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ARE MY COLLEAGUES SOFT ON (ACADEMIC) CRIME?

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ABSTRACT:

This paper investigates faculty perceptions about the frequency of student cheating, what kinds of behaviors should be considered to be cheating, and which remedies would reduce academic dishonesty. The survey also queries faculty about their perceptions of the factors that contribute to student cheating. The data for the study were collected at UNC Wilmington in January of 2009 and were used to provide direction for the rewriting of the UNCW student academic honor code. Generally, faculty definitions of cheating are broader than student definitions: faculty believe that student cheating is a major problem and faculty are moderately vigilant in detecting cheating (though they perceive their peers to be “soft on crime”). Policy prescriptions for reducing cheating include building a community of academic integrity and imposing harsher penalties.

THE IMPACT OF INDIANA HORSE RACING ON THE INDIANA ECONOMY, A PRELIMINARY STUDY

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ABSTRACT

This paper reports some of the findings obtained from the survey that was recently conducted regarding the 2009 economic activity of the racing segment of the equine industry. The preliminary results focus on four issues: (1) the direct and indirect economic impact from the horse racing and race horse breeding segment of the equine industry; (2) the direct and indirect impact this industry segment has on employment; (3) the direct and indirect impact this industry segment has on Indiana taxes; and (4) the proportion of expenditures by this industry segment directly in Indiana.

INTRODUCTION

In 1988, the constitutional ban on all forms of gaming in Indiana was removed with a sixty-two percent majority of Indiana voters. In September, 1994, the first pari-mutuel racetrack opened in the state. The racetrack was a combined facility with a casino. From the beginning of pari-mutuel horse racing in Indiana, legislators displayed the foresight to give this fledgling industry a good head start and a solid foundation as it competed with older, more established state racing programs in other states, by providing a share of casino taxes to subsidize purses for the racetracks. A second racetrack and casino was opened and currently the two racetracks, one in Shelbyville, Indiana and the other in Anderson, Indiana continue to function.

In 2007, the Indiana General Assembly passed, and the governor signed into law, a bill that would permit electronic gaming at the state's two pari-mutuel racetracks. This "slots" legislation was the product of unprecedented cooperation and more than ten years of effort put forth by representatives of Indiana standardbred, thoroughbred and quarterhorse racing and breeding associations and the state's two pari-mutuel race tracks in building public understanding of the industry and legislative support for this concept.

With the passage of the slots law, state representatives and senators demonstrated judgment and vision in keeping Indiana dollars in Indiana by promoting the state's homegrown horse racing and breeding industry. The new law reinforced the framework for a growing, productive industry with the intent that it would generate future agribusiness economic activity, revenue and jobs throughout Indiana.

In the campaign for passage of gaming at the tracks, both horsemen and race tracks relied on the results of a 2005 study by the American Horse Council (American Horse Council, 2005) which was based on 2003 data. This study reported a direct economic impact of \$181 million and a total economic impact of \$294 million for the Indiana racing and breeding industry.

For the purpose of quantifying the effects of the 2007 slots law and an accurate representation of the current condition of the industry in the state, all four racing and breeding associations came together and commissioned a survey and business analysis of the racing and breeding industry and its economic impact on Indiana.

METHODOLOGY

The data collection portion of the research involved two surveys that were conducted simultaneously. One survey obtained economic data from the Indiana racetracks for the calendar year 2009 and both Indiana horse racing tracks responded with their data. The second part of the study involved a survey of over 7,000 members of the race horse breeding community requesting their economic data for 2009. The breeder survey resulted in 1,000 responses.

Estimation of economic impact utilizes state specific IMPLAN multipliers to estimate the overall economic impact of the industry on the state GDP and on employment. This platform was selected for several reasons. The IMPLAN modeling system is an input-output model that describes commodity flows from producers to intermediate and final consumers (Hodges 2007). Total industry expenditures, employment compensation, and tax implications can be extracted using this modeling system. It has been in use since 1979 and is currently used by over 500 private consulting firms, university research centers, and government agencies (UNFCCC, 2010). The IMPLAN modeling system combines the U.S. Bureau of Economic Analysis' Input-Output Benchmarks with other data to construct quantitative models. From this data, one can examine the effects of a change in one or several economic activities to estimate its effect on a specific state, regional, or local economy (MIG 2010). The economic impacts of horseracing and breeding related activities were estimated using 2008 IMPLAN multipliers for the State of Indiana. In this study, only the aggregate impact on the State economy was considered. The impact on specific counties or on specific industries was not within the scope of the study.

