

CANADA'S EXPERIMENT WITH CHILDREN'S
FITNESS AND ACTIVITY TAX CREDITS

Canada's Experiment with Children's Fitness and Activity Tax Credits

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By

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Abstract

This thesis evaluates the Children's Fitness Tax Credit and similar credits to determine whether they are suitable to increase physical activity levels in Canada. It begins by reviewing the literature on physical activity to establish that increasing physical activity is a worthy public policy goal. It then reviews the literature on tax expenditures and health behaviour interventions to provide information in order to evaluate the credits. The credits are then described and their stated purpose is discussed. This description establishes how quickly the credits expanded from one small credit to many. One of the credits, the Active Families Benefit, requires a new concept to evaluate it as it is not simply a tax measure or a spending measure. The term hybrid tax measure is introduced to explore this credit. An evaluation of the credits considering their effectiveness, efficiency and equity in determining their suitability to increase physical activity is performed and the conclusion is made that they are unlikely to be effective and that the inequity of the credits is problematic, particularly in light of this ineffectiveness finding. It is recommended that the credits be repealed and no new credits be created, but as repeal may not occur, alternative recommendations are also provided.

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1 Introduction

In the last nine years, there have been a number of children's activity tax credits introduced in Canada. These measures provide credits for a number of different activities. Some, such as the federal government's Children's Fitness Tax Credit ("CFTC") focus solely on activities that include physical activity and promote physical fitness. Other credits are broader and also provide a credit for recreational, arts and even academic activities. What they share is a way to provide public financing for activities. Thus far, these credits have generally been for children's activities, but there has been serious discussion of expanding these measures to include physical activities for adults.

The Canadian experience provides a unique opportunity to examine these credits as to date it is the only country to adopt such measures. The implementation of the credits shows not only how well such credits could work, but also how quickly they can gain public acceptance as well as how rapidly they can expand. The first credit was introduced in Nova Scotia for the 2005 tax year and was a \$150 credit worth up to \$15 per child. Today there are two federal credits as well as credits in many provinces of Canada. As well, there are election promises from the Conservatives to double the CFTC and introduce an Adult Fitness Tax Credit ("AFTC").¹ The credits have also vastly expanded in terms of public expenditure. In 2005 there was only a single \$150 credit in Nova Scotia costing about \$1 million dollars²; the total cost of the credits in 2013 was over \$250 million dollars,³ and, based just on the Conservative plans for federal activity

¹ Conservative Party, "Here for Canada: Stephen Harper's Tax Plan for Jobs and Economic Growth" at 26-7, online: Conservative Party < http://www.conservative.ca/media/ConservativePlatform2011_ENs.pdf > [Conservative Party Platform].

² Minister of Finance, *Nova Scotia Budget for the Fiscal Year 2005-2006*, at 26, online: Government of Nova Scotia < http://www.gov.ns.ca/finance/site-finance/media/finance/2005_budgetaddress.pdf >.

³ The estimates from the governments add up to a cost of \$268.5 million, but many governments only provide estimates when they first introduce their credit and current estimates are not available so it is expected the true cost of the credits is actually higher than \$268.5 million; Canada, Department of Finance, *Tax Expenditures and Evaluations 2012*, (Ottawa: Department of Finance Canada, 2013) at 17, online: Government of Canada < <http://www.fin.gc.ca/taxexp-depfisc/2012/taxexp12-eng.asp> > [*Tax Expenditures and Evaluations 2012*]; British Columbia, Ministry of Finance, *British Columbia Budget and Fiscal Plan 2013/14 – 2015/16, Budget Fiscal Plan* at 63, online: Government of British Columbia < <http://www.bcbudget.gov.bc.ca/2013/default.htm> > [*B.C. Budget 2013*]; Saskatchewan, Minister of Finance, *Saskatchewan Provincial Budget 13-14, Estimates* at 112, online:

credits, they could be over \$750 million during the 2015-16 budget year.⁴ So, while these credits have already quite rapidly expanded in a several ways, still greater expansion appears likely.

The federal government and most of the provinces in Canada now have activity credits for children. These credits can be divided into two groups. The first group will be called the dual credit group and includes credits from jurisdictions offering two credits: one for fitness and one for other activities. Analysis of this group is focused on the federal credits: the CFTC and the Children's Arts Tax Credit ("CATC"). Introduced by the federal government for the 2007 taxation year, the CFTC was the second credit created. This credit is very focused and limited to activities which should increase physical fitness in the present and establish a pattern of behaviour so that children will continue to be active as adults. A parent can claim this non-refundable credit for up to \$500 of eligible expenses and as the credit is calculated at a rate of 15% of eligible expenditures, the maximum return is \$75 per child. In 2011, the federal government introduced the CATC, which functions in a similar way to the CFTC, except that it essentially covers the rest of children's activities not covered by the CFTC (outside of school activities and childcare). British Columbia, Manitoba and Yukon are also part of this dual credit group as they have companion credits to the federal credits which are governed by the same federal Income Tax Act "(ITA") provisions.

In addition, in 2008 Alberta passed a private member's bill to create a Physical Activity Credit for children and adults. It was similar to the CFTC, although a bit broader and has a few

Government of Saskatchewan <<http://www.finance.gov.sk.ca/budget2013-14/>>; Manitoba, Department of Finance, *The Building Budget, Manitoba Budget 2007, Taxation Adjustments* at C2, online: Government of Manitoba <<http://www.gov.mb.ca/finance/budget07/papers/index.html>>; Manitoba, Department of Finance, *Manitoba Budget 2010, Taxation Adjustments* at C1, online: Government of Manitoba <<http://www.gov.mb.ca/finance/budget10/papers.html>> [*MB Budget 2010*]; Manitoba, Department of Finance, *Manitoba Budget 2011, Taxation Adjustments* at C3, online: Government of Manitoba <<http://www.gov.mb.ca/finance/budget11/papers.html>> [*MB Budget 2011*]; Ontario, Ministry of Finance, *2011 Ontario Budget* at 250, online: Government of Ontario <<http://www.fin.gov.on.ca/en/budget/ontariobudgets/2011/index.html>>. [*ON Budget 2011*]; Nova Scotia, Minister of Finance, *Nova Scotia Budget Bulletin for the Fiscal Year 2008-09, Tax Relief for Nova Scotians*, online: Government of Nova Scotia <http://www.gov.ns.ca/finance/site-finance/media/finance/bulletin_taxrelief.pdf> [*NS Budget 2008*].

⁴ The increase in cost is based on promise to double the CFTC and implement an Adult Fitness Tax Credit. This number would also likely be higher than the estimated \$757.5 million as many estimates are not current and do not reflect how the cost of the credits are bound to grow. *Ibid*; Conservative Party Platform, *supra* note 1 at 65; Finances et Économie Québec, *Budget Plan, Budget 2013-2014* at A76, online: Government of Quebec <<http://www.budget.finances.gouv.qc.ca/Budget/2013-2014/en/documents/budgetplan.pdf>> [*QC Budget 2013*].

additional differences. It was never brought into force, but as it was similar to the CFTC, will be considered as part of the dual credit group.

The second group is the single credit group. This group includes credits introduced by Saskatchewan, Ontario and Quebec. Each of these credits is broad enough to include most children's activities, fitness or non-fitness, within a single credit. All of these credits are refundable. Saskatchewan was the first in this group to enact its credit, which provides a 100% refund on up to \$150 of eligible expenses. The Active Families' Benefit ("AFB") in Saskatchewan is unique because even though it is administered through the tax system, it was developed by and is part of the budget of the Department of Parks, Culture and Sports, putting into question whether it is really a tax expenditure. Also, at a 100% refundable rate of return, it returns a much higher percentage of the expenditure to parents than any of the other credits. Ontario introduced its credit in 2010, which provides a 10% refund on eligible expenses of up to \$500, indexed to inflation (\$535 for 2013). Quebec introduced a credit on \$100 of eligible expenses in 2013 (which will increase to \$500 over the next 5 years) refunded at a 20% rate. This credit is unique in that it is only available to families earning less than \$130,000.

In addition to these groups is the credit introduced by Nova Scotia. As it was the first children's physical activity tax credit introduced, it had elements that were left out of later credits. In terms of the types of activities eligible for the credit it straddles the line between the CFTC of the dual credit group and the single credit group as it includes physical activities and recreational activities, but does not extend to include the arts. Although there is just one credit in Nova Scotia, because it is not as broad based as the credits provided in single credit group and it is not refundable, it does not fit within the single credit group. While the credit contains elements that later governments (except for Alberta) choose not to use, none of the factors lead to a particularly interesting comparison and therefore it is left out of the two primary comparator groups.

The comparison of the dual credit group and the single credit group is focused around the CFTC and the AFB. The CFTC is not only the federal credit, the most costly and the credit that has the most data related to its use, but its related provincial credits are very similar. The AFB is the focus of the dual credit group because it is the most extreme of that group and so provides the best contrast to the CFTC. It also simplifies the discussion to generally compare the CFTC with

one credit instead a broader range of the single credit group, though much of the discussion is relevant to other credits within the groups.

In general the term “the credits” will be used to include the fitness activity credits of the dual credit group credits, the Nova Scotia credit and the single group credits. These are the credits to be analysed in this thesis. The arts credits provide a complication for defining this term and more generally. Although from the name it would appear that the arts credits are about addressing the arts, they are very broad and need to be considered as part of the system the fitness credits are in because: i) they provide funding for physical activity not falling within the fitness tax credits,⁵ ii) the fitness and arts credits together cover a similar range of activities as the single credit group credits, iii) their creation appears to be a consequence of creating the fitness credits and iv) their existence addresses some of the inequities of the fitness credits. Thus, although this thesis will not evaluate the arts credits on the basis of whether they are suitable to increase physical activity as it will the credits, they have an important place in the analysis of the credits and are a significant part of the system.

The use of another term, “suitability”, requires explanation. The evaluation of the credits will be based on suitability to meet a specific goal, increasing physical activity. The term “suitability” is used in order to frame the question in a more neutral way than using the term “acceptable”. Its use is also intended to reflect that there are many policy options for increasing physical activity and that this evaluation is not intended to consider whether these credits are a solution to a problem, but whether the credits are justifiable because they will be useful in increasing physical activity in a meaningful degree, when that measured against other options and after considering equity issues. The credits will be suitable not based on whether they are the best measure for increasing physical activity but whether they meet a lower standard of being suitable to increase physical activity when effectiveness, efficiency and equity are considered.

Considering the newness of the credits as well as their quick expansion and possible future expansion, it is important at this junction to assess whether there is an adequate policy basis for the use of such credits and whether the amount of government resources they represent could be used in some better way. In order to properly evaluate these credits it is useful to look at

⁵ This is physical activity which that does not meet the requirements of the CFTC, but outside of the ITA is considered physical activity.

a number of issues. As these credits are all administered through the tax system, it is important to examine how this administration affects their function. Secondly, it is helpful to consider what activities lead to a healthier society and which activities are most important to encourage. Lastly, it is necessary to consider the role of economic incentives in changing behaviour.

There are six main chapters in this thesis. Chapter two reviews the literature on physical activity and the other health-related considerations. The governments who created the credits have many goals; trying to evaluate the credits' ability to meet all of these goals would be very difficult. Therefore, the goal that will be used in this thesis to evaluate the credits is the goal of increasing physical activity, which is common to all of the credits. Chapter two describes how active Canadians should be in order to meet minimum recommended levels of physical activity, and reviews the literature that shows that most are not currently meeting that level. Secondly, the chapter explores the vast health benefits of increasing physical activity in order to show why increasing physical activity is a valid goal. Lastly, the chapter shows why the goals of reducing obesity, increasing physical fitness, reducing sedentary behaviour and increasing wellness provide useful secondary considerations for evaluating the credits.

Chapter three explores the importance of the form of the credits as tax expenditures. As tax expenditures, the credits should be evaluated as government expenditures, as opposed to as simply a tax reduction. The literature on tax expenditures reveals advantages and disadvantages of using the tax system to deliver these measures, and these are explored in chapter three.

Chapter four provides a short summary on the factors that alter the effectiveness of economic incentives. As these credits represent significant government expenditure, in order to be considered effective these credits should be bringing about a change in behaviour. As the extent to which these credits increase physical activity is very difficult to measure, the literature on health behaviour change reviewed in chapter four provides insight into the likely effectiveness of these measures.

Chapter five describes in more detail the credits, how they work and why they were created. Although the credits may seem quite similar in that they all provide a tax benefit for enrolling children in activities, there are significant differences among the credits that have the

potential to impact the effectiveness and fairness of these measures. Thus, the background information in chapter five will provide the base for later exploration of the credits.

Chapter six explores the inadequacy of current tax expenditure theory to conceptualize the AFB. As it is a measure that is situated both within the tax system and a non-tax governmental department it requires a new term to describe this situation. This chapter will introduce the idea of a hybrid tax and spending measure and the new possibilities provided by using both systems instead of choosing between them. It will also compare the functioning of the AFB and the CFTC using this concept.

Following the findings of the previous chapters, chapter seven will analyze the credits as spending programs intended to incentivise increases in physical activity. The first consideration will be the effectiveness of these credits in meeting this goal. The analysis is broken down into three parts: i) whether the credits will result in an increase in activity and camp enrolments or memberships to facilities, ii) whether increases in enrolments or memberships will lead to an increase in physical activity in the short-term, and iii) whether the increases in enrolments or memberships will lead to a long-term increase in physical activity. The general conclusion is that the benefit of the credits will not likely outweigh their costs. Secondly, this chapter will consider the efficiency of these credits. The question here is one of comparison to other measures. While the consideration of all of the possible alternative measures is beyond the scope of this thesis, this section will provide a brief consideration of what other tax measures could be used. The last section in chapter seven explores equity and exposes a concerning inequity in the application of the credits. The last chapter provides a final evaluation of the credits and recommendations based on that evaluation.

The purpose of this thesis is to evaluate the suitability of the credits to increase physical activity. This thesis concludes that the credits are likely not sufficiently effective at increasing levels of physical activity to bring about a significant health benefit and, additionally, they are inequitable. As such, they are not a suitable scheme of increasing physical activity.

2 Physical Activity

The purpose of this chapter is twofold: first, to establish the increase of physical activity as the primary goal against which the credits will be assessed and, second, to demonstrate the validity of such a goal. There are a number of goals that could be chosen to evaluate the credits, including: reducing overweight and obesity, increasing physical fitness, increasing well-being or reducing sedentary behaviours. Although these would all be positive results and are useful to keep in mind as secondary considerations, the primary goal that will be used for evaluation in this thesis is increasing physical activity amongst Canadians. This chapter will more fully explain why physical activity has been selected as the primary goal for evaluation purposes by addressing three issues: the extent to which Canadians fall short of physical activity goals, the net benefits of physical activity and the superiority of physical activity as a goal for evaluation in comparison to the alternative goals. When evaluating public policy, it is important to first consider whether the aim or aims of the policy are valid. As will be expanded on in this chapter, increasing the physical activity of Canadians is a very important goal and the benefits of achieving this goal could be vast.

The first section of this chapter will explore how active Canadians should be and explain that most Canadians are not currently meeting these guidelines. Many organizations have created guidelines to help individuals understand how much and what types of physical activity they should be engaged in. This section will explain the Canadian physical activity guidelines as well as the World Health Organization's ("WHO") guidelines. By showing that Canadians do not meet current physical activity guidelines, the importance of increasing physical activity is shown and a baseline is provided for the amount of physical activity Canadian should be engaging in.

The second section of this chapter will explore the benefits of being physically active and the risks of being physically inactive. The economic burden of inactivity in Canada was

estimated at \$6.8 billion for 2009.¹ Being physically active reduces the risk of many chronic diseases, such as cardiovascular disease, hypertension, type II diabetes, colon cancer, breast cancer and osteoporosis by very significant amounts. By explaining the benefits of physical activity, this section will further explain why the Canadian government should be concerned about physical activity and why government interventions on this issue could be justified.

The third section will explain why physical activity will be used to evaluate these credits rather than the alternative options of physical fitness, sedentary behaviour, obesity and well-being. Although these are useful secondary considerations, focusing on changes in physical activity makes sense for a number of reasons. Firstly, it simplifies the analysis. Secondly, because the credits are assumed to primarily operate as incentives intended to change behaviour, it is easier to use behaviour change (in this case, increase in physical activity) in order to measure the benefit. Physical fitness, obesity levels and well-being measure the results of the behaviour, while physical activity measures the activity that helps to bring about these results. Thirdly, increasing physical activity has been one of the most common purposes stated by the legislators of the credits. Therefore, physical activity is a superior choice to measure these credits.

Thus, this chapter will explain how much physical activity Canadians should engage in, why they should engage in this activity and why these credits will be evaluated on the basis of whether they increase physical activity.

2.1 Canadian Activity Levels

This section will begin by explaining physical activity targets under the Canadian and WHO physical activity guidelines. It will then show that most Canadian adults and children are not active enough to meet these recommendations. The sub-optimal levels of physical activity in Canada may justify the government's goal of increasing physical activity.

2.1.1 Recommended Activity Levels

In order to judge the activity level of Canadians, the first question that must be asked is: how active should Canadians be? In order to answer this, physical activity guidelines will be described here to provide a standard by which to evaluate these credits. The benefit of the

¹ Ian Janssen, "Health Care Costs of Physical Inactivity in Canadian Adults" (2012) 37 *Applied Physiology, Nutrition and Metabolism* 803 [Janssen, "Costs"]. See also Peter T. Katzmarzyk & I. Jensen, "The Economic Costs of Physical Inactivity and Obesity in Canada: an update" (2004) 29 *Canadian Journal of Applied Physiology* 90.

guidelines is that they are based both on a consideration of how much physical activity is required for a significant health benefit and realistic levels that individuals can, and will feel like they can, achieve.²

Though many physical activity guidelines have been developed, this section will use the Canadian physical activity guidelines. Canada recently introduced new guidelines which are very similar to the WHO guidelines.³ This similarity reinforces the legitimacy of the new Canadian guidelines. Both will be explained below.

2.1.1.1 Adults

The Canadian guidelines for adults aged 18-64 years old are quite simple. First, adults “should accumulate 150 minutes of moderate- to vigorous-intensity aerobic physical activity per week, in bouts of 10 minutes or more.”⁴ In addition “it is also beneficial to add muscle and bone strengthening activities using major muscle groups, at least 2 days per week.”⁵ Lastly, the guide states that “more physical activity provides greater health benefits.”⁶ The WHO guidelines differ in that they include different levels for different intensities of activity; they recommend either 150 minutes a week of moderate-intensity activity or 75 minutes of vigorous-intensity activity.⁷ The Canadian guidelines for older adults are the same as for other adults, but with the addition that “those with poor mobility should perform physical activities to enhance balance and prevent falls.”⁸

2.1.1.2 Children and Youth

The Canadian guidelines provide specific guidelines for children and youth between 5-17 years of age. Previous guidelines required a much higher level of activity but few children were attaining that level of activity. Under the new guidelines, children and youth should engage in at least 60 minutes of moderate- to vigorous-intensity activity (“MVPA”) a day.⁹ On at least three

² Michael T. Sharratt & William E. Hearst, “Canada’s Physical Activity Guides: Background, Process, and Development” (2007) 32:2E Applied Physiology, Nutrition, and Metabolism S9.

³ World Health Organization, “Global Recommendations on Physical Activity for Health” (2010) online: WHO <<http://www.who.int/dietphysicalactivity/publications/9789241599979/en/index.html>>.

⁴ Canadian Society for Exercise Physiology, “Canadian Physical Activity Guidelines” online: Canadian Society for Exercise Physiology <<http://www.csep.ca/CMFiles/Guidelines/CSEP-InfoSheetsComplete-ENG.pdf>>.

⁵ *Ibid.*

⁶ *Ibid.*

⁷ *Supra* note 3 at 8.

⁸ *Supra* note 4.

⁹ *Ibid.*

days a week the activity should be vigorous. Also, activities that strengthen muscles and bones should be engaged in at least three times a week.¹⁰ And as with the adult guidelines, more activity is better. The WHO guidelines are essentially the same.¹¹ In Canada, separate sedentary behaviour guidelines for children and youth have also been introduced that include “limiting recreational screen time to no more than 2 hours per day” and “limiting sedentary (motorized) transport, extending sitting and time spent indoors throughout the day.”¹²

2.1.2 Current Activity Levels

The vast majority of Canadians are not sufficiently active to meet the guidelines. The level of activity amongst Canadians was measured by the 2007 and 2009 Canadian Community Health Survey through self-report and accelerometer data.¹³ A number of conclusions were made using the accelerometer data. It was found that only 15% of adults from ages 20 to 79 meet the Canadian guidelines for physical activity of 150 minutes of MVPA a week. It is also expected that greater benefit is achieved if that 150 minutes is attained by being active numerous times during the week, and only 5% of Canadian adults met the goal of being active for at least 30 minutes a day for 5 days a week.¹⁴ The data was also used to measure inactivity; 37% of Canadian adults did not even accumulate 15 minutes of MVPA on one day of a week. This is significantly different than self-reported data as 52.5% of Canadians saw themselves as at least moderately active in their leisure time.¹⁵

¹⁰ *Ibid.*

¹¹ *Supra* note 3 at 7.

¹² Canadian Society for Exercise Physiology, “Canadian Sedentary Behaviour Guidelines” online: <Canadian Society for Exercise Physiology http://www.csep.ca/CMFiles/Guidelines/SBGuidelinesChildandYouth_E.pdf>.

¹³ Rachel C. Colley et al, “Physical Activity of Canadian Adults: Accelerometer results from the 2007 to 2009 Canadian Health Measures Survey” (2011) 22 *Health Reports*, online: Statistics Canada <<http://www.statcan.gc.ca/pub/82-003-x/2011001/article/11396-eng.pdf>>.

¹⁴ This means active for at least 30 minutes of MVPA, accumulated in bouts of at least 10 minutes. Moderate intensity examples used for accelerometer data includes walking over 3.2 km/h, cleaning and bicycling for pleasure. *Ibid.* The CFLRI’s data evaluation found that 48% of Canadian adults were active based what they determined is the equivalent of 30 minutes of MVPA a day. Canadian Fitness & Lifestyle Research Institute, “2008 Physical Activity Monitor, Bulletin 2: Physical Activity Levels of Canadians” online: Canadian Fitness & Lifestyle Research Institute <http://www.cflri.ca/media/node/82/files/PAM2008FactsFigures_Bulletin02_PA_among_CanadiansEN.pdf> [CFLRI, “Adult Levels”].

¹⁵ Accelerometer data does not measure all activity including swimming, upper body activity and biking and so there is some difference expected from self-report data. But as walking is the most common activity, the discrepancy between self-report and accelerometer data is much higher than this would account for. *Ibid.*

Levels of inactivity increase with age.¹⁶ Men have higher rates of activity than women.¹⁷ Assessments have found that leisure time physical activity was also lower for individuals with lower socioeconomic status.¹⁸ Immigrants have a lower rate of being at least moderately active in leisure time, while off-reserve Aboriginal and Metis people have higher than average rates of being at least moderately active in leisure time.¹⁹ For some of those classified as inactive, they are active in other parts of their lives, but generally those who were active in their leisure time were more likely to be active in other parts of their lives.²⁰ Large portions of the Canadian adult population are not meeting the Canadian guidelines and therefore are insufficiently active.

In addition to these low levels of activity amongst adults, many Canadian children are not sufficiently active. According to data from the 2007 and 2009 Canadian Health Measures Survey, only 9% of boys and 4% of girls (for a combined 7% of youth and children) engage in at least 60 minutes of MVPA 6 days a week.²¹ This is similar to the amount required by the Canadian guidelines of 60 minutes of MVPA a day. Although few children meet the guidelines, 44% of children and youth engage in 60 minutes of MVPA at least 3 days a week and most (60%) children and youth engage in 90 minutes of MVPA at least one day a week. The previous guidelines required 90 minutes of MVPA a day, and less than 2% of children and youth would have met this level of activity.²² The current guidelines also include some vigorous-intensity activity 3 times a week, and little of the activity children and youth engage in is vigorous as 97% of MVPA in the data was of moderate-intensity. Only 4% of children and youth engage in 20 minutes of vigorous-intensity activity 3 times a week.²³ Less than half of children and youth engage in even 5 minutes of vigorous-intensity activity one day a week.²⁴ Children tend to

¹⁶ *Ibid.*

¹⁷ *Ibid.*

¹⁸ CLFRI, "Adult Levels" *supra* note 14; Heather Gilmour, "Physically Active Canadians" (2007) 18 Health Reports online: Statistics Canada < <http://www.statcan.gc.ca/pub/82-003-x/2006008/article/phys/10307-eng.pdf> > at 46.

¹⁹ *Ibid.*; Leanne C. Findlay, "Physical Activity among First Nations People off reserve, Métis and Inuit" (2011) 22 Health Reports online: Statistics Canada < <http://www.statcan.gc.ca/pub/82-003-x/2011001/article/11403-eng.pdf> >.

²⁰ Gilmour, *supra* note 18 at 49.

²¹ Girls averaged 10,300 steps a day and boys averaged 12,100 steps a day. Rachel C. Colley, "Physical Activity of Canadian Children and Youth: Accelerometer Results from the 2007 to 2009 Canadian Health Measures Survey" (2011) 22 Health Reports online: Statistics Canada < <http://www.statcan.gc.ca/pub/82-003-x/2011001/article/11397-eng.pdf> > [Colley "Children"].

²² *Ibid.*

²³ *Ibid.*

²⁴ The amount of vigorous activity may actually be significantly higher. One of the acknowledged limitations of this study was that the cut-off point for vigorous activity as based on only one study. *Ibid.*

become less active as they become older and girls are generally less active than boys.²⁵

Household income and education level of parents are not a large factor in the number of steps taken by children.²⁶ The vast majority of Canadian children and youth engage in a significant amount of moderate physical activity but very few meet the guidelines for MVPA or engaging in some vigorous-intensity activity.

2.1.3 Types of Physical Activity

There are different ways to be physically active and attempts to increase physical activity in the population often focus on a certain type of activity. This section will explore the types of activities adults and children engage in.

2.1.3.1 Adults

There are a number of explanations for why Canadians are not sufficiently active including the move to sedentary work environment and urban planning, which is based around the car. But these changes have come with many benefits, and therefore it is unrealistic to expect that we will simply go back to the ways things were. And although there are ideas about how to make the environment accommodate greater physical activity, added physical activity which is engaged in for the purposes of being active has become an important component of a healthy lifestyle. This is referred to as leisure time physical activity (“LTPA”).

The reason why there has been a focus on leisure time is because it has been increasing. One way to measure time usage is through the use of SLOTH, which measures how much time is spent in sleep, leisure, occupation, transportation and home production and how time spent in

²⁵ *Ibid.*

²⁶ The Canadian Fitness & Research Institute has performed 7 years of pedometer data analysis and found the relationship between income and education factors has not been consistent. In year 7 the significant relationships were that children from the highest income households took more steps than those from the lowest income households and children with parents who had a university education took more steps than those whose parents had a college education. But, for instance, in the year 2000, children from the highest income families were more likely to be defined as active enough than children from the lowest income families, but it was children whose families' household income were between \$30,000 and \$39,000 who were most likely to be defined as active enough. And parents with college level education were more likely than parents with a university education to have children who were defined as active enough. CL Craig et al, *Increasing Physical Activity: Supporting Children's Participation* (Ottawa: Canadian Fitness and Lifestyle Research Institute 2001) at 85 online: CFLRI <<http://www.cflri.ca/media/node/422/files/2000pam.pdf>>. American literature finds a link between income and levels of MVPA. See e.g. Stephanie Walters et al, “Does Participation in Organized Sports Predict Future Physical Activity for Adolescents from Diverse Economic Backgrounds?” (2009) 44 *Journal of Adolescent Health* 268; Andrea J. Romero, “Low-Income Neighborhood Barriers and Resources for Adolescents' Physical Activity” (2005) 36 *Journal of Adolescent Health* 253.

each of these activities has changed in the recent past. Roland Strum analysed how time use has changed in each of these areas in the United States between 1965 through 1999.²⁷ Sleep has remained at around 8 hours a night.²⁸ Time spent in occupation and home production have both decreased, while free time has increased.²⁹ Between 1965 and 1985, free time for women increased by 4.9 hours to 39 hours a week; for men, free time increased 4.7 hours to 40 hours a week.³⁰

Within this period, there has been an increase in LTPA in the United States.³¹ There has also been an increase in the amount of money spent on leisure time equipment and activities as a percentage of gross domestic product (“GDP”).³² But this increase has not been enough to bring Americans in compliance with their physical activity guidelines, which are similar to the Canadian guidelines.³³ While the amount spent on physical activity and time spent in LTPA has increased, it has not increased nearly as much as the time and money spent on sedentary leisure time activities. For instance, the home entertainment industry went from being smaller than the sporting goods industry in 1987 to four times larger than it in 2001.³⁴ In the same period, the amount of spectators to sporting events increased fivefold.³⁵ Although there has been an increase in leisure time including free time, more of the time and money related to this area has gone towards sedentary pursuits instead of active ones.

In recent years there has been more focus on other ways to make adults more active, specifically through active transport and workplace changes.³⁶ Just as free time has increased over time, so has the time spent in transportation.³⁷ Active transport involves walking, biking and public transportation, as activities such as taking the bus generally require more walking than does taking a car. The benefit of active transport depends on what activity is engaged in, the

²⁷ Roland Strum, “Economics and Physical Activity: A Research Agenda” (2005) 28 *American Journal of Preventive Medicine* 141; See also Michael Pratt et al, “Economic Interventions to Promote Physical Activity: Applications of the SLOTH Method” (2004) 27 *American Journal of Preventive Health* 136.

²⁸ Strum, *ibid* at 127.

²⁹ Time spent in home production relates to time caring for children, preparing food and taking care of the home.

³⁰ Strum, *supra* note 27 at 128.

³¹ *Ibid.*

³² *Ibid.*

³³ *Ibid.*

³⁴ Strum, *supra* note 27 at 128.

³⁵ *Ibid.*

³⁶ See e.g. Transport Canada, *Marketing Active Transportation*, (Ottawa: Transport Canada, 2010).

³⁷ Pratt, *supra* note 27.

intensity and the time. Canadians' walking habits provide an example of this. The most common type of physical activity for Canadians over 12 is walking.³⁸ Although walking can be a form of moderate physical activity, in many cases the walking engaged in is not in long enough stretches, and not often or intense enough to achieve significant benefit.³⁹ Thus the benefit of active transportation varies.

Workplace measures have also become more popular. For those who work at traditionally inactive workplaces, these can include printing documents off further away and taking the stairs. It can also involve using a standing desk, a treadmill desk or organized workplace activities. These workplace activities can increase step counts but are unlikely to involve enough MVPA to make meeting the guidelines much more likely. Lunch hour is clearly an important part of the workday for MVPA as the average adult is slightly more active on weekdays than weekends and the highest levels of activity occur during the lunch hour.⁴⁰ Thus, even if work does not allow for much MVPA, the time surrounding work is an important source of physical activity.

2.1.3.2 Children

There are a number of types of physical activities children may engage in. These types include: (i) organized sport and physical activity participation, (ii) active play and leisure, (iii) active transport and (iv) physical activity in the school environment.⁴¹

Three-quarters of Canadian children and youth participate in some type of organized physical activity.⁴² Organized sports and physical activities do not necessarily involve large amounts of MVPA and often also require sedentary car rides to and from the organized activities.⁴³ However, organized activities are an important part of being active as can be seen

³⁸ Gilmour, *supra* note 18 at 47; Craig, *supra* note 26 at 21 & 80.

³⁹ Pratt, *supra* note 27 at 138.

⁴⁰ Didiger Garriguet & Rachel C. Colley, "Daily Patterns of Physical Activity among Canadians" (2012) 23:2 Health Reports.

⁴¹ Active Healthy Kids Canada, *Are We Driving Our Kids to Unhealthy Habit? 2013 Active Healthy Kids Canada Report Card on Physical Activity for Children and Youth* (Toronto: Active Healthy Kids Canada, 2013) online: Active Healthy Kids Canada <<http://www.activehealthykids.ca/ReportCard/2013ReportCard.aspx>>.

⁴² Canadian Fitness & Lifestyle Research Institute, "2010-11 Physical Activity Monitor, Bulletin 1: Participation in Sport among Children and Youth" (Ottawa: Canadian Fitness & Lifestyle Research Institute, 2013) [CFLRI, "Sport"].

⁴³ JR O'Neill, RR Pate & MW Beets, "Physical Activity levels of Adolescent Girls during Dance Classes" (2012) 9:3 Journal of physical Activity & Health 382.

through the fact that children and youth involved in such activities take an average 1,600 more steps a day than those not involved.⁴⁴

Most sport participation occurs within an organized environment. Seventy-nine percent of children and youth primarily participate in structured sport environment while only 4% participate primarily in an unstructured sports environment.⁴⁵ As girls tend to be more inactive than boys, a structured activity may be particularly important for them as they are also more likely than boys to primarily participate in a structured sports environment.⁴⁶ An income difference is also visible here as children and youth from high income families (\geq \$80,000 a year) are more likely to be primarily involved in a structured environment than children and youth from lower income families ($<$ \$50,000 a year).⁴⁷ The largest difference in sports participation was based on the current involvement of parents in sports. For children whose parents were not currently involved in sports in any way, 24% of their children participated in sport.⁴⁸ Where parents were at least spectators of amateur sports, their children participated at a 62% rate.⁴⁹ Where parents played sports, there was a 69% rate, and where parents were involved in administrating, coaching or refereeing sports their children participated at an 82% rate.⁵⁰ In addition, the average two-parent family who spent money on sports and athletic equipment spent \$579 on those two items.⁵¹

Sports participation declined between 1992 and 2005; this decline was greater for boys than for girls.⁵² Girls are generally moving away from traditionally female sports and are more active in what have been male-dominated sports.⁵³ While participation rates in many sports have declined, soccer has become by far the most popular sport with 20% of 5 to 14 year olds in 2005 regularly participating in it (up from 12% in 1992).⁵⁴ Swimming was the next most popular sport

⁴⁴ Active Healthy Kids Canada, *supra* note 41 at 17.

⁴⁵ Canadian Fitness & Lifestyle Research Institute, "2010-11 Physical Activity Monitor, Bulletin 2: Nature of Children's Sport Participation" (Ottawa: Canadian Fitness & Lifestyle Research Institute, 2013).

⁴⁶ *Ibid.*

⁴⁷ *Ibid*; Warren Clark, "Kids' Sports" (2008) 85 Canadian Social Trends 54.

⁴⁸ *Ibid* at 56.

⁴⁹ *Ibid.*

⁵⁰ *Ibid.*

⁵¹ *Ibid* at 54.

⁵² *Ibid.*

⁵³ *Ibid* at 58.

⁵⁴ *Ibid.*

at 12%, followed by hockey at 11%.⁵⁵ Hockey has not only become less popular, but has particularly seen a reduction in participation by boys from lower income households.⁵⁶ Since 2005, soccer has remained by far the most popular sport for children and youth to participate in.⁵⁷

Active play and leisure provides another important opportunity for MVPA. Unorganized physical activity can provide different benefits from organized sports and physical activity. While organized sports provide opportunities for skills training and teamwork, unorganized activities allow for more independent and creative play. According to parents, children 5 to 11 years old are active in unorganized activities for 4.1 hours a week.⁵⁸

Active transportation focuses generally on walking or biking to school, although it can involve walking or biking for other transportation reasons. Twenty-four percent of children and youth use active transportation to get to and from school.⁵⁹ Sixty-two percent use inactive forms of transportation and 14 % use a combination of both.⁶⁰ Active transport provides an opportunity to be physically active but does not necessarily increase MVPA. There is some evidence that children and youth who use active transportation to and from school are more active.⁶¹

School provides an opportunity for MVPA through physical education programs, sports activities and recess and lunch breaks. Children and youth engage in the highest levels of MVPA during the lunch hour and in the afterschool period.⁶² The largest difference in MVPA for the least active third of children and youth and the most active third of children and youth occurs during the afterschool period from 3:00 p.m. to 5:00 p.m.⁶³ Children and youth are also more active on weekdays than weekends, averaging 57 minutes of MVPA on weekdays compared to 47 minutes on the weekends. The time around the school period is clearly an important time for physical activity.

⁵⁵ *Ibid.*

⁵⁶ *Ibid.*

⁵⁷ CFLRI, “sport”, *supra* note 42.

⁵⁸ Active Healthy Kids Canada, *supra* note 41 at 21.

⁵⁹ Canadian Fitness & Lifestyle Research Institute, “2010 Physical Activity Monitor, Bulletin 12: Transportation among Youth and Children” (Ottawa: Canadian Fitness & Lifestyle Research Institute, 2012).

⁶⁰ *Ibid.*

⁶¹ Roman Pabayo et al, “The Importance of Active Transportation to and from School for daily Physical Activity among Children” (2012) 55:3 Preventive Medicine 196.

⁶² Garriguet, *supra* note 40.

