

FAT TAX AS AN ALTERNATIVE TAX IN SOUTH AFRICA

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ABSTRACT

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The so-called 'fat tax' has become a controversial topic debated in recent years not only as a means of curbing behaviour that leads to obesity but also because of its potential for revenue creation especially in view of the global economic downturn.

Not only has South Africa been found to have the highest rate of adolescent obesity in Africa as well as astoundingly high obesity rates amongst adults, but the economic crisis has not left South Africa unscathed. Furthermore, the new National Health System which is to be introduced will increase the need for additional tax revenues. Therefore, it is necessary to consider whether 'fat taxes' should be instituted in South Africa to curb behaviour, or to increase tax revenues, or whether a combination of the two options should be introduced.

Very little research has been done on taxing less healthy foods as an alternative source of revenue, or as a means of altering behaviour in South Africa. With the economic downturn, governments in many developed nations have considered or instituted these taxes as an additional source of income. Obesity rates have skyrocketed in many countries and this excise duty has, therefore, also been used to entice people to buy healthy foods.

The purpose of this study is to determine whether 'fat taxes' should be considered as an alternative tax in South Africa with regard to behavioural effect and revenue creation, and what other considerations should be taken into account before 'fat taxes' can be instituted.

This study discussed the potential of 'fat taxes' to generate much needed additional tax revenues for the South African government as well as its potential to be used as a tool to decrease the rising rates of South African obesity and thus improve the general health of South Africans.

Keywords:

Fat tax

Excise Duty

Sin taxes

Paternalism

Obesity

OPSOMMING

VETBELASTING AS 'N ALTERNATIEWE BELASTINGVORM IN SUID-AFRIKA

deur

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Die sogenaamde 'vetbelasting' het gedurende die afgelope aantal jare ontwikkel in 'n uiters kontroversiële debat, beide ten opsigte van die moontlikhede wat dit vir vetsug inhou asook die inkomste genererende potensiaal wat dit in die huidige globale ekonomiese insinking kan inhou.

Daar is bevind dat Suid-Afrika nie alleen die hoogste adolessente vetsugkoers in Afrika het nie maar ervaar ook in dié verband uitsonderlike hoë koerse onder volwassenes. Die wereldwye ekonomiese krisis het ook nie die Suid-Afrikaanse ekonomie ongeskonde gelaat nie. Die nuwe Nasionale Gesondheidstelsel wat ingestel gaan word sal ook die behoefte aan addisionele belastinginkomste verhoog. Dit is dus noodsaaklik om ondersoek in te stel na die vraag of 'n 'vetbelasting' nie in Suid-Afrika oorweeg moet word om ongewenste gedragspatrone te verander, of inkomste uit belastings te verhoog nie, of om beide opsies te oorweeg.

Uiters min navorsing is in Suid-Afrika gedoen op die heffing van belasting op ongesonde voedsel as 'n alternatiewe inkomstebron of as 'n instrument om gewenste gedragsverandering te weeg te bring. Met die ekonomiese afswaai wat tans ervaar word het verskeie regerings van ontwikkelde lande so 'n belasting ondersoek of ingestel as 'n addisionele bron van inkomste. Vetsugkoerse het in baie lande die hoogte ingeskiet en dié vorm van aksynsbelasting is met sukses aangewend om mense aan te moedig om meer gesonde voedsel te koop.

Die doel van hierdie studie is om vas te stel of 'vetbelasting' in Suid-Afrika oorweeg moet word as 'n alternatiewe belasting om gedragspatrone te verander, om addisionele inkomste te genereer asook watter ander oorwegings in ag geneem moet word voordat 'n vetbelasting ingestel kan word.

Hierdie studie bespreek die potensiaal van 'n 'vetbelasting' om dringende addisionele inkomste vir die Suid-Afrikaanse regering te genereer, asook die waarde van 'vetbelasting' as 'n instrument om toenemende vetsug in Suid-Afrika te beïnvloed en sodoende die algemene gesondheid in die land te verhoog.

Sleutelwoorde:
Vetbelasting

Aksynsregte
Sondebelasting
Paternalisme
Vetsug

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FAT TAX AS AN ALTERNATIVE TAX IN SOUTH AFRICA

CHAPTER 1

BACKGROUND AND PROBLEM STATEMENT

1.1 BACKGROUND

"In this world nothing can be said to be certain, except death and taxes" is a frequently quoted opinion expressed by Benjamin Franklin in 1789 (*Answers.com:Wiki Answers* 2011). According to Creighton (2010:123) in modern times it might be more suitable to amend this well-known statement to include an additional certainty, namely obesity. Certainties are, therefore, no longer limited to death and taxes but obesity should be added to the list.

Taxes have been an encumbrance throughout the ages. There are records of taxes being imposed on Sumerians, Mesopotamians and Egyptians dating from approximately 2500BC. According to Sharlach, Silverman and White (2002), these early taxes were not paid in currency as in modern times, but took the form of live-stock, grain and even manpower in the form of manual labour.

Sin taxes are not a new notion either. In the 16th century, Pope Leo X of Florence, legalised prostitution and then taxed the prostitutes by means of a sin tax to fill his coffers and live in luxury. Peter the Great taxed men who chose to sport a beard in the 18th century. In 1791 a sin tax on alcohol was imposed in Pennsylvania by Alexander Hamilton, the American patriot (Altman, 2009:1). Hamilton's tax was the first known sin tax that was enforced, not only to increase state revenue, but also to decrease the consumption of a harmful consumer good (Green, 2010:68).

Just as in the time of Alexander Hamilton, the imposition of sin taxes today tend to be construed, often quite correctly, as a tax on behaviour and used by governments as a tool to encourage self control instead of as a mere source of revenue creation (Green, 2010:72-73).

The latest sin tax that has been debated and in some cases initiated in countries around the world is the controversial 'fat tax' (Hunter, 2004:68). There are many differing

expressions which refer to this type of excise duty. McColl (2009:797) refers to it as *'fat tax'*; *'junk food taxes'* or *'soda tax'*, Kuchler, Tegene and Harris (2005:7) refer to this type of tax as a *'snack tax'*, while Sheu (2006:2) notes that the tax is sometimes referred to as a *'twinkie tax'* or a *'selective food tax'*. In essence all these terms imply that an excise duty or a sin tax on high fat, high sugar, in its various forms, foods and components thereof is imposed. In certain instances taxes on advertising these commodities are also categorised as a form of fat tax (Weiss and Smith, 2004:383).

According to Powell and Chaloupka (2009:231), the number of American states which have instituted some kind of fat tax in the form of taxes on soft drinks, candy or snack foods had risen to forty by 2008. They also state that 34 states impose a tax on soda drinks, while 30 states have a tax on candy, 29 states tax chewing gum and 15 states earn revenue through the tax on potato chips.

Although candy, soft drink and snack food taxes have been in use for quite some time and have been studied by various writers, the imposition of the first recorded true fat tax was only announced on the 1st of October 2011 according to Mike Rayner, the Director of Oxford University's Health Promotion Research Group (Molland, 2011:1). This ground-breaking tax, which is based on the amount of saturated fat in foods, was introduced in Denmark by Prime Minister Helle Thorning-Schmidt (Best, 2011:1).

Fat tax has become a controversial topic of debate. According to Strnad (2004:1232), people tend to believe that the choices they make regarding risks to their own personal health should not be interfered with by anyone, but should be made at their own discretion. This view is termed "*consumer sovereignty*".

In strict contrast to the view of "*consumer sovereignty*" (Strnad, 2004:1232) the idea that a government enforces control through sin taxes is referred to as '*paternalism*'. The concept of paternalism refers to the policies designed by those in power, such as the government, to alter the behaviour of the people who are subject to them into making choices which are more preferable according to the authorities (O'Donoghue and Rabin, 2006:1840). An example of paternalism is that of the tax on cigarettes which is instituted in order to decrease the prevalence of smoking.

It can be said that fat tax truly brings the issues of paternalism and self-control into focus. Many people view this form of intervention from their governments as directly trying to control what they can and cannot consume leaving them with the impression of living in a 'nanny state' (Brownell and Warner, 2009:259-294). The idea does not sit well with many, but there is sound reasoning behind their point of view and it does generate great support from many spheres.

Obesity claims more or less 300 000 victims annually in America and is said to be likely to cause as many if not more deaths than smoking if no appropriate intervention is put in place (The elephant in the room ... 2003:1161-1184).

To a certain extent sin taxes are meant to alter the behaviour of taxpayers, especially the poor who cannot afford to be spending on sin goods (Caraher and Cowburn, 2007:1242-1249). In South Africa hardly any research on the behavioural effects of sin taxes has been done. Since most of the research in this field was confined to environments found in developed economies factors, such as extreme poverty, divergent cultures and other variables prevalent in developing countries, have not been factored into available research.

It is clear from Green's (2010) study that sin taxes have been in existence for a long time. Rising obesity rates have highlighted the need for a tax on high fat, high sugar content foods as statistics show that addiction to food and obesity in general may cause more deaths than cigarette smoking (The elephant in the room ... 2003:1161-1184). Powell and Chaloupka (2009:229-251) point out just how widespread the use of fat taxes have become but do not indicate what the relative effectiveness of these taxes have been in terms of either revenue creation or behavioural changes.

It is important to determine whether the underlying objectives of sin taxes and more specifically fat tax have been reached and whether these objectives were intended to alter consumer behaviour or merely to generate additional revenue. Caraher and Cowburn, (2007:1242-1249) are of the opinion that sin taxes are tools used to alter the behaviour of taxpayers whereas Sanson (2005:10) stresses the fact that sin taxes are often used merely to increase governments' tax revenues.

1.2 PROBLEM STATEMENT

The purpose of this study is to determine whether fat tax should be considered as an alternative tax in South Africa with regards to its behavioural effect, its revenue creation potential and what other possible considerations would need to be taken into account before fat taxes are introduced.

1.3 RESEARCH OBJECTIVES

1. To determine which factors contribute to the behavioural effects of sin taxes and ultimately fat taxes in other countries and to compare these factors to the situation in South Africa in order to establish whether fat taxes may have a potentially positive behavioural effect in South Africa.
2. To ascertain whether sin taxes and fat tax which have been instituted in other countries primarily to raise government revenue have been successful and whether these taxes could be an effective revenue creating tool in South Africa by taking certain local considerations into account.
3. To briefly look at a limited number of other factors which may affect the decision of whether or not a fat tax would be appropriate for South Africa.

