

Ms Ann Sample  
Effects of four accidents

Tuesday, 9 November 2010

CHAISE & HEARSE, Barristers & Solicitors  
 N° 999 – 1000 Nelson Street  
 Vancouver, BC

Attention: Malcolm Hearse, Esq

Dear Mesdames and Sirs:

**Re Ms Ann Sample and the effects of four accidents in 2005 ~ 2008**  
**Multipliers applicable to future losses of earning capacity or outlays for care**

As you asked, I have calculated the survival-adjusted present value of \$1,000 per year of Ms Sample's future earnings or loss, care outlay, or indexed benefit. Table A shows the results.

<b>Table A</b>				
<b>Summary: dates, ages, multipliers (survival-adjusted present values)</b>				
Dates ...	Birth	13-Nov-57	Reference	07-Feb-11
	Age at reference date	53.24 years		
	Life expectancies at reference date ...			
	Working to 65	11.50 years	Lifetime	32.00 years
Multipliers — Survival-adjusted present values per \$1,000 per year				
Income — working life to 65			[Sched 1]	9,994
Cost of care — lifetime		Years	[Sched 2]	
First year only		1		982
Annual outlays		1, 2, 3, ...		18,685
Beginning in the second year		2, 3, 4 ...		17,703
Periodic outlays — initial year and every ...				
Second year thereafter		1, 3, 5 ...		9,592
Third year thereafter		1, 4, 7 ...		6,563
Fourth year thereafter		1, 5, 9 ...		5,051
Fifth year thereafter		1, 6, 11 ...		4,143
Tenth year thereafter		1, 11, 21 ...		2,340

The calculations in Schedules 1 and 2 incorporate these factors (applied at midyear)  
 [Schedules omitted from this example]:

*Survival* — the chance that she will survive to each future year. This represents the contingency of survival or death for a woman in British Columbia her age at the reference date who enjoys a normal life expectancy. These figures come from Statistics Canada's 2000 ~ 2002 life table for females in British Columbia (adjusted for the 2005 ~ 2007 life expectancies).

*Discount* — the discount rates set pursuant to the *Law & Equity Act* — 2½% for income, 3½% for costs of care or future indexed benefits — allow the time value of money and future price-level increases. The income-loss rate allows for wage-level increases as well. The two discount rates differ by the typical annual increase in real wages or productivity. Since indexed benefits allow for just price-level changes, the rate for future costs also applies to such benefits. Nonindexed benefits would be discounted at a higher nominal rate, usually 6% per year, that includes typical inflation; I could readily address this.

A survival-adjusted present value is the sum that, invested at the prescribed discount rate, would yield the annual payments of principal and interest that would offset the annual losses, exhausting to zero upon retirement for employment income, over the life expectancy for costs, and over the prescribed period for indexed benefits. To evaluate other patterns of losses, the schedules show these details:

*Annual* — For each year, the discount and survival factors and the combined weight per \$1,000 that year, which apply to amounts foregone, paid, or received during the year.

*Periods of years* — The cumulative totals forwards from the trial to each year and remaining at the end of each year.

Table B shows some arbitrary examples of using the multipliers and schedules to find the survival-adjusted present values of future amounts:

<b>Table B</b>				
<b>Examples of using the schedules to evaluate future income losses &amp; care outlays</b>				
Earnings or loss [Sched 1]	<i>Loss or outlay</i>		<i>[Schedule: value]</i>	
Steady annual income loss	@ \$10,000	9,994	1: Working life to 65	99,940 †
Income loss for first five years	@ \$ 9,000	4,668	1: Total, start ~ year 5	9,592
& then from year six	@ \$ 4,500	5,326	1: Remains at end of year 5	23,966
				33,558
 Care outlays [Sched 2]				
Annual care outlay	@ \$ 1,000	18,685	2: Lifetime years 1, 2, 3 ...	18,685
One-year care outlay, third year	@ \$ 3,000	911	2: Annual, year 3	2,733
Care outlay, years 1, 4, 7 ...	@ \$ 500	9,592	2: Years 1, 3, 5, ...	4,796
	† [= 10,000 ÷ 1,000	X multiplier	9,994]	

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I am the sole author of this report, and the report notes the instances in which I have employed information from other persons or sources. I hereby certify: (a) that I am aware of my duty to assist the Court and not to advocate for any party; (b) that I have made this report in conformity with that duty; and (c) that I will, if called to give oral or written testimony, give that testimony in conformity with that duty — as Rule 11-2(2) requires.

I apply my expertise in accounting and economics to the quantification of economic damages, the valuation of business and pension interests and guideline incomes, and related matters. I have regularly given expert, opinion evidence on such matters in the Supreme Court of British Columbia since 1989. My estimation of economic damages includes past and future business and employment losses, future costs of care, and related contingencies and allowances.

*HT*

As to my professional qualifications, I received my Bachelor of Science in Electrical Engineering from Purdue University in 1962 and my Master of Arts in Economics from the University of Oregon in 1968. I qualified as a Certified Management Accountant in the United States in 1983 and as a Certified General Accountant in British Columbia in 1986.

I have valued listed and private businesses ranging from a BC shipyard and Canadian and European manufacturers to a direct-mail marketer for purposes of financing, public security offerings, mergers and acquisitions, and litigation, and I have been accepted as an expert on the subject by the British Columbia Securities Commission and the then Vancouver Stock Exchange.

I first gave expert evidence on economic losses (in the Superior Court of the State of Washington) in 1972 and first appeared in the Tax Court of Canada in 2005. I have worked professionally for 33 years as an economic and financial analyst and for nine years as a full-time university teacher (three years teaching accounting at Simon Fraser, six years teaching economics at Western Washington).

As to the requirements of Rule 11-6(1):

- a. Name, address, and area of expertise* — The opinion page shows my name and address; the foregoing states my area of expertise.
- b. Qualifications and experience* — The foregoing paragraphs provide my degrees and designations and a summary of my experience in the area of expertise.
- c. Instructions provided* — I have developed an understanding of what I can provide in a case like this one through working with Counsel over the years. The first sentence of the first paragraph of the opinion page states the points on which counsel requested my estimates — the multipliers. Counsel supplied the date of birth, gender, reference date, and assumption of normal life expectancy; I supplied the statistics and conventions. Counsel or I could provide the engagement and instruction letter.
- d. Opinion sought and included issues* — The first sentence of the first paragraph of the opinion page states the matters on which counsel requested my opinion — the multipliers.
- e. My opinion respecting each issue* — The first paragraph and Table A provide my opinions — ie, my estimated multipliers — respecting each issue.
- f. Reasons for the opinion* — The discussion of the survival contingency summed up the noted assumed facts. The estimates follow as the report explains.

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Please call with any questions.

Yours very truly,



Howard Teasley, MA(Econ), CGA

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