

## **Factors contributing to tax refund /payments of inner city Baltimore residents**

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### **ABSTRACT**

This study examined the effect of income and the health insurance coverage tax refund/ payment of clients of Coppin State University VITA (volunteer income tax assistance) for the 2015 to 2016 tax season. Coppin State VITA has provided free tax preparation services to low income earners for several years. The clients of Coppin State Vita were residents of the inner Baltimore City and the surrounding areas who used the Coppin State Vita Services for tax preparation purposes for the 2015 to 2016 period. This study analyzed if refunds/payments were dependent on certain factors such as income and the health insurance coverage of the client.

The VITA program was mutually beneficial to the university and the community. It was found that the refund was positively and highly dependent on health insurance coverage. The health insurance coverage at the time was ObamaCare. The income did not affect the amount of refunds.

Keywords: Health Insurance, Income, Refunds, Payment.

## INTRODUCTION

Coppin State University was a historically Black College located in Baltimore, Maryland. The Accounting Department in the College of Business of the University has offered a free tax preparation service to the community from 1998 to 2005 and then from 2010 to date. Some students, staff and faculty as well as residents of the inner Baltimore City and surrounding areas used the services of Coppin State VITA. This inner city Baltimore neighborhood was uniquely poor as acknowledged by the IRS. After the May 2015 riots in the City, many businesses were destroyed and had closed. Coppin State VITA therefore brought a relief to the community by bringing in \$813,380 in tax refunds to the neighborhood and additional savings of between \$119,328 to \$185,094, through avoidance of tax preparation fees. Fees charged were dependent on the itemization, schedule and complexity of the tax return filed.

This paper researched refunds and payments of inner city Baltimore residents for 2015 to 2016 period. It analyzed whether income and the health insurance coverage (Obamacare) affects refunds/payments of impoverished neighborhoods.

We are motivated to conduct this research because tax season is an important season for the general populace and while obtaining refunds is generally gratifying, others have to make a payment back to the government and/ or state and this can sometimes be unpleasant. The results of this study will throw more light on an issue that affects the general population. The sample from which this study is based is especially important because the people in this sample cannot afford rich tax attorneys and tax consultants to help them in their tax planning. Regulatory bodies will also benefit from the results of this study in that the health insurance policy of Obamacare has been strongly debated and even politicized. An independent research finding will therefore provide an unbiased source of verification to help in policy or decision making.

It was found that among this sample the refund and or payment was highly and positively dependent on the health insurance coverage (ObamaCare). Clients who had no health insurance were more likely to make a payment and vice versa. The income did not affect the amount of refunds or payments.

This study is a contribution to the literature because to the best of our knowledge this is the first study to investigate whether health insurance coverage and income affects refunds or making payments to the IRS, of clients of impoverished areas in Baltimore in the 2015/2016 tax year. The paper continues as follows: section 2 presents the literature review, section 3 presents VITA, Section 4 Analysis, Section 5, Results while 6 presents Conclusion.

## LITERATURE REVIEW

According to the American Association for Higher Education service learning is ‘that which helps to promote both intellectual and civic engagement by linking the work students do in the classroom to real-world problems and real-world needs’ (AAHE Brochure, 1997). In order for service-learning to occur there must be a balance between service outcomes and its associated learning goals. The service provided must therefore reinforce the learning while the learning strengthens the service. Learning and service must therefore be reciprocal. (Prentice and Garcia, 2000, p. 19). The students who offered their services at Coppin State Vita obtained a reciprocal learning service experience. They provided services to the community under the supervision of their professors while obtaining learning experience.

Kozeracki (2000) and Brown (1998) found that students’ sense of patriotism towards the

community and empathy increased with service learning. In addition, learning was enhanced and their work skill improved with service learning. Further more critical thinking, self-esteem and work skills were also positively impacted. Student volunteers for the Coppin State Vita were very fulfilled as a result of participation in the VITA program. Students who had already participated in VITA and were no longer required to participate due to the fact that they had already passed the tax accounting course still came to volunteer. Coppin students were very courteous to customers, helped customers with directions and offered assistance as needed. These student volunteers exhibited patriotism confirming the findings of Kozeracki (2000) and Brown (1998).

