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Marketing Implications of the Baby Boom Hitting the Target

Robert L. Brown
FSA, FCIA, ACAS
Department of Statistics and Actuarial Science
University of Waterloo
Waterloo, Ontario
N2L 3G1

You have all seen references to the baby boom somewhere, and yet it is still true that a lot of people have misconceptions about the baby boom. When it comes to something like the Baby Boom you shouldn't have any misconceptions.

Directly connected to the Baby Boom is the related issue called,"The Aging of the Canadian Population". There are two ways that a population can age. A population will age if each and every member of that population has an enhanced life expectancy, i.e. every individual in the population lives to an older age on average, as expressed by the life expectancy. You can see from Slide #1 that for all of this century life expectancy has been improving, more dramatically for females than for males, but everyone's life expectancy has been improving. So for no other reason than enhanced life expectancy the population in total would be aging.

SLIDE #1

LIFE EXPECTANCY

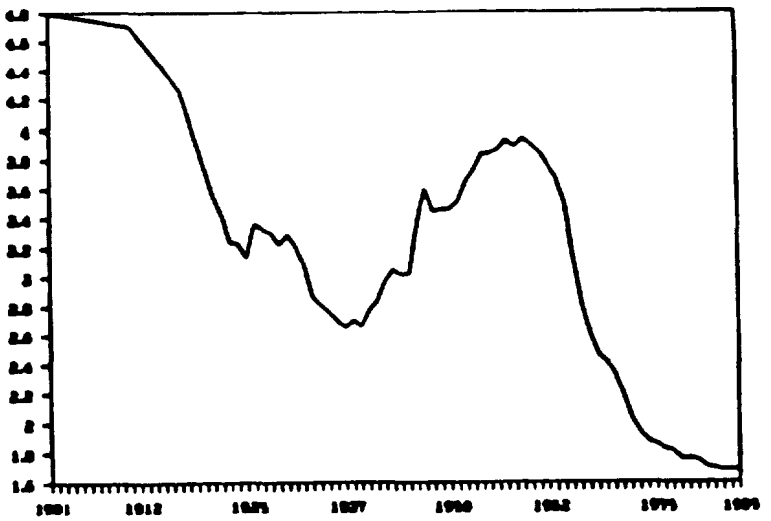
	at birth		at age 65		at age 75	
	male	female	male	female	male	female
1921	58.8	60.6	13.0	13.6	7.6	8.0
1931	60.0	62.1	13.0	13.7	7.6	8.0
1941	63.0	66.3	12.8	14.1	7.5	8.2
1951	66.3	70.8	13.3	15.0	7.9	8.8
1961	68.4	74.2	13.5	16.1	8.2	9.5
1971	69.3	76.4	13.7	17.5	8.5	10.7
1981	71.9	79.0	14.6	18.9	9.0	11.9
1986	73.0	79.7	14.9	19.1	9.1	11.9

Source: Statistics Canada (Nagnur, Dhruva 1986)

Life Tables, Canada and Provinces, 1985-87

SLIDE #2

Fertility Rates

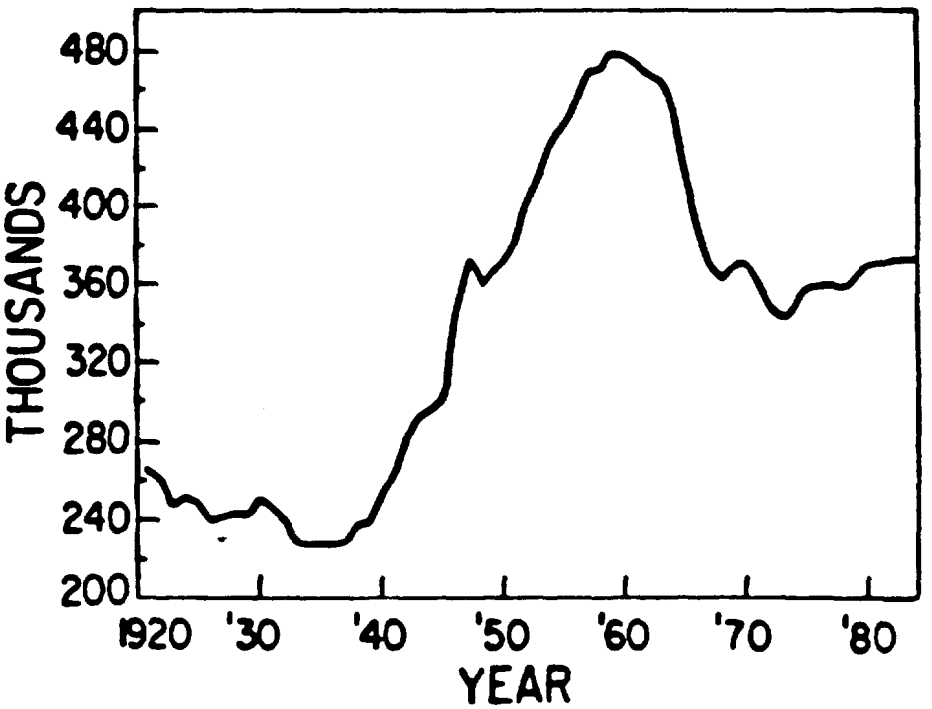


However, the main reason for population aging as we are going to describe it, is not enhanced life expectancy of the individual, rather it is shifts in demographics. We will look at the "age" of a population by analyzing the percentage of the population age 65 and over. A young population would have a very small proportion over age 65, and an older population would have a relatively high percentage of its population over age 65. It is true that because of an enhanced life expectancy the proportion of the population over age 65 would increase. But what is more important is the baby boom.

