ECONOMIC IMPACT STUDY OF THE PAUL OGLE FOUNDATON

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BACKGROUND

"The Paul Ogle Foundation, Inc., was incorporated as an Indiana non-profit corporation in 1979 and is qualified under the IRC §501(c)(3) as a private foundation. The Foundation's founder and original benefactor was Paul W. Ogle, who lived in Clark County, Indiana.

A native of Switzerland County, Mr. Ogle had for many years been a major contributor to charitable activities in his hometown of Vevey, Indiana, and the southern Indiana area. Mr. Ogle had no family and transferred a majority of his assets to the Foundation prior to his death in 1989, and the balance at his death. He was active in establishing a vision for the Foundation until his death. Three of the current Directors have been on the Board since 1980 and knew Mr. Ogle personally for many years and continue to carry forward his vision of assisting communities in which Mr. Ogle made his fortune.

The Foundation is headquartered in Jeffersonville, Indiana, and provides grants to deserving 501(c)(3) organizations in Clark, Floyd, Harrison, Switzerland, Scott, and Washington Counties in Indiana and Jefferson County, Kentucky. The Board of Directors has established guidelines for programs which they will consider for grant funding of capital projects and endowments. The Guidelines are published on this website and make up the current basis for recognized charities to apply for grant funding." (http://www.ogle-fdn.org/)

ASSESSING THE OGLE FOUNDATION'S ECONOMIC IMPACT

There is not much literature on assessing the economic impact of a non-profit, philanthropic organization. Most economic impact studies examine the building of new facilities (e.g., sports stadiums), certain forms of businesses (e.g., casinos), government programs such as early childhood education, or colleges and universities. Because the Ogle Foundation has donated so much money for college and university construction projects as well as scholarships, perhaps it is easier to model any assessment of it similar to how the economic impact of a university is assessed. According to Stokes and Coomes (1996) colleges and universities have two types of economic impacts in a regional economic area: *expenditure effects* and *knowledge effects*. Expenditure effects basically are the direct spending impacts of institutional expenditures on supplies, buildings, equipment, etc. as well as the spending of the students, faculty and staff of a university. Since the Ogle Foundation gives operating and capital funds to different organizations, and since its own operating expenses are small in comparison to these grants, the crucial spending effects of the monies granted to various organizations by the foundation are what is measured in this paper rather than any direct spending by the Ogle Foundation.

Knowledge effects reflect the increased earnings and purchases of a college's graduates who decide to stay and live within the institution's metro area and/or the nation at large. For college's that are not located in a metro area (like Indiana State in Terre Haute) or those that serve national and/or international student markets (like Harvard University in Massachusetts) knowledge effects in a region are minimal because most graduates do not

stay in the area that the college serves. Since the Ogle Foundation has given money for scholarships for schools inside and outside of the metro area, this report calculates human capital returns for college graduates who received Ogle scholarship monies at both a local or regional level as well as at a national level.

Knowledge effects are also commonly referred to as returns to college graduates' *human capital*. Human capital is the investment that a student decides to make into his or her education and training with the intent of earning a higher lifetime income than if he or she decided to stop schooling at the high school level. The human capital concept explains one of the main reasons for wage and salary differentials by age, occupation, years of experience on the job, etc. (Berger and Black, 1993). It can also explain unemployment history among different classes of workers. For example, college graduates have far lower incidences and shorter periods of unemployment than those with a high school diploma or lesser education. They also tend to dominate higher paying occupations and are much more likely to work year-round and full-time than their less educated counterparts (Becker, 1993).

The human capital concept can also be used to explain differences in the economic development and affluence of different nations as well as areas within the US. Those nations with a higher per capita level of citizens with advanced education are usually more economically advanced than those with less (Becker, 1993). The same goes for different regions and MSAs within the United States—the higher the concentration of college-educated workers within a region or MSA, the greater the area's income and level of affluence (Blair, 1995). Also, the higher the level of skilled workers within an area, the greater its potential for further growth and economic development. Finally, it is claimed that college graduates usually participate more in their local communities through civic and charitable activities. As a rule, college graduates vote at higher rates than non-college educated voters (Fair, 1982).

