate significant fiscal benefits. Under the current K-12 funding system, the state would incur a net revenue reduction while districts would disproportionately experience fiscal benefits from expansion of the program. If the state were to switch to an enrollment-based funding model for the BEF components of its K-12 system, then SB 299 could generate significant fiscal benefits for both the state and school districts.

APPENDIX TABLES

Detailed calculations based on 90 percent switcher rate

TABLE A1 Estimated Fiscal Effects for EITC and OSTC programs and SB 299 (program expansion proposal) under current BEF funding and 90 percent switcher rate

School Year Ending	Number of Scholarships Awarded	Number of Scholarships Awarded to Switchers	Total Tax Credits Distributed	State Savings (Reduction in Revenue for Districts) for Students Redirected from District Schools	State Net Fiscal Impact	Est. Average Total Variable Costs per Pupil	BEF Allocation per Pupil	Est. Total Variable Cost Savings for School Districts	District Net Fiscal Impact
2002	17,350	15,615	$17,000,000	$0	($17,000,000)	$6,045	$2,225	$94,390,835	$94,390,835
2003	20,208	18,187	$19,800,000	$0	($19,800,000)	$6,328	$2,268	$115,088,951	$115,088,951
2004	25,875	23,288	$25,200,000	$0	($25,200,000)	$6,823	$2,354	$158,885,056	$158,885,056
2005	26,701	24,031	$26,100,000	$0	($26,100,000)	$7,199	$2,533	$173,006,204	$173,006,204
2006	29,638	26,674	$28,900,000	$0	($28,900,000)	$7,514	$2,631	$200,427,805	$200,427,805
2007	36,540	32,886	$35,800,000	$0	($35,800,000)	$7,623	$2,782	$250,678,445	$250,678,445
2008	44,334	39,901	$43,500,000	$0	($43,500,000)	$8,169	$2,750	$325,958,434	$325,958,434
2009	44,893	40,404	$43,700,000	$0	($43,700,000)	$8,529	$2,924	$344,621,840	$344,621,840
2010	38,646	34,781	$37,800,000	$0	($37,800,000)	$8,919	$3,109	$310,218,048	$310,218,048
2011	40,876	36,788	$40,100,000	$0	($40,100,000)	$9,181	$3,262	$337,758,896	$337,758,896
2012	45,100	40,590	$44,500,000	$0	($44,500,000)	$9,135	$3,051	$370,802,680	$370,802,680
2013	35,849	32,264	$73,661,006	$0	($73,661,006)	$9,453	$3,085	$305,008,029	$305,008,029
2014	45,879	41,291	$85,472,003	$0	($85,472,003)	$9,708	$3,175	$400,833,381	$400,833,381
2015	49,813	44,832	$108,210,621	$0	($108,210,621)	$10,122	$3,200	$453,781,649	$453,781,649
2016	41,886	37,697	$93,476,448	$0	($93,476,448)	$10,717	$3,296	$404,013,455	$404,013,455
2017	48,977	44,079	$103,724,463	$0	($103,724,463)	$10,824	$3,428	$477,134,142	$477,134,142
2018	52,144	46,930	$125,265,232	$0	($125,265,232)	$10,933	$3,497	$513,066,940	$513,066,940
2019*	79,264	71,338	$144,000,000	$0	($144,000,000)	$11,042	$3,567	$787,711,142	$787,711,142
2020 (projected)	75,490	67,941	$144,000,000	$0	($144,000,000)	$11,152	$3,638	$757,703,098	$757,703,098
2021 (projected)	89,868	80,882	$180,000,000	$0	($180,000,000)	$11,264	$3,711	$911,047,773	$911,047,773
2022 (projected)	106,986	96,288	$225,000,000	$0	($225,000,000)	$11,377	$3,785	$1,095,426,489	$1,095,426,489

Sources: Author's calculations using data from the Pennsylvania Department of Education; Pennsylvania Department of Community and Economic Development; National Center for Education Statistics, U.S. Department of Education; The Commonwealth Foundation; EdChoice
**Note: for current school year (2018-19), the analysis assumes that 90 percent of the $110 million credit cap is reached, generating donations to provide scholarships whose average amount is about $1,800.*

How to read Table A1: In school year 2001-02, scholarship organizations (SOs) awarded 17,350 scholarships to students via the EITC and OSTC programs (second column). Of these students, 90 percent (15,615 students) switched from public schools. The state disbursed $17 million in tax credits for donations to SOs (fourth column). As there was no state savings from students leaving district schools (fifth column), the net revenue reduction for the state was $17 million (sixth column).

