# This is Exhibit "A" to the Affidavit of

DOUGLAS W. ALLEN

Sworn before me this 29 day of

AUGUST

A Notary Public in and for the Province of British Columbia

JUDITH A. PICCOLO

Notary Public
20416 Douglas Cres.
Langley, BC V3A 484
Tel: 604-534-0144

PERMANENT COMMISSION

#### Exhibit A

# Supplementary Report of Douglas W. Allen on Professor Sarlo's CSG Report

August 29, 2012

1. I, Douglas W. Allen, base this report on my personal research and knowledge of Canada's Child Support Guidelines (*Guidelines*) as applied to children under the age of majority.

#### I. Mandate

2. I have been asked by counsel to provide supplementary comments on Professor Sarlo's report: "An Assessment of the Federal Child Support Guidelines".

## II. Qualifications

- 3. I am the Burnaby Mountain Professor of Economics at Simon Fraser University (SFU), in Burnaby, British Columbia. I am also a senior consultant for Delta Economics Group Inc. (DEG) in Vancouver, British Columbia.
- 4. I have a BA (Hons) (1983) and an MA (1984) degrees from SFU, and a Phd (1988) from the University of Washington. All of my degrees are in economics.
- 5. I am an applied economist with a specialty in Law & Economics. The economics of the family is one of my fields of research, (see Appendix A). Among other courses, I have designed and teach an advanced undergraduate course on the family.
- 6. I have written four academic papers on child support guidelines. My 2007 Journal of Law, Economics, and Organization (JLEO) paper both theoretically and empirically examines Canada's guidelines, and shows that they create marital instability within households where one spouse earns an income greater than \$60,000 per year. My 2011 Research Handbook paper provides a detailed history of how Canada's Family Law Committee (FLC) arrived at the Guidelines, and argues that the Guidelines were designed to maximize the transfer of wealth from non-custodial parents to custodial parents within a rhetoric of hard science. My 2011 Family Law Quarterly (FLQ) paper (co-authored with law professor

Margaret Brinig) compares Canada's guideline system to the two major systems within the U.S. Finally, my forthcoming *International Review of Law and Economics* (IRLE) paper (co-authored with Professor Brinig), empirically compares the effects of the different U.S. systems of guidelines on divorce rates.

- 7. I was an assistant professor of economics at Carleton University from 1988-1990, after which I joined the department of economics at SFU. I have worked with DEG since 2004.
- 8. I have published over 40 articles in refereed academic journals, and have published approximately 30 other articles in scholarly books, encyclopedias, and other academic outlets. I have published three academic books, and two undergraduate textbooks on micro economic theory.
- 9. I have received numerous academic awards and honors. These include the Dean's Silver Medal for outstanding academic service in research and teaching; the endowed Burnaby Mountain Chair; an Erskine Fellowship at the University of Canterbury, New Zealand; and a university wide teaching award. I've given public lectures at several colleges and universities, including the Giblin lecture at the University of Tasmania, and the Janis Lecture at Brown University. My CV is attached as Appendix A.

# III. Overall Assessment of Professor Sarlo's Report

10. I agree with both the general and specific claims made in Professor Sarlo's report. I agree with his understanding of the history of Canada's CSGs; his assessment of the economic literature on child costs, equivalence scales, and cost shares; his assessment of the 40/30 rule and the role of linearity; his opinions on what the CSGs are lacking; and his reasoning and methodology found in his table calculations in the exhibits and appendices.<sup>1</sup> My contribution is to provide additional commentary and emphasis on matters related to his report.

<sup>&</sup>lt;sup>1</sup> I have not, however, worked through all of the arithmetic in his tables. My understanding is that relevant accounting professionals have checked his tax figures and arithmetic calculations.

## IV. Additional Commentary on Some CSG Issues

## Comments of Guideline History

#### General Comments

- 11. Professor Sarlo provides a basic history of Canada's CSG development. In my 2011 Research Handbook paper, I provide a more detailed history. I claim in that paper that there is strong evidence that the FLC's ultimate design of the Guidelines was driven to maximize the feasible amount of transfer from the NCP to the CP. In my opinion, the CSGs were not designed to just cover the costs of children.
- 12. Every element of the *Guidelines* is consistent with this claim: the decision to use an *ad hoc* equivalence scale to *approximate* the costs of a child; to use the largest equivalence scale available; to assume a linear equivalence scale; to ignore the *value* of children; to add section 7 expenses; to ignore the costs of the NCP; and to ignore subsequent changes in family structure.
- 13. In addition, the historical documents show that from the early 1990s until the implementation of the CSGs, there was a transformation in thinking at the DOJ in terms of the Guidelines. Professor Sarlo alludes to this when he notes that early academic findings were ignored in the development of the Guidelines. There is ample evidence that the Guidelines became a mechanism for alleviating perceived child poverty issues and created a de facto spousal support system, rather than purely a method to cover child expenditures.
- 14. Understanding this history explains why the actual CSGs are so incongruent with the stated objectives and principles of the *Guidelines*.