⁶³ *Ibid.*

2.1.4 Summary

These physical activity goals for adults, older adults, children and youth provide context for evaluating the credits. For adults the goal should be at least 150 minutes of MVPA a week. For children and youth, this should be 60 minutes a day. Particularly for children and youth, a certain amount of this activity should be vigorous. Encouraging activity that increases bone and muscle strength is also important, as is encouraging those who are already active to become more active. Reducing sedentary behaviour, particularly for children, is also a worthwhile goal. Much of the current focus is on increasing activity during leisure time.

2.2 Benefits of Physical Activity

This section will further explain why governmental intervention to support increasing physical activity can be justified. The point of promoting physical activity is to increase the quality of life of Canadians and reduce the costs to the health care system and the Canadian economy resulting from chronic disease. For 2009, the economic burden of physical inactivity was estimated at \$6.8 billion.⁶⁴ The direct cost to the health care system was an estimated \$2.4 billion and the indirect cost was an estimated \$4.3 billion.⁶⁵ Some care is required when using this type of cost assessment as it does not include cost savings resulting from physical inactivity.⁶⁶ As will be explained in this section, physical activity can play a role in preventing diseases, as well as in the treatment of particular diseases. The dose-response relationship explains how the effect of the activity depends on the amount and intensity level of activities. Darren Warburton and his co-authors have performed two systematic reviews to evaluate the amount of activity recommended under Canada's previous physical activity guidelines for adults.⁶⁷ These reviews will form the basis for the majority of this section.

⁶⁴ Janssen, "Costs", *supra* note 1.

⁶⁵ *Ibid.*

⁶⁶ Although not ideal that people do not live as long due to inactivity it does lead to reduction in costs in terms of pensions, old age security and possibly for health and hospital care later in life. Janssen's article simply consists of additional costs and not possible reductions in costs. For an example, van Baal found that obesity prevention would not reduce health expenditure costs (but would life-expectancy). van Baal PHM et al, (2008) "Lifetime Medical Costs of Obesity: Prevention No Cure for Increasing Health Expenditure" (2008) 5 PLoS Medicine e29 online: PLoS Medicine <<http://www.plosmedicine.org/article/info:doi/10.1371/journal.pmed.0050029>>; E. Haavi Morreim, "Sticks and Carrots and Baseball Bats: Economic and other Incentive to Modify Health Behavior" in Daniel Callahan, ed, *Promoting Healthy Behavior: what freedom? Whose responsibility?* (Washington, D.C.: Georgetown University Press, 2000).

⁶⁷ Darren ER Warburton et al, "Evidence-informed Physical Activity Guidelines for Canadian Adults" 32:2E *Applied Physiology, Nutrition, and Metabolism* S16 [Warburton "2007"]; Darren ER Warburton et al, "A

2.2.1 All-cause Mortality

Physical activity is very important for reducing the risk of premature all-cause mortality. Premature mortality weighs deaths by the age at which they occur. For example, if life expectancy is 70 years of age and someone dies at age 30, this person is viewed as having lost 40 years; if death has occurs at age 60, only 10 years are viewed as lost. These deaths are weighted differently because of the difference in years lost. All-cause mortality refers to death from all causes. Looking at all-cause mortality allows evaluation based on overall risk of death linked to physical inactivity instead of simply from particular diseases. Warburton *et al* found “a mean 31% lower risk for all-cause mortality in the most active individuals.”⁶⁸ They also found that meeting the previous Canadian guidelines was “associated with a 20-30% lower risk for premature all-cause mortality, with greater health benefits with high volumes and/or intensities of activity.”⁶⁹ One study by Blair *et al* found that “low physical fitness was a more important risk factor for all-cause mortality than hypertension, high cholesterol, obesity, or cigarette smoking.”⁷⁰ Meeting or exceeding the Canadian guidelines is very beneficial in reducing mortality from all-causes for adults.

The most important group to target with interventions are the least active as the greatest benefit occurs where the least fit become more fit; Even relatively small increases in habitual physical activity can bring significant benefits.⁷¹ But the least fit are not the only group that benefits from increasing physical activity as risks continue to decline for all but the most active with increased activity.⁷² Reinforcing the value of physical activity is also important, as it is not simply being active that is beneficial, but remaining active in the long-term. The greatest benefit of being active goes to those who maintain this type of lifestyle long-term.⁷³ If government interventions can be effective at increasing physical activity, the benefits in risk reduction for premature all-cause mortality in Canada could be very significant.

Systematic Review of the Evidence for Canada’s Physical Activity Guidelines for Adults” (2010) 7:39 International Journal of Behavioral Nutrition and Physical Activity [Warburton “2010”].

⁶⁸ Warburton, “2010”, *supra* note 67 at 6.

⁶⁹ *Ibid.*

⁷⁰ Warburton, “2007”, *supra* note 67 at S26; S. N. Blair et al, “Influences of Cardiorespiratory Fitness and other Precursors on Cardiovascular Disease and All-cause Mortality in Men and Women” (1996) 276 Journal of American Medical Association 205.

⁷¹ Warburton, “2007”, *supra* note 67 at S26.

⁷² *Ibid.*

⁷³ *Ibid.* at S28.

2.2.2 Cardiovascular Disease and Strokes

Physical activity is very helpful in preventing incidence of cardiovascular disease (“CVD”) and strokes. Warburton found an average relative reduction in the incidence of CVD of 33%.⁷⁴ As with all-cause mortality, more activity is generally better. But small amounts of activity may also be very protective; one study found that just walking one hour per week reduced the risk of CVD mortality in one group of women by 50%.⁷⁵ In terms of strokes, a risk reduction of at least 25-30% in the most active individuals has been found.⁷⁶ There is less evidence that relatively small amounts of physical activity, such as mentioned in relation to CVD, are protective against strokes.⁷⁷ In order to reduce the risk of both CVD and strokes, Warburton recommends 30 minutes or more of MVPA on most days of the week.⁷⁸

Physical activity also plays an important role in reducing health risks for those who have already developed CVD. Habitual physical activity has been found to reduce all-cause mortality for those with CVD by 20-25%.⁷⁹ Significant reduction in risk was found even for light physical activities.⁸⁰ There is some concern about the risks of physical activity for those with CVD, but the risk of cardiac events is low for supervised exercise training.⁸¹ So, physical activity is important for prevention of CVD and strokes, as well as for treating those who have already developed CVD.

2.2.3 Obesity

Often discussions about physical activity have grown out of a concern about the increasing rates of overweight and obesity. As will be discussed below, physical activity can help to reduce levels of adiposity⁸² in children and youth.⁸³ Where obesity diverges from the other risks discussed here is the amount of physical activity required in order to prevent weight gain or to sustain weight loss. There is evidence that 45-60 minutes of activity a day is required in order to

⁷⁴ Warburton, “2010”, *supra* note 67.

⁷⁵ *Ibid.*

⁷⁶ *Ibid.*

⁷⁷ *Ibid.*

⁷⁸ *Ibid.*

⁷⁹ Warburton, “2007”, *supra* note 67 at S30.

⁸⁰ *Ibid.*

⁸¹ *Ibid.*

⁸² Adipose means fatty. Adiposity is defined as “excessive fat in the body” and is a synonym for obesity. Donald Venes, ed. *Taber’s Encyclopedic Medical Dictionary* 21st ed. (Philadelphia: F.A. Davis Company, 2009).

⁸³ Ian Janssen, “Physical Activity Guidelines for Children and Youth” 32:2E *Applied Physiology, Nutrition, and Metabolism* S109 [Janssen “Guidelines”].

prevent weight gain and that 60-90 minutes a day is required to sustain weight loss in the long term.⁸⁴ Less is known about what is needed to attain weight loss.⁸⁵ Thus, if the main concern is prevention or reduction of obesity rates, the current Canadian guidelines alone are unlikely to meet this goal.⁸⁶

2.2.4 Hypertension

Prevention of hypertension is of particular importance as it is a very common condition. About 20% of Canadian adults report having been diagnosed as hypertensive.⁸⁷ In addition, there is evidence that a 55 year old Canadian with normal blood pressure has over a 90% chance of becoming hypertensive by the time he or she is 80 years old.⁸⁸ Physical activity is important to reduce risks both for those who are hypertensive and those who are not. The average risk reduction associated with physical activity was 32%.⁸⁹ There is some evidence that more vigorous-intensity activities are most important for reducing risk of hypertension.⁹⁰

2.2.5 Type II Diabetes

Physical activity plays a large role in prevention of type II diabetes. Warburton found an average risk reduction of 42% between the most active/fit and the least active/fit.⁹¹ There is an established relatively linear dose-response relationship with small amounts of activity reducing risk and increasing levels of activity bringing increased risk reduction.⁹² Lifestyle plays a very large role in the incidence of type II diabetes. Using evidence from the Nurses' Health Study, Hu

⁸⁴ Warburton *et al* did not address changes in dietary intake required to sustain weight loss. Warburton, "2007", *supra* note 67 at S31. See also W.H.M. Saris et al, "How much physical activity is enough to prevent unhealthy weight gain? Outcome of the IASO 1st Stock Conference and consensus statement" (2003) 4:2 *Obesity Reviews* 101 (this consensus statement also simply focuses on the physical activity requirement to weight loss and not other factors, specifically dietary intake levels). See also Kelly Crowe, "Obesity research confirms long-term weight loss almost impossible: No known cure for obesity except surgically shrinking the stomach", *CBC News* (4 June 2014) online: CBC News < <http://www.cbc.ca/news/health/obesity-research-confirms-long-term-weight-loss-almost-impossible-1.2663585>> (this article quotes from Traci Mann and Tim Caulfield on the importance of healthy eating and exercise for health, but that long-term weight loss is uncommon. According to Traci Mann, "long-term weight loss happens to only the smallest minority of people").

⁸⁵ Warburton, "2007", *supra* note 67 at S31.

⁸⁶ This is not intended to suggest that the guideline were intended to or expected to solve the "obesity epidemic" but to point out physical activity guidelines in relation to obesity are higher than what is being used as a measure in this thesis. *Ibid* at S32.

⁸⁷ Warburton, "2010", *supra* note 67.

⁸⁸ *Ibid*.

⁸⁹ *Ibid*.

⁹⁰ *Ibid*.

⁹¹ *Ibid*.

⁹² Warburton, "2007", *supra* note 67 at S33.

and his co-authors found that 91% of diabetes cases within this study could be attributed to five lifestyle factors, one of which is 30 minutes per day of MVPA.⁹³ Thus, physical activity has a vital role to play in the prevention of type II diabetes.

2.2.6 Cancer

There is also a link between physical activity and certain types of cancers, particularly colon and breast cancer. For colon cancer, Warburton found a mean 30% risk reduction between the least active/fit and most active/fit.⁹⁴ For breast cancer, the risk reduction is about 20% between the most active and least active.⁹⁵ MVPA may be of particular importance in the risk reduction for colon cancer.⁹⁶ In addition, because colon cancer studies have been careful to consider confounding factors, the real level of risk reduction may actually be greater.⁹⁷ It is the amount of activity that may be more important in reducing the risk of breast cancer.⁹⁸ Physical activity plays an important role in reducing the risk of colon and breast cancer.

2.2.7 Osteoporosis

Physical activity is also important for prevention of osteoporosis and also to reduce falls and the risk of fracture.⁹⁹ The considerations in relation to osteoporosis are different than what has thus far been considered. The benefit of physical activity in relation to osteoporosis is in increasing or maintaining bone mineral density. It is most commonly post-menopausal women who suffer from osteoporosis; aerobic and resistance training interventions have been found to be particularly helpful for this group.¹⁰⁰ Activity that provides significant loading/impact provides for greater reduction in the risk of osteoporosis.¹⁰¹ Thus, the type of activity engaged in is important. But when engaged in at very high levels, such as with elite athletes, this type of activity can actually increase the risk of osteoporosis significantly.¹⁰² This is an important factor

⁹³ The five factors were “BMI, a healthy diet, the participation in [MVPA] for at least 30 min per day, no current smoking, and the consumption of an average of at least one-half serving of alcoholic beverage per day. Warburton, *supra* note 67 at 207; FB Hu et al, “diet, Lifestyle, and the risk of type 2 Diabetes Mellitus in Women” (2001) 345 *New England Journal of Medicine* 790.

⁹⁴ Warburton, “2010”, *supra* note 67.

⁹⁵ *Ibid.*

⁹⁶ *Ibid.*

⁹⁷ *Ibid.*

⁹⁸ *Ibid.*

⁹⁹ *Ibid.*

¹⁰⁰ *Ibid.*

¹⁰¹ *Ibid.*

¹⁰² *Ibid.*

to remember, but in encouraging the general public to become more active, the level of activity generally being encouraged would bring benefit, particularly for women.

2.2.8 Mental Health and Wellness

Physical exercise also plays an important role in preventing mental health problems. Regular physical activity has been found to increase well-being by positively affecting mood, creating a feeling of satisfaction with life and increasing the ability to cope with stress.¹⁰³ Aerobic activity has been found to not only prevent mental health problems, but also serves as an effective treatment for mild to moderate depression.¹⁰⁴ One study found that following public health recommendations for physical activity was as effective for treating mild to moderate depression as medication or cognitive behavioural therapy.¹⁰⁵ Promoting physical activity is important for preventing mental health problems and increasing well-being.

2.2.9 Children and Youth

The benefits of physical activity in children and youth have not been studied to the same extent as in adults, but some benefits have been established. An expert panel was convened by the US Centers for Disease Control and Prevention (“CDC”) to assess existing evidence. They found strong evidence that “physical activity has beneficial effects on adiposity (within overweight and obese youth), musculoskeletal health and fitness, and several components of cardiovascular health.”¹⁰⁶ They also found evidence “adequate to conclude that physical activity has beneficial effects on adiposity levels in those with normal body mass, on blood pressure in normotensive youth, on plasma lipid and lipoproteins levels, on non-traditional cardiovascular risk factors..., and on several components of mental health.”¹⁰⁷ What is less understood is the dose-response for physical activity in children and youth and if this differs from adults.¹⁰⁸ Despite this lack of knowledge of the dose-response relationship, a recommendation of 60 minutes of MVPA a day has become common. In addition to the health benefits during childhood, being active in childhood can set the pattern for being active as adults. In order to set

¹⁰³ Steve Edwards, “Physical Exercise and Psychological Wellness” (2002) 4:2 International Journal of Mental Health Promotion 40 at 45.

¹⁰⁴ James R. Dunn, Gerry Veenstra & Nancy Ross, “Psychosocial and Neo-material Dimensions of SES and health revisited: Predictors of self-rated health in a Canadian National Survey.” (2006) 62 Social Science & Medicine 1465 at 1466-7.

¹⁰⁵ *Ibid.*, at 7.

¹⁰⁶ Janssen, “Guidelines”, *supra* note 83 at S113.

¹⁰⁷ *Ibid.*

¹⁰⁸ *Ibid.* at S115.

this pattern it is very important that children and youth enjoy the physical activity they engage in.¹⁰⁹ The amount of physical activity required and degree of benefit has not been as thoroughly investigated for children and youth as it has been for adults. Although the benefits of physical activity in children have not been as studied this does not mean that they are not as great. Also as a large of part of being active as a child is about setting a pattern of being active in adulthood, the benefits of being active in adulthood is just as important as the benefits for childhood when considering increasing physical activity in children.

2.2.10 Risks of Physical Activity

As has been examined above, there are many benefits that can come from being physical active, but it is also important to remember that there are risks that come from being physically active. This is not intended to minimize the benefits of physical activity, which are extensive, but to be aware that there are also risks and harms related to physical activity. These risks and harms increase significantly when there is extensive, vigorous activity engaged in, such as when someone is training for and participating in a sport.¹¹⁰ Also, at this point the benefits of increasing physical activity level off.¹¹¹ Thus physical activity is not simply an issue of benefit, but is a risk-benefit question, where at some level, the health risks of increasing physical activity outweigh the health benefit.

There are a number of risks involved in vigorous intensity activity. Sports injuries can result in significant medical expense and reduce productivity in addition to the pain and limitations they place on the individuals who suffers the injuries. Sports injuries are common. One study considered the number of sports injuries in the Netherlands between 1992 and 1993.¹¹² It found among the 16 million residents, there were 2.9 million injuries registered and 1.1 million of these required medical attention.¹¹³ In recent years, there has also been increasing concern over the long term consequences of concussions suffered in contact sports such as

¹⁰⁹ *Ibid.* at S117.

¹¹⁰ Esther M.F. van Sluijus et al, "Risks of Physical Activity" in Jim McKenna & Chris Riddoch, eds, *Perspectives on Health and Exercise* (New York: Palgrave Macmillan, 2003) 109 at 112.

¹¹¹ *Ibid.*

¹¹² *Ibid* at 113.

¹¹³ This information was also used to calculate which sports had higher injury rates. This was measured by the number injuries per hours of sports participation. Indoor soccer had the highest rate of 6.2, followed by soccer, hockey and karate/tea kwon do at the risk of 5.5. *Ibid.*

hockey and football.¹¹⁴ This level of injury from sport is a relevant concern when considering the extent to which the government should be promoting them.

Relative to the benefits of physical activity, the risks of physical activity appear low. But in encouraging physical activity, particularly vigorous-intensity physical activity and sport, it is important to be aware of the risks of such activity.

2.2.11 Summary

The potential benefits of physical activity are great both in terms of the individuals who attain a health benefit and the possible savings to the health care system from that health benefit. The benefit to individual Canadians is in terms of the reduction of suffering, disability and premature death related to physical inactivity. As has been explained in this chapter, physical activity reduces the relative risk of CVD, obesity, hypertension, type II diabetes, cancer and osteoporosis as well as promotes well-being. The degree of benefit depends on the level of activity and the intensity; in general, more is better. Another possible benefit could be in reduced governmental expenditures on health care as well as a benefit to the economy through having a healthy workforce.

This section was intended to establish the possible benefits of increasing physical activity. The next section will explain why increasing physical activity is a better way to evaluate these credits than obesity, physical fitness, sedentary behaviour/physical inactivity or well-being, though these are important secondary considerations.

¹¹⁴ See e.g. Mary Ormsby, “What parents need to know about hockey and concussions” (September 22,2011) online: Parent Central < <http://www.parentcentral.ca/parent/activities/kidshockey/article/1053269--what-parents-need-to-know-about-hockey-and-concussions>>.

In addition, for professional female athletes, there is an additional concern beyond injury referred to as the ‘female triad.’ This condition occurs when female athletes who are concerned about too much body fat and who train hard end up with disordered eating, amenorrhea (delayed onset or absence of menstrual bleeding)¹¹⁴ and osteoporosis.¹¹⁴ The prevalence of these conditions amongst female athletes and their consequences are concerning. For instance, the bone loss resulting from the triad for an adolescent female can result in “a young athlete...acquir[ing] the bone mass of a 60-year old, with a subsequent three-fold risk of stress fractures.” Non-athletes can at times also engage in an unhealthy level of physical activity, for instance, excessive exercise is one of signs of bulimia nervosa. In considering promoting physical activity for females, it is important to consider whether what is being promoted may also encourage unhealthy behaviours in addition to healthy behaviours.

Vigorous-intensity physical activity can also increase the risk of death from sudden cardiac arrest. This is obviously a serious risk, although the rate of sudden cardiac arrest is very low, estimated at about one per 20 000 – 45 000 exercisers per year. But this is a higher level of risk than during inactivity. The risk of sudden cardiac arrest during vigorous activity is much higher for those who are not regularly physically active. In addition, underlying heart disease increases the risk for such events. Although the risks are low, there are individuals for whom vigorous-intensity physical activity is not advisable. van Sluijus, *supra* note 110 at 114-123.

2.3 Secondary Considerations

The problems these credits are intended to address are varied. The primary consideration for this thesis is physical activity. Though this was also an important part of why each government introduced their credits, there were also other goals in mind in the creation of these credits. For instance, in the case of the dual-credit groups, the focus was on physical fitness and obesity, whereas some of the single-credit group credits were more focused on well-being. This section will explain how these other purposes inform analysis and also explain why physical activity will be used as the primary consideration in evaluating these credits. This section will consider the issues of obesity, physical fitness, sedentary behaviour and well-being.

2.3.1 Obesity

One goal on which the credits could be assessed is the prevention and reduction of overweight and obesity in Canada. There are a number of reasons why increased physical activity is a preferable goal to reduction of obesity. The health concern in relation to obesity is generally in terms of increased chronic diseases, much as it is with physical inactivity. However, the amounts of physical activity that are required to prevent age-related weight gain and to sustain long-term weight loss are significantly higher than what is recommended to reduce the risk of chronic disease. Instead of 150 minutes a week, the recommendations for prevention of weight gain is 45-60 minutes a day, and to sustain weight loss it is 60-90 minutes a day. These recommendations do not even include how much physical activity is required in order to lose weight. Despite these high levels of physical activity in order to affect obesity levels, the level to bring about health benefits though the reduction of relative risk for chronic disease does not require this level of activity. The benefits of being active and fit for overweight and obese individuals appear at least as important as whether they lose weight.¹¹⁵ Thus, evaluating these

¹¹⁵ Warburton, “2007”, *supra* note 67 at S31.

In exploring this issue Steven Blair and Susan Brodney found that:

Overweight and obese individuals who are active and fit have lower rates of disease and death than overweight and obese individuals who are inactive and unfit. This inverse gradient of risk across activity or fitness categories is present in various strata of body habitus and frequently is steeper in the higher categories of body habitus variables.

They also found that, “Overweight or obese individuals who are active and fit are less likely to develop obesity-related chronic diseases and have early death than normal weight persons who lead sedentary lives.” Thirdly, they found that, “inactivity and low cardiorespiratory fitness are as important as overweight or obesity as predictors of mortality, at least in men.” Together these findings show that physical activity is a very important goal health goal without having to link it to overweight and obesity. Steven N. Blair & Suzanne Brodney, “Effects of Physical Inactivity and Obesity on Morbidity and Mortality: Current Evidence and Research Issues” (1999) 31:11 *Medicine*

credits on the basis of obesity may overlook the health benefits attained by overweight and obese individuals who do meet the guidelines for physical activity.

Beyond considering whether physical activity or obesity is a preferable goal for the government to pursue, there are a number of reasons why physical activity makes a more appropriate measure for evaluating these credits than obesity. First, to the degree that the credits target obesity, this is done through increasing physical activity.¹¹⁶ As such, a focus on physical activity still makes sense. Secondly, these measures are intended to affect behaviour; reduction in obesity is not the behaviour, physical activity is the relevant behaviour. Thirdly, obesity is a complex problem that involves many factors other than physical activity, such as: environment, genetics and diet.¹¹⁷ As these credits cannot (and do not intend to) address all or even most of the issues in relation to obesity, to judge these credits on the basis of obesity would be inappropriate. This does not mean that the credits are unable to play a valuable role in preventing or reducing overweight and obesity, but as this benefit would come through physical activity, and because physical activity itself may be just as valuable for health as prevention or reduction of obesity, physical activity makes a better focus for evaluation than obesity.

2.3.2 Physical Fitness

The fitness levels of Canadians have been declining while rates of overweight and obesity have been increasing. It is possible to see this through comparing data from the 2007-2009 Canadian Health Measures Survey with the 1981 Canada Fitness Survey.¹¹⁸ Analysis of these surveys considered changes to fitness levels as well as body composition. It found that more Canadian adults were at high risk based on waist circumference, were obese based on body mass index (“BMI”), and had a fair/needs improvement rating in terms of body composition,

& Science in Sports & Exercise S646 at S659-S660. See also Francisco B. Ortega, et al. “The Intriguing Metabolically Healthy but Obese Phenotype: cardiovascular prognosis and role of fitness” (2013) 34 *European Heart Journal* 398.

¹¹⁶ Wellness credits can be broader than this as weight loss programs that focus on diet, such as weight watchers, may also be supported through such programs.

¹¹⁷ Philippe Vandebroek, Jo Goossens & Marshall Clemens, “Tackling Obesities: Future Choices – Obesity System Atlas” (UK: Department of Innovation Universities and Skills, 2007) online: Foresight < http://www.bis.gov.uk/foresight/MediaList/foresight/media%20library/BISPartners/Foresight/docs/obesity/~/_/media/BISPartners/Foresight/docs/obesity/11.ashx >.

¹¹⁸ See Margot Shields et al, “Fitness of Canadian Adults: Results from the 2007-2009 Canadian Health Measures Survey” (2010) 21:1 *Health Reports* ; Mark Tremblay et al, “Fitness of Canadian Children and Youth: Results from the 2007-2009 Canadian Health Measures Survey” (2010) 21:1 *Health Reports*.

flexibility and muscular strength.¹¹⁹ Canadian children were also found to have lower strength and flexibility ratings and less healthy body compositions than in 1981.¹²⁰ In addition to being inactive, the physical fitness of Canadians is also in need of improvement.

Physical fitness results from being physically active. Physical fitness may be more beneficial to health than physical activity, particularly when moving from very low levels of fitness or activity.¹²¹ It could be tempting to choose physical fitness as the goal of the credits, but, there are a number of reasons why physical activity has been chosen instead for this analysis. First, in terms of public perception, individuals are much more likely to feel like they can become more active than that they can become fit. As one of the benefits of these measures is that it is a show of government support and belief that individuals can become more active and fit, it makes sense to speak in terms of activity instead of fitness.¹²² This can also be seen in promoting physical activity guidelines instead of physical fitness guidelines. The benefits of physical fitness can be integrated into promoting physical activity by focusing on MVPA and promoting higher levels of activity.

Secondly, these credits will be evaluated as incentives, which means that they are intended to change behaviour; physical activity is the behaviour while physical fitness is the result of that behaviour. To consider physical fitness instead would require another step to have to be taken in evaluating these credits, without a great deal of benefit.

¹¹⁹ The exception to this was flexibility of males aged 40-59 and females aged 40-69. Shields, *supra* note 118 at 28-29.

¹²⁰ Tremblay, *supra* note 118 at 16.

¹²¹ Steven Blair, Yiling Cheng & J. Scott Holder, "Is Physical Activity or Physical Fitness more important in defining health benefits?" (2001) 33:6S *Medicine & Science in Sports & Exercise* s379.

¹²² Steven Blair, et al, pointed out that as a matter of public policy it makes more sense to promote being more active instead of telling individuals to become fit. For instance, the former guidelines for adults start by encouraging low intensity activity for those who are inactive, such as walking, as this is something that may be seen as more doable, particularly for those whose level of physical activity and physical fitness is very low. Walking is also by far the most popular type of leisure time physical activity amongst Canadians, so it is the type of behaviour Canadians are more likely to actually engage in and continue to engage in. Those who are currently not active or fit are also a very important group to target, as the greatest benefit of activity is for those who are least active/fit. Although fitness focused activities may be more beneficial, the question of what activities will Canadian actually engage in is also important. Even though there appears to be a greater relationship between physical fitness and health outcome, the primary way of attaining higher levels of physical fitness is through physical activity. Individuals will likely become more fit if they become more active and so physical activity makes a good primary consideration, and physical fitness a useful secondary consideration. *Ibid* at s397.

2.3.3 Sedentary Behaviour

Another option for encouraging good health is to target reducing sedentary behaviour. Sedentary behaviour is often associated in the literature with what is referred to as screen time, which can include watching television, playing video games and time spent on the computer. Canadian children and youth are sedentary for an average of 8.6 hours a day.¹²³ There is some evidence of a link between sedentary behaviour and greater health risks.¹²⁴ The risk created by sedentary behaviours may go beyond the fact that they are periods of inactivity.¹²⁵ There has been particular concern that sedentary behaviour has led to higher rates of obesity and overweight.¹²⁶ This concern over sedentary behaviour is also reflected in the new sedentary behaviour guidelines for children discussed earlier in this chapter.

Although physical activity and sedentary behaviour are not complete opposites, increasing physical activity will obviously have an effect on the amount of sedentary time. And although there is some evidence that reduction in sedentary behaviour is healthy, the benefits are not established to the same degree or to the same extent that they have been established for physical activity. Remembering that decreased screen time, less time sitting and more time outside is healthy is important for evaluation as some of the credits were established with a much wider goal than physical activity, of which reducing sedentary behaviour is an important part. But physical activity still provides a better primary goal for this analysis than being active as the established benefits are so much higher than for reductions in sedentary behaviour.

2.3.4 Well-being

Well-being is a broad goal that reflects important considerations in relation to an individual's level of health and health risks beyond physical activity. For instance, the WHO defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."¹²⁷ Thus, in evaluating these credits, it is useful to remember that

¹²³ Colley, "Children", *supra* note 21; Active Healthy Kids Canada, *supra* note 44 at 26.

¹²⁴ *Ibid* at 32-36; Alan L. Smith & Stuart JH Biddle, eds, *Youth Physical activity and Sedentary Behavior: Challenges and Solutions* (Champaign, IL: Human Kinetics, 2008); Stuart JH Biddle et al, "Standing up to Diabetes: Sedentary Behavior Matters" (2012) 2:4 *Diabetes Management* 261.

¹²⁵ Colley, "Children", *supra* note 21.

¹²⁶ Natalie Pearson & Stuart JH Biddle, "Sedentary Behavior and Dietary Intake in Children, adolescents, and Adults: A Systematic Review" (2011) 41:2 *American Journal of Preventive Medicine* 178; Smith, *supra* note 124.

¹²⁷ World Health Organization "Prevention of Mental Disorders: Effective Interventions and Policy Options Summary Report" (2004) World Health Organization at 16; World Health Organization, *Basic Documents*, World

there is more to the concept of health than simply a measurable physical health benefit of a reduced level of pre-mature mortality and chronic disease.

However, physical activity is a better primary consideration because its benefits are better established and it is much easier to measure. One of the problems with using the terms wellness or well-being is that these terms involve many different considerations. It is difficult to determine what should be measured, how it can be measured, how to assess what overall benefit has occurred and what the degree of this benefit is. This does not mean that well-being is not a legitimate goal and may be worthy of government intervention; but being able to perform such an evaluation is beyond the scope of this thesis. In addition, an important contributor to well-being is physical activity.

Although well-being is not the central focus for evaluation, there are a number of factors relating to wellness that will be useful to keep in mind. The first factor is the negative effect that stress can have on well-being and the health risks that can result from having chronic levels of high stress.¹²⁸ Thus, programs that reduce stress may be useful interventions. Secondly, involvement in activities that allow for self-expression, such as the arts, can often prove useful for increasing wellness and health more generally.¹²⁹ Social capital can also be beneficial. Social capital is “the information, trust and norms of reciprocity inhering in one’s social network.”¹³⁰ It occurs when individuals interact with their family, friends and community. Having these links with others can help to reduce stress, provide information about the consequences of unhealthy behaviour and cause individuals to feel responsibility for their health because it affects others and not only themselves.¹³¹ Social capital most often results in positive outcomes. For instance, being part of a sports team has been found to provide greater benefit than physical activity alone

Health Assembly, 48th ed, Supp 2006 at 1 (Constitution of the World Health Organization) online: World Health Organization <http://www.who.int/governance/eb/who_constitution_en.pdf>.

¹²⁸ Mark Forshaw, *Advanced Psychology: Health Psychology* (UK: Hodder & Stoughton, 2003).

¹²⁹ For e.g. Raymone MacDonald, Gunter Kreutz & Laura Mitchell eds, *Music, Health and Wellbeing* (Oxford: Oxford University Press, 2012); Jennifer E Titus & Ada L Sinacore, “Art-making and Well-being in Healthy Young Adult Women” (2013) 40:1 *The Arts in Psychotherapy* 29.

¹³⁰ M. Woolcock, “Social Capital and economic development: toward a theoretical synthesis and policy framework” (1998) 27:2 *Theory and Society* 151 at 153 cited in Joan Costa-Font & Philipa Miladovsky, “Social Capital and the Social Formation of Health-related Preferences and Behaviours” (2008) 3 *Health Economic, Policy and Law* 413 at 413.

¹³¹ This influence is not always positive, for instance, if most people in a group smoke this may influence the negative behaviour of smoking instead of discouraging smoking. Sherman Folland, “An Economic Model of Social Capital and Health” (2008) 3 *Health Economics, Policy and Law* 333.

due to the benefit that flows from being part of a team.¹³² Benefits have also been observed from cultural, religious and other group activities.¹³³ Thus whether a program reduces stress, promote self-expression or increases social capital is a valid consideration. A number of the activity credits have recognized this by making cultural and recreational activities eligible for their credits.

2.3.5 Summary

The previous sections of this chapter explained why increasing physical activity is so important and why increased physical activity can serve as a legitimate goal for evaluating these credits. As the governments who created these credits had a number of goals in mind when creating them, this section considered the legitimacy of these goals. It found that these goals can help to create a fuller and more nuanced analysis for these credits. However, as the benefits of physical activity are so great, physical activity is easier to measure, and physical activity is one of the important purposes of the governments who enacted them, physical activity will be the primary goal considered in evaluation.

2.4 Conclusion

This chapter showed why physical activity is used in this thesis as the primary goal used in evaluating the credits. It explained that, as compared to recommended levels of activity, most Canadians have sub-optimal levels of physical activity and fitness. The many benefits of physical activity were explored, including risk reduction for chronic disease and all-cause pre-mature death. Increased physical activity could lead to a significant decrease in CVD, hypertension, type II diabetes, colon and breast cancer and osteoporosis. Physical activity is also useful in promoting mental health and well-being. Government interventions may be acceptable if they are

¹³² See Lindsay A. Taliaferro *et al.*, “High School Youth and Suicide Risk: Exploring Protection Afforded Through Physical Activity and Sport Participation” (2008) 78:10 *Journal of School Health* 545 at 552; David Carless & Kitrina Douglas, “The Role of Sport and Exercise in Recovery from Serious Mental Illness: Two Case Studies” (2008) 7:2 *International Journal of Men’s Health* 137.

¹³³ The classic example of this is the health of individuals in religious communities in Utah. M. Grossman, “On the Concept of Health Capital and the Demand for Health,” (1972) 82 *Journal of Political Economy* 233 cited in Richard M. Scheffler & Timothy T. Brown, “Social Capital, Economics, and Health: New Evidence” (2008) 3 *Health Economic, Policy and Law* 321 ay 322. Another example of community building that has showed positive mental health benefits is the use of men’s sheds in Australia. These sheds provide an accepting environment for men to discuss concerns, meet socially and perform meaningful tasks. They are an example of how important being part of a social community is for the prevention of mental health problems and increasing well-being. Michelle Morgan *et al.*, “Men’s Sheds: A Community Approach to Promoting Mental Health and Well-being” (2007) 9:3 *International Journal of Mental Health Promotion* 48.

able to increase physical activity levels because of the high health benefits that result from being active.

The first two sections established why physical activity can be used to evaluate these credits. The last section explains why evaluation based on physical activity is preferable to other considerations, although the others make for useful additional considerations. These include: obesity, physical fitness, sedentary behaviour and well-being. These considerations play a role in why the credits were created and are, therefore, relevant in evaluating the credits. But physical activity plays an important role in attaining all of these goals and physical activity plays a central role in each of these credits, so it is a legitimate basis for evaluation of these credits.

3 Tax Measures

The credits to be considered in this thesis are tax expenditures. This chapter will explain what tax expenditures are, how this concept has developed and some of the relevant implications of being tax expenditures. Three ways of evaluating tax expenditures will be discussed: preservation of the comprehensive tax base, traditional tax expenditure analysis and institutional design. The discussion of tax expenditures in this chapter will inform the analysis of the credits later in this thesis.

3.1 The Tax Expenditure Concept

Stanley Surrey introduced the concept of tax expenditures in 1967, when he was serving in the United States as the Assistant Secretary of the Treasury for tax policy.¹ Surrey became concerned with tax measures that were essentially spending programs hidden within the tax system. He had found that tax substitutes were “equal to about a quarter of the regular federal budget” and as they were “buried ...in the tax system,...were immune from scrutiny at a time when the regular budget [was] being carefully scrutinized for every possible saving.”² Thus, through introducing the concept of a tax expenditure he highlighted a number of very important points: these measures involved a lot of government spending that did not appear as spending, they were not treated as spending when the measures were created, and were not generally reviewed when cuts to the budget had to be made. Surrey expanded on his concern over the use of tax expenditures in a number of articles and books, often co-authored with Paul McDaniel,

¹ J. Clifton Fleming Jr. & Robert J. Peroni, “Reinvigorating Tax Expenditure Analysis and its International Dimension” (2008) 27 Va Tax Rev 437 at 439 ; Daniel Shaviro points out in his article that German writers and the German government had already begun considering the similarities between certain tax measures and government spending and had already been reporting on such measures when Surrey popularized the concept of tax expenditure. Daniel N. Shaviro, “Rethinking Tax Expenditures and Fiscal Language” (2004) 57 Tax L Rev 187 at 199-2000.