Average variable costs for school districts was $6,045 per student (seventh column). Districts did not experience a revenue reduction in BEF funding (fifth column). Thus, districts experienced estimated net cumulative savings of $94,390,835 (last column) from 15,615 students leaving districts via the choice programs.

TABLE A2 Estimated Fiscal Effects for EITC and OSTC Programs and SB 299 (program expansion proposal) Under Enrollment-Based BEF Funding and 90 Percent Switcher Rate

School Year Ending	Number of Scholarships Awarded	Number of Scholarships Awarded to Switchers	Total Tax Credits Distributed	State Savings (Reduction in Revenue for Districts) for Students Redirected from District Schools	State Net Fiscal Impact	Est. Average Total Variable Costs per Pupil	BEF Allocation per Pupil	Est. Total Variable Cost Savings for School Districts	District Net Fiscal Impact
2002	17,350	15,615	$17,000,000	$34,749,902	$17,749,902	$6,045	$2,225	$94,390,835	$59,640,933
2003	20,208	18,187	$19,800,000	$41,249,935	$21,449,935	$6,328	$2,268	$115,088,951	$73,839,015
2004	25,875	23,288	$25,200,000	$54,816,409	$29,616,409	$6,823	$2,354	$158,885,056	$104,068,647
2005	26,701	24,031	$26,100,000	$60,869,621	$34,769,621	$7,199	$2,533	$173,006,204	$112,136,583
2006	29,638	26,674	$28,900,000	$70,191,011	$41,291,011	$7,514	$2,631	$200,427,805	$130,236,794
2007	36,540	32,886	$35,800,000	$91,487,102	$55,687,102	$7,623	$2,782	$250,678,445	$159,191,344
2008	44,334	39,901	$43,500,000	$109,709,961	$66,209,961	$8,169	$2,750	$325,958,434	$216,248,474
2009	44,893	40,404	$43,700,000	$118,133,199	$74,433,199	$8,529	$2,924	$344,621,840	$226,488,641
2010	38,646	34,781	$37,800,000	$108,151,050	$70,351,050	$8,919	$3,109	$310,218,048	$202,066,999
2011	40,876	36,788	$40,100,000	$119,997,009	$79,897,009	$9,181	$3,262	$337,758,896	$217,761,888
2012	45,100	40,590	$44,500,000	$123,844,403	$79,344,403	$9,135	$3,051	$370,802,680	$246,958,277
2013	35,849	32,264	$73,661,006	$99,537,243	$25,876,237	$9,453	$3,085	$305,008,029	$205,470,785
2014	45,879	41,291	$85,472,003	$131,108,877	$45,636,874	$9,708	$3,175	$400,833,381	$269,724,503
2015	49,813	44,832	$108,210,621	$143,465,436	$35,254,815	$10,122	$3,200	$453,781,649	$310,316,213
2016	41,886	37,697	$93,476,448	$124,236,883	$30,760,435	$10,717	$3,296	$404,013,455	$279,776,572
2017	48,977	44,079	$103,724,463	$151,120,398	$47,395,935	$10,824	$3,428	$477,134,142	$326,013,744
2018	52,144	46,930	$125,265,232	$164,110,143	$38,844,911	$10,933	$3,497	$513,066,940	$348,956,797
2019*	79,264	71,338	$144,000,000	$254,452,768	$110,452,768	$11,042	$3,567	$787,711,142	$533,258,374
2020 (projected)	75,490	67,941	$144,000,000	$247,182,689	$103,182,689	$11,152	$3,638	$757,703,098	$510,520,410
2021 (projected)	89,868	80,882	$180,000,000	$300,150,408	$120,150,408	$11,264	$3,711	$911,047,773	$610,897,365
2022 (projected)	106,986	96,288	$225,000,000	$364,468,352	$139,468,352	$11,377	$3,785	$1,095,426,489	$730,958,137