#### The Role of Wisconsin

15. Professor Sarlo notes that the FLC relied on a public survey from Wisconsin to help justify its choice of the Fixed Percentage rule. Professor Sarlo also notes that the personal values of University of Wisconsin professor Irwin Garfinkel played a strong role in the design of the Canadian CSGs. Indeed, as I argue in

my 2011 Research Handbook paper, several fundamental features of the Canadian guidelines are based on the Wisconsin system. The Canadian guidelines system, however, developed its own unique formula for calculating child support numbers.

- 16. This connection likely lies in the role played by the economist Ross Finnie. Finnie was a student of professor Irwin Garfinkel, while doing graduate studies at Wisconsin, and this influence may have played some role in the similarities between the Canadian and Wisconsin systems (Senate of Canada, p. 17-67, December 12, 1996). Finnie was brought on-side early in the process to help in technical matters, and was instrumental in developing the formulas. Finnie later left the project before it was completed, and before decisions were made regarding section 7 expenses and the treatment of government programs.
- 17. The key difference between the Wisconsin and Canada situation, however, is that Wisconsin initially developed its child support system in the 1970s within the context of AFDC welfare cases.<sup>2</sup> In these low income situations it was often the case that the custodial parent had no private income at all, the non-custodial parent had no contact with the children, and everyone involved was at or below the poverty line. Under these circumstances a simple linear guideline rule was easy to implement, and may have been completely appropriate.
- 18. The state of Wisconsin extended its guideline system to everyone when, in 1988, the U.S. federal government mandated that all states have some type of child support guideline. In total eleven states simply adopted the "Wisconsin model" to apply to all households. Since that time four of these eleven states have switched to considering both NCP and CP income, and three other states have eliminated the linear nature of their equivalence scale in the calculation of child support. No state has switched to a Wisconsin system since 1988.<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> Aid to Families with Dependent Children (AFDC) is the core U.S. welfare system.

<sup>&</sup>lt;sup>3</sup> See Allen and Brinig (forthcoming).

## The Role of Low Income in Using the 40/30 Rule

- 19. Not only did Canada adopt a guideline system that was designed to fit low income circumstances (ie. utilizing only the NCP income, linear scales, and an assumption of limited NCP contact), it also chose a Canadian scale that was developed within the context of low income families.
- 20. To appreciate the implications of the Statistics Canada 40/30 rule, it is important to understand it was devised to help Statistics Canada determine its "low-income cutoff" a metric often used for social programs for the poor. Unfortunately, the linear 40/30 rule was devised by Statistics Canada to study low income cut off levels, but the Guidelines apply it to all levels of income. This means that the 40/30 rule is used for something it was never intended for, and is inappropriately applied.<sup>4</sup>

## What Equivalent Scales Were Available To the FLC

21. Professor Sarlo does an excellent job discussing the mechanical details of the 40/30 equivalence scale. He mentions that the FLC did not design its own scale, but rather chose from a set of linear equivalence scales already existing. A linear scale takes the form: a+b(n-2), where n is the total number in the household, a is the number necessary to make a two member household equivalent in terms of goods and services to a single member household, and b is the "marginal cost" of extra members in the household. The (n-2) part of the equation comes from assuming the a value represents the income necessary for two people to have the same standard of living as one person. Table 1 below shows most of the

[p. 10, 1995]

<sup>&</sup>lt;sup>4</sup> The Finnie et al (1995) report recognizes that:

<sup>...</sup> most of the established scales apply — strictly speaking — only to incomes at the poverty (or "low income") line. This is because most of the scales have been constructed to derive poverty lines, and are not necessarily intended for making comparisons of well being at other income levels.

scales the FLC considered.<sup>5</sup> As can be seen, the different scales had values for a which ranged from 1.09 to 1.46, and values of b that ranged from .05 to .40.<sup>6</sup> The 1.46 value for a came from a study of low income data, and according to their table is "higher than a true 'equivalence,' due to an important aspect of social assistance policy." If we drop this value, the next highest is the Statistics Canada value of 1.4. In the end, the committee decided to use the Statistics Canada 40/30 rule which set the value of a = 1.4 and the value of b = .3. Interestingly, the FLC decided to pick the highest value for a and one of the highest values for b. If the FLC had decided to average the equivalence scale values for a and b from Table 1 they would have arrived at 1.28 and .26.<sup>7</sup>

## The Importance of Linearity

- 22. One of the subtle, and most important, aspects of the CSGs is that they are based on a *linear* equivalence scale.
- 23. This linearity is shown in Figure 1 where I assume there are no taxes or government transfer programs, in order to focus on the linearity of the scale. In the Figure, the income of a single individual is given along the horizontal axis and the equivalent income for a household of three is given along the vertical axis. The 40/30 rule generates an equivalence income function which is linear

Virtually all of the scales were designed for low income households. Most of the scales considered by the FLC also had declining values of b as n increased. Here I report the values of b for a second person in the household. I have no knowledge of how these scales were developed, what the data sets were, or what empirical strategies were used, and I make no claim on their validity. Still, several features are interesting to note. First, the range of estimates is enormous: 1.09-1.46 for a, and 0.05-4 for a. Second, differences in methods of estimation made significant differences in estimates. Finally, it is odd that the Canadian Bar Association would have estimated a scale. All of this, perhaps, reflected the limited state of the art at this early time.