² Stanley S. Surrey, *Pathways to tax reform; the Concept of Tax Expenditures* (Cambridge, Mass: Harvard University Press, 1973) at 32-3 [Surrey, *Pathways*].

who also worked in the United States Treasury Department in the 1960s and as a well-respected legal scholar on taxation thereafter.³

Surrey and McDaniel defined a tax expenditure as a tax measure that departs from the normative tax structure.⁴ The basic premise of their work was simple enough: when the government forgoes a tax payment for a non-tax reason, then it is essentially the same as the government spending money and should be evaluated as such. Since tax measures were not treated as spending, this allowed for tax measures to be implemented that would not have been acceptable if they had been considered as direct spending measures.⁵

Providing a workable definition for tax expenditures was more difficult as many tax provisions benefit some more than others but do so for reasons that are a part of the tax system, or as Surrey and McDaniel called it, the normative tax structure. In order to determine what measures were part of the normative tax structure, Surrey used the Haig-Simon definition of income: “an increase in net economic wealth between two points in time plus consumption during that period.”⁶ As this definition was not specific enough to determine what is the normative tax structure, “widely-accepted ‘standards of business accounting’ ...[and] the ‘generally accepted structure of the income tax’” were used to determine what was part of the normative tax structure.⁷ Surrey and McDaniel argued that the amount of revenue that was forgone due to measures which were not part of the normative tax structure was equivalent to spending that amount. As the decision to implement a tax expenditure was “really a fiscal policy decision disguised as a tax policy decision....the approach and analysis applied should be similar to those in direct spending budgets.”⁸

³ Stanley S. Surrey & Paul R. McDaniel, “The Tax Expenditure Concept: Current Developments and Emerging Issues” (1979) XX BCL Rev 225 [Surrey, “Current Developments”]; Stanley S. Surrey & Paul R. McDaniel, *Tax Expenditures* (Cambridge, Mass: Harvard University Press, 1985) [Surrey, *Tax Expenditures*]; Paul R. McDaniel, “The Staff of the Joint Committee on Taxation Revisions of Tax Expenditure Classification Methodology: What is to be made of a Change that makes no Changes?” in Lisa Philipps, Neil Brooks & Jinyan Li, eds. *Tax Expenditures: State of the Art* (Canada: Canadian Tax Foundation, 2011) 3:1 [McDaniel, “Joint Committee Methodology”].

⁴ Surrey, “Current Developments”, *supra* note 3 at 227-232.

⁵ *Ibid.*

⁶ Surrey, *Tax Expenditures*, *supra* note 3 at 4.

⁷ Stanley S. Surrey, “The Concept of Tax Reliefs – Its Relation to Tax Policy and Budget Process” (Lecture delivered at the 1977 Varna Congress, International Institute of Public Finance, Subsidies, Tax Relief and Prices, 1977) cited in Surrey, “Current Developments”, *supra*, note 3 at n 9.

⁸ Surrey, *Tax Expenditures*, *supra* note 3 at 70. One of the greatest problems with tax expenditures is determining what is a tax expenditure and what is not. The difficulty lies in determining what is part of the normative tax

Due to the problems caused by defining the normative tax structure, a number of other options have been considered. For instance, Victor Thuronyi introduced the concept of what he termed substitutable tax provisions.⁹ He focused on whether a non-tax based spending program could achieve the same goals as a tax provision at least as well as the spending program, instead of focusing on whether it was part of the normative tax structure.¹⁰

Canada and the OECD have chosen to address the normative structure problem in another way. They instead use the term “benchmark tax structure”. The use of the phrase “benchmark tax structure” is intended to remove the problem of defining what is normative, which according to Kraan, has become a very political exercise.¹¹ Removing the discussion of the normative tax system is intended to remove the assumption that a tax measure is deviating from the norm and is therefore problematic. But as with the normative structure, there remains large disagreement about what fits within the benchmark structure.¹²

Regardless of the method of evaluation, the credits are clearly tax expenditures. They are not a part of the normative tax system, as the credits are not necessary to identify the taxpayer’s theoretical income, and thus they meet Surrey’s definition. They also are substitutable, as this financial support could be provided through a direct spending program. Similar spending programs could be provided through a voucher provided to parents to be used to register in an

structure and what is outside of that structure, making it a tax expenditure. Adding to this complication is the question of whether the income tax really is still an income tax, or whether it could be considered a consumption tax or whether it at least should be evaluated from the point of view of a consumption tax. Evaluating it in this manner would make many measures that appear to involve large amounts of forgone income into a part of the normative tax structure. The measures to be examined in this thesis are clearly outside of the normative structure, even if evaluated from the point of view of a consumption tax and so qualify as tax expenditures. See generally McDaniel, “Joint Committee Methodology”, *supra* note 3.

⁹ Victor Thuronyi, “Tax Expenditures: A Reassessment” (1988) 1988 Duke LJ 1155 at 1156.

¹⁰ *Ibid.*

¹¹ Dirk-Jan Kraan, “Off-budget and Tax Expenditure” (2004) 4 OECD Journal on Budgeting 121, cited in OECD, *Tax Expenditures in OECD Countries* (OECD, 2010) [OECD, *Tax Expenditure 2010*].

¹² Canada publishes information on tax expenditures in Canada annually. In order to do so, it has chosen to report any deviations from the basic benchmarks that have been set for the income tax system in Canada. This means that inclusion in the *Tax Expenditures and Evaluations* reports does not mean that a measure is a tax expenditure in a theoretical sense, but provides information on measures some of which may be considered as tax expenditures. The estimated cost of such measures is measured in revenue forgone and limits the accuracy of the information in relation to how revenue would change if the measure did not exist. The distinctions between country definitions of what is within the benchmark kept Swift, Brixi and Valenduc from comparing tax expenditure between countries although the OECD has compared them. Marc Seguin & Simon Gurr, “Federal Tax Expenditures in Canada” in Hana Polackova Brixi, Christian M.A. Valenduc & Zhicheng Li Swift, eds. *Tax Expenditures – Shedding Light on Government Spending through the Tax System* (Washington, D.C.: The World Bank, 2004) 97 at 97-107; Zhicheng Li Swift, Hana Polackova Brixi & Christian Valenduc, “Tax Expenditure: General Concept, Measurement, and Overview of Country Practices” in *ibid*; OECD, *Tax Expenditure 2010*, *supra* note 11 at 16.

activity at a reduced or no cost or the use of an online system that would allow organizations to claim the credit on behalf of individuals and reduce the amount charged accordingly. Thus, they meet Thuryoni's definition. Finally, they would be considered a tax expenditure under the OECD's conceptualization, as a benchmark tax system would surely not include such credits.¹³ Therefore, there is no issue as to whether or not the credits should be considered tax expenditures.

3.2 Evaluating Tax Expenditures

Review of the literature on tax expenditures suggests three approaches to evaluating tax expenditures: preservation of the comprehensive tax base, traditional tax expenditure analysis and institutional design.

3.2.1 Preservation of the Comprehensive Tax Base

Before the term tax expenditures was popularized, similar themes were being discussed and have continued to be discussed under the broader area of tax reform in order to bring about a comprehensive tax base.¹⁴ The discussion of reform focused on creating an efficient and simplified tax system base either on the Haig-Simon definition of income or on the basis of consumption. An integral part of making this reform work required removing "preferences"¹⁵ from the income tax system. Instead of being focused on how much is essentially being spent by these preferences, the focus was on how they make the tax system less efficient, and privilege some in the same income group over others without an economic reason for doing so (which is

¹³ The federal Department of Finance also views the CFTC and CATC as being outside the benchmark system, evidenced by its inclusion in tax expenditure reports. Canada, Department of Finance, *Tax Expenditures and Evaluations 2012*, (Ottawa: Department of Finance Canada, 2013) online: Government of Canada <<http://www.fin.gc.ca/taxexp-depfisc/2012/taxexp12-eng.asp>> [Canada, *TE 2012*].

¹⁴ Major works in the area include: US, Committee on Ways and Means, *Tax Revision Compendium: Compendium of Paper on Broadening the Tax Base*, Committee Print (1959); Boris I. Bittker, "A 'Comprehensive Tax Base' as a Goal of Income Tax Reform" (1967) 80 Harv L Rev 925; R. A. Musgrave, "In Defense of an Income Concept" (1967) 81 Harv L Rev 44; Joseph A. Peachman "A Comprehensive Income Tax: A Comment" (1967) 81 Harv L Rev 63 (Bittker argued against the feasibility of using the comprehensive tax base concept leading to a debate in the Harvard Law Review reprinted and expanded in Boris I. Bittker et al, *A Comprehensive Income Tax Base? A Comment* (Branford, Conn: Federal Tax Press Inc., 1968). According to the Peachman article noted above, The Canadian Royal Commission on Taxation (known as the Carter Commission) also played an important role in developing the concept of comprehensive tax base because of the vast resources put into complying this work. Canada, *The Report of the Royal Commission on Taxation* (Ottawa: Queen's Printer and Controller of Stationery, 1966) (Chair: Kenneth LeMesurier Carter) [Carter Commission]. See also William E. Simon, *Reforming the Income Tax System* (Washington: American Enterprise Institute for Public Policy Research, 1981).

¹⁵ "Preferences" generally include measures that fit within the term "tax expenditures".

referred to as horizontal equity).¹⁶ Departures from the comprehensive base are allowed under this ideal structure in situations where they are the most efficient way of achieving a goal or it is impractical for administrative reasons to not depart from the base.¹⁷ Under this approach the focus is not on tax expenditures or preferences themselves but on their negative effect on the tax system.

The ideal of having a comprehensive tax base is far from being reached. For instance, the cost of 189¹⁸ federal tax expenditures, in Canada, in 2009, was over \$100 billion.¹⁹ These measures also represented over a quarter of government spending,²⁰ were greater than spending by voted appropriations,²¹ represented 6.5% of GDP²² and in 2004, and were equal to approximately 60% of total income tax revenue.²³ There has also been a general increase in using the tax system in Canada and elsewhere to address social issues.²⁴ Adding one new tax expenditure or as it would be viewed here, preference, is unlikely to change substantially the

¹⁶ The tax literature also discusses vertical equity which considers the positive position of different income groups. The comprehensive tax base approach is generally more concerned with economic efficiency than vertical equity or redistribution through the tax system, although the Carter Commission focused on both horizontal and vertical equity. Carter Commission, *supra* note 14 at 1 & 4. In the traditional tax expenditure approach the discussion is not of vertical or horizontal equity, which related to matters within the normative or benchmark system, but of equality. Later in this thesis the term equity is used to evaluate the credits using its broader general meaning which relates to the tax definition of equality, not the specifics of vertical and horizontal equity.

¹⁷ Peachman, *supra* note 14 at 66.

¹⁸ The OECD puts this number at 149 in 2007. OECD, *Tax Expenditure 2010*, *supra* note 11 at 181.

¹⁹ Canada, Office of the Parliamentary Budget Officer, *Federal Tax Expenditures: Use, Reporting and Review*, (Ottawa: Office of the Parliamentary Budget Officer, 2011) (Prepared by Jason Jacques) at 1.

²⁰ *Ibid.*

²¹ *Ibid.*

²² *Ibid* at 3.

²³ OECD, *Tax Expenditure 2010*, *supra* note 11 at 234.

²⁴ Tax expenditures are rising in popularity in Canada. Since the Conservative party took power in 2006 a number of new measures have been added, including the following personal income tax expenditures: the Public Transit Tax Credit, the Home Renovation Tax Credit, the First-Time Home Buyers' Tax Credit, the Working Income Tax Benefit, the Tax-Free Savings Account, the Textbook Tax Credit, the Canada Employment Credit, the First-Time Donor's Super Credit, Volunteer Firefighters Tax Credit, Family Caregiver Tax Credit, the CFTC and the CATC. The total projected revenue forgone in 2013 due just to these measures is over \$4 billion, with over an extra \$2 billion spent in 2009 due to the home renovation credit (although it is acknowledged that simply adding the estimated cost of each program may overstate the total cost). Canada, Department of Finance, *Tax Expenditures and Evaluations 2013*, (Ottawa: Department of Finance Canada, 2014). See generally OECD, *Tax Expenditure 2010*, *supra* note 11 & Sean Speer et al, "The Cost to Canadians of Complying with Personal Income Taxes" (April 2014) online: Fraser Institute

<<https://www.fraserinstitute.org/publicationdisplay.aspx?id=21133&terms=tax+compliance>> (this report discusses the increase in tax expenditures in Canada and also estimates the direct cost of complying with the personal income tax system in 2012 was between \$4.74 billion and \$5.63 billion, the total cost of complying was between \$5.84 and \$6.96 billion (or an average of \$501 per household) and that this cost weighs more heavily on low-income households).

efficiency, administrative simplicity²⁵ or horizontal equity in the system but preferences do contribute to moving further from the ideal comprehensive tax base and further the problems that accompany this move.

Although the desire for a comprehensive income tax system was not fully realized, the point remains that such preferences contribute to making the tax system less efficient and more complex. Regardless of the problems that exist under the current system, what can be taken from this approach is that new tax expenditures can contribute to making the tax system less efficient, further from the ideal of the untaxed economy, less simplified and less horizontally equitable. The benefit of understanding tax expenditures as preferences is that it expands the discussion to those who take issue with the idea that tax expenditures are equivalent to spending, but who may also criticize specific tax expenditures on the basis of efficiency, horizontal equity or administrative simplicity.²⁶

3.2.2 Traditional Tax Expenditure Analysis

The second and standard way to evaluate spending measures in the tax system is using what has been traditionally referred to as tax expenditure analysis. Originally the point of such analysis was more to show all of the problems with using tax expenditures and was biased against their use. Surrey expressed this viewpoint in his early writing on tax incentives²⁷:

As a generalization, the burden of proof should rest heavily on those proposing the use of the tax incentive method. In any particular situation—certainly any new situation—the first approach should be to explore the various direct expenditure alternatives. Once the most desirable of these alternatives is determined, if one still wishes to consider the tax incentive method for the same substantive program, the question must be what clear advantages can be obtained by using the tax methods....I think it unlikely that clear advantages...will be found. Moreover, I stress strongly that the advantages must be clear and compelling to overcome the losses that accompany the use of the tax incentive, even the well-structured incentive. The problems of achieving a well-structured incentive in themselves formidable [including]... unfairness and windfalls,...confusion and divided authority in the legislative

²⁵ The Frasier Institute report looked at 5 different family or individual (not including investment) tax expenditures and found the average total cost of complying with at least one of these measures was \$34.3 (or an average 13.9% higher than not using any of the measures). *Ibid* at iv.

²⁶ John Sargent, “Introductory Remarks” in Neil Bruce, ed. *Tax Expenditure and Government Policy: Proceedings of a Conference held at Queen’s University 17-18 November 1988* (Kingston: John Deutsch Institute for the Study of Economic Policy, 1988) 15 at 17; See also Monica Prasad’s discussion of how the creating a equivalence between not taxing and spending and in particular to seeing tax preferences as the equivalent of the welfare state is problematic. Monica Prasad, “Tax ‘Expenditures’ and the Welfare State: A Critique” (2011) 23:2 *The Journal of Policy History* 251.

²⁷ A tax incentive is a type of tax expenditure which is intended to work as an incentive to change behaviour. The measures evaluated in this paper are tax incentives.

and administrative processes, difficulties in maintaining budgetary control, confusion in perceiving and setting national priorities, and dangers to the tax structure itself.²⁸

In later writings with McDaniel, Surrey took a more measured approach to the issue while still emphasising the problems with tax expenditures. Instead of using the term tax incentive or expenditure as a judgement of a measure, it was a sign that a tax measure should receive the same scrutiny as a spending measure:

The classification of an item as a tax expenditure does not in itself make that item either a desirable or undesirable provision: nor does it indicate whether the inclusion of the item in the tax system is good or bad fiscal policy....[It] is purely informative...it is simply a way of announcing that the item is not part of the normative tax structure²⁹

Later, they stated: “The basic question then becomes whether or not government assistance should be provided. This question must be answered in terms of criteria applied to government spending programs.”³⁰

In a more recent attempt to reinvigorate tax expenditure analysis, J. Clifton Fleming, Jr. and Robert J. Peroni, set out a test for evaluating tax expenditures:

1. Is the tax expenditure an acceptable governmental program when recast as an analogous direct expenditure program?³¹
2. If the answer to the preceding question is yes, do the benefits of the tax expenditure outweigh its costs, including its undesirable effects and its cost of administration?
3. If the answers to both of the preceding questions are yes, can the tax expenditure’s benefits, nevertheless, be better achieved through a direct expenditure program?³²

This analysis basically does three things: asks if the measure is acceptable as spending, uses a cost-benefit analysis and asks if a direct spending program would be better. From the questions asked, it is easy to see scholars still have similar concerns to Surrey: that these measures are being placed in the tax system because they would not have been implemented if they appeared

²⁸ Surrey, *Pathway*, *supra* note 2 at 148-9.

²⁹ Surrey, *Tax Expenditures*, *supra* note 3 at 5.

³⁰ *Ibid* at 26.

³¹ The use of the term “acceptable” here appears to refer to Surrey’s point that often when a tax expenditure is recast as a direct spending program it would no longer be acceptable to those who create legislation, including the administrative agencies who would design such measures and those who would pass them. Fleming and Peroni discuss in their paper the importance of the normative tax base as something against which to measure acceptability and that acceptability requires more than just political approval. They point to the problems of wastefulness (inefficiencies) and distributional issues (inequities) as reasons that would make a program appear “appalling” instead of acceptable when recast as a direct spending measure. They specifically distinguish their approach from Weisbach and Nussim (discussed later in this chapter) because of the use of a normative structure instead of simply determining which program best meets a specific goal. Surrey, “Current Developments”, *supra* note 3; Fleming, *supra* note 1 at 448, 468-470 and 474.

³² Fleming, *supra* note 1 at 526.

to be spending, that there are negative consequences from being run through the tax system and that direct spending measures are usually preferable.

There are a number of negative consequences resulting from being a part of the tax system that are common to most tax expenditures. The two that are particularly relevant to the credits to be examined later are introduced below: framing and regressivity. These two issues are well demonstrated by a historical example from Surrey, where he recast the 1969 charitable tax expenditures in the United States as spending measures:

We propose to establish a Division of Charitable and Education Assistance which will distribute its funds as follows:

- Suppose a person calls and says: "I am too poor to pay an income tax but am contributing \$50 to my favorite charity. Will the Government also help it? The answer here will be: "We appreciate your sacrifice but we cannot use our funds in this situation."

- Suppose a person calls and says: "I am quite well-off and want to send a check for \$3000 to one of my favorite charities. Will the Government also aid it?" The answer here will be: "We are delighted to be of assistance and are at once sending a Government check for \$7000 to that charity."

- Suppose a person calls and says: "I am really very wealthy with a considerable fortune in various stocks that originally cost me or my family very little. In fact, I will be selling about \$2 million of stock to pay income tax this year and to raise cash for other purposes as well. I think that a particular charitable institution deserves support and while I have decided not to contribute anything myself, I am calling to inquire whether the Government will contribute to it." The answer will be: "We understand the situation and will be delighted to contribute \$2 million to that institution. We will of course say it is in your name. And, in appreciation of your suggesting this to us, we are sending you a check for \$100,000, tax-exempt of course."³³

This quote well summarizes these two problems. What appears acceptable when framed as a tax expenditure can quickly seem unacceptable and even ridiculous when reframed as spending. Additionally, it demonstrates the regressive nature of tax expenditures; often those with higher incomes benefit significantly more than those with middle or low incomes.

3.2.2.1 Framing

Whether an expenditure is framed as a tax cut or a spending measure alters how people perceive it. Edward J. McCaffery and Jonathan Baron have explored the framing effects of using tax expenditures.³⁴ For instance, people like bonuses and like to avoid penalties; tax expenditures

³³ Stanley S. Surrey, "Federal Income Tax Reform: The Varied Approaches Necessary to Replace Tax Expenditures with Direct Governmental Assistance" (1970) 84 Harv L Rev 352 at 390-1.

³⁴ Edward J. McCaffery & Jonathan Baron, "The Political Psychology of Redistribution" (2005) 52 UCLA L Rev 1745; See also Edward A. Zelinsky, "Do Tax Expenditures create Framing Effects? Volunteer Firefighters, Property Tax Exemptions, and the Paradox of Tax Expenditures Analysis" (2005) 24 Va Tax Rev 797; Robert Lepore, "Bringing Balance to the Budget Debate: Challenging the Privileged Procedural Status of Regressive Tax

feel like bonuses.³⁵ People are averse to paying taxes; they dislike the idea of paying a tax more than making a payment, regardless that the difference is simply the term used.³⁶ After exploring how differently people view taxing from spending, and how certain governments have reduced revenue from taxation without a corresponding reduction in spending, the authors ask:

Will people support tax cuts now, even with no specified spending cuts, because of a failure to think through what will happen—that is, because the bifurcation of taxes and spending has created an isolation effect, between taxes and spending program?³⁷

In terms of tax expenditures, the answer to this question would often seem to be yes. The public will accept measures that will reduce their tax burden without regards to the fact that less tax revenue means less revenue to spend. McCaffery and Baron also found that individuals who suggested that in general spending cuts were a good idea had difficulty determining where in particular such cuts should be made.³⁸ This ability to frame a measure as a reduction in taxation instead of an increase in spending distorts understanding of what is being supported and also makes it easier for measures to gain political support that otherwise would not.

In addition, because tax expenditures make people feel like they are simply not paying as much tax as they would have and people get used to getting their money back for doing certain things, they began to feel entitled to the credits. Once people feel entitled to such measures it becomes very difficult politically to get rid of these measures regardless of how ineffective they are.

Further, the cost of such measures are less noticeable than those included in the regular budget. At the federal level, in Canada, tax expenditures are included in annual tax expenditure reports, but this retains the framing of being a tax cut. It was hoped that such reports would alert the public and government to these measures and lead to the repeal of some, but the effect of such reports has remained very limited.³⁹ The provinces do not have tax expenditure reports and so, in most years, no information is provided about the existence or cost of such measures. Information can be provided to the public and government officials about framing effects, but as

Expenditures over Discretionary Spending Programs” (2010) XVII Geo J on Poverty L & Pol’y 103 & Shaviro, *supra* note 1; Eric J. Toder, “Tax cuts or spending – does it make a difference?” (2000) 53 Nat’l Tax J361.

³⁵ McCaffery, *supra* note 34 at 1757.

³⁶ *Ibid*, at 1759.

³⁷ *Ibid*, at 1774.

³⁸ *Ibid*, at 1780.

³⁹ Sargent, *supra* note 26 at 16-17. Fleming, *supra* note 1 at 443-4.

can be seen from the work of McCaffery and Baron, they still continue to throw a positive light on tax expenditures and a negative light on comparable spending measures.

3.2.2.2 Regressivity

One of the greatest problems with using tax expenditures, both historically and currently, is that they generally provide much higher levels of subsidization to those with higher incomes than those with middle or low incomes (referred to as the “upside down effect”).⁴⁰ One of the reasons this occurred was because they were often set up as deductions instead as credits. That meant that those in higher tax brackets with higher marginal tax rates received larger amounts back than those with lower marginal rates of tax.⁴¹ This problem with deductions is why most tax expenditures now are created in the form of credits. A credit usually provides that everyone claiming the credit does so at the same rate. Federally, in Canada, this generally means that a credit is assessed at the lowest marginal tax rate, which is currently 15%.⁴² This does not eliminate the upside-down effect, as higher income individuals may claim larger amounts, but it does significantly reduce the problem.⁴³ In tax expenditure analysis this would usually be referred to an equality issue as it is outside of the normative or benchmark system where horizontal and vertical equity considerations apply. In this thesis, equity is being evaluated it its

⁴⁰ Surrey, *Pathways*, *supra* note 2 at 70; Thaddeus Hwong, “The Distributional Effects of Making Personal Income Tax Credits Refundable” in Lisa Philipps, Neil Brooks & Jinyan Li, eds. *Tax Expenditures: State of the Art* (Canada: Canadian Tax Foundation, 2011) 5:1 at 5:2

⁴¹ The marginal tax rate is the rate applied to the last dollar of income. Surrey, *Pathways*, *supra* note 2 at 70.

⁴² On a deduction, the rate the deduction is calculated at ranges from 15% to 29% federally and it not refundable. Higher income individuals are often also able to claim a larger deduction or credit before the relevant rate is applied. For example, Poterba and Sinai estimated the distributional effect of these two issues combined on the mortgage interest deduction in the United States. The average benefit for households with an average income of \$250,000 was \$5,444, incomes between \$75,000 to \$125,000 was \$1,256 and for incomes less than \$40,000 was \$101. James M. Poterba & Todd M. Sinai, “Income Tax Provisions affecting Owner-Occupied Housing: Revenue Costs and Incentive Effects” NBER Working Paper no. 14253 (Cambridge, Mass: National Bureau of Economic Research, 2008). Surrey found that, in the United States, in 1972, the average individuals with an income of under \$3,000 received a dollar back from the government through tax expenditure measures, while the millionaire received \$725,865. Surrey, *Pathway*, *supra* note 2 at 70. Warren Buffet popularized this problem more recently by sharing that his marginal tax rate was about 17% and the marginal tax rate for his receptionist and cleaning lady were about 30%. Beverly Moran, *Wealth Redistribution and the Income Tax*” (2010) 53 *How LJ* 319 at 326.

⁴³ The CFTC and CATC provide an example of higher claims by higher income individuals; in looking at overall claims of non-refundable federal tax credits in 2011, the claims were much higher by those with incomes over \$150,000, but there was not a large difference among individuals making between \$20,000 and \$100,000. See tables A.1-A.7 in the appendix. See also Hwong, *supra* note 40 at 5:16. Credits also still create a small upside-down effect because the amount refunded is not included as income in the year it is received. As high income earners have a higher marginal tax rate, they benefit more from not being included. On the federal level, an individual with a taxable income over \$135,054 (in 2013) is not having to pay back 29% of that benefit. While someone with an taxable income less than \$11,038 does not receive any additional benefit. The actual value of a \$100 credit thus ranges from \$100 (for some low income individuals) to \$129 (for some high income individuals). See Yoseph Ebrey & Howard Adams, “Equitable Implementation of Tax Expenditures” (1989) 9 *Va Tax Rev* 109.

broader, non-tax sense, and for consistency purposes the term equity will be used in this section instead of equality.

An additional problem with many of the tax expenditures which have recently been developed is that, even when structured as credits, they are not refundable.⁴⁴ This means that if an individual is not earning enough to pay tax or the individual's income is excluded from taxation, that individual is not able to claim any credits otherwise available. Examples of excluded income include income earned on reserve by Status Indians and scholarship and bursary income given to students. Also, a basic personal amount (personal exemption) is available to offset at least the first \$11,038 of income.⁴⁵ It may be argued that as these individuals are not paying income tax, it is fair that they are not eligible for refunds on taxation. However, an individual who does not pay income tax usually is still paying other taxes, as they are still subject to payroll and excise taxes. Also, when considered from the point of view of a spending program it does not make sense to exclude such individuals.⁴⁶ Where the government is using the tax system to fund certain social goods, it generally is not logical to exclude low-income individuals. For some measures, particularly for incentives, it may actually be better to target these individuals, as the value placed on the amount of money they would receive back could be much greater. In other cases, it may be best to target higher income individuals. However, there should not be a presumption that credits should cease to be available at the level at which no income tax is payable.⁴⁷

There is some question as to how large of a difference converting non-refundable credits to refundable credits would make. Thaddeus Hwong considered what would happen if all Canadian federal non-refundable personal income tax credits (except for the basic personal exemption) were made refundable and claimed by all those who were eligible. He found that the cost of the credits would increase by 9% and 87% of that increase would be paid to individuals with an income under \$20,400.⁴⁸

⁴⁴ See Lily L. Batchelder, Fred T. Goldberg Jr. & Peter R. Orszag, "Efficiency and Tax Incentives: the case for Refundable Tax Credits" (2006) 59 Stat L Rev 23.

⁴⁵ This is the 2013 amount.

⁴⁶ Batchelder, *supra* note 44.

⁴⁷ *Ibid* at 70.

⁴⁸ Hwong, *supra* note 40 at 5:15.

Refundability is important for formal equity;⁴⁹ it is more difficult to determine the practical results of making credits refundable. There are numerous reasons that low income individuals may not claim the credits available to them. The awareness of certain measures may be greater amongst higher income individuals. Such individuals may be more likely to use superior professional services to file their taxes and by doing so, be made aware of what tax credits and deductions they should claiming.⁵⁰ Individuals who are not aware of what they should be claiming will not know to claim or be aware of what receipts they will need to retain or what forms will need to be filed to claim their benefit. Additionally, the amount received back on taxes is received a year after the money has been expended. In situations where money is tight, individuals may not have the luxury of expending in the present to receive a refund in the future. As more credits are introduced that are intended to specifically address low-income individuals and higher quality free software options for filing increase knowledge of personal income tax credits, equity issues may be reduced.

Although the tax expenditures that have been recently developed avoid some upside-down effects, in crafting new measures and evaluating present measures it is very important to consider who will benefit from such measures and the extent to which they will benefit.

3.2.3 Institutional Design

The third contributor to evaluating tax expenditures comes from the point of view of institutional design.⁵¹ David A. Weisbach and Jacob Nussim refer to this approach as the

⁴⁹ The term equity is used here in a broad sense and not in the specific sense it is often used for in tax law to refer to horizontal and vertical equity.

⁵⁰ According to a recent Frasier Institute Survey, it generally true that higher income earners are more likely to use paid services for tax preparation although the lowest rate for paying for personal income tax preparation was the \$70,000-\$99,000 income group. Interestingly the more clear delineation of costs related to education levels, with lower education levels making it more likely that personal income tax filing services were paid for. Despite the rates of using paid services, the cost and extent of guidance provided by the service is also likely to differ. As free software options continue to improve and provide prompts for specific credits that may also lessen the awareness issues. According to the same report, 16.3% of taxfilers generally used self-software options to file their taxes while 28% of taxfilers who claimed the CFTC used this method. The other preparation methods showed the opposite trend. There are too many factors to draw a conclusion from this but it is an interesting result. (Speer, *supra* note 24 at 11 - 14.) Additionally, paid services result in a financial burden to low income individual claiming credits. For a discussion of the burden of claiming the Earned Income Tax Credit and lack of awareness and use of free programs see: Younghee Lim, Tara V. DeJohn & Drew Murray, "Free Tax Assistance and the Earned Income Tax Credit: Vital Resources for Social Workers and Low-Income Families" (2012) 57:2 Social Work 175.

⁵¹ This approach can be viewed as simply an extension of tax expenditure analysis and the question of where a program should be placed is a part of that analysis (For example see Jonathan Kesselman, "Direct Expenditures versus Tax Expenditures for Economic and Social Policy, in Bruce, ed., *supra* note 39, 283). I find the distinction of

integration of tax and spending programs, as they focus on the benefits of integrating spending measures into the tax system in order to benefit from using the existing tax collection structure instead of creating additional administrative structures.⁵² They suggest that the government should be viewed as a corporation with many divisions and the question should be where administratively it would be best to place a spending measure. Eric T. Laity takes a very similar approach using institutional economics to determine when the tax system is an appropriate system to implement non-tax goals.⁵³

Institutional design simply assumes these measures are going to exist and asks where they should be placed.⁵⁴ Laity provides a quote at the beginning of his paper that sums this up very well: “Until we realize that we are choosing between social arrangements which are more or less failures, we are not likely to make much headway.”⁵⁵ Instead of traditional tax expenditure analysis, which focuses on the failure, the focus shifts here to simply asks how best to implement a program.

More traditional analysis has focused on the additional administrative cost and complexity these measures add to the tax system. The focus here is on the overall administrative cost to government and the benefit attained by not having to create additional administration structures.⁵⁶ Weisbach and Nussim refer to this as the benefits of coordination. In addition, different departments have specific specializations, including: i) having more information on specific issues, ii) knowledge of other programs relating to the same issue, iii) understanding how they will interact with a new program being brought in and iv) an ability to administer a program in a greater variety of ways.⁵⁷ The evaluation of a measure is based on weighing the benefits of coordination against the benefits of specialization.

calling it institutional design useful as that is how Weisbach, Nussim and Laity have framed it and because it highlights the change from asking if a measure should exist to where a measure should be placed.

⁵² David A. Weisbach, & Jacob Nussim, “The Integration of Tax and Spending Programs” (2004) 113 Yale LJ 955 at 980.

⁵³ Eric T. Laity “The Corporation as Administrative Agency: Tax Expenditures and Institutional Design” 2008 28 Va Tax Rev 411.

⁵⁴ Weisbach, *supra* note 52 at 964.

⁵⁵ Ronald H. Coase, “Discussion” (1964) 54 American Economic Review 192 cited in Laity, *supra* note 53 at 413.

⁵⁶ Weisbach, *supra* note 52 at 981-2 & 985-9.

⁵⁷ *Ibid.*

Weisbach and Nussim compared the Earned Income Tax Credit (“EITC”),⁵⁸ which is part of the tax system in the United States, and the Food Stamp program,⁵⁹ which is not, to demonstrate their approach.⁶⁰ The EITC has: much lower administration costs (both for the government and for individuals),⁶¹ much higher uptake rates by eligible individuals,⁶² but also, much higher rates of overpayment.⁶³ Both measures are based on income and so would benefit from coordination with the tax system. In terms of the EITC, the benefits of coordination outweigh the cost of overpayments.⁶⁴ For the Food Stamps program, its ability to respond to needs more quickly outweighs the benefits that would result from coordination.⁶⁵ Generally, where measures are broad or income measurement is an important part component of the program, they fit well within the revenue agency’s specialities. Where measures need to be more specific and responsive to a particular issue, they tend to fit better within the department that has expertise on that specific issue.⁶⁶

3.3 Conclusion

Tax expenditures are essentially spending measures and should receive the same level of scrutiny that spending measures receive. From the perspective of preserving the comprehensive tax base, using tax expenditures can decrease efficiency, increase the complexity of the tax system and negatively affect horizontal equity. From the literature on tax expenditures it is clear that placing spending measures in the tax system also changes how people view them and who benefits from them. These problems and other factors have led to a bias against their use under traditional tax expenditure analysis. Traditional tax expenditure analysis considers the issue of whether specific tax measures are acceptable through the lens of what is acceptable for traditional spending measures and whether being part of the tax system improves a specific measure in some way. Institutional design avoids the question of whether a measure is acceptable and instead asks where the best place to put a spending measure is. The three approaches to evaluating tax expenditures could be stated as: i) considering the economic

⁵⁸ This is a refundable tax credit provided to low and middle income working families.

⁵⁹ Now called the Supplemental Nutrition Assistance Program

⁶⁰ Weisbach, *supra* note 52 at 997-1027.

⁶¹ *Ibid* at 1003.

⁶² *Ibid* at 1004.

⁶³ *Ibid* at 1005.

⁶⁴ *Ibid* at 1023-1027.

⁶⁵ *Ibid* at 1021-1023.

⁶⁶ *Ibid* at 1027-1028.

efficiency of a measure and its negative consequence for the tax system, ii) viewing tax expenditure as expenditures which need to be acceptable when viewed as spending and need to be made better by being in the tax system to be justified and iii) simply assuming the measure will be enacted and asking which is the most efficient system to enact the measure in.

The evaluation of the credits will draw on the traditional tax expenditure analysis and the institutional design literature. The traditional approach is used because it asks the question of whether the credits should exist and provides background on the consequences of using tax expenditures. The evaluation will also draw on the institutional design literature because as a more pragmatic matter, the credits are most likely to continue regardless of any determination based on the traditional approach; this makes focusing on the form just as important as whether there should be a credit.

4 Health Behaviour Interventions

The credits are intended to increase physical activity; engaging in physical activity is a type of health behaviour. Work has been done in numerous fields trying to determine how individuals decide or come to engage in health behaviours and how best to bring those health behaviours about. This chapter provides a short summary of that work. As it is not practically possible to determine the actual incentive effect of the credits, this literature is introduced here to provide some basis on which to extrapolate how effective the credits may be.

4.1 Psychology

There have been many attempts in psychology to explain how to change people's behaviour, and, as is particularly relevant here, to change behaviour in ways that will improve health. The attempts to create psychological models began with trying to make simple interventions more acceptable to the public. Simple interventions are decisions that are made once or relatively few times. The Health Belief Model was introduced to try to understand how to get individuals to attend mobile clinics to be screened for tuberculosis.¹ As the behaviour that was to be changed became more complex, so did the models. Complex behaviours are those that require the decision to do something to be made over and over again, as is the case with quitting smoking. James Prochaska and Carlo DiClemente combined hundreds of models to create the Transtheoretical Model, one of the most widely used models in health behaviour research.² This model includes six stages of change, 10 processes of change and two additional concepts.³ What

¹ Victoria L. Champion & Celette Sugg Skinner, "The Health Belief Model" in Glanz et al. eds. *Health Behavior and Health Education: Theory, Research, and Practice* (San Francisco: John Wiley & Sons, Inc., 2008) 45 at 47-8.

² Karen Glanz et al, "Theory, Research, and Practice in Health Behavior and Health Education" in Glanz et al. eds. *Health Behavior and Health Education: Theory, Research, and Practice* (San Francisco: John Wiley & Sons, Inc., 2008) 23 at 31.