Accounting programs were being urged to prepare their accounting students adequately for the profession. Accounting Education Change Commission (AECC) recommended that students must be active learners instead of passive information recipient. According to the AECC, in Issues Statement No. 4 (1993), "Students should seek opportunities to obtain firsthand knowledge of the business world and practice environment." According to Zlotkowski (1996) in-class activities though valuable were unable to portray the complexity of real-world situations. Practical experience on the other hand gives students the ability to deal with complex situations. Feedback from employers reported that alumni of the Coppin State University who had undertaken this program exhibited a great depth of knowledge when they entered the field of practice. This can be attributed to their direct experience which enabled higher retention and learning of tax accounting.

Udpa (1996) advocated that a broad based approach should be identified in accounting education, he emphasized "the cultivation of intellectual skills, development of students' ability to communicate their thoughts effectively, both orally and in writing, and a deep understanding of the ethical and social problems that exist in the society in which they function." Coppin State University Accounting students have had first-hand experiences through the VITA during the tax season. Students experienced hands on learning using tax software and practice with real life clients; instead of hypothetical examples in class. Students have learned how to interact with both appreciative and sometimes belligerent customers who may be expecting a refund and have to make a payment instead. Unlike the practice lab or the text-book examples, students interacted with actual clients and this gave them a phenomenal experience which other students who do not participate in VITA do not experience. Most students felt a sense of fulfilment and came back to help when they were no more required to do so because they had completed the tax accounting class and consequently participation was not mandatory. Students' patriotism and empathy towards the community was greatly highlighted during the tax season. Coppin Tax Accounting students went above and beyond their call of duty in assisting the elderly and less fortunate in society, by answering questions, helping customers find parking and other tax filing issues.

The Patient Protection and Affordable Care Act (PPACA) or the Affordable Care Act (ACA), popularly referred to as Obamacare was passed by the United States Congress and signed into law by President Barrack Obama. Since the 1900s, several attempts of legislation was geared towards the provision of health insurance to the low income earners or retirees through the Medicaid and Medicare respectively. Many of these attempts led to massive uninsurance among the small businesses or low income earners. The goal of the ACA was to extend health insurance to millions of the uninsured Americans.

According to the IRS, the Affordable Care Act had "tax provisions that affect individuals, businesses, insurers, tax-exempt organizations and government entities". These provisions mandated that individuals and their dependents maintain health insurance. There were tax

penalties if people did not maintain health insurance. This paper attempts to show a correlation between the Obama Care and Tax refunds of clients at Coppin State University VITA office.

## VITA

The IRS sponsors a volunteer income tax preparation program that allows trained volunteers to prepare taxes of underprivileged individuals for free.

In conjunction with the Internal Revenue Service, the Coppin State University through its Accounting Department in the College of Business participated in Volunteer Income Tax Assistance Program (VITA) in 2016. The program begun in January and ended in April 2016. Coppin State VITA provided free tax preparation services to the underprivileged in the community. This site operated on a first come first serve basis. The University offered office spaces and computers and other logistics such as parking while the IRS offered the software and technical assistance. The Accounting faculty of the university offered training as well as supervision of the volunteers. The volunteers consisted of tax accounting students of Coppin who were required to participate to fulfil their credits for the course. Other students from the University as well as tax accounting students from the Baltimore Community College were allowed to participate. Volunteers were required to pass (grade of 80% or higher) an Ethics and Basic Examination provided by the IRS.

Table 1 below shows performance of the students that participated in the VITA program. All students scored 80% or higher on the examinations. Apart from the IRS Conduct and Basic Exam, the students also took a quiz in taxation and wrote a research paper reflecting on the VITA program.

The program prepared state tax returns from Maryland, Pennsylvania, Delaware, Virginia, North Carolina, New York, and in a few cases, West Virginia, and Porto Rico as well as federal returns. According to Beverly, S.G (2002), the advantages of VITA include firstly tax preparation without paying, secondly VITA sites with ability to e-file make it easier and faster to obtain refunds. Lastly well trained VITA staff help reduce error rates. The community and surrounding areas of Baltimore benefitted from the advantages mentioned by Beverly 2002, the rejection rate for the site was very low, implying very little error; more-over the Coppin State Vita center had the ability to e-file which made clients obtain their refunds faster. The savings through avoidance of tax preparation fees ranged from \$119,328 to \$185,094.