<sup>&</sup>lt;sup>6</sup> See Finnie, et al, p. 11, 1995. Note the different scales vary across geographical regions. The Guidelines ignore this and apply a single scale to all households regardless of household location.

<sup>&</sup>lt;sup>7</sup> Since the creation of Canada's guidelines, much study on equivalence scales has taken place, and the most significant research has been done by the Australian government. The new Australian scales are 20/15, exactly half of the Canadian equivalence scales. See Henman *et al.* 2007, or http://www.csa.gov.au/.

 $\begin{tabular}{ll} Table 1 \\ Equivalence Scales Considered by the FLC \end{tabular}$ 

Equivalence Scale	Value of a	Value of b	
Phipps, single parent version	1.25	.13	
Phipps, Extended Engle method, married couple	1.09	.05	
Douthitt and Fedyk:			
Low income, Ont.	1.21	.24	
High income, Ont.	1.32	.27	
Low income, Que.	1.15	.15	
High income, Que.	1.21	.24	
Phipps, BD method	1.34	.28	
Canadian Bar Association	1.33	.34	
Basket of Goods Approach:			
Montreal	1.21	.39	
Toronto	1.35	.25	
Statistics Canada Scales:			
social assistance average	1.46	.25	
pre-tax low income cutoff (1986 base)	1.36	.37	
after tax low income cutoff (1986 base)	1.36	.40	
pre-tax low income cutoff (1992 base)	1.25	.31	
40/30 scale	1.4	.30	

See Section 21 in text for discussion.

through the origin and has a slope of 1.7 (1.4+.3). This means if a single household has an income of \$10,000, a three member household would require \$17,000 to be equally well off; if the single income is \$100,000, then the three member household would require \$170,000, etc.

- 24. Professor Sarlo is correct in all his criticisms of this linearity, and here I wish to emphasize two things.
- 25. First, this is the critical assumption that theoretically allows the guideline tables to use only a single income to determine child support amounts. When costs are a linear function of income, average costs are constant, and this procedure works. When average household costs decrease with income, then it is inappropriate to use a linear function. To do so creates a net transfer of wealth from the NCP to the CP.
- 26. Consider the example in the top half of Table 2.8 Here two households experience a divorce, and the only difference between them is the custodial parents income. In one case, the non-custodial parent earns \$60,000 per year and the custodial parent earns nothing. In the other case, each earns \$60,000.9 In both cases child costs are linear and assumed to be 25% of income. Columns (2) and (3) consider the case where only the non-custodial parent's income is used to determine the child support award, and columns (4) and (5) consider the case where the relative shares of both incomes are used to determine the award.
- 27. Columns (2), (3), and (4) are all very similar, and in each case child support is simply \$15,000, or .25 × \$60,000. In column (5) both incomes are included, but since the total child costs are \$30,000 and split 50/50, the non-custodial child support amount still remains \$15,000. When the costs of children are linear the non-custodial parent pays the same support whether the custodial

<sup>&</sup>lt;sup>8</sup> I ignore government transfers and taxes in order to focus on the matter of linearity.

<sup>&</sup>lt;sup>9</sup> As Professor Sarlo points out, income levels around \$60,000 are the likely range where the guidelines cause the smallest problems in terms of net wealth transfer. For this reason, I'll generally use this level of income for my examples.

- income is counted or not. The higher incomes in the second household imply an off-setting higher cost of children, resulting in the same payment.<sup>10</sup>
- 28. The bottom half of Table 2 considers what happens when average costs decrease with income; that is, as total income increases, expenditures on children increase at a decreasing rate. To keep things simple, assume that when household income is \$120,000 the child costs are only 20% of total income rather than 25%, or \$24,000.
- 29. If both incomes are considered the non-custodial payment is \$12,000 when the total income is \$120,000 (column (5)). However, if only one income is considered when total income is \$120,000, then the non-custodial parent pays \$15,000 (column (3)). This means that the non-custodial parent makes a transfer of wealth of \$3000 to the custodial household in this case.
- 30. In effect, if the percentages are set to mimic child-related expenses at low incomes, the single income model subsidizes more and more non-child related expenses in the custodial household as the average cost of children as a percentage of income falls. If the fraction of total income allocated to child costs falls with increases in income, then it is necessary to use the *total* income to calculate child costs, and not just the non-custodial income.
- 31. Second, as Professor Sarlo points out, there is no evidence for a linear equivalence scale. This has been known at least since the nineteenth century studies done by the German statistician Ernst Engel (1821–1896). Professor Browning, who was hired by the FLC at the beginning of the *Guideline* process rejected linear scales across all incomes. Indeed, even the most recent empirical estimates of this relationship show that this type of linear relationship is false.<sup>11</sup>

 $<sup>^{10}</sup>$  These examples assume that the CP actually makes the expenditure on children. The CSGs do not enforce this.