Slide #2 shows Canadian fertility rates from 1900 up to now. You can see that, in general, fertility rates have been in a state of decline, consistently throughout this century. There was one very important break in that state of decline, however, and that's the period that you can see started in the middle of the depression and carried on through the war, peaked in the 1950's and then turned and went away down until we now have some very low fertility rates. Keep in mind were we to extend the fertility rates from the beginning of the century forward in a linear fashion, we would in fact get to the fertility rates we are experiencing today. That is, had I been a demographer in the 1920's (and it may come as a surprise but I wasn't) and projected fertility rates, I would probably have come up with a pretty good estimate of the 1989 fertility rate, because it's just about exactly what you would have projected from the first 25 years of this century. So today's fertility rate is not a surprise. The surprise is the fertility rate after the war, in the 1950's and 1960's.

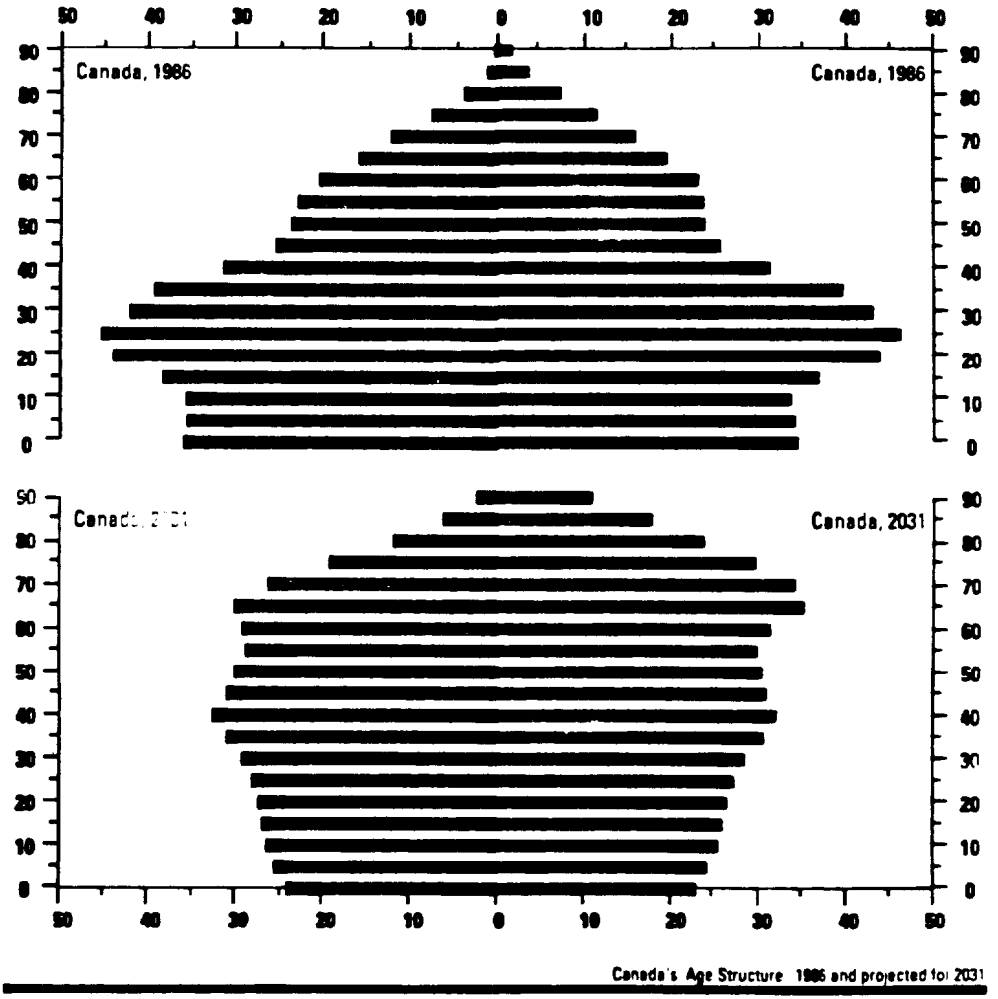
SLIDE #3

Number of Live Births



SLIDE #4 #5

Changes in the Age Structure

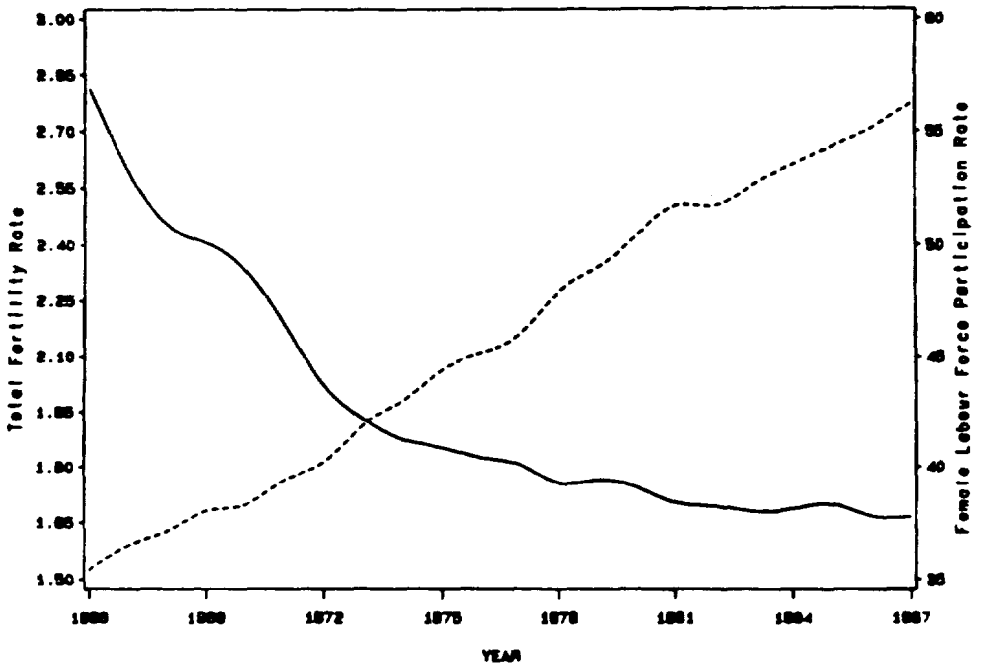


Canada's Age Structure 1986 and projected for 2031

couple of implications: first you would put me in the baby boom (and I don't consider myself to be a member of the baby boom); second, you would suggest that the baby boomers alive today are around age 45. In fact, I am telling you that the baby boomers today are anywhere from age 24 to 39 and the mid point would be at age 31. If I think of the baby boomers as being 45 years old, that's quite a difference in terms of my target market, then thinking of them being from age 24 to 39 with a mid point of age 31. I am telling you that the correct representation is the latter one, so if you try to target products or target advertising to the baby boom you better understand that they are not 45 years old but quite a bit younger than that.

What follows the baby boom was the equally dramatic baby bust and it is this combination of a large number of births followed by a small number of births that leads to some critical factors as we head into the next century. The next two slides present the Canadian population in a form called a "population pyramid". You have the females on your right and the males on your left and the length of each line represents a percentage of the population for each of the age groups. In the 1986 slide we see a very large bulge which is the baby boom. We can also see the beginnings of a little bit of an echo because the baby boomers are all in their period of high fertility so there will be a slightly increased number of live births as the baby boomers have their babies but that echo is going to be extremely mild, just a ripple (you throw a stone in a pond you get a big wave and then you get a ripple). In a stationary population, you have a