³ The six stages are: precontemplation, contemplation, preparation, action, maintenance and termination. The ten processes of change are: consciousness raising, dramatic relief, self-reevaluation, environmental reevaluation, self-liberation, counterconditioning, stimulus control and reinforcement management. The two additional concepts are decisional balance (pro-con assessment) and self-efficacy. Carlo DiClemente et. al. "The Process of Smoking Cessation: An Analysis of Precontemplation, Contemplation and Preparation Stages of Change" (1991) 59 *Journal of Consulting and Clinical Psychology* 295; James O. Prochaska & Wayne F. Veliver, "The Transtheoretical Model of Health Behavior Change" (1997) 12 *American Journal of Health Promotion* 38.

is more relevant than the specifics of this model is the fact that despite trying to make it very complete by looking at many factors and being one of the most widely used models, it is still only able to explain a small amount of behaviour change.⁴

These psychological models are generally of limited use here, beyond pointing out the difficulty of determining why behaviours change, but the models have come to focus on one particular concept that may be helpful. This concept is self-efficacy.⁵ Unlike self-worth, which is the belief in one's value, self-efficacy is the belief that one can change in a specific way.⁶ This has become viewed as very important, because without a belief that change is possible, most people simply will not even try to change. Thus, interventions that increase self-efficacy may be more likely to increase health behaviours.

4.2 Economic, Cognitive, Affective and Visceral Factors

Economics has also been used to model how decision making happens and how financial measures can increase or decrease how often actions are taken. In relation to health behaviours this has taken the form of determining the optimal amount of tax on cigarettes, alcohol and other vices in order to decrease consumption without creating an excessive level of externalities.⁷ Creating an incentive to increase health behaviours seems quite similar in that it is an attempt to reduce costs enough in order to increase activity. But framing effects make these measures a less useful comparator because the disincentive of paying an additional amount, like a tax, is felt more than the incentive of the same amount; this occurs on an emotional level and on a cognitive level.⁸

Economics is generally predicated on the basis that people act in rational ways. As this is often not the case, behavioural economics has incorporated elements of psychology to model

⁴ Kenneth Resnicow & Scott E. Page, "Embracing Chaos and Complexity: A Quantum Change for Public Health" (2008) 98 *American Journal of Public Health* 1382 at 1382. See generally Bess H. Marcus et al "Adherence to Physical Activity Recommendations and Interventions" in Sally A. Schumaker et al, eds, *The Handbook of Health Behavior Change*, 3rd ed (New York: Springer Publishing Company, 2009) 235.

⁵ Albert Bandura, *Self-Efficacy: The Exercise of Control* (New York: W.H. Freeman and Company, 1997)

⁶ *Ibid*; Mark Forshaw, *Advanced Psychology: Health Psychology* (UK: Hodder & Stoughton, 2003) at 88.

⁷ Jonathan Gruber & Botond Köszegi, "Is Addiction "Rational"? Theory and Evidence" (2001) 116 *The Quarterly Journal of Economics* 1261.

⁸ This is referred to as loss aversion in economics. Daniel Kahneman & Amos Tversky, "Choices, Values, and Frames" in Terry Connolly, Hal R. Arkes & Kenneth R. Hammond, eds. *Judgement and Decision Making: An Interdisciplinary Reader* 2nd ed. (Cambridge: Cambridge University Press, 2000) 147.

how people act.⁹ One of the focuses of behavioural economics is intertemporal choices, which are “decisions involving trade-offs among costs and benefits occurring at different times.”¹⁰ Time is important in health behaviours because the benefits, costs and decision-making involved occur at a wide variety of times. There are two different time concepts important here. Time discounting describes any reason that reduces the “expected utility of a future consequence, such as uncertainty or changing tastes.”¹¹ Time preference is the preference for benefit in the present over a delayed benefit.¹² In relation to health behaviours, these often require costs in the present for future, uncertain benefits. Time discounting and time preference often leave the future benefit undervalued and the present costs appearing higher than they are.

In addition to these general time principles there are a number of other cognitive, affective elements and visceral influences that affect decision making and engagement in health behaviours. Firstly, people tend to have a self-serving bias. This means people tend to take credit for success but blame outside factors for failures, such as not engaging in health behaviours.¹³ In deciding whether to begin engaging in health behaviours in the future, often the problems of the past are not taken into account or dealt with. This works along with optimism bias, which leaves people believing that changing a behaviour in the future will not be as difficult as changing it in the present. This makes it easier to decide to engage in health behaviours in the future, but makes it less likely they will be engaged in when the future becomes the present.¹⁴

⁹ Cass Sunstein, who served as the Administrator of the White House Office of Information and Regulatory Affairs from 2009 to 2012, has recently advocated to use the insights of behavioural economics (specifically the work of Daniel Kahnman) to make regulations which nudge people towards making better decisions. His focus has been on non-monetary matters such as opt-out instead of opt-in programs and the placement of healthier options. Cass R. Sunstein, “The Storr Lectures: Behavioral Economics and Paternalism” (2013) 122 Yale LJ 1826; Daniel Kahneman, *Thinking, Fast and Slow* (New York: Farrar, Straus and Giroux, 2011). For a discussion of the importance of considering behavioural economics in tax reform see: Simon James “The Contribution of Behavioral Economics to Tax Reform in the United Kingdom” (2012) 41:4 *The Journal of Socio-Economics* 468.

¹⁰ Shane Fredrick, George Loewenstein & Ted O’Donoghue, “Time Discounting and Time Preference: A Critical Review” in George Loewenstein et al eds. *Advances in Behavioural Economics* 162.

¹¹ *Ibid* at 163.

¹² *Ibid*.

¹³ Cordelia Fine, *A mind of its Own* (New York: W.W. Norton & Company, 2006); W. Keith Campbell & Constantine Sedikides, “Self-Threat Magnifies the Self-Serving Bias: A Meta-Analytic Integration” (1999) 3 *Review of General Psychology* 23.

¹⁴ Roger Buehler, Dale Griffin & Michael Ross, “Exploring the “Planning Fallacy”: Why People Underestimate their Task Completion Times” (1994) 67 *Journal of Personality and Social Psychology* 366; Fine, *supra* note 13 at 3-30.

In some ways these biases can help balance some of the time preference problem if used properly.¹⁵ If an incentive is used to get a person to make a decision to engage in healthy behaviours sometime in the future, the value of that future behaviour is both increased at the same time as the cost of that behaviour appears smaller as it is also in the future and there is bias that makes it seem easier than it will actually be. The evidence is mixed on whether making a commitment to future activity is an effective way to bring about long-term behaviour change.¹⁶

George Loewenstein, who is well-known for his work in behavioural economics, has explored how emotional and visceral influences on decision making are much larger than they are often given credit for.¹⁷ Changing health behaviours is partially about the present, but generally it is focused on the risk of future health consequences. As a matter of time discounting, because this risk is an uncertainty and in the future, as a cognitive matter its value will be lower than if the consequence were in the present.¹⁸ Loewenstein considers how people emotionally react to risk, including the possibility of future ill health. According to this model, the feeling of risk is often different than the cognitive assessment of risk.¹⁹ An emotional assessment of risk is insensitive to probability and tends to respond to the vividness of future possibilities and the time interval between the decision making and the future problem.²⁰ According to Loewenstein, where emotional assessments of risk differ from cognitive assessments, people are more likely to make decisions based on emotions not cognitive evaluations.²¹ Thus in designing an intervention, it is more likely to be successful if it can bring about a change in emotional evaluation, not simply respond to the cognitive elements discussed earlier.

¹⁵ Christopher J. Armitage, “Evidence that Implementation Intentions Reduce Dietary Fat Intake: A Randomized Trial” (2004) 23 *Health Psychology* 319 at 319.

¹⁶ *Ibid*; Bas Verplanken & Suzanne Faes, “Good Intentions, Bad Habits, and Effects of Forming Implementation Intentions on Healthy Eating” (1999) 29 *European Journal of Social Psychology* 591 found implementation intentions were helpful. Cath Jackson et al, “Beyond Intention: do specific plans increase Health Behaviours in Patients in Primary Care? A Study of Fruit and Vegetable Consumption” (2005) 60 *Social Science & Medicine* 2383 found they were not helpful.

¹⁷ See e.g. Fredrick, *supra* note 10; L Babcock & G Loewenstein, “Explaining Bargaining Impasse: The role of Self-Serving Bias” in C.R. Sunstein, ed, *Behavioural Law and Economics* (Cambridge, UK: Cambridge University Press, 2000) 355; G Loewenstein, T O’Donoghue & M Rabin, “Projection bias in predicting Future Utility” 118 *Quarterly Journal of Economics* 1209; C. Camerer, G Loewenstein & D Prelec, “Neuroeconomics: how neuroscience can inform economics” (2005) 43:1 *Journal of Economic Literature* 9; C Camerer et al, “Regulation for Conservatives: Behavioral Economics and the case for “Asymmetric Paternalism” (2003) 1151 *University of Pennsylvania Law Review* 1211.

¹⁸ Fredrick, *supra* note 10 at 163.

¹⁹ *Ibid*.

²⁰ George F. Loewenstein et al, “Risk as Feeling” (2001) 127 *Psychological Bulletin* 267 at 276.

²¹ *Ibid* at 274.

In designing an intervention what it desired is long-term behaviour change, which requires decisions to be made over and over again. There is an initial decision to start engaging in the behaviour, often at a time before the change is to start occurring. And then there are a multitude of separate decisions to engage or not engage in a specific behaviour that continually take place as long as the behaviour is engaged or not engaged in. Even if the original decision is primarily based on a cognitive assessment, the decision to continue on is going to be affected by, if not based on, emotional or visceral elements.

Visceral influences are a specific type of feeling that are strong and influential. Instead of simply liking something, it is more of a want, a need or craving.²² Examples of visceral influence are drive states like hunger and thirst, physical pain and moods.²³ These influences can be strong enough to cause people to act against their own self-interest with a full cognitive awareness that they are doing so.²⁴ The result of visceral influence can be much like the other factors already discussed. It can be easy to make a decision to engage in future health behaviours, but at the time the health behaviour is to be engaged in, that decision can easily be overwhelmed by other, non-rational factors. In evaluating a health behaviour intervention, its ability to counter visceral influences requires consideration.

4.3 Chaos and Complexity

Thus far this chapter has considered how emotion, visceral influences and cognitive biases alter how decisions are made and how decision-making is often less rational than it is assumed to be. It has also explored the role of time in the discounting the future value of an action and how a decision about taking an action now is different than a decision to take an action in the future. To this is added one last concept, which is Kenneth Resnicow's and Scott Page's adaption of chaos theory to looking at health behaviour change as a complex system.²⁵

The work of Resnicow and Page is in some ways discouraging for evaluation of interventions as it explores the complexity of decision making and how little is known, but its

²² George Loewenstein, "Out of Control: Visceral Influences on Behavior" in George Loewenstein ed. *Exotic Preferences: Behavioral Economics and Human Motivation* 523 at 527-8.

²³ *Ibid*,

²⁴ *Ibid*.

²⁵ Resnicow & Page, *supra* note 3.

explanation of how some small changes can bring about large results is encouraging.²⁶ Behaviour often reaches a tipping point, where dramatic changes in social behaviour occur quickly and seemingly inexplicably²⁷ And although long-term behaviour change requires continuing decisions to engage or not engage in a behaviour, long-term behaviour change does occur. Resnicow and Page describe this change as happening to a person instead of by a person and describe it as a quantum change.²⁸ The importance of undergoing a quantum change was demonstrated in a number of studies.²⁹ In the first, it was found that smokers who spontaneously decided to quit were more successful than smokers who planned to quit; in this study over half the decisions to quit were spontaneous.³⁰ In a second study, problem drinkers who choose to stop drinking based on a transformative experience were more likely to not be problem drinkers at follow-up than those who decided based on pro con lists or based on the encouragement of others.³¹ This research is encouraging in its recognition that small changes can have large effects and long-term behaviour change is possible. But the question as to what government interventions will lead to those large effects still remains open.

4.4 Conclusion

Changing long-term health behaviours is complex. From the literature reviewed in this chapter it can be seen that there is still much that is not known about how long-term behaviour change occurs and any evaluation of health behaviour interventions cannot be definitive. What is clear is that health behaviour decisions and actions involve more than rational cost-benefit analysis. The timing of costs and benefits, and the effects of cognitive biases, affective factors and visceral influences must also be considered when evaluating the likely effectiveness of health behaviour interventions.

²⁶ *Ibid* at 1384.

²⁷ *Ibid*.

²⁸ *Ibid* at 1382.

²⁹ *Ibid* at 1385.

³⁰ L C Larabie, "To what extent do smokers plan quit attempts?" (2005) 14 Tobacco Control 425.

³¹ Helen Matzger, Lee Ann Kaskutas & Constance Weisner "Reasons for Drinking Less and their Relationship to Sustained Remission from Problem Drinking" (2005) 100 Addiction 1637.

5 Description of the Credits¹

The Nova Scotia government was the first in Canada to enact a tax credit for children involved in sports or recreational activities in 2005. The federal government then instituted a similar credit to encourage parents to involve their children in programs that promote physical fitness. In 2008, the Alberta Legislative Assembly chose to create a physical activity credit that was also for adults, though this credit was not implemented. That same year, Saskatchewan created a much broader credit that also included cultural and artistic activities and better addressed the needs of low income families. In 2010, Ontario created an activity credit that included both physical and non-physical activities. In addition, in April 2011, as part of the Conservative election platform Stephen Harper announced a promise to double the CFTC (Children's Fitness Tax Credit), to create an AFTC (Adult Fitness Tax Credit) and a CATC (Children's Arts Tax Credit). In 2011, the CATC was enacted. In 2012, British Columbia enacted a children's fitness tax credit and a children's art tax credit. In 2013, the Quebec government announced its own children's activity credit, which would be limited to families earning less than \$130,000.

From this brief timeline, it becomes clear the idea of a physical activity credit has expanded quickly, as almost every year at least one new credit has been added. This section will explain how each of the existing credits works as well as the purpose for which they were implemented. It will also divide the credits into two major groups: the dual-credit group and the single-credit group. This is to aid in simplifying analysing the credits. The credits will be explored chronologically as it is useful to see how the credits evolved.

¹ This chapter expands on previous publication: JoAnne Sauder, "Children's Fitness and Activity Tax Credits: why they were created and what they are intended to do" (2014) 21 Health Law Journal 75.

5.1 Nova Scotia Healthy Living Tax Incentive

5.1.1 Description

Effective beginning in the 2005 tax year, The Nova Scotia government offered a tax credit to parents for up to \$150 of fees in physical activity programs.² The \$150 credit was soon increased to \$500.³ Like all of the dual-group credits, the reduction in taxes is calculated by multiplying the amount of the expenditure, up to the maximum, by the lowest marginal tax rate. The maximum return available under this credit for the 2013 tax year was therefore \$43.95. The credit is non-refundable, non-transferable, and cannot be carried back or forward, so it cannot be utilized by those who are not otherwise required to pay income tax in that particular taxation year. The credit is available to parents enrolling children 17 years of age or younger in activities. The government provides a list of eligible organizations for which the credit is available.⁴ Eligibility for the credit is based on whether fees are paid to an eligible organization instead of the specific activity engaged in. Organizations can apply online through the government's website in order to be recognized, and the current list includes a range from sports groups, health clubs and school athletic groups to those that are more recreational in nature.⁵ The credit is not particularly large, but it is available for a very broad range of recreational and physical activity services existing in Nova Scotia.

In 2008, Nova Scotia renamed its credit the Healthy Living Tax Incentive⁶ and announced that it would become available to adults in 2009.⁷ But, in the 2009 Budget, the government announced that due to financial constraints, the extension of the credit to adults

² Minister of Finance, *Nova Scotia Budget for the Fiscal Year 2005-2006*, at 26, online: Government of Nova Scotia <http://www.gov.ns.ca/finance/site-finance/media/finance/2005_budgetaddress.pdf> at 26 [*NS Budget 2005*].

³ *Income Tax Act*, RS NS 1989, c 217 s 12A; Department of Finance, *Nova Scotia Budget Address 2006*, at 19, online: Government of Nova Scotia <http://www.gov.ns.ca/finance/site-finance/media/finance/2006_budgetaddress.pdf>.

⁴ Minister of Health and Wellness, *Eligibility List 2013*, online: Government of Nova Scotia <<http://www.gov.ns.ca/hpp/pasr/healthy-living-eligibility-2013.asp>> [*NS Eligibility List*].

⁵ Minister of Health and Wellness, *Healthy Living Tax Incentive Registration Form*, online: Government of Nova Scotia <<https://www.gov.ns.ca/hpp/pasr/healthy-living-registration.asp>>; *NS Eligibility List*, *supra* note 4.

⁶ There are a number of names for the credit, elsewhere it is called the Healthy Living Tax Credit and in the statute and tax forms it remains the Sport and Recreational Expenses for Children.

⁷ Minister of Finance, *Nova Scotia Budget Bulletin for the Fiscal Year 2008-09, Tax Relief for Nova Scotians*, online: Government of Nova Scotia <http://www.gov.ns.ca/finance/site-finance/media/finance/bulletin_taxrelief.pdf>.

would be deferred indefinitely.⁸ The cost of the credit is approximately \$3.3 million per year and would have increased to \$8.6 million if it had been expanded to adults as planned.⁹

5.1.2 Purpose

The purpose of the Nova Scotia credit is broad. When the credit was introduced, the government stated that the credit was intended to “support our goal of promoting physical activity” and “offset the cost of registering children in organized sport and recreation programs.”¹⁰ The credit was part of a broader program of health promotion. This program included a 186% increase of allocations to KidSport between 2004 and 2006, a ten year, \$50 million program to upgrade and build new recreational facilities¹¹ and a new department of Health Promotion and Protection.¹² According to the Minister of that department, the goal was to take “incremental steps in making Nova Scotia the healthiest province in Canada.”¹³ He also stated that “I won’t be satisfied until we have a cultural change in this province, that Nova Scotians embrace the fact that a physical, active lifestyle and healthy eating will lead to a better Nova Scotia.”¹⁴ The credit was “to entice people with their back pockets to invest in their children.”¹⁵

5.2 Children’s Fitness Tax Credit

5.2.1 Description

The federal CFTC was enacted for the 2007 tax year.¹⁶ The credit is available to parents of children under 16 years of age and children under 18 who qualify as a child with a disability. A child with a disability must qualify under section 118.3 of the ITA.¹⁷ The credit is non-refundable, non-transferable and can be used by either parent for up to \$500 of fees per child.

⁸ Minister of Finance, *Nova Scotia Budget Assumptions and Schedules for the Fiscal Year 2009-2010*, at 3.11, online: Government of Nova Scotia <http://www.gov.ns.ca/finance/site-finance/media/finance/budget2009/Assumptionselected_sociodemographic_characteristicschedules_Fall09.pdf>.

⁹ *Ibid.*

¹⁰ *NS Budget 2005*, *supra* note 2.

¹¹ Nova Scotia, Subcommittee of the Whole House on Supply, *Committee Hansard* (30 March 2007) at 207 and 209 (Hon. Barry Barnet). online: Nova Scotia Legislature <http://nslegislature.ca/index.php/committees/committee_hansard/C13/su_2007mch30> [*NS Committee Hansard*].

¹² This was later combined with the Health Department to create the Department of Health and Wellness.

¹³ *NS Committee Hansard*, *supra* note 11 at 235 (Hon. Barry Barnet).

¹⁴ *Ibid.*

¹⁵ *Ibid.*

¹⁶ *Income Tax Act*, RS C 1985, c 1 (5th Supp) s 118.03 [ITA].

¹⁷ *Ibid* at s 118.03(1).

After applying the lowest marginal tax rate, the credit resulted in a maximum tax reduction of up to \$75 per child for the 2013 tax year. There is an additional \$500 credit for a child with a disability if at least \$100 has been spent on eligible fitness expenses.¹⁸ Parents of children with disabilities will therefore receive an additional tax reduction of a full \$75 as soon as the \$100 requirement is met. The cost of the CFTC was about \$120 million in foregone tax revenue in 2012.¹⁹

The requirements of the CFTC are more specific than many of the other credits. To be eligible for the credit, the expenditure must be for a prescribed program of physical activity. First, the definition of “physical activity” needs to be met. Generally, the requirement is that the program is “a supervised activity suitable for children,” which “contributed to cardio-respiratory endurance and to one or more of...(i) muscular strength, (ii) muscular endurance, (iii) flexibility, and (iv) balance.”²⁰ Riding in a motorized vehicle cannot be “an essential component of the activity” for it to be considered physical activity.²¹ The requirement is less stringent for children with a disability. In this case the term “physical activity” is defined as “results in movement and in an observable expenditure of energy in a recreational context.”²² Thus, the definition of physical activity that must be met is quite high.

The regulations are specific as to how much physical activity must take place, as well the length of the program. In addition to meeting the definition of physical activity, the expense must be for a “prescribed program of physical activity.”²³ This requires the program be weekly for at least eight consecutive weeks or daily for at least five consecutive days or be a membership of at least eight consecutive weeks.²⁴ The activity cannot be part of school curriculum. There are also requirements for the amount of activity within these programs that meets the definition of physical activity. For a weekly program, a substantial amount of the activities must include a significant amount of physical activity.²⁵ For a daily program, such as a camp, 50% of the daily

¹⁸ *Ibid* at s 118.03(2.1).

¹⁹ The budget does not take into account the administrative costs of the credit. Canada, Department of Finance, *Tax Expenditures and Evaluations 2012*, (Ottawa: Department of Finance Canada, 2013) at 17, online: Government of Canada <<http://www.fin.gc.ca/taxexp-depfisc/2012/taxexp12-eng.asp>>

²⁰ *Income Tax Regulations* CRC, c 945 s 9400(1) “physical activity” (a) [ITR].

²¹ *Ibid* s 9400(1).

²² *Ibid* at s 9400(1)(b).

²³ *Ibid* s 9400(2).

²⁴ *Ibid*.

²⁵ *Ibid* at 9400(2)(a).

activities must include a significant amount of physical activity.²⁶ For a membership in an organization, 50% of activities offered to children must include a significant amount of physical activity.²⁷ If the organization allows for participation in a variety of activities, either 50% of what is offered to children or 50% of scheduled activity must include a significant amount of physical activity.²⁸ Where there is less physical activity, in certain circumstances, prorating is available for a part of the fees of the program.²⁹ In addition to these regulations, the costs for which the credit is issued cannot include “the cost of accommodation, travel, food or beverages.”³⁰ Thus, if the credit is given for a camp, the portion of fees for accommodation and food cannot be part of the credit.

When combined, these requirements should ensure that the credit is only granted for a program that contains a substantial amount of physical activity. But, it also makes it more difficult for parents and organizations to know whether fees qualify for the tax credit and in certain cases, what portion of fees are eligible for the credit.³¹

In the 2011 election campaign the Conservative party also stated its intention to increase the CFTC to a \$1000 credit and to introduce an AFTC once the budget is balanced.³²

5.2.2 Purpose

The CFTC is specifically focused on addressing the issue of childhood obesity. Discussion of the credit in Parliament was limited,³³ but an Expert Panel was created in order to

²⁶ *Ibid* at 9400(2)(b).

²⁷ *Ibid* at 9400(2)(d).

²⁸ *Ibid* at 9400(2)(c).

²⁹ *Ibid* at 9400(3)(4).

³⁰ ITA, *supra* note 16 at s 118.03(1).

³¹ Letter from Gail Shea, Minister of National Revenue (30 April 2013) CRA document no. 2013-0485741M4 (Shea, 2013-0485741M4); Letter from Gail Shea (5 April 2012) CRA document no. 2012-0437311M4; Letter from Gail Shea (12 April 2012) CRA document no. 2012-0438041M4; Letter from Gail Shea (7 November 2011) 2011-0423081M4; Letter from Carol Skelton (29 June 2007) CRA document no. 2007-0237391M4.

³² Conservative Party, “Here for Canada: Stephen Harper’s Tax Plan for Jobs and Economic Growth” online: Conservative Party at 65 <http://www.conservative.ca/media/ConservativePlatform2011_ENs.pdf>. The federal government has committed to having a balanced budget by 2015. Department of Finance, *The Road to Balance: Creating Jobs and Opportunities (Budget 2014)*, (Ottawa: Department of Finance Canada, 2014) online: Government of Canada <<http://www.budget.gc.ca/2014/docs/plan/pdf/budget2014-eng.pdf>>.

³³ For example, see *House of Commons Debates*, 39th Parl, 1st Sess, No 18 (8 May 2006); *House of Commons Debates*, 39th Parl, 1st Sess, No 69 (25 October 2006); *House of Commons Debates*, 39th Parl, 1st Sess, No 76 (3 November 2006).

consider how the CFTC should work.³⁴ Their report provides information on why the CFTC was implemented. First, it is intended to address the obesity ‘epidemic’ which is seen as a result of a change in lifestyle that does not provide a sufficient level of activity:

Encouraging families to help their children to become physically active is an important goal, and one that is becoming increasingly important.

There are alarming statistical reminders within our report regarding the prevalence and impact of childhood obesity. This obesity “epidemic” is – in part – a function of the dramatic societal changes that we have experienced only relatively recently. Within the past hundred years, people have experienced radical changes in their diet, become frequent users of motorized transportation, seen great shifts away from primarily physical labour to work that is far more intellectually-focused, and undergone a tremendous rise in more sedentary leisure activities than ever before.

The forces working against greater health and fitness are not malevolent, but rather day-to-day realities faced by modern civilization.

Encouraging more physical activity, sport, and fitness within our culture is a complex, multi-faceted, and challenging issue. While we do not pretend that the Children’s Fitness Tax Credit will be a panacea that will end most childhood obesity, we passionately believe the tax credit is an important component of what must be a broader strategy to encourage activity among young people. The tax credit can be a catalyst that supports programs for children, increased levels of activity, and hopefully – a lifelong love of active lifestyles for thousands of young Canadians.³⁵

The CFTC was not viewed as a solution to this problem but one factor in bringing about a solution. The Expert Panel recognized that government has played a role in changing social behaviours before and that this credit was intended to play a similar role by improving children’s fitness, health and well-being:

The Children’s Fitness Tax Credit is one component of an overall strategy in which government is a catalyst, but not necessarily an active player in all cases. While government has an important role to play, the solutions will not come from government alone. The most powerful driver of new, more active behaviours will be parental and peer influences. Through this tax credit, the Federal Government is helping to encourage children to get into the habit of daily physical activity. Stakeholders have informed us that this physical activity habit – once started – is one that people often maintain their entire lives.

We have seen great progress in social behaviour when it comes to drinking and driving, and we are beginning to see similar results when it comes to smoking. It is our hope that similar behavioural change will improve childhood fitness, and eventually the health and well-being of our population....

Let the Children’s Fitness Tax Credit be a start. Let it inspire more and greater physical activity among our nation’s young people. And let Canada be recognized as a world leader in childhood fitness and physical activity.³⁶

³⁴ Department of Finance Canada, *Report of the Expert Panel for the Children’s Fitness Tax Credit*, by Kellie, K. Letich, David Basset & Michael Weil (Ottawa: Department of Finance, 2006) [*Expert Report*].

³⁵ *Ibid.*

³⁶ *Ibid.*

5.3 Manitoba and Yukon Fitness Tax Credit

Manitoba and the Yukon both introduced fitness credits that are based on the same criteria as the federal credit in the same year the CFTC was introduced.³⁷ They are also \$500 credits and therefore simply result in parents getting a higher percentage of the amount spent back than if only the federal credit were available. In Manitoba, this was up to an additional \$54 for the 2013 tax year. In the Yukon, the maximum additional amount was \$35.20. The additional benefits for children with disabilities also apply. There is not a great degree of discussion by the governments relating to the extension of the CFTC to Manitoba and Yukon.

Of greater interest is that Manitoba government extended its credit to individuals between 16 and 24 years of age.³⁸ Either the parents or the eligible young person or his or her spouse could claim the credit instead. The cost of the expansion to this age group was estimated at \$1.2 million per year.³⁹

5.4 Alberta Physical Activity Credit

5.4.1 Description

In 2008, the Alberta legislature passed an amendment to the *Alberta Personal Income Tax Act*⁴⁰ that would provide a physical activity credit for adults and children.⁴¹ This credit was created by a private member's bill. Although it was passed, it was not proclaimed and therefore has not become law. In the 2009 Budget, the government of Alberta questioned the potential effectiveness of this credit and explained that it had chosen not to proclaim the credit.⁴² The discussion below is based on how the credit would have worked had it been proclaimed.

The Alberta Physical Activity Credit would have been a \$500 credit. The original version of the bill would have been a \$1500 credit.⁴³ The bill does not explain what rate would apply to

³⁷ *Income Tax Act*, RS M 1988, c I10 s 4.6(10.2) [Manitoba ITA]. *Income Tax Act*, RSY 2002, c. 118 s. 6(29)(c)(ii) [Yukon ITA].

³⁸ Manitoba, Department of Finance, *Budget Paper C: Taxation Adjustments*, (2010) online: Government of Manitoba < <http://www.gov.mb.ca/finance/budget10/papers/taxation.pdf>>.

³⁹ *Ibid.*

⁴⁰ *Alberta Personal Income Tax Act*, RS A 2000, c A-30.

⁴¹ *Alberta Personal Income Tax (Physical Activity Credit) Amendment Act, 2008* c 30 [PAC]

⁴² Alberta, Department of Finance, *Budget 2009: Building on our Strength* (2009) at 151, online: Government of Alberta < <http://budget2009.alberta.ca/details/index.html>> [AB Budget 2009].

⁴³ Alberta, Legislative Assembly, *Hansard* 27th Leg, 1st Sess, Iss 43 (3 November 2008) at 1698 (Rob Anderson) [AB Hansard 43].

the credit, but presuming it used the lowest marginal rate⁴⁴ (10%) the probable maximum worth of the credit would have been \$50. The credit would have been non-refundable. Where this credit differed from the others is that \$100 would have to be spent on fees by the tax filer before the credit would be available and the credit would only apply to amounts over that \$100.⁴⁵ From the provisions it appears this amount would only apply once for each filer. For instance, if an individual with two children paid fees for her own activity and for her two children, \$100 would be deducted from the fee total. Up to \$500 in fees for each of them could then be claimed. There was no explanation for why the credit was set up this way. Considering the similarities between this provision and the CFTC provision relating to children with disabilities, this result may have been unintentional. The CFTC provision for children with disabilities requires \$100 to be spent on eligible activities, at which point an additional \$500 credit is given. Thus, the provision for the Alberta credit may have unintentionally borrowed this requirement and applied it to all children. The cost of the credit could have been quite high. One Member of the Legislative Assembly found that in its original form of a \$1500 credit, if it was claimed by only a quarter of Albertans, it would represent an expenditure of \$125 million a year.

There would have been a number of requirements in order to claim this credit. First, the definition of physical activity would need to be met. It is similar to the federal definition: “‘physical activity’ means an activity that contributes to the development of an individual’s cardio-respiratory endurance, muscular strength, muscular endurance, flexibility or balance.”⁴⁶ These are the same factors in the federal definition. The language here is “contributes to the development,”⁴⁷ while the federal simply used “contributes.”⁴⁸ The federal credit requires this contribution to be to cardio-respiratory endurance and one other; the Alberta credit only requires contribution to be one of these factors. This may not make a huge difference, but the Alberta definition appears somewhat easier to meet. The Alberta bill also requires that there is no remuneration for the activity and the fees are to be paid to an eligible organization which has been approved by the Provincial Minister. This last requirement is similar to the Nova Scotia scheme. One key distinction from the other credits is that the Alberta credit would have been

⁴⁴ This is also the only personal income tax rate in Alberta.

⁴⁵ Bill 206, *Alberta Personal Income Tax (Physical Activity Credit) Amendment Act, 2008*, 1st Sess, 27th Leg, Alberta, 2008 cl 2 (assented to 2 December 2008), c 30.

⁴⁶ *Ibid* at cl 12(1)(d).

⁴⁷ *Ibid*.

⁴⁸ ITR, *supra* note 20 at s. 9400(1) “physical activity” (b).

available to adults. In any event, it does not appear that it will become available anytime in the near future. In the most recent Alberta election, there were promises by both major parties to enact a new children's fitness credit, and presumably it would be similar to the federal credit.⁴⁹

5.4.2 Purpose

The Alberta credit provides a unique opportunity to understand the intentions of those who voted for the bill. The other credits were government sponsored and, except in Ontario, resulted in little debate. Because the Alberta bill was a private member's bill, it led to greater legislative debate.

The object of the Alberta credit was similar to the credits already discussed. Dave Rodney, who put forward the bill, explained its purpose as "increas[ing] participation in physical activity...in accordance with the government's objective of promoting healthy living."⁵⁰ He also stated that "increased physical activity plays a significant preventive role in health by reducing health complications and, ultimately, the drain on our valuable health care resources."⁵¹ Thus, the general focus of the credit appears to be physical activity. However, with this credit and all of the others, there is some confusion as to whether they are intended to be an incentive, a reward to parents for putting their children in activities or just a recognition of the cost of activities. In some cases, it may actually be all of these. Rodney explained that the bill "rewards good behaviour by providing incentives."⁵² This gives rise to confusion: is it a reward or an incentive? Also, within the legislative debates, there was discussion of workers, particularly farmers and ranchers, who are physically active due to their jobs but would not be recognized by this credit.⁵³ If the credit is a reward then this is relevant. However, if the measure is an incentive, then this is not a group that requires the credit. The 2009 Alberta budget simply stated: "the government has questions about the potential effectiveness of a tax credit in encouraging Albertans to be

⁴⁹ CBC News, "Tories Promise Child Fitness Tax Break," April 7, 2012 <www.cbc.ca/news/canada/albertavotes2012/story/2012/04/07/albertavotes2012-redford-child-fitness-tax-break.html>.

⁵⁰ Alberta, Legislative Assembly, *Hansard* 27th Leg., 1st Sess, Iss 16a (8 May 2008) at 587 (Richard Marz).

⁵¹ Alberta, Legislative Assembly, *Hansard* 27th Leg, 1st Sess Iss 28 (2 June 2008) at 1112 (Dave Rodney) [*AB Hansard* 28].

⁵² *Ibid.*

⁵³ See *AB Hansard* 43, *supra* note 43 at 1702-3; Alberta, Legislative Assembly, *Hansard* 27th Leg, 1st Sess, Iss 35 (20 October 2008).

physically active.”⁵⁴ The purpose of the credit may have gone beyond being an incentive, but the decision to not implement focused on its inability to be an effective incentive.

There is another way to see credits such as these. Rodney paraphrased a letter received from a constituent supporting the credit. The letter writer explained that he had lost 170 pounds, now worked out twice a day and “believe[d he was] entitled to this credit” because he was “not a strain on the medical industry, like most people.”⁵⁵ Introducing the idea that there is a right to such a credit takes the goal of the credit to a new level; it is no longer an incentive or reward, but something that is deserved. It would therefore be wrong to not offer this measure to an individual who is doing his part to reduce health care costs. It is difficult to know how much this credit (and others) is intended to be an incentive and to what degree they are intended to be a reward or recognition of a cost or an entitlement.

Discussion in the Legislature also considered whether the credit would be able to help low income families. Rodney read from a letter of support in which the letter writer explained that “I myself would like to join the local pool but lack the resources to do so.”⁵⁶ In responding to the concern of other members that the credit would not be enough to make physical activity programs affordable or accessible for low income families, Rodney stated “I would hope it would be common practice that those who can’t pay at the beginning will be allowed to pay once they’ve received the credit, so this credit will be exactly what the less advantaged have been praying for.”⁵⁷ Although the problems this would cause for many organizations which are themselves struggling financially was pointed out by another member, a majority of the members of the Legislature did vote in favour of the bill.

One unique aspect of the conversation on the Alberta bill was its consideration of not only the economic benefits of better health, but the economic benefits that would result for businesses that provide physical activity services. Another member of the Legislature, Rob Anderson, was clear in the discussion that this credit was not a spending measure; it was a tax cut that would be justified by the economic benefit gained by businesses.⁵⁸ This is yet another

⁵⁴ *AB Budget 2009*, *supra* note 42 at 151.

⁵⁵ *AB Hansard 28*, *supra* note 51.

⁵⁶ *Ibid.*

⁵⁷ *AB Hansard 43*, *supra* note 43 at 1697 (Dave Rodney).

⁵⁸ *Ibid* at 1698 (Rob Anderson).

possible justification for the Alberta credit, though it is notable that there is no indication that any of the other credits were justified on this basis.

As it was introduced in a private member's bill, the Alberta credit allows for a fuller examination of the purpose of this particular credit. Being an incentive for greater physical activity does seem central, but there are also references to the credit's role in rewarding behaviour, recognizing the cost of activities, rewarding parents, creating an entitlement, assisting low income families, and assisting businesses.

5.5 Saskatchewan Active Families Benefit

5.5.1 Description

The Saskatchewan government introduced the Active Families Benefit ("AFB") for the 2009 tax year.⁵⁹ When it was introduced, it was quite different from the other credits discussed above as it was for a very broad range of activities, it was refundable and, unlike other credits, the refund was for the full amount paid up to \$150. Some other governments have followed Saskatchewan's lead, but it is still the only government to refund 100% of the amount spent (up to \$150). The AFB is called a benefit, instead of a credit. It is different from the other credits in that it was developed by the Ministry of Tourism, Parks, Culture and Sport and the cost of the benefit is considered part of that department's budget. Also, unlike the other credits, the legislative base for the benefit is found in separate legislation.⁶⁰ As will be discussed in the next chapter, it is possible to see this measure as not being a tax measure or a tax credit, but as a hybrid tax and spending measure.

