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PROVIDING FINANCIAL EDUCATION TO THE COMMUNITY: BUSINESS STUDENTS' CONTRIBUTION

Ruby L. Beale, Hampton University

ABSTRACT

Financial education is a critical topic/skill for the development of a progressive society. A project was designed and implemented to address two primary objectives. The first was to provide students with the opportunity to identify a critical need in a target community and to design an effective approach which would address the documented financial education challenges that are disparately experienced by low to moderate income predominately minority individuals and families. The second primary objective was to serve critical needs in their surrounding university community by applying their academic and professional learning to real life community needs. The development of this project provided a vehicle for students to use their academic training and community service commitments to assist others with critical financial education and behavioral application needs and strategies

Sub prime lenders have targeted minorities who are disproportionately rated as “high risk” borrowers because these individuals do not have a high credit score. A disparate number of minority individuals are charged higher premiums in fees and interest rates. Not everyone is sharing in the low interest rate boom (Kroll, 2002) as a growing number of homebuyers find themselves paying more than the home is worth (Norton, 2003). Mortgage denials are on the rise for Boston Blacks (Mason, 2002) and Blacks in metro-Milwaukee face the worst racial disparity in home lending in the U.S. (Gores, 2002). Auto insurance discrimination (Russell, 1999) and higher home, health & rental insurance continue to dissipate the financial resources of minorities. There is also evidence of discrimination in small business financing (Cavaluzzo, Cavaluzzo & Wolken, 2002) and, even with tax credits available to many low-income families, outrageous tax anticipation refund loan interest rates and fees hurt the poorest taxpayers (Pugh, 2003).

Additionally, there is an increasing number of check cashing and cash advance facilities spawning in minority communities. An open forum discussing the African American wealth gap further delineated financial issues and problems encountered (Raines, 2001). In a subsequent forum held to discuss ways to close the gap, *financial education* was one of the primary strategies recommended (Raines, 2002).

According to an article in the Wall Street Journal (Sporsi, 2002) “Predatory Lending”, also known as corporate crime victimizes minorities. A disparate number of minority individuals are charged a higher premium in fees and interest rates that they cannot afford based on their current credit standing. Other sources report that minorities are disproportionately rated as high risk borrowers with weak credit histories and a large wealth gap exists between white people and people

of color - many with the same income. This project identifies and addresses the financial challenges that are disparately experienced by low to moderate-income predominately African American individuals and families. We are proposing the development of a project to inform and educate the target population with strategies that increase knowledge and understanding of financial issues. As a result, these families will be empowered to resist unsavory financial practices while increasing their overall financial well being.

In order to keep low to moderate income minorities from being penalized by predatory lending practices, personal and institutional financial literacy was essential. Despite the fact that some minorities were able to increase their income, they still suffered from past credit histories that stayed on record even when they increased their income. There is a critical need for financial education to tear down barriers to financial progress. Once victims of “bad credit” rating reports learn how to avoid or get out of debt, they could become less vulnerable to sub prime financial programs and services that hindered financial progress. These legal strategies increases opportunities to use finances in a manner that increases financial well being with access to home buying, reputable refinancing of homes and other wealth producing strategies.

METHODOLOGY

The target population was designated as low to moderate income individuals, predominantly but not limited to African Americans, married or single families, welfare to work parents, adults taking care of elderly parents, the elderly and grandparents taking care of minors, and the unemployed. The US census estimates for people of age living in low to moderate income households in the city of Hampton and parts of Newport News was over 20, 000 people. Many were centrally located in low-income neighborhoods, apartments or housing complexes. A few of the households had access to computers at home for personal matters. There were community centers and churches located within or near these communities and these organizational venues were open to providing space for their residents and/or members to access financial literacy information. These residents and communities were representative of many areas nationally.

The financial education sessions were conducted in community centers and churches which were conveniently located for the participants. The sessions started with a pre-survey. Subsequently, an overview was given with time for allotted for questions and answers. Each financial workshop segment consisted of power point materials and a notebook was handed out during each session. Recommended reading/viewing lists were offered along with a community resource guide that included resources that participants could readily access. Participants completed their post-test at the end of each session. All evaluation and survey related data was collected and analyzed.

RESULTS AND DISCUSSION

In order to evaluate the project’s impact on the intended audience, we used pre / post and follow-up surveys with the participants in the workshops. Questions regarding workshop participant’s current knowledge and interest in financial matters were asked as well as what they wanted and expected to learn from the training. Immediately after they completed the workshop

sessions, participants were asked to complete a post - survey on what they learned and if they believed that it was possible to apply their knowledge to their personal financial situation.

Analysis of the pre and post data collected at the workshops indicated that the community participants engaged financial education topics (such as credit & borrowing, banking and savings) and learned effective financial strategies that enabled them to improve the implementation of more financially strategic behaviors that improved their financial health outcomes.

Quantitative results indicated that there was measurable learning from the pre to the post survey. In particular, participants stated that they learned more about the specific topic of Credit, Loan to Own, Savings, and Banking with Savings and Checking Accounts. The qualitative or anecdotal data indicated that they rarely had productive instructive conversations regarding money or financial strategies as many were reluctant to share too much of their private concerns. They could ask to borrow from a friend or lend to a friend but not discuss too many details without embarrassment or fear of being judged. With the access to the payday loan places, many thought that it allowed them more privacy from prying eyes and ears in their family or friend network.

The target population became more financially literate as a result of this project in several ways. Participants were given an overview of the financial well being of minorities in the United States and learned personal finance basics so that they could identify the traps that predatory lending organizations use to take advantage of some customers. We facilitated discussions of credit card use, misuse and timely payment of utilities and their impact on consumer credit scores. Second, participants learned more about home buying, home ownership, mortgages, and refinancing loans. They learned how to search for lower interest rates (e.g. when buying a car) and programs specifically developed to help low to moderate income families. Third, participants learned the importance of health, homeowners and car insurance and how that can enhance their financial lives. By the end of the project, participants were able to make informed financial decisions to use strategies that can increase their financial well-being.

The project was developed to inform and educate the target population with information and resources that could be used to increase their knowledge, understanding and behavioral strategies in financial education issues. Thereby, participants became better informed and empowered to engage in strategies which assisted them in identifying and resisting unsavory financial practices, such as predatory lenders which are proliferating in epic proportion in low to moderate communities nationally.

CONCLUSION

The tangibles delivered were a compilation of financial education curriculum, workshop training agenda and case studies for clients and facilitators training, program evaluation and outcomes report and a program model that other organizations could replicate and or customize to their communities. The personal financial literacy objectives of this project provided: (1) Outreach and access to financial education and materials for low to moderate income families (2) An interactive learning environment which encouraged financial knowledge attainment (3) Strategies that decreases ineffective financial decisions (4) Skills that increases effective financial decision behaviors.

REFERENCES

- A Diverse Lot of Online Applicants. (2000 June). Credit Card Management, 13 3-6. New York.
- Cavaluzzo, K., Cavaluzzo, L., Wolken, J. (2002 October). Competition, Small Business Financing and Discrimination: Evidence from a New Survey. Journal of Business, 75, 641-679. Chicago.
- County Estimates for Median Household Income for Virginia: 1998. US Census Bureau 2000. www.census.gov/hnes/www/saipe/stcty/c98_51/htm.
- County Estimates for People of all Ages in Poverty for Virginia: 1998. US Census Bureau 2000. www.census.gov/hnes/www/saipe/stcty/a98_51.htm.
- Dymi, Amilda. (2002 September 16). BET Lends Wealth Management Drive. National Mortgage News, 26, 8-11. New York.
- Dymi, Amilda. (2000 November 13). Subprime Lenders 'Most Color Blind.' National Mortgage News, 25, 6-8. New York.
- Fishbein, Allen J. (2003 September/October 2002). Going Subprime, Shelterforce Online, Issue #125 retrieved <http://www.nhi.org/online/issues/125/goingsubprime.html>.
- Garcia, Beatrice. (2002 August 31). Miami Area Inner-City Neighborhoods Await Broad Band Equality. Knight Ridder Tribune Business News, 1. Washington.
- Gordon, Marcy. (2001 July 25). High cost loans costing \$9.1 billion a year, report estimates. Associated Press Newswires.
- Gores, Paul. (2002 October 2). Blacks in Metro Milwaukee Face Worst Racial Disparity in Home Lending in US. Knight Ridder Tribune Business, 1-3. Washington.
- Hampton City, VA. US Census Bureau 2000. Available: quickfacts.census.gov/qfd/states/51/5160.html.
- Kroll, Karen. (2002 November). Not Everyone's Sharing in the Low Rate Boom. US Banker, 112, 13-15. New York.
- Mason, Edward. (2002 December 27). Mortgage Denials Rise for Boston Blacks. The Boston Business Journal, 22, 1-2. Boston.
- Minority Mortgage Denial Rates Rise. (2000 October). ABA Bank Compliance, 21, 3. Washington.
- Norton, John. (2003, January 12). Growing Numbers of HomeBuyers Find Themselves Paying More Than Home's Worth. Knight Ridder Tribune Business News, 1-5. Washington.
- Pugh, Tony. (2003, March 23). Refund Loans Hurt the Poorest Taxpayers: Outrageous Rates Take a Big Bite Out of Tax Credit. Daily Press Money & Work, E 1 & 6. Hampton, Va.
- Raines, Franklin D. (2001 September 17). Open Forum: The African American Wealth Gap. National Mortgage News, 25, 4-7. New York.
- Russell, Judi. (1999 January 25). Lawsuit Charges Auto Insurance Discrimination. New Orleans City Business, 19, 4-7. Metairie, Louisiana.
- Sporsi K., Hanwood, J. (2002 July 18). Seeking a Spotlight on Minority Borrowers-- Predatory Lending Is Called Corporate Crime That Victimizes African – Americans. Wall Street Journal, eastern edition, A4.

ATTENDANCE AND LEARNING IN THE MICROECONOMIC PRINCIPLES CLASS

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ABSTRACT

This paper explores the relationship between attendance and learning in the microeconomic principles course. Using pre and post testing to measure learning, attendance, as well as several other variables are studied as possible explanatory variables as to how well students perform in two classes where attendance was voluntary. The outcome suggests that attendance was not important with respect to learning, but did have an influence on the course grade received, especially in the instance of excessive absences.