SLIDE #6


Total Fertility Rate
3.00
2.85
2.70
2.55
2.40
2.25
2.10
1.95
1.80
1.65
1.50
Female Labour Force Participation Rate
60
55
50
45
40
35
1969
1968
1972
1975
1978
1981
1984
1987
YEAR

population pyramid that is broad in its base with a large number of live births and then works it way to a tip through survivorship or mortality. Here you can see that this doesn't look like a pyramid at all. It is more like a pregnant cylinder or the effects of a python swallowing a pig. In 2031, we can see the baby boom aging and the ripple or the echo from the baby boom. We also have what remains of the baby boom now over age 65 and, unfortunately, trying to support the large top of this pyramid is a sharply decreased working population.

This represents very nicely what's going to happen in the next century. We are going to have all of these people retired and in need of medical care and social security but supported by a much smaller population than historically. So, it's the ratio of this dependent population to the working age population or labour force population that creates some serious problems.

The other important demographic phenomenon over the last 25 years is represented nicely in Slide #6. You can see as females took their place in the labour force (over half of them are now participants in the labour force), coincidental to that, there was a sharp decline in fertility rates from the high of the baby boom through the lows that we are now experiencing. I am not saying what was the cause and what was the effect; that females had fewer babies because they went to work or was it because they had fewer babies that more of them went to work, (that's for sociologists).

SLIDE #7

Projected Percent Increase in the Population 65+: 1985 to 2025

Country	% Increase
India	264
China	238
Hong Kong	219
Canada	135
Australia	125
Japan	121
Isreal	116
U.S.	105
France	67
Italy	51
W.Germany	36
U.K.	23
Sweden	21

Source: U.S. Department of Commerce 1987, 6

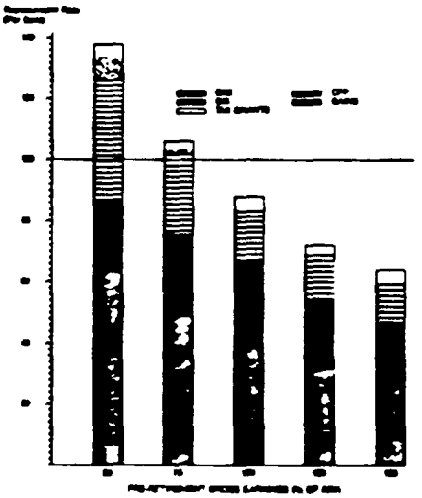
That's a very important phenomenon and it means again in terms of product development and target marketing and advertising, you have to understand that you are looking at a completely different population today than you were 30 years ago. We don't have the same sort of stay-at-home housewife with a working father and four or five children. We are now talking about two working couples, often childless, but if they do have children its one or two. Three would be a big family these days. If you are designing cars you can design them for four people. If you are designing homes the jacuzzi may take on the importance of the big family kitchen of the old days.