The Saskatchewan credit is for a broad range of activities. Eligibility is based on meeting the definition of eligible cultural, recreational or sports activity.⁶¹ Eligible cultural activities "must provide exposure to, or training or participation in, any field of the arts, heritage or multiculturalism."⁶² The definition of these three terms is broad, including areas such as: crafts, internet arts, visual arts, performing arts, recording of commercial advertisements, sacred places,

⁵⁹ *The Active Families Benefit Act* SS c A-4.01 [AFBA]

⁶⁰ Although Saskatchewan's income tax legislation does address some specifics of eligibility for the credit. *The Income Tax Act, 2000* SS C I-2.01 s. 39.2.

⁶¹ *The Active Families Benefit Regulations*, c A-4.01 Reg 1 at s 4, 5 & 6 [AFBR]; AFBA, *supra* note 59 at s 2.

⁶² AFBR, *ibid* at s 4(2).

archaeology, cultural legacy, language and fostering the diversity of Saskatchewan.⁶³ This allows for the inclusion of a very wide variety of activities. The definition of recreation is “any activity, process or means that: (a) has elements of choice; (b) is designed to refresh, entertain or provide satisfaction; (c) does not involve...a winner or...monetary gain; and (d) provides physical, emotional or mental benefit.”⁶⁴ By definition, “sport” “(a) involves large muscle groups; (b) requires strategy, physical training and mental preparation; (c) has an outcome determined by...rules...not...chance; and (d) [an]...organized and competitive environment.”⁶⁵ Together, most activities children engage in outside of school and child care would fit within the definition of recreational or sports activities. The notable exception would be for tutoring and academic pursuits, which would have to fall within the cultural definition in order to be covered.

Organizations are not required to register with the government in order for fees to be eligible. The AFB does not specify minimum levels of activity, frequency or regularity that must be attained and does not state an exclusion for travel and accommodation costs that are included as part of the activity fee. When compared to the other credits, the way this benefit was more limited was to whom it applied as it was originally available only for children between the ages of 6 and 14.⁶⁶ It is now available for all children under 18 at an estimated cost of \$11.5 million.⁶⁷ In summary, compared to the other credits, the AFB is much broader, administratively simplistic and the only credit to refund 100% of fees.

5.5.2 Purpose

The purpose of the benefit is very broad. Its primary focus is not on obesity or physical activity. The reason for the benefit was stated during the Speech from the Throne: “numerous studies have shown that children who are involved in positive activities early in life are more likely to have positive outcomes in later life. They are also likely to avoid problems with drug addiction and alcohol abuse.”⁶⁸ The benefit was created “in order to assist families.”⁶⁹ This language does not make it clear to what degree this measure is intended to be an incentive and to

⁶³ *Ibid* at s 4(1).

⁶⁴ *Ibid* at s 5(1).

⁶⁵ *Ibid* at s 6(1).

⁶⁶ *AFBA, supra* note 59 at s 2(1)(d).

⁶⁷ Saskatchewan, Minister of Finance, *Saskatchewan Provincial Budget 14-15, Estimates* at 104, online: Government of Saskatchewan < <http://finance.gov.sk.ca/budget2014-15/2014-15Estimates.pdf>>.

⁶⁸ Saskatchewan, Legislative Assembly, *Hansard*, 26th Leg, 1st Sess, Vol 50 (10 December 2007) at 6 (Hon. Gordon L. Barnhart) [*SK Hansard* 50].

⁶⁹ *Ibid*.

what degree it is a recognition of cost. There was very little legislative discussion before this benefit was passed; most of the discussion was within the Standing Committee on Intergovernmental Affairs. Criticism focused on the needs of low income families for whom the benefit may not be enough to help and whether it would be better to spend money on organizations like KidSport which could better meet these needs.⁷⁰ Introducing the benefit as a 100% refundable rebate reflects a concern by those who developed the benefit about how the benefit could help low income families. The Minister explained that the benefit was not an attempt at perfection, but that the government was “attempting to increase the opportunities for families and children...in a sustainable way,” as an “added benefit to families” and “to try and remove barriers” to programs.⁷¹ The choice to require eligible activities instead of eligible organizations was explained as a response to perceived problems with how the credit had functioned in Nova Scotia.⁷²

5.6 Ontario Children’s Activity Credit

5.6.1 Description

The Ontario credit was introduced in the 2010 tax year. The design of the Ontario credit is very similar to the CFTC. These similarities include: a \$500 limit, provisions for children with disabilities, the same requirements for weekly or daily activity and the level of activity required, and the availability of prorating if activity levels are lower. The major differences are that it is a refundable credit and that it covers a wide range of non-fitness activities, although these activities are now also eligible for the CATC. An activity qualifies if it meets the federal definition of physical activity or it meets the definition of “qualifying activity” under the Ontario Act. To meet the latter, the activity must be supervised, suitable for children and involve one of: (1) instruction in music, dramatic arts, dance or visual arts, (2) language instruction (3) “substantial focus on wilderness and natural environment,” (4) substantial focus on developing and using particular intellectual skills, (5) developing interpersonal skills or (6) “enrichment or tutoring in academic subjects.”⁷³ As such, the Ontario Act is very broad and not particularly

⁷⁰ Saskatchewan, Standing Committee on Intergovernmental Affairs and Justice, *Hansard Verbatim Report*, 26th Leg, No 3 (10 April 2008) [*SK Hansard 3*]; Saskatchewan, Standing Committee on Intergovernmental Affairs and Justice, *Hansard Verbatim Report*, 26th Leg, No 8 (May 5 2008).

⁷¹ *SK Hansard 3*, *ibid* at 28-29 (Hon. Christine Tell).

⁷² The problems resulting from the Nova Scotian approach were not identified. *Ibid* at 28 (Susan Hetu).

⁷³ *Taxation Act, 2007*, SO 2007, c 11, Schedule A s. 103.1 [*Taxation Act*].

focused on physical activity. For the 2010 tax year, the credit was refunded at a rate of 10% making it worth \$50 per child (\$100 for children with disabilities). Another unique aspect of the credit is that it is indexed to inflation; in 2013 it was worth \$535 per child (\$1070 for a child with a disability).⁷⁴

5.6.2 Purpose

Ontario's credit was created "to help parents with the cost of enrolling their children in activities that encourage them to be healthy and active."⁷⁵ This credit was part of a larger agenda intended to help Ontario families. There has been a focus by the Ontario government on improving education within schools,⁷⁶ and this tax credit was introduced because "we also know that learning takes place outside the classroom."⁷⁷ In introducing the second reading of the bill, Leeanna Pendergast quoted a 2008 study conducted by Statistics Canada [which] concluded:

Children's participation in organized extracurricular activities has been associated with positive short- and long-term outcomes, such as academic achievement and pro-social behaviours, and with reduced negative outcomes, such as dropping out of school and emotional and behavioural disorders.⁷⁸

Thus, the purpose behind this credit seems very similar to the AFB: both are looking for positive outcomes, regardless if they come through physical activity or other means. They also both appear to be an acknowledgment that children should be in extracurricular activities and that governments should share in the cost of such programs. Both programs have considered the needs of low income families as both are refundable; the press release announcing the credit focused on its refundability:

The tax credit would be refundable, unlike the federal Children's Fitness Tax Credit and similar tax credits in other provinces. Because the credit would be refundable, low-income parents who pay little or no income tax would benefit.⁷⁹

⁷⁴ *Ibid* at s 23.

⁷⁵ Ministry of Finance, Press Release, "Ontario's Children's Activity Credit" (6 September 2010), online: Government of Ontario < <http://news.ontario.ca/mof/en/2010/09/ontario-childrens-activity-tax-credit.html>> [CAC press release].

⁷⁶ Ontario, Legislative Assembly, *Hansard* 39th Parl, 2nd Sess, No 43 (15 September 2010) at 2085 (Leeanna Pendergast) [*ON Hansard* 43]; Ministry of Education, Press Release, "Full-Day Kindergarten Registration for September 2011 Underway (9 February 2011), online: Government of Ontario < <http://news.ontario.ca/edu/en/2011/02/full-day-kindergarten-registration-for-september-2011-underway.html>>.

⁷⁷ *ON Hansard* 43, *supra* note 76.

⁷⁸ *Ibid*.

⁷⁹ This quote appears to also show a lack of awareness of the AFB. CAC press release, *supra* note 75.

The major difference is that the AFB refunds 100%, for a return of up to \$150, while the Ontario credit only refunded 10%, for a maximum return of \$50. The focus of the Ontario credit does not appear to be incentive, but recognition of cost; this can be seen in the credit being available for activities during 2010 tax year before the intention to create the credit was even announced. The goals of the Saskatchewan and Ontario credit are similarly very broad and do show an awareness of the needs of low income families.

Ontario's credit was a government-sponsored bill, but like in Alberta, it was discussed extensively within the legislature. The discussion provides insight into the possible political motives behind such credits. The credit was announced two months after the Harmonized Sales Tax ("HST") came into effect in Ontario.⁸⁰ Some members of legislature saw its introduction not as a response to the cost of children's activities, but as a response to dissatisfaction with the HST, which included an 8% tax increase on many children's activities. Norm Miller explained the recent increases in costs to Ontarians: "the HST...that's on your hydro bills and gas bill,...the eco fees,... a couple of years back, the health tax,... and recently...the government made changes to auto insurance."⁸¹ He questioned why "when they passed the HST just last year...didn't they just exempt children's sporting activities? I know we had gyms coming around to the finance committee, asking if they could be exempt. They didn't [exempt them]."⁸² He also noted that "they exempted the under-\$4 purchases at Tim Horton's, probably because there was more political push-back on that one. They're exempting doughnuts and coffee but taxing sporting memberships under the HST."⁸³

A number of members saw this credit as an admission that the government had made a mistake and a political move to make up for this mistake. John O'Toole stated "it's an admission that they went overboard on the HST; it's a clear admission."⁸⁴ In the words of Elizabeth Witmer, "the government now is saying they recognize that it was a mistake."⁸⁵ Norm Miller

⁸⁰ CAC press release, *supra* note 75.

⁸¹ Ontario, Legislative Assembly, *Hansard* 39th Parl, 2nd Sess, No 41 (13 September 2010) at 1999 (Norm Miller) [*ON Hansard* 41].

⁸² *Ibid.*

⁸³ *Ibid.*

⁸⁴ *ON Hansard* 43, *supra* note 76 at 2092 (John O'Toole).

⁸⁵ Ontario, Legislative Assembly, *Hansard* 39th Parl, 2nd Sess, No 44 (16 September 2010) at 2141 (Elizabeth Witmer) [*ON Hansard* 44].

stated: “I think it’s more about politics than anything else.”⁸⁶ Cheri DiNovo stated: “Let’s face it: This is a gnat-sized corrective for an elephant-sized mistake, which is the HST... This is a subtle way—maybe a not-so-subtle way—of saying, ‘Oops, we made a mistake.’”⁸⁷ Michael Prue explained:

Government numbers in opinion polls have gone down. People are starting to get very angry when they see HST coming up on their bills. In British Columbia, which has recall legislation, you are starting to see a government very nervous and worried as people are upset because they have to wait a whole year, or more than a year, until the time roughly of the next Ontario election, to vote to get rid of the HST in that province. People don’t like it. They don’t like what’s happening to them; they don’t like the costs of it. I’ll tell you, what is happening in British Columbia, which is well documented because of the recall legislation, is also happening here.⁸⁸

John Yakabuski commented on how his constituents had responded to the HST increase and how they were particularly were upset when it came to the increased cost of their children playing hockey:

Earlier this year, when the HST was implemented, they weren’t calling me so much about it. But when it came time to register their kids for minor hockey this fall, whoa, something hit the fan and it didn’t smell good. I tell you, I started to get the calls. I started to get the calls from hockey parents. They say, “What are these people trying to do to us?” Do you realize what it has done to minor hockey fees in this province? You see, one of the most costly parts of being engaged in hockey is the cost of ice time. That’s all subject to the HST now. And of course there are so many other things. If you are a hockey mom or a hockey dad, you are driving your kids all across hell’s half acre most of the time to get them to games and practices. What are you paying HST on? You’re paying HST on the gasoline to run that vehicle.⁸⁹

To some members of the legislature, the introduction of the credit was a response to the negative public reaction to the introduction of the HST and an admission that they had made a mistake.

It was also explained that the credit would cost the government less than they would gain through related HST provision:

A recent study by a leading HST researcher, David Murrell, suggests that Ontario families spend \$1.8 billion on now taxable recreational programs and facilities and that the McGuinty government’s 8% tax means that families will be paying \$148 million in new taxes, double the amount of the \$75 million that’s proposed in this bill that the McGuinty Liberals are spending on their fitness tax credit. So families, again, are losers; they are losers in the overall scheme of things.⁹⁰

⁸⁶ *ON Hansard 41*, *supra* note 81.

⁸⁷ Ontario, Legislative Assembly, *Hansard* 39th Parl, 2nd Sess, No 45 (22 September 2010) at 2186 (Cheri DiNovo) [*ON Hansard 45*].

⁸⁸ *Ibid* at 2183 (Michael Prue).

⁸⁹ Ontario, Legislative Assembly, *Hansard* 39 Parl, 2nd Sess, No 50 (30 September 2010) at 2433 (John Yakabuski).

⁹⁰ *ON Hansard 45*, *supra* note 87 (Michael Prue).

Despite the concerns over how little help the credit was for parents, Peter Tabuns explained why he felt many still supported it by comparing it to a puppy:

Some pieces of legislation that come before us are very large, some are very complex, some have a huge impact on the lives of people in this province and some are just puppies. It's hard not to like a puppy: It's little; it's cute. It doesn't bring home the bacon and, frankly, a picture of a puppy on an election flyer is something that everyone would love. I expect that this piece of legislation is going to be part of that.⁹¹

By some, the new credit was seen as a political move, meant to respond to Ontario parents' negative feelings towards the HST and other increased costs, though it was also seen as not enough to address these concerns and make children's activities more affordable. The idea of increasing enrolment was not raised as an issue in the legislative discussion; the issue was whether parents could still afford the activities they could in the past. Thus the purpose of the credit appears to be two-fold: to make activities more affordable after having recently made many less affordable and to provide a political response to the concerns and anger of Ontarians over the adoption of the HST.

5.7 Children's Art Tax Credit

In its 2011 budget, the federal Conservative government introduced a non-refundable Children's Arts Tax Credit. In addition, Manitoba and the Yukon also followed the federal lead by adding a Children's Art and Cultural Activity Tax Credit.⁹² They follow a very similar form as the CFTC in that there has to be a certain amount of activity, of a certain duration and they do not include expenses like travel or accommodation. They can also be prorated. But unlike the CFTC, they are available for prescribed artistic, cultural, recreational and developmental activities, as long as they do not qualify as physical activity.⁹³ The list of prescribed areas include: literary arts, visual arts, performing arts, music, media, languages, customs, heritage, wilderness and natural environment, development and use of intellectual skills, development of interpersonal skills and tutoring in academic subjects.⁹⁴ This introduction follows the broader Saskatchewan and Ontario credits, which cover physical activity and most of the activities of the CATC. The separation created here by having two credits instead of one may cause difficulty for

⁹¹ *ON Hansard 44*, *supra* note 85 at 2134 (Peter Tabuns).

⁹² "Personal Tax Credit" online: Manitoba Finance <<http://www.gov.mb.ca/finance/pcredits.html#fitness>>; Manitoba ITA, *supra* note 37 s. 4.6(10.7); Yukon, *supra* note 37 ITA s. 6(29)(c)(ii).

⁹³ The definition of "'artistic, cultural, recreational or development activity' ...includes an activity...(other than physical activity)." ITR, *supra* note 20 at Reg 9401

⁹⁴ ITA, *supra* note 16 at s 118.031 and ITR, *supra* note 20 at Reg 9401

parents and organizations to know which credit a particular program fits under. This is further complicated by travel and accommodation not being eligible for the credit. For instance there could be an overnight camp that includes both physical activity (as defined in the federal ITA) and recreational activity. In this case, an organization would need to determine what amount of the cost of the camp was for accommodation and travel (to which no credit would apply) and if there is an amount that can be claimed under the CFTC or under the CATC. An opinion was given on this problem in relation to a dance studio.⁹⁵ It was found that if 60% of the activity met the definition of physical activity and 40% of the activity was within the definition for artistic, cultural, recreational and developmental activity, only the CFTC could be claimed for that activity, but the entire cost for the activity could be claimed. Only one of the credits can be claimed for an activity, unless it actually includes distinct programs, which must be reflected by having two distinct receipts. Determining what amounts are eligible for which credit results in extra administrative work for organisations and parents. This is further complicated by the difficulty of having to determine the line between prescribed physical activity and prescribed artistic, cultural, recreational and developmental activity. But the separate credits do to some extent preserve the original intention of the CFTC to only support activities which provide a specific level of physical activity.

The CATC was introduced five years after the CFTC began, and the reason for doing so was explained in the Budget as being because “artistic, cultural, recreational and developmental activities can positively contribute to a child’s development” and that these activities can also be difficult for parents to afford.⁹⁶ The cost of the credit according to the federal tax expenditures report is \$35 million a year, although the federal budget predicted it would rise to \$100 million a year.⁹⁷ Manitoba estimated its cost at \$3.8 million per year, which considering the federal tax expenditures report estimate, is likely too high of an estimate.⁹⁸

⁹⁵ Shea, 2012-0438981M4, *supra* note 31.

⁹⁶ “Introducing a New Children’s Art Tax Credit, online: Canada’s Economic Action Plan <<http://www.actionplan.gc.ca/en/news/introducing-new-children-s-arts-tax-credit>>.

⁹⁷ *Ibid*; Conservative Party Platform, *supra* note 5.

⁹⁸ Manitoba, Department of Finance, *Manitoba Budget 2011, Taxation Adjustments* online: Government of Manitoba <<http://www.gov.mb.ca/finance/budget11/papers.html>>.

5.8 British Columbia

In 2012, British Columbia followed this example by implementing separate non-refundable fitness and arts credits that function in the same way as the federal credits.⁹⁹ The credits are calculated at a rate of 5.06% for a maximum return of \$25 for each credit.¹⁰⁰ The combined cost of the credits is expected to be \$9 million per year.¹⁰¹

5.9 Quebec

The most recent promise to add a new credit was made by Quebec. The credit was announced in the 2013 budget as a refundable tax credit for youth physical, artistic and cultural activities.¹⁰² It appears this credit will be similar to the Saskatchewan credit in breadth, in that it covered most children's activities, but does not include tutoring. The rate of return of the credit is 20%. In 2013, it will be calculated for up to \$100 of expenses, but this will increase over the next five years until it reaches \$500.

Quebec's unique twist on offering a credit has been the decision to limit who can claim the credit to families who make less than \$130,000. As one of the major criticisms of these credits has been that they help higher income families more, this may prove a helpful element in reducing that problem. At the very least, it shows an acknowledgment by the Quebec government of this problem and an intention to address it. Once the credit is fully implemented it is expected to cost \$35 million per year.¹⁰³

5.10 Other Jurisdictions

There has been a discussion about implementing credits outside of Canada. There has been a bill called the Child Fitness Credit Bill introduced twice in the state of Illinois.¹⁰⁴ It was

⁹⁹ British Columbia, Ministry of Finance, *British Columbia Budget and Fiscal Plan 2012/13 – 2014/15*, *Budget Fiscal Plan* at 58, online: Government of British Columbia <http://www.bcbudget.gov.bc.ca/2012/bfp/2012_Budget_Fiscal_Plan.pdf>

¹⁰⁰ *Ibid.*

¹⁰¹ British Columbia, Ministry of Finance, *British Columbia Budget and Fiscal Plan 2013/14 – 2015/16*, *Budget Fiscal Plan* at 63, online: Government of British Columbia <<http://www.bcbudget.gov.bc.ca/2013/default.htm>> [*B.C. Budget 2013*].

¹⁰² Finances et Économie Québec, *Budget Plan, Budget 2013-2014* at A76, online: Government of Quebec <<http://www.budget.finances.gouv.qc.ca/Budget/2013-2014/en/documents/budgetplan.pdf>>.

¹⁰³ *Ibid* at A78.

¹⁰⁴ It may have been introduced additional times; I only have information for two introductions.

introduced as House Bill 4408 in 2008 and again as House Bill 0167 in 2009.¹⁰⁵ The Bill died at the end of the sessions without being accepted.¹⁰⁶ It would have been a \$500 credit for qualified physical-fitness programs and would have ended in the 2014 taxation year. It would have been non-refundable.¹⁰⁷ Although considered by the House in Illinois, it appears no tax credits focused on physical activity or fitness were enacted in the United States as of the 2010 tax year.¹⁰⁸

There has also been some discussion of creating a physical activity credit in Australia. In 2007, the Australian Sports Federations Alliance advocated for the creation of a Physical Activity Tax Rebate Initiative.¹⁰⁹ This initiative appears similar to the CFTC. The Alliance suggested it should be for at least \$250 of fees per child, which would equate to \$75 for adults earning between \$25,001 and \$75,000 of net taxable income per annum.¹¹⁰ Unlike the CFTC, where everyone who receives the credit does so at the same rate, this initiative would differ depending on income levels. The worth of the credit would thus increase as income levels increase into higher tax brackets. It would not be refundable. The cost of the credit was estimated at \$113 million per year.¹¹¹ The Australian government does not appear interested in this option.¹¹² While there has been consideration of using physical activity credits outside of Canada, no measures appear to have yet been enacted.

¹⁰⁵ “Legislation Provides Child Fitness Tax Credit” (April 2008) 5(4) IDEA Fitness Journal 17; U.S., H.B. 0167, *Child Fitness Credit*, 96th General Assembly, Reg. Sess, Ill, 2009 online: Illinois General Assembly <<http://www.ilga.gov/legislation/96/HB/PDF/09600HB0167lv.pdf>> [HB0167].

¹⁰⁶ “Bill Status of HB0167, 96th General Assembly” online: Illinois General Assembly <<http://www.ilga.gov/legislation/BillStatus.asp?DocNum=0167&GAID=10&DocTypeID=HB&LegID=&SessionID=76&SpecSess=&Session=&GA=96>>.

¹⁰⁷ HB0167, *supra* note 105.

¹⁰⁸ I looked through the 2010 state tax forms in the United States in order to conclude this. For a discussion on introducing a activity tax credit in the United States see Daniel M. Reach “Fitness Tax Credits: Costs, Benefits and Viability” (2012) 7 Northwestern Journal of Law & Social Policy 352.

¹⁰⁹ Australian Sports Federations Alliance, “Physical Activity Rebate Initiative: Promoting Better Health Outcomes for all Australian Children” (2007) online:

<<http://www.vicsport.asn.au/Assets/Files/Tax%20Deductibility%20for%20Sport%20-%20Australian%20Sports%20Federation%20Alliance%20Position%20Paper.pdf>>.

¹¹⁰ *Ibid.*

¹¹¹ Victoria’s Peak for Sport & Active Recreation, “Submission to the Federal Government: Australia’s Future Tax System” online: VicSport

<<http://www.vicsport.asn.au/Assets/Files/VicSport%20Submission%20regarding%20Australia's%20Future%20Tax%20System.pdf>>.

¹¹² Rhonda Jolly, “Sports Funding: Federal Balancing Act” online: Parliament of Australia

<http://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/BN/2012-2013/SportFunding>.

5.11 The Credits Collectively

The Canadian credits can be divided into two groups. The dual-credit group includes the federal, Manitoba, Yukon and British Columbia credits. All of these credits are based on the federal income tax provisions which detail the CFTC and CATC. The Alberta credit would also have fit in this group if it had been enacted as it was very similar to the CFTC.

The Expert Report on the CFTC specifically saw the CFTC as a response to the obesity ‘epidemic’.¹¹³ Overweight and Obesity amongst children and youth in Canada has been mentioned in relation to many of these credits, but with the CFTC it appears as more of a focal point. As more credits have been introduced, the focus seems to have become much broader. The goal of the Saskatchewan credit is “positive outcomes.”¹¹⁴ The Ontario and Quebec credits are also very broad. The credits in these three provinces make up the single-credit group. In addition to being broader, these credits are simpler and acknowledge the needs of lower income families as they are all refundable. None of the single-credit group’s credits are tied to the lowest marginal tax rate, which is unusual for a tax credit.

The credit in Nova Scotia does not fit well within either of these groups. The dual-credit group and the single-credit group will be used in the next chapter to aid analysis, although because the CFTC is the main credit and the AFB is both a unique credit and the most different from the CFTC, the focus will be on comparing these two credits.

5.12 Conclusion

This chapter has explored what the different credits are, why they were introduced and how quickly one small credit in Nova Scotia costing \$1 million a year expanded into multiple federal and provincial credits costing over \$250 million a year. The CFTC was the second credit introduced and was focused very clearly on physical activity while newer credits involved a broader range of children’s activities. There is some confusion as to whether the credits are meant to be incentives or are meant to be rewards, entitlements or are mainly politically motivated. Aside from the credit in Nova Scotia, the credits fall into two basic groups: those whose governments that have one very broad refundable credit and those that have two non-refundable credits.

¹¹³ *Expert Report, supra* note 34 at 6-7.

¹¹⁴ *SK Hansard 50, supra* note 68.

6 Hybrid Tax and Spending Measures

The discussion in this chapter fills in gaps in the literature by identifying the AFB using a new term, hybrid tax and spending measure (hybrid measure for short). The comparison of the AFB and the other credits, which are clearly tax expenditures, highlights some important differences that likely resulted from the hybrid nature of the AFB. This provides a unique opportunity to compare a provision developed outside of the tax administration with the CFTC, which was developed within a tax department. These distinctions also become relevant to the evaluation of the credits in chapter seven.

6.1 The Need for a New Concept

The academic literature has not dealt with the situation of hybrid measures such as the AFB in Saskatchewan. The AFB is referred to here as a hybrid measure because it does not appear to be a traditional tax expenditure or a traditional direct spending measure, but a combination of both.

As discussed in chapter three, Stanley Surrey introduced the idea of tax expenditures. The basic premise of his argument was that tax expenditures are really the equivalent of spending measures and should be treated as such. In highlighting the similarity of these tax measures to spending he wanted people to see that the tax system is not a good fit for spending measures. From the time Surrey first explored tax expenditures until now the attempt to legitimize tax expenditure evaluation has been bogged down by the issue of when a tax measure is really an expenditure and when it is a tax measure just part of the normative (or benchmark) system. The initial question, which has not been considered, is: when is an expenditure a tax measure? That is, what role does the tax system need to play in the development and administration of a measure to have it qualify as a tax expenditure? The AFB highlights the importance of this question because it is not clear whether it is a tax measure.

Traditional tax expenditure analysis is no longer the only recognized approach for evaluating tax measures that could also be viewed as spending. From a more institutional

approach, or what Weisbach and Nussim referred to as “the integration of tax and spending” the question has been which measure is best able to meet an objective, not based on a value judgement but on whether the tax system or another system is best equipped to efficiently meet the desired objective. The AFB adds another option to the evaluation. Instead of asking whether a specific tax measure or a specific spending measure is best able to meet an objective, a hybrid measure provides a third possibility.¹

6.2 The AFB as a Hybrid Measure

The AFB has characteristics of both a spending measure and a tax expenditure.² The credit was developed by the Ministry of Tourism, Parks, Culture and Sport (“the Ministry”),³ not the Finance department. The benefit is generally governed by an independent piece of legislation, *The Active Families’ Benefit*, but the administrative detail of the timing requirement of residency is determined is located within the provincial *Income Tax Act*.⁴ The cost of the benefit is included each year in the budget of the Ministry instead of being absent from any public report or in a tax expenditure report. But claiming the AFB and the subsequent return is administered by the CRA through the regular income tax filing system.

6.2.1 Framing

The measure that has resulted from this process has important differences as compared to the rest of the credits. One difference is the framing of this credit. First, it is labelled a benefit, which creates the perception that the government is providing something to families, instead of a credit, which creates the perception of a tax cut based on engaging in a specific behaviour.⁵

¹ Weisbach and Nussim also hint at this possibility in its discussion of coordination, although this relates more to specific areas of policy instead of to a particular policy. David A. Weisbach, & Jacob Nussim, “The Integration of Tax and Spending Programs” (2004) 113 Yale LJ 955 at 957-959 & 983-985.

² Another example of a hybrid measure is the Graduate Retention Program in Saskatchewan. The Graduate Retention Program was developed by the Ministry of Advanced Education and the determination of eligibility is administered by that Ministry but the claiming and refund of the credit is administered by the CRA. The cost of the program is included in the budget of the Ministry of Advanced Education each year. Residency is determined by the provincial income tax act. *The Income Tax Act, 2000* SS C I-2.01; Saskatchewan, *The Graduate Retention Program Act*, SS 2008 c G-5.11; Advanced Education “Graduate Retention Program” online: Advanced Education <<http://ae.gov.sk.ca/grp>>.

³ The Ministry refers to what was the Ministry of Tourism, Parks, Culture and Sport of Saskatchewan and is now the Ministry of Parks, Culture and Sport.

⁴ SK ITA, *supra* note 3 at s. 39.2(c)(ii).

⁵ This difference created by using the term “benefit” is not limited to measures outside or partly outside the tax system. For instance, the Working Income Tax Benefit, sounds different than its American counterpart Earned Income Tax Credit, although both function in a similar manner.

A second framing difference is that the name Active Families' Benefit suggests a different emphasis in terms of what the measure is intended to support. The name Children's Fitness Tax Credit focuses specifically on children and their engagement in activities that will result in fitness. The name of the Active Families' Benefit instead refers to families instead of children and those families being active instead of children being in (organized) physical activities; even though it only provides money for children's activities the framing provided by the name is different. The specific reason for this choice is not provided, though it seems reasonable to consider that it may have come from being developed by a government department that specializes in this area and is therefore aware of the importance of parents modeling active behaviour and of parents' involvement in encouraging their children to be active.⁶

The third, and perhaps most important, framing difference, is its inclusion in the budget of the Ministry. This reporting not only makes it visible as a spending measure available for cutting when expenditures need to be reduced, but it also means the cost of the credit and its expected inevitable increase is calculated and readily accessible every year. In the case of the CFTC, the federal government publically reports on the growth of the credit in the annual tax expenditure report, but this is not part of the budget document and therefore it is not as visible and not as clearly framed as spending. And although tax expenditure budgets were promoted to show the public and public officials how much is being spent and what could potentially be cut, it has been found that in practice such reports have been largely unsuccessful in meeting that goal. In the case of the AFB, its reporting is much different when compared with the other provincial credits as in those provinces there are no tax expenditure budgets⁷ and the credits are only visibly included in budget documents in the year they are introduced or expanded. The increasing costs of those credits are not only unseen, but they are not readily available for anyone who wants to inquire into the cost. As explored earlier, the cost of tax expenditures tend to increase very significantly, and may even be scheduled to increase if indexed for inflation (as in the case with the Ontario credits).

⁶ This suggestion is speculative; another possibility is that the focus on families may have been politically attractive.

⁷ There is no tax expenditure report in Saskatchewan either.

6.2.2 Breadth

Another significant difference that may have resulted from the program being developed by the Ministry instead of the finance department is the breadth of the AFB. By developing a broad program, the Ministry showed what may be seen as wisdom not evident in the ITA provisions. This breadth achieves two things. First, it acknowledges that many children's activities are valuable for children's health, as is likely to be recognized by a ministry that has a broader focus than just physical activities. This importance has since been recognised by credits developed elsewhere, but the Ministry was the first to acknowledge the importance of all of these areas. And, secondly, in not including academic tutoring, which Ontario and the dual group credits have adopted, the AFB reflects a belief in the importance of participating in activities that are not school-related.⁸

The provisions of the Active Families' Benefit Act may at first appear specific, but on closer review it is clear that the benefit is available for a wide range of activities where that activity is offered by a Saskatchewan group, in Saskatchewan, and not through a school or child care or academic tutoring. These requirements are then easier for the CRA and the Ministry to interpret and provide information to parents and organizations on what can be claimed. As the Ministry specializes in sport and culture, instead of a specialization in developing tax provisions it may simply have understood that trying to create a useful distinction between which programs would fit into the benefit would be futile. This may also have led to not excluding travel, accommodation, food and beverages costs and programs of insufficient length, and generally avoiding issues of apportionment, which add difficulty for non-profit organizations and parents in determining what can be claimed.

Those who develop tax provisions have many skills including creating distinctions between similar items, defining time periods and providing specific enough distinctions and definitions in order to withstand court challenge. This type of specialization in providing such distinctions may intuitively have become more of a focus in developing the CFTC than in the AFB development. Additionally or alternatively, specialization of the Ministry may have led developers to understand how the extra work required or inconvenience involved in

⁸ The AFB does cover academic activities outside of school that are culture and multicultural related activities, such as language instruction, archeology and anthropology.

organizations or taxpayers determining what contributes to cardio-respiratory endurance, muscular strength, muscular endurance, flexibility and balance or apportioning out which costs were for accommodation, travel, food and beverage or were provided above fair market value was not worthwhile. Another example of the differences in specialization may also be visible in the residency requirement for the AFB. In developing the residency requirement the Ministry may have lacked awareness of the how complex a residency requirement under the tax system is, in this case specifically in relation to time, a situation presumably rectified by dealing with residency through Saskatchewan tax legislation.

Returning to the issue of the breadth of the credit, which may be attributable to the Ministry's specialization in sport and culture, this breadth could be criticized by those who have advocated for a more targeted focus on increases in physical activity (as was the case with the CFTC). By offering a single credit for a broad range of activities, as opposed to dual credits for fitness and other activities, there may be a lesser incentive to participate in physical activities in particular, as other options are available. It is notable, however, that other jurisdictions may have followed Saskatchewan's lead on this use of a single credit. Also, it is not clear how narrow or broad the CFTC is in practice⁹ and the low uptake of the CATC in comparison to the CFTC¹⁰ suggests that most activities parents put their children in would meet the definition of CFTC, and the added complication is unnecessary.

The CFTC provisions presumably were developed by the tax policy department within the Finance Department, but their development also involved experts outside that department. The federal government created an expert panel intended to focus on childhood obesity, and the recommendations are focused specifically on the relatively high level of physical activity required to make an actual difference in levels of child obesity both as these children are young and when they become adults. In order to make an actual difference it was determined that these measures needed to be specific. The problem came in translating these specific requirements into tax legislation while retaining these specifications. What resulted was typical tax legislation, which is hard for even experts to understand, for parents and organizations to interpret and for the CRA to meaningfully explain in their guides and website. It also resulted in calls for

⁹ For instance, bowling likely meets the requirements of the CFTC. Letter, Gordon O'Connor, M.P. (7 May 2008) CRA document no. 22007-0248651M4.

¹⁰ See table A.5 & A.6 in the appendix.

broader coverage of children's activities, which led to the creation of a second credit instead of simply expanding the first. The differences in the provisions may show that the provisions were affected by the specialization of those who developed them including the involvement a tax policy department or the Ministry, the goal set out by the government (reducing obesity versus increasing well-being) and who was involved in the creation of the provision as a result of that goal.

When the CRA gets questions about a specific issue, they will sometimes publish their interpretation so the public, or, most often, tax experts, can have a ready interpretation. Their answers demonstrate the areas in which the CRA has expertise, and the areas in which expertise is lacking. One of the first questions the CRA answered and published related to whether a set of swimming lessons was within the length requirements when one week there was no lesson because of a holiday.¹¹ Specifications surrounding time occur frequently in tax legislation and can be surprisingly complex, so clearly the CRA in interpreting the relevant term have a very high level of specialization. The CRA has, on the other hand, struggled to give a practical interpretation of matters such as: what a significant amount of physical activity is, when one activity is really two and should be divided into two receipts so both credits can be claimed, and how much of the cost of a camp is related to physical activity and therefore can be claimed.¹² For example, when asked if bowling qualified for the CFTC, the CRA stated that bowling likely qualifies as significant activity,¹³ which results in uncertainty by using the term "likely", and also suggests that the requirement of contributing to cardio-respiratory may be much lower than was likely intended.¹⁴ It appears that at least some of the uncertainty as to when the CFTC applies is attributable to the fact that it is administered by people who are not experts in the incentivized activity.¹⁵

¹¹ Letter, Renee Shields, (25 March 2009) CRA document no. 2008-0301711E5.

¹² See discussion in last chapter.

¹³ Letter, Gordon O'Connor, M.P. (7 May 2008) CRA document no. 2007-0248651M4.

¹⁴ Reviewing the websites of organizations also indicates they experience difficulty in interpreting provisions and providing information. Often they explain the CFTC exists but clearly do not want to be held responsible if the credit is claimed when it should not be. In other cases, the information is inaccurate, as with Dance Kids Canada, which states in bold that dance is deemed to within the definition of physical activity and includes a CRA symbol beneath it. Horseback riding is actually the only activity deemed to be in the definition (*Income Tax Regulations* CRC, c 945 s 9400(5)). Dance Kids Canada, "Federal Child Fitness Tax Benefit" online: Dance Kids Canada <<http://www.dancekidscanada.com/news/categories/Federal-Child-Fitness-Tax-Benefit/>>.

¹⁵ Another example of an administrative issue not addressed comes from the interaction of the AFB and CFTC. The information provided by the CRA specifically for Saskatchewan on the AFB uses the same language as other

To relate this back to the issue of which was the best department to develop the credits it raises the question: did the Ministry's specialization in physical activity and children's activities allow them to see that a physical activity definition administered by a tax agency would be impractical?