PUBLIC ATTITUDES TOWARD THE OBAMA REVENUE PLAN

Larry R. Dale, Arkansas State University

ABSTRACT

The Obama Administration has raised some questions concerning he and his team's ability to improve the American Economy. This survey found that in general students are still supportive of his efforts. Business men and women are less supportive but willing to give him the benefit of the doubt. We looked at three groups for this study. College students, Business people, and the general population in Arkansas, Ohio and California. Our survey of 5,555 people from universities and cities of varying sizes and 2,201 business persons. Discovered that the president still has the support of the American people all though many question his plan to improve the economy.

PERSONAL VALUES: WHAT ARE THEY WORTH?

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Larry E. Short, Northwestern State University

Jerry L. Wall, Northwestern State University

ABSTRACT

This paper examines the impact on earnings for those who had previously served in the U.S. Armed Forces. While it is well known that additional education leads to higher earnings, the question addressed here is whether military experience can also lead to higher average earnings. Are there other things that are learned while in the military that are valued by private employers? Specifically, are the values taught by the military later rewarded in the private sector? The answer appears to be yes for those persons with a high school diploma but less than a bachelor's degree. And this premium holds for both Whites and African-Americans and across age groups.

INTRODUCTION

Many of us have been told—by our parents, teachers, ministers, and even our employers—that the personal values we bring to the workplace are important determinants of our future success on the job. If this is true, then an employee with good personal values—such as loyalty, respect for others, integrity, enthusiasm, initiative, etc.—should, in the long run, earn more money than an employee lacking such personal values. We already know that a person who values and then obtains education will probably earn more money over a lifetime than one who doesn't. The College Board reports a positive correlation between higher levels of education and higher earnings for all racial/ethnic groups and for both men and women. (Baum & Ma, 2007) People who value higher education will take specific actions to improve their employability by pursuing higher education and employers appear to be willing to pay them more for a higher level of education. However, the question arises for persons not interested in pursuing bachelor's degrees as to what other experiences can they engage in that will develop a personal value system that would be awarded by higher earnings?

BACKGROUND

A personal value system is a set of values that guide behavior by determining what is meaningful and important. Personal values define character and impact every aspect of life including work behaviors. Some of the more important and more universally accepted values are integrity, respect, loyalty, and responsibility. (Hereford, 2008) An individual's personal value system develops over time and can be influenced by many aspects of an individual's life such as family, friends, church, schools, etc. The purpose of this paper is to determine if a specific life experience is available to people who have at least a high school education that can have a positive effect on their value system and, thus impact their future income earning capability. In particular,

this paper examines the impact that military experience has upon earnings in civilian life. The basic assumption of this study is that the modern United States military has developed orientation and training programs that teach military personnel many of the personal values that are important in the working world.

What are employers searching for as they review the backgrounds of individuals wanting employment with their firms? That is, what are the particular backgrounds, skills and abilities valued by employers as they search for potential employees? According to Jeff Nardo, a career services coordinator at Coastal Carolina Community College, recruiters responding to the National Association of Colleges and Employers surveys over many years identify the following skills as extremely or very important: verbal/written communication skills, interpersonal skills, honesty, integrity, teamwork skills, strong work ethic, analytical skills, flexibility, adaptability, organizational skills, leadership, self-confidence, and being detail oriented. Nardo further explains that it is not enough for students to merely say on their resumes and in interviews that they possess these skills and abilities, they have to provide examples of where and how they demonstrated these skills. (NACE 2008)

Where can potential employees develop the kind of personal value system deemed important by employers? Even a cursory review of the advertisements from the United States Armed Services suggests that military service might be useful in providing young men and women with attributes desired by employers. Many of the core values taught to all members of the military are good values to carry over to civilian employment. The U.S. Army lists its core values as loyalty, duty, respect, honor, integrity, and personal courage. (U.S. Army Core Values, 2008) The U.S. Air Force narrows its core values to integrity first, service before self, and excellence in all we do. (U.S. Air Force Core Values, 2008) While the U.S. Navy and U.S. Marines have as their core values honor, courage, and commitment. (U.S. Navy & Marines Core Values, 2008) In addition to the basic core values taught to all members of the military, many military personnel attend schools that teach special leadership skills and attributes that may also be of value in civilian life. For example, the U.S. Marines Core leadership training program list the traits they teach as courage, decisiveness, dependability, initiative, tact, justice, enthusiasm, bearing, endurance, unselfishness, loyalty, and judgment. (USMC Leadership Traits, 2008)

The key question is, however, do employers really value the training and experience acquired in the military and do they exhibit endorsement of these values in the form of increased remuneration? We hypothesize that military experience should be worth something in the civilian workforce since the skills and values wanted by employers are often the same skills and abilities taught in the military.

PURPOSE OF THE STUDY

The purpose of this study is to ascertain if military service pays off in civilian employment in terms of increased compensation. The assumption underlying this study is that military experience teaches individuals vital skills, important values and a serious work ethic and that these skills, values and work ethic will result in increased earnings in the long run in civilian employment.

METHODOLOGY

Since the Vietnam Conflict, the United States has significantly restructured their military forces into an all volunteer force. During the Vietnam Conflict, one could argue that some elements of the military forces were permitted to deteriorate and that the personal value system developed by many military personnel during the Vietnam Conflict was not highly valued by the public in general when they returned to civilian life. The all volunteer military force emphasizes a strong, positive personal value system. Since this study attempts to determine the impact that the current voluntary military service has upon civilian pay, the sample used for analysis was limited to ensure that only those personnel who were in the restructured military were included in this study. Thus, our study was restricted to personnel who joined the military in 1982 or after. Our sample was defined by two decision rules. A minimum age restriction of 25 years was imposed to permit personnel time to complete their military service and enter the civilian workforce. A maximum age restriction of 44 years was imposed to ensure that only people who volunteered for the restructured military were included in our sample. Since the military draft was eliminated in 1973, anyone age 25-44 with military service had to voluntarily join the military.

Sample

The March 2008 Current Population Survey (CPS) sample was used as the database for this study. Our sample was restricted to employed persons ages 25-44 years who were employed at least 38 weeks per year and at least 35 hours per week. The limitation to persons employed at least 38 weeks per year (as opposed to the usual 50 weeks) and at least 35 hours per week was made to include people employed in the teaching profession.

Sample Characteristics

Our sample consists of 34,740 employed persons of which only about 6% had some military experience. Males were more represented (56%) in the sample than females (44%). The sample was well distributed across age groups with 44% between the ages of 25-34, and 56% between the ages of 35-44. Over 80% of the sample was White, while almost 11% was Black and the remaining 9% was classified as Other. Almost one-third of the sample (31%) had only a high school education; another one-third (31%) had some college but no bachelor's degree, and the remaining 38% had a bachelor's degree or better. (See Table 1.) It is important to remember that this sample does not reflect the overall population of the United States, but is a fairly accurate reflection of those persons, ages 25-44 who are employed for at least 38 weeks a year and at least 35 hours per week.

Table 1 Sample* Characteristics		
	Number	Percent
Race		
White	27,859	80.2
Black	3,720	10.7%
Other	3,161	9.1
Gender		
Male	19,424	55.9
Female	15,316	44.1
Ages		
25-34	15,322	44.1
35-44	19,418	55.9
Education		
High School Graduate	10,711	30.8
Some College	6,764	19.5
Associate Degree	4,052	11.7
Bachelors Degree	8,875	25.5
Masters Degree	3,206	9.2
Doctor/Professional Degree	1,132	3.3
Military Experience		
With Military Experience	2,026	5.8
Without Military Experience	32,714	94.2
*Sample consists of 34,740 employed persons ages 25 through 44 who were employed at least 38 weeks per year and at least 35 hours per week.		
Source: March 2008 Current Population Survey conducted by the Bureau of the Census for the Bureau of Labor Statistics.		

FINDINGS

Tables 2 through 4 show the impact that military experience has upon average earnings. Table 2 shows the average earnings of full-time, year-round civilian workers (ages 25-44) by race and military experience. As shown in Table 2, Black civilian employees with military experience had an average annual salary of \$48,835 while those without military experience had an annual salary of \$39,934. White civilian employees with military experience had an average annual salary of \$54,849 while those without military experience had an annual salary of \$49,808. The differences between those with military experience and those without are extremely significant ($p < .0001$). Although there was a difference between the average salaries for the Other racial group of civilian employees (i.e., \$54,589 for military experience and \$51,911 for non-military experience), the difference was not statistically significant at any conventional level of significance. Thus, it appears that previous military experience has a positive influence on the average salaries of Black and White civilian employees.

Table 2 Average Earnings of Full-Time Year-Round Civilian Workers* Ages 25 Through 44 by Race, March 2008						
	Military Experience		No Military Experience			
Race	Average Salary	n	Average Salary	n	t-stat	Prob > t
White	54,849	1,634	49,808	26,225	4.35	0.0001
Black	48,835	260	39,934	3,460	4.4	0.0001
Other	54,589	132	51,911	3,029	0.53	0.5943
Total	54,060	2,026	48,959	32,714	4.99	0.0001

*Workers employed at least 38 weeks per year and at least 35 hours per week.

Table 3 shows the average earnings of full-time, year-round civilian workers by age and military experience. In both categories of age (i.e., 25-34 years and 35-44 years), the presence of military experience results in higher average salaries. For civilian workers ages 25-34 years, the average salary of those with military experience is \$45,227 and without military experience is \$42,269. This difference is significant at $p < .03$. For civilian workers ages 35-44 years, the average salary of those with military experience is \$57,946 and without is \$54,420. This difference is significant at $p < .01$. Thus, it is evident that workers with military experience receive higher average salaries regardless of age grouping.

Table 4 shows the average earnings of full-time, year-round civilian workers (ages 25-44) by education and military experience. As can be seen in Table 4, the average salaries of civilian employees with a bachelor's degree or higher are not significantly impacted by military experience. Military experience, however, does have a significant impact ($p < .0001$) on the average salaries of civilian employees with only a high school education, employees with some college but not an

associate degree, and employees with an associate degree. Thus, it appears that the presence of military experience significantly influences the average salaries of civilian employees without a bachelor's degree or higher.

Table 3 Average Earnings of Full-Time Year-Round Civilian Workers* By Age, March 2008						
Age	Military Experience		No Military Experience		t-stat	Prob > t
	Average Salary	n	Average Salary	n		
25-34	45,227	619	42,269	14,703	2.28	0.023
35-44	57,946	1,407	54,420	18,011	2.59	0.0096

*Workers employed at least 38 weeks per year and at least 35 hours per week.