## ANALYSIS

Table 2 shows the customers according to their filling status. Majority of our clients 529 out of the total of 678 filed as singles, while 100 clients filed as head of household. 30 filed as married filing jointly while 18 filed as married filing separately. We also filed for 1 Qualifying Widow. Table 3 shows the federal and state taxes paid, refunds obtained and the tax credit obtained for the clients. Total adjusted gross income was \$13,644,314, while the average adjusted gross income was \$20,090. Federal refunds obtained was \$605,081 while the refund obtained from the state of Maryland was \$208,299. Federal taxes owed was \$19, 628 while the taxes owed to Maryland was \$50,842. Earned income tax credit was \$171,027 and \$76,431 for the federal and state of Maryland respectively.

This paper analyzed whether income and the health insurance coverage (Obamacare) affects refunds/payments of impoverished neighborhood of Baltimore and the surrounding areas

for the year 2016. A regression analysis was run with the dependent variable being the refund/payments obtained by the clients. The independent variables were health insurance coverage and income of the client.

In the regression analysis, Health insurance coverage was represented by the dummy variable Dum Health, this was represented by 1 if client had insurance and 0 if not. Income was represented by the variable Adjusted Gross Income, AGI.

Adjusted Gross Income (AGI) was defined as “Gross Income (GI) minus deductions for AGI. Gross income is a taxpayer’s total income from all sources”. IRS Publication 17. Deductions for AGI is normally referred to as above the line deductions and include moving expenses, health savings accounts, self-employment retirement plans, alimony payments, and higher education expenses and others. Negative Adjusted Gross Income (NAGI) may occur if, a taxpayer in business may has a loss in business. Alternatively, if the total income of a taxpayer is less than total deductions for AGI, this will lead to a negative adjusted gross income. For example, if a taxpayer has a total income of \$10,000 and a total deduction for AGI of \$13,000, there will be a negative AGI of \$3,000. Negative AGI will result in a \$0 taxable income and \$0 tax liability.

The average refund was \$707, the maximum refund obtained by a client was \$8,098, while the maximum re-payment was \$6,543. The average AGI of the client was \$20,124 while the maximum AGI was \$125,744 and minimum was -\$6,737. A dummy variable was used to represent Health Insurance, this was represented by 1 if client had insurance and 0 if not

## RESULTS

Results of the study can be found in Table 5 below. Health Insurance Coverage was represented by the dummy variable Dum Health, which was represented by 1 for those who had insurance and 0 for those without insurance. Health insurance coverage affected positively the refund obtained. 445 times correlated with the refund with a t-statistic of 2.2. The results show that people with health insurance coverage were more likely to obtain a refund than those without. The result was consistent with the Obamacare policy in place in 2016 which penalized uninsured citizens as against insured citizens.

It was found that income though positively correlated with the refunds was insignificant (t-statistic of 0.96). Income was represented by the variable AGI.

## CONCLUSION

Coppin State University was a historically Black College located in Baltimore, Maryland. The University has offered a free tax preparation service to the community since 1998 to 2005 and from 2010 to date.

Residents of the inner Baltimore City and surrounding areas as well as members of the University community used the services of Coppin State VITA. This inner city Baltimore neighborhood was uniquely impoverished and Coppin State VITA therefore brought in approximately one million dollars to the neighborhood through refunds and savings through avoidance of tax preparation fees in 2016.

This paper investigated the refunds/payments of the impoverished neighborhood of inner city Baltimore. Variables such as the income and health insurance coverage was used in the

investigation. It was found that refund and or payment was highly dependent on the health insurance coverage. Clients with health insurance coverage were more likely to obtain a refund. However, the income did not affect the amount of refunds.

The inner city Baltimore area was a uniquely poor neighborhood as shown by the average income of clients based on AGI of about twenty thousand dollars. This study is an addition to the literature because it throws more light on how health care coverage affects poor citizens. Such citizens would not be able to afford expensive tax attorneys. Regulators and other decision makers can use the results of this study for decision making. Future studies would expand the sample to a more diverse sample to see whether results would still hold.