<sup>&</sup>lt;sup>11</sup> For example, Donaldson and Pendakur (2002) find:

<sup>...</sup> that equivalence scales for households with children decrease significantly with

Table 2
Consideration Given To Custodial Income

	Only NCP Income Considered		Both Incomes Considered	
	(2)	(3)	(4)	(5)
CP Income	0	60,000	0	60,000
NCP Income	60,000	60,000	60,000	60,000
Child Support	.25×60k	.25×60k	1×(.25×60k)	.5 ×(.25×120k)
	=\$15,000	= \$15,000	=\$15,000	=\$15,000
Non-Linear Costs of	Children			
Non-Linear Costs of	Children 0	60,000	0	60,000
		60,000 60,000	0 60,000	
CP Income	0			60,000 60,000 24,000
CP Income NCP Income	0 60,000	60,000	60,000	60,000 24,000
CP Income NCP Income Total Child Costs	0 60,000 15,000	60,000	60,000 15,000	60,000 24,000

The numbers in this table are simplified to demonstrate the importance of the linear cost assumption. They do not reflect actual costs or situations. See Sections 25–30 for discussion.

expenditure. For example, the GESE-restricted equivalence scale for dual parents

- 32. Figure 1 shows that as we move away from moderate levels of income, the difference between the equivalent income generated by the 40/30 rule and the estimated equivalence relation starts to grow. At an income of \$100,000 the 40/30 rule states a three member household needs \$170,000, but using the Donaldson/Pendakur results suggest the estimated costs of the triple household would be \$120,000. The 40/30 rule, therefore, over-estimates the equivalent income by \$50,000. This gap continues to grow with increasing household income.<sup>12</sup>
- 33. The linearity assumption has a particularly strange implication for families with high incomes.
- 34. As used by the FLC, and contrary to the way used by Statistics Canada, the

with one child is 1.93 at low expenditure and 1.62 at high expenditure.

[p. 4, 2002]

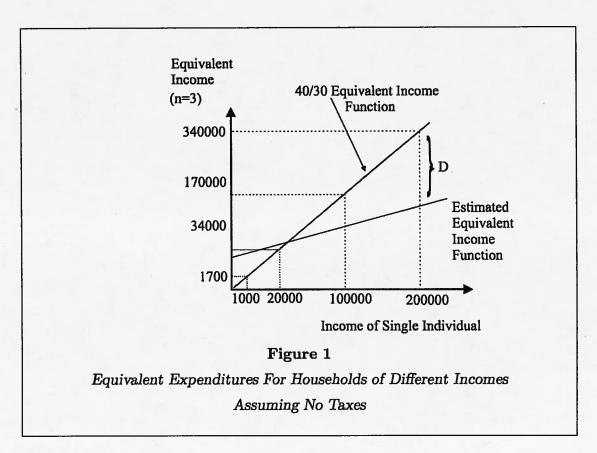
What this means is the equivalence income function does not go through the origin and may not be linear. Because the function does not go through the origin, the average costs of children decline with income. They find that for two children living in a single parent household the equivalence scale falls dramatically (their estimated point elasticity is -0.40 (Table 4, p.22)). They go on to estimate many scales under a number of different assumptions. They also estimate these scales for average and low incomes, which means little confidence can be placed in extrapolating their numbers to large incomes. In Figure 1 I use the scale of 1.2, which is an interpolation of one of their scales (p. 24, 2002) which comes closest to the example of n=3. Donaldson and Pendakur (2006) extend their work on equivalence scale estimation and conclude:

Using Canadian consumer demand microdata, we estimate the equivalent-expenditure function given GAESE. We find that equivalent expenditure has important fixed and varying components and that neither alone is sufficient to accommodate behavior. The estimated fixed components for multiple-member households are large and positive. This implies that the equivalence scales for these households decline with expenditure. The expenditure dependence of equivalence scales is substantial

[p. 256, 2006]

In English, this means that the linear 40/30 rule through the origin is false. Average costs within a household fall as household income rises. See also Koulovatianos et al 2004 who conclude the following: "Our data from both countries indicate strongly that household economies of scale increase as the living standard goes up." (p. 967, 2004).

<sup>12</sup> For incomes over \$150,000 the guidelines do allow the courts the discretion to set the amount of child support. My understanding, however, is that the 40/30 rule is the presumptive rule used and that this rule has been applied to very high incomes.



linear 40/30 rule is applied to all levels of income.<sup>13</sup> That means that as income increases the household is assumed to always devote a fixed share of income towards children. Consider the following example. Suppose there is a couple with one child earning \$34,000, and they then have a second child. To be equally well off they would need \$40,000 (34,000 x 2.0/1.7). In other words, the second child "cost" \$6,000 according to the 40/30 rule. However, if the couple earned \$340,000 and had a second child, the 40/30 rule states they would need \$400,000 to maintain the same standard of living. The 40/30 rule, when applied at this higher level of income calculates the cost of a second child as \$60,000.

35. This extraordinary result follows from the linear nature of the equivalence scale.

<sup>13</sup> Recall that Statistics Canada developed the 40/30 rule to arrive at its low income cut offs. That is, it was intended to apply only to households close to the poverty line.