Table 4 Average Earnings of Full-Time Year-Round Civilian Workers* Ages 25 Through 44 by Education, March 2008						
Education	Military Experience		No Military Experience		t-stat	Prob > t
	Average Salary	n	Average Salary	n		
High School Graduate	44,038	646	34,375	10,065	8.04	0.0001
Some College	50,746	550	39,026	6,214	6.7	0.0001
Associates Degree	50,640	314	41,638	3,738	4.76	0.0001
Bachelors Degree	64,171	370	59,657	8,505	1.63	0.103
Masters Degree	83,304	105	72,782	3,101	1.72	0.0863
Doc/Prof Degree	116,503	41	114,050	1,091	0.14	0.8903

*Workers employed at least 38 weeks per year and at least 35 hours per week.

CONCLUSIONS

If we accept the assumption underlying this study that military service teaches individuals vital skills, important values and a serious work ethic, then it is apparent that employers reward

those individuals with these skills, values and work ethic with higher average salaries. Both Black and White civilian employees with military experience receive higher average salaries than those without military experience. Both age categories of civilian employees (ages 25-34 and ages 35-44) receive higher average salaries than those without military experience. All civilian employees with military experience who have at least a high school education but not a bachelor's degree receive a higher average salary than those without military experience. In particular, this study suggests that high school graduates who do not want to obtain a college degree or even to pursue further education can impact their long-run earnings potential by joining the military. High school graduates, age 25-44, with military experience can earn, on average, almost \$10,000 more per year than high school graduates without military experience. Thus, it would appear that military experience has a significantly positive influence on the average salaries of many civilian employees.

REFERENCES

- Baum, S. & J. Ma (2007). *Education Pays: The Benefits of Higher Education for Individuals and Society*, Trends in Higher Education Series. Washington, DC: The College Board.
- Hereford, Zorka, (n.d.). *9 Essential Life Skills: The Book*. Retrieved January 27, 2009 from <http://www.essentiallifekills.net/personalvaluesystem.html>
- NACE (2008). "Key Strategies for You Job-Search Success," *Job Choices for Business & Liberal Arts Students: 2008*, National Association of Colleges and Employers: Bethlehem, PA pp. 17-23.
- U.S. Army Core Values (n.d.). Retrieved January 27, 2009 from <http://www.army.mil/armybtkc/gov/values.htm>
- U.S. Air Force Core Values (n.d.). Retrieved January 27, 2009 from <http://www.usafa.af.mil/core-value/>
- U.S. Census Bureau (n.d.). Current Population Survey, March 2009. Retrieved September 6, 2008 from <http://www.census.gov/cps/>
- U.S. Navy Core Values (n.d.). Retrieved January 27, 2009 from <http://usmilitary.about.com/od/navy/1/blcorevalues.htm>
- U.S. Marine Core Values (n.d.). Retrieved January 27, 2009 from http://www.usmcpres.com/heritage/corp_values.htm
- USMC Leadership Traits (n.d.). Retrieved January 27, 2009 from <http://www.libertylib.com/usmc-leadership-traits.shtml>

A SMALL BUSINESS INSTITUTE (SBI) PROJECT: MULTIPLE VIEWS: CLIENT, STUDENTS, JUDGES

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ABSTRACT

This paper examines a Small Business Institute (SBI) project from the perspective of the, client, students, and final examination judges. The same client was the subject of two different team projects. One team split into two factions and presented two separate reports, a total of three projects. Students liked the real world experiences and lack of structure, although they felt not all students could handle the lack of structure. The wide background of the judges was an advantage although the scoring system needed to be improved. A clear definition of the scope of work was important. The recommendations of two of the reports were used by the client as they were practical in nature. The student-client interaction was found to be important in one case as the student's enthusiasm and work ethic energized the client about the project. The selection of the client and student teams is critical to a successful SBI project. We had the best of both worlds a good client and good student teams at least in two of the three cases.

INTRODUCTION

The Small Business Institute© (SBI) program began as a pilot program of the United States Small Business Administration (SBA) in 1972. The mission was to use faculty expertise, expand SBA resources, and develop student competencies, all founded on helping small business owners (Elbert, Harmeson & Dougan, 2001).

At its peak, SBI programs across the U.S. included about 475 colleges and universities. "Official" SBI programs numbered fewer than 125 in 2003 (Osborne, 2003). One reason for the decline was the loss of federal funding in 1996 (Osborne, 2003; Jackson, Gaulden, & Gaston, 2003). Today, several hundred universities and colleges conduct both SBI and similar programs to provide consulting services by both graduate and undergraduate students (Cook & Belliveau, 2006).

The SBI at The University of New Orleans (UNO)

The SBI approach has been used at UNO since 1975. During the course of some 33 years, over 300 field projects have been carried out in a variety of courses including retailing, undergraduate and graduate business strategy, and independent study. A student team in a graduate business strategy course was the 1991 Region VI recipient of the Small Business Institute Graduate Case Study of the Year Award.

A small business consulting course (BA 4076) was designed and introduced in 2000 as part of the B.S. in Entrepreneurship curriculum. The course is required of all entrepreneurship majors and is open to graduate students. BA 4076 was not held during the period Fall 2005-Spring 2007 because of Hurricane Katrina and the plans of the new dean of the UNO College of Business to have

business school faculty go into the New Orleans Metropolitan Area and work with teams of students from their classes to assist small businesses, especially in the aftermath of Hurricane Katrina. The dean was replaced in 2006 and BA 4076 was offered again in the Fall semester of 2007.

The author has been the SBI director since the inception of the program and has been the primary instructor. One other management professor has taught in the SBI program primarily in the undergraduate business strategy course.

In the early days of the SBI at UNO, clients were procured from the U.S. Small Business Administration. A Small Business Development Center (SBDC) was established at UNO in 1985. Since 1985, clients have been obtained from a variety of sources including the SBA, UNO-Small Business Development Center (UNO-SBDC), graduates of ExcEL, a UNO-based program which helps persons with disabilities start a business, local contacts of the SBI director, and small businesses assisted in a HUD grant.

PURPOSE

Past research studies concerning the SBI program cover topics related to the students, views of clients, and a mixture of other SBI-related topics. This paper examines an SBI project from the viewpoint of several parties: (1) student team members, (2) client, and (3) final examination judges. An analysis of these views provides guidance for those teaching the SBI course for the first time and a review for veteran SBI teachers. First let us consider the SBI literature.

LITERATURE REVIEW

There has been an extensive stream of research concerning the SBI program published over the past three decades (Osborne, 2003, Jackson, Gauden C. C., Jr., & Gaster, W., 2003). The literature can be categorized according to studies regarding the client, the student, and topics related to the SBI program.

Studies related to the client tend to be concerned with client satisfaction with student projects. A major review of the SBI program by Weaver and Solomon (1985) found that client perceptions were exceptionally positive. There have been many studies conducted related to the client. A selected list of research studies is listed in the bibliography.

Student-related studies have been concerned with student views concerning their overall SBI experience. Other studies have been related to developing student skill sets such as oral presentation skills. A selected list of these studies can be found in the bibliography section of this paper.

Other studies related to the SBI program include those concerning SBI-SBDC relationships, Fry (1987) and Hulpke, Harvey and Metghalehi (1993), and economic development and community outreach, Cours, Williams, and Schramm (2001), Osborne (2003), Bradley (2003), Beguin (2003), and Young (2004).

RESEARCH METHODOLOGY

Two SBI field projects were studied, one in the Fall 2007 semester, the other in the Spring 2008 semester. Each project was concerned with the same client, the Creole Skillet, a New Orleans-

based restaurant. Personal interviews were held with available student team members, the client, and persons who were judges in the final oral examination.

THE CREOLE SKILLET

The Creole Skillet is a fine dining restaurant located in the Warehouse District of New Orleans. The restaurant was conceived in April 2007 and opened January 19, 2008. Ms. Anne Kiefer is the sole owner of the Creole Skillet.

The Creole Skillet has a manager who has a degree in Hotel, Restaurant, Tourism and over 10 years of restaurant experience. The staff consists of a chef, one bartender, one preparation cook, and a dishwasher. There are six part-time wait staff.

Fall 2007

During the Fall 2007 semester the owner of The Creole Skillet was in the process of getting the restaurant ready to open. Building permits were procured and renovations being made.

The project was carried out by students in BA 4076, Small Business Consulting. Two students were assigned to The Creole Skillet. An initial meeting was held by the project team with Ms. Anne Kiefer, the client. Confidentiality agreements were signed and a scope of work defined. The Creole Skillet was a past client of the UNO-SBDC. Paperwork required by the SBDC was completed. One student team member did have experience working in the hospitality industry in New Orleans prior to Hurricane Katrina.

The purpose (scope of work) of the project was to conduct a market analysis of the New Orleans Warehouse District. The client desired the analysis for a business plan in the event she applied for outside funding. Additional information was sought to determine if the client was eligible for tax incentives or special funding through the Hurricane Katrina Go Zone Program or through the Downtown Development District.

Weekly meetings were held by the instructor with the project team to assess their progress and to provide assistance. The project team conducted three walking tours of the area to assess restaurant competition. Personal interviews were held with an executive of the New Orleans Convention and Visitors Bureau, a commercial real estate agent, a staff member of the UNO Office of Economic Development, and the director of the Downtown Development District. Research reports from the UNO Division of Business and Economic Research and EASI –Demographics provided demographic and economic data on the Warehouse District and the New Orleans economy.

The team presented its report to the client. The final examination consisted of a 30 minute presentation to a panel of business persons followed by a 30 minute question and answer period. Fifty percent of their grade was based on the judges' ratings, 40 percent on the report, and 10 percent on a peer evaluation.

Spring 2008

The second SBI project conducted with the Creole Skillet was carried out by students in BA 4076 in the Spring 2008 semester. Three students A, B, and C were assigned to the client. An initial

meeting was held by the team with the client to define the scope of work. The project objective (scope of work) was to develop a low cost promotion plan for the client. Paperwork required of the UNO-SBDC was completed. After that, the students worked separately on the project. A and B together, C alone. Separate projects developed despite biweekly meetings with the instructor. There was little interaction between A, B, and C. A and B conducted five personal/telephone interviews (four in April 2008) with industry persons. These included a UNO-Hotel Restaurant Tourism professor, and representatives of the New Orleans Concierge Association, New Orleans Living Magazine, and Gambit a weekly newspaper. Students A, B, and C met together with an executive of the Louisiana Restaurant Association in late April 2008.