Sources: Author's calculations using data from the Pennsylvania Department of Education; Pennsylvania Department of Community and Economic Development; National Center for Education Statistics, U.S. Department of Education; The Commonwealth Foundation; EdChoice
**Note: for current school year (2018-19), the analysis assumes that 90 percent of the $110 million credit cap is reached, generating donations to provide scholarships whose average amount is about $1,800.*

How to read Table A2: In school year 2001-02, scholarship organizations (SOs) awarded 17,350 scholarships to students via the EITC and OSTC programs (second column). Of these students, 90 percent (15,615 students) switched from public schools. The state disbursed $17 million in tax credits for donations to SOs (fourth column). Had BEF funding been based on enrollment, the state would have incurred an offset of $34,749,902 from students leaving district schools (fifth column), thereby generating $17,749,902 in net savings for the state (sixth column).

Average variable costs for school districts was $6,045 per student (seventh column). Had BEF funding been based on enrollment, districts would have experienced $2,225 in reduced BEF revenue per student (eighth column), or $34,749,902 in total (fifth column). Districts would have experienced estimated net cumulative savings of $59,640,933 (last column) from 15,615 students leaving districts via the choice programs.

NOTES

1 EdChoice (2019), The 123s of School Choice: What the Research Says about Private School Choice Programs in America, 2019 edition, retrieved from: www.edchoice.org/research/the-123s-of-school-choice

2 Martin F. Lueken (2018), The Fiscal Effects of Tax-Credit Scholarship Programs in the United States, Journal of School Choice, 12(2), pp. 181–215, https://dx.doi.org/10.1080/15582159.2018.1447725

3 Pennsylvania Department of Education, Annual Financial Report Data Files, Revenue Data for: School Districts, Career and Technology Centers, and Charter Schools, School Year 2016-2017 accessed 4/10/2019 at https://www.education.pa.gov/Teachers%20-%2Administrators/School%20Finances/Finances/AFR%20Data%20Summary/Pages/AFR-Data-Summary-Level.aspx#.VZvrX2XD-Uk

4 Matthew M. Chingos and Kristin Blagg (2017), Making Sense of State School Funding Policy, Urban Institute, retrieved from https://www.urban.org/sites/default/files/publication/94961/making-sense-of-state-school-funding-policy_0.pdf

5 James Paul (2014). "Harmed by 'Hold Harmless'", Commonwealth Foundation, accessed 4/10/2019 at https://www.commonwealthfoundation.org/policyblog/detail/harmed-by-hold-harmless

6 Author's estimates based on data accessed 4/10/2019 from the Pennsylvania Department of Education: https://www.education.pa.gov/Teachers%20-%20Administrators/School%20Finances/Finances/Historical%20Files/Pages/default.aspx https://www.education.pa.gov/Teachers%20-%20Administrators/School%20Finances/Finances/AFR%20Data%20Summary/Pages/AFR-Data-Summary-Level.aspx#.VZvrX2XD-Uk

7 Basic Education Funding Commission (2015). Basic Education Funding Commission: Report and Recommendations [report], June 18, 2015. http://basiceducationfundingcommission.pasenategop.com/wp-content/uploads/sites/68/2014/08/final-report-061915-.pdf

8 Education cost data were available on the PDE website starting with FY 2008. For prior years, we assumed that the BEF allocation was 60 percent of state revenue reported by the PDE to NCES. For other cost data, we used NCES data for years prior to 2008.

9 I use the same accounting method used by Lueken (2018) and consider three categorical expenditures as variable in the short run: Instruction, Instruction Support Services, and Student Support Services. For more detailed discussion, please see Scafidi (2012) and footnotes 16 and 17 on p. 200 in Lueken (2018). Benjamin Scafidi, The Fiscal Effects of School Choice Programs on Public School Districts (Indianapolis: Friedman Foundation for Educational Choice, 2012), http://www.edchoice.org/wp-content/uploads/2015/07/The-Fiscal-Effects-of-School-http://www.edchoice.org/wp-content/uploads/2015/07/The-Fiscal-Effects-of-School-Choice-Programs.pdf; Martin F. Lueken (2018), The Fiscal Effects of Tax-Credit Scholarship Programs in the United States, Journal of School Choice, 12(2), pp. 181–215, https://dx.doi.org/10.1080/15582159.2018.1447725