Slide #7 shows how dramatically the population of elderly people in Canada is going to increase over the next forty years (which takes us to the year 2025). We can see that except for the Asian countries India, China, Hong Kong, the very next country in terms of the increase in the proportion of aged is going to be Canada. We are going to have a 135% increase in the next 40 years in our elderly population. That exceeds Australia, Japan and the United States. We see here a noticeable difference between Canada and the United States. Our baby boom had a higher peak and a lower trough so that as indicated, we are going to have a far more dramatic demographic shift than the United States.

Some of the European countries are already relatively old and they are not going to change very much in the next forty years. The United Kingdom, Sweden only a 20% increase in their elderly; most of that due to enhanced life expectancy; very little of the baby boom

SLIDE #8

Income Replacement in Retirement provided by Government Programs
for One-Earner Couple in 1984
(Percentage of Net Pre-Retirement Income)



Source: Ontario Treasury estimates.

effect. They didn't really have the baby boom in the Scandinavian countries so, in terms of something like funding of social security, Sweden doesn't have a serious problem.

If their social security is being funded today and they are comfortable with it, then it will be affordable tomorrow.

However, just because Canada has a system of social security that's being funded today doesn't necessarily mean that its going to be affordable tomorrow, because of we are going to have a 135% shift, which may be a concern.

In terms of achieving economic security, how do we achieve it in Canada?

We have a number of sources of economic security: we have government sponsored income security which includes Old Age Security, Guaranteed Income Supplement and Canada/Quebec Pension Plan. The second tier is your employer sponsored plan, so you can have a private pension plan through your place of work. The third source of retirement income security would be your own savings and if you are wise that would include a high percentage of registered retirement savings products as we will see in a moment.

Slide #8 shows the percentage of a person's income that would be replaced by government sponsored programs at different wage levels. The person who earns half of the average industrial wage will

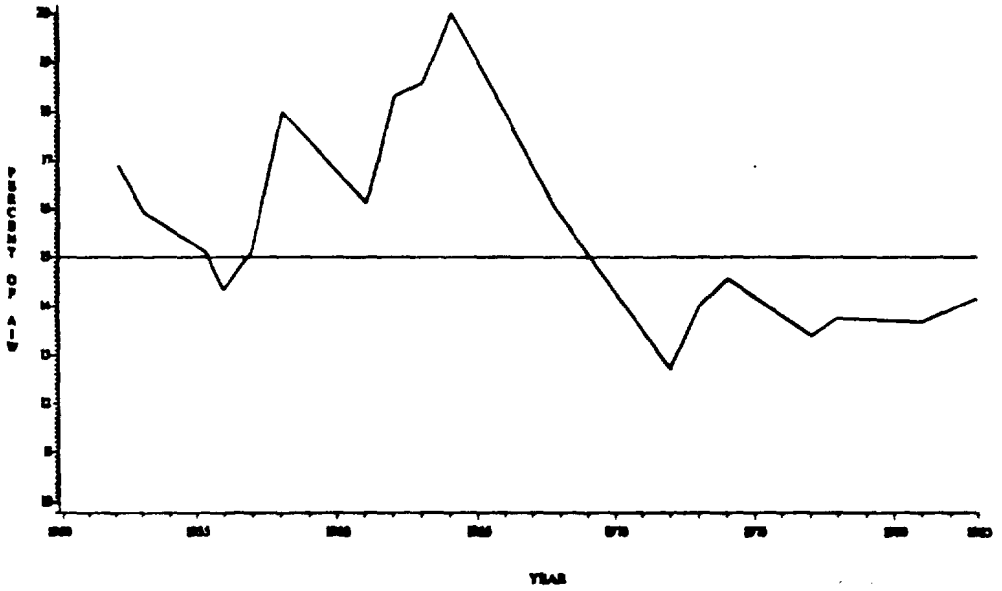
have more than their final salary replaced in their retirement years through government programs. So the working poor would actually be better off after they retire than on the last day of employment. As we move up to higher wage levels we see a gap occuring between what the government provides for us and what our final average salary was.

There are two aspects of economic security. One is that you have a basic level of income so that you know that you can live, you have enough money to buy food and clothing and shelter, so that's one of the things the government programmes do is provide us with this safety net, this net of security. The second aspect of economic security is that you want to retain some level of a standard of living. That is you don't want to go from earning $100,000 a year to $20,000 a year the day you retire and for the individual earning $100,000 a year if you don't have an employer sponsored pension plan and you don't have any individual savings then obviously the government is not going to provide you with economic security through their programs because you would see a tremendous drop if you only have government sponsored programs to fall back on. The government says it will take care of the basic security net but it leaves a lot of the rest to the employers and to the individuals. The government will not guarantee that everybody has a certain standard of living in retirement only that they will feel secure in terms of buying food, clothing and shelter. The only government sponsored system that is geared to your earnings level at all is the Canada/Quebec Pension Plan which gives a percentage of income but

SLIDE #9

Old Age Security Payments as a Per Cent of the Average Industrial Wage
1952 - 1983

Figure 3



only up to the average industrial wage. Once you get to the average industrial wage you reach the maximum Canada Pension Plan benefit and beyond that point if you want to replace a certain percentage of your income you have to do it either through your employer sponsored plan or through your own savings.

