



## A Local Tax Credit for Sponsoring Basic Education: Draft Bill and Field Evidence of Potential Effectiveness

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**Abstract:** We design a TRAIN-compliant and economically efficient tax incentive for individuals who sponsor the basic education of relatives. We then obtain before-the-fact evidence of its potential effectiveness by running a survey-experiment among 210 individuals within our social network who are financially capable of sponsoring a beneficiary. Respondents are randomly assigned to control, or to one of two possible treatments: proportional tax credit versus lump-sum tax credit. We then use contingent valuation to calculate the mean willingness to sponsor of each treatment group relative to a baseline. Our results indicate a baseline willingness to sponsor of at least PhP13,714 per year, but which is significantly increased to around PhP23,600 by the introduction of the tax incentive – regardless of whether it is offered as a proportionate or lump-sum credit.

**Key Words:** altruism, tax credit, basic education, survey experiment

### 1. INTRODUCTION

This paper is motivated by an idea first proposed by Prof. Dr. Tereso S. Tullao, Jr. of the DLSU School of Economics: that a tax incentive be granted to individuals who support the education of their relatives. Tullao argued it would be economically efficient to do so, because such an incentive may increase the provision of education, a valuable yet under-provided public good, particularly in the Philippines, which has one of the highest primary education dropout rates in the world (Knoema, 2020).

A tax credit is granted by governments to reduce the tax burden of individuals, usually to reward or promote desirable behaviour. But for such

a tax credit to pass economic scrutiny, it must fulfill a number of design requirements. It must not distort market prices, it must be as or more efficient than existing alternatives, and it should be equitable toward its intended targets. Finally, it must be feasible; that is, compliant with the national taxation laws of the Philippines, notably its 2017 TRAIN law.

The conference paper format does not allow us to present the tax credit as a full legislative bill, but we highlight its key features below (annotations in italics):

- (a) The credit may only be claimed by sponsors who are relatives – but not parents – of the beneficiary; *to ensure efficiency and non-distortion,*



- sponsorship must not crowd out parental obligation from the Family Code (1987)*
- (b) The once-a-year credit will originate from Residential Real Property Taxes (RPT) only – but the claiming sponsors must not themselves be delinquent in paying real property taxes; *RA 5447 stipulates an additional levy from the Real Property Tax whose proceeds go toward a Special Education Fund (SEF), with specific allowable expenses such as the operation of Grade 1 schooling, construction and repair of elementary school buildings, salaries to public school teachers, etc. By riding on existing legislation, we minimize administrative costs*
  - (c) The beneficiaries must be Filipino citizens, Filipino nationals, or resident aliens, whose family income status qualifies based on a means test; *needs testing may be piggybacked on existing local databases, but is essential in preventing relatives from sponsoring each others' children and undermining the tax base*
  - (d) For each relative sponsored, the sponsor may claim an RPT credit of 100% for the first PhP10,000 in school expenses and an additional 25% of the next PhP20,000, for a maximum PhP15,000 in tax credits – or a fixed credit of PhP15,000 for a minimum PhP30,000 spent on qualified expenses. The total tax credit would not exceed PhP15,000 a year, but up to three beneficiaries may be sponsored; *by crediting tuition and expenses, the tax credit remains neutral between private and public schools, the latter of which charge lower tuition in general*
  - (e) The sponsor must be able to show official receipts for basic education expenses – tuition, books, supplies and other materials required by the school – issued in the beneficiary's name; *aside from a means of stanching high primary dropout rates, it's been argued for*

*decades (at least since Todaro, 1993) that social benefits to education are maximized at the primary levels.*

Would such a tax credit work – that is, would it result in greater willingness to sponsor the basic education of one's relatives? Obviously, this can be answered only by evidence before the fact. To obtain it, we administer a field survey whose sample was purposively drawn from our social networks, selecting only contacts able to potentially sponsor beneficiaries. We describe the empirical design below.

## 2. DESIGN AND METHOD

### 2.1 Data

*Sample.* We recruited 210 respondents from our online social networks, selected only if clearly financially able to sponsor a child's education, e.g., those who own residential property and pay annual real property taxes.