The teams wrote separate reports for the client. Students A and B made their oral presentation to a panel of judges. Student C was ill and did not take part in the oral presentation. Student C was given a special one-on-one oral examination later that summer by a consultant from the restaurant industry.

Student C used several avenues to gather information. One was to attend with the client the "Business After Hours" event sponsored by the New Orleans Metropolitan Convention and Visitors Bureau (NOMCVB). She assisted the client in developing a database from persons visiting the client's booth at the Zoo-To-Do, an event held at Audubon Zoo. Other sources of information included Visitor Publishing, New Orleans Restaurant.com, Zagat Survey, the Concierge Association, the membership chair of the NOMCVB, and the Louisiana Restaurant Association.

FINDINGS

Student Views

The two students who had the Creole Skillet in the Fall 2007 semester and one of the three (Student C) who worked with the Creole Skillet in the Spring 2008 semester were queried regarding their respective projects. A set of questions developed by Elbert, Harmeson & Dougan (2001) in a survey of SBI students was used. The small number of respondents did not allow for comparison. The highlights of their responses are presented next.

The best learning experiences were felt to be working with real-world contacts and not having a regular class schedule. They should have taken better notes or kept a journal during the course of the semester. This would help prepare the final reports (written and oral). In addition, a schedule or series of milestones should have been used to avoid having to rush at the last minute.

All felt they had accomplished the project objectives for the client. Any misgivings had to do with not being able to follow up with the client beyond the objectives which were achieved. Team members should be allowed to fire a team member who is not doing his/her share of the work. All were in agreement on this, or at least have both the team members and client give a grade.

The primary strength of the project as a learning experience was that it gave the student an exposure to the business world beyond the textbook. Weaknesses of the project included the necessity to have students sign confidentially agreements. Also, the lack of structure was alien to some students who are not self-starters. A two-person group has an advantage in that the schedules of only two people have to be managed. Coordination of three and four person teams is much more

complex. Recommendations included screening students before they are allowed to enroll in the course. Second, establish deadlines for all requirements early in the semester.

Judges' Views

Three practitioner judges were used for each oral presentation. As noted above, Student C received a special one-on-one examination by a judge who is a consultant in the restaurant industry. The judges were asked to provide the strengths and weaknesses of the judging process and to make recommendations for improvement.

First, let us consider the judging for the Fall 2007 Creole Skillet presentation. Strengths of the process included a diversity of judges, and good use of audio visual aids by the student team. One judge appreciated the students' dedication and enthusiasm, professional dress, and the use of PowerPoint for the presentation, and a well-researched project. Weakness included that the judges were not sure of their role and the grading sheet they used. The restaurant industry judge felt that the student who had a background in the restaurant industry tended to talk too much. Recommendations included a better scoring system and even more student rehearsal for the presentation.

Next, the judging of the Creole Skillet team for the Spring 2008 semester is considered. Students A and B made the presentation. A strength of the process was that the exam was a useful learning experience. It caused students to think, make and support their recommendations, and sought to determine if the group was helpful to the client. Weaknesses included the scoring system. Also there was an insufficient introduction as well as a comprehensive summary by Students A and B.

Recommendations included: (1) students should learn how to work the PowerPoint equipment prior to presentation, (2) an improved judging system is needed, (3) allow the panel of judges to ask questions after each section of the presentation rather than at the end only, and (4) be concise and to the point. Last, the client should not be allowed to coach the presenters during the presentation.

As noted above, Student C received a one-on-one examination by a restaurant industry consultant. The strengths as viewed by this judge are described next.

The student was prepared for the oral exam. She did a thorough job in her research. She gave several examples of her findings and people she met to gather information for the client. From this information she listed recommendations she suggested to the client. The student worked closely with client. Together, they attended some networking meetings and events to gather and learn more options for client to use in her business. The student found ways the client could use some associations that she was already a member for marketing and a web site for tourists to find the restaurant. She went to the Zoo-To-Do to conduct a survey for the client and gathered e-mail addresses for potential customers. The student showed the client how she could use e-mail to send information on specials and events the restaurant hosted.

The student was confident that the client would benefit from her findings and would like to stay in contact with the client for further assistance. Recommendations were those that the client could use in her business. The primary weakness was that the student missed working in a group presentation.

The Client's View

The client's views concerning the project are considered next. Interview questions were based on those used by Brennan (1995) in a survey of SBI clients. Views were obtained on the Fall 2007 project and projects completed by Students A and B and Student C in the Spring 2008 semester.

Fall 2007

According to the client, the project results were most beneficial. The project results described what the target market area was like and that customers would be primarily tourists and conventioners rather than people living in nearby condos. The benefit was that the Creole Skillet could correctly target potential customers. The major impact was that the project helped the client prepare for busy and slow periods (e.g., by knowing what conventions would be held in New Orleans during the upcoming year). The client had no negative comments and was very satisfied with the project. She had no recommendations for improvement.

Spring 2008, Students A and B

The scope of work on the project was to develop a low-cost promotion plan for the Creole Skillet. In the view of the client, the one benefit was that the team visited the Louisiana Restaurant Association. The project results were not useful, reflecting a lack of work on the students' part. The client was not satisfied with the project report. There was no impact on sales. The oral presentation by A and B was poorly done in the client's view.

Spring 2008, Student C

Student C worked separately from Students A and B. The project purpose was the same, as for Students A and B, to develop a low-cost promotion plan for the Creole Skillet. The client felt the project by Student C was most beneficial. The client got more motivated and involved in the project and took a greater interest in it. A major benefit was the development of a mailing list by Student C from the visitors to her booth at the Zoo-To-Do event. This was most useful as it gave a database of potential customers. As for the impact of the names collected, it drew in customers but no count was made of them. A major strength of the project was Student C's interpersonal skills. She cared about the project. The client was very satisfied and had no negative comments.

DISCUSSION

A major benefit of the SBI project as experienced by the students queried was the real-world experience, i.e., working with a real business on a problem in a textbook. Studies by Hedberg and Brennan (1996) and Brennan (1995) of students' views also found that the real world experience was the most liked aspect of the SBI project. Students queried in the Creole Skillet project liked the lack of structure as well. However, they felt that some students (other teams in the class) could not handle

the lack of structure. This was particularly true of Students A and B. The students on the Fall 2007 team had some degree of work experience behind them. Student C had a natural characteristic of self-motivation and initiative which rubbed off on the client.

The lack of structure is both an advantage and disadvantage. This was not mentioned in the Brennan (1995) and Hedberg and Brennan (1996) studies. For students needing structure, more specific guidelines, deadlines, and instructor-student meetings are needed. Rainsford (1992) suggested several ways to get maximum results out of student efforts. These methods include a final report outline, requiring the students to meet at least three times with the client, and requiring the students to write a report after each meeting with the client. In both the Fall 2007 and Spring 2008 projects, these requirements were required and generally followed. Students A and B did not meet three times with the client. Biweekly e-mail reports were required of all teams.

Student teamwork is critical to conducting a good project. Sometimes there is team disagreement or a slacker on the team. All three student respondents were in favor of firing a team member who is not pulling his/her share of the load. In the Fall 2007 project there was no team problems as the two students worked quite well together. In both classes the instructor selected the team members. There were four additional teams in each class. Students A and B requested that they be put on the same team as they were close friends. In retrospect, this was a mistake as we had two weak or disinterested students and one strong one (C). Student C started out as the team leader but A and B didn't have the same interest. In the peer evaluations each claimed the other (A and B versus C) did not communicate, e.g., answer e-mails. A and B did not desire to put in the off-campus effort of working the Zoo-To-Do or attending networking functions with the client, the reasons being that attendance was not required by the instructor. Eventually Student C went on her own and did her own project.

Hedberg and Brennan (1996) found that students liked the real-world experience the best about the SBI project; however, working with team members was either liked or disliked. Working with team members was not mentioned by the Fall 2007 group. Student C, however, had strong negative feelings about her teammates.

One common view of the judges for both the Fall 2007 and Spring 2008 presentations was that a better system of scoring was needed as well as questioning the students. Student C was examined on an individual basis as noted above. The judge was most inspired by her preparation, research and presentation. Essentially, a new judging system and score sheet will have to be developed. One problem was that in the examination of Students A and B, the client interjected herself and tried coaching them on their presentation.

One of Hedberg and Brennan's (1996) findings was that the selection of the client was critical. This was true in the case in the selection of the Creole Skillet. The client was very cooperative with the Fall 2007 team and Student C. Students A and B seldom contacted her. Interesting enough, Student C's energy and enthusiasm energized the client to work with her.

The client felt that the results of the Fall 2007 and Student C projects were helpful and beneficial. The client carried out the recommendations. Rocha and Khan (1985) reported that risk, cost and lack of specificity were the primary reasons the client failed to implement recommendations. In the cases of both the Fall 2007 and Student C projects, the projects presented clear, specific answers to the scope of work. In summary, the client played a pivotal role in all three projects. Only two of them rewarded her.

CONCLUSION

This paper examines an SBI project from the perspective of three student team members, the client, and final examination judges. Students liked the real world experience and lack of structure. They felt some students in projects such as the SBI experience needed structure. Non producing team members should be fired. There is a need to plan out what is to be done and set deadlines.

A diversity of background of practitioners judging the oral final examination was a plus; however, a better scoring system was desired. When the client is present at the final exam he/she should not enter into the discussion.

Client selection and cooperation were beneficial. In two of the three team projects, the student teams presented specific recommendations which the client put to use. The student-client relationship is important. The enthusiasm of Student C actually got the client more enthusiastic about and involved in the project.

The client selection was lucky, perhaps' due to her business relationship with the SBI instructor, and being a startup really needed the help. As noted in research by others, student teams and client selection are critical to a successful SBI project. We had the best of all worlds in two of the three projects, good students and a good client.

Recommendations for conducting a successful SBI project based on our experience include starting early in the semester and better screening of student teams. The schedule of project milestones needs to be determined by the students and instructor as well as the final report outline. Periodic e-mail progress reports and meetings with the instructor need to be carried out. A clear scope of work is needed. The team needs to meet periodically with the client. Rainsford (1992) recommends at least three times, however, that may depend upon the time constraints of the client. The instructor plays an important role in directing students to area sources of help and information. Students are not always familiar with these sources. The oral presentation needs to be rehearsed. Also, in our case, the final examination scoring system used by the judges needs to be improved.