One part of the government sponsored social security system, the Old Age Security portion, is in a state of decline. Slide #9 shows that as a percentage of the average industrial wage the Old Age Security reached its peak around 1966 and then went into a steady state of decline. 1966 is when the government introduced the Canada Pension Plan and Guaranteed Income Supplement. So where the Old Age Security was the only benefit up to that point, after that point were added two more sources of retirement income security: Canada Pension Plan and the Guaranteed Income Supplement. That is one reason for the decline in Old Age Security. You will know from the last budget that the government now also plans to tax back all of the Old Age Security benefit from people earning relatively high incomes in their retirement years. You start to hit this tax bracket at about $50,000 a year of income and if you have income of more than $76,000 a year in retirement, you will pay all of your Old Age Security back to the government. Old Age Security is becoming a second tiered Guaranteed Income Supplement and its nature has changed rather dramatically.

One of the things we need to remember is what the government gives you it can also take away. There is no contractual guarantee

SLIDE #10

Pension type	Plans		Active Members (000)	
	#	%	#	%
Defined Contribution	6,108	(40.1)	246	(5.3)
Defined Benefit				
flat benefit	1,340	(8.8)	1,039	(22.3)
% of earnings	7,345	(48.8)	3,324	(71.4)
Other	349	(2.3)	49	(1.0)

Source: Statistics Canada, Pension Plans in Canada 1984, 27

that your government benefits will be received. You may have it in your mind that when you are 65 you are going to get A, B, and C from the government but, when you are 65 you may not get A, or B, or C. There is no contractual guarantee that the government sponsored systems will come through. They are there because the working population is transferring wealth to the retired people today in the hopes that the next population will do the same for us when we retire. That's all it is. It exists in legislation and if the voters change their minds, the government can take it away; the government is the people. So, if it becomes too expensive it can be taken away.

The second source of economic security is your employer plan. We can see in Slide #10 that 5% of workers are in employer-sponsored defined contributions plans and, 95% of the workers are in some form of defined benefit plans. That is in terms of the number of active members. You can also see that in terms of the number of plans, 40% of the plans are defined contribution; 60% of the plans are some form of defined benefit. What that tells you quite clearly is that almost all of the really big plans are defined benefit and almost all of the small plans are defined contribution. Under defined contribution plans, what is defined is how much will be contributed to the plan, and what is unknown is what it will be worth at age 65 in terms of its ability to buy you an annuity so, they don't provide you with as much security. With the defined benefit plan what is defined is what you will get at age 65 and the variable is how much the employer must contribute each year. So the risk is on the

SLIDE #11

Required Percentage of Salary that must be saved. to Achieve 70% Integrated Replacement Ratio

Sex	Age At Which Saving Starts	Age at retirement 60	65
Male	25	14.1	10.2
	30	16.5	11.6
	35	19.8	13.6
	40	24.7	16.3
	45	32.9	20.3
Female	25	17.5	12.9
	30	20.4	14.7
	35	24.5	17.2
	40	30.6	20.6
	45	40.9	25.8

shoulders of the employer but you have a pretty good idea of you going to get when you retire.

The final source of retirement security is your own savings. I have done some calculations here to show the effect of saving through non registered products versus saving through registered products. Slide #11 shows the required percentage of salary that must be saved to achieve a 70% replacement ratio (given that you are going have the government sponsored plans) for somebody earning the average industrial wage. That is, how much would they have to save to retire at 70% of their final average salary given that they have government sponsored income security. You can see a number of things here. First, the earlier you start, the easier it is to provide the savings that you need to retire at this level. Second, females are going to have to save more than males because, on average, females will live longer than males post 65 . Third, there is quite an impact because of early retirement.

If you want to retire early, you are going to have to save a lot more money. For instance, if you want to retire at age 60 and don't even start to think about retirement until age 45 you are going to have to set aside a third of your salary every year in a non registered vehicle to achieve that goal. I don't really think that's legitimate for the average person, you just can't save at that level. What you would be doing is putting yourself through a number of years of a very low standard of living and you would actually be better off after you retire because the "savings" portion of your budget would disappear.