*Survey-experiment.* Respondents received an online survey, but whose items randomly assigned them into one of two treatments (n=70 per treatment, the rest for control). Treatment A presented the tax credit in proportions (100% of first PhP10,000 in expenses then 25% of the next PhP20,000), while Treatment B presented it as a lump sum (PhP15,000 for a minimum of PhP30,000 in expenses). Respondents in the control group were not presented with any incentives, but were simply asked whether they would be willing to sponsor a relative; this established baseline willingness to sponsor.

### 2.2 Method

Contingent valuation (CVM) allows us to measure and compare willingness to sponsor (WTS) among respondents. We do so by computing the weighted average of WTS for each group of respondents. Since the responses were submitted as ranges, we set an arbitrary value of 1 to differentiate between ranges, and allow conversion into "point"



peso values; e.g., below PhP15,000 is assigned PhP14,999, PhP15,000 is assigned PhP15,000, above PhP15,000 is assigned PhP15,001.

Mean WTS was then obtained using the formula:

$$WTS_j = \frac{\sum_{i=1}^N w(A)}{N}$$

where  $j = \{\text{control, proportional, fixed}\}$   
 $w =$  number who responded for each given WTS  
 $A =$  sponsorship amount  
 $N =$  total number of respondents

### 3. RESULTS AND DISCUSSION

What was the mean Willingness to Sponsor within the sample, at baseline? Our results indicate it was PhP13,714.53 per year, but with 66% of those in the control group willing to sponsor at least PhP30,000 per year.

For those in the Proportional treatment, the mean Willingness to Sponsor was PhP23,786, but with 69% of the sample willing to sponsor at least PhP30,000 per year.

Finally, offering the tax credit as a Lump Sum yielded an average WTS of PhP23,571.81, with 71% of the group willing to sponsor at least PhP30,000 annually.

Our results indicate first that a latent desire to sponsor the basic education among relatives exists within the sample of financially able households. None of them were currently paying for education of children other than their own, yet the mean value out of the control group was over PhP13,000 per year. For context, a quick survey of private grade school tuition in the Philippines yielded a range of PhP70,000 to PhP200,000.

Next, they show a significant increase in WTS from the introduction of a tax incentive. T-tests comparing two independent sample means confirmed

a statistically significant increase of 73% in the WTS between control and the Proportional treatment, versus a 72% increase between control and the Lump Sum treatment. Random assignment of the survey items ensured minimum selection bias among respondents and allows stronger claims about the impact of the Real Property Tax credit.

Finally, they indicate that the tax credit itself can be flexible. We see this in the insignificant differences between WTS when the tax credit is offered as a two-stage proportional incentive versus when it is given as a lump sum for a minimum PhP30,000 worth of sponsorship. This suggests that local governments may customize the incentive to suit their fiscal profiles without reducing overall WTS.

One of the items had respondents indicate the type of schooling they preferred to sponsor for their beneficiaries. Unsurprisingly, 76% of respondents across the entire sample chose private education over public. This may however indicate an extra level of commitment among potential sponsors given the widespread expectation of higher miscellaneous costs among private schools. We estimate that private grade schools require a minimum of PhP8,550 extra costs per year compared to PhP1,950 for public schools (Edukasyon, 2018).

We note that respondents were divided on the question of whether to sponsor basic (56%) over tertiary education (44%), and may indicate work needed in raising awareness of the social benefits of basic education as well as our historically high dropout rates.

Our findings extend beyond the potential economic viability of a tax credit for sponsoring basic education. They provide some assurance against the possibility, raised in behavioral economics (Gneezy & Rustichini, 2000), that introducing extrinsic or monetary incentives, such as a tax credit, may crowd out the intrinsic motivation of individuals (the so-called "warm glow" that follows altruistic actions), and reduce the overall level of donation.



#### 4. CONCLUSION

A tax credit that monetizes the altruism of relatives in sponsoring the education of grade schoolers may work within present fiscal parameters. There is evidence that it taps into a latent willingness to sponsor education and can increase it by about PhP10,000 a year, regardless of whether the credit is offered as a proportional incentive or as a lump sum after a minimum donation.

#### 5. ACKNOWLEDGMENTS

We thank Kris A. Francisco and Krista Danielle Y. Yu for helpful comments — and of course Tereso S. Tullao, Jr. for the seminal insight.

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