Results of the Horse Racing Industry Survey

The two racetracks in Indiana, Hoosier Park and Indiana Downs, generated a cumulative income of \$319,136,342 in 2009, paid out purses of \$49,043,165, paid State and local taxes of \$5,106,261, and have an investment of \$155,781,213 in land, facilities, and equipment, of which \$3,042,146 is new real investments. The industry employed 161 full time employees, 765 part time employees, and 596 seasonal employees in 2009, which computes to a full time equivalent of 1,240 employees.

The preponderance of racetrack revenue in 2009 came from wagering and most racetrack wagering revenue in 2009 came from off track and pari-mutuel sources. In 2009, 98% of racetrack revenue came from wagering and 2% came from other sources such as admission fees, concessions, and sale of programs. Of the wagering revenue, only 6% was generated at the track while 94% came from off-track and pari-mutuel wagering. The racetracks engaged in Thoroughbred, Standardbred, and Quarterhorse racing in 2009 with Thoroughbred racing generating 53% of the wagering revenues, Standardbred racing accounting for 44% and Quarterhorse racing the remaining 3%.

An examination of daily wagering revenues by breed provided some interesting facts. Although thoroughbred racing seems to be the big attraction and generates the most revenue as well as the most revenue per day, the Indiana racetracks engage in more days of Standardbred

racing. The Thoroughbreds wagering revenue was \$166,163,798, racing 125 days with \$1,329,310 in revenue per day. Standardbreds wagering revenue was \$127,928,734, racing 160 days and \$799,555 revenue per day. Quarterhorse racing generated \$8,722,966 in wagering revenue, racing 56 days with \$155,767 in revenue per day. These findings tend to indicate the significance of off-track and specifically, pari-mutuel wagering. What is not known, is the amounts that are paid out as expenses from pari-mutuel wagering.

The major expenditure for the racetracks in 2009 was for purses which accounted for 58.2% of reported expenditures. Wages accounted for 18.4% and other categories of expenditures were commission, 6%; veterinary services, 0.5%; maintenance, 1.7%; general business expenses (insurance, utilities, advertising, equipment purchases, and office supplies), 9.1%. Taxes, state and local, accounted for 6.1% of total expenditures.

ECONOMIC IMPACT OF THE HORSE RACING ON THE INDIANA ECONOMY

The economic impact of the industry is measured in several ways. The direct effects come from the reported level of economic activity, expenditures and employment, generated by the industry, The indirect effects are the changes in the State economy generated by the direct effect. The induced effect is the change in employee household consumption expenditures related to the direct and indirect effects. The total economic impact of the industry, as determined by the IMPLAN model is 2,843 employees, \$109,253,392 in labor income, and \$488,356,672 in contribution to state GDP. These estimates are generated using IMPLAN 2010. The horse racing industry in Indiana generates by direct payment as well as from indirect and induced economic activity a total of \$73 million in tax revenues of which \$29 million is in various forms of federal taxes and \$45 million returns in State and local taxes.

Using the IMPLAN model with 2008 data, the projected direct and indirect tax revenue consequences from the economic activity of the racetrack is substantial. State and local tax revenues attributed to the racetrack industry exceed \$45 million while federal tax revenues attributed to the racetrack industry of nearly \$28 million. The resulting tax impact exceeds \$73 million.

RESULTS OF THE RACE HORSE BREEDING SURVEY

A survey of over 7,000 breeders and related operations in the State of Indiana resulted in 1,000 surveys completed and returned. These were the findings:

80 counties were represented in the survey with the most responses from Lagrange County (29), Elkhart County (20), and Allen County (16).

The principal residence of more than 10% of the breeders in the survey was out of state. Thirty-four states were represented in the survey with the most responses indicating Ohio (179), Kentucky (136), and Illinois (113) as the principal residence.

When asked about organizational affiliations, 32% were affiliated with Thoroughbred organizations, 58% with Standardbred organizations, and 10% with Quarterhorse organizations.

When asked about investments in horses, property and equipment since the slots in 2007, 19% indicated the number of horses had increased, while 69% indicated the number of horses had decreases, with 12% indicating no change. The amount of property owned increased for 1% of the breeders, while 68% had decreased property holdings, and 31% had no change in

property holdings. The investment in equipment reportedly increased for 2% of the respondents, decreased for 32%, and was unchanged for 66%.

The number of horses owned in the 1,000 responses, was reported to be 3,365 while 65% of those horses raced in 2009 and 215 of the horses that raced, or 21% had won in 2009.