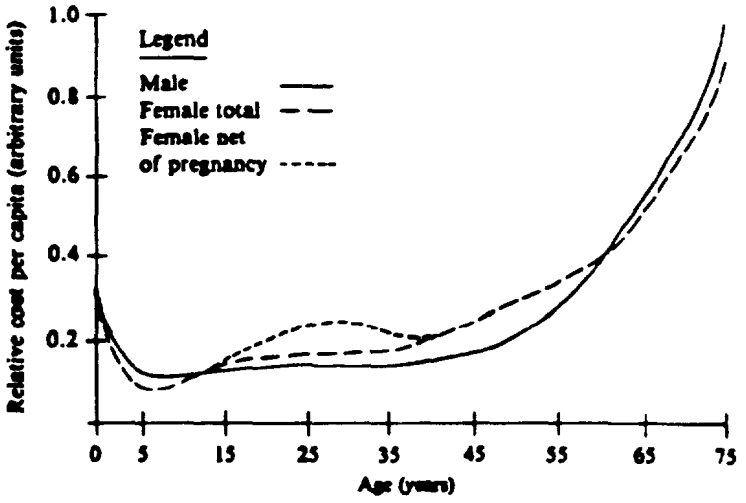
SLIDE #12

Required Percentage of Salary that must be saved Using Registered Retirement Plans

Sex	Age At Which Saving Starts	Age at Retirement 60	65
Male	25	6.0	4.1
	30	7.7	5.2
	35	10.0	6.6
	40	13.7	8.7
	45	19.9	11.8
Female	25	7.0	4.9
	30	8.9	6.2
	35	11.7	7.9
	40	16.0	10.4
	45	23.2	14.1

SLIDE #13

Relative per Capita Costs of Health Care for Males and Females, by Age

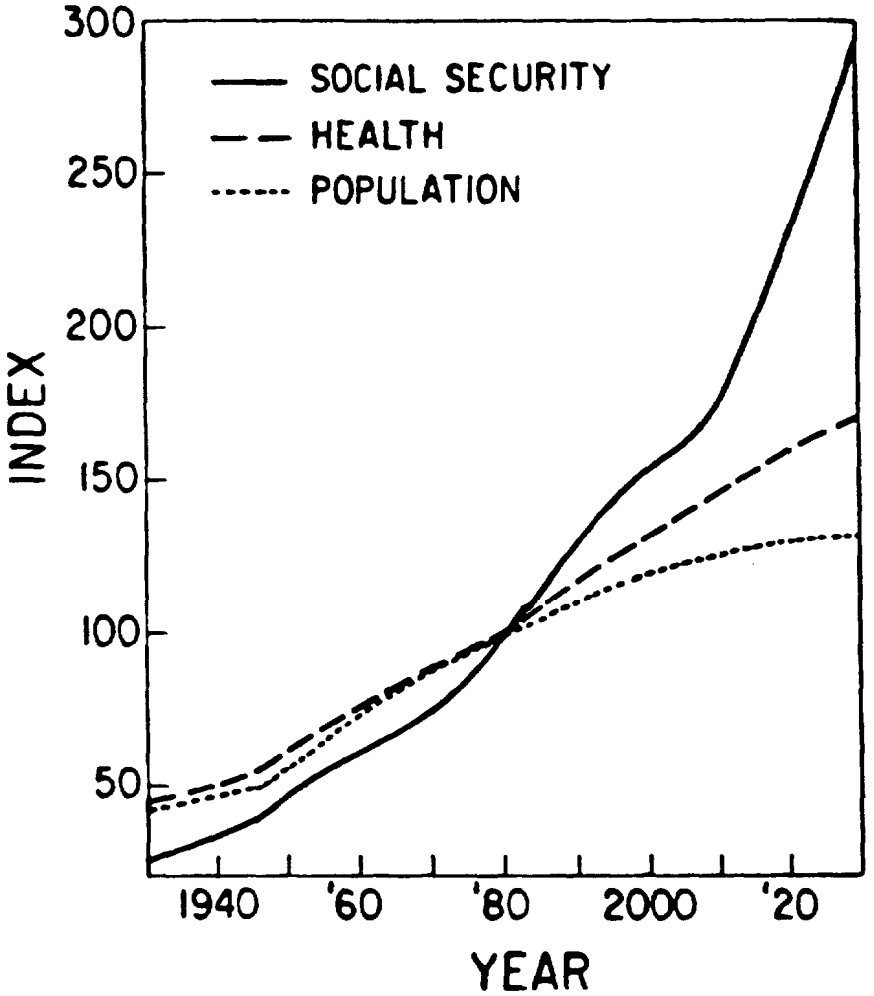


If you use registered products then the contribution going into the plan is tax deductible within limits and the earnings on the plan are tax free. Slide #12 shows what a dramatic difference it makes to use registered products. Most of the rates are cut in half, some of them moreso. So it really does show you how important it is to analyse the registered products that are available and the tax advantages that go with them.

Those tax advantages are about to be expanded so, philosphically, the government is saying take care of yourself, don't depend on us. We are giving you a tax break for registered plans, we are giving you the 7-year carried forward for contributions. Get out there and make sure your individual savings are going to provide you with your required income security.

Another part of the economic security puzzle is the cost of medical care. It is not of much importance to an individual in Canada how much medical care costs because we don't pay for it on an individual basis. If an American were looking at this problem and they weren't in a good health plan, then they would be concerned because what Slide #13 shows is quite a bit of a 'U' curve of health care costs with age. As you get older, medical care costs rise. If you are in the U.S. you really have to be concerned about how you are going to pay these bills. Being in Canada, with the full government sponsored universal medical care, that is not a concern on an individual basis.

SLIDE #14



The graph shows the rate of change for Population, Government Sponsored Social Security, and Government Sponsored Health Care, with 1980 = 100 for all three.