It assumes that rich families spend the same fraction of income as poor families on their children. The equivalence scale says nothing specifically about the composition of this spending, but presumably it assumes that the same fraction is spent on everything; families spend the same fraction on boats, luxury automobiles, food, holidays, and children. Of course, for a very long time economists have measured how expenditures on goods change with income. The general lesson from these studies is that when incomes increase almost anything can happen to the quantity of a given good consumed. Sometimes the quantity consumed of a given good declines with increases in family income, and other times it increases.<sup>14</sup> As a result, wealthy families spend differently than poor ones, and often spend more income on things that have no benefit to children. For example, "hobbies" like fine woodwork, sailing, and adventure skiing, are strong normal goods, meaning that wealthier people are more likely to consume them. Yet these hobbies are often not consumed by children. Even though wealthy families do not spend in the same proportions as poor families, the 40/30 rule assumes that they do.

36. The 40/30 rule also assumes that expenditures on children as a fraction of income are independent of age; that is, it incorrectly assumes that young children cost the same as older children. Even other government programs, such as child tax credits and welfare benefits, acknowledge this is not true and adjust payments based on the ages of children.

## The Importance of Utility Over Children

37. Professor Sarlo mentions in his conclusion that the CSGs ignore the utility or value of children. I think this is a critical problem with the guidelines, and

<sup>14</sup> The economic concept here is "income elasticity", which measures the percentage change in consumption for a given percentage change in income. An income elasticity can take on both negative and positive values. When the elasticity value is a positive fraction it means that even though income has increased, by say 10%, consumption increases by less than 10%. When the elasticity value is greater than 1, then a given percentage increase in income, say 10%, leads to an even larger percentage increase in consumption, say 15%. The linear equivalence scale incorrectly assumes that the income elasticity for all goods is always 1.

deserves some elaboration.

38. As pointed out by Professor Sarlo, the table values for the guidelines are determined through the following equation:

$$\frac{\text{Disposable Income of NCP}}{1} = \frac{\text{Disposable Income of CP}}{1.4 + .3(n-2)} \quad (1)$$

- 39. The intuitive idea behind this Revised Fixed Percentage rule is that the after tax welfare between the custodial and non-custodial households should be the same. However, rather than measuring welfare, the formula considers the disposable household income.
- 40. This means that the "utility of custody" (the value one gets from custody) is assumed to be zero. This has a major effect on increasing the size of the support award. Children are valuable and increase the welfare of the parents, and so some measure of the value of children should enter the numerator of the custodial side of equation (1). In other words, the numerator on the custodial side is too small.
- 41. It is true that children are costly, and this is (over) accounted for in the denominators of equation (1) through the 40/30 rule. But as Professor Sarlo points out, children are valued by both parents, and are often the *most* valuable part of a marriage or domestic relationship. The value of children is a real "hidden benefit" of custody. These benefits stand in contrast to the "hidden costs" of custody that are often spoken of. By not taking these benefits into account, the true welfare of the separate households is not equalized.

## The Importance of NCP Costs

42. Professor Sarlo brings this point up in his report. Here I wish to emphasize it and show where the assumption appears in the equation determining the table awards.

- 43. One of the most critical assumptions built into the Revised Fixed Percentage formula is the assumption of costs related to time spent with the children. In equation (1) above the non-custodial parent's disposable income is divided by 1 (not some portion of 1.4+.3(n-2)). This means it is assumed that the children spend no time with the non-custodial parent.<sup>15</sup> To put this another way, this assumes that a single parent has expenses *identical* to a single individual who is not a parent.
- 44. Non-custodial parents, however, have to maintain a home where the children can stay over for weekends and vacations without having to camp out on the living room floor. Likewise, whereas a single individual living in an urban setting may be able to get by without a car, the non-custodial parent may have to maintain a mini-van for the children, their friends, and sporting outings. Of course, non-custodial parents feed and entertain their children when they are with them. Since a non-custodial parent lives differently than a single individual, the denominator on the left hand side of equation (1) is too low, and this raises the amount of the child support award to the custodial household.
- 45. It is an interesting exercise to consider what number should be used in the CP denominator rather than "1". Assume, for the moment, that all the costs of children were fixed, and did not vary with the amount of time one spent with children (for example, each parent only has to provide a bed for the child). Under this assumption, each side of the equation should be divided by the same number, and (ignoring government transfers) there would be no formula grounds for an award if the parents had equal incomes. On the other hand, alternatively assume that all costs were variable and depended on the amount of time the child spent with the parent (for example, a parent only feeds a child when they are with that parent). Now each side of the equation should be divided by  $s \times (1.4 + .3(n-2))$ , where s is the share of time spent with a given parent.

<sup>&</sup>lt;sup>15</sup> This is assumed to be true until the children spend more than 40% of their time with the non-custodial parent.

- 46. In life costs are both variable and fixed, which means that if the children spend time with the non-custodial parent then the non-custodial parent's equivalence scale will be something larger than 1. Thus, if the parents had a 30/70 split of time with the children, it would not be unreasonable to assume that the denominators for equation (1) should be something like 1.4 and 1.6, rather than 1 and 1.7 (if there were two children). Such a recognition of true costs in each household would have a significant effect on awards calculated. 17
- 47. In short, if the guideline formula is going to be used to equate the welfare across households, then it must reflect the actual costs of each household. Therefore, when the children spend some time in both homes the non-custodial parent should have their disposable income deflated by more than 1 and the custodial parent's disposable income should be divided by less than 1.4+.3(n-2). Forcing the relative incomes to be divided by 1 and 1.4+.3(n-2) leads to a larger transfer of wealth to the custodial home.