Most of these horses were kept on the owner's property (68%) while 7% were kept at training facilities and 25% reported other types of facilities held their horses.

The other type of facilities included race tracks (38.4%), other farms (20.5%), fairgrounds (11%), breeding farms (8%), and out of state (15.5%).

The most significant sources of revenue were the purses and breed awards received by the breeders. Of the 1,000 responding in the sample, 586 breeders indicate \$15,400,083 in purses for an average of \$26,280 per winning breeder. Breeders also reported breed awards totaling \$1,569,299 for an average of \$8,622 per breeder reporting these awards. Breeders reported a total income of \$31,682,037 in Indiana which represented a significant part of their total income, since many breeders operate in multiple states

The total expenditures reported by the 1,000 breeders responding to the survey total \$58,193,160 for 2009. Nearly two thirds of the breeders reside outside of Indiana. Of the 1,000 survey responses received, 353 indicated in-state residence and 647 were out-of-state breeders operating in Indiana. The 353 in-state breeders were from 80 counties. Out of the 353 in-state breeders, 82 did not report expenses. The 271 that did report expenses report a total expenditure of \$19,344,954 which is an average of \$71,384 per breeder. Since the sample represents approximately one seventh of the breeders in the State, total expenditures per county were projected based on the number of responding breeders per county. The projections provide a geographical as well as financial picture of the horse breeding industry.

In the breeder survey, 648 responses came from breeders licensed in Indiana but residing in another state. Thirty-four States were represented in the sample. Of the \$58,193,160 in total expenses reported in the survey, \$38,233,324, or 66% is reported by breeders indicating their residence is outside of Indiana, indicating that the breeding industry is also a significant export market for the State of Indiana.

Out-of-State breeders indicate that they earn a substantial portion of the revenue generated by the breeding industry. Of the \$31,682,037 of revenues reported in the survey, \$24,775,875 were reported by out-of-State residents operating in Indiana.

ECONOMIC IMPACT OF THE RACE HORSE BREEDING INDUSTRY ON THE INDIANA ECONOMY

The survey results were tabulated and the total industry parameters estimated by projecting the sample results proportionately to the population. The sample operations indicate a total expenditure of \$58,193,160 for the year 2009 which projects to a total expenditure of \$414,352,120 by the industry in 2009. In a similar fashion, the economic impact of the breeding industry was determined using the IMPLAN 2010 model. The race horse breeding industry generates a total of \$49 million in tax revenue of which \$24.4 million is in State and local tax revenue. This is the total direct and indirect tax effect.

Using the IMPLAN model with 2008 data, the projected direct and indirect tax revenue consequences from the economic activity of the racetrack is substantial. State and local tax revenues attributed to the horse breeding industry exceed \$24 million while federal tax revenues

attributed to the horse breeding industry also exceed \$24 million. The resulting tax impact exceeds \$49 million.

CONCLUSIONS

The year 2009 was a difficult year economically for the economy in general, the state economy, and also the equine industry. The situation in a more stable economic environment may be significantly more positive. One inescapable conclusion emerges from the data and analysis of the report: the State of Indiana is generating extraordinary economic activity from its design of and ongoing investment in the state horse racing and breeding industry.

When viewed from a nation-wide perspective, a racetrack is either expanding or declining, but not standing still. When a racetrack is successful, it can afford to offer larger purses and attract better horses and athletes, drawing in larger incomes from pari-mutuel and off-track wagering, which then affords an opportunity to offer even more attractive purses. When a racetrack is less successful, purses decline and the cycle reverses.

The 2005 American Horse Council study reported a direct economic impact of \$181 million and a total economic impact of \$294 million for Indiana racing industry. The findings of this study five years later indicate \$733 million direct effect with over \$1 billion total impact for the racing industry. The 2005 study reports \$5 million paid in state and local taxes with the current study reporting \$69 million state and local tax revenue. The industry currently generates direct and related employment of 9,865 jobs.

PROSPECTS FOR FUTURE RESEARCH

There are important refinements that need to be made in the study. The preliminary results are a simple extrapolation from the sample. The large proportion of responses from out of state breeders suggests that a closer look at the proportions of inquiries may lead to a more accurate estimate of the impacts. There is also an opportunity to examine more closely the proportion of expenditures by breeders that occur in Indiana and the proportion of off track and pari-mutuel racetrack revenues are from Indiana and from outside Indiana. An additional opportunity is to explore the impacts on specific industries as well as specific counties where these activities occur.