1.4 METHODOLOGY

This study consists of a literature study. The main focus is on fat taxes. This literature study has been done in the form of a case study by way of researching multiple cases in the available literature. The end result consists of a comparative study of this literature.

Since a substantial amount of research on fat tax is available from mostly American and European writers it was possible to use these studies as a basis for the design of this study. The information was collected mainly from the internet, the relevant databases, journals, internet platforms and other electronic sources which are available to university students as well as general websites which are available to the public.

Fat tax may be implemented for different reasons. It is either intended to curb the behaviour of consumers or to supplement tax revenue. It can also be employed to serve as a counterbalance to other taxes to create relief in other areas. The nature of these

different approaches is discussed and attention is given to which possible approach to fat taxes, if any, might be the more appropriate one in South Africa.

1.5 LIMITATIONS OF THE STUDY

This study focuses on the behavioural and revenue creating potential of sin and fat taxes and will also consider a number of other considerations. It does not, however, take all potentially relevant considerations into account and consequently there may be certain potentially decisive factors which have been omitted from the study.

1.6 UNDERLYING ASSUMPTIONS

For purposes of this study, it is assumed that people's tendency towards addiction found in studies conducted in first-world countries will not differ significantly from that found in studies of South African consumers.

1.7 IMPORTANCE AND BENEFITS OF THE PROPOSED STUDY

Very little research has been done in South Africa regarding excise duties on less healthy food as an alternative tax revenue creating tool or as a means of altering behaviour.

With the economic downturn, many developed nations have considered or instituted these taxes as a revenue creation fiscal tool. Furthermore, obesity rates have skyrocketed in many countries and, therefore, this particular type of excise duty has also been used to entice people to buy healthier foods.

The need for additional tax revenues may increase even further if the envisaged National Health System is introduced in South Africa. This study addresses the question of whether fat tax should perhaps be considered as a valuable source of much needed additional revenue in South Africa or whether fat tax might not also contribute towards a healthier South African population.

1.8 DEFINITION OF KEY TERMS

1.8.1 Excise duty

Excise duties are defined as taxes levied on particular products and services, typically with discriminatory intent (Osoro, Mwinyimvua and Mpango, 2005:1–25). According to the *Business Dictionary.com* (2011) excise duties are a tax levied on goods which are locally produced, such as tobacco products or alcoholic beverages. These taxes are most commonly imposed at a fixed percentage when manufactured, used or sold. Sin taxes are sometimes used as a synonym for excise duties.

1.8.2 Price elasticity

The price elasticity of a product is a measure of the rate of change in demand for the product in response to a change in the price of the product. It is calculated by dividing the percentage change in the quantity demanded by the percentage change in the price of the product concerned. The price elasticity of any good would be smaller than one if the percentage change in demand is less than the corresponding percentage change in price. The greater the price elasticity, the smaller the required percentage change in price is to bring about a desired percentage change demand (Leicester and Windmeijer, 2004:12).

1.8.3 Waist circumference

The measurement of the circumference of a person's waist is one measure of obesity. If a person's waist circumference exceeds a measure of 94cm for a man and 80cm for a woman, it is known as abdominal obesity (Malhotra, Hoyo, Ostbye, Hughes, Schwartz, Tsolekile, Zulu & Puoane, 2008:315).

Table 1: Abbreviations used in this document

Abbreviation	Meaning
BMI	Body Mass Index
VAT	Value-Added Tax as defined by the Value-Added Tax Act 89 of 1991

1.9 BRIEF CHAPTER OVERVIEWS

In Chapter 2, the historical use of sin taxes to curb behaviour is examined. The chapter then focuses on the role of modern sin taxes which have been instituted for behavioural change.

The extent to which the sin and fat taxes which have been instituted in other countries have reached their objectives with regard to behavioural change is considered.

The factors which affect behavioural change are analysed in order to determine their effect on changes in behaviour. The factors considered are education, self-control and addiction. Each factor is separately discussed and the importance of each is considered.

The extent to which education may be considered as an important factor in affecting health choices is considered. The effects of self-control on decision-making and individual health is emphasised, the role of addiction in sin taxes is pin-pointed, and the external effects of addiction to cigarettes and alcohol are highlighted. How governments have chosen to intervene through paternalism and the importance of the sin taxes in the use of cigarettes and alcohol are also looked at in greater detail.

The current obesity epidemic in other countries is highlighted and then compared to relevant statistics in South Africa. Factors associated with obesity, which are unique to South Africa, are then investigated in order to establish whether a fat tax might be applicable or appropriate to bring about behavioural change in South Africa.

In Chapter 3, the revenue generating potential of fat taxes is highlighted. The historical uses of fat tax to generate revenue in times of economic difficulty in the past are focused on and it is considered why so many different fat taxes have already been instituted in other countries to generate revenue. The current economic downturn and its effects on global economies are pointed out and examples are provided of how fat taxes have assisted in providing fiscal relief to countries affected by the economic crisis.

The effectiveness of fat taxes in other countries, as an income generating tool, is then considered and the potential of similar taxes within the South African context with its unique economic and social difficulties is investigated.

Chapter 4 focuses on a limited number of factors which may affect a potential decision to institute a fat tax in South Africa. These factors are the difficulties inherent in the levying of fat tax, the regressive nature of fat taxes and how a fat tax may affect certain industries.

It is shown that the levying of a fat tax may prove to be an exceptionally difficult and expensive exercise and if not done correctly may prove to be too expensive to be worth the effort. The way in which other countries currently implement fat taxes is also investigated.

The chapter delves into the regressive nature of a fat tax and the differing views of various authors regarding whether a fat tax is truly regressive or not is discussed.

The manner in which industries might react to fat taxes as an important factor is examined, and the ways in which industries have historically reacted to sin taxes is also emphasized. Lastly, the possible effect of a fat tax on certain industries is discussed and the ramifications of this for industries should a fat tax be implemented is pointed out.

1.10 CONCLUSION

Taxes date back to about four and a half millennia, almost as long as recorded civilisation. Benjamin Franklin said that death and taxes are the only certainties in life but due to the rise in the prevalence of obesity, it too can now be considered to rank as one of the certainties in life according to Creighton (2010:123).

Excise duties first appeared five centuries ago. Taxes are, on the whole, used by governments to generate revenue but excise duties are more often seen as taxes on destructive behaviour and are often tools used by governments to alter behaviour (Green, 2010:72-73).

According to Powell and Chaloupka (2009:231) 40 states in America have instituted taxes on candy, soda drinks and snack foods but until recently none of these taxes were levied on the saturated fat content of foods. The imposition of a tax on saturated fat content was recently announced in Denmark (Molland, 2011:1).

Strnad (2004:1232) stated that because of “*consumer sovereignty*”, people tend to resent any form of interference in their consumer choices. The use of paternalism to curb the consumption of unhealthy food may be necessary as it has been found that obesity causes more deaths than smoking America (The elephant in the room ... 2003:1161-1184).

The revenue-generating potential of fat tax is capturing the interest of countries that are keen to increase their government’s tax revenue (Sanson, 2005:10). It would have to be considered whether this would also be applicable to South Africa.

Not only has the need for additional revenue created an interest in fat taxes, the prevalence of obesity has also lead many countries around the world to consider measures to improve the health of their citizens. Recently, the South African Minister of Health has also started to focus on issues of obesity. The extent to which the same need to curb the behaviour of people in order to reduce obesity exists in South Africa, and whether measures such as sin taxes may be useful in South Africa.

CHAPTER 2

THE POTENTIAL OF SIN AND FAT TAXES AS INSTRUMENTS FOR BEHAVIOURAL CHANGE IN SOUTH AFRICA

2.1 INTRODUCTION

“If behavior is immoral, then we should abolish it. If abolition is not possible, then taxation is the next best thing” according to Newman (2003:5).

Van der Merwe and Pepper (2006:315) point out that the World Health Organisation has recognised obesity as a chronic disease. Seiders and Petty (2004:153) state that obesity causes as many deaths in America as smoking. Topping (2011:1) has predicted that without any intervention, 70 per cent of those who live in Britain will be obese by 2050.

There are various issues which influence behavioural change and decision-making. For instance, the level of schooling attained by an individual may influence their ability to reason and therefore affect decision-making (Gelbach, Klick and Stratmann, 2007:7-8). Self-control is an issue on which the literature on sin taxes focuses strongly. According to O’Donohue and Rabin (2006:1832) self-control is important because a person who has a problem with self-control tends to over-indulge as consumers. Addiction is another factor which is quite prevalent in the literature on sin taxes. According to Koch (2004:368) addiction is stronger than rationality and Black (1982:1-183) is of the opinion that people believe that they are excluded from the norms of addiction.

2.2 FACTORS AFFECTING BEHAVIOURAL CHANGE AND CHOICES

Sin taxes are often used to curb the behaviour as well as to affect the decision-making of people (Caraher and Cowburn, 2007:1242-1249). Various factors which may have an influence on behaviour and decision-making are discussed in the literature on sin taxes.

The factors affecting decision-making are primarily the following:

- Education (Gelbach *et al*, 2007:7-8),
- Self-control (O’Donoghue and Rabin, 2006:1832), and
- Addiction (Chaloupka and Warner, 1999:14).

2.2.1 Education

The level of education may be a contributing factor to the choices that are made and therefore to the behaviour of individuals. According to Gelbach *et al* (2007:7-8), people who are better informed are more likely to take non-monetary concerns into account for decision-making.

Gelbach *et al* (2007:8) state that it is likely that a person with a higher level of education will be more aware of the health risks involved in eating unhealthy food and would therefore be more likely to take them into consideration. Part of Gelbach *et al*'s (2007) paper comprises a comparison of the price sensitivity (elasticity) of an individual's demand for food and his or her level of education. The study found that persons who did not complete high school were more likely to be sensitive to food prices than concerned about the content of the food.

The study by Malhotra *et al* (2008:319) found that different researchers came to opposing conclusions regarding the correlation between price sensitivity and the level of education. A study by Senekal, Steyn and Nel (2003:112) corroborated the findings of Gelbach *et al* (2007) in that persons who have not reached a certain level of schooling were more likely to be obese. However, a study by Mishra, Arnold, Semenov, Hong, and Mukuria (2006:1364) found that more literate persons are more likely to be obese. Pasquet, Temgoua, Melaman-Sego, Froment and Rikong-Adie (2003:558) on the other hand, reported no link between the level of education and obesity.