However, the cost of medical care is part of the gross national expenditure pie. If the baby boom is all aging together, and if the baby boom all reaches these advanced age at the same time, (as it will) who is going to pay all these medical care costs? Given that I am already concerned about the funding of social security, who's going to pay for the cost of medical care when they all impact at exactly the same moment? Slide #14 shows what the graphs look like in terms of the competing forces for government monies into the next century. We have the population as the dotted line, and you can see the population in total is growing and then eases off into the next century. Health care costs rise and continue to rise into the next century as the population ages. However, the rise is not all that great and most researchers say that it will turn out to be affordable. All of these graphs start at a base of 1.00 in 1980. You can see that the cost of health care is going to rise about 60% in the next half century.

Social Security costs, however, are going to just about triple in the same period of time. This is government sponsored social security costs. The reason for this is that the government sponsored plans are not pre-funded i.e. that they do not have full actuarial reserves. When I send a dollar contribution to the Canada Pension Plan this morning, by the afternoon it is in the mail out to a retired person as a benefit cheque. So there is no actuarial full-funding reserve with the Canada Pension Plan. Old Age Security and Guaranteed Income Supplement are paid purely from general tax revenues. Again, as I pay my taxes, part of my tax money pays for Old Age Security Benefits and Guaranteed Income Supplements Benefits. There is no

SLIDE #15

Year	Population (,000) (1)	Labour Force (LF) (,000) (2)	Dependency Ratios Pop. 0-19/ (LF) (3)	Pop. 65+/ (LF) (4)	Total* Ratio (5)
1986	25591	12898	0.57	0.21	0.78
1991	26783	13767	0.54	0.23	0.77
1996	27766	14494	0.51	0.25	0.75
2001	28524	15090	0.48	0.25	0.74
2006	29131	15364	0.46	0.27	0.72
2011	29648	15418	0.44	0.30	0.73
2016	30063	15163	0.43	0.35	0.78
2021	30318	14770	0.44	0.41	0.85
2026	30367	14408	0.44	0.47	0.92
2031	30219	14083	0.44	0.52	0.97
2036	29909	13862	0.44	0.54	0.98

*Column(s) may not equal (3) + (4) because of rounding

Source: Denton and Spencer 1987, Tables 2, 3, 6 Standard Assumptions

reserve or actuarial funding. Hence, these plans will be affected by shifts in demographics and you can see here the cost of the Social Security Plans are just about going to triple in the next 40 years.

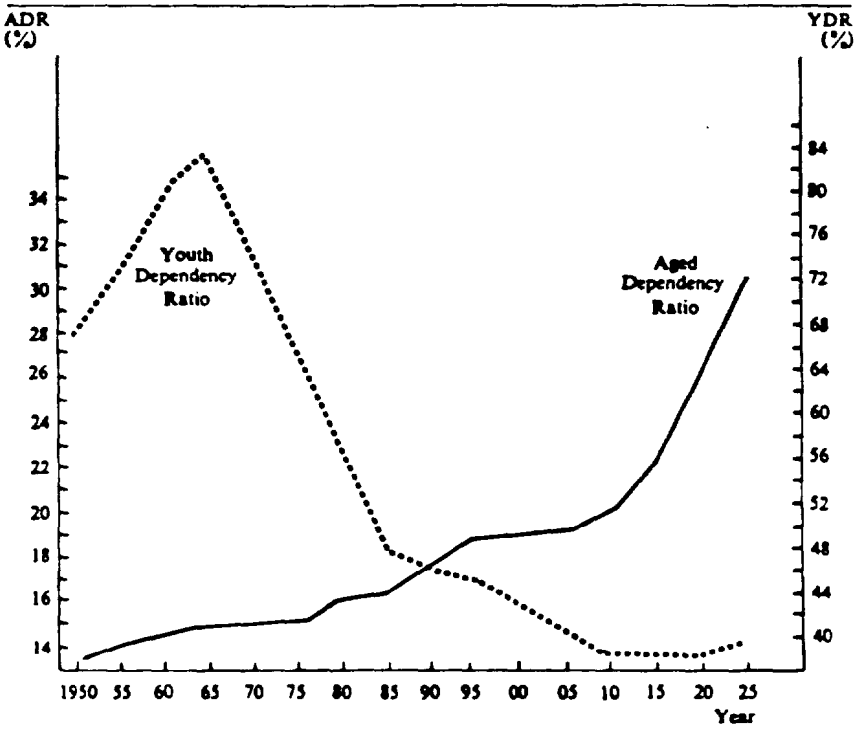
This is not the case for an employer sponsored plan because it is actuarially fully funded so that shifts in demographics have no effect on it whatsoever. It is fully secured because every individual member has assets in their name and an actuary comes in at least once every three years and attests to that. The same can be said about an RRSP. It is backed by real funds and is immune from demographic shifts.

What's going to happen then? The baby boom, born between 1951 and 1966 is going to age. Following the baby boom was the baby bust so, as the baby boom moves into the retirement years, the labour force is going to be made up of the members of the baby bust and anybody born after 1966 is going to be left holding the bill. They are going to have to pay for all these benefits.