6.2.3 Equity

The other major difference between this benefit and other credits is in terms of equity. The AFB is both refundable and returned at a 100% rate. This is more equitable because a parent's level of taxable income is not a bar to claiming the AFB and for parents with low incomes a 100% return in comparison to a 15% return is more likely to make an activity that appears unaffordable to become affordable. No other credit comes close to that level of equity, even when the federal and provincial credits are combined. This may also reflect the development of the benefit outside of the tax system where the lowest marginal tax rate would not necessarily be the default rate and where there may be a greater understanding of how to develop a more practically useful credit. But as will be seen in the next section on the uptake of the AFB relative to the CFTC, these differences may not be translating into as much practical equity as might be suggested by these differences.

6.2.4 Uptake

As noted above, the actual and projected costs of the AFB will be available to the public and government officials every year.¹⁶ This provides as some insight into the program's uptake and possible effectiveness of the measure and an opportunity to compare the consequences of the difference between the AFB and CFTC discussed in this chapter.

The trend of the cost estimate of the AFB is actually the opposite of what would be expected of a tax credit. When its cost was first estimated, which was for the 2009-2010 year, it

provinces and states that the provincial credit cannot be claimed for an amount already claimed elsewhere, but the case in Saskatchewan is quite different from other provinces. Most of the credits can be claimed together even if they are not part of the dual-credit system. For instance, the CFTC and Ontario credit can be claimed for the activity, but the in Saskatchewan it doesn't seem that should be the case. In Ontario that would mean a 25% return, in Saskatchewan it would result in a 115% return. Whether a Saskatchewan resident should claim the first \$150 under the AFB and the rest under the CFTC or if both the AFB and CFTC can be claimed on the first \$150 is unclear. The lack of clarity likely means that some parents are unknowingly given a benefit equal to more than they paid.

¹⁶ The determination of the cost of the AFB based on general budget information provided in the budget is that the cost of the AFB is the requested amount by the Ministry to pay for the AFB for the budget year..

was expected to cost \$18 million.¹⁷ For the 2010-2011 year it was revised down to \$11.2 million based on the revised estimates of uptake.¹⁸ It dropped in 2011-2012 to \$9 million, half of the original estimate.¹⁹ In 2012-2013, it increased to \$12 million but this was due to an expected increase because of the expansion of the credit from 6-14 year olds to all children and youth under 18 years old.²⁰ The cost estimate remained the same for 2013-2014 and was reduced again for 2014-2015 to \$11.5 million.²¹ The inclusion of these numbers in the budget shows that the cost of the benefit perhaps has not increased as would be expected and that it is not being claimed nearly as often as was expected, even after being expanded and being in effect for a number of years. This may also say something about awareness of the benefit and how it functions for parents.²²

These cost estimates and CRA data can be used to compare the amounts that could be claimed under these credits to the amounts that were actually claimed.²³ These numbers do provide a limited amount of information so these comparisons are simply based on the number of children under the relevant age in Canada for the credit and the cost of the credits. This

¹⁷ Saskatchewan, Minister of Finance, *Saskatchewan Provincial Budget 09-10, Estimates* at 139, online: Government of Saskatchewan < <http://finance.gov.sk.ca/budget2009-10/Budget200910Estimates.pdf>>.

¹⁸ Saskatchewan, Minister of Finance, *Saskatchewan Provincial Budget 10-11, Estimates* at 135, online: Government of Saskatchewan < <http://finance.gov.sk.ca/budget2010-11/2010-11Estimates.pdf>> ; Saskatchewan, Minister of Finance, *Saskatchewan Provincial Budget 10-11, Budget Summary* online: Government of Saskatchewan < <http://finance.gov.sk.ca/budget2010-11/2010-11BudgetSummary.pdf>>.

¹⁹ Saskatchewan, Minister of Finance, *Saskatchewan Provincial Budget 11-12, Estimates* at 138, online: Government of Saskatchewan < <http://finance.gov.sk.ca/budget2011-12/2011-12Estimates.pdf>>.

²⁰ Saskatchewan, Minister of Finance, *Saskatchewan Provincial Budget 12-13, Estimates* at 134, online: Government of Saskatchewan < <http://finance.gov.sk.ca/budget2012-13/2012-13Estimates.pdf>>.
Saskatchewan, Minister of Finance, *Saskatchewan Provincial Budget 12-13, Budget Summary* at 18, online: Government of Saskatchewan < <http://finance.gov.sk.ca/budget2012-13/2012-13BudgetSummary.pdf>>.

²¹ Saskatchewan, Minister of Finance, *Saskatchewan Provincial Budget 13-14, Estimates* at 112, online: Government of Saskatchewan <<http://www.finance.gov.sk.ca/budget2013-14/>> at 112; Saskatchewan, Minister of Finance, *Saskatchewan Provincial Budget 14-15, Estimates* at 104, online: Government of Saskatchewan < <http://finance.gov.sk.ca/budget2014-15/2014-15Estimates.pdf>> [*SK Budget 14-15*].

²² Also, there may be a lack of understanding by organizations. For instance the City of Saskatoon leisure services site has a page on the CFTC which includes information on the AFB at the bottom. The presentation of the information seems to make it appear that it is a secondary opportunity claiming the CFTC even though it is a better one. Its information on which ages it is available for is also inaccurate. City of Saskatoon, "Children's Tax Credits" online: City of Saskatoon <<http://www.saskatoon.ca/DEPARTMENTS/Community%20Services/LeisureServices/Pages/ChildrensTaxCredits.aspx>>.

²³ This comparison is based on 2011 census numbers, CRA data from 2011, but the cost estimates for the AFB from 2014-2015. In 2011, the AFB was more limited but the cost was actually slightly higher than the 2014-2015 estimate. The choice to use the later numbers is based on the assumption that they should be more accurate than the older numbers.

comparison necessary ignores the heightened CFTC for children with a disability²⁴, assumes the government costs are accurate, and compares the credits as if they were both refundable²⁵ and as if all parents were spending enough on activities to claim the full amount for the relevant credit.²⁶ According to the 2011 census there were 240,640 children under 18 years old in Saskatchewan, and if the full amount of the benefit was claimed for all these children, the AFB would cost \$36,096,000.²⁷ For what is almost the equivalent of free money for activities, this appears a fairly low uptake, at about 29% to 31% based on 2014/2015 budget estimates, which are likely most accurate.²⁸ In comparison, if the CFTC was available to all 6,031,100 children under 16 in Canada, the uptake is 27%, based on 2011 data.²⁹ It may be helpful to also compare how often the CFTC and AFB are claimed just within Saskatchewan, as that removes the socio-economic factors differences between the Saskatchewan and the wider sample of Canada. Within Saskatchewan, the uptake of the CFTC was 25% compared to 29% to 31% for the AFB.³⁰ Although this suggests the AFB is claimed more often for children than the CFTC, it does not reveal why that is occurring. This could be due to the refundable status of the AFB, it may be more attributable to the ability to claim the full amount of the expense, or it may be breath of activities the AFB can be claimed for. The difference in uptake shows that there are important

²⁴ The heightened CFTC increases the amount that could have been claimed by parents and although unlikely to change the findings here, if it did, it would be to decrease the percentage of the amount of credit is being claimed.

²⁵ The non-refundability of the CFTC reduces the number of children the CFTC is actually available for. As the numbers to make a comparison based on how many children would fit within the non-refundable criteria are not readily publically available, this comparison is not made here. But as the CFTC could be made refundable and refundability is one of the major contrasts between the CFTC and AFB, a comparison based simply on the number of children under the relevant age for each of the measures could be the more important comparison as it points to the consequences of non-refundability.

²⁶ Again, this is the only comparison available, but as it is the comparison which would point to how the differences in the measures affect uptake, also the more important comparison.

²⁷ Statistics Canada, *Census of Canada 2011*, (Ottawa: StatsCan) online: StatsCan <<http://www12.statcan.gc.ca/census-recensement/index-eng.cfm>> (2011 Census).

²⁸ The 2011 population numbers would place uptake at 31%, but by using 2011 population data, percentage uptake is likely slightly high. Available population data through 2013 shows a 2.5% increase in growth over 2 years for children and youth 19 years of age and younger, or 1.25% increase per year. Assuming steady growth through 2014, this would mean a 3.75% increase, for maximum claim costs of \$37,449,600. The percentage uptake, based on 2014-2015 budget numbers and expected population in 2014 is 29%. Some of the earlier budget numbers would place uptake at a higher level but they are likely less accurate. Saskatchewan Bureau of Statistics, "Saskatchewan Population (at July 1), by Age Group, 2003 to 2013" online: Government of Saskatchewan <<http://www.stats.gov.sk.ca/stats/population/saskpopbyage.pdf>>.

²⁹ This is based on an under 16 population of 211,700. 2011 Census, *supra* note 27; CRA, *Preliminary Statistics*, 2013 Edition (2011 tax year) (Ottawa: CRA, 2013) online: CRA <<http://www.cra-arc.gc.ca/gncy/stts/ntrm-eng.html>>.

³⁰ 2011 Census, *supra* note 27; *SK Budget 14-15*, *supra* note 21.

differences between the CFTC and AFB, although overall the cost of the AFB relative to what could be claimed by parents may be the more important point.

6.3 Conclusion

In summary, the development of the AFB through a ministry focused on sports and culture and the administration of that measure through the tax system have offered some advantages over the usual model. Although it is not clear the AFB is, in reality, functioning much better than the CFTC, the joint development and administration involving more than one agency does present new possibilities for developing new government programs in the future.

7 Evaluating the Credits

This chapter will evaluate the suitability of the credits to increase physical activity. The previous chapters have established: (i) what the credits are and why they were created, (ii) that physical activity is very important for health so it will be useful to evaluate the credits based on whether they increase physical activity in a substantial way, (iii) that it is difficult to determine how effective health behaviour interventions like the credits will be and (iv) as these credits are tax expenditures, the literature on tax expenditures provides a foundation for analysis. This chapter sets out the approach to analyzing the suitability of the credits, provides the empirical evidence which will be used in evaluation and then proceeds to apply this approach to the credits. It will be concluded that the credits are not a suitable way to increase physical activity because they are unlikely to be effective, efficient or equitable.

7.1 Approach to Evaluating the Credits

The goal of this research is to determine whether the credits are a suitable method to increase physical activity levels. To begin, there are two choices here which could use explanation: i) the use of increasing physical activity levels as the goal and ii) the use of the term suitability.

7.1.1 Increasing Physical Activity Levels

Chapter two established why increasing physical activity is a worthy public policy goal based on the low level of physical activity Canadians, and particularly, Canadian children engaged in and the vast benefits of physical activity. It showed that for some health benefits small amounts and relatively low level intensity activity is useful (the prevention of CVD, managing CVD and prevention of type II diabetes), but for many benefits larger amounts of activity (weight maintenance), greater intensity (prevention of hypertension) or greater impact (osteoporosis) is necessary to provide substantial benefit. It was also shown that generally the greatest health benefits of increasing activity are attained by those who are the least active to start with, leaving this group particularly important to consider when constructing an incentive.

Additionally, until a very high level of activity is reached, more activity is better, making the group who could benefit for increased activity almost all Canadians, and particularly as this discussion is focused on children, almost all Canadian children.

7.1.2 Suitability

Chapter three reviewed how tax expenditures are evaluated. One of the important questions set out under traditional tax expenditure analysis is whether a tax expenditure would be acceptable if it were recast as a spending measure. Similar to the move from the phase “normative tax system” to “benchmark tax system” in tax expenditure reports, using the term “suitable” instead of “acceptable” is intended to focus this inquiry on policy instead of politics. The use of this term will draw on traditional tax expenditure analysis as it will evaluate the suitability of the credits as if they were traditional spending programs which may be negatively be affected by framing and regressivity issues that often occur when measures are placed in the tax system. It will also utilize the literature on the preservation of the comprehensive tax base in considering whether the credits are an efficient way to meet the goal of increasing physical activity and the complexity of the credits. This evaluation also draws on the institutional literature in comparing the differences between the credits and exploring which are most suitable to increase physical activity, but as this literature is focused on where a measure should be implemented instead of if a measure should be implemented, it is not the primary focus for evaluation. The analysis of suitability also draws on the literature on health behaviour interventions discussed in chapter four including i) the difficulty of changing long-term behaviour patterns, ii) the lack of knowledge as to how health behaviour changes are made and iii) the effect of time on action.

7.1.3 Data Sources and Literature

There are a number of data sources that will be useful in evaluating the credits. John Spence and his co-authors collected self-report data through an online survey on the use of the CFTC.¹ They found that the CFTC was inequitable as higher income families claimed it at a much higher rate than lower income families. They also found that despite this inequity, for

¹ John C Spence et al, “Uptake and Effectiveness of the Children’s Fitness Tax Credit in Canada: the rich get richer” (2010) 10:356 BMC Public Health [Spence, “Uptake and Effectiveness”]; John C Spence et al, “Non-refundable Tax Credits are an Inequitable Policy Instrument for Promoting Physical Activity among Canadian Children” (2012) 103:3 Canadian Journal of Public Health 175.

those from lower income groups who have claimed the credit, it had a higher incentive effect. Kori Fisher and her co-authors performed a more thorough analysis of the use of the CFTC using both data from the Canada Revenue Agency (“CRA”) and self-report data.² The data collected and its interpretation shows a more complex picture of the credit’s use and value. In addition, the CRA provides data on the value claimed and how often federal credits are claimed by both province and income groups.³ This information is listed by individual income and is not weighted by any other factors, but provides basis information on who is claiming the CFTC and CATC. In addition, Statistics Canada, through its Survey of Household Spending, provided data on specific types of recreational spending by household types and income groups.⁴ Without further statistical analysis this information is of limited use, but it does provide some basic information on what is being spent including by household income and type.⁵

7.1.4 Factors

In order to evaluate the suitability of the credits three factors will be considered: the effectiveness, efficacy and equity of the credits. These three are chosen because each is important to determining suitability to increase physical activity; suitability increases (i) the more effective it is, (ii) the more efficient it is and (iii) the more equitable it is. This approach to evaluating the credits is also similar to the approach used by The Expert Panel on the CFTC. Although they did not specify whether any incentive effect or how much of an incentive effect

² Koren L Fisher et al, “Awareness and Use of Canada’s Fitness Tax Credit” (2013) 61:3 Canadian Tax Journal 599.

³ Canada Revenue Agency, *Final Statistics*, 2009 Edition (2007 tax year) (Ottawa: CRA, 2011) online: CRA <<http://www.cra-arc.gc.ca/gncy/stts/fnl-eng.html>> (CRA, 2007); Canada Revenue Agency, *Final Statistics* 2010 Edition (2008 tax year) (Ottawa: CRA, 2011) online: CRA <<http://www.cra-arc.gc.ca/gncy/stts/fnl-eng.html>> (CRA, 2008); Canada Revenue Agency, *Preliminary Statistics*, 2011 Edition (2009 tax year) (Ottawa: CRA, 2011) online: CRA <<http://www.cra-arc.gc.ca/gncy/stts/ntrm-eng.html>> (CRA, 2009); Canada Revenue Agency, *Preliminary Statistics*, 2012 Edition (2010 tax year) (Ottawa: CRA, 2011) online: CRA <<http://www.cra-arc.gc.ca/gncy/stts/ntrm-eng.html>> (CRA, 2010); Canada Revenue Agency, *Preliminary Statistics*, 2013 Edition (2011 tax year) (Ottawa: CRA, 2011) online: CRA <<http://www.cra-arc.gc.ca/gncy/stts/ntrm-eng.html>> (CRA, 2011);

⁴ Statistics Canada, *Survey of Household Spending in 2005*, (Ottawa: StatsCan, December 2006) [StatsCan, SHS 2005].

⁵ In addition to these data sources are the CFTC evaluations provided in: Tamara Larre, “The Children’s Fitness Tax Credit: Right Message, Wrong Policy Instrument” in Lisa Philipps, Neil Brooks & Jinyan Li, eds. *Tax Expenditures: State of the Art* (Canada: Canadian Tax Foundation, 2011) 12:1; Barbara von Tigerstrom, Tamara Larre & JoAnne Sauder, “Using the Tax System to Promote Physical Activity: Critical Analysis of Canadian Initiatives” 2011 101:8 American Journal of Public Health. Hai V. Nguyen and Paul Grodendorst have used the survey to evaluate whether the CFTC lead to greater activity by children. Their findings do not suggest that the CFTC is substantial increasing physical activity. Their work has not been published in a peer-reviewed journal. Hai V. Nguyen and Paul Grodendorst, “Does Child Fitness Tax Credit Program Make Children More Active?” (June 2012) [unpublished, online: Hai V. Nguyen <http://haivannguyen.ca/CFTC_Nguyen_Paul.pdf>].

would be required in order to consider the credit a success, they did use the phrase “meaningful incentives.” The Expert Report provided four principles for evaluating the credit: effectiveness, simplicity, efficiency and equity. These four principles will be considered with simplicity forming part of the effectiveness evaluation.⁶

7.1.4.1 Effectiveness

The credits will have the greatest positive impact if they increase physical activity both in the present and in the future. In order for the children’s credits to function as incentives to increase the physical activity levels of children in the present and future they must do a number of things: (i) the credits would need to increase the enrolment⁷ in children’s activities and children’s memberships and (ii) those activities and memberships must result in those children increasing their levels of physical activity and (iii) those children must continue to have higher levels of physical activity as older children and adults due to being involved in those activities or organizations. The first two criteria relate to increasing physical activity in the immediate term, and the last criterion relates to increasing physical activity in the future. Analysis of an adult fitness tax credit would require the same three criteria to be evaluated, but the analysis would change due to considerations such as the fact that adults would be enrolling themselves, rather than their children.

As there is limited evidence as to the increase in enrolment due to the credits and even less evidence as to whether this increases levels of physical activity in Canadian children now or in the future, it is difficult to determine what the incentive effect of the credits are. But as the incentive effect is considered here as the primary benefit of the credits, some attempt to determine effectiveness is required in order to weigh the benefit of the credits against the cost of the credits.

7.1.4.2 Efficiency

The second consideration is the credits’ efficiency in meeting the goal of increasing physical activity. This is generally a matter of comparing the credits to other proposals for increasing physical activity in terms of their costs and benefits. Although it is beyond the scope

⁶ *Expert Report, supra* note 34 at 9.

⁷ Enrolments include both in specific programs and camps while memberships refer to purchasing the right to use particular facilities and the services they offer.

of this paper to compare the almost limitless possible strategies for increasing physical activity levels, it is important that its relative position be considered at least in a cursory manner in order to place this evaluation within the wider body of literature on physical activity interventions. There are a number of other tax options that could be used to try to increase physical activities, and as these provide a more limited sample for comparison and share similar attributes with the credits (because they are part of the tax system), they will be examined here to provide a limited comparison.

7.1.4.3 Equity

The last consideration is equity.⁸ In considering whether the credits are suitable it is important not simply to consider how much they change physical activity, but also which individuals and families they primarily benefit.

7.2 Empirical Evidence

The evidence discussed in this section relates specifically to the effectiveness and equity of the credits. It is primarily presented in relation to income class. It relates particularly to the issue of whether there has been an increase in enrolments and memberships based upon the credits as this analysis will be performed on the basis of affordability which relates to income class. It also provides the basis for the major equity issue as it is also based on income class. This section will first describe the government-provided data followed by the data provided by Fisher *et al.*

The Survey of Household Spending provides survey information on spending by Canadians on different types of recreation including sports and athletic equipment, children's camps and physical activities and facilities. These numbers are only provided at a household level and do not identify the family member participating in the activity or using the equipment. The numbers from the 2005 survey will be used here as they provide information on the level of spending before the introduction of the credits and before the economic crisis of 2008, which may have affected such spending.

The survey provides information based on income quintiles and family type. The information provided includes average expenditure per household, the number of households

⁸ The term equity will be used in a broad sense which relates to the term equality in tax literature.

reporting spending on that particular items and the average expenditure of the households that report such spending. Overall, the average spending on sports and athletic equipment (besides athletic footwear) for all households was \$166, with 34.7% of households reporting spending for an average expenditure of those reporting of \$479.⁹ Those in higher quintiles spend significantly more money and are more likely to spend on sports equipment; the average spending on sports equipment by quintile from the first to the fifth was \$21, \$50, \$118, \$207 and \$436.¹⁰ These amounts are not eligible for the credits but show some of the physical activity related costs were incurred outside of the credits and the inequity of that spending.

Part of the cost for some children's camps is eligible for the credits. Once again there is a large difference between how often and how much is spent on camps by the different quintiles. Overall an average of \$48 was spent, from the first to the last quintile the averages were: \$2, \$16, \$19, \$50 and \$151. Of the three measures, camps had the lowest rate of spending at 7.9% across all quintiles and ranging from 0.7% for the lowest quintiles to 15.6% for the highest.¹¹ It is particularly notable here how large the difference is between the fifth quintile relative to the other four groups.

The most important consideration is the last measure, spending on physical activities and facilities.¹² The average spending on this was \$242, with 37% of households reporting spending and the average spending for those reporting being \$479.¹³ The average spending from the first quintile to the fifth were \$41, \$86, \$172, \$262 and \$648.¹⁴ The rate at which households spent on such items from the first to the last quintile were 13%, 25%, 37%, 49% and 62%.¹⁵ The amount spent on average by those who did spend from the first to last quintile was \$315, \$398, \$471, \$539 and \$1044.¹⁶ What is noticeable here is the large increase in spending and the rate of spending between each of the quintiles. The difference between the fourth and fifth, as with the camps, is significantly larger than between other bordering quintiles. To understand the income

⁹ The average spending on women's athletic footwear was \$69 and \$84 for men's athletic footwear. StatsCan, SHS 2005, *supra* note 4.

¹⁰ *Ibid.*

¹¹ *Ibid.*

¹² The specific question asked was: how much was the household spent in 2005 on "single usage fees, membership fees and dues for sports activities, sports and recreation facilities, and health clubs?" *Ibid.*

¹³ *Ibid.*

¹⁴ *Ibid.*

¹⁵ *Ibid.*

¹⁶ *Ibid.*

differences of the income quintiles it is useful to look at the average total expenditure of each of the quintiles. Overall the average total expenditure per quintile was \$66,857, and from the first to the fifth quintiles the amounts were \$22,042, \$38,659, \$57,751, \$80,451 and \$135,381.¹⁷

What is clear from these numbers is that the amount spent on items related to physical activity is closely linked to income and not simply as a matter of low income relative to high income. What is more surprising from this data is the relatively low amount spent on physical activities, particularly in relation to the amount of the credits. A credit for a single child at \$500 is high relative to the average spending of \$244 average per household, or for a reporting household, an average of \$653.¹⁸ Even in comparison to the highest income quintiles where the average spending for those who do spend is \$1044 per household,¹⁹ this is still not very high relative to the \$500 credit per child. In addition, even in the fifth quintile, it is reported that 38% of households are spending nothing on sports activities and facilities.²⁰ This may be partially attributable to underreporting of spending, but the numbers still demonstrate that there is much room for increase as many households are not spending on physical activities. For those households that report spending, as a percentage of total expenditure those in the first quintile are spending at the highest rate, followed by the second, third, the fifth and lastly, the fourth quintile. This shows that at lower incomes, for those who are spending on physical activities and facilities, relatively, a greater portion of their total expenditure is spent on physical activities and facilities, but those with higher incomes are more likely to spend and are spending larger amounts. So at lower income levels fewer are spending on physical activities and facilities, but for those who do it is costing them relatively more to get less.

The survey information by family type shows that the average couple with children has a total expenditure of about \$92,733, substantially higher than the household average of \$66,857, or for lone parent households the average of \$52,717.²¹ Couples with children spend an average of \$295 on sports activities and facilities, at a rate of 51%, with an average spending of \$783 by those who do spend.²² Lone parent families spend an average of \$145, at a rate of 36.4%, for an

¹⁷ *Ibid.*

¹⁸ *Ibid.*

¹⁹ *Ibid.*

²⁰ *Ibid.*

²¹ *Ibid.*

²² *Ibid.*

average spending of \$513 by households which do spend.²³ In comparison to the second and third quintiles, lone-parent families spend more and more of them spend on sports activities and facilities. From these numbers it is clear that couples with children spend more and at a higher rate than lone parent households.

The CRA publishes data on how often the CFTC and CATC are claimed, and the amount claimed is separated out by income class²⁴ and by province and territory. Unlike the survey information, which was based on household income, these numbers are based on individuals. The numbers show that there was an increase from 5.21% to 5.88% from 2007 to 2008 of tax filers claiming the credit. The percentage of taxfilers claiming the credit continued to increase between 2008 and 2010 to 6.10% and slightly declined in 2011 to 6.08%.²⁵ The average amount claimed by those who make a claim has increased each year from \$501.65 in 2007 to \$535.06 in 2011.²⁶ This increase between the first and second year could represent more children in activities or simply greater awareness of the credit and thus a greater proportion of actual expenditures were claimed.

It is clear from the numbers that with each increase in income class, more tax filers claim the credit and they claim larger amounts. For instance the 2011 claims show 1.26% of the \$10,000 - \$14,999 income class claimed the credit and claimed an average of \$426.09. The amount claimed increases in each class above that, with 22.01% of taxfilers and an average claim of \$769 for the over \$250,000 income class.²⁷ The increase is also steady, showing that the difference is not simply between low and high income individuals but occurs all the way through the income classes.

²³ *Ibid.*

²⁴ Income class is determined by line 150 of the tax return. It includes employment income, pension income, investment income, self-employment income, tax-exempt income and income from certain other sources. This leads to some overstatement and understatement of true economic income. A number of factors account for why there are taxable returns and claims of the CFTC and CATC despite having an income level that is lower than the allowable personal amount (\$9,600 - \$10,527 from 2007-2011) that relate to: minimum tax, withdrawal of forward-averaging amounts, returns by non-residents not subject to the basis personal amount and those resident in Canada for only part of the year. CRA 2008, *supra* note 3.

²⁵ See Tables A.1-A.5 in the appendix.

²⁶ This represents a per parent, not per child amount and the amount claimed, not the reduction in taxation (15% of the amount claimed). *Ibid.*

²⁷ *Ibid.*

The CATC is claimed much less often. There is one year of information for the CATC, and it shows the same pattern, but with only 1.83% of tax filers claiming the credit. The claims are slightly lower than the CFTC, with the average claim being \$497.94.²⁸ What is clear from the CRA data is that the use of the CFTC has increased somewhat since it was initially enacted, although mainly between the first and second year of the credit. The CATC is not claimed nearly as often, but the average claim of the CFTC and CATC are similar. It is clear that the higher the income class, the more common it is that the CFTC is claimed and the amount claimed is higher.

In addition to this government-provided data, Koren Fisher *et al* used both government-provided data and survey results to evaluate the CFTC; the rest of this section explains those findings. These findings are arranged by higher income, middle income and lower income households. Higher income families with children have higher CFTC claims and claim rates, both before and after being controlled for other selected sociodemographic characteristics.²⁹ In 2009, 36.3% of all families with children under 18 claimed the CFTC, while, within the income class of \$100,000 to \$200,000, 61.4% claimed the credit and 70.2% of the over \$200,000 income class claimed the credit.³⁰ When controlled for selected sociodemographic characteristics and using the under \$20,000 class as a reference group, there were much greater odds of the credit being claimed by people with family incomes over \$100,000.³¹ In the \$100,000 to \$200,000 income class, the claims averaged \$125.74 more than the reference and the over \$200,000 class had claims that averaged \$253.92 higher.³² Parents in this group also had a much greater awareness of the credit³³ and were less likely than most to see the credit as motivating them, making it easier to register or allowing their children to register for physical activities.³⁴

The next income range to consider is \$40,000 to \$50,000. Fisher *et al* found that the influence of the CFTC (according to parental perceptions) seems to be substantially reduced in the \$40,000 - \$49,999 household income range. This lack of influence existed despite the fact that, when considered with selected sociodemographic characteristics, those in the \$40,000 -

²⁸ See Table A.5 in the appendix.

²⁹ These factors include income, urban/rural residence, immigration status, parental age, family composition, previous CFTC claims and time. Fisher, *supra* note 2.

³⁰ *Ibid*, *supra* note at 610.

³¹ *Ibid*, *supra* note at 614.

³² *Ibid*.

³³ Although they also had the second highest rate of lack of awareness of the credit.

³⁴ These factors were only lower for the first two factors for the \$40,000-\$49,999 class and for the last factor the \$40,000-\$59,999 classes. Fisher, *supra* note 2 at 617-626.

\$49,999 household income range also had the highest awareness of the CFTC.³⁵ In relation to parent's perception of the importance of the CFTC, parents in the \$50,000-\$59,999 household income group were the most likely to find the CFTC important, while those in \$40,000-\$49,999 class were the least likely to find it important.³⁶ In relation to making it easier to put their children in activities, outside of those households with income over \$100,000, those with incomes between \$40,000-\$49,999 were the least likely to find the credit made it easier to register their children followed closely by those with incomes under \$40,000.³⁷ Those in the \$40,000-\$49,999 category were also the least likely to find that the credit allowed them to register their children in activities that they otherwise would not have, followed by those in the \$50,000-\$59,999 category.³⁸ Those most likely to say that the CFTC allowed them to register their children in activities they otherwise would not were in the \$80,000-\$89,999 category, suggesting that in terms of incentive, the CFTC might be most effective at higher income levels.³⁹ However, when considered with selected sociodemographic characteristics, parents in the \$50,000-\$59,999 category were the most likely to find the credit important.⁴⁰ As with the rest of the pattern, parents in the \$40,000-\$49,999 category were the least likely to find the credit important when controlled for selected sociodemographic characteristics.⁴¹ Surprisingly the group with the second highest odds of finding the credit important when controlled for selected sociodemographic characteristics was those making less than \$40,000,⁴² though this fits with Spence's findings that although the credit is claimed less often by those with low incomes, respondents with low incomes were more likely to claim that the CFTC increased their child's level of physical activity.⁴³ These findings suggest that particularly around the \$40,000-\$49,999 range, the CFTC is the least useful and that they find enrolments and memberships difficult to afford.

For some families making under \$40,000 the CFTC does appear to make them see previously unaffordable physical activity as affordable. In terms of allowing for registrations that

³⁵ *Ibid* at 618.

³⁶ *Ibid* at 621-622.

³⁷ *Ibid*.

³⁸ *Ibid*.

³⁹ *Ibid*.

⁴⁰ *Ibid* at 620.

⁴¹ *Ibid*.

⁴² *Ibid*.

⁴³ *Ibid*; Spence, "Uptake and Effectiveness," *supra* note 1.

otherwise would not occur, only households making \$80,000-\$89,999 were more likely than the under \$40,000 group to say the credit allowed for such registrations.⁴⁴ But as can be seen from the numbers both before and after they are controlled for selected sociodemographic characteristics, those in the under \$40,000 income class claim the smallest amounts and claim least often so although some low income parents perceive that the CFTC is allowing for more enrolments or memberships, they form a very small portion of the amount of the CFTC that is being paid out.⁴⁵ These low claim levels suggest that perhaps the parents' perceptions of the credit is overly positive, that perhaps there is misperception of how much they are getting back⁴⁶ or that for those parents this relatively small amount of 15% made a larger difference in whether they found an activity affordable or not. The low claim levels suggest that if that is happening it is to a limited degree.

In looking at who claims the credits, it is clear that income is the dominant factor, but there are other factors that affect how often the CFTC has been claimed. In relation to the provinces, there is no clear evidence that having a provincial credit leads to more CFTC claims.⁴⁷ The territories have lower claim level, particularly Nunavut at a claims rate of 1.49%, representing approximately only 280 taxfilers.⁴⁸

After adjusting for family income, a number of other factors can be seen. In terms of community size, those in communities of 100,000-499,999 claim the CFTC most often, followed by communities over 500,000.⁴⁹ Beyond that, the rate of claims and the amount claimed decreases further with each decrease in population level.⁵⁰ Claim levels also relate to parental age with parents between 35-44 claiming the credit most often and parents between the ages of 40-49 claiming the largest amount.⁵¹ In addition, immigrants are much less likely to claim the

⁴⁴ Fisher, *supra* note 2 at 621-622.

⁴⁵ *Ibid* at 610-614. The \$20,000-\$39,999 class claimed \$10.37 less than the under \$20,000, and the \$40,000-\$59,999 claimed \$3.49 less.

⁴⁶ Misperception of the credit could have an interesting incentive effect in itself because if parents think they are getting 100% of what they spend back or are even focused on that amount of \$500 instead of 15% or \$75, this could make the incentive more effective.

⁴⁷ *Ibid*; Fisher, *supra* note 2 at 610-613.

⁴⁸ The lack of claims in Nunavut is even more noticeable with the CATC, as approximately only 40 tax filers are claiming the credit. CRA 2011, *supra* note 3.

⁴⁹ Fisher, *supra* note 2 at 615-616.

⁵⁰ *Ibid*.

⁵¹ *Ibid*.

credit than non-immigrants, although for those who do claim, the amount is not much lower.⁵² Whether they recently immigrated is a less significant factor.⁵³ Single parents are more likely to claim the CFTC than couples under this adjustment for income, although before this adjustment couples are over twice as likely to claim the credit than single parents.⁵⁴ In addition parents with at least one male child are more likely to claim the credit.⁵⁵ Those who have claimed the CFTC before are vastly more likely to claim the credit than those who have not and claim considerably more.⁵⁶ There are a number of factor that affect CFTC claim levels, but it is clear that income is by far the most important factor.⁵⁷

7.3 Effectiveness

These measures will be judged, in part, by whether they increase physical activity in the short-term as well as whether they establish a pattern of long-term physical activity. In order to consider whether these measures are effective, the analysis will be broken down into three parts.

The first part addresses whether the credits are likely to lead to an increase in enrolments or memberships. If there is not an increase, then the credits are obviously not effective. The second part will consider whether an increase in enrolments or memberships will result in an increase in physical activity in the short-term. The third part considers whether this short-term participation significantly contributes to establishing a pattern of long-term physical activity. This section concludes with an assessment of overall effectiveness.

7.3.1 Increased Enrolment and Memberships

The first issue in considering whether these credits are effective is whether they result in more enrolments or memberships being bought than if the credits did not exist. If this does not occur and the credits are simply claimed by those who would have paid such fees anyways, it is not an effective incentive.

⁵² *Ibid.*

⁵³ *Ibid.*

⁵⁴ As the vast majority of single parent families are headed by women there is also a gendered dimension to this impact. *Ibid* at 610-616.

⁵⁵ *Ibid* at 615-616.

⁵⁶ *Ibid.*

⁵⁷ Previously having claimed the credit is clearly related to claiming the credit in future years but this does not provide much information on who claims the CFTC.

In relation to the empirical evidence presented in the previous section, the information gleaned from the CRA information alone tells little about how much enrolments have increased as a result of the enactment of the CFTC because it provides no base for comparison, but it provides a base for understanding the income of those claiming the CFTC. The Survey of Household data provides a base for understanding how much is being spent on activities that may be covered by the CFTC and that there is room for an incentive on \$500 or even \$150 to increase enrolments and memberships. The information from Fisher *et al* shows higher income families with children under 18 claim the CFTC more often and claim more. Parents' perceptions of the CFTC show that \$50,000 is an important dividing line as to whether the CFTC makes unaffordable activities affordable. Under \$40,000 there is also a high perception of usefulness, but considering how much less often the CFTC is claimed by this group, this effect is limited.

7.3.1.1 Impact of the Credits

Essentially, in this section it is imagined that the credits are not yet in effect, and the question being asked is whether introducing the credits is likely to make a difference. In order to determine the likely effect of the credit on enrolments and memberships for children, parents will be divided into seven subgroups. First, they will be divided into three groups based on how easily they can afford to pay for putting their children in activities: i) those who can easily afford to spend \$500 on their children's activities for each of their children, ii) those who can afford to spend \$500 on children's activities for each of their children, but for whom the cost is a significant factor and iii) those who feel that they cannot afford to put their children in any activities at all. The \$500 amount is used because it is the amount for the CFTC and most of the credits. For the AFB the analysis differs because it is for up to \$150, so the groups change because of that lower number. These groups should correlate to some degree with high, middle and low income, but as the more relevant consideration is how big a factor cost is, parents will be divided based on this factor instead of income classes.

The first two groups will be further subdivided into i) those who are currently paying close to \$500 or more on activities for each of their children, ii) those who are spending something on activities but significantly less than \$500 and iii) those who are spending nothing. The last income group will not be subdivided because if parents cannot afford activities it will be

assumed they are not currently spending money on them. In considering the AFB the amount again is reduced to \$150.

7.3.1.1.1 Easily Affordable

The first subgroup of parents are those who can easily afford to put their children in activities and spend close to or more than \$500 on activities for each child. The question in the case of parents who are already spending \$500 on physical fitness programs is whether getting \$75 back upon filing a tax return will lead to putting their children in more programs. As cost is not the major consideration in this case, a small amount received back at tax time is unlikely to make a significant difference. Further, although increasing activity amongst this group can contribute to their health, the benefit will not be as great as increasing activity amongst less active children. It is likely that the CFTC and similar credits will not result in a substantial increase in enrolments or memberships for this group.