#### Professor Sarlo's Table Calculations

- 48. Whereas my comments have all been of a theoretical nature, Professor Sarlo makes an interesting and valuable applied contribution to the study of CSGs. His report contains several tables that show the impact the *Guidelines* have on family members based on various differences in family circumstances. I cannot speak to the accuracy of his tax and benefit calculations, but here I want to comment on the overall structure of his tables.
- 49. Each table takes a similar form. They start with some level of earnings, adjust these earnings for taxes, benefits, and support to reach a family income that

 $<sup>^{16}</sup>$  Both of the denominators could add up to more than 1.7 because both households might make large investments in fixed costs.

<sup>17</sup> Later, I go through an example where the NCP has a second family but still spends time with his first family children. There I assume more modest costs of access (namely 30% of the expenditures on the second family child) to account for the fact that the second family has considerably lower disposable income. The numbers here, and the numbers mentioned in Professor Sarlo's report regarding the cost of access assume there is no second family.

indicates the actual *means* of the household. Professor Sarlo then breaks down the expenditures on children (based on the 40/30 rule) into the amounts paid by the government, the custodial parent, and the non-custodial parent. His table calculations show that the NCP consistently pays a larger fraction of the child care costs. Professor Sarlo then calculates what the two parents should pay based on their available means and relative incomes. It is notable how different these amounts of "should pay" are compared to the actual amounts.

## Other Problems With the Guidelines

- 50. Professor Sarlo raises many issues with the *Guidelines*, most he discusses in great detail and others he only mentions. Here I draw attention to some others.
- 51. Essentially the CSGs assume: children never earn any income nor pay for any of their own costs; child costs are the same in urban and rural areas; the first child in a custodial household costs the same as an adult; non-custodial parents never incur extraordinary expenses; child support payments made by the NCP are actually spent on the child; and child tax credits to the custodial parent are not counted as income. Based on formula (1) above, all of these secondary assumptions raise the net transfer from the non-custodial to the custodial household, and mean that welfare between the households is not equated.
- 52. In my opinion, two matters that deserve more attention relate to accountability and second families. Under the current system, dollars are transferred from the NCP to the CP and no auditing or measurement is done to determine how this money is spent. Although this happens at low incomes (due to the strong presence of government transfers not accounted for in the guidelines), this problem is especially acute as the income of the NCP increases, since the net wealth transfer increases as the payments exceed reasonable costs of children. As the NCP's income increases, the child support effectively becomes a net wealth transfer, and as a result the matter of accountability is important.

- 53. As for second families, it has always puzzled me why the Guidelines ignore this substantial change in circumstances. Remarriage is common, and second families are also common for both CPs and NCPs. For the CP any improvement in the standard of living (whether through remarriage or earnings) is not accounted for in subsequent child support. Similarly, a second family for the NCP is also not accounted for in the original child support payment. The effect of this similar treatment on living standards, however, is much different for the CP compared to the NCP, and leads to an unequal treatment of children across the different households. Since the Guidelines argue that their purpose is to equalize the standard of living across households, for consistency this equalization should be applied to the subsequent families. By ignoring subsequent families the Guidelines create different classes of children in terms of their standards of living. 18
- 54. Table 3 below provides an analysis of expenditures on children within a second family, using a table structure similar to the ones Professor Sarlo has in his table calculations. I've used similar family structures, similar basic methodology to show the impacts the *Guidelines* have on the welfare in a second family, and I've used the same tax amounts and table numbers found in Professor Sarlo's tables. <sup>19</sup> As with Table 2 I assume that the husband and wife in the original family both earn \$60,000 per year, and that they have two children, with one under 5 years of age. I assume that the CP does not remarry. In column (2) it is assumed that the NCP remarries and has another child, under the age of 5. The second spouse is assumed to have no earnings.
- 55. Despite the fact that the CP and the NCP start with the same income, the bottom of Table 3 shows that the disposable income of the CP is almost twice

<sup>&</sup>lt;sup>18</sup> Since the second spouse also suffers in reduced disposable income as a result of the guideline treatment, the *Guidelines* also create a second class of spouse as well. However, I will not elaborate on this.

 $<sup>^{19}</sup>$  It is my understanding these tax and table amounts come from Ontario in 2010.

as high as the income for the NCP. Furthermore, Table 3 shows a considerably different treatment in terms of the children. In columns (1) and (2) the two separate households after divorce each have three members, but in terms of expenditures on children, those from the original family receive \$13,156 per child (\$11,321+\$1,835), while the child in the second family receives only \$6,117.<sup>20</sup> The child of the second family receives less than half of the expenditures of the first family. As for the NCP, the disposable income available is \$20,391, compared to \$38,454 for the CP.