There are several important aspects of the industry that need to be explored. A significant share of racetrack revenues comes from off track and pari-mutuel sources. A significant investment in the breeding segment of the equine industry is from out-of-state interests. These elements indicate that the equine industry is a significant export industry, generating in-state revenues from out-of-state sources. A second factor is the amount and nature of investment spending as real investments have long-lasting impacts on the economy. A third factor is the impact of a relatively infant industry. Although the race tracks have been in operation for several years, the supporting components of the industry are growing and the IMPLAN multipliers tend to be backward-looking and may not properly assess this significant growth element.

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ISSUES IN PERSONAL INJURY AND WRONGFUL DEATH CASES: ESTIMATING LOST EARNINGS CAPACITY OF AN UNDOCUMENTED WORKER

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ABSTRACT

Current estimates show that there are approximately 20 million illegal aliens residing in the United States. Numerous studies have been done to estimate the impact of undocumented workers on the American labor market. A significant number of undocumented workers are employed in sectors of the economy where the risk of injury is higher. With the increasing number of undocumented workers in the U.S. and courts applying the rights of citizens to these persons in personal injury and wrongful death cases the existing practices of estimation require adjustment.

This paper reviews recent court decisions and proposes a process of dealing analysis of the loss experienced by undocumented workers.

THE CONTINUING ROLE OF SWITZERLAND AND THE SWISS FRANC IN INTERNATIONAL FINANCE

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ABSTRACT

Switzerland has had a long and unique role in international business and finance. Investors have historically been drawn towards Switzerland because of their trust in the stability of the Swiss currency. The Swiss economy attracts many international corporations because of its competitiveness on the tax front and its facilitated access to other European countries. This concentration of multinationals in Switzerland has a direct impact on the utilization of the Swiss franc in international finance. Furthermore, individual investors around the world are drawn to invest in Swiss banks, due in large part to the bank secrecy guaranteed in the Swiss Constitution along with special tax advantages offered in several Swiss cantons. The strong infrastructure that supports the Swiss banking system also adds to the attractiveness of Swiss franc investments.

However, the recent financial crisis may have a damaging impact on the reputation of the Swiss banking system. Increased scrutiny is being directed once again at the “Gnomes of Zurich”. In addition, Switzerland’s geographic and economic position within the heart of Europe has fostered speculation on Switzerland possibly joining the European Union. This article examines the past and present role that Switzerland and the Swiss franc have played in the high stakes world of global finance and postulates what its future involvement might be.

INTRODUCTION

Given the growth in globalization over the past few decades, international trade has become increasingly important. For most of the twentieth century and beyond, the U.S. dollar has been THE leading international currency, both in terms of its role as the leading foreign reserve currency and its presence in international transactions. Other currencies, most notably the British pound, Japanese yen, Deutsch (German) mark, and Swiss franc have also played significant roles in the global economy. Since 1999 the Euro has operated as the common currency within the European Monetary Union, replacing the Deutschmark and other European currencies. The Euro has consequently become the second most important currency behind the U.S. dollar. Given its geographical proximity to various members of the European Union (EU) and its economic ties to its neighbors, increased scrutiny has been directed at the likelihood of Switzerland joining the EU, as well as the possible future of the Swiss franc, vis-à-vis, the Euro.

Switzerland and the Swiss franc

It is commonly acknowledged that “modern” Switzerland began in the 1840s with the acceptance and implementation of a new constitution. This constitution gave the country a more centralized administration, transforming the formerly independent canton regions into a single economic area. Important aspects of the constitution included the creation of a strong, unified

banking system and the adoption of a common currency, the Swiss franc, for all of the Swiss cantons. The economy encountered some early difficulties, but overall Switzerland has flourished under the new constitution.

The Swiss have remained neutral but after World War II began to join international bodies such as the European Free Trade Association. With Switzerland having limited natural resources and being landlocked, it depends heavily on foreign trade. However, Switzerland has stayed out of the EU, maintaining that its interests can be guaranteed without joining the EU due to the various bilateral agreements it has with its neighbors, along with the benefits of operating under the Free Trade Agreement of 1972 (State Secretariat for Economic Affairs, n.d.).

The Swiss franc: Reserve, traded or investment currency?

The Swiss franc has been and continues to be a major international currency. But to what does the term “major international currency” refer? One can look at currencies from several perspectives. First, one can examine the volume with which individual currencies are traded in the global markets. Second, one can look at the amount of currency held as bank reserves, for example, how many Swiss francs are being held as reserves by foreign banks. And finally, one can focus on the amount of money invested in accounts labeled in a specific currency such as the size and scope of investments made by non-Swiss entities in Swiss securities accounts.