The Ogle Foundation, through its grants of scholarship funds for various colleges and universities has helped to increase the human capital of the Louisville region and other parts of the US. The increased earnings of graduates who received financial aid thanks to the Ogle Foundation as well as the increased spending power of those organizations which received monies for operating and capital expenses, whether these organizations were schools or other governmental or non-profit organizations (municipal parks departments, YMCA, United Way, etc.), all have had a significant impact upon the Louisville regional and US economies.

PART I

EXPENDITURE EFFECTS: OGLE FOUNDATION GRANTS TO DIFFERENT OGRANIZATIONS FOR OPERATING AND CAPITAL EXPENDITURES

Using the Regional Input-Output Modeling System II (RIMS II) developed by the U.S. Department of Commerce's Bureau of Economic Analysis, the impact of the Ogle

Foundation's grants to other organizations can be estimated at the local and national levels.[1] RIMS II is based on an accounting framework called an input-output (I-O) table. Input-output models are often employed to do economic impact studies in urban and regional settings (O'Sullivan 2003, pages 135-141). For each industry, an I-O table shows the distribution of the inputs purchased and the outputs sold. Using RIMS II for impact analyses has several advantages. RIMS II *multipliers* can be estimated for any region composed of one or more counties and for any industry or organization in the national I-O table. RIMS II is also a "middle-of-the-road" method for estimating multipliers. Through constant revisions and upgrades in data, RIMS II contains multipliers that neither underestimate nor overestimate the spending effects of any organization, whether private, public, or non-profit.

The multiplier is a concept that shows both the direct and subsequent indirect effects of expenditures on various items. In most economics textbooks, the multiplier is illustrated by showing that for every dollar spent by an individual or institution on certain goods and services, the vendors of those goods and services in turn spend their sales revenue purchasing labor, supplies, raw materials, etc. Next, these laborers and suppliers spend their wages and earnings on more goods and services. This cycle of spending continues for many more rounds until all purchases are completed. If the multiplier effect were two, the total impact of customers spending $100,000 at a local restaurant would end up being $200,000 after the $100,000 has circulated among restaurant employees, suppliers, and others throughout the local economy. Multiplier effects are often called "ripple effects" because the effect of spending money is like throwing a rock into a pond that causes an initial splash followed by several waves of water.

RIMS II is widely used in both the public and private sector. The Department of Defense uses RIMS II to estimate the regional impacts of military base closings, while in the private sector, analysts, consultants, and economic development practitioners use RIMS II to estimate the regional impacts of a variety of projects, such as the development of theme parks and shopping malls.

Since its inception, the Ogle Foundation has granted around $68 million to different organizations (schools, government entities, non-profit organizations, etc.) for numerous educational, artistic, and civic projects that have benefited many people and communities over the years. **Using RIMS II multipliers, the estimated overall impact of these grants and donations as the monies circulate in the economy amount to nearly $153 million, of which around $150 million are mostly in the Louisville metro and Southern Indiana region. These estimates are in terms of the value of a dollar for the year in which the monies were spent (that is, e.g., grants given in 1995 were in terms of 1995 dollars and 1995 dollar purchasing power, grants given in 1996 were in terms of 1996 dollars and 1996 dollar purchasing power, and so on and so forth).**

[1] The national estimates contained in this report were either derived from multipliers estimated for other regions in the US outside of the Louisville KY-IN region, such as for the Indianapolis metro area, or if these were unavailable, national level multipliers from input-output tables by the US Bureau of Economic Analysis were used.

In terms of 2010 dollars, the total impact amount is nearly $218 million of which $214 million is for the Louisville-Southern Indiana region. Please see Table 1 below.