As stated by Malhotra *et al* (2008:319), there are such conflicting findings regarding education as a behavioural factor that no conclusions can be drawn on whether or not education truly has an effect on behaviour and decision-making. Therefore, it will not be further considered in this study.

Although the authors of the literature on sin tax disagree on the effects of a person's education on their decision making, most writers concur that self-control plays a significant role in decision-making (Gelbach *et al*, 2007:33).

2.2.2 Self-control

The issue of self-control forms an important part of the literature on sin tax. Many writers focus on this because it is either the main reasoning behind, or at least a major factor contributing to the existence of sin taxes.

An example which illustrates the importance of self-control is found in research by O'Donoghue and Rabin (2006:1832), in which they show that people with problems of self-control are naturally more inclined to over-consume commodities and have a total disregard for its negative effects on their health. Whereas those with good self-control would not be subject to similar tendencies.

According to O'Donoghue and Rabin (2003:187), most people have “present biased preferences”. This entails that they tend to seek immediate gratification regardless of their personal view of this behaviour or the longer term implications of their actions.

This is further emphasized by Gelbach *et al* (2007:33) who in referring to obesity and over-consumption in America, point out that many people opt to ignore the benefits of healthy eating and exercise and prefer to satisfy their short-term fulfilment with unhealthy food and inactivity. This exact same concept of people's tendencies towards immediate gratification is also demonstrated in further research by O'Donoghue and Rabin (2006:1826).

Based on the literature of O'Donoghue and Rabin as well as Gelbach *et al* it can be said that self-control takes a back seat to immediate gratification and therefore the lack of self-control is an important contributing factor to people's behaviour and decision-making.

There are various models of self-control and addiction in the literature on sin taxes. It appears that self-control and addiction are often viewed as synonymous in studies on sin taxes as some researchers state that either people are not always realistic about the addictiveness of products and overestimate their ability to control themselves, or they choose to be addicted or underestimate their own susceptibility to addiction (Chaloupka and Warner, 1999:14).

2.2.3 Addiction

As stated in O'Donoghue and Rabin (2003:186) "Most adults in most situations make better choices for themselves than others would make for them". This is based on the assumption that a normal sane person would take all applicable consequences into consideration before making a decision.

The truth is that addiction predominantly occurs when people underestimate their own susceptibility to addiction and the addictiveness of the product (Chaloupka and Warner, 1999:14). It is expressed in Black's (1982:1-183) book on addiction and the effects of addiction on families. She points out that individuals believe that addiction will never affect them and that they will never become part of the statistics on addiction.

According to Koch (2004:368) even rational people may become addicted to commodities, albeit their harmfulness to health. In Becker and Murphy (1988:675) it is stated that the current benefit gained from consumption must outweigh the perceived consequence of consumption. This could be said to mirror the arguments of O'Donoghue and Rabin (2003:187) regarding immediate gratification.

The concept of addiction and people's willingness to pay for a substance which is harmful to their health, is best illustrated by the smoking of cigarettes. In Koch (2004:371), it is noted that young people base their decision to smoke on whether they can currently afford it, their expectation of its future affordability, and their opinion of whether they will become addicted, as well as the range of products which are currently available to them. However, as Black (1982:1-183) points out, people tend to believe that they are excluded from the norms of society and thereby underestimate the addictive nature of products. Due to this addictive nature of cigarettes, if people are willing to pay for cigarettes when they are young, they are more likely to be willing to pay for them later in life as well (Koch, 2004:371).

Addiction by its very nature, more often than not, overrides rationality or common sense (Koch, 2004:368) and, therefore, significantly affects behaviour. Due to this tendency, there seems to be justification for governments to intervene and try to curb such behaviour. Such actions by government are referred to as 'paternalism' (O'Donoghue and Rabin, 2006:1840).

2.3 HOW SELF-CONTROL PROBLEMS AND ADDICTION LEADS TO THE NEED FOR PATERNALISM IN SIN TAXES

From the arguments of O'Donoghue and Rabin (2006:1836) as well as those of Koch(2004:381), it is clear that due to problems relating to addiction and self-control issues, people do not or, occasionally cannot, control their consumption. The costs to society in general are vast. This supports the argument that the government should try to curb people's consumption through paternalism, such as imposing sin taxes.

Paternalism is frequently considered to be at the cost of personal freedom (Mytton, Gray, Rayner and Rutter, 2007:693) and an infringement rather than a safeguard to citizens. This could quite easily be counter-productive to any attempts by governments to influence consumer behaviour due to the negative connotation attached to such actions (Alderman, Smith, Fried and Daynard, 2007:102).

The controversy around the arguments of O'Donoghue and Rabin (2006:1825-1849) is that people do not agree with the notion that the government should be allowed to influence their behaviour. It is unfortunate, but many feel that it is necessary as not only is the person who is consuming the commodity disadvantaged, but others are as well. Once again referring to the example of cigarettes, not only is the smoker affected, but because of the second-hand smoke effect which is inevitably produced, others are affected as well. Thus, there are clear externalities involved in smoking because others may be harmed in the process as well.

The use of sin taxes in an attempt to change behaviour is not a strategy construed by modern governments, but has been in use for quite some time.

2.4 HISTORICAL USE OF SIN TAXES TO CURB BEHAVIOUR

The Puritans in Massachusetts were the first to use sin taxes, not only for revenue creation, but also to curb behaviour. They taxed everything that they considered luxurious, from certain foods, sugar and spices to clothing, tobacco and liquor (Green, 2010:68-69). Historically sin taxes eventually changed from a revenue creating tool into a tax to alter the behaviour of consumers.

The use of sin taxes to curb behaviour did not end with the Puritans, but governments worldwide, including the South African government, have been taxing goods to curb behaviour ever since. The best examples of paternalism currently being enforced by many governments, including South Africa, are the sin taxes on tobacco and alcohol (Van Walbeek, 2003:1-12).

2.5 CURRENTLY INSTITUTED SIN TAXES: CIGARETTES AND ALCOHOL

Currently the most widely instituted sin taxes are on tobacco and alcohol. These sin taxes are designed, similarly to the taxes of the Puritans, to discourage the consumption of the items that are being taxed (Green, 2010:69).

It could be said that the main appeal of modern sin taxes, is the health benefits which they promote (Chaloupka and Warner, 1999:7). Modern sin taxes tend to be targeted at goods which are known to be addictive and, therefore, these taxes may assist people in controlling their addictions (Chaloupka and Warner, 1999:12-14).

2.5.1 Tobacco and Cigarettes

The reasoning behind the taxing of cigarettes is that the smoker is not the only one affected by their choice to smoke. The second-hand smoke which is inevitably produced affects the health of others as well as the smokers themselves. Therefore, the external effect of smoking is that others may be harmed as well (O'Donoghue and Rabin; 2006:1825-1849).

Due to the addictive nature of cigarettes, once a person has become dependent on them, they are exceedingly more likely to continue purchasing them irrespective of continually rising prices (Chaloupka and Warner, 1999:7).

Originally tobacco taxes were introduced for revenue reasons only. Only later did the health consequences of smoking, propelled by research showing that excise duties could be effective to decrease the consumption of tobacco encouraged governments to start taxing tobacco products more vigorously (Powell and Chaloupka, 2009:250).

According to Chaloupka and Warner (1999:7) the prevalence of smoking is definitely decreased by an increase in the price of tobacco products. Therefore, it can be concluded that sin taxes on cigarettes have the desired effect on the behaviour of smokers by reducing the incidence of smoking.

Van Walbeek (2003:8) found that the implementation of taxes on cigarettes in South Africa have been effective in curbing the demand for cigarettes. In this regard, he found that a decrease in consumption of approximately 6 per cent occurred for every 10 cents of tax added to the price of a packet of cigarettes in South Africa.

The use of sin taxes in South Africa, and elsewhere, to curb behaviour is not limited to sin taxes on cigarettes but is also applied to alcohol.

2.5.2 Alcohol

Myers, Parry and Thiede (2003:137) state that the reasoning behind the taxation of alcohol in South Africa is that it has been found that the over-indulgence of alcohol may place a heavy burden not only in a social context, but also on the health-care system of a country. This is a financial burden arising from the treatment of those who have become addicted, the costs associated with necessary emergency services due to “alcohol related trauma” and other complications resulting from the over indulgence in alcohol and also the cost of treating those who have “alcohol-related psychiatric problems”. Myers, *et al* continue to state that it is estimated that alcohol is involved in approximately 54 per cent of road accidents in South Africa and is also involved in a further 74 per cent of injuries resulting from violence in South Africa.

Moore (1995:5) states that there is some evidence to prove that the increase in the price of alcohol resulting from taxes may contribute to restricting the degree and frequency of moderate to heavy alcohol consumption. He also states that alcohol tax should decrease the demand, particularly among young drinkers, as they tend to be more sensitive to price increases. Similarly, he points out that it may also decrease the number of road accidents.

The addictive properties and health impacts of cigarettes and alcohol around the world and in South Africa have been very well documented, as well as the health consequences from

second-hand smoke and the potential consequences of alcohol abuse on others. It needs to be established whether there are any similar factors which are applicable to certain foods or obesity as a result of food that may necessitate the introduction of a fat tax.

2.6 WHY THERE MAY BE A NEED FOR A FAT TAX IN TERMS OF ITS BEHAVIOURAL EFFECT

Cigarettes and alcohol are universally acknowledged as being addictive and that is part of the reason why sin taxes are levied upon these products. It is, however, unclear whether the same would apply to food. In Frascella's (2010) study it was revealed that the latest research shows that food and certain ingredients in food are addictive.

Strnad (2004:1227) states that researchers have found that "physical inactivity results in nearly as much morbidity and mortality as cigarette consumption". He is also of the opinion that obesity in America has reached epidemic proportions. According to Chouinard, Davis, LaFrance and Perloff (2005:4), the percentage of overweight and obese Americans rose from 45 per cent to 65 per cent between 1960 and 2002. The study emphasises the need for fat taxes, as self-control and decision-making seem to be influenced by external factors which are beyond the individual's control and food addiction could possibly play a significant role in these statistics.