The Swiss franc as a traded currency

Only seven currencies (the U.S. dollar, Euro, Japanese yen, British pound, Australian dollar, Swiss franc, and Canadian dollar) make up the bulk (87.6 percent) of foreign exchange trading worldwide. The list is dominated by the U.S. dollar and the Euro, which make up approximately sixty percent of all foreign exchange trading. We find that the Swiss franc is currently the sixth most highly traded currency in the world, accounting for around 6.4 percent of daily transactions (Bank for International Settlements, 2010).

The Swiss franc as a reserve currency

As a reserve currency, the Swiss franc is clearly not among the most widely held currencies. Reviewing the currency composition of official foreign exchange reserves, one finds that Swiss francs currently make up less than 0.1% of the total reserves. Nonetheless, given its historical importance, it is interesting to note that the IMF continues to list the Swiss franc within its statistical summary of international reserve currencies (International Monetary Fund, 2010).

The Swiss franc as an investment currency

It probably goes without saying that Switzerland is best known as a haven for foreign investment. However, investing in a country does not always mean investing in that country’s currency. We therefore use the more generic “assets under management” when examining the issue of investments managed within specific countries. The total volume of cross-border private banking at the end of 2009 was \$7,400 billion with Switzerland being the global leader with approximately \$2,000 billion under management, or 27 percent of the market. In comparison, the rapidly growing financial centers of Singapore and Hong Kong have only a 9% share (\$700

billion) between them (Swiss Bankers Association, 2011). Although not all of the assets managed by Swiss banks are held in Swiss francs, the existence of vast holdings within the Swiss banking market indicates the important role that Switzerland maintains in global finance.

The continuing importance of Switzerland and the Swiss franc

The importance of Switzerland and the Swiss franc can be attributed to various factors. Switzerland offers a strong and stable economy. The Swiss have managed to foster steady economic growth while consistently maintaining low rates of inflation. Indeed, the stable Swiss economy is a key factor explaining why investors look to invest in Swiss francs.

A second factor helping the Swiss franc maintain its importance is the presence of many large and globally-diversified companies domiciled in Switzerland. Looking at the number of corporations headquartered in Switzerland and knowing that one-third of Swiss GDP comes from the activities of multinational corporations, one can see why Switzerland and the Swiss franc continue to play major roles in the global economy (SCC, 2007).

The important role that commerce plays can be explained from several perspectives. First, Switzerland's business friendly legal and fiscal environment is a common reason cited by many international firms moving to Switzerland. The Swiss-American Chamber of Commerce reports that remaining competitive on the tax front is among the key steps necessary to ensure that multinationals stay in Switzerland (SCC, 2007). Second, the stability of the Swiss economy and the Swiss franc is attractive to multinational corporations looking at Switzerland. Third, Switzerland has geographical benefits as it is centrally situated within the European Union area. Furthermore, the Swiss proclivity toward maintaining high standards results in it being a very good test market for businesses hoping to introduce products in Europe (Parsons, 2003). Using Switzerland as a base for operations leads companies to often rely on the Swiss franc as a trading currency. The use of the Swiss franc is bolstered by Swiss accounting standards that are specially adapted to facilitate the currency translation process.

Switzerland is well known as a location that attracts wealthy investors from around the world. This can be explained by various aspects of the Swiss constitution that appeal to rich investors (Federal Department of Finance, n.d.). For example, bank secrecy is a policy under which the identity and amount of money invested by people in Swiss financial institutions are kept private. Likewise, there are specific Swiss cantons that are known to target wealthy investors. These cantons offer tax breaks specifically designed to benefit the wealthiest from around the world (Kirchgassner, 2009). The number of wealthy individuals who have emigrated to Switzerland over the years is a testament to their success.

Last but certainly not least, Switzerland has a state-of-the-art banking infrastructure. It is likely that Swiss banking know-how, together with its technological expertise, are leading criteria for global investors looking to move their funds. Investors trust the Swiss banking system as one of the safest places to invest money. It is impossible to know to what extent the quality of the Swiss bank infrastructure accounts for Switzerland's success in banking. But Switzerland has always been known for its use of the most modern facilities and technologies and has always been able to anticipate market demands in terms of financial products and technologies.