Slide #15 shows projected labour force figures as we move into the next century. Here is what the labour force is going to look like and you can see that it actually gets smaller. If we look at the percentage or the proportion of the population age 0 to 19, that's a youth dependent group of people. That segment of the population is going to decline. The youth dependency ratio will fall and at the same time the aged dependency ratio representing those aged 65 and over is going to more than double. If we add these two dependency ratios

SLIDE #16

Impact of Demographic Shifts on Personal Saving, 1950-2025



SLIDE #17

Year	Total Dependency Ratio Growth Pattern (1)	Expenditures Dependency Ratio Growth Pattern (2)
1986	1.00	1.00
1991	0.98	1.01
1996	0.96	1.02
2001	0.94	1.02
2006	0.92	1.02
2011	0.93	1.07
2016	1.00	1.19
2021	1.08	1.33
2026	1.17	1.47
2031	1.24	1.60
2036	1.25	1.63

together the change is not all that dramatic i.e. as the number of dependent youths get smaller, the number of dependent elderly gets larger but the total isn't all that dramatic. Slide #16 shows these ratios back to the 1950's. As the age dependency ratio is rising, the youth dependency ratio is falling and they are almost a mirror image of each other.

That leads to the natural conclusion that there is no problem. All we have to do is shift the money away from the youth sector and into the elderly sector. So, we just have to get rid of all those stupid old university professors and pay for nursing home facilities. Well, that in itself is difficult because you can't just turn a university professor into a nursing home administrator. The second part that makes this difficult is that these costs are not equal. It doesn't cost the same in terms of government funding for an elderly person as it does for a young person. In fact, studies have shown that it costs 2-1/2 to 3 times as much from the government sponsored sector for an elderly person, as it does for a young person. Slide #17 shows what is called an Expenditure Dependency Ratio starting in 1986 at 1.00. If we weight a young person with a factor of 1 and an old person with factor of 2-1/2, it shows how much of an increase in costs we will have in the government sponsored systems. So, we are going to have to fund a 63% increase in costs when we weight the young people with a factor of 1 and the old people with a factor of 2-1/2. That is, out of the Gross National Product pie, we are going to have to find 63% more money to look after the aged.

Now, 63% over a period of 50 years turns out to be not all that bad, as it is 1.0% per annum compound growth. If we continue to be productive, so that our real wealth increases by at least 1.0% per annum (which we have been able to do historically) then we will be able to have all these programs without raising the tax rate, without going through any stupendous turmoil. However, we will not be able to expand any existing programmes or start any new ones (e.g. Daycare) for the next 50 years.

Lets just review what we have learned in terms of considerations if you are in business. First, you need to make sure that you understand the target market, that it is not age 45, it is actually age 24 to 39. Second, you don't market to a family with a stay at home mother and a working father and three or four kids. You should be marketing to a two income family. In fact, one of the words that are now being used to describe the family unit you may be thinking of marketing to include DINKS, (double income, no kids).

Third, you've got to keep in mind that the people who are now in the baby boom are worried about their future economic security. They read in the newspaper about how costs are going to rise; they read about how the baby boom is followed by the baby bust, and that many schemes are not going to be affordable. So, they are concerned about economic security. They also want more personal control and to back this up they are not as interested in having the government solve all the problems, they would rather control their own destiny. Given a choice between an expanded Canada Pension Plan or more

room for their RRSP savings, they will tell you they would rather have the RRSP. At the same they show a serious lack of planning. A recent survey showed that over half of Canadians have no retirement savings plan and no intention of starting one. We have got to get out and get the message across. Start early! The earlier you start to think about this, the easier it is to provide yourself with economic security. Lets start to think about it now, not when we reach the edge of the cliff. At the same time we need to get to the government and get them to think about these things. The average politician has a time span that ends with the next election. If we wait until the next century then the changes that have to be made are huge and traumatic. If we make these changes today they can be small and easily assimilated and can prove to be palatable to the voting population but its hard to get to the politicians if your problem doesn't exist in the next 4 years.

We cannot ignore the concerns about health care costs despite the fact that we have a universal, 100% pay-all health care plan. People are concerned about how they are going to pay for the health care costs and Social Security at the same time. So, if you talk to people, they do include medical care costs as one of their concerns. Now, there are ways to bring medical care costs under control. If you read the literature, it is very consistent. There are problems with the present delivery system in Canada that can be solved and health care costs don't have to rise as fast in the future as they are presently.

We need to offer new unique products to people to help them achieve economic security. An example of a new product that is starting to be marketed now is a reverse mortgage. We have got a lot of elderly who are asset rich and income poor. Most elderly people live in their own homes with no mortgage. In fact, 2/3's of the elderly in Canada today are in a home that is fully paid for and yet they don't have enough income on a month to month basis to pay for all of their needs in terms of food and clothing and taxes. So, why don't they take the asset base in their house and annuitize it, turn it into monthly income? This is called the reverse mortgage.

The present cohort that is retired is the cohort that was born in the 20's and matured during the depression. The depression really had an impact on them. They are very concerned about turning their assets into cash. So, the present group of elderly are not rushing to buy reverse mortgages. I think there is also some feeling that they want to leave an estate, for some reason, I don't understand. I believe, however, that the next generation of Canadians that didn't grow up during the depression might find something of a reverse mortgage more palatable.

I thank you for your attention and invite questions and discussion.