- 56. Clearly the structure of the CSGs, by ignoring any changes in family circumstances, create a situation where children from subsequent families suffer in terms of their standard of living.<sup>21</sup> It is hard to understand the justification of such different treatment if, as a matter of social policy, children have equal value regardless of their family status.
- 57. It is my understanding that one of the specific factual situations in this trial involves additional families. Table 4 provides a similar analysis as Table 3 using details that are similar to this specific family at some point in time, and assuming there are no section 7 expenses. In this case the NCP earns \$300,000 per year, and is now in a third marriage. There are three children from the first marriage, one from the second, and two from the third. The income of the CPs is unknown, and the taxes and guideline amounts are based on Ontario values.

I calculate the expenditures on the children using the 40/30 rule and using the funds available in each family. Hence, in the case of the second family the \$6,117 comes from .3/1.7(38334-3670). The \$3670 is the extra cost the NCP incurs for providing access to the two original children. Here it is assumed that each child from the original home increases NCP costs by 30 percent of the cost of the first child in the second home. Hence, under the 40/30 rule the AEU for the second family becomes 1.88 (1 for the NCP, .4 for the spouse, .3 for the new child, .09 for the 1st child of the previous marriage and .09 for the 2nd child of the previous marriage). The cost of access for the children of the first marriage is calculated as  $.18/1.88 \times 38334 = 3670$ .

<sup>&</sup>lt;sup>21</sup> This difference in family outcomes occurs even though I've started with a case where both spouses have the same income of \$60,000. This is the income level at which the guideline support amounts make the most sense.

Table 3: Welfare of Second Family

	CP	NCP Remarried
	(two children)	(one child)
	(1)	(2)
Earnings	60,000	60,000
UCCB	1,200	1,200
Before Tax Earnings	61,200	61,200
CPP & EI	(2,911)	(2,911)
Federal Taxes	(6,257)	(6,489)
Ont. Taxes	(3,696)	(3,609)
After Tax Income	48,336	48,191
Guideline Support	10,824	(10, 824)
Non Taxable Benefits	1,935	967
Family Income	61,095	38,334
Gross Expenditures on		
children in primary custody (40/30)	25,157	6,117
NCP costs of Access		3,670*
CP Decreased costs from NCP Access	2516*	
Direct Expenditures per child		
Original Family Child:	11,321	1,835
New Family Child:		6,117
Expenditure on 2nd spouse (40/30)		8,156
Disposable Income per		
income earner	38,454	20,391

<sup>20</sup> 

<sup>\*</sup>Assumes CP experiences 10% reduction in expenditure for reduced time in CP home. Also, assumes NCP experiences an increase in cost of the first family children equal to 30% of amount spent on new family child. See footnote 20, and sections 54–56.

- 58. As can be seen from Table 4, the result of Table 3 still applies: the standard of living for children across the different households varies considerably. In this specific case the children from the third family receive \$11,946 in expenditures, while the child from the second family receives \$28,368, plus the access costs.<sup>22</sup>
- 59. Table 4 only points out what the NCP is paying, but presumably the CP is also making expenditures towards the child. Including CP contributions would increase the difference in treatment of children in the different families.

## Additional Micro Evidence on Guidelines Impact

- 60. Professor Sarlo examines the *Guidelines* from a number of useful perspectives. My own work on the *Guidelines* provides some complementary evidence to the case he makes.
- 61. In particular, I would like to draw attention to my 2007 JLEO paper. This paper used one of the best data sets in the country: Statistics Canada's Survey of Labour Income Dynamics (SLID). The SLID is a large, nationally representative sample that repeats new over-lapping cycles. It contains income information based on tax records, includes all income from all sources, and tracks the marital and family history of an individual. Using this data set I was able to follow a random sample of families over time from before and after the implementation of the CSGs in 1997. I was able to control for a number of demographic variables such as family size, location, length of marriage, immigrant status, education, and the birth or death of a child during the time period. These controls allowed me to focus in on the effect of the introduction of the CSGs. I was able to determine which families were vulnerable to the potential net transfers of wealth caused by the Guidelines and which ones were not. As might be expected given the analysis of Professor Sarlo, the Guidelines do not treat all families equally. In particular, as the income of one spouse increases relative to the other, the

<sup>&</sup>lt;sup>22</sup> Similar to the calculations from Table 3, the AEU of this family is 2.36 (1 for NCP, .4 for spouse. .3 for each child of the 3rd marriage and .09 for each child of the previous marriages) Therefore the cost of access is now .36/2.36 or 15.25% of disposable family income.

Table 4
Child Expenditures By NCP with Multiple Families

Gross Earnings	300,000	
After Tax Income	180,136	
Guideline Support		
First Family (three children)	57,792	19,264 per child
Second Family (one child)	28,368	28,368 per child
Costs of Access by NCP 15.25%*	14,335	3,584
Net Income after Support, Access, and Taxes	79,640	
Expenditure on Two Children		
in Third Family (40/30)	23,892	11,946 per child

<sup>\*</sup>Assumes NCP experiences an increase in cost equal to 30% of amount spent on new family child for each child from previous marriages. See footnote 22, and sections 57–59.