2.6.1 Food Addiction

Green (2010:73) states that highly refined carbohydrates may result in addictions similar to the addictions to tobacco and alcohol. A study found that the brain responses of obese persons to food were very similar to the response of a known cocaine addict's brain when a dose of the drug is administered (Richards, Patterson and Tegene, 2007:311). According to this study, it was found that it was not specific foods that were found to be addictive, but rather certain components and the chemistry of these components, such as sugars or fats.

Obesity is very often the end result of food addiction and much of the literature on fat taxes states that obesity is the main contributing factor to many diseases associated with eating patterns, such as hypertension, heart disease and other diseases (Cawley, 2006:70). It is therefore necessary to define the term 'obesity'.

2.6.2 Defining obesity

The measure of obesity is a difficult issue. In Gelbach *et al* (2007:1-52), they use the Body mass index (BMI) to establish unit of measurement.

Body mass index is defined by Leicester and Windmeijer (2004:1) as the quotient of a person's weight in kilograms divided by their height in metres squared. It is often referred to as 'BMI'. This calculation is mirrored by Looek, Wilders, Strydom and Ellis (2010:86).

A healthy BMI determined by The World Health Organisation ranges between 20 and 25. (Malhotra, *et al* 2008:316) whereas a BMI in excess of 25 is classified as overweight, 30 and greater is classified as obese and a BMI exceeding a reading of 40 classifies a person as morbidly obese.

Obesity in its most extreme form is referred to as morbid obesity. The effects of obesity are magnified to the nth degree in cases of morbid obesity (Leicester and Windmeijer, 2004:2).

According to Gelbach *et al* (2007:1-52) the measurement of BMI is often criticized on account of the fact that it only considers height and weight in its measurement.

An additional measurement of obesity is used in the study by Malhotra *et al*. In this South African study the measurement of the circumference of the waist is also used to indicate obesity. This measure is known as the measure of abdominal obesity (Malhotra *et al*, 2008:315). According to Malhotra *et al* abdominal obesity occurs when the waist circumference of an individual exceeds certain limits. These limits are 94cm for males and 80cm for females.

Another measurement of obesity referred to by Du Toit and Van der Walt (2009:17) is the measurement of the body fat percentage.

Obesity rates are soaring around the world according to Seiders and Petty (2004:153) and obesity has been acknowledged as an epidemic which causes as many deaths in America as smoking.

2.6.3 Obesity as an epidemic

In 2008 it was estimated that approximately 1.6 billion people around the world are overweight and that roughly 400 million adults can be categorized as obese (Lemmens, Oenema, Klepp, Hendriksen and Brug, 2008:446).

In the United States of America alone it is estimated that there are nine million children over the age of six who are obese (Alderman *et al*, 2007:90). Health risks coupled with obesity include asthma, high blood pressure, diabetes, heart disease and depression to name only a few (Cawley, 2006:70).

If the statistics portrayed by Seiders and Petty (2004:153) are considered it is apparent why obesity is regarded as an epidemic. Even though it appears that obesity and food addiction are different to cigarettes and alcohol in that the use of these products does not directly or blatantly affect others, obesity does in actual fact, have an impact on others. Obesity results in massive health risks and this in turn results in the creation of costs which are borne by the government or private medical funds and ultimately the taxpayer. These can be referred to as the externalities of obesity (Strnad, 2004:1232).

2.6.4 Externalities of obesity

Although at first glance the effect of obesity on others is not immediately evident, it does not mean that there are no externalities to obesity. It is argued by some that although obesity and unhealthy eating habits lead to a high mortality rate, it is different to the use of cigarettes and alcohol because its consumption does not affect others. In actual fact, a significant external effect that is being overlooked is the huge burden placed upon society in terms of health costs due to obesity-related conditions (Strnad, 2004:1232).

It was found by Hayne, Moran and Ford (2004:391) that productivity costs and direct health care costs are created when large numbers of the population are obese. Hayne *et al* continued to state that society at large has to bear a part of the costs incurred due to the bad health decisions of the few.

This is re-iterated by Finkelstein, French, Variyam and Haines (2004:169) who state that a large part of medical costs related to obesity is borne by the government and therefore in

the final instance by the taxpayer. Powell and Chaloupka (2009:233) state that obesity also causes increases in medical aid premiums because of the extent of the costs solely created by obesity. They furthermore state that in the long run, productivity losses from obesity can also create a drop in tax revenue for the government and, therefore, a need for higher tax rates.

Due to the externalities created by obesity it would be prudent to consider what causes obesity in an attempt to see what possible preventative measures can be taken.

2.6.5 Causes of obesity

There is a fine balance between how much energy is obtained through the consumption of food and drink versus how much energy is expended through one's everyday activities. When more energy is conserved than is expended this causes a gain in weight which may ultimately lead to obesity. In most cases the cause of obesity is, therefore, an excess intake of energy (Alderman *et al*, 2007:91).

Research has shown that a diet consisting mainly of foods which are high in calories without regular physical activity results in obesity. Economic factors such as time constraints and a limited budget also affect the prevalence of obesity (Baum & Joliffe, 2007:3).

According to Chouinard *et al* (2005:4), factors, such as employment status, level of income, the physical nature of one's work and other employment influenced factors may contribute to obesity. It has also been found that a decrease in food prices influences obesity quite significantly. Hayne *et al* (2004) also concludes that environmental issues, such as the availability of convenience food and a drop in food prices perpetuate the problem because of the higher food consumption.

It has been established that obesity is the most prevalent where processed food is more readily available to consumers. It has also been found that an increase in portion size has probably increased the daily calories consumed and, therefore, contributed to the obesity epidemic (Cawley, 2006:71–73).

If a fat tax is considered as a tool to control over-consumption and obesity (Alderman *et al*, 2007:91), it is critically important to know how much an increase in the price of a food would affect its consumption. This concept is referred to as price elasticity. If an increase in price significantly decreases consumption, then it may have an impact on the prevalence of obesity (Schroeter, Lusk and Tyner, 2005:21).

2.7 PRICE ELASTICITY OF GOODS TAXED UNDER FAT TAX AND BEHAVIOURAL CHANGE

Price elasticity is an important focus point in many studies on fat taxes. Price elasticity shows to what extent an increase in the price of a product affects a consumer's demand for the product (Wall, Mhurchu, Blakely, Rodgers and Wilton, 2006:518).

According to Schroeter *et al* (2005:21) the effectiveness of a tax in changing the behaviour of consumers would be greatly dependent on the elasticity of demand for the unhealthy food. If a good is taxed and a close substitute with the same high calorie level is readily available, then consumers are likely to simply switch to the untaxed good, thereby making the tax less effective than desired. However, determining the elasticity of demand for unhealthy food in South Africa will be very difficult as there is only limited information available on the subject.

The expensive prices associated with healthy food may also play a large role in the unhealthy food choices made by consumers. Therefore, taxing food on a nutrient basis could be a possible solution to alter consumer choices (Wall *et al* 2006:518).

If consumers are inclined to purchase less unhealthy foods because of a fat tax which has been levied on these foods, thereby reducing obesity, it can be concluded that these taxes have been effective in terms of behavioural change (Fletcher, Frisvold and Teft, 2010:29). It would be useful to consider the experience other countries might have had in this regard.

2.8 THE EFFECT OF FAT TAXES ON BEHAVIOURAL CHANGE AND DECISION_MAKING IN OTHER COUNTRIES

Fletcher *et al* (2010) did a study in the United States on the effectiveness of fat taxes on the population's weight control by comparing the effects of the institution of fat taxes on the overall BMI of the population. It was found that fat taxes on soft drinks would have an impact on the weight of individuals. The scale of the impact would, however, be relatively small due to the current low rates at which these taxes are imposed. The study suggests that there would be a definite decrease in the overall BMI of the population. It was found that a 1 per cent fat tax would decrease BMI by approximately 0.003 points (Fletcher *et al*, 2010:29).

The effect of fat taxes on lower income groups is greater. Fletcher *et al*'s (2010) research shows that a 1 per cent fat tax can decrease obesity by 0.08 per cent and overweight by 0.1 per cent in the case of lower income groups. Higher income groups are affected to a smaller degree showing a decrease of only 0.05 per cent in obesity and 0.08 per cent decrease in overweight (Fletcher *et al*, 2010:30).

It is interesting to consider that cigarettes are taxed at an alarming 58 per cent where currently soda is taxed at a mere 3 per cent. Fletcher *et al* (2010:32) speculate that should taxes on soft drinks be increased to the level of 58 per cent a decrease in obesity of 0.7 per cent is possible.

Strnad (2004:1274) is of the opinion that a fat tax is primarily meant to change the behaviour of consumers and there should, therefore, not only be a tax on unhealthy food, but also a subsidy given on healthy food to ensure a more pronounced effect on behaviour. Certain states in America which have instituted fat taxes have set aside all or part of the money raised by fat taxes for specific purposes. Interestingly enough, none of them have earmarked this revenue to subsidize healthy foods (Jacobson and Brownell, 2000:854).

Obesity is rampant and behavioural change may become necessary. As stated before, tobacco products are taxed but Seiders and Petty (2004:153) have pointed out that obesity causes as many deaths as smoking in the USA. Obesity rates are climbing in South Africa

and it might be time to ask why the South African government does not impose a tax on those foods which, when over- consumed, could lead to obesity.

2.9 THE NEED FOR A FAT TAX IN SOUTH AFRICA

South Africa's Minister of Health, Dr Aaron Motsoaledi's speech on 7 September 2011, emphasized the need for South Africans to adopt healthier lifestyles (Get healthy, urges Motsoaledi 2011). This is clear evidence that South Africa is serious about the need for behavioural change in terms of health and obesity. The Minister stated that South Africans need to pursue healthier life styles through exercise, healthy eating and avoiding tobacco. He also indicated that this may decrease the prevalence of diabetes and hypertension in the population.