10 My estimates are lower than Scafidi's, who also includes costs for enterprise operations and food service in addition to the costs that comprise our variable cost estimates. They are also within the range of what Bifulco and Rebeck estimate as variable costs for public schools in Albany and Buffalo. Their estimate variable costs for Albany and Buffalo are, respectively, 66.3 percent and 54.6 percent of expenditures. Scafidi, The Fiscal Effects of School Choice Programs on Public School Districts; Robert Bifulco and Randall Reback, "Fiscal Impacts of Charter Schools: Lessons from New York," Education Finance and Policy 9, no. 1 (Winter 2014), pp. 86-107, doi:10.1162/EDFP_a_00121.

11 This is the same approach used by Lueken (2018), please see footnote 20 on p. 200 for further discussion about these assumptions. Martin F. Lueken (2018), The Fiscal Effects of Tax-Credit Scholarship Programs in the United States, Journal of School Choice, 12(2), pp. 181–215, https://dx.doi.org/10.1080/15582159.2018.1447725

12 Jonathan N. Mills and Patrick J. Wolf (2019). The Effects of the Louisiana Scholarship Program on Student Achievement After Four Years, EDRE Working Paper 2019-10, University of Arkansas. Retrieved from http://www.uaedreform.org/wp-content/uploads/Mills-Wolf-LSP-Achievement-After-4-Years-final.pdf Dynarski, M., Rui, N., Webber, A., and Gutmann, B. Evaluation of the DC Opportunity Scholarship Program: Impacts Two Years After Students Applied (NCEE 2018-4010). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. https://files.eric.ed.gov/fulltext/ED583552.pdf

13 See p. 17 in Lueken (2018). Ibid.

14 The EITC and OSTC programs do not limit the number of scholarships from scholarship organizations that students may apply for and receive. However, based on discussions with individuals living in the state who are familiar with the programs, scholarship organizations (SO) are mostly associated with individual schools. It is uncommon for any private school to be served by more than one SO. Thus, opportunities for students to receive multiple scholarships is minimal.

15 This assumption generates more cautious estimates as a lower credit rate would mean the state would disburse fewer credits for a given level of donations.

16 This assumption aligns with the Florida Tax Credit Scholarship Program's experience in the last 10 years.

17 This assumed rate aligns with the average annual growth over the last 5 years per NCES data.

18 This assumed rate aligns with the average annual growth in BEF allocation over the last 5 years per PDE data.

19 Pennsylvania Department of Education, Annual Financial Report Data Files, accessed 4/10/2019 at https://www.education.pa.gov/Teachers%20-%20Administrators/School%20Finances/Finances/AFR%20Data%20Summary/Pages/AFR-Data-Summary-Level.aspx#.VZvrX2XD-Uk

20 Detailed tables under other scenarios are available upon request.

21 Assuming a 30 percent switcher rate, SB 299 would generate estimated annual net savings for school districts worth between $250 million and $365 million (roughly $3,300 per scholarship). The fiscal effect on the state is the same as that based on other switcher rate assumptions. For reasons discussed earlier in this paper, the switcher rate will likely be much higher and closer to 90 percent.

22 Robert M. Costrell, "The Fiscal Impact of the Milwaukee Parental Choice Program in Milwaukee, Wisconsin, 1993-2008," (Fayetteville, AK: School Choice Demonstration Project Milwaukee Evaluation Report #2, University of Arkansas, 2008). Robert M. Costrell, "The Fiscal Impact of the Milwaukee Parental Choice Program: 2010-2011 Update and Policy Options," (Fayetteville, AK: School Choice Demonstration Project Milwaukee Evaluation Report #2, University of Arkansas, 2010).

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Martin Lueken is EdChoice's director of fiscal policy and analysis, where he focuses on research and analysis of issues that pertain to school choice bills, current programs, and school funding. His work includes providing expert support and advice for policy makers in helping understand the fiscal impact of current school choice programs and potential fiscal effects of programs introduced in state legislatures. He has provided expert testimony and advice about fiscal issues for numerous states that have introduced education choice legislation. His work has been mentioned in various media and education-specific outlets, including The New York Times, The Wall Street Journal, Education Next, Education Week, and The 74.

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