Future role of the Swiss franc

What will become of the Swiss franc? This is a complex issue that can be examined from many perspectives. We have noted that Switzerland offers a complex mix of factors that explain why investors have historically looked there for investment purposes. However, in the near term, we see that the current financial crisis has had and will likely continue to have a negative impact on the Swiss banking system. This may reduce the prominence of Switzerland and the Swiss franc in the global marketplace. We find that since 2007 there has been a significant outflow of funds from Switzerland. Foreign investments in Swiss securities accounts have declined by about 40 percent since their peak in 2007, a loss of some \$460 billion, while domestic investments are down only around 25 percent, a loss of \$145 billion (Swiss National Bank, 2010).

Similarly, Swiss economic policies have come under fire, most notably from the U.S. but also from some of its European neighbors. The main target has been UBS (the Union Bank of Switzerland), probably the largest manager of private wealth assets in the world. For example, the U.S. Treasury department has negotiated the transfer of names of many American customers who allegedly had illegal investments in UBS bank accounts. The crucial importance of bank secrecy is therefore being pierced with unknown consequences for the future role of Swiss banks managing the financial affairs of foreign investors.

The long-term fortunes of Switzerland likely revolve around whether or not Switzerland would be willing to join the EU and the ability of the Swiss franc to remain independent of the Euro. We have shown that Switzerland offers unique advantages in promoting itself as a financial center, advantages that can only be maintained if it remains neutral and stays outside of the EU. Indeed, joining the EU would force the Swiss to abide by its requirements. Even if, as with the British, Switzerland joined the EU without joining the currency union, a variety of costly adjustments might endanger the role Switzerland plays as a leading economy and the role of the Swiss franc as a major international currency.

But what is the likelihood of Switzerland to join the Euro? Joining the euro would benefit the Swiss economy in two key areas: lower transactions costs from not having to exchange currencies and less uncertainty in valuing transactions, as the majority of business activities would be denominated in Euros. However, adopting the Euro could cause Switzerland to lose a significant amount of seigniorage that it currently exploits due to some of the boutique value placed on Swiss francs. Investors may not be as willing to look at Switzerland if some of the unique benefits of the Swiss franc and Swiss banking system are negated by a move to the Euro.

SUMMARY AND CONCLUSION

This paper highlights the importance of Switzerland in international trade and finance. The continued role of Switzerland and the Swiss franc is being threatened by the current financial crisis that has damaged some of the reputation of the Swiss banking system. Even as the Swiss franc continues to be heavily traded in the global foreign exchange markets, we observe massive capital outflows from Switzerland, particularly from foreign private investors. It is difficult to say if this drop in confidence in the Swiss financial markets will last long term, but if it would, the survival of Switzerland as a major, independent player in the global financial markets will be in jeopardy.

If this happens, Switzerland might need to consider joining the EU. If it did join, even without adopting the Euro as its currency, Switzerland will likely suffer from losing some of its

comparative advantages in making itself relevant in the global marketplace. The Swiss banking system and the Swiss franc might therefore become nothing more than components necessary for maintaining well-diversified international portfolios rather than as significant players attractive to corporate and private investors alike.

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A DEMOGRAPHIC STUDY OF SOUTH AFRICAN ATTITUDES ON TAX EVASION

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ABSTRACT

A number of studies have examined the relationship between tax collection and various demographic variables. However, until recently most of those studies have involved a United States sample population. The Internal Revenue Service provides demographic data for researchers on a regular basis. The present study goes beyond those studies in several important ways. For one, it uses data on South Africa taken from the World Values database. Not much work has been done on the South African tax or public finance system. Thus, the present study expands on the very limited research done on South African public finance.

The present study expands on existing literature in at least two other ways as well. For one, it examines how various demographics interact with attitudes toward tax evasion. Secondly, we examine several demographic variables that were not examined in prior studies.

One of the questions in the World Values database asked whether it would be justifiable to cheat on taxes if it were possible to do so. Respondents were asked to choose a number from 1 to 10 to indicate the extent of their support for tax evasion. This study examines those responses, both overall and through the prism of more than 20 demographic variables. A trend analysis is also done to determine whether South African attitudes regarding tax evasion have changed in recent years. A comparison is made with other ethical issues to determine the relative seriousness of tax evasion.

The study found that attitudes toward the justifiability of tax evasion often do vary by demographic variable. Tax evasion was found to be a less serious offense than accepting a bribe, suicide or wife beating, equally as serious as prostitution, and more serious than receiving government benefits to which you are not entitled, avoiding a fare on public transport or euthanasia. The trend of opinion on the justifiability of tax evasion has been nonlinear. It is more acceptable in the most recent survey than it was in 1996 but less acceptable than it was in 1990 or 2001.

Although the present study focuses on South Africa, the methodology used in the present study could serve as a template for research on other countries or regions.