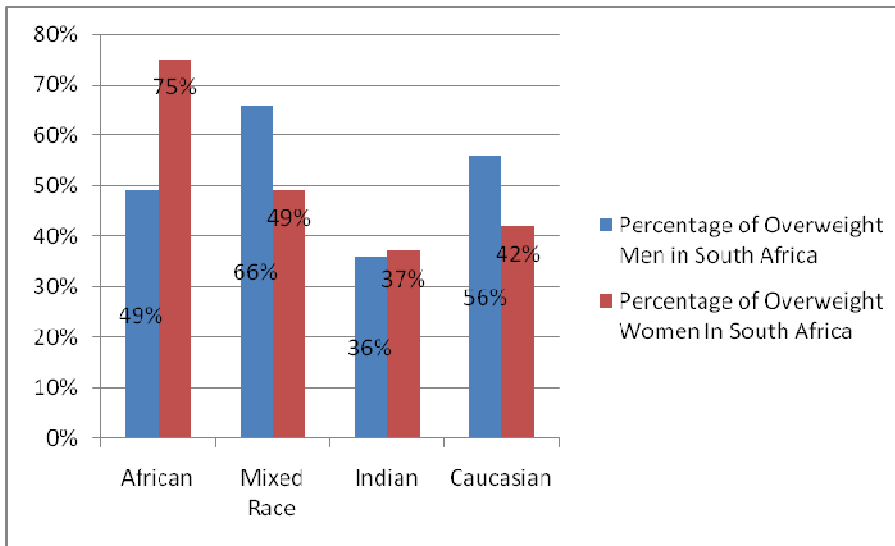
2.9.1 Obesity in South Africa

With the sweetness of success when a third world country becomes more affluent comes the bitterness of the problems which industrialised nations have to face. One of these issues is obesity (Reddy, Resnicow, James, Kambaran, Omardien and MBewu, 2009:204).

In terms of the 2011 budget speech the South African Government is planning on spending R113 billion in the 2012 fiscal period on health-care alone.

Van der Merwe and Pepper (2006:315-316) found that there were exceptional differences in the rates of overweight amongst different racial groups. African females were found to have the highest incidence of overweight at 75 per cent, close on their heels were mixed race males at 66 per cent incidence of overweight. Caucasian men were next at 56 per cent while African males and mixed race females were on par at 49 per cent. The three groups with the lowest incidence of overweight were Caucasian females, Indian females and Indian males at 42 per cent, 37 per cent and 36 per cent respectively. (see **Figure 1**)

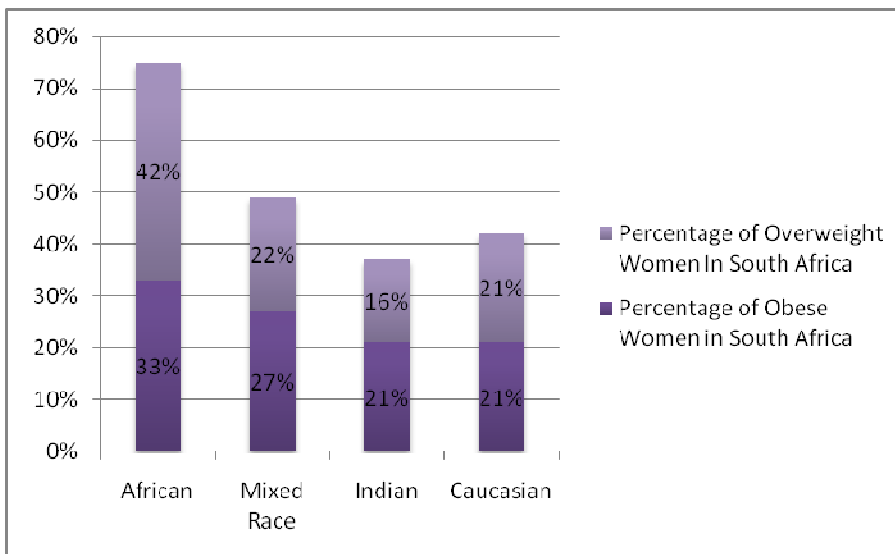
Figure 1: Statistics of overweight persons in South Africa by ethnic groups



Source: Adapted from van der Merwe and Pepper (2006:315-316).

Only a certain percentage of the persons who were overweight were also found to be obese. Although there were large differences in the incidence of overweight amongst different racial groupings, the rate of obesity is similar amongst different racial groups. In African females 33 per cent were found to be obese while the incidence of obesity in mixed race females was 27 per cent. Indian and Caucasian females had the same incidence of obesity at 21 per cent (Van der Merwe and Pepper, 2006:320) (see **Figure 2**).

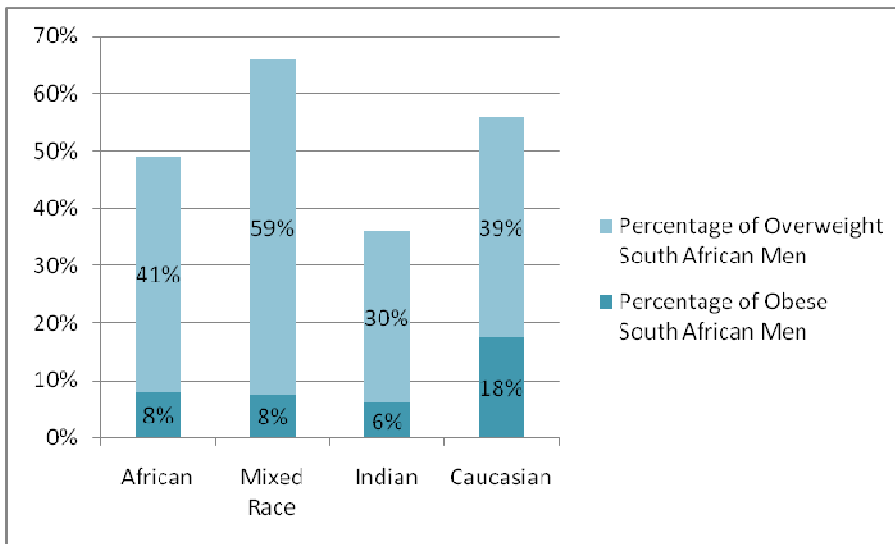
Figure 2 Breakdown of obesity versus overweight statistics of South African women by ethnic groups



Source: Adapted from Van der Merwe and Pepper (2006:320).

The incidence of obesity amongst South African males is substantially lower than obesity among females, with the exception of the Caucasian male population who are at 18 per cent only marginally lower than the 21 per cent of their female counterparts. The obesity rates of African and Mixed Race males are both at 8 per cent while Indian males have the lowest incidence of obesity at only 6 per cent (Van der Merwe and Pepper, 2006:315-316) (see **Figure 3**).

Figure 3: Breakdown of obesity versus overweight Statistics of South African men by ethnic groups



Source: Adapted from Van der Merwe and Pepper (2006:315-316).

Loock *et al* (2010:83-89) carried out a study on South African women between 30 and 65 years of age. From this study it was deduced that one in three South African women who participated in the study could be classified as obese. Astoundingly the average BMI of South African women aged 55 to 64 was found to be 29.8. This average is very high considering a BMI reading above 30 is regarded as obese. Such a high BMI increases the health risks of these women (Loock *et al*, 2010:83).

According to Reddy *et al* (2009:206) the rates of obesity among adolescents in South Africa are the highest in Africa and are reaching similar rates to those of industrialised nations.

In general, in the Western world, it is considered a personal failure if you are overweight or obese (Seiders and Petty, 2004:156). In a South African context, that view is contradicted since there are certain cultures amongst particular ethnic groups which purposely seek to be obese (Bateman, 2007:490).

2.9.2 Culture and its effects on obesity in South Africa

Bateman's (2007:490) study found that a staggering 15 percent of obese black South African women, rated themselves as 'underweight' in a questionnaire while almost none of the white women who participated in the study, considered themselves to be underweight. Obesity in South Africa is, therefore, also a matter of perception and culture.

Bateman (2007:490) also found that obesity is partly sought after in African culture not only for the social significance that is associated with it, but also because it is assumed that obesity signals an HIV negative status. This is an extremely unfortunate and destructive myth which could have various negative consequences.

Furthermore, Malhotra *et al* (2008:315) found that there is an incorrect perception in South Africa of a healthy obesity. Research has proven that no such thing exists. As demonstrated by the data set out in Figure 1, African women are statistically the most overweight group by far and the myth of benign obesity is the most prevalent amongst them.

As in Bateman's study, Malhotra *et al's* (2008:319) study found that only a small percentage of overweight African women who participated in their study actually viewed themselves as overweight. This is due to the African culture which views being overweight as an attractive attribute. It is "*associated with respect, dignity and affluence*".

2.10 CONCLUSION

There are various factors which influence behavioural change and choice, such as education, self-control and addiction. Due to the conflicting findings of different studies, education was found not to be a reliable influential factor. Self-control was found to be an important factor in terms of behaviour and choices and it was concluded that self-control

falls short of the effects of addiction on behavioural change as it was clearly shown that addiction by its very nature may generally override rationality and common sense.

Due to self control and addiction being such significant contributing factors in behaviour and choices, the Government in South Africa and governments elsewhere have chosen to intervene in the form of paternalism to endeavour to alter the behaviour of people. There has been a mixed reaction to intervention in the form of paternalism, as many feel it affects their personal freedom and this may create a negative connotation to any implementation of new sin taxes.

Historically sin taxes were first used to generate revenue but with time they became a tool to affect consumer behaviour. Currently sin taxes are being levied mainly on addictive goods. The most widely instituted sin taxes are on cigarettes and alcohol. Research has established that sin taxes on both cigarettes and alcohol have decreased demand for these products and therefore effectively influenced behaviour and the choices of consumers.

It has been found that the addictive nature of food or certain components of food can be compared to those of cigarettes and alcohol. It was also discovered that obesity can be as deadly as smoking and has now been acknowledged as an epidemic in the United States of America.

The main externality of obesity is the large burden placed on society due to the massive additional costs incurred in obesity-related diseases. Governments have to spend huge amounts on health-care and private medical aid contributions are inflated by the additional costs of obesity.

It was established, that fat taxes have been effective to reduce weight in the United States of America and that higher fat tax rates could have a much more favourable impact on the problem of obesity.

Figures 1, 2 and 3 clearly revealed why South African rates of obesity and overweight can be compared to those of industrialised nations. It was, however, found that even though the rates of obesity are comparable to western nations, certain aspects of the diverse

South African cultures are completely different from those in the western world. Western cultures attach a distinct negative stigma and shame to obesity whilst some segments of African culture view obesity in a favourable light.

Fat taxes were generally seen as an effective behaviour changing tool in countries which have instituted them. South Africa is beginning to face similar challenges to the United States with regard to obesity and its related diseases and, therefore, a fat tax in South Africa may be a worthwhile tool in order to positively affect obesity rates in the country. Cultural differences peculiar to South Africa may, however, affect the efficacy of a fat tax on behaviour and choices.