Table 1

	National	Local
Expenditure Effects of Grants	**$ 152,977,721.41**	**$ 149,929,802.53**
Sum of Knowledge Effects from all scholarships for 2 year schools	**$ 4,005,529.70**	**3,004,147.28**
Sum of Knowledge Effects from all scholarships for 4 year schools	**$ 118,177,693.41**	**$ 13,364,011.38**
TOTAL IMPACTS	**$ 275,160,944.52**	**$ 166,297,961.19**

PART II

KNOWLEDGE EFFECTS: HUMAN CAPITAL RETURNS AND INCREASED EARNINGS TO COLLEGE GRADUATES WHO HAVE RECEIVED OGLE SCHOLARSHIPS AND FUNDING

The most common way to measure the knowledge effects or impacts of Ogle Foundation Scholarship recipients is to look at their projected earnings after graduation. Earnings give some idea of the spending power that college graduates have in comparison to high school graduates, and like most studies, this paper uses the difference between what the graduates earn as a college graduate versus what they would earn as only a high school graduate in order to make economic impact projections.

Using data from Crosby and Moncarz (2006) of the US Bureau of Labor Statistics and taking the present value of the earnings differences or differentials over a 42 year working career for the graduates, a projection of the knowledge impacts or "human capital dividends" for two-year and four-year graduates who received Ogle Foundation funding is shown in Table 1 above. For those schools that were not able to indicate the portion of scholarship recipients who went on to graduate, a seventy-five percent graduation rate was assumed (which is higher than the overall graduation rate for most students at most schools because scholarship funding is based on high academic achievement and progress toward degree completion). And for those graduates who went to school in the Louisville-Southern Indiana region, it is assumed that roughly a least seventy-five percent of these graduates continue to live in the region. This is based on reports for local schools which report high rates of graduates staying in the area upon graduation throughout their careers (Indiana Business Research Center 2008). **Table 1 shows that Ogle scholarship recipients who have earned a baccalaureate degree will earn around $119 million more as a group than if they had stopped their education at the high school level (around $14 million of which is forecasted to be earned in the Louisville-Southern Indiana region), whereas those recipients who have earned an associate degree will earn around $4 million more. These amounts are substantial contributions to the US and local economies over the next several decades.**

College graduates earn substantially more than their high school counterparts over their working careers (around 42 years, age 25 to 67). These extra earnings translate into increased disposable income and higher standards of living. These are calculations of the differences in *average* annual earnings based on the graduates' college majors and anticipated careers. They are conservative estimates and probably underestimate the total returns to a college education and do not include any other education received beyond the degree for which the scholarship monies were awarded. In using averages, one must consider that higher earning occupations are balanced out by lower earning occupations. In addition, older workers with more years of on the job experience will earn more money than younger workers who have the same educational level as their older counterparts. Also, no distinction has been made between male and female graduates. Please note that because a high school graduate can have four years of full-time work experience over a recent college graduate, there may not be that much of a difference in their annual earnings at least for several years until the college graduate gains more full time work experience. Often US government agencies do not collect some data on college graduates until age 25 or more.

Because college grads enter occupations that tend to have lower levels of physical stress and on the job injuries, and because these occupations tend to be less sensitive to downturns in the national economy, the probability of a college graduate working full-time, year round, and year in and year out, is greater than that of a high school graduate (Berger and Black, 1993, table 5). Additionally, there are more opportunities for college graduates to learn on their jobs and for them to develop professionally. These opportunities usually translate into higher earnings. Finally, college graduates usually have greater potential for career advancement within their places of work because of their education. Therefore, over time, the gap between the annual earnings of a college graduate and a high school graduate will grow to a substantial amount (Becker, 1993 and Berger and Black, 1993).

CONCLUSION AND SPECIAL CONSIDERATIONS

The combined expenditure and knowledge effects of the Paul Ogle Foundation are estimated to be **$275 million over the next several decades for the entire US economy, of which over $166 million are felt in the Louisville-Southern Indiana regional economy.** This is a conservative estimate of what the Ogle Foundation has contributed to its region and the nation. The foundation is a major benefactor of many worthy organizations and projects in the Louisville and Southern Indiana area and other parts of the US and has had a profound economic impact through its grants and donations.

More importantly, and something that is hard to quantify, is the extra quality of life benefits that the foundation has brought to many people and various communities. Many deserving projects would have been foregone or delayed and many deserving college students may have gone without financial aid f it were not for the Paul W. Ogle

Foundation. Certainly the foundation has touched the lives of many through its generous philanthropy.

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