The SBI program has been around some 30 years. It is a most valuable teaching tool and can benefit both student and client, the two most critical factors in a project's success. Hopefully it will be around for years to come.

BIBLIOGRAPHY

Ames, M.D. (2005). *From concepts to profits: Helping SBI student consulting teams and clients to understand and control success*. Paper given at USABA/SBI 19th National Conference.

Bradley, D. B., III (2003). *The use of the Small Business Institute program in economic development*. Paper given at the 2003 ASBE Conference.

Brennan, D. P. (1995). What is the value of an SBI program: Clients' perspective. *Proceedings of the 1995 Conference, Small Business Institute Director's Association*. (pp. 51-56).

Brennan, D. P. (1995). *What is the value of an SBI program: Students perception*. Paper given at 1995 Conference Small Business Institute Director's Association.

Cook, R. & Belliveau, P. (2006). *The experiential student team consulting process*. Indianapolis: Dog Ear Publishing.

- Cours, D., Williams, M. S. & Schramm, N. (2001). *University and public partnerships in small business consulting: Making it work*. Paper presented at 2001 Conference of the Association of Small Business and Entrepreneurship.
- Dietert, J., Halatin, T. & Scow, R. (1994). *Improving SBI programs educational quality through feedback: A survey of former SWT, SBI students*. Paper given at the 1999 meeting of the Small Business Institute Director's Association.
- Elbert, D. J. & Anderson, D. G. (1986). The SBI experience: Reactions of student team leaders. *Proceedings of the 1986 Small Business Director's Association Meeting*. (pp. 412-418).
- Elbert, D. J., Harmeson, P. A. & Faircloth, J., III, (2000). Enhancing SBI student consulting competencies: A decade long (AAR) after action report. *Proceedings of the First USA/SBA/SBIDA Joint Annual National Conference*, (pp. 49-54).
- Elbert, D. J., Harmeson, P. A. & Dougan, W. (2001). *Enhancing SBI student consulting competencies-Part II: A decade long (AAR) after action report*. Paper given at the 2001 Small Business Institute Director's Association Meeting.
- Fry, F. L. & Howard K. (1987). *SBI/SBDC cooperation in the late 1980's*. Paper given at the 1987 Small Business Institute Director's Association Meeting.
- Hedberg, P. R. & Brennan, D. P. (1996). *The SBI experience from the students' perspective: Implications for student learning*. Paper given at the 1996 Small Business Institute Director's Association Meeting.
- Hoffman, D. L. Iyer, V. & Abbott, D. (2004). Cooperative relationships between the SBI and SBDC. *Proceedings of the 2004 meeting of the Small Business Institute Director's Association*. (p. 220).
- Hulpke, J. F., Harvey, D. & Metghalchi, M. (1993). The relationship between SBI and SBDC: Unnatural enemies? In H. Lawrence (Ed.), *Proceedings of the 1993 Annual Conference, Southwestern Small Business Institute Association*, (pp. 44-50).
- Jackson, W. T., Gaulden, C. C., Jr., & Gaster, W. (2003). *Quality in student small business projects*. Paper given at the 2003 Association of Small Business and Entrepreneurship Conference, Houston, TX.
- Jackson, W. T., Vozkis, G. S., & Babakus, E. (1992). SBI intervention: An old problem—A new perspective. *Journal of Small Business Strategy*. 3 (2) 15-30.
- Lacho, K. J. & Kiefer, A. (2008). The Creole Skillet restaurant: A post Katrina start up. *Proceedings of the Academy of Entrepreneurship, Allied Academies International Conference*, (pp. 37-38).
- Madison, T. & Chawla, S. K. (1998). SBI client's perception of student consulting projects: An empirical model. In R. W. Smith & W. Gaster (Eds). *Proceedings of the 1998 Annual Conference Association of Small Business & Entrepreneurship*. (pp. 78-83).
- Mick, T., Maranville, S., Green, F., Clow, T., Hughes, P.A., & Taylor, S. R. (2004). Leveraging your university school resources via SIFE/SBI and other organizations. *Proceedings of the 2004 meeting of the Small Business Institute Director's Association*. (p. 237).
- Nafziger, D. W. & Daniels, J. (1986). Perceived value of the SBI to student consultants. *Proceedings of the 1986 SBIDA Great Lakes Regional Conference*. (pp. 6-17).

- Osborne, S. W. (2000). Yet another benefit of the Small Business Institute: A hands-on experience in business ethics. *Proceedings of the First USA SBE/SBIDA Joint Annual National Conference*. (pp. 160-164).
- Osborne, S. W. (2003). *The Small Business Institute: An economic development perspective*. Paper given at the 2003 Small Business Institute Director's Association Meeting.
- Rainsford, P. (1992, August). The Small Business Institute: Hands on learning. *Cornell Hotel and Administration Quarterly*, pp. 73-76.
- Rocha, J. R., Jr. & Khan, M. R. (1984, Summer). Impact of counseling on small business performance. *American Journal of Small Business*, pp. 34-42.
- Schindler, P. S. & Stockstill, L. E. (1995). *Beyond client satisfaction: SBI's educational impact*. Paper given at the 1995 Small Business Institute Director's Association Meeting.
- Sonfield, M. C. (2008). SBI Consulting: Small business" versus "entrepreneurial" performance. *Small Business Institute Journal*, (1), 62-75.
- Watts, L. R. & Jackson, W. T. (1994). The SBI program and student outcomes. *Proceedings of the 1994 meeting of the Small Business Institute Director's Association Meeting*.
- Weaver, K. M. & Solomon, G. (1985). *A review of the Small Business Institute evaluation*. Paper presented at the 1985 Small Business Institute Director's Association Meeting.
- Weinstein, A. Nicholls, J. A. F. & Zeaton, B. (1992, October). An evaluation of SBI marketing consulting: The entrepreneur's perspective. *Journal of Small Business Management*. pp. 62-71.
- Young, M. (2004, Fall). *Analysis to determine gaps in higher education assistance programs and needs of small businesses: A comparison of two studies*. Paper given at the Fall 2004 meeting of the Association of Small Business and Entrepreneurship.

A NEW INSTITUTIONAL APPROACH TO ENVIRONMENTAL MANAGEMENT BASED ON STUDY OF SOME RURAL INDUSTRIAL PROJECTS IN INDIA

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INTRODUCTION

Sponge iron is a cheaper substitute for coke, which is used as an essential ingredient in the production of steel. Sponge iron industry in India being mainly coal based is one of the very polluting industries under strict regulations imposed by central pollution control authority, implementation of which rests upon the provincial pollution control board and different local bodies under it. The sponge iron industries are to comply with certain requirements for maintaining standard with regard to emission of carbon dioxide carbon, monoxide and sulfur. There are regulations set by the authority for dealing with solid and liquid effluents and fugitive elements. There are norms set by the authority with regard to disposal and recycling of gaseous, solid and liquid effluents and clear instruction prohibiting use of ground water and specifying the quality of coal and iron ore to be used as raw materials. The quality of iron ore and coal is very important since the rate of dolchar (the harmful solid waste) generation becomes exorbitantly high due to use of inferior quality of coal. Another important aspect is adequate supply of water. Water is important for gas conditioning through cooling which requires 5-6 cubic meter water per hour for each klin of 100 tones per day. Thus water becomes essential ingredient for pollution control. While non-availability of good quality coal and iron ore intensify the process of generation of pollution enormously, lack of adequate supply of surface water creates huge pressure on ground water, enhancing both private and social cost of pollution control. To estimate the extent of loss incurred by the people living in surrounding areas of the factories we have carried out statistical analysis on the basis of data collected from the households through field survey. To take care of impact of gaseous and solid emissions as well as spread of particulate wastes we consider it appropriate to estimate the effect of distance from the factory on the fall in production and fall in the number of livestock. By following a method of two-stage stratified random sampling we select 200 households falling under different size classes of holdings, living in Nituria and Saturi blocks of Purulia within .5,1,2 and above 2 KMS of distances from the one or the other of the seven sponge iron factories concentrated in the area. By following the same method of two-stage random sampling we select 50 households falling under different size classes and living within the same four specified distances, from the one or the other of the three sponge iron units concentrated in the Borjora block of Bankura district. For each farmer we take into account different plots of land falling under different distances from the factories. We collect data on different aspects of agricultural production, production of fruits and vegetables and livestock raising before and after the coming of the factories. Since factories have come up within last five years, there has been no problem in getting data relating to the year just before the coming of the factories along with data relating to current year.

As reported by the households some of the agricultural lands have gone out of cultivation due to degradation of the soil. Apart from this the land, which are still under cultivation, have undergone drastic fall in productivity due to loss in soil quality. Secondly due to degradation of grazing land caused by spread of harmful solid waste from the factories, the domestic animals suffer from diarrhea and animals with less sustaining capacity die of the diseases in large numbers. While cows and buffaloes can sustain and live with ill health, goats, lambs and calves can hardly sustain the hazard. The areas have seen drastic fall in goat, lamb and calf population. The goats which once were considered as a important subsidiary source of livelihood of agricultural people have almost been wiped out of the area. We present below the average percentage of fall in agricultural production and percentage fall in livestock in two survey areas according to different land holding size groups and different distances from the factories.

It is seen that there have been more than 45 percent and 30 percent fall in production of paddy in survey areas of Purulia and Bankura districts respectively. The percentage fall in the number of livestock due to death caused by diarrhea has also been quite high between the year before and after the factory came into being, indicating the extent of negative impact not only on the well being of the rural households but also on the biodiversity having very great potential long run impact on lives of human being.

In order to examine this more rigorously we have carried out regression analysis using dummy variables to take care of impact of distance parameter:

REGRESSION 1; for Purulia and Bankura, respectively.

$$Y=50.84-2.32x+9.68D \quad R \text{ Square}=0.03 \quad \text{Adjusted R square } 0.02; \text{ Observations}=173$$

$$t \text{ stat:}(11.77) \quad (-1.15) \quad (2.03) \quad F (0.05)$$

$$2) Y=23.01+0.37x+8.23D \quad R \text{ Square}=0.10 \quad \text{Adjusted R square } 0.06; \text{ Observations}=52$$

$$t \text{ stat} : (5.99) \quad (1.04) \quad (2.25) \quad F (0.08)$$

Where Y= Fall in production; X=Cultivated land; D=1, for <1km=0, otherwise;

The results of regression analysis show while there has been very significant fall in production in two time periods; fall in production has been significantly greater within distance range of 1 km. It is also observed that higher size of farms means lower proportional fall in productivity.