Although fat taxes are often proposed in order to change behaviour, it has been instituted in many countries to raise revenue for the government. The economic crisis has magnified the need for additional revenue generating tools and fat taxes could effectively be used as an alternative source of revenue.

CHAPTER 3

THE POTENTIAL OF SIN AND FAT TAXES FOR REVENUE CREATION IN SOUTH AFRICA

3.1 INTRODUCTION

Sin taxes and fat taxes are most often promoted by governments for their behaviour curbing merits but they should not only be considered as a means of promoting the health of the taxpayer but could also be considered as a way of supplementing a government's tax revenue.

According to Leonhardt (2009:1) governments are currently not managing to obtain enough revenue from the taxes which are in place due to the worldwide recession. Sin taxes and fat taxes might be the easiest and least controversial way for countries to increase their tax revenue without it being to the detriment of their citizens. Fat taxes, therefore, might assist in solving the difficult question currently faced by so many governments, namely, where to obtain the finances to make up their fiscal shortfall.

The possibility that a revenue creating tax may significantly curb consumer purchasing because of the price elasticity of the goods which are being taxed, has to be taken into account before a decision can be made as to whether a fat tax should be instituted for revenue creation since it may not create enough revenue to be a useful revenue generating tool for government (Chouinard *et al*, 2005:1).

3.2 PRICE ELASTICITY OF GOODS TAXED UNDER FAT TAX AND REVENUE CREATION

If people are not affected by the increase in the price of goods to which a fat tax has been attached and they continue purchasing unhealthy food even though it costs more, a fat tax would be more likely to prove to be a reliable source of revenue for the country. The converse is true and even though the intention of the fat tax is merely to create revenue and the tax causes a sudden slump in consumption, the institution of the fat tax would be unsuccessful (Chouinard *et al*, 2005:1).

This balance of ascertaining whether a sin tax may be effective as a revenue creation tool without seriously affecting consumption has been maintained for a long time, and not only in the taxing of cigarettes and alcohol but also in the taxing of foods.

3.3 HISTORICAL USE OF FAT TAXES TO GENERATE REVENUE

It may come as a surprise, but the taxing of high sugar, high calorie or fat content food is not a 21st Century concept. The first sin tax which could be considered to be a fat tax was instituted on sugary soda drinks and was introduced in the United States of America during the First World War by section 313 of the War Revenue Act of 1917. This Act brought in a tax on the syrups used in the manufacturing process of soda drinks and amounted to a few cents per gallon of syrup. This original fat tax was not brought in as a behaviour changing sin tax, but was brought in to help fund the First World War (Sheu, 2006:5).

Soon after the imposition of the war time taxes on soft drinks, a 5 per cent 'luxury tax' was instituted on sweets in 1919. In the following decades fat taxes were used to tax non-essential items, such as sweets or chewing gum. Fat taxes were subsequently used to help absorb some of the costs resulting from the Great Depression in the early 1930s (Sheu 2006:6). Due to the Great Depression, many states implemented fat taxes as an alternative to increasing other taxes and to provide relief to taxpayers whilst trying to minimise the monetary shortfalls of the relevant states (Sheu, 2006:9).

It is clear from Sheu's (2006:6-9) discussion that fat taxes have been utilized by governments in the past century mainly for revenue creation purposes whenever the need for additional revenue arose. Similarly, governments around the world have started instituting fat taxes to supplement their coffers and to overcome the financial difficulties created by the recession.

3.4 WHY REVENUE GENERATING FAT TAXES HAVE BEEN INSTITUTED IN OTHER COUNTRIES

Economic decline has become a global event. The recent recession which first emerged in the United States of America in the latter half of 2007, has ignited the need for further revenue generating tools for governments around the world. The current recession has been compared to the Great Depression and just as in that era, governments are

searching for revenue generating tools whilst trying to avoid increases in income and other general taxes (Smith, 2009:1-2).

In 2008 the governor of New York had to make a plan as New York fell into the biggest budgetary deficit in its history. This fiscal deficit resulted in the proposition of an 18 per cent tax on regular soft drinks in an attempt to curtail the dramatic shortfall (McColl, 2009:797).

According to Younglai (2011:1) the United States of America Government predicted that the highest fiscal deficit in history would occur in the 2011 fiscal year. This deficit was estimated to be 10.9 per cent of the American gross domestic product for the 2011 fiscal year amounting to 1.65 trillion dollars.

The issue that should be addressed is, whether there are similarities between the current financial difficulties experienced globally and the financial circumstances of South Africa and, therefore, whether a need for an additional revenue creating tool exists in South Africa and whether such a tax may be an effective revenue generating tax for South Africa.

3.5 DOES SOUTH AFRICA HAVE SIMILAR NEEDS FOR ADDITIONAL INCOME GENERATING TAXES?

The South African Minister of Finance, Pravin Gordhan, announced in the 2011 Budget Speech that the National Government debt is expected to increase from R 526 billion at the end of the 2008/2009 fiscal period to over R1.3 trillion in 2013/2014 (South African Government Information 2011).

The new proposed National Health System which is to be introduced into South Africa will cost the South African Government an estimated R125 billion in 2012 creating yet a further need for South African tax revenues (NHI to cost R125bn by next year 2011)

Although South Africa is far removed from the United States of America, Europe and other countries hard hit by the recession, the country has not been able to elude the economic down-turn and just as many nations globally it finds itself in a fiscal deficit position. The statement regarding the national debt by Pravin Gordhan in the latest Budget Speech is

reiterated by Maswanganyi (2011:1) who points out that the South African fiscal deficit is expected to increase from 4.6 per cent to approximately 5.3 per cent of the gross domestic product for the 2012 year. This deficit can be translated into R142.4 billion for the 2012 fiscal period.

Frye (2009:10) argues that South Africa was already in an economic crisis long before the global economic down-turn. Previously, unemployment was excessively high but currently the economic downturn has just magnified the situation. He further states that the number of people living in poverty amounted to 22.5 million before the economic down-turn.

South Africa has world-class metropolitan cities and it is often compared to First World countries as a global player (Frye, 2009:8). Fakir (2009:7) mentions that there are many problematic differences between South Africa and many developed nations. Firstly, 60 per cent of South Africans live in poverty (Blignaut and Van der Elst, 2009:14). The South African poverty statistics are significantly higher than in developed nations. Secondly, there tends to be an extreme expectation and dependence upon government to fulfil people's basic needs unilaterally without any recompense (Fakir, 2009:6).

This attitude of dependence on government for the fulfilment of basic needs highlighted above significantly increases the financial strain on the South African Government. Nearly two thirds of South Africans live in desperate poverty and often live off government handouts with no foreseeable possibility of employment (Blignaut and Van der Elst, 2009:14). Assubuji & Luckscheiter (2009:1) state that those who live in poverty are the ones who are worst affected by the economic down-turn.

As to whether this attitude of dependence on, and expectation of government in South Africa is a cultural problem or learned behaviour is unclear, but it may be due to the way in which politicians have enticed voters through promises of free homes, water and electricity, and consequently it could be a government-produced problem. Politicians may have created an absolutely unrealistic expectation through political campaigning, even more so now that the country finds itself in the midst of a recession (Fakir, 2009:7).

Fakir (2009:7) states that in 2009, more than 13 million people in South Africa were receiving some form of government grant depleting the tax revenue coffers by

approximately R118 billion a year. He points out that it is estimated that these annual grants are climbing dramatically and may cost the government R140 billion per annum by the end of 2012. With rising unemployment this figure may continue to rise.

According to Fakir (2009:7) South Africa's unemployment rates in 2009 were hovering close to 30 per cent and rapidly rising. Frye (2009:10) states that the estimated number of unemployed South Africans in 2009 amounted to 5.1 million. Fakir (2009:7) estimated that by the end of 2009 nearly one million jobs had been lost because of the economic crisis in South Africa.

Although other countries have instituted fat taxes in order to generate much needed revenues, the question as to whether they have had some of the desired impact of revenue generation must be considered.

3.6 SUCCESS OF IMPLEMENTED FAT TAXES FOR REVENUE CREATION

The revenue creating potential of fat taxes has proven that fat taxes are not to be dismissed as a purely behaviour changing solution and currently, just as in the past, some governments institute fat taxes simply to cover their shortfall. In 2005, the mayor of Detroit at the time, wanted to introduce a 2 per cent tax on fast foods to generate millions of dollars to help with the budgetary shortfall (Sanson, 2005:10).

In 2000, 19 American states had already instituted minor taxes mostly on carbonated drinks, sweets or snack foods (Jacobson and Brownell, 2000:854). In that year, they generated over a billion dollars in tax revenue. Of the 19 states mentioned in this study, 14 states used this money to supplement the total income of government. The remaining states earmarked the revenue for specific purposes, such as assisting medical educational institutions, environmental concerns and refuse control, and violence and drug control. Only Arkansas earmarked the funds for its public medical scheme (Jacobson and Brownell, 2000:855).

Where a government is merely trying to magnify their tax revenues and, therefore, not expressly attempting to alter the behaviour of taxpayers, the fat taxes instituted may be so

small that consumers may hardly notice that they exist and, yet, it may still be an effective revenue creating tool (Sanson, 2005:10).

Federal governments in the United States of America have instituted a wide range of fat taxes which differ from state to state. These fat taxes are for the most part used simply as revenue generating tools and are not meant to alter behaviour. They are mostly taxes which are levied based on the class of the food instead of what the food contains, for example taxes on snack foods or taxes on soft drinks. The imposition of many of these taxes proved that the demand for snack foods is affected by small increases in price. For example, it was found that the demand for certain snack foods dropped by approximately 10 per cent after a tax was imposed on this class of food (Caraher and Cowburn, 2005:1245). Therefore, the question as to whether a tax which was introduced to generate revenue would not potentially affect consumption so dramatically that no revenue is generated must be considered.

According to Brownell, Farley, Willett, Popkin, Chaloupka, Thompson and Ludwig (2009:1603) if a fat tax of one cent was to be levied on every 30 millilitres of sugar-sweetened cold drink in the United States of America, it would raise an estimated 14.9 billion dollars in revenues annually.

It is clear from the revenue numbers discussed by Brownell *et al* (2009:1603) that fat taxes have already been, and can potentially be, an impressive revenue source in the United States of America. Therefore, it can be argued that fat tax might generate the required revenues in South Africa.