INTRODUCTION

Tax evasion has been in existence ever since the first person with sufficient authority attempted to extract tribute from some local population (Adams, 1982, 1993; Webber & Wildavsky, 1986). The topic of tax evasion has become multidisciplinary over the decades, expanding from economics and public finance journals into the fields of accounting, taxation, law, sociology, psychology and other behavioral sciences.

The present study focuses on attitudes toward tax evasion in South Africa. Not many studies have been made of South African public finance and even fewer of attitudes toward tax evasion in South Africa. One study that was made of South African attitudes toward tax evasion was a survey of 191 South African university business students (McGee & Goldman, 2010). That survey included a survey instrument that listed 18 arguments that had been used to justify tax evasion through history. Students were asked to choose a number from one to seven to indicate the extent of their agreement or disagreement with each statement.

The strongest argument to justify tax evasion was in cases where a large portion of the money collected was wasted. The second strongest argument was in cases where the tax system was perceived to be unfair. The next two strongest arguments had to do with oppressive governments – where the taxpayer lived in a repressive regime such as Nazi Germany or Stalinist Russia, or where the government discriminates because of race, religion or ethnic background. Other strong arguments justifying tax evasion were in cases where the taxpayer was unable to pay, where the government imprisons people for their political opinions, where a significant portion of the money collected winds up in the pockets of corrupt politicians, their friends and families, where the proceeds go to support an unjust war, where tax rates are too high or where funds are spent on projects that the taxpayer morally disapproves of. That study also found that women were more opposed to tax evasion than men, in some cases significantly.

That study also examined the relationship between age and attitude toward tax evasion. The findings were curious, in the sense that they were different from what was expected. Participants in the younger age group (under 25) were more opposed to tax evasion in 10 of 18 cases, whereas the older group (25-40) was more opposed in only 8 of 18 cases. However, in three of those 18 cases the older group was significantly more opposed to tax evasion. The difference in mean scores in the other 15 cases was not significant.

The age findings were curious because they run somewhat contra to the findings in other cases where age was examined. In most other studies that examined age in conjunction with various ethical issues, the older groups were more respectful of the law than were younger groups (Barnett & Karson, 1987, 1989; Longenecker et al., 1989; Harris, 1990; Kelley et al., 1990; Ruegger & King, 1992). Yet in this 2010 South African study, the younger group was more strongly opposed to tax evasion than was the older group in a majority of cases. However, the differences in mean scores were not significant in the cases where the younger group was more opposed, but the scores were significant in three cases where the older group was more opposed. Part of this lack of tidiness regarding the results could be attributed to the fact that the older group was not that much younger than the younger group.

The prior South African study also examined ethnicity and found that whites were more strongly opposed to tax evasion than Africans in 17 of 18 cases. Mean scores were significantly different in four cases. Other ethnic groups were not included in the statistical calculations due to small sample sizes.

The 2010 South African study also examined religion. The only two religions that had a sufficiently large sample size to compare were Catholics and Other Christians. Catholics were more opposed to tax evasion in 10 of 18 cases. Other Christians were more opposed in 7 cases. In one case, both groups had the same mean scores. None of the differences were significant. The authors of that study speculated that some of the mean score differences might have been significant if the sample size had been larger.

The 2010 study also examined student status as a variable. There were three categories – diploma students, undergraduate and postgraduate students. The diploma students were less

opposed to tax evasion than were the other two groups. However, only one difference in mean score was significant – the ability to pay argument. In that case, undergraduate students were more opposed to tax evasion than were the other two groups.

The 2010 study also examined academic major. Management majors were more opposed to tax evasion than economics and finance majors in 11 of 18 cases. However, none of the differences in mean scores were significant. Other business majors were excluded from the mean score comparison because of small sample size.

One good thing that can be said about student surveys, from the researcher's perspective, is that the data is relatively easy to gather. One limiting factor is that the results of student surveys may not be applicable to a wider population. Students are generally younger and more educated than the general population. However, student surveys are a legitimate and popular research methodology and such surveys do make positive contributions to the literatures of many disciplines.

The present study is more than a mere replication of the 2010 South African study. The present study uses the *World Values* survey data that was gathered in South Africa. The sample size is much larger, nearly 3,000. The demographics are also much broader and include a wide range of age groups, races, cultures, occupations, marital status, education and social levels. Because of its comprehensive nature, the present study breaks new ground in several ways. For one, it is more comprehensive than other studies of the South African population. It also examines more demographic variables than any other South African study and also includes more variables than studies of other countries. The methodology used in the present study can be a template for studies of attitudes toward tax evasion in other countries or regions.