In order to examine the impact of distance from factory on extent of fall in production we conduct separate regression analysis with three distance Dummies to represent different distance ranges from the factories with the intercept representing the highest distance. The regression results given below show extent of fall in productivity rises significantly with reduction in distance from the factory. This confirms the highly negative impact of pollution on agricultural productivity.

REGRESSION 2; for Purulia and Bankura respectively

$$1) Y=28.04+64.17 D_1+36.83 D_2+13.95 D_3 \quad R \text{ Square}=0.03 \quad \text{Adjusted R square } 0.02$$

$$t \text{ stat: } (7.61) \quad (5.24) \quad (6.67) \quad (3.11) \quad F (1.35)$$

$$2) Y=21.59+9.94D_1+8.85D_2 \quad R \text{ Square}=0.006 \quad \text{Adjusted R square } -0.014$$

$$t \text{ stat} : (2.64) \quad (0.91) \quad (0.82) \quad F (0.71)$$

Where Y = Fall in production; $D_1=1$ for distance range $0 < 0.5$; $= 0$, other wise; $D_2=1$, for distance range $0.5 < 1$; $= 0$, other wise; $D_3=1$ for distance range $1 < 2$; $= 0$, otherwise; Observations = 270

As the regression results show, the differences in percentage fall in production across different distance ranges are statistically significant indicating strong reason in favor of accepting the hypothesis that presence of the factories is crucial in causing the deterioration in agricultural production.

In order to deal with the problem of pollution control the traditional method of command and control is followed with the use of technological instrument. Each unit is instructed to install electro static precipitator (ESP) for controlling emission of hazardous gas, induction furnaces are to be provided with implements for controlling emission of hazardous materials, and proper technological measures are to be taken to control fugitive emission. Proper storage system for materials and product with loading and unloading system is to be provided to prevent pollution through spread of hazardous particulate matters. Each of the factories gets a particular value obtained by adding up all different values assigned to it on fulfillment of different criteria in different degrees. We have taken into account five criteria of compliance, which are common to both in the report we obtain from our interview of the affected people and in the compliance report obtained by the officials from their routine inspection, which we collect through informal discussion with the latter. We assign a value of 10 for hundred percent non-compliance with regard to a particular criterion. The value declines as the degree of compliance rises. Thus we get an aggregate value of compliance for each of the farms with total value of compliance being 50 in case of full noncompliance with regard to all the five criteria. The factories are ranked according to values obtained on the degree of compliance, with a lower value indicating a higher degree of compliance. We observe by and large a close inverse association between degree of compliance and percentage fall in productivity.

While the characteristics of governance do not indicate the existence of a strong and rigorous system of implementation of pollution control regulations, the pollution control technology used in most of the cases involves huge recurring cost because of the huge amount of water that is required for its operation. It is this characteristics of the technology used, which makes it very costly, particularly in dry areas where scarcity of water poses enormous problem. Even if we ignore the social cost of declining under ground water table through excessive extraction of water due to operation of the machine, the enormously high private cost of operating the machine makes it highly gainful for the factory owners to keep the machine non operative for few hours a day. In the absence of continuous monitoring it becomes obvious, under the present system of governance based on command and control, with physical inspection and imposing Fine being the only instrument of control, that rules would be normally violated and halting the process of generation of pollution would be almost an impossible task, given the existing technology as it is. The motive of violating rules for one firm, when other firms may or may not violate, may be explained by relative gain from violation against the probable cost a firm would have to bear under the alternative situations arising out of other person's behavior regarding compliance or violation of rules. We face a situation of absence of unanimity among the polluters to comply with pollution control norms, even though they are organized under some form of association and even though non compliance invites hazards and increases financial burden to all firms.

This can be demonstrated following a simple game theoretic framework:

Let the gain from one hour's non-operation of the machine be g and the loss inflicted on the society for such action for a year be c . If there are two firms A and B and both firms violate the norms, individual gain of each firm would be g and total loss to the society would be $2c$. Now we suppose that damage cost to the society for one hour's non-operation of the machine per day for the whole year, by both firms, is estimated. A pollution tax is imposed every year to cover the damage cost so that total volume of tax $T=2c$, the total damage cost; each of the firm is to bear a tax burden $=T/2=2c/2=c$ when both firms violate the rules.

The Pay off matrix is as follows:

	Player A	
	C	D
C	0, 0	-c/2, g-c/2
Player B		
D	g-c/2, -c/2	g-c, g-c

Violation is the Nash Equilibrium strategy if $g=c$. If each of the firm while violating the rule attaches a probability of .5 that other person is also violating the rule and .5 to the other person complying with the rule, then his expected pay off would be $0.5x(g-c/2)+0.5x(g-c)=g-3c/4$. The cost of one hour's operation of the machine being very high, g is fairly large so that $g-3c/4>0$. Violating the rules appear to be gainful to the firms as long as $g>c$. In fact the tax imposed by the government may not be so high as to cover the entire damage cost. This is because in imposing the tax the government has to take into consideration the question of viability of the firms after imposition of the tax. It depends on the scale of operation of the firms whether they would be able to bear the heavy burden of tax.

An alternative to pollution tax, a fine (F) in cash combined with a system of granting cash awards (W) to all the producing units of the area as an incentive in case of successful attainment of environmental standard, may be used to control pollution. Let a fine F be imposed in case a violation is detected, the amount of fine is determined on the basis of estimated damage cost of pollution. Let $F=\lambda x c$, $\lambda >0$, amount of damage cost = c when one person violates while the other complies, in a two person system and $F=\lambda x 2c$ when amount of damage cost is $2c$ when both persons violate norms. Let the probability that a person violating the rule is detected, is p . The outcome under such situation would be as follows:

	Player-1		
		C	D
Player -2	C	W, W	0, $\{g - (p \times \lambda \times c)\}$
	D	$\{g - (p \times \lambda \times c)\}, 0$	$\{g - (p \times \lambda \times 2c)\},$ $\{g - (p \times \lambda \times 2c)\}$

This means there is always a positive gain to a firm from violation of rules irrespective of whether the other firm violates or complies as long as $\{g - (p \times \lambda \times c)\} > 0$. Whether compliance would generate positive gain to an individual firm would depend on whether the other person complies or not. If one firm thinks that other firm will always comply he will decide to comply only if $W > \{g - (p \times \lambda \times c)\}$. This means generation of pollution can be halted by setting particular value for λ and p such that $(p \times \lambda \times c) > (g - W)$, i.e., $\lambda \times c > (g - W)/p$ given g and c as technological parameters and W a parameter set from outside, a lower p means λ has to be set at a high level such that the minimum threshold value of λ is equal to $(g - W)/(p \times c)$. Under this situation, the value of p , that is, the probability of detecting violation and identifying the violator, becomes a crucial factor in controlling violation. With the value of $p = 1$, $\lambda = (g - W)/c$ i.e. the ratio between the market value of water and electricity saved net of cash award, and the damage cost, which is nothing but the ratio between gain to the polluter for polluting, net of gain from total compliance, and the damage cost. If the technological condition makes $g - W > c$, this means $\lambda > 1$ i.e., $F > c$. In any case lower the probability that violation is detected and the violator is identified, the greater should be the money value of the fine. Under an alternative technological condition, if $(g - W) < c$, for each value of p the required value of λ for halting generation of pollution would be lower, that is the required money value of fine would be lower compared to what it would be when $(g - W) > c$. A lower value of p in either case would mean a higher required value of the fine.

The analysis suggests a package of regulatory measures consisting of (1) a set of new technological devices with sufficiently low operating cost compared to the benefit it generates, by preventing pollution (g sufficiently small compared to c), (2) Providing for cash award in case of maintaining high environmental standard and, (3) raising the probability of detecting the violation and identifying the violator (p) i.e. improving the level of monitoring.

We have seen that the limitations of the traditional command and control measures of regulation have given rise to emergence of some new instrument of governance: Voluntary Agreement has been one such instrument, under which the Government comes under voluntary agreement with all the stake holders including the polluting firms. There can be an alternative to both the traditional instrument and the new instrument of Voluntary Agreement, which is a combination of traditional and a new instrument. Instead of the government appearing as an agent, collective participation of the heterogeneous stakeholders is supposed to provide an improved system of governance. It is easy to see that such collective action on the part of the stake holders is not only possible but also can act as a more effective instrument of control: We consider certain characteristics of the rural society which is affected by industrial pollution and is deprived of a very valuable public good that is pollution free environment. People in this society are mainly cultivators having land in different sizes. Animal husbandry also forms an important source of their livelihood.

Land productivity is very low because of soil quality and lack of irrigation facilities. Because of lack of adequate infrastructure, industry is almost absent except for the highly polluting sponge iron industrial units concentrating in one area covering parts of two administrative blocks. The situation is almost equal in the two survey areas. The sponge iron industries provide supplementary source of livelihood to a small percentage of people. Most people are extremely poor and both our survey areas are marked as backward areas. These factors, apart from the importance of sponge iron as an industrial input play positive role in favor of sponge iron units getting quick approval of the authority. However because of extremely harmful impact they generate on environment people are extremely averse to such units and express their opinion in favor of closing down of the units in spite of the meager positive effects on employment. All these make people highly motivated in favor of protecting the area from industrial pollution to save their lives and for the small farmers it becomes a question of their existence since the drastic fall in agricultural productivity and livestock threaten their life support system. They raise protest against the units' extremely harmful behavior, to the local Gram Panchyat, but without any results in their favor. Informal discussion with authorities, namely, Pradhan of the Gram Panchyat, and local level officials of pollution control centers strongly indicate that close association of influential and powerful persons with the owners of the units protect the latter from any hard measure being taken against them.

It is against this background that the potential of collective action by the heterogeneous stake holders can be explored, as a supplementary to the existing system of regulation based on command and control: The stake holders may come forward to form a group with the objective to protect environment from the reckless behavior of the industrial units. The method would be to form collective organization based on voluntary agreements among all the stake holders including the representatives of the polluting industrial bodies, local leaders of the political parties, local bodies of social organizations, NGOs and members of the pollution control authorities, apart from the directly affected rural people. In so far as maintaining environmental standard would result in direct benefit to local residents, they will have to bear the cost involved in such negotiating activities through their contributions, though there can also be some voluntary contributors. The aim of the negotiation is to obtain full agreement on the point that the environment has to be kept completely free from pollution, which involves cost to the polluters. In order to make the agreement fully effective the collective body may propose to share a part of the cost out of their own contribution, in the form of a reward, in case of full achievement of the objective.