3.7 CONCLUSION

The literature on fat taxes shows that these taxes were historically used for revenue creation in times when governments needed to supplement their revenue. History is currently repeating itself as fat taxes are being introduced because of the economic decline experienced worldwide as governments are unable to fulfil their revenue needs by means of the tax instruments currently available to them.

It is clear from the examples provided by of Sanson (2005:10), Jacobson and Brownell (2000:854) and Brownell *et al* (2009:1603) that fat taxes have been delivering the revenues that governments had intended and that, therefore, they have been successful tax revenue creation tools where they have already been instituted.

Not only has the economic crisis hit South Africa, it has magnified an already precarious situation of high unemployment and poverty rates. Furthermore, there are very high numbers of people who depend on government grants for their existence. This increases the need for additional revenue generating taxes.

The South African fiscal deficit is expected to amount to R142.4 billion by the end of 2012 (Maswangani, 2011:1) and South Africa is planning a new National Health System which is expected to create huge costs. As such, it makes sense to consider using a fat tax as a revenue generating tool, particularly in view of its success in other nations.

Although there may be significant information to support the institution of fat taxes for revenue generation or behavioural change, there are other external factors and considerations which need to be taken into account before a fat tax can be considered in a South African context.

CHAPTER 4

OTHER FACTORS WHICH MAY INFLUENCE THE DECISION TO INTRODUCE FAT TAXES IN SOUTH AFRICA

4.1 INTRODUCTION

Fat taxes have been perceived as quite a controversial tax, especially when it is either the intent or perceived intent of government to alter behaviour (Hunter, 2004:68).

There are a host of factors which have influenced the decisions to institute fat taxes in other countries and it would be nearly impossible to point out each of these factors. The most prominent factors which are highlighted in the literature reviewed and which may affect the decision of whether or not to institute a form of fat tax in South Africa were found to be as follows:

- Difficulties in how to institute and levy fat taxes (Caraher and Cowburn, 2005:1243; Cawley, 2006:80).
- The regressive nature of fat taxes (Leonhardt, 2009:3; Shabodien, 2009:20).
- How industries might be affected by fat taxes (Brownell & Warner, 2009:259-294; Sheu, 2006:7; Strnad, 2004:1290).

Instituting taxes on cigarettes and alcohol is straight-forward as no one needs cigarettes and alcohol to survive and, therefore, it is possible to avoid consumption completely and in this way avoid paying the taxes on these goods. The dilemma, as far as fat taxes is concerned, is that people need to eat in order to live, and if fat taxes are levied on foods which may form part of a person's balanced diet, he or she will end up paying the fat taxes (Mytton *et al*, 2007:689).

4.2 DIFFICULTIES IN LEVYING FAT TAXES

4.2.1 The specific dilemmas in levying fat taxes

There are a couple of dilemmas surrounding the levying of fat taxes, especially if the intention of the government is to use the tax to decrease the rates of obesity of a

population and not simply to generate revenue. Arranging foods and categorising which foods to tax may turn out to be exceedingly problematic as who is to say which specific foods lead to obesity (Cawley, 2006:80).

Experts have pointed out that it would be most appropriate to levy the tax according to either the nutritional value, or the amount of saturated fat contained in the food. Although there is merit to this argument, it would be quite problematic as it would be so complicated to institute the tax that the cost could outweigh the benefits. Norway's tax system seems to be the only known instance where the tax which has been instituted can be considered to be a 'calorie tax' (Caraher and Cowburn, 2005:1243).

4.2.2 How countries have attempted to overcome the problematic nature of levying fat taxes

It appears that many countries have opted for quite a complex system of levying fat taxes. The intention behind the institution of the tax is a crucial deciding factor in how the tax should be levied. However, if the costs of the institution of the tax outweigh its benefits, as highlighted by Caraher and Cowburn (2005:1243) then there may be no point in pursuing it.

According to Caraher and Cowburn (2005:1248) instead of levying the fat tax as a sales tax or a point of sale tax, it may be better to levy fat taxes at the production stage to encourage producers to improve their processes and in this way motivate the production of healthier food. Although this may be true many countries have opted to go the route of point of sales and sales taxes.

A sales tax or Value-Added Tax (VAT) has been used as a fat tax tool by numerous countries. These countries have mainly instituted their versions of fat taxes through the additional imposition on normally exempt foods or drinks of their already existent VAT or sales tax (Caraher and Cowburn, 2005:1245).

4.2.3 The use of VAT and sales tax in order to levy fat taxes

VAT and sales tax are used in various countries and each one has its own rate or set of rates (Caraher and Cowburn, 2005:1244-1245).

Certain countries institute fat taxes by adding either a fixed percentage on to the price or adding a fixed monetary amount per specified unit on determined categories such as sweets and sugary carbonated drinks. For instance, Arkansas in the United States of America levies two cents of their currency per 360 millilitre can of soft drink, whereas California levies a 7.25 per cent sales tax on all soft drinks (Jacobson and Brownell, 2000:854). Other countries have simply instituted sales tax or VAT at a higher rate on goods which attract fat taxes, whilst other foods are zero-rated or exempt from these sales taxes.

In the United Kingdom, VAT is used as a fat tax or food tax instrument, as it is levied only on specific foods, such as ice cream but other foods are zero-rated. At the other end of the scale, drinks which are considered to be “essential”, amongst others, tea is taxed at a lower rate of VAT. Australia has now instituted a Goods and Services Tax which could in certain circumstances be viewed as a form of fat tax, but this Goods and Services Tax excludes most goods which are included by the United Kingdom as a tax on foods (Caraher and Cowhurn, 2005:1244).

Ireland also uses VAT as a fat tax instrument as most foods are generally zero-rated under their VAT legislation but ice cream, confectionery and soft drinks are taxed (Caraher and Cowhurn, 2005:1244).

A whole range of countries including Ireland, the European Union, the United Kingdom, Germany, Italy and Belgium have instituted fat taxes in the form of VAT on drinks which are not considered fundamental, such as soft drinks. They generally apply a higher rate of VAT to these drinks. Generally these countries also apply a lower VAT rate to drinks which are considered fundamental, such as milk and tea (Caraher and Cowburn, 2005:1244).

There is widespread concern about the possible regressive nature of fat taxes. This refers to the possibility that the poor may spend a greater percentage of their total income on a tax than a wealthier person. This would mean that fat taxes could be very regressive if poor people were to be expending a much larger proportion of their income on the fat tax than the rich (Cawley, 2006:80).

4.3 THE REGRESSIVE NATURE OF FAT TAXES

The possibility of how fat taxes may prove to be regressive in nature is illustrated by Shabodien (2009:20) who confirms the fact that South African underprivileged families expend nearly two thirds on average of their income on food. On the other hand, South African food expenditure for middle-class to wealthy families ranges from 24 per cent to 28 per cent of their income.

With reference to soda taxes, Leonhardt (2009:3) contests the findings of Cawley in this regard. According to Leonhardt it has been found that people, and in particular poorer people, tend to be responsive to price and, therefore, any increase in price by the institution of a fat tax would more than likely reduce consumption by the poor. Therefore, poorer people would be spending less of their income on taxes as they will no longer be purchasing those goods which are subject to the fat tax.

Therefore, Leonhardt (2009:3) concludes that although sin taxes tend to be regressive in nature, if consumption by poorer individuals is affected significantly, the regressivity of the taxes will be limited.

Although it is important to focus on how to levy fat taxes and the possible impact of fat taxes on the poor, the way in which industries may be affected and how they will react to fat taxes also needs to be considered. According to Brownell and Warner (2009:259-294), industries have not taken kindly to sin taxes in the past and have opposed them furiously and will surely do the same in future.

4.4 SIN TAXES AND INDUSTRY

4.4.1 Why industries and their reactions to fat taxes need to be considered

The opposition to sin taxes and pressure enforced by the affected industries have often been the final nail in the coffin for many excise taxes which have been introduced in the past. In 1933, during the Great Depression in the United States of America, the candy industry complained that legislatures were unjustified in only taxing candy but not ice cream and biscuits too and, therefore, the tax was eventually reduced (Sheu, 2006:7).

An example of industry applying pressure to repeal a sin tax occurred in 1997 when Coca-Cola insisted that it would only build a plant in the State of Louisiana if the latter repealed a tax on soft drinks. Louisiana acquiesced in exchange for the manufacturing plant and the resulting benefits for the state (Sheu, 2006:17).

The history of the tobacco industry reveals the best examples of how industry has opposed taxes in the past which they felt could affect them.

4.4.2 Historical responses of sin taxes on industry

Brownell and Warner (2009:259-294) state that it is the intention of industries which may be affected by excise duties to manipulate and deceive in order to protect their market share and sales. The example of the tactics adopted by tobacco companies in this regard is used by Brownell and Warner (2009:259-294) as an illustration of this. They state that the tactics used by the tobacco industry were effective as they planted a seed of doubt in the minds of the consumer regarding medical findings in respect of lung cancer, for example. Furthermore, sponsorships and similar instruments were used as tools to dissuade those capable of bringing about change from doing so, such as politicians and women's movements.

Brownell and Warner (2009:259-294) compare the tobacco industry's actions in the 1950's to that of the current food industry and exposes the similarities in their responses to looming legislative changes which may affect them in a similar way in which excise duties and regulations affected the tobacco industry. It should be anticipated that any possible fat tax may create an uproar in the food industry in South Africa and elsewhere as these taxes may potentially harm the relevant industries.

4.4.3 Anticipated possible ramifications of fat taxes on industry

Sin taxes almost inevitably will affect the industries which are taxed. If the taxes cause a substantial decrease in demand it may do considerable harm to the industries in question. Strnad (2004:1290) states that a fat tax is not only a tax on the finished product, but also on the components thereof. Therefore, not only the specific taxed industry will be affected but also the industries producing the ingredients in the production process.

Strnad (2004:1290) states that if there are no reasonable or appealing substitutes for a product, then the consumption of that product should not be too negatively affected by a tax. However, in a situation in which there are substitutes for a product, especially ones which will end up cheaper after the tax has been implemented, the whole industry may be affected.

If a fat tax was to be instituted in South Africa, the way in which industries would react and how various industries would be affected would need to be carefully considered to ensure that the institution of the new tax does not have substantial negative unintended effects whether it be on the industry as a whole, the industry of the ingredients, a complimentary product, an alternative product or any other product. Intensive research would need to be conducted on the possible reactions of, and effects on industries should any fat tax be considered in South Africa.