METHODOLOGY

Groups of social scientists all over the world have been conducting coordinated surveys of the world's population since the 1980s. Some surveys have solicited the opinions of more than 200,000 people in more than 80 countries. The surveys included hundreds of questions on a wide range of subjects. One question in the most recent surveys addressed attitudes toward tax evasion:

Please tell me for each of the following statements whether you think it can always be justified, never be justified, or something in between: Cheating on taxes if you have a chance.

The range of responses used a 10-point Likert Scale where 1 = never justifiable and 10 = always justifiable. The surveys collected data on a number of demographic variables, including level of education, gender and age. The present study uses the data gathered in the most recent survey on South Africa. The sample size was nearly 3,000.

More than 20 demographic variables are examined using t-tests and ANOVAs to determine whether any differences are significant at the 5 percent level. The ANOVA was used to analyze mean score differences between groups as a whole. The ANOVA scores are reported in the "b" tables. T-tests were sometimes made to compare the mean scores of two particular groups. Those scores, where made, are reported in the "a" tables.

Relative Seriousness of Tax Evasion

The next test was to determine the relative seriousness of tax evasion. The *World Values* surveys collected data on a few other ethical issues. Tables 27a and 27b show the results. Tax evasion was found to be less serious of an offense than accepting a bribe, suicide, or wife beating and more serious than prostitution, claiming government benefits to which you are not entitled, abortion, avoiding a fare on public transport, homosexuality, euthanasia, or divorce. The ANOVA found the difference between groups to be significant at the 1 percent level ($p < 0.0001$).

H27: Tax evasion is equally as serious as other acts.

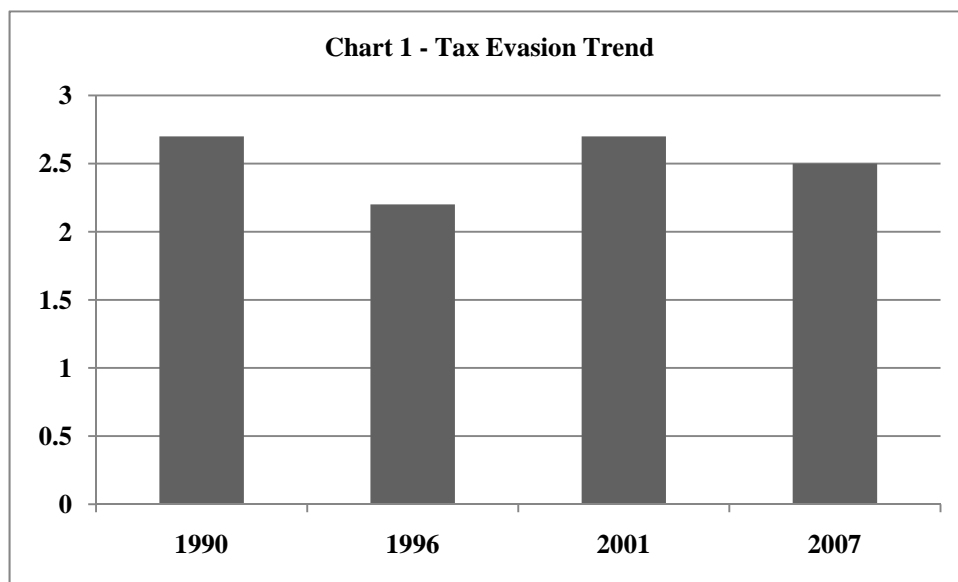
H27: Rejected.

Trend Analysis

Data on South Africa was gathered in four waves of surveys. A trend analysis was done to determine whether attitude on tax evasion has changed over time. The results in Tables 28a and 28b show that the attitude has changed, but not in a lineal pattern. People were most opposed to tax evasion in the 1996 survey and were least opposed in the 1990 and 2001 surveys. Between 1990 and 2007, opposition increased, then decreased, then increased again. The ANOVA found that the difference between groups was significant at the 1 percent level ($p < 0.0001$). Chart 1 shows the trend.

H28: People are just as averse to tax evasion now as they have been in the past.

H28: Rejected.



CONCLUDING COMMENTS

This study found several interesting relationships between attitude toward tax evasion and more than 20 demographic variables. It is perhaps the most comprehensive demographic study of South African attitudes toward tax evasion done to date. The methodology used in this study can also serve as a template for studies of other countries and regions. Some of the demographic variables included in this study have not been used in prior studies, which break new ground and may serve as the basis for further research into these variables.