The advantages of such a heterogeneous body would be: (1) probability of detecting and identifying the defectors would be 1. (2) It is now possible to estimate the individual gain from non-compliance of rules and to determine the exact amount of fine so as to completely out weigh the gain from defection. If gain from defection can thus be effectively out weighed through correct detection of defection, correct estimation of such gain and the social power of the collective organization of the stakeholders to impose fine because of violation of agreement, there will be no incentive for the polluters to pollute.

REFERENCES

- Balland, Jean-Marie and Jean-Philippe Platteau (1996): 'Halting Degradation of Natural Resources: Is there a Role for Rural Communities'? Food and Agriculture Organization of the United Nations and Clarendon Press.

Bartik, T. J. (1987): 'The Estimation of Demand Parameter in Hedonic Price Model', *Journal of Political Economy*, Vol 95.

Behera, B and V. Ratna Reddy (2002): 'Environment and Accountability: Impact of Industrial Pollution on Rural Communities', *EPW*, Vol XXXVII, No-3, January.

Bandon, C and K Homman (1995): 'The cost of inaction: Valuing the Economy-wide cost of Environmental Degradation in India' Working Paper, World Bank.

ECONOMIC IMPACT OF STURGIS MOTORCYCLE RALLY

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ABSTRACT

There are approximately 25 “major” motorcycle rallies held each year in the United States with hundreds of other “minor” or “local” rallies held that appeal primarily to riders from a single state, region or brand of motorcycle. The three largest and most famous gatherings are (by age) Laconia Bike Week (New Hampshire) established in 1916, Daytona Bike Week (Florida) established in 1936, and the Sturgis Rally (South Dakota) established in 1938. The Laconia rally is held annually in June; Daytona in late February and early March and Sturgis in August. All of them were initially organized around a motorcycle racing event as the primary focus although that has now become just another event among many.

The Sturgis Biker Rally has become the largest of the three major events although Daytona Bike Week runs a very close second. In both cases, it reflects the desire of the participants to ride their motorcycles during an ideal vacation period. Daytona, for example, appeals extensively to those from the Northeast and upper Midwest seeking a respite from the cold and snow by going to Florida in February. The Sturgis rally appeals to riders from almost every state and numerous foreign countries by its date in August since that is a favorite vacation period. The Sturgis Rally was formed by Clarence Hoel, who belonged to a local motorcycle club that wanted to sponsor a race, and is now managed by a separate department within the Sturgis city government.

The 2008 Sturgis rally drew 415,000 participants, which is well below the highest year of 2000 when it drew 633,000 participants. 2000 was the 60th anniversary year of the rally (it was not held during the Second World War due to gas rationing) and numerous special events were scheduled which accounted for a significant portion of the higher attendance. In addition, the effects of high fuel costs and the general economic situation negatively affected 2008 attendance levels. The organizing body estimates that temporary vendors generated taxable sales of \$13.2 million from the 2008 rally. Local and state sales tax collections were \$891,000 which includes local taxes from nearby communities. Additional revenues are obtained from the motels, restaurants and other services provided by local business including increased attendance at Black Hills National Park and other tourist attractions within an approximately 75 mile radius.

Sturgis, South Dakota is a city with a relatively stable population of 6,500 in Meade County which has a total population of 24,000. Local sponsors of the Sturgis Rally contributed \$40,000 to the Sturgis Chamber of Commerce and an additional \$20,000 to the Sturgis Rally Charities Foundation. It would be difficult to overestimate the impact an event with more than 400,000 participants and the associated economic contribution has on a community of this size. The Rally also contributes significantly to the communities of Rapid City, Deadwood, and others that are considered by the participants as an easy day’s ride from the headquarters city of Sturgis.

USING GAPMINDER WORLD IN THE ECONOMICS CLASSROOM

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ABSTRACT

Interest in improving instructional methods in economics classrooms has been growing lately. One reason for this trend may be that economics seems to be lagging behind other disciplines in applying non-lecture teaching methods. We detail several non-lecture methods for improving economic instruction through the use of Gapminder World.

Gapminder World is a free, simple and engaging internet-based resource for illustrating relationships between key global economic indicators. Its presentation of the data is in line with students' exposure to the dramatic visual content that goes along with modern media exposure. The format instantly and intuitively conveys a great deal of information.

The four applications detailed here represent relatively costless methods for achieving more relevant and rewarding economics instruction. The first application is a visual introduction to graphs, correlation and models. The second application details a visual method of increasing global economic development literacy by highlighting international differences in population, GDP and GDP per capita. The third application provides a method for overcoming student apathy toward economics, as a subject, by visually depicting the link between GDP per capita and personal outcomes such as life expectancy and infant mortality. The final application is sure to capture students' attention by illustrating the shortfalls of GDP per capita as a measure of quality of life through a vivid presentation of real world decreases in life expectancy.

The authors are grateful to the developers of Gapminder World because its existence has improved the courses that we teach. The benefits of using this tool are instantly apparent and the cost of its development has already been shouldered by the Gapminder foundation. Real world application and creative presentation are the keys to capturing the increasingly illusive attention and interest of today's student body. This tool can be readily used to energize students' natural curiosity, regarding world events, converting it into genuine motivation to understand economics.

THE INFLUENCE OF SCHOOL-LEVEL SES UPON THEIR STUDENTS' FIRST YEAR COLLEGE RETENTION

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ABSTRACT

Historically high schools have been expected to be a significant source of human and social capital for those that attend. However, there is a robust level of empirical documentation that asserts students who arrive at high schools with low levels of human and social capital tend to leave in a similar fashion (e.g., Jencks and Phillips, 1998).

This paper investigates the relationship between student first-year college retention and their home high school's proportion of at-risk students. Students who are defined as "at-risk" typically receive an enhanced level of state funding as compared to the general population. This funding is expected to provide a financial means of creating more equitable and potentially successful educational outcomes for the at-risk population. The paper aggregates schools by five levels based on proportion of students participating in free and reduced lunch programs (e.g., 0-15%, 16%-35%, etc.) and utilizes a predictive model to determine the school's effect upon their students' college success. Additionally, the full paper reports on the mean differences between the aggregated school levels and the success rate of the associated students along with the implications for policy, funding, and equity

GOLDBLOCKS REBATES: COMPLYING WITH GOVERNMENT WISHES ONLY WHEN REBATE AMOUNT IS "JUST RIGHT"

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ABSTRACT

Whether federal income tax refunds stimulate consumer spending or saving remains contradictory. This study combines income tax research findings with research on mental accounting, to determine if an explicit statement of government preference influences taxpayers' intended refund use, controlling for refund timing. The authors developed and administered an experiment, to test whether a stated government preference for spending or saving matters. ANOVA results confirm that government direction has only a very limited but significant effect on taxpayer spending and saving choices. Conformance with government preference appeared only in a "sweet spot" of rebate levels that is not too high in amount and not too low. In 2008, the President and Congress enacted rebate legislation to stimulate the economy. To validate our initial findings, a second instrument was disseminated to test how taxpayers spent their actual lump-sum rebate checks. The same pattern was observed in the spending the actual rebates.

INTRODUCTION

This study developed and administered a survey instrument, attempting to determine whether an explicit government statement of preference is effective for influencing taxpayers' intended use of their refunds, controlling for demographics, refund size and refund timing. It is important to know whether and how the government's intent affects spending versus saving. The evidence is contradictory per Slemrod (2004), and may be affected by whether the refund is a lump sum or prorated monthly through e.g., reduced withholding tables (Chambers and Spencer, 2007 and 2008). This paper examines how closely taxpayers follow the government's stated objective by examining spending at four levels of tax rebates: \$300, \$600 \$1,500 and \$3,000. Additionally, this study explores the types of investment/saving and spending that result from refunds under both sets of government directions, controlling for the distribution's timing.

LITERATURE REVIEW

Presidents have predicted how tax cuts would affect the economy. Yet, few studies determine whether government direction actually affects taxpayer use of tax cuts and refunds. Slemrod and Bakija (2004) posited "the degree to which people spend any increase in their after-tax incomes depends heavily on their perceptions of the state of the economy (and) cast doubt on the

effectiveness of even persistent tax cuts as recession-fighting measures” (pp. 102-103). Tax distribution timing might also affect the amount spent vs. saved. Per Shapiro and Slemrod (1995), almost half of taxpayers receiving the 1992 decrease in tax withholding expected to spend most of the money immediately. That rebate changed federal taxes withholding but not tax liability. The money was later due or it reduced year-end refunds. However, when the 2001 tax cut came as a lump sum of about \$300-\$600, only about 25% of taxpayers expected to spend the refunds (Shapiro and Slemrod, 2003a, 2003b). Parker (1999) found that taxpayers whose salaries exceed the Social Security limit spend a significant amount of the excess when received, rather than averaging the excess over an entire fiscal year; Souleles (2002) found that taxpayers responded to the 1981 gradual tax cuts by gradually increasing consumption. Chambers and Spencer (2007) found that those receiving a yearly refund of either \$300 or \$600 in a lump sum saved more than if that same yearly amount were spread out in smaller, monthly installments.

Thaler (1999) asserts that individuals use “mental accounting,” informally labeling funds based on whether they come from a regular income flow or from an irregular, lump-sum windfall. Read, Loewenstein and Rabin (1998) label this as “choice bracketing,” including time periods in which accounts are mentally reconciled. The relative amount of the refund might be a factor, with poorer households tending to have shorter reconciliation periods than wealthier households. See Camerer et al. (1997), Heath and Soll (1996), Rizzo and Zeckhauser (1998) and Rice (1992). Chambers (2005) found that the self-employed or those actively seeking to be self-employed often elect to pay quarterly estimated taxes in smaller, more frequent amounts, despite foregone interest. However, few related practical tax policy uses have been developed.

HYPOTHESIS AND RESEARCH QUESTIONS

The author(s) hypothesize that explicit government direction for the uses for the refund will not make a significant difference, controlling for the timing of the distribution:

Hypothesis: Respondents receiving a lump sum hypothetical tax refund of \$300 (or \$600, \$1,500 or \$3,000) which the government expressly wishes them to spend will not spend significantly more of the refund than those receiving the same lump sum amount where the government expressly wishes that the taxpayer save it.

