Brian Ferguson:

It’s very easy to talk about the need for catastrophic drug coverage in Canada. I don’t think there’s any real argument that we do need some kind of a catastrophic drug program. The trickier thing is, how do we actually set it up in a manner which is sustainable in the long run, because it is also very easy to say, “The government should pay for it.” And to lose track of the fact that government does not pay for anything, government basically taxes Peter to buy stuff for Paul.

What government does is redistribute the income which is generated in the rest of the economy.

It’s also very easy to say at the moment that the federal government has the surplus, therefore the federal government should be paying for this and that. If there’s one part of the country which should be well aware that relying on federal transfers for your programs, means basically building your house on a foundation of sand, it is Atlantic Canada.

When you consider what part of provincial government revenue is federal transfers in this part of the country you start to wonder whether maybe a catastrophic drug program for this region should be built in a manner that is sustainable, primarily using regional revenue and regional resources rather than relying on, well, as the Ontario government at the moment would grumble, Ontario being taxed in order to provide this for Atlantic Canada.
And that leads to the suggestion that we need to think about changing the way, or at least not funding such a program, in the way that we have been funding our health care system up until now, because at the moment we fund it on what's generally called a pay-as-you-go system, which means revenue comes in today and revenue goes out today. Current expenses are funded out of current revenue.

If you think about, just the sort of life cycle pattern of tax payment and health care use, it is actually more of what's called an overlapping generation structure, because you tend to have a fairly long period when you are paying taxes into the system, not drawing that much out of the health care system yourself. Then a period later when you are probably going to be drawing more out than you are actually paying in. Certainly, once we sort of calculate in the retirement years.

So what you are actually looking at is a system which is effectively funded on a current revenue basis but operates on the basis of inter-generational transfers primarily. This is the kind of system that works fine, as long as the age structure of your population isn't changing.

It's a system which is designed, if you look at the modeling of it, it is designed quite explicitly on the assumption that the rate of population growth, whatever that might be, is going to be constant for a very long time. When you've got long-term constant rate of population growth, you have unchanging age ratios. The proportion of the population in different age groups remains unchanged, and in that case what you've got is a pretty stable, what you might refer to as inter-generational social contract because everybody knows that, okay, I'm going to be paying in this part of my life; in that part of my life I'm going to be drawing out, if you like.

They may recognize that they are not actually saving for their own health care expenses in the future, but there is a sense that they are going to get a fair shake, in terms of what they pay in now, and what will be covered for them later on.

When the age structure of the population is changing, when your population is aging, that inter-generational social contract becomes strained simply because, you know, you've heard the debates about whether the aging population drives up health care costs. Some people say lots of problems; other people say, no, nothing to worry about. That's not the end that matters. The end that matters is what's happening to the revenue generating age groups in your population; what's happening to the tax base that you are relying on for all of this kind of stuff, and when you are working on an overlapping generation structure like that, and your age distribution is ... well, it actually wouldn't matter if the population was getting younger.
So when your population is getting older then you've got problems, actually, financing the thing. And at that point, you have to start thinking about different ways of structuring it, and you have to start thinking about how to structure it in what is essentially an actuarially sound manner, because that will give you sustainability in the long run.

Now that doesn't mean that you've got no government participation in it at all. It does mean that government participation should be very well defined, probably restricted largely to providing a re-insurance pool and to subsidizing, basically premiums for the lowest income groups in the population, so that everybody is actually included in the system.

When economists think about catastrophic coverage, we define it, or we conceptualize it rather differently from what other people do. We conceptualize it in a typical economist’s bloodless manner, so that's what I'm going to do for a moment, and I'm going to grossly oversimplify insurance theory, so my apologies to anyone in the room who is actually from the insurance industry.

But basically, if you think about it, acute catastrophic illness where you have massive bills and then you either recover or you die within that year, that's not a problem, that's insurable. That can be covered out of standard insurance, where the premiums come in this year, and you've got a pool of funds and that is then paid out to anyone who gets sick this year. It actually works in a manner very similar to the way we fund the public system anyway. That's not an issue.