4.5 CONCLUSION

There are various factors which would need to be considered should fat taxes be considered in South Africa whether for behavioural effect or for revenue creation or some combination of the two. According to Cawley (2006:80), the categorization of foods to be taxed might turn out to be exceedingly problematic. Even though Caraher and Cowburn (2005:1243) state that a calorie-based tax would be most appropriate if the intention of a fat tax is to reduce obesity, they conclude that such a complex system may turn out to be so expensive to institute that it would not be worth the effort.

It was established that the possible regressive effects of fat taxes could pose a problem because of the high poverty rates in South Africa, but not all authors agree that fat taxes will be substantially regressive.

The possible effect on industries of the products that may be taxed as well as the unintended effect on complimentary products has been considered. The way in which the affected industries may react and oppose the institution of fat taxes has also been examined.

CHAPTER 5

CONCLUDING REMARKS

5.1 INTRODUCTION

The recent remarks regarding the need for behavioural change to improve the health of South Africans which were made by South Africa's Minister of Health, Dr Aaron Motsoaledi, and reported on the *News24 South Africa* website, highlights the fact that there is a need for change and that the South African Government is starting to take note of this need.

According to Cawley (2006:70) hypertension and diabetes, referred to by Dr. Motsoaledi, are conditions relating to obesity. The South African Minister of Health has, therefore, indicated that the Government is becoming concerned about obesity.

Furthermore, the 2011 South African Budget Speech proves how significant the costs associated with health-care are. This document indicates that South Africa's budgeted health-care costs amounted to R 113 billion for the fiscal year and according to *Fin24* South Africa's newly proposed National Health System is expected to cost the government approximately R 125 billion in 2012 (NHI to cost R125bn by next year 2011).

Frye (2009:10) pointed out that South Africa's economic crisis pre-dates that of the current economic downturn by far. South Africa has been grappling with exceedingly high unemployment rates and poverty for a very long time. Blignaut and Van der Elst (2009:14) state that approximately 60 per cent of South Africans live in poverty and Fakir (2009:7) highlights the fact that in the region of R118 billion is spent by the South African Government on government grants annually.

The economic crisis has also had its effects on South Africa. Maswanganyi (2011:1) points out that the fiscal deficit is increasing by 0.6 per cent in the 2012 fiscal year and is currently estimated to be around R142.4 billion.

5.2 WOULD FAT TAX POTENTIALLY HAVE A POSITIVE BEHAVIOURAL EFFECT IN SOUTH AFRICA?

5.2.1 Substantiation for a fat tax in South Africa with regard to obesity

Other nations which have imposed fat taxes for behavioural change did so in order to attempt to decrease rates of obesity in their populations (Fletcher *et al*, 2010:29). The South African statistics of overweight and obesity pointed out in Van der Merwe and Pepper (2006:315-316) is evidence that obesity is beginning to run rampant in South Africa in the same way it has in the United States of America. This finding is supported by Look *et al* (2010:83-89) who points out that one in three South African women is classified as obese and Reddy *et al* (2009:206) who maintains that South Africa has the highest obesity rates in Africa .

Based on the obesity rates reported by Van der Merwe and Pepper (2006) and others, as well as the plea from the Minister of Health that South Africans should live healthier lifestyles, the conclusion can be drawn that there is indeed evidence that substantiates the need for a fat tax in South Africa to bring about behavioural change.

5.2.2 Factors setting South Africa apart from other nations

Bateman (2007:490) points out that obesity is believed to be a sign of health, prosperity and dignity as well as an attractive attribute amongst certain South African cultures, and that these norms may prove hard to influence.

Bateman (2007:490) states that one in six obese African women rated themselves as underweight. This demonstrates that even if measures are put in place to decrease obesity in South Africa, it may be inadequate if cultures are causing people's perceptions of obesity to be distorted. Another negative factor identified by Bateman is that there is a strong belief amongst many South Africans that obesity is healthy and that it indicates that a person is HIV negative. Therefore, if South Africans correctly judge themselves to be obese, they are less likely to recognise that obesity is detrimental to their health and therefore paternalistic corrective action in the form of fat taxes may not be welcomed by them.

5.2.3 Conclusion

For individuals living in one of the major metropolitan cities in South Africa, it may be easy to forget that South Africa is part of the developing world and it, therefore, experiences problems which are foreign to First World nations. Cultural beliefs of healthy obesity, high rates of unemployment and the extreme poverty experienced by many South Africans make it difficult to compare the findings of studies conducted in South Africa to the outcomes of studies which have been compiled in the rest of the world.

As in the case of the efficacy of cigarette and alcohol taxation, fat taxes have been proven to decrease consumption in other countries and, therefore, if thorough additional research is done to ensure that such taxes are instituted in the most acceptable way, they may prove to be a useful behaviour curbing tool in South Africa.

Although it can be said that fat taxes could possibly be used in South Africa as a behaviour curbing tool, the question as to whether fat taxes could also be viewed as a useful revenue creating tool needs to be considered.

5.3 THE POTENTIAL OF A FAT TAX AS A REVENUE CREATING TOOL IN SOUTH AFRICA

5.3.1 The need for additional tax revenue in South Africa

Sheu (2006:6-9) indicate that historically governments around the world have instituted fat taxes for revenue creation in times when the need arose. In the 2011 Budget Speech, Pravin Gordhan stated that South African National Government debt has to be augmented from R526 billion in 2008/2009 to over R1.3 trillion in 2013/2014 suggesting quite an extensive need for additional tax revenue.

The conclusion can be drawn that there is in fact substantiation for fat taxes to be considered in South Africa for revenue creation. This conclusion is based on a consideration of the budgetary deficit as disclosed by the Minister of Finance, Pravin Gordhan, and discussed by Maswanganyi (2011:1) as well as the information provided by Frye (2009:10) and Blignaut and Van der Elst (2009:14) regarding unemployment and the poverty experienced in South Africa together with the growing figure which is being spent on government grants annually to support the needy. Another factor which substantiates

the institution of fat taxes for revenue creation is the new National Health System which is to be brought into South Africa soon. According to an article in *Fin24*, the National Health System will cost the South African government an estimated R125 billion in 2012 (NHI to cost R125bn by next year 2011:1).

5.3.2 An additional consideration

According to Chouinard *et al* (2005:1), if a fat tax were to curb demand for a product too substantially, then it may not generate a sufficient amount of revenue to substantiate the institution of the tax.

5.3.3 Conclusion

It is clear that due to the current fiscal deficit experienced in South Africa together with the additional needs created by rising unemployment and the eventual institution of the National Health System, it can be said that there is a substantial reason for instituting some form of fat tax for revenue generation purposes in South Africa. It would, however, be necessary for substantial and thorough research to be done to ascertain how South Africans would respond to such a tax and whether such a tax would be viable in South Africa.

Although it has been established that a fat tax can be substantiated in South Africa, this does not mean to say that there are no additional considerations which need to be taken into account before fat taxes can be considered as an alternative tax in South Africa.

5.4 DIFFICULTIES WITH REGARD TO THE INTRODUCTION OF A FAT TAX IN SOUTH AFRICA

Based on the findings in the subject literature it has been shown that there is evidence that a fat tax could be considered in South Africa both as a means of bringing about behavioural change and of generating revenue if compared to the reasoning adopted by other nations. There are, however, certain factors which would need to be considered.

5.4.1 Possible regressive consequences of fat taxes

With South Africa having such a high rate of unemployment and experiencing immense poverty, the possible regressive nature of fat taxes should be taken into account. If the poor have to spend a larger proportion of their income on a fat tax than wealthier individuals it could be problematic (Cawley, 2006:80).

Based on the findings of Shabodien (2009:20), who states that poor South Africans spend approximately two thirds of their income on food, it is clear that it is a real possibility that should a fat tax not be planned very carefully, it may end up being an exceedingly regressive measure. But if the findings of Leonhardt (2009:3) are taken into account, the South African Government may find that if consumption by poor people is decreased significantly because of the fat tax, its regressive nature can be very limited.

Even if it is found that a fat tax would not be significantly regressive, the way in which the relevant industries in South Africa may be affected by the possible institution of a fat tax would need to be considered.

5.4.2 The effect on South African industries

The imposition of a fat tax would inevitably affect certain industries. Based on the writings of Strnad (2004:1290) careful research would need to be done to ensure that the possible decrease in demand which may result from a fat tax in South Africa does not result in unintended consequences for the industries involved.

If the study by Brownell and Warner (2009:259-294) is looked at, it is clear that in the past industries have put up fierce opposition to any taxes which may hurt their market. It may prove to be extremely problematic to find the best way to institute fat taxes in South Africa. Should South Africa intend instituting a fat tax, it may be a good approach for the Government to work in collaboration with the industries which may be affected in order to plan the proposed fat tax.

5.4.3 Difficulties with regard to the levying of fat taxes

According to Cawley (2006:80) the levying of fat taxes can prove to be so troublesome that the cost of instituting and enforcing them may prove to outweigh the benefits. The way in which fat taxes are levied would greatly depend on the intention behind the fat taxes.

Cawley (2006:80) points out that the difficulty in the levying of fat taxes arises because who is to say which foods lead to obesity. As pointed out by Caraher and Cowburn (2005:1243) the intention behind the fat tax is, therefore, a decisive point as it would make more sense to attempt to specifically tax foods which cause obesity if the South African Government intends targeting and reducing obesity than if it is merely taxing certain foods in order to raise revenues.

Based on the findings by Sanson (2005:10) if the South African Government has decided to levy a fat tax merely to generate revenues and, therefore, not to curb consumption by South Africans, the fat tax which is instituted may be so small that consumers may barely notice that it exists.

5.5 SUGGESTIONS FOR FURTHER RESEARCH

A quantitative study based on the receptivity of South Africans to a fat tax would be useful for government decision-making.

5.6 CONCLUSION

It appears from the conclusions that have been drawn from this study of the subject literature that fat taxes could be introduced as a means of both behavioural change and revenue creation, and that its implementation could be substantiated by the current South African economic climate.

As such, it may be appropriate for the South African Government to consider a fat tax which generates revenue but also affects consumption of undesirable foods as a possible alternative tax in South Africa.

It can, therefore, be concluded that it would be possible, if the further appropriate research is done and it corroborates the findings of this study, that a fat tax can be considered as an alternative tax in South Africa for either its behavioural effect, or revenue creation, or a combination of the two.

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