Saving is defined as increasing assets and/or decreasing liabilities (Shapiro and Slemrod, 1995). Short-term saving, spent within 12 months, is included as spending. A separate analysis tests whether including short-term saving as saving significantly changes the results. A third analysis controls for the annual amount of the refund if distributed over 12 equal monthly installments. Shapiro and Slemrod (1995) asked if respondents intended to do one of three things with their 1992 rebates: “(A) spend, (B) save, (or) (C) repay debt,” without considering whether the savings will last longer than, or less than, one year. The time horizon for saving might have a broad economic effect on the price of marketable securities. Similarly, a one-time purchase of durable goods is different from increased regular monthly purchases. As with Chambers and Spencer (2007 and 2008), spending and saving decisions are studied by asking 12 research questions. Specifically, research questions examine percentages of refunds applied on a yearly, and monthly, basis respectively as:

(1) & (7) investing in long-term savings vehicles; (6) & (12) saving for short-term goals; (3) & (9) paying down long-term notes payable; (2) & (8) paying down credit card debt; (4) & (10) spending for monthly bills; or (5) & (11) durables spending.

METHODOLOGY

Within-subjects experimental questionnaires concerning either the \$300 or \$600 rebate amount were distributed to 376 university students. An additional 88 students were given the same instrument at the \$1,500 yearly level; and 96 at the \$3,000 level to test the sensitivity of the findings of this study. Students completing the instrument received extra credit equal to about 1% of their final grade. Initially, the instrument was distributed during the 2006-2007 academic school year. In 2007-2008, the instrument was re-distributed, and those 2007-08 data are the focus of this paper, with a comparison to the 2006-07 results when they differ significantly.

The instrument provides a hypothetical refund amount (\$300 or \$600) and a statement that the government would like the taxpayer to spend, or save. Roughly half of the instruments first asked how much of the lump sum refund would be: (1) invested (in stocks, bonds, savings account, etc.), (2) used to pay off credit card debt, (3) used to pay off notes (e.g. mortgage, car note), (4) used up for regular monthly expenses, (5) used to buy a durable asset (e.g. car, boat, washing machine, furniture), and (6) used to save for an infrequent yearly expense (e.g. vacation, bigger holiday gifts). Next, respondents were asked the same six questions, but with the refund in monthly amounts equal to 1/12 of the lump sum. The remaining instruments reversed the order, to test whether order mattered. ANOVA was used for analysis, with items 1 through 3 as saving, and items 4 through 6 as spending, and then again with short-term saving included as saving rather than spending. The research items were analyzed in percentage terms and with descriptive statistics. Descriptive statistics are available upon request. Soon after, the 2008 rebate was distributed; a second study surveyed taxpayers who had received the 2008 rebate.

This second instrument asked respondents to indicate the size of the economic stimulus rebate and the month they received it. Then they were asked how they allocated the funds, among the same six categories used in the first questionnaire. The instrument also asked for responses to questions on their demographics and financial status. The dollar amount for each of the primary six categories was converted to a percentage of the refund, as well as aggregated into the saving and spending categories. As with the experimental group, investing and paying off credit card debt and/or notes is considered as savings (items 1 through 3), and monthly spending and purchasing durable assets as spending (items 4 and 5). In the first analysis, saving for an infrequent expense (item 6) is added to savings. However, because it is only short-term savings, stimulating the economy by the end of the year, the analysis is run a second time to include it as spending instead of saving; in that second analysis “savings” indicates “long-term savings.”

RESULTS AND DISCUSSION

The instrument was administered to 376 experimental respondents, averaging 3.4 years of business experience and some college. The amount of Adjusted Gross Income (AGI) was significant for those with non-zero AGI, but not significant for those with zero AGI. The size of the effect for

income earners only was very small (0.0003). No other control variables were found to be significant. Surprisingly, the null hypothesis was rejected, but only at one level of hypothetical lump sum refund amount, \$600. To validate these findings, an instrument was tested how taxpayers spent their actual 2008 economic stimulus rebate checks. The same pattern was observed as predicted by the experimental study, supporting those experimental findings.

As with Shapiro and Slemrod (2003a), most of a lump sum refund of \$300 or \$600 would have been saved. Specifically, \$173 (58%) of the \$300 and \$374 (62%) of the \$600 would be saved for longer than one year when the government requested the refund be saved. When the government requested the refund be spent, the amounts were \$159 (53%) and \$256 (43%). Of those instructed to spend, 13 (27%) saved all of a \$300 lump sum refund compared to 14 (27%) of those instructed to save. Of those who received a \$600 lump sum, 2 (5%) of those told to spend actually saved it all, versus 13 (32%) of those instructed to save. ANOVA results at the \$300 level for a lump-sum distribution indicate no significant difference. When the amounts are distributed in smaller, monthly amounts, none of the differences are significant, consistent with Chambers and Spencer (2008). When short-term saving is considered as saving, the p-value for difference between groups is not significant, sustaining the hypothesis at the \$300 level.

For a \$600 refund the hypothesis is rejected, with robust, significant results. The significance comes almost entirely from the group instructed to spend. Those instructed to save at the \$300 and \$600 levels save most of the refund: 57.8% and 62.4%, respectively. Those instructed to spend move from saving 53.0% at the \$300 level to saving only 42.7% at the \$600 level, largely disregarding the government's intent when the refund level increases to \$1,500. Where short-term saving is considered as saving at the \$600 level, the p-value falls to .07. Paired with the findings at the \$300 level, it seems taxpayers view short-term saving as spending.

Conformance with government preference appears only in a "sweet spot" of rebate levels not too high or too low. This makes sense where friction costs of conforming with government preferences is relatively high for low rebate amounts - outweighing the benefits, as in the case of all (smaller) monthly rebated amounts, and, in this case, at \$300/year. Somewhere above \$600, taxpayers may value higher personal utility and/or responsibility for the disposition of their tax rebates. To try to pinpoint the amount of the sweet spot, the authors analyzed amounts between \$300 and \$600 but found no hypothetical breaking point in that range. If individuals invest more when asked to invest rather than spend, that effect is not significant and remains insignificant at the \$3,000 level, sustaining the hypothesis at these levels of refund. At the \$600 level, the greatest increase in spending - when taxpayers were encouraged to spend - was for durables. When encouraged to save, the greatest increase in saving was in credit card debt reduction.

Results for actual 2008 rebates in the \$300 to \$600 range indicate that taxpayers end compliance with government for spending beyond \$600. At \$300, many split their rebates between two, or more, categories. Some appeared to take government direction in that "material" range above \$300, but ending in self-determination at \$600; 40% of the time, the entire \$300 was spent. The percentage for the \$301 - \$599 range is similar, but then at \$600, the percentage of the rebate spent drops to 24% (a drop of 40%). For actual rebates, the sweet spot is not between \$300 and \$600, but, on average is at \$600. For 2008 rebates in a \$300 range (+/- 20%, an *a priori* grouping) around the \$1,500 rebates, the rebate mean was \$1,355. The pay-down of credit cards was almost twice the expected rate, with less spending on monthly expenses and durables. However, in the hypothetical

scenario, the announcement of the rebate was simultaneous with its receipt. In the actual scenario, there was much public notice of the forthcoming rebate. Some may have spent the rebate in anticipation of receiving it, and now were “paying it back.”

CONCLUSIONS

Results confirm that government direction has only a limited effect on spending and saving choices, significant around \$600. Individuals followed the government’s stated desire only when the amount is perceived as small, but not so small as not worth the effort. The implication for federal tax policy is to not rely on government requests for the desired behavior. It appears that taxpayers’ desires for their own self-interest are not dissuaded by government requests once the rebate exceeds the \$600 level.

REFERENCES

- Camerer, C., Babcock, L., Loewenstein, G., & Thaler, R. H. (1997). Labor supply of New York City cabdrivers: one day at a time. *Quarterly J. of Economics*, CXII (May): 407-442.
- Chambers, V. (2005). Evidence of intangible utility of more frequent payments over financial gain opportunity in a tax budgeting situation. Working Paper.
- Chambers, V., & Spencer, M. K. (2007). Do taxpayers spend refunds the way the government wants them to? *Proceedings of the International Academy of Business and Public Administration Disciplines Conference*, October, 2007.
- Chambers, V., & Spencer, M. K. (2008). Does changing the timing of a yearly individual tax refund change the amount spent vs. saved? *Journal of Economic Psychology*, November 2008.
- Heath, C., & Soll, J.B. (1996). Mental accounting and consumer decisions. *J. of Consumer Research*, 23: 40-52.
- Parker, J. (1999). The reaction of household consumption to predictable changes in social security taxes. *American Economic Review* 89, 4 (Sept): 959-973.
- Read, D., Loewenstein, G., & Rabin, M. (1999). Choice bracketing. *J. of Risk and Uncertainty*, 19:1-3; 171-197.
- Rice, E. M. (1992). The corporate tax gap. In Joel Slemrod (Ed.), *Why People Pay Taxes* (pp. 125-161), An Arbor: University of Michigan Press.
- Rizzo, J.A. & Zeckhauser, R. J. (2003). Reference incomes, loss aversion, and physician behavior. *The Review of Economics and Statistics*, 85 (4): 909-922.
- Shapiro, M.D. & Slemrod, J. (1995). Consumer response to the timing of income: Evidence from a change in tax withholding. *American Economic Review* 85 (1), 274-283.
- Shapiro, M.D. & Slemrod, J. (2003a). Consumer response to tax rebates. *American Economic Review*, 93 (1), 381-396.
- Shapiro, M.D. & Slemrod, J. (2003b). Did the 2001 tax rebate stimulate spending? Evidence from taxpayer surveys. In James M. Poterba (Ed.), *Tax Policy and the Economy*, 17, (83-109), National Bureau of Economic Research and Cambridge, MA : MIT Press.

Slemrod, J., & Bakija, J. (2004). *Taxing Ourselves: A Citizen's Guide to the Debate over Taxes (3rd Ed.)*. Cambridge, MA: The MIT Press.

Souleles, N. S. (2002). Consumer response to the Reagan tax cuts. *J. of Public Economics*, **85** (1) (July), 99-120.

Thaler, R.H., (1999). Mental accounting matters. *Journal of Behavioral Decision Making* **12**: 183-206.