- size of the net wealth transfer increases, and this creates an incentive for the other spouse to divorce. This is what I found. I was able to show that the CSGs actually increased the divorce rate among families where one spouse earned a relatively large income.
- 62. My finding does not mean that the CSGs "work" for lower income families. At low incomes the structure of the *Guidelines* and their treatment of government transfers creates an unequal standard of living between the CP and the NCP. However, at these low incomes the total amount of dollars transferred is too small to often induce a divorce. The best interpretation of my findings is that they confirm a bias in treatment between the CP and the NCP. The absolute size of this bias increases with income, and eventually a tipping point is reached where divorce is more likely.
- 63. As Professor Sarlo's tables show, even at modest middle incomes, there is a net transfer of wealth to the CP parent, and hence an unequal treatment. What this means is that for couples in marginal marriages, one spouse can make themselves better off by divorcing and becoming the CP. This is what I found. The effect was quite large and statistically significant.<sup>23</sup>

## IV. Conclusion

- 64. Canada's Guidelines were created to transfer wealth from non-custodial homes to custodial homes. Virtually every choice made in their construction from the 40/30 rule to the treatment of the value of children leads to a net transfer above the costs of children. From the formula, we can see how these assumptions do not equate welfare between the two households. Professor Sarlo has done a very good job in going through the details of the Guidelines to show this.
- 65. The idea that a simple table of numbers could actually achieve equality in living standards across two households under all types of circumstances is simply

Allen and Brinig (forthcoming) run a similar experiment in the U.S.. As mentioned, some U.S. states adopted the same Wisconsin based CSG system. Most states developed guideline systems that depend on *both* incomes. We find that Wisconsin-like systems are less stable for families because of the excessive transfers of wealth involved.

unrealistic. No guideline system is magic. However, to the extent that Canada continues to use a guideline system, then a few simple changes could drastically improve the fairness of the system: both incomes (from all sources) must be used in calculating awards; a more reasonable equivalence scale needs to be adopted; subsequent family status must be adjusted for; a system of third party guideline review should be developed; and some form of accountability needs to be built in.

66. Other jurisdictions around the world, including Australia and several of the United States, have modified their guideline systems over time based on new academic research and practical experiences within their systems. Canada would do well to follow their leads.

Douglas	W.	Allen

Date

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# Douglas W. Allen Curriculum Vitae

Burnaby Mountain Professor Department of Economics Simon Fraser University Home: (604) 534-2065

Work: (778) 782-3445

#### Personal:

• Date of Birth: August 15, 1960

• Canadian. Married with three children.

## **Education:**

- Ph.D. (1988), Economics, University of Washington Fields: Price Theory, Industrial Organization
- M.A. (1984) Economics, Simon Fraser University
- B.A. (Hons.) (1983) Economics and Business Administration, Simon Fraser University

#### Honors:

- 2011- Board of Directors, International Society for New Institutional Economics.
- 2011 Janis Lecture, Brown University
- 2009 Excellence in Teaching Award, Simon Fraser University.
- 2006-2009 Associate Editor, American Journal of Agricultural Economics
- 2006: Erskine Fellow, University of Canterbury
- May 2006: Giblin Lecture, University of Tasmania
- 2000 Dean's Silver Medal: Outstanding Academic Service
- 2000 Burnaby Mountain Chair
- 1988: Henry Buechel Undergraduate Teaching Award University of Washington
- 1984–1988: SSHRCC, Doctoral Fellowship
- 1984: S.F.U. Thesis Fellowship

- 1983: Western Economic Association's Best Graduate Paper Prize
- 1980–1982: S.F.U. Open Scholarship

#### Grants:

- 2006–2011: SSHRCC Standard Research Grant
- 2002-2005: SSHRCC Standard Research Grant
- 1995-97: NSF Research Grant (Dean Lueck principal investigator)
- 1995-98: SSHRCC Standard Research Grant
- 1995: Research Grant, Center for the Study of Contracts, Univ. of Pittsburg
- 1992-93: SSHRCC Standard Research Grant
- 1992: SSHRCC Small Grant
- 1990-92: S.F.U. President's Research Grant
- 1988-89: SSHRCC GR-6, Research Award

## Teaching Experience:

- 2000-: Burnaby Mountain Professor, Department of Economics, Simon Fraser University.
- May-June 2006: Erskine Fellow, University of Canterbury
- Fall 2004: Visiting Professor, Trinity Western University
- December 2000: Visiting Professor, Novosibirsk State Technical University.
- May 2000: Visiting Professor, University of Canterbury
- 1999–2000: Professor, Department of Economics, Simon Fraser University.
- 1993–99: Associate Professor, Department of Economics, Simon Fraser University.
- 1990–93: Assistant Professor, Department of Economics, Simon Fraser University.
- 1988–1990: Assistant Professor, Department of Economics, Carleton University.
- 1984–1988: Teaching Associate, University of Washington
- 1982–1983: Teaching Assistant, Simon Fraser University

#### Journal Publications:

- "Child Support Guidelines and Divorce Incentives" (with Margaret Brinig), International Review of Law and Economics (forthcoming).
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