The second subgroup consists of the parents who can easily afford to spend \$500 on children's activities, but have chosen to spend significantly less, though still are spending something on physical activities. It is difficult to know how large this group is, but considering the Status of Household Survey numbers, it could be quite large. In this case an economic incentive may cause parents to enrol their children in more activities, but the form of the credit is of particular importance. As all of these credits are delivered through the tax system they only result in a return in the year after the activity has been paid for. This minimizes the incentive ability of the credit. As was mentioned in chapter four, time discounting explains how a benefit received in the future is discounted in the present. Obtaining this benefit also requires the work of determining if the credit is available for the activity, getting and keeping of proper receipts and remembering to claim the amount on the tax return. This may seem like a minor inconvenience, but the annoyance of having to do this may also lead to parents discounting the value of the credit. The actual value of the credit is also relevant. For the CFTC, the return is only 15% of what is spent, and this low rate of return may also make the incentive factor of the credit quite low for this group of parents. For parents living in provinces with a complementary credit, the incentive effect may be increased.

In contrast, the rate of return on the AFB is 100%, but the credit is only for a maximum of \$150 of fees. If parents can easily afford programs, there is a good chance they will at least be

spending \$150 a year, particularly as this includes almost all activities that children could be involved in, outside of school, tutoring or childcare. Thus there is no real incentive to put their children in more activities. Some parents may respond due to seeing the emphasis placed on activities by the government, but it is doubtful that this will result in a large increase in enrolments and memberships.

The last subgroup amongst those who can easily afford to put their children in physical activities are those parents who choose not to put their children in any such activities. It would seem that there is a good chance that this group would be small, though the Survey of Household Spending numbers suggest it is larger than would be expected. Also, there may be some parents whose children are in activities, but not those meeting the restrictive requirements of the CFTC. If parents can already easily afford such activities and chose not to when there is generally a social expectation to have their children in such activities, it would seem unlikely that these credits would change that. But it would seem that whatever reasons exist for not having children in eligible programs, the 15% incentive would not likely overcome them. Again, if a provincial credit were also available, especially the AFB, the incentive effect would be somewhat higher, though probably still quite low.

In looking at the CRA data, it is easy to see that parents who can easily afford to put their children in activities are more likely to do so and that they are likely to spend more money on such activities. Another important factor in regards to this group is that they are the most likely to be aware of such credits as they are more likely to use tax professionals who will advise them of the credit and its requirements. This may be one of the reasons they are likely to claim such credits, but it is also important for the incentive component of the credit. The discussion of this group has been predicated on the assumption that parents within the group are aware of the credit. For any parents who are not aware, the credits cannot provide any incentive effect as a decision cannot be based on a credit a parent is not aware of.

In April of 2011, the Conservative Party of Canada made an election promise to double the CFTC to \$1000 per year. If such a change were to be made, the previous analysis (and analysis to follow) would be looking instead at groups divided by who is already spending \$1000 or close to that amount, and those who are spending less. For those not spending anything even though they could afford to, the analysis is unlikely to change. However, there will be a greater

number of parents in the group that spends something less than the maximum. It is possible that an increase in the monetary limit of the credit will mean that more children who are already in activities will enrol in more activities, though the degree to which this will occur is questionable. As the average claim for individuals making \$100,000 or more is \$672 and 73% of households who claim have more than one child under 18, it would appear that many, if not most, families are not even claiming \$500 on the credit, much less \$1000, even for those with higher incomes.⁵⁸

An additional factor in considering the incentive effect with this and the other income groups is the cost of equipment, transportation etc. related to having children in activities. As discussed in Ontario, the cost of hockey is much greater than fees; costs include equipment, skate sharpening, the cost of gas to get to practices, games and weekends away and the time involved.⁵⁹ This reduces the ability of the incentive effect of the CFTC, for example, as it is no longer for 15% of cost of the activity, but simply 15% of the enrolment fee.

7.3.1.1.2 Affordable

The next group of parents are those who can afford to put their children in activities, but will have to forgo in order to do so, thus making the cost of the activities a significant consideration. This is the group for which an economic incentive, like the CFTC, has the greatest chance of being effective. Once again this group can be broken down into a number of subgroups.

The first subgroup is those parents who choose to spend \$500 or close to that on activities. This group would appear to be a fairly small portion of the affordable group.⁶⁰ This group of parents obviously values putting children in such activities. For such parents the credit is obviously not able to have a great direct incentive effect as they will be claiming the full amount of the credit regardless. The question that remains is whether they will choose to use the \$75 they receive towards more activities. Once again delay of return is a factor as well as how much more activity enrolment can occur for that \$75. If the credit is changed to a thousand dollars, the group of parents spending the maximum would obviously shrink, but the analysis would not differ greatly.

⁵⁸ *Ibid* at 610; See table A.5 in appendix.

⁵⁹ See discussion in chapter five.

⁶⁰ Fisher, *supra* note 2 at 610.

Another useful consideration here is how the AFB would affect such parents. Once again this is not an issue of incentive but of whether because of the \$150 they will receive after filing their taxes, they will choose to put their children in more activities, although the delay of return is important in considering how great of an effect both of these credits will have on parents using the money returned to put their children in more activities. But it may also be that parents will use the return from the previous year's taxes to put their children in additional programs in the current year. Much of the question for this group revolves around just having a little bit more money and whether that money will end up going to activities. A tax return of \$150 one year later seems relatively insignificant. One of the problems here is that the link between the money being spent on activities and the money received back may be lessened by the amount of time it takes to receive the \$150 and because it is just part of a larger tax return. Thus, for this group there is a possibility that the credit will lead to an increase in enrolment in activities, but currently there is no evidence that it will very large increase.

The second subgroup is those who can afford to put their children in activities costing \$500, have chosen to enrol them in some activities but are spending significantly less than \$500. This group is similar to the last in that whatever money they do get back though the credit may be used to enrol their children in more activities. The difference here is that the credit can work as an incentive because affordability is a factor for these people and they will get a greater credit if they spend more on activities. The question really is how great an incentive the tax credit will be. For those for whom cost is a major concern, a small reduction in cost such as 15% may make children's activities more affordable, but it also may not be enough, when supplied after the fact, to make much of a difference.

The last group for this income category are those who have chosen not to put their children in activities. For these parents a 15% credit may still not make much of a difference although it could provide some encouragement and reinforce that there is a social expectation that children be in activities. It may have a greater incentive effect than for those who can easily afford the activities but choose not to do so, as, here, affordability is a greater concern. A credit like the AFB which refunds 100% is likely to make a greater impact. The AFB still faces the problems of having to wait for the return as well as lack of awareness and lack of understanding of the benefit. It is notable that in the case of the CFTC it may have a greater effect than would

be expected for a 15% return because of a lack of understanding leading some parents to think they are receiving a 100% return. Despite these issues for the AFB, the incentive effect should be fairly high as essentially parents are able to enrol their children in programs for free, up to \$150. This amount seems low relative to the \$500 standard of the CFTC, but it is enough to enrol children in something. Because these are children who are not enrolled in any programs, they are also some of the most important to enrol as they are most likely to benefit from increased physical activity.

7.3.1.1.3 Not Affordable

This last group is those who feel that they cannot afford to put their children in activities. Once again, this is an important group to target as their children are not in organized activities. For parents who cannot afford activities, 15% is unlikely to change that fact. In addition because the CFTC and other dual group credits are not refundable, for many of these parents they cannot claim the credits anyway. The other single credit group credits, even when combined with the CFTC, are still not useful, which is still only 25% when Ontario is combined with the CFTC (less in the other provinces, expect Quebec which will eventually be 35%). In this case, the AFB could be much more effective because it is a 100% return and is refundable. However, it still faces the barriers of delay in receiving the benefit as well as lack of awareness and inconvenience. Awareness can come from numerous places: advertisements, tax professionals, word of mouth and eligible organizations. In contrast to the CFTC, the AFB has not been well advertised.⁶¹ In addition, the title Active Families Benefit does not explain the benefit well and it also makes the credit difficult to search for when looking for physical activity or physical fitness tax credits. And even if there is awareness of its existence, without awareness that it consists of a 100% return and is refundable (not to mention knowing what refundable means) the credit cannot act as an incentive the way it otherwise could. Therefore, although the AFB has the potential to make the greatest difference in this group, its lack of awareness may be a significant barrier to its effectiveness.

The delay in payment is another obvious problem. In many cases coming up with the initial \$150 in order to be able to get it back a year later may not seem possible or wise. But it is possible that the refund will be able to make a difference. In the United States there is a program

⁶¹ So far there has been information on the government's webpages as well as a few news stories.

called the Earned Income Tax Credit that is available to low-income Americans. This program provides much more substantial refunds, in the thousands of dollars. What is relevant here is that many of the individuals who receive the credit plan for its usage. For many it operates like a saving account and the purchase of large items is often saved for when it is paid out.⁶² It is possible that the AFB could come to operate in a similar manner. An initial payment would still have to be made, but each year the refund from the previous year could be used for the current year's activities. It is questionable whether the AFB will ever operate in this manner for parents, but for parents who have difficulty paying for such programs, it is an interesting possibility. At this time, the lack of awareness discussed previously would be a major barrier to such a result. Considering the current cost of the credit to the government relative to the number of children in Saskatchewan,⁶³ the numbers do not suggest this is currently occurring at a significant rate. But because the credit is also available for such a wide range of activities, finding inexpensive activity options should also be easier and perhaps with better awareness the AFB could be used in such a way.

There are also inconvenience factors as in order to get the refund receipts have to be kept and taxes filed. For those who do owe tax within the year and would not otherwise file, this is an additional step and may make claiming the credit less likely. For example, about one third of personal income tax returns are non-taxable.⁶⁴ But as more programs, like the Working Income Tax Benefit and other child benefits, are delivered through the tax system, many people not owing taxes likely file to access other programs anyway. While the credits require additional work by the families who claim them, they are generally a lot less work and it is less invasive than claiming benefits through other government programs.

Thus for parents who cannot afford to put their children in activities, the CFTC is unlikely to change this and so would not have a significant incentive effect. A credit like the AFB has the possibility to be a very significant incentive for those families, but whether it will or not in reality remains to be seen.

⁶² Jennifer L. Romich & Thomas Weiser, "How Families View and Use the EITC: Advance Payment versus Lump Sum Delivery" (2000) 53 National Tax Journal 1245 at 1247.

⁶³ See the discussion in chapter six.

⁶⁴ CRA, 2011, *supra* note 3.

7.3.1.1.4 Other Factors

In looking at who claims the credits, it is clear that income is the dominant factor, but in understanding who is claiming the credit and the degree of incentive power it is useful to consider other factors that affect how often the CFTC has been claimed. At this time there is no clear evidence that having a provincial credit is a substantial incentive to claim the CFTC.⁶⁵ This may show how low the incentive effect of the credits are as having a return rate of 20-25% instead of 15% does show an obvious increase in uptake.⁶⁶ Other factors that could be considered relate more to equity issues than incentive effect. CFTC claims in relation to community size, parental age, immigrant status, having at least one male child and previous credit claims are not inconsistent with the credits not having a substantial effect on enrolment and memberships. The slightly higher claims for single parents when other factors are controlled may show some incentive effect, but similar to the under \$40,000 perception of incentive, the overall effect of this on increased enrolments and memberships appears small.⁶⁷ The empirical evidence in relation to factors other than affordability and spending on physical activity before the credits is consistent with the previous analysis that the credits are unlikely to result in a substantial increase in enrolments and memberships.

7.3.1.1.5 Summary

In order to determine the likely effectiveness of the credits in terms of increasing enrolment in children's activities, parents were divided into a number of groups. The first group are those who can easily afford to put their children in activities. There is some possibility of incentive for parents who are spending on activities, but are spending less than \$500. The second group are parents who can afford to spend on activities but for whom the cost of activities means forgoing something else. It is among this group that credits like the CFTC have the greatest chance of resulting in more enrolments, though there is no evidence to date that these increases have been or will be large. A credit designed as a 100% credit like the AFB does have the possibility of greater effect but the evidence so far does not suggest that it has, and it is not

⁶⁵ *Ibid*; Fisher, *supra* note 2 at 610-613.⁶⁶ The CRA numbers used are from before the 20% Quebec credit was introduced so this does not include evidence on the effect of that credit. Saskatchewan is not included here as the credits do not work in combination to increase the rate of return.

⁶⁶ The CRA numbers used are from before the 20% Quebec credit was introduced so this does not include evidence on the effect of that credit. Saskatchewan is not included here as the credits do not work in combination to increase the rate of return.

⁶⁷ Fisher, *supra* note 2, at 610-616.

possible to determine how great the effect of the AFB will be. The last group of parents are those who cannot afford to put their children in activities. In the case, the CFTC is unlikely to make activities affordable and so it is unlikely to make a difference in enrolments and memberships. It is possible the AFB could have a very significant incentive effect, but the likelihood of this has also not been established and it has a number of other problems that are likely to be a barrier to effectiveness.

7.3.1.2 Impact of an Adult Fitness Tax Credit

In addition to the credits for children, a fitness tax credit for adults is a distinct future possibility. Such a measure was passed in Alberta and included in the budget of Nova Scotia.⁶⁸ More recently, Prime Minister Harper announced the formation of an AFTC once the deficit is eliminated (which could occur as soon as 2015). A recent request for the Parliamentary Budget Officer to look at the cost of a AFTC which would be available only for older Canadians suggested this credit may end up being limited to seniors.⁶⁹ This exploration in relation to adults will not be as thorough as the analysis for children, but it is worth considering how effective an adult credit would be in increasing both enrolments in programs and purchase of memberships.

The Fitness Industry Council of Canada has been advocating for a federal AFTC.⁷⁰ In order to support its position, it had a report prepared by the Centre for Spatial Economics which shows there could be long-term health savings if such a credit was created.⁷¹ Unfortunately this is the only study published on an adult credit, though this does not change the questionable nature of its findings.⁷² The study assumed a certain level of incentive from the credit would occur, leading to better health and a decrease in health care costs.⁷³ The discussion in this section

⁶⁸ Neither credit became active.

⁶⁹ Canada, Office of the Parliamentary Budget Officer, Cost Estimate of an Adult Fitness Tax Credit, (Ottawa, 2013) online: PBO <www.pbo-dpb.gc.ca> (Prepared by Duncan MacDonald).

⁷⁰ Fitness Industry Council of Canada, "Implementation of an Adult Fitness Tax Credit" online: Adult Fitness Tax Credit <<http://www.adultfitnesstaxcredit.ca/index.php>>.

⁷¹ Centre for Spatial Economics, "Economic Benefits of an Adult Fitness Tax Credit" (December 2007) (Prepared for Fitness Industry Council of Canada). The report used to be available on the Adult Fitness Tax Credit website, but this website no longer has a current link to this material.

⁷² Shinyi Wu et al, "Economic Analysis of Physical Activity Interventions" (2011) 40:2 American Journal of Preventative Medicine 149 (Wu et al does not discuss this particular study but the problem with assumptions used in studies of physical activity interventions, finding that the assumptions are more important for determining efficiency than the differences between interventions).

⁷³ Case for Spatial Economics, *supra* note 71.

will not assume a specific level of incentive, but simply discuss the factors which could affect the ability of an AFTC at 15% to bring about an increase in enrolments and memberships.

As with parents spending on their children, there are those who are already spending \$500 on fees, those who are spending less and those who spend nothing on their own physical activity. The level of household spending on such activities has already been discussed above, and what is of particular note is that at an average household spending of \$242, and only 37% of households reporting spending, the vast majority adults are spending less than \$500 a year on such fees.⁷⁴ For those already spending \$500 a year, the measure would not be an incentive in the present. It may play some role in encouraging individuals to continue to buy memberships or enrol in programs. Individuals tend to become less active as they grow older, so even if they are already spending in the present, it does not mean they will necessarily continue. The issue then becomes how likely it is that they will stop buying memberships or paying enrolment fees and to what degree a 15% return, on up to \$500, a year will change this. For this group, who are already spending \$500 a year, there is no present incentive from such a credit, although possibly a certain degree of incentive to continue to spend \$500 a year on fees could be useful. The second group are those spending some money on fees but significantly less than \$500. This is a group for which there would be a present and future incentive to spend. Amongst this group there is a greater chance of incentive affect, but the same question of how much difference a 15% credit will make still remains. As a matter of effectiveness, the last group, those not spending anything on such fees, are the most important to target as they are likely to be the least active. There is a definitely possibility of incentive here. Once again the rate and form of the incentive will likely limit its incentive ability.

Of added weight to the economic incentive itself may be the message that it is important enough for adults to be active that the government is willing to provide a tax credit. But this additional message may be limited by previous physical activity campaigns of the government which already convey this message such as, ParticipACTION. This additional message may or not may be enough to bring about an increase in enrolment or memberships. As adults are likely less concerned with their personal health than parents are with their children's health, they may

⁷⁴ StatsCan, SHS 2005, *supra* note 4.

be less likely to spend on such fees and likely would require a greater level of prodding by the government to get them to do so.

There is another reason why adults may be less responsive to such measures than parents. The leisure time physical activity adults are most likely to engage in do not require memberships to either a fitness facility or enrolment in a program. The incentive for these may not be that effective as they do not involve the types of activity individuals are most likely to engage in. By far the most popular activity is walking.⁷⁵ Although this can also be done at fitness facilities, which during the winters in Canada can be helpful, walking indoors, particularly on a treadmill does not generally provide the level of enjoyment of walking outside. This will affect the degree to which the credit can be an incentive.

There is another possibility that needs to be noted with all these credits. This is whether the credits are able to act as an incentive to the degree that they will then affect the cost of programs or memberships. If parents or adults are willing to spend more because of these credits, those offering may respond by charging more because the market now allows them to do so. Further, regardless of how well the incentive works, this may not be a significant factor as the credit does not reduce the price when it is purchased. This differs from other measures that could be used like a reduction in GST/HST on memberships or a voucher system which produces an immediate benefit. This may also be a minor issue simply because the incentive power of the credit is likely low anyway.

7.3.2 Short-term Increase in Physical Activity

The issue here is to what degree an increase in enrolments and memberships will result in increased physical activity. This question will be broken down into three parts: (i), whether the credit is being used for enrolment is for a scheduled program or whether it is for a general membership (ii), whether the specific requirements for the credit requires actual physical activity and (iii) whether an increase in participation in these organized activities will result in a decrease in unorganized physical activity.

⁷⁵ See discussion in chapter two; Heather Gilmour, “Physically Active Canadians” (2007) 18 Health Reports online: Statistics Canada < <http://www.statcan.gc.ca/pub/82-003-x/2006008/article/phys/10307-eng.pdf>> at 18.

Presumably a children's activity credit will be more focused on programs and camps while an adult credit will be more focused on memberships for fitness facilities. Although these may not seem all that different, the resulting level of physical activity could be quite different. Memberships for fitness facilities may be less effective, as it is expected that there would be a lower level of attendance at a facility than being in a scheduled activity or on a sports team where social capital will play a larger role.⁷⁶ For instance, one study found that the average cost of each session at a health club was higher for those with memberships (\$14-\$16 in the first three months and over \$17 in the next three months) than when individual sessions were purchased with a ten-visit pass (\$10) or individually (\$12) because of how rarely they were used.⁷⁷ In the case of a scheduled activity or sports team there is more pressure to attend on a regular basis. Often there will also be pressure to attend from other members of the activity. A good example of these would be sports teams. Having a group atmosphere also provides other benefits. Group activities provide social capital. Since activities such as sports teams allow individuals to be part of a group, this may further push the individual to develop skills and engage in physical activity. Thus, increasing enrolment in programs will likely be more effective in increasing physical activity, as well as providing other benefits, as compared to increasing memberships in fitness facilities.

The goal of some of these credits goes beyond simply encouraging physical activity; some are available for a wide range of activities, including programs which include no physical activity, such as academic tutoring. So what the credits are used for is particularly important. Providing credits for a wide scope of activities can be justified by looking at these credits from a wellness standard. For instance, a certain child may respond to music lessons and this may be very important to their well-being. But as physical activity has been chosen here for the basis of evaluating effectiveness, those credits that allow claims for a broad range of activities will not increase physical activity where they have been used for other types of activities.

As a matter of the qualifications of the credits, it is the CFTC that is most likely to translate increase in enrolment into an increase in physical activity. It is of particular importance

⁷⁶ In some situations gym memberships will also provide social capital where personal trainers are used, individuals workout in partnership with others, classes are attended or a membership leads to lower prices for enrolments in specific programs. See discussion of social capital in chapter 2.

⁷⁷ Stefano DellaVigna & Ulrike Malmendier, "Paying not to go to the Gym" (2006) 96:3 *The American Economic Review* 694.

that the CFTC requires that physical activity includes MVPA. Although the requirements of the federal credit make it more complicated to administer, particularly for organizations and parents, this complication may be worth the benefit gained by only supporting activities which are so directly related to increasing physical fitness. This does not mean the single credit group credits will not increase physical activity, including MVPA, but the link between the increase in enrolment and the increase in activity will not be as strong. With the suggestion that bowling fits within the scope of the CTFC it is questionable to what degree this structure actually as limiting as it was intended to be. Also, the much lower rates of claims for the very broad CATC, while claiming similar amounts, suggests that the level of physical activity is not a large barrier to claims.⁷⁸ If the limitations of the CFTC were so limiting in practice, than it would not be expected that the CFTC would be claimed over 3 times more often than the CATC, which covers the recreation and arts activities not covered by the CFTC.⁷⁹

The last issue is how the increase in organized physical activity will affect levels of unorganized physical activity. It is possible that in putting their children in more activities, parents will simply be substituting organized for unorganized physical activity. In doing so, they may also be substituting adult-directed play for self-directed play, in which children are learning additional skills which are not developed when they are simply doing what they are told to do. Although a relevant concern, it would appear this has not currently become a large problem. It has been found that children who engage in a large amount of organized physical activity also engage in a large amount of unorganized physical activity.⁸⁰ Additionally, there are groups of children for whom unorganized physical activity is so low that organized physical activity cannot help but increase their level of activity. This low level of activity has been of particular concern amongst adolescent girls. Concern has also been expressed that the CFTC, due to its high standard of what is considered as physical activity, is less available for the type of organized physical activity these girls are likely to engage in.⁸¹ In this situation, some of the broader credits may be better at getting this group more active. Although higher intensity provides greater

⁷⁸ See Tables A.5 & A.6 in the appendix.

⁷⁹ *Ibid.* The comparatively large claims of the CFTC could also be partially attributed to a lack of enforcement in terms of the CRA investigating the activity level of the program claimed.

⁸⁰ See discussion in chapter 2.

⁸¹ Sheila Block, "The Children's Fitness Tax Credit: Less than meets the eye" (2007) 9:3/4 *Canadian Women's Health Network* 20.

benefit, amongst those who are inactive the most important thing that can be done is simply to get them more active.

Thus, assuming they occur, an increase in enrolment and membership should lead to an increase in the level of physical activity. Enrolment in scheduled programs is likely to do a better job of this than the purchase of memberships, and thus adult credits may be less effective. Credits with more strict limitations are more likely to translate increased enrolment into increases in physical activity. Unorganized physical activity may decrease somewhat as a result of such measures, but it is also quite possible that it would actually increase instead. The question still remains when considering the cost of these measures whether these benefits are worth the cost.

7.3.3 Long-term Outcomes for the Individual

The greatest benefits of physical activity lay in not simply becoming active for a short period of time, but from an established pattern of physical activity. Once again, the difference between child credits and adult credits is important. In relation to children, particularly younger children, the goal is to establish a pattern of physical activity that will continue into adulthood. Currently, most Canadian children are not meeting the desired level of physical activity. In addition to this, as they grow older, if levels remain the same, they will continually become less active as they grow older.

In order to establish a long-term pattern of physical activity, children both need to become active and that activity needs to be a positive experience for them as they are unlikely to continue involvement long-term if they do not enjoy what they are doing. If the benefits of the activity are not just abstract future health, but are in the present and felt as being part of the activities, continuation is more likely. As mentioned earlier in chapter four, decisions are often based on feeling, not simply on rational calculation. Here the flexible nature of credits can provide some benefit, as it is up to the family to decide what type of activity to be involved in. Thus, if a child enjoys soccer, hockey, swimming, dance etc. more than other activities, the parent can enrol them in these activities according to their preferences. To show the importance of this a comparison may be useful. For instance, there is also a push to increase physical activity

in schools.⁸² This does provide children with a variety of experiences which may lead to finding something they enjoy. For many students this can also be a negative experience, particularly for overweight and obese children (which is a particularly important target group).⁸³ This negative experience may actually result in a lower level of physical activity in the long-term. Providing flexibility in terms of programs enrolled in can help bring about a higher level of positive experience leading to a greater chance of creating a long-term pattern of physical activity.

The case for adults is different. Firstly, the short term increase in physical activity is not likely to be as great for adults as it is for children. Secondly, the goal is different. Although for some adults it will be to continue to be active, for most adults it will be to bring about a long-term change in behaviour. Long-term behaviour change is not only notoriously difficult but our understanding of how it occurs is also very limited, particularly in relation to the area of preventive health behaviours, as discussed earlier. An AFTC may for some individuals be the measure that sparks behaviour change, but the degree to which this will happen is simply something that we do not know. Like with so many factors discussed in the section, the knowledge that exists is limited and the possibility of a significant benefit resulting from a tax credit is simply not established and the reality of such benefit is highly doubtful.

7.3.4 Overall Effectiveness

This section has considered the likely effectiveness of the credits on a number of levels. First, it considered whether the credits are likely to bring an increase in the number of memberships and enrolments. It found that there may be some incentive effect, but it will likely be small. It also found that a broader credit such as the AFB which is refundable could be a more effective incentive although thus far it has not been shown to have a higher incentive effect. The incentive ability for an adult credit seems even more limited than the children's credits.

The second consideration was whether any increase in memberships or enrolments that do occur would translate into more physical activity being taken within the period for which the credit is for. In terms of enrolments, this likely would result in an increase in physical activity. It

⁸² Michael Gard & Jan Wright, *The Obesity Epidemic: science, morality, and ideology* (New York, Routledge, 2005).

⁸³ *Ibid.*

is expected that memberships to fitness facilities will not be as effective in leading to increase in physical activity.

The third consideration is the long-term effectiveness of the credit for those whose current level of activity has been increased by the credit. Here the difference between how the credit would work for children and adults could be great. In the case of children, the credit may contribute to establishing a pattern of being physical activity. In relation to adults, the question is instead one of long-term behaviour change which is more difficult to achieve. As any long-term effectiveness requires short-term increase in behaviour, it is not expected that there will be substantial long-term effect from the credits.

7.4 Efficiency

Evaluating efficiency requires comparison to other possible interventions governments could use to address the issue of low physical activity rates. The number of possibilities to increase physical activity seems almost endless, and a comparison of them will not be attempted here. However, it is useful to point out a few things. If a program is ineffective it cannot be efficient. Secondly, in regarding to increasing physical activity levels, the issue is not simply which intervention is better, but a issue of which interventions should be used together as no one intervention will fully address the issue. But as there is not unlimited financing to allow governments to try all of these options, it is still important to compare how well the different options will work, both separately or in combination.

There are many measures that could be used to attempt to increase physical activity among Canadians. Instead of using tax credits, the different levels of governments could subsidize physical activity organizations. Financial support could be given to schools to specifically support sports programs as well physical activity classes. The government could also raise requirements regarding how much physical activity is required in school. Also, much of the recent literature on obesity and physical activity has focused on the need for a change in environment. This includes making it easier to use active means of transport including walking, biking and using public transportation, many of which have the added benefit of provide opportunities for individuals to enjoy the outdoors. Support for indoor spaces is also important including physical activity complexes, soccer centers, swimming pools etc. According to a survey of parents, when compared with five other strategies, tax credits had the lowest

percentage of parents indicating they were very important and the highest percentage of parents indicating they were not important at all.⁸⁴ Non-tax measures could also be used to target specific populations that are inactive and lack the means to become more active, particularly among children. For instance, an organization like KidSport may provide a greater benefit for a similar amount of money because it is able to target children who would not otherwise have the opportunity to be on sports teams.⁸⁵ Although comparison of these measures is beyond the scope of this work, the point is that there are many options that could be used to increase physical activity in Canada.⁸⁶

There are also a number of other tax expenditures that could be put in place to attempt to encourage physical activity. As this thesis concentrates on a particular set of tax measures intended to increase physical activity, it makes sense to also consider at least briefly what other tax expenditures could be used to increase physical activity or broader health-related goals such as wellness. Evaluation of such measures, at least from a health perspective has also been limited in the literature relative to many of the other physical activity or obesity interventions, thus making their evaluation important in case policy makers consider using such measures.

These measures will be divided into two groups. In the first group are measures whose primary focus is health-related, whether it is in promoting activity or focused on a broader goal of increasing wellness. These are based on American proposals for tax expenditures. Considering them in a Canadian context, the first would essentially expand the Medical Expense Tax Credit (“METC”) to include a credit for the purchase of exercise equipment. The second would extend a tax credit to businesses that provide opportunities or incentives to their employees to become more active, lose weight or improve their overall well-being in some other manner. The possible benefits and disadvantages of both these types of credits will be surveyed.

⁸⁴ The other strategies were: i) sports and recreation facilities, ii) convenient and accessible programming, iii) coaching or instruction, iv) school or after-school programs and v) opportunities for free play. Fisher, *supra* note 2 at 627.

⁸⁵ As discussed in chapter five, the first credit introduced (Nova Scotia) was accompanied by an increase in KidSport funding and in Saskatchewan it was suggested that KidSport may be a better option.

⁸⁶ It is also very difficult to compare the efficiency of physical activity measures. Wu et al found that the biggest factor in comparing efficiency levels between different measures related to assumptions made about the measures in the studies they compared. Thus, even when the primary purpose of a paper is to compare the efficiency of physical activity measures, it is very difficult to do so in a meaningful way. Wu, *supra* note 72.

In addition to tax expenditures that are intended to provide health benefits as their primary purpose, there are a number of credits whose primary goals are not health, but may result in an increase in physical activity. The first two expenditures that will be considered fall into the category of transportation. Both the Public Transit Tax Credit and Cyclescheme in the U.K. promote using methods other than a car to get to work. In doing so, they encourage active transportation. The last to be considered is the Working Income Tax Benefit (“WITB”), a measure that is intended to reduce effective marginal tax rates on those who are moving from welfare into employment. This credit will be evaluated here on the premise that if low-income families have more resources to draw from, they will be able to involve their children in more activities and more generally, provide healthier options. Although these interventions are focused on other social issues, their possible fringe benefits of increasing health could make these expenditures more worthwhile if they are effective.

7.4.1 Physical Activity Measures

In the United States, the Personal Health Investment Today Act (or PHIT Act) has been introduced a number of times. It would provide credits for engaging in preventive health measures. A similar measure could be implemented in Canada by simply expanding what could be claimed under the METC. In some ways this could be similar to the activity credits discussed as it could include the cost of a gym membership. However, it could also include the purchase of exercise equipment for the home.

The effect of using the METC could be different because the requirements are different. The METC is not generally about incentive, but it is more a recognition of cost and a governmental decision to share this cost.⁸⁷ As the measures that could be added to the credit relate to preventing health problems and improving well-being, they could fit within the purpose of the credit. As discussed with the activity credits, this broadening may not be desirable. The METC generally provides a 15% non-refundable return on qualified medical expense for the individual (or his or her spouse and children under 18 years of age) paid for by the individual, that exceed the lesser of 3% of income or \$2,152.⁸⁸ Enhancing the credit would allow for larger refunds than under the CFTC as there is no cap and may be better for encouraging larger

⁸⁷ CRA, S1-F1-C1: Medical Expense Tax Credit, online: CRA < <http://www.cra-arc.gc.ca/tx/tchncl/ncmtx/fls/s1/f1/s1-f1-c1-eng.html> >.

⁸⁸ ITA, *supra* note 16 at 118.2(1) (for 2013).

purchases, such as home exercise equipment. But because the lesser of 3% of income or \$2,152 must first be met, the usefulness of the credit is based on what other medical expenses an individual incurred. If the goal is to create an incentive to purchase exercise equipment a reduction in the Goods and Services Tax, Harmonized Sales Tax and Provincial Sales Tax (“GST/HST/PST”) would likely be more effective.

Reducing the GST/HST/PST on goods and services related to physical activity is another option.⁸⁹ This would provide a discount at the time of purchase, although the discount would be smaller. One of the problems of this type of measure is the difficulty of capping the benefit. With the CFTC the greater benefit goes to higher income individuals, but the degree to which they benefit is limited to \$75 per child. It is much more difficult to effectively cap an exclusion from the GST/HST/PST. Also, because the discount is at the time of purchase and would be universally available, this may allow the cost of such goods and services to rise instead of the full benefit going to the individuals purchasing such goods and services.

Providing economic incentives to employers for employee wellness plans has also been popular in the United States. Such incentives have generally been provided by health insurance companies, but perform a similar function. In the short term these incentives have been viewed as quite effective at affecting change for individuals and reducing costs. There are a number of reasons why this type of measure could be more effective than an AFTC. The amount a business would claim could be quite large, depending on the size of the workforce, making the credit more worth claiming. The delay of return may not be as large of a factor and businesses may tend to be more aware of such credits as reducing tax liability is an important component of such businesses. Effective wellness programs can also produce direct benefits to employers through increased productivity and a happier workforce. Depending on what form such a credit would take, there could be a large issue with it mainly being used by companies that already provide such benefits instead of working as an incentive to get new companies who do not have such programs to create them. There is also a substantial possibility that such programs would not be provided as often to low-wage workers.

⁸⁹ von Tigerstrom, *supra* note 5.

In comparing this to the activity credits, the employer-focused option is more similar to allowing claims for fees for enrolment than purchase of a membership in that it has the element of social capital. Having these measure enacted at work means there is a greater chance of such measures being effective, at least in the short term. But this also creates a problem as employees who choose not to participate may be stigmatized, particularly if they are overweight, obese or appear to not be physically fit. In addition, the long-term effectiveness of these measures has not been shown and considering the difficulty of long-term behaviour change, may not be great enough to justify the cost.

7.4.2 Other Measures

The second group of credits involve those not primarily aimed at health. Transportation times have increased and include the use of cars. For environmental reasons, there is a move to address this problem; increasing physical activity could be a side benefit of such measures. Active transportation can involve a number of different methods, including walking or cycling to work or the use of mass transit systems, as these generally require the user to engage in more physical activity than driving to work.⁹⁰ Government policies, including tax policies, could be used to increase this type of activity. For example, in Canada, the Public Transit tax credit provides a credit for the purchase of bus passes.⁹¹ In the United Kingdom there is a program called Cyclescheme that allows employers to purchase bicycles and safety equipment and loan them to their employees for a part of the employee's salary over a certain period of time. The government of the United Kingdom has set up the scheme in order to provide tax savings in a number of ways. For the employee, the reduction in salary is taken before income tax and the national insurance contribution is applied to wages, and therefore the use of the program reduces the amount of each of these. The employer is also allowed to reclaim value added tax it has paid due to the purchase of the bicycle. The employer's national insurance contribution is also reduced. Together, these saving can be very significant.⁹² Another option is to simply remove the sales tax from bicycles and related safety equipment. One of the benefits of using these types of incentives, if they are effective, is that they also meet the governmental objective of reducing carbon emissions; in fact that is often the primary objective of such programs. In addition to the

⁹⁰ For benefit of public transportation see, Lilah M. Besser & Andrew L. Dannenberg, "Walking to Public Transit: Steps to Help Meet Physical Activity Recommendations" (2005) 29:4 American Journal of Public Health 273.

⁹¹ ITA, *supra* note 16 at s.118.02.

⁹² Cycle Scheme "Home Page" online: Cycle Scheme <<http://www.cyclescheme.co.uk/>>.

problems with exclusions from GST/HST/PST already discussed, one of the complications of using such programs is the requirement for the infrastructure to make walking, cycling or taking mass transit a viable transportation option, the cost of which could be very high.

The effectiveness of such measures is also questionable, particularly in the case of the Public Transit Tax Credit. This credit would only encourage public transit use, which can increase activity, but by a pretty limited amount. In addition, as with the CFTC, the rate of return is only 15%, it is non-refundable and it is returned in the following year. In contrast, the Cyclescheme program has been well developed with incentives at a number of levels including the availability of folding bikes that better meet the needs of transportation. Active transport tax credits provide an opportunity for increasing physical activity, which with the proper infrastructure and rate of return may be a viable option. But the cost and difficulty of doing so in Canada may be prohibitively high and not worth the expense.

The last measure for consideration is the WITB.⁹³ It was enacted not to address health concerns but to address the welfare wall. When individuals move off of welfare and to low wage employment, what is lost in benefits can make the benefit from the wages earned very small, or even nothing. In order to make work more worthwhile and help with this transition, the government provides a refundable tax credit to low income individuals and families.