The kids who make the headlines, the ones whose drugs cost a hundred or two hundred thousand dollars a year, well, quite frankly, they are not an issue either. The numbers of them, when you get up into that really headline Toronto Star headline grabbing range, the numbers of cases involved are so small that, you know, you could probably pay for them out of petty cash in a sponsorship program or something like that. So that in terms of the hits involved with those very, very expensive drugs for very few people, that's really pretty manageable.
However, let’s looks at catastrophic coverage from the economic point of view. The problem with catastrophic illness is expensive chronic illness. It’s a problem because on the standard year by year funding of an insurance pool, in which the premiums come in this year, the payments go out this year and your premiums are actuarially based, meaning that they are based on the probability of your having to draw on the system and the amount you are expected to draw on the system.

If you get a chronic illness, then all of a sudden not only are you drawing this year but the probability that you are going to have to draw next year goes up virtually to 100 percent. And on an actuarial basis on a year by year basis, if the probability that you are going to have to draw on the pool this year is roughly 100 percent, then the appropriate premium for you to be paying this year, if we are funding the system on an annual basis, is roughly equal to the amount that you expect to draw from it this year. That's why those people, especially when you look at the American situation, that's why it is so difficult for people with chronic illnesses to get coverage because the premium would basically have to be exactly equal to the amount they would expect to draw anyway.

So when you are looking at this kind of thing you need to move into the area of what is known as guaranteed renewability insurance or lifetime insurance. And that means, basically, you've got to set up a structure in which everybody is paying into it, but people start paying into a lifetime insurance program when they are young. It is referred to as pre-funding their later claims on the system.

You can think of it, actually, another way. You can say that when you are paying your annual insurance premiums, you are actually paying two premiums. You are paying one premium for this year's acute coverage; you are paying another premium against the probability that at some point in the future, you will develop one of these chronic illnesses.

This kind of a structure is already present in, for example, the German National Health Insurance System. They fund it on a social security tax basis, and what you pay in, in the form of social security taxes, when you are young is calculated in part in order to pre-fund what you are expected to draw out of it, when you are older.

So what you are looking at is, basically, in addition to buying this year's acute coverage you are buying a future's contract. That will pay off, if you develop at some point in your later life a chronic illness, that may not necessarily cost you $100,000 a year, which might be perfectly manageable on a cost basis if you were only paying it one year. But if you have to pay it every year, for the rest of your life, then it suddenly becomes a significant
burden.

One of the advantages of thinking about this kind of thing, as an insurance pool rather than as a government program, is that it gets away from the notion that our health coverage is something that the government does for us. It gets back to the idea that what we are really doing with insurance, is sharing the risk among ourselves. Because if you think on it again, on a social contract basis, that's ultimately what any of these social programs do. But by running it strictly as government based entitlements, we are creating a distinct impression that somehow or other, there is an endless pool of funds out there that can be drawn on to do this kind of thing.

As I said at the beginning, I don't think that there is any real problem or any real argument with the need to structure some kind of catastrophic coverage. I would suggest to you that it does need to be structured on an insurance pool basis. I would also suggest to you that one of the advantages of structuring it on a proper guaranteed renewable insurance pool basis is that it takes it out of the hands of politicians. One of the big problems with all of these social security programs, in pretty much any country you look at, is the immense temptation that politicians have to add to entitlements without figuring out where the revenue is going to come from, and then, you know, they leave it to be somebody else's problem. And when it becomes somebody else's problem the response is usually to cut.

As I say, the government's role in this is not insignificant if you are setting up an insurance pool. There would be an income based subsidy to it, but I think any sustainable system has to be one which is basically set up so that it is very transparent in its funding and so that the future tax burden, if you like, of any changes which are made today, is made quite clear. You've got to have very clear inter-generational accounting, on any kind of a structure like that if you want to avoid winding up with the kind of boom-bust funding cycle, that all kinds of our social programs are subject to now. And I'll leave there.