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## APPENDIX

Table 1

Last Name (initial)	First Name (initial)	Student ID	IRS Standards of Conduct%	IRS VITA Basic Exam%	Class Quiz %	VITA Reflection Paper %
B	B	547	100.00%	83.00%	100.1	94
C	S	497	100.00%	93.00%	97.24	95
C	S	786	80.00%	83.00%	94.38	90
C	H	467	90.00%	86.50%	94.38	94
D	T	619	100.00%	83.00%	91.52	90
D	S	574	80.00%	80.00%	97.24	94
E	A	783	80.00%	80.00%	100.1	95
H	T	610	90.00%	83.30%	94.38	90
R	N	946	80.00%	83.30%	71.5	94
T	L	817	80.00%	80.00%	85.8	90

Table 2: Filing Status

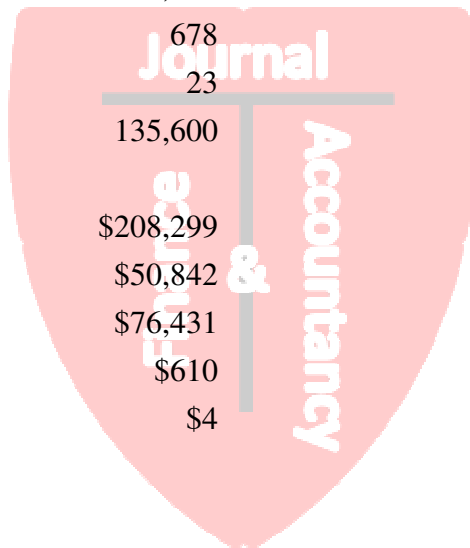
Head of Household	100
Married Filing jointly	30
Married Filing separately	18
Qualifying widow	1
Single	529
Total	678

**Table 3: Federal and State Taxes****Federal Tax Returns**

Federal Refunds	\$605,081
Average Refund	\$700
Total AGI	\$13,644,315
Average AGI	\$20,090
EITC	\$171,027
Child tax Credit	\$23,750
Educational Tax Credit	\$20,372
Tax owed	\$19,628
Electronic Returns	678
Rejects	23
Tax savings	135,600

**State Tax Returns**

Maryland Refunds	\$208,299
MD Tax due	\$50,842
State EITC	\$76,431
MD Tax filing	\$610
Rejection	\$4





**Table 4: Data Statistics**

<i>Refund</i>		<i>AGI</i>		<i>Dum Health</i>	
Mean	707.1725664	Mean	20124.358	Mean	0.907079646
Standard Error	57.39669421	Standard Error	566.74048	Standard Error	0.011157934
Median	536	Median	17750.5	Median	1
Mode	0	Mode	0	Mode	1
Standard Deviation	1494.519984	Standard Deviation	14757.034	Standard Deviation	0.290535129
Sample Variance	2233589.983	Sample Variance	217770055	Sample Variance	0.084410661
Kurtosis	5.309241405	Kurtosis	4.0130608	Kurtosis	5.916723964
Skewness	0.874888	Skewness	1.2540175	Skewness	-2.81056563
Range	14641	Range	132481	Range	1
Minimum	-6543	Minimum	-6737	Minimum	0
Maximum	8098	Maximum	125744	Maximum	1
Sum	479463	Sum	13644315	Sum	615
Count	678	Count	678	Count	678
Largest(1)	8098	Largest(1)	125744	Largest(1)	1
Smallest(1)	-6543	Smallest(1)	-6737	Smallest(1)	0

**Table 5**

<i>Regression Statistics</i>								
Multiple R	0.097152599							
R Square	0.009438628							
Adjusted R Square	0.006503631							
Standard Error	1489.652154							
Observations	678							
ANOVA								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	2	14272530.15	7136265.1	3.215890375	0.040735082			
Residual	675	1497867889	2219063.5					
Total	677	1512140419						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	228.8205226	197.3988426	1.1591786	0.246793273	-158.769078	616.4101228	-158.769078	616.4101228
AGI	0.003730752	0.00389768	0.9571724	0.338822957	-0.00392228	0.011383788	-0.00392228	0.011383788
Dum Health	444.5839516	197.9733183	<b>2.2456761</b>	<b>0.025047523</b>	55.86637736	833.3015257	55.8663774	833.3015257