For the many Canadian families that can claim this credit, organized physical activity programs or even eating well may simply have too high of an opportunity cost. There is a well-established link between poverty and poor health. Thus increased income for these families could result in health benefits, which could include an increase in physical activity. Instead of being an incentive to engage in healthier behaviours, the WITB may simply make them more affordable. The effectiveness of the WITB in increased incomes is yet to be established, as, for instance, it could lead to relative reductions to the minimum wage, as the EITC has in the United States.⁹⁴ But, assuming the WITB is an effective way of increasing income for low income families and individuals, it could be accompanied by significant health benefits.

⁹³ ITA, *supra* note 16 at s. 122.7.

⁹⁴ Pamela Herd, "The Fourth Way: Big States, Big Business, and the Evolution of the Earned Income Tax Credit" (Paper presented at the American Sociological Association Annual Meeting, Boston, MA, 31 July 2008) [unpublished].

7.4.3 Tax Measures relative to Non-tax Measures

In considering the possible efficiency of using tax credits instead of other measures, one possible benefit that needs to be considered is the possible reduction in administrative costs. This can be seen in comparing the activity credits to their close non-tax alternative. The AFB provides a ready example of this because of its refundable nature and 100% refund rate. To make this into a non-tax measure a voucher system could be used. Parents could be issued a voucher of \$150 for each of their children that could be given to organizations who would then claim that portion of the fees from the government. This would require getting information for all of these children, mailing out vouchers and providing refunds to claiming organizations. Instead of making out vouchers the government might choose to electronically track claims for registrations for each child, though this would require organizations to be part of this system in order to ensure parents were not claiming more than \$150. Although a government may not realistically choose this type of option, it shows that a tax credit allows for administrative savings. The tax credit system allows for the CRA, which is already processing returns, to simply deal with one more thing. This minimizes the administrative cost. These savings should not be overstated though, as there can be costs involved to the individual who files and organizations whose fees could be eligible for the credit. In addition, if a credit is ineffective, then the reduction in administrative costs does not make the measure efficient.

There are many measures, tax based and not, which could be used to increase physical activity. Considering how low the level of effectiveness of activity credits is likely to be, and their costs, there are many measures which could be much more efficient than these.

7.5 Equity

There are a number of equity issues to be considered in regards to the credits. This discussion of equity relates to the broad sense of the term which is similar to the use of the term equality in tax law, not to the specific tax terms of vertical and horizontal equity. The first is in regards to children with disabilities and how they are treated in relation to other children. The second relates to what activities are covered and whether they leave out certain groups of children. The third issue is whether the credits are inequitable in not addressing ease of access. The last issue is in relation to income levels.

The first equity issue relates to children with disabilities. The cost of activities for these children can be significantly higher. The CFTC and the Ontario credit have recognized this by providing a larger maximum return and different physical activity standards. The adequacy of these measures is beyond the scope of this work, but they do show recognition of the costs incurred by these families, and that it is important for these children to be involved in physical activities.

The second issue relates to what activities are covered by the credits. Under the CFTC a certain level of physical activity needs to be engaged in to be covered. Concern has been expressed that the activities covered are generally male-dominated activities, such as hockey.⁹⁵ This has led to many of the credits including a much broader range of activities as well as the introduction of the CATC. From the viewpoint of wellness, including many types of activities is important as all children are different and some may connect with the arts more than they do sports. But in the single credit group, the inclusion of more activities leads to the physical activity elements of the credits being watered down. The restrictiveness of the CFTC, was more of an issue before the introduction of the CATC, as it may lessen any equity issues that were created by the specifications of the CFTC. But assuming the CFTC is not making a substantial difference in physical activity levels, this restrictiveness may instead be one of the ways that makes this spending not simply ineffective, but ineffective and inequitable.

In addition, the credits only address the cost of activities. This creates an equity problem as access to activities and the use of facilities depends on how easy or difficult it is to access such things. This would appear to be a problem both in relation to income and community size. Access can often be more difficult for lower income families and it may be part of the reason the CFTC is claimed less often in smaller communities.

The last issue to consider and the most concerning equity issue is in relation to income. As mentioned earlier these credits could be effective, and even efficient, without being equitable. But regardless, the lack of equity would be a concern. As can be seen from the CRA data, the higher the income classification, the greater the percentage of people who claim the CFTC and, on average, higher amounts are claimed.⁹⁶ Not only is this generally true as can be seen for all

⁹⁵ Block, *supra* note 81.

⁹⁶ See Tables A.1-A.5 in the Appendix.

the years the CRA has provided data (2007-2011), but it is also clear that the any change in uptake occurs through all the income groups keeping the general pattern the same.⁹⁷ So, in considering the CFTC as spending there is a clear upside-down effect.

In addition, in considering this as spending provided to families and looking at the Survey of Household Spending data from before the CFTC was introduced, it is clear that more higher income families spend substantially larger amounts.⁹⁸ It is clear that this spending has translated to more claims and larger claims by higher income families.⁹⁹ As a matter of household income, both after and before selected sociodemographic characteristics are considered, it is very clear how important of a factor income is in the CFTC claims.¹⁰⁰ The result is that the activities engaged in by children from high income families are more highly subsidized. This is clearly an upside-down effect which is so common with using tax credits. In addition, it is not an inequity that contributes in any way to making the credits more effective.

There are a number of possibilities for addressing this inequity. In relation to the actual credits, they could be made refundable. This would make access to the credit appear fairer and is a step that should be taken, it is more difficult to know what the actual effect would be. For those who are not paying federal income tax, approximately one-third of tax filers, other issues still remain that would make claiming of the credit unlikely. Another option, in combination with refundability, would be to increase the rate of return. A 100% rate of return or a 50% rate of return (for a combined 100% rate between provincial and federal credit) rather than 15% could lead to less inequity, although it would still not create an equitable credit. Another remaining problem is the delay of return, for which there is likely not viable solution.

Another option is to cap the availability of the credit to a certain level of household income or to phase out the availability of the credit. The model for this option is Quebec where the credit is available only to parents with a household income under \$130,000. This should decrease the inequity of the credits to some degree. This may also increase the effectiveness of the credits, although not to a degree that the previous analysis of the effectiveness of the credits would change substantially.

⁹⁷ *Ibid.*

⁹⁸ StatsCan, SHS 2005, *supra* note 4.

⁹⁹ Fisher, *supra* note 2.

¹⁰⁰ *Ibid.*

There are a number of reasons to have reservations about capping the credits. Generally children from higher income families are not excluded from social programs unless they are specifically designed to address the needs of lower income families.¹⁰¹ As a small credit this may be a minor point, but setting a precedent of excluding children on the basis of income seems unwise even if it is because their families have particularly high incomes. This exclusion could send the message that these children are less important to the government or, alternatively, that these parents are already acting so properly (as compared to other parents) that they do not need an incentive. It may be unwise to exclude any children or parents from the message that physical activity is important.

Equity is also an issue in relation to a cap. A cap would be enacted at a somewhat arbitrary amount leaving the credit available for household incomes which are slightly lower than the cap and unavailable to those with household income are slightly more than the cap.¹⁰² Additionally as this relates to incomes at the higher range of incomes, the role of corporations in reducing the amount of personal income (in relation to the tax system) could be important. For instance, a professional corporation¹⁰³ allows for what would have been personal income to be corporate income instead; not all of that corporate income earned would need to be taken as household income in the year it is earned.¹⁰⁴ This could lead to some households with lower overall incomes or wealth being excluded from the credits while households with higher incomes or wealth whose income is earned through a corporate form still being eligible. The use of a cap would also add complexity to the credits. A cap also does not solve the income inequity issue; it simply makes the group within which there is inequity smaller. As discussed earlier the pattern of income inequity is throughout the income ranges, and with a cap of under \$130,000 household income each of the higher income brackets would be claiming the credit more often and claiming larger amounts. A cap would remove those who are claiming the highest amounts and more often

¹⁰¹ This situation differs from social programs which are directly intended to address the needs of lower income families as those programs are specifically designed to address issues based on having a low income (for e.g. KidSport), whereas for the credits incentive is more central to the purpose of the credits than are income issues including affordability. The cap does not increase the affordability of the credits for low income families; it simply makes the credits less expensive by excluding high income families.

¹⁰² A phase out could reduce these concerns but would add more complexity, particularly as the credits are relatively small.

¹⁰³ A professional corporate allows individuals to earn the income they are making from a specific profession (e.g. doctor, lawyer) through a corporate form instead of as personal income.

¹⁰⁴ This includes both dividends and salary paid from the corporation to the individual or the individual's spouse.

but it does not address the underlying pattern. The Quebec cap is an interesting idea and should decrease inequity to some degree and may increase effectiveness, but there does not appear to be enough evidence at this point to recommend implementing a cap be introduced for the other credits.

A more effective way of attaining equity would likely be governmental subsidization of sports programs for low income families. An example of this is KidSport, which does currently have support. What is concerning about this option is that it will likely be much easier to cut funding to such programs that currently ameliorate inequity and are in the regular budget than to cut the credits (except for Saskatchewan). Also, although such programs address the difference between low income and high income classes, they do not address the difference between middle income and higher income parents; the inequity of benefit between these two groups is also very important.

There may be ways to lessen the inequity of the CFTC, but it will not change that the higher income parents will likely still be getting greater benefits than either lower income or middle income parents. If the credit was highly effective, than there may be reason for this inequity, but considering the ineffectiveness of the credit, there is no excuse for this inequity.

7.6 Conclusion

This chapter provided an analysis of how the credits function, focusing specifically on the effectiveness, efficiency and equity of the credits. It found that there is limited evidence as to the effectiveness of the CFTC and other credits, but it is not expected that the credits will substantially increase physical activity levels among children and an adult credit has an even lower chance of being effective. It considered other tax measures that could be used, both those whose purpose would primarily address physical activity levels and those that are primarily designed for other purposes but could result in increased physical activity levels. Measures in the latter group may be the most promising, like Cyclescheme and the WITB. Cyclescheme and similar measures really depend on having the correct environment for using walking, biking and mass transit to get places. The more important expenditure may relate more to making changes to the environment. In relation the activity credits, if they are not effective, they cannot be efficient. In addition, the credits are inequitable, particularly in relation to income. Because the credits are

probably not substantially effective in increasing physical activity levels, the inequity is particularly problematic.

8 Evaluation and Recommendations

The question asked in this thesis was: are the credits suitable measures to increase physical activity? The general answer is no, they are not suitable measures to increase physical activity as they are unlikely to substantially increase physical activity, they are costly and they are inequitable. But this answer is not sufficient to deal with the practical realities of the current situation in Canada where the credits are established and there are no easy policy answers for how to increase physical activity. The primary recommendation is to repeal the credits and not to introduce new ones, but as that may not happen, a discussion of how to improve the credits is also important and from a practical standpoint, may be more useful. This focus on how to better the credits also draws on the institutional approach to tax expenditures, which asks how best to implement an expenditure instead of if an expenditure should be made.

8.1 Evaluation

It is important to not have unrealistically high expectations of any governmental measures as no measure will be able to perfectly address all issues. Policy is often a question of what is the best option between many imperfect options. But that does not mean that an option that is unproven and unlikely to be effective should be implemented, or expanded, particularly where it is clearly inequitable. Many measures are bound to be inequitable in relation to income unless they are specifically designed to address income issues. But in the case of the credits, not only is there a large gap in claims between higher income and lower income families, which could be addressed by providing particular support outside of the credits to address the needs of these families, but it is clear that there are more claims and more is claimed in each level of income increase that the CRA tracks. Further, even when other sociodemographic factors are controlled for, these very substantial differences remain. Instead of being a physical activity measure, this makes the credits a reward for having children while having a higher income.

Relative to other government spending programs and tax expenditures, the cost of the CFTC and the credits may not seem like significant spending. However, every amount spent by

the government has to come from somewhere, and when many ineffective and inefficient programs that do not appear to be particularly expensive are considered together their costs do become substantial. When these programs are also inequitable then not only is there substantial monetary cost, but they also may harm society more than they help. It is not just huge government bumbles that cost Canadian society, but also the “puppy” measures, as one member labelled the Ontario credit, that cost Canadians in forgoing better spending opportunities, reducing the debt or lowering taxes.

The creation of inequitable “puppy” policies through the tax structure is not only concerning in themselves, but they are also concerning because they point to what kind of country Canada is. In celebrating Surrey’s life on his passing, McDaniel wrote of Surrey:

He understood what other tax specialists often forget – that beneath the technical intricacies in which we quite happily immerse ourselves lie value judgements about the type of tax system our country should have and, in turn, about what kind of country it should be. Stanley believed these choices should reflect the obligation of the powerful to ensure that their power is exercised to help the powerless, the need for individuals who hold the public trust to be always alert to whether they are serving public rather than private interests, and the obligation of those who benefit most from this country’s treasures to share them with those who benefit the least.¹

The credits at first appearance may seem to help those who are powerless and benefit the least for our country’s treasures by making healthy activities for children more affordable for parents and by empowering adults who would benefit from more activity with an economic incentive which shows that the government believes that it is in the power of each individual to become more active. But after considering the technical intricacies of the credits and the best available evidence, this positive reflection of what the credits could be is overwhelmed by their shown inequity and their expected ineffectiveness.

As more credits continue to be introduced and the cost of the credits already introduced expands, the cost of the credits no longer appears all that insignificant even on their own. The future functioning of the credits needs to be considered. As conditions that relate to physical activity in Canada may change this could modify the effectiveness of the credit. But beyond any benefit that can be gained with increased awareness, which will likely continue to grow, great positive change in effectiveness does not appear likely. There are two issues to considering in

¹ Paul R. McDaniel, “Celebrating Stanley’s Gifts” (1984-1985) 98:329 Harv L Rev 341.

relation to the future of these credits. Will lack of effectiveness keep the credits from being expanded? Will lack of effectiveness lead to their repeal?

Considering the recent election campaign in which Prime Minister Stephen Harper promised to both double the CFTC and introduce a AFTC, the answer seems obvious. Expansion of the credits is quite likely. In addition, the jurisdictions offering these credits have also expanded quite quickly as the first was established only 9 years ago. Now most people across the country have both a federal and provincial credit available to them. One common problem with tax credits is that the cost of such measures tend to expand over the years, even if the credit has not changed. To some extent, the increased cost might indicate a greater success of the program, in this case by reflecting higher enrolment in physical activities. In other cases, the increased costs can show poor fiscal management. Because these credits (outside of Ontario) have not been indexed to inflation, there has been some degree of protection against this possibility since the maximum expenditures may remain capped at the same level (though fees will likely rise with inflation, leading to increased claims up to the cap). But the promise to double the CFTC shows that even without this tie to inflation, governments may choose to pass large increases. In light of what is likely a lack of significant incentive effect of these measures, the large expenditure by the credits and the expected expansion, there is reason to be concerned about the future growth of the credits in Canada.

In general, it is difficult to repeal tax expenditures; this is because those who claim them can begin to feel entitled to them and special interest groups who benefit from them have a large interest in them remaining. In addition, for tax expenditures like these credits which appear to be helping families, the general public is unlikely to be concerned enough about their cost and inequity to advocate for appeal. As mentioned earlier this is a common problem with tax expenditures. In an attempt to reduce this problem some credits were created with sunset clauses. But even when the government is forced to reconsider a matter and vote on a credit, not simply leave it there, getting rid of tax credit ends up being very difficult. This is one of the reasons that great care should be taken in creating these measures and expanding them.

The CFTC is a “feel good” measure. Despite actual effect, it is easy to establish the perception that it is helping families, encouraging physical activity and that the government is addressing the ‘obesity epidemic.’ Camouflaged as a tax measure, it is also likely that individuals

will perceive these credits not as actual spending resulting in higher taxes or decreased government services. Even if viewed as an expenditure, the seemingly small amount of the credits also seems insignificant relative to other spending measures and therefore less likely to be targeted. Special interest groups also have a stake in keeping such a repeal from occurring. This would be particularly true for an adult credit, which the Fitness Industry Council of Canada has lobbied for. As was stated about the Ontario activity credit, it is like a “puppy”, likeable but not very useful.² If it is that hard to not vote for the creation of such a credit, how much more difficult it would be to vote to repeal it?

Despite the difficulty of repeal generally for tax expenditures, there may be political room to repeal these credits. The answer may be to provide something more suitable to increase physical activity which is also a “feel good” measure at the same time as a repeal is made. In the case of the credits that now exist there does not appear to be special interest group which is lobbying for these credits to the same degree as with the adult credits. There will be parents and organizations which perceive they are benefiting from the credits, but if additional funds were put into measures they perceive as more important than the credits while information was also provided on how little the credits do, repeal may be a good option politically. When parents were asked to evaluate six different options based on how important they were for increasing children’s activity, tax credits or benefits were the least likely to be viewed as very important and the most likely to be viewed as not important at all.³ The other five areas were: sports and recreation facilities, convenient and accessible programming, coaching or instruction, school or after-school programs and opportunities for free play. If governments were to find suitable measures to fund, or increase funding to, within these broad options, repealing the credits may be viewed by the public as a positive option.

Recently, having a good evidence base for evaluation has become increasingly important for policy measures.⁴ It is difficult to provide an ideal evidentiary basis for concluding that the credits should be repealed because they do not increase physical activity levels. But the real

² Ontario, Legislative Assembly, *Hansard* 39th Parl, 2nd Sess, No 44 (16 September 2010) at 2134 (Peter Tabuns).

³ Koren L Fisher et al, “Awareness and Use of Canada’s Fitness Tax Credit” (2013) 61:3 *Canadian Tax Journal* 599 at 627.

⁴ Evidenced by the focus on evidenced based medicine and more recently, the work done to design guidelines for evidence based public health. See e.g. Ross Brownson, Jonathan Fielding & Christopher Maylahn, “Evidence-Based Public Health: A Fundamental Concept for Public Health Practice” (2009) 30:175-201 *Annual Review of Public Health* 175.

question that should be asked is not whether there is an evidentiary basis for repealing the credits, but whether there was enough evidence that the credits would be effective to have ever introduced them or whether there is enough evidence of their effectiveness to sustain them now. This basis simply does not exist and what little evidence that does exist suggests that the credits will not substantially increase physical activity and that the credits are unacceptably inequitable.

8.2 Recommendations

8.2.1 Repeal

When issues gain attention the way the ‘obesity epidemic’ has, there is often a feeling that something needs to be done. But these feelings are not a good enough reason to implement new measures. New measures should either have an evidentiary basis to show that they will be effective or there should be a good reason to believe that they will be effective. The activity credits have not met this standard. For this reason, repeal appears to be the best policy option.

8.2.2 Alternative Recommendations

For governments which choose not to repeal their credits, there are a number of ways in which the CFTC and the other credits could be improved.

As an alternative to repeal it is recommended that:

- i) all of the non-refundable credits be made refundable
- ii) the rate at which the credits are calculated be raised while lowering the amount that can be claimed, for example:
 - a. reformulate the CFTC so it is calculated on \$75 at a 100% rate, or
 - b. reformulate the CFTC and provincial credits so they are calculated on \$150 at a 50% rate
- iii) do not double the CFTC as was promised by the current sitting federal government
- iv) do not introduce an AFTC as was promised by the current sitting federal government
- v) do not introduce any credits similar to the credits in other jurisdictions
- vi) periodically review the credits to determine their effectiveness, efficiency and equity.

The first two recommendations are intended to make the credits more equitable. Although in practice they are unlikely to make the credits equitable, they are a move in the right direction and would provide greater formal equity. In relation to the second suggestion, increasing the rate at which the credits are calculated, where there are both federal and provincial credits working together it would ideal to provide a 50% return by each government as this would be a simple way to keep parents from claiming the same activity twice for a 200% return. As when there are federal and provincial personal income credits of the same name they generally are claimed on the same amount, to change this would add unnecessary confusion and complexity. Increasing the rate may also provide greater incentive for parents who currently do not have their children in any eligible activities, who are also the most important target of the credits. No recommendation is provided in relation to using as specific limiting physical activity formula as the CFTC has or a much broader definition of eligible activities as provided by the dual-credit groups. It is not clear that the complexity of the CFTC definition outweighs the benefits of having such a specific focus. It is also not clear in its operation the CFTC is being defined that narrowly or will be defined that narrowly in the future. The next three recommendations are simply to not create new credits and not expand the existing credits, intentionally or accidentally. Lastly, if the credits are to remain it is important they continue to be studied by those outside of the government and that the governments who have such credits review them regularly.

The credits are not a suitable way to increase physical activity. Although the credits appear to involve little harm, it is always important to consider whether government funds are being spent wisely and who is benefiting from that spending. As the credits are unlikely to be effective and they are inequitable, they should be repealed.

Table A.1 CFTC Claims by Income Group 2007

Income Group	Total	Nil/loss	\$1-9,999	\$10,000-14,999	\$15,000-19,999	\$20,000-24,999	\$25,000-29,999
Number of returns	24,600,590	765,400	3,914,080	2,550,850	2,390,700	1,848,680	1,593,360
Taxfilers claimed	1,282,180	2,170	25,960	26,420	40,920	48,670	57,080
% of taxfilers claimed	5.21%	0.28%	0.66%	1.04%	1.71%	2.63%	3.58%
Amount claimed*	\$643,208	\$1,089	\$8,925	\$8,992	\$16,987	\$20,103	\$21,649
Average claim	\$501.65	\$501.84	\$343.80	\$340.35	\$415.13	\$413.05	\$379.27
Income Group	\$30,000-34,999	\$35,000-39,999	\$40,000-44,999	\$45,000-49,999	\$50,000-59,999	\$60,000-69,999	
Number of returns	1,585,190	1,471,480	1,254,670	1,074,990	1,660,170	1,219,120	
Taxfilers claimed	65,910	78,820	78,880	76,780	144,410	132,660	
% of taxfilers claimed	4.16%	5.36%	6.29%	7.14%	8.70%	10.88%	
Amount claimed*	\$27,853	\$34,991	\$33,376	\$35,883	\$69,464	\$65,197	
Average claim	\$422.59	\$443.94	\$423.12	\$467.35	\$481.02	\$491.46	
Income Group	\$70,000-79,999	\$80,000-89,999	\$90,000-99,999	\$100,000-149,999	\$150,000-249,999	Over \$250,000	
Number of returns	912,360	637,500	402,350	804,700	325,140	189,880	
Taxfilers claimed	116,140	93,170	63,570	135,620	57,690	37,320	
% of taxfilers claimed	12.73%	14.61%	15.80%	16.85%	17.74%	19.65%	
Amount claimed*	\$61,677	\$52,432	\$37,067	\$81,679	\$38,872	\$26,973	
Average claim	\$531.06	\$562.76	\$583.09	\$602.26	\$673.81	\$722.75	

*Amount claimed in thousands

Number of returns, taxfilers claimed and amount claimed provided by: Canada Revenue Agency, Final Statistics, 2009 Edition (2007 tax year) (Ottawa: CRA, 2009) online: CRA <<http://www.cra-arc.gc.ca/gncy/sts/fnl-eng.html>>.

Appendix: CRA Data

Table A.2 CFTC Claims by Income Group 2008

Income Group	Total	Nil/loss	\$1-9,999	\$10,000-14,999	\$15,000-19,999	\$20,000-24,999	\$25,000-29,999
Number of returns	24,965,060	764,930	3,590,770	2,597,000	2,443,640	1,820,630	1,425,880
Taxfilers claimed	1,466,810	3,960	31,170	34,850	43,250	49,580	67,870
% of taxfilers claimed	5.88%	0.52%	0.87%	1.34%	1.77%	2.72%	4.76%
Amount claimed*	\$746,673	\$1,052	\$11,058	\$13,892	\$16,722	\$18,983	\$28,258
Average claim	\$509.05	\$265.66	\$354.76	\$398.62	\$386.64	\$382.88	\$416.35
Income Group	\$30,000-34,999	\$35,000-39,999	\$40,000-44,999	\$45,000-49,999	\$50,000-59,999	\$60,000-69,999	
Number of returns	1,579,550	1,515,940	1,291,870	1,090,480	1,720,040	1,271,810	
Taxfilers claimed	74,070	92,210	84,080	88,430	164,350	143,360	
% of taxfilers claimed	4.69%	6.08%	6.51%	8.11%	9.56%	11.27%	
Amount claimed*	\$31,101	\$40,504	\$37,146	\$39,841	\$76,912	\$75,382	
Average claim	\$419.89	\$439.26	\$441.79	\$450.54	\$467.98	\$525.82	
Income Group	\$70,000-79,999	\$80,000-89,999	\$90,000-99,999	\$100,000-149,999	\$150,000-249,999	Over \$250,000	
Number of returns	947,470	693,330	452,950	889,780	338,620	188,030	
Taxfilers claimed	128,730	108,990	76,240	163,950	70,290	41,430	
% of taxfilers claimed	13.59%	15.72%	16.83%	18.43%	20.76%	22.03%	
Amount claimed*	\$68,445	\$62,312	\$44,101	\$101,138	\$48,887	\$30,938	
Average claim	\$531.69	\$571.72	\$578.45	\$616.88	\$695.50	\$746.75	

*Amount claimed in thousands

Number of returns, taxfilers claimed and amount claimed provided by: Canada Revenue Agency, Final Statistics, 2010 Edition (2008 tax year) (Ottawa: CRA, 2010) online: CRA <<http://www.cra-arc.gc.ca/gncy/sts/gb08/pst/fnl/h/ml/tb2-eng.html>>

Table A.3 CFTC Claims by Income Group 2009

Income Group	Total	Nil/loss	\$1-9,999	\$10,000-14,999	\$15,000-19,999	\$20,000-24,999	\$25,000-29,999
Number of returns	24,485,700	261,280	4,152,470	2,433,830	2,480,220	1,854,520	1,590,730
Taxfilers claimed	1,461,070	2,220	32,380	28,590	41,440	52,310	62,940
% of taxfilers claimed	5.97%	0.85%	0.78%	1.17%	1.67%	2.82%	3.96%
Amount claimed*	\$753,563	\$1,046	\$12,660	\$11,255	\$16,891	\$21,557	\$26,204
Average claim	\$515.76	\$471.17	\$390.98	\$393.67	\$407.60	\$412.10	\$416.33
Income Group	\$30,000-34,999	\$35,000-39,999	\$40,000-44,999	\$45,000-49,999	\$50,000-59,999	\$60,000-69,999	
Number of returns	1,545,660	1,445,230	1,306,050	1,085,440	1,708,080	1,252,980	
Taxfilers claimed	75,610	84,800	86,310	84,970	161,260	145,420	
% of taxfilers claimed	4.89%	5.87%	6.61%	7.83%	9.44%	11.61%	
Amount claimed*	\$31,833	\$36,475	\$38,527	\$38,967	\$77,033	\$73,538	
Average claim	\$421.02	\$430.13	\$446.38	\$458.60	\$477.69	\$505.69	
Income Group	\$70,000-79,999	\$80,000-89,999	\$90,000-99,999	\$100,000-149,999	\$150,000-249,999	Over \$250,000	
Number of returns	925,240	677,730	452,010	880,030	332,650	173,570	
Taxfilers claimed	131,880	112,410	81,100	168,750	70,280	38,400	
% of taxfilers claimed	14.25%	16.59%	17.94%	19.18%	21.13%	22.12%	
Amount claimed*	\$70,648	\$64,210	\$632,060	\$106,328	\$48,973	\$29,301	
Average claim	\$535.70	\$571.21	\$7,793.59	\$630.09	\$696.83	\$763.05	

* Amount claimed in thousands

Number of returns, taxfilers claimed and amount claimed provided by : Canada Revenue Agency, Interim Statistics, 2011 Edition (2009 tax year) (Ottawa: CRA, 2011) online: CRA <<http://www.cra-arc.gc.ca/agency/stts/gb09/pst/ntrm/table2-eng.html>>

Table A.4 CFTIC Claims by Income Group 2010

Income Group	Total	Nil/loss	\$1-4,999	\$5,000-9,999	\$10,000-14,999	\$15,000-\$19,999	\$20,000-24,999
Number of returns	24,842,010	258,340	2,244,100	1,915,990	2,477,130	2,433,390	1,863,460
Taxfilers claimed	1,515,760	2,470	18,720	18,740	31,340	42,560	53,470
% of taxfilers claimed	6.10%	0.96%	0.83%	0.98%	1.27%	1.75%	2.87%
Amount claimed*	\$805,299	\$1,243	\$7,995	\$7,595	\$13,079	\$18,175	\$22,968
Average claim	\$531.28	\$503.24	\$427.08	\$405.28	\$417.33	\$427.04	\$429.55
Income Group	\$25,000-29,999	\$30,000-34,999	\$35,000-39,999	\$40,000-44,999	\$45,000-49,999	\$50,000-54,999	\$55,000-59,999
Number of returns	1,580,320	1,531,510	1,439,280	1,319,380	1,098,620	937,100	799,110
Taxfilers claimed	63,070	74,430	83,950	86,760	86,360	84,000	79,510
% of taxfilers claimed	3.99%	4.86%	5.83%	6.58%	7.86%	8.96%	9.95%
Amount claimed*	\$27,188	\$32,395	\$37,318	\$39,830	\$40,668	\$40,812	\$39,521
Average claim	\$431.08	\$435.24	\$444.53	\$459.08	\$470.91	\$485.86	\$497.06
Income Group	\$60,000-69,999	\$70,000-79,999	\$80,000-89,999	\$90,000-99,999	\$100,000-149,999	\$150,000-249,999	Over \$250,000
Number of returns	1,286,050	960,610	702,970	492,150	956,180	359,800	186,520
Taxfilers claimed	147,500	135,820	115,900	89,790	184,140	75,660	41,590
% of taxfilers claimed	11.47%	14.14%	16.49%	18.24%	19.26%	21.03%	22.30%
Amount claimed*	\$76,216	\$74,495	\$67,187	\$54,717	\$117,989	\$53,570	32,338
Average claim	\$516.72	\$548.48	\$579.70	\$609.39	\$640.76	\$708.04	\$777.54

*Amount claimed in thousands

Number of returns, taxfilers claimed and amount claimed provided by: Canada Revenue Agency, Interim Statistics, 2012 Edition (2010 tax year) (Ottawa: CRA, 2012)

online: CRA <<http://www.cra-arc.gc.ca/gncy/sts/gb09/pst/trtm/table2-eng.html>>

Table A.5 CFTIC Claims by Income Group 2011

Income Group	Total	Nil/loss	\$1-4,999	\$5,000-9,999	\$10,000-14,999	\$15,000-19,999	\$20,000-24,999
Number of returns	25,126,890	250,980	2,233,170	1,852,810	2,378,390	2,441,010	1,881,130
Taxfilers claimed	1,526,620	2,260	17,860	18,360	29,900	40,430	50,270
% of taxfilers claimed	6.08%	0.90%	0.80%	0.99%	1.26%	1.66%	2.67%
Amount claimed*	\$816,835	\$1,145	\$7,631	\$7,661	\$12,740	\$17,525	\$21,850
Average claim	\$535.06	\$506.64	\$427.27	\$417.27	\$426.09	\$433.47	\$434.65
Income Group	\$25,000-29,999	\$30,000-34,999	\$35,000-39,999	\$40,000-44,999	\$45,000-49,999	\$50,000-54,999	\$55,000-59,999
Number of returns	1,569,240	1,518,620	1,439,570	1,337,170	1,116,920	963,060	822,840
Taxfilers claimed	59,340	70,330	80,340	83,020	83,170	82,180	78,420
% of taxfilers claimed	3.78%	4.63%	5.58%	6.21%	7.45%	8.53%	9.53%
Amount claimed*	\$25,923	\$30,857	\$35,760	\$38,174	\$39,317	\$39,794	\$38,857
Average claim	\$436.86	\$438.75	\$445.11	\$459.82	\$472.73	\$484.23	\$495.50
Income Group	\$60,000-69,999	\$70,000-79,999	\$80,000-89,999	\$90,000-99,999	\$100,000-149,999	\$150,000-249,999	Over \$250,000
Number of returns	1,340,850	1,023,180	748,660	549,990	1,059,720	396,550	203,010
Taxfilers claimed	146,520	138,450	117,590	98,720	201,540	83,250	44,690
% of taxfilers claimed	10.93%	13.53%	15.71%	17.95%	19.02%	20.99%	22.01%
Amount claimed*	\$75,564	\$75,283	\$67,522	\$59,958	\$128,533	\$58,360	34,382
Average claim	\$515.72	\$543.76	\$574.22	\$607.35	\$637.75	\$701.02	\$769.34

*Amount claimed in thousands

Number of returns, taxfilers claimed and amount claimed provided by: Canada Revenue Agency, Interim Statistics, 2013 Edition (2011 tax year) (Ottawa: CRA, 2013) online: CRA <<http://www.cra-arc.gc.ca/gncy/stts/gb11/pst/ntrm/pdf/table2-eng.pdf>>.

Table A.6 CATC Claims by Income Group 2011

Income Group	Total	Nil/loss	\$1-4,999	\$5,000-9,999	\$10,000-14,999	\$15,000-19,999	\$20,000-24,999
Number of returns	25,126,890	250,980	2,233,170	1,852,810	2,378,390	2,441,010	1,881,130
Taxfilers claimed	460,890	580	5,130	5,020	8,120	11,080	13,400
% of taxfilers claimed	1.83%	0.23%	0.23%	0.27%	0.34%	0.45%	0.71%
Amount claimed*	\$229,496	\$285	\$2,187	\$2,136	\$3,472	\$4,787	\$5,798
Average claim	\$497.94	\$491.38	\$426.32	\$425.50	\$427.59	\$432.04	\$432.69
Income Group	\$25,000-29,999	\$30,000-34,999	\$35,000-39,999	\$40,000-44,999	\$45,000-49,999	\$50,000-54,999	\$55,000-59,999
Number of returns	1,569,240	1,518,620	1,439,570	1,337,170	1,116,920	963,060	822,840
Taxfilers claimed	15,700	18,190	20,710	21,470	21,730	21,420	21,200
% of taxfilers claimed	1.00%	1.20%	1.44%	1.61%	1.95%	2.22%	2.58%
Amount claimed*	\$6,826	\$7,808	\$8,933	\$9,399	\$9,649	\$9,700	\$9,746
Average claim	\$434.78	\$429.25	\$431.34	\$437.77	\$444.04	\$452.85	\$459.72
Income Group	\$60,000-69,999	\$70,000-79,999	\$80,000-89,999	\$90,000-99,999	\$100,000-149,999	\$150,000-249,999	Over \$250,000
Number of returns	1,340,850	1,023,180	748,660	549,990	1,059,720	396,550	203,010
Taxfilers claimed	41,160	41,640	37,540	33,480	72,490	32,450	18,380
% of taxfilers claimed	3.07%	4.07%	5.01%	6.09%	6.84%	8.18%	9.05%
Amount claimed*	\$19,202	\$20,201	\$19,081	\$17,767	\$40,512	\$19,721	\$12,286
Average claim	\$466.52	\$485.13	\$508.28	\$530.68	\$558.86	\$607.73	\$668.44

*Amount claimed in thousands

Number of returns, taxfilers claimed and amount claimed provided by: Canada Revenue Agency, Interim Statistics, 2013 Edition (2011 tax year) (Ottawa: CRA, 2013)
 online: CRA <<http://www.cra-arc.gc.ca/gncy/sts/gb11/pst/ntrm/pdf/table2-eng.pdf>>.

Table A.7 Average Amount of Non-refundable Tax Credits Claimed by Income Group 2011

Income class	Total	Nil or Loss	\$1-4,999	\$5,000-9,999	\$10,000-14,999	\$15,000-19,999	\$20,000-24,999
Number of returns	25,126,890	250,980	2,233,170	1,852,810	2,378,390	2,441,010	1,881,130
Non-refundable tax credits claimed*	\$65,509,349	\$430,972	\$4,096,855	\$3,708,407	\$5,372,867	\$6,333,565	\$5,130,766
Average claim per taxfiler	\$2,607	\$1,717	\$1,835	\$2,002	\$2,259	\$2,595	\$2,727
Income class	\$25,000-29,999	\$30,000-34,999	\$35,000-39,999	\$40,000-44,999	\$45,000-49,999	\$50,000-54,999	\$55,000-59,999
Number of returns	1,569,240	1,518,620	1,439,570	1,337,170	1,116,920	963,060	822,840
Non-refundable tax credits claimed*	\$4,315,051	\$4,202,175	\$3,965,903	\$3,688,663	\$3,094,384	\$2,675,005	\$2,293,745
Average claim per taxfiler	\$2,750	\$2,767	\$2,755	\$2,759	\$2,770	\$2,778	\$2,788
Income class	\$60,000-69,999	\$70,000-79,999	\$80,000-89,999	\$90,000-99,999	\$100,000-149,999	\$150,000-249,999	Over \$250,000
Number of returns	1,340,850	1,023,180	748,660	549,990	1,059,720	396,550	203,010
Non-refundable tax credits claimed*	\$3,751,714	\$2,882,647	\$2,144,417	\$1,606,392	\$3,223,176	\$1,334,547	\$1,258,097
Average claim per taxfiler	\$2,798	\$2,817	\$2,864	\$2,921	\$3,042	\$3,365	\$6,197

* Amount claimed in thousands

Number of returns, taxfilers claimed and amount claimed provided by: Canada Revenue Agency, Preliminary Statistics, 2013 Edition (2011 tax year) (Ottawa: CRA, 2013) online: CRA <<http://www.cra-arc.gc.ca/gncy/sts/ntrm-eng.html>>

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