The Scottish Parliament
Pàrlamaid na h-Alba

Official Report

# HEALTH AND SPORT COMMITTEE

Tuesday 10 January 2012

Session 4

# Tuesday 10 January 2012

## CONTENTS


| | Col. |
|---|---|
| **ALCOHOL (MINIMUM PRICING) (SCOTLAND) BILL: STAGE 1** | 779 |


## HEALTH AND SPORT COMMITTEE
**2nd Meeting 2012, Session 4**

**CONVENER**

*Duncan McNeil (Greenock and Inverclyde) (Lab)

**DEPUTY CONVENER**

*Bob Doris (Glasgow) (SNP)

**COMMITTEE MEMBERS**

*Jackson Carlaw (West Scotland) (Con)
*Jim Eadie (Edinburgh Southern) (SNP)
*Richard Lyle (Central Scotland) (SNP)
*Fiona McLeod (Strathkelvin and Bearsden) (SNP)
*Gil Paterson (Clydebank and Milngavie) (SNP)
*Dr Richard Simpson (Mid Scotland and Fife) (Lab)
*Drew Smith (Glasgow) (Lab)

*attended

**THE FOLLOWING ALSO PARTICIPATED:**

Professor Timothy Stockwell (University of Victoria, British Columbia)

**CLERK TO THE COMMITTEE**

Douglas Wands

**LOCATION**

Committee Room 1

# Scottish Parliament

## Health and Sport Committee

*Tuesday 10 January 2012*

[The Convener *opened the meeting at 18:00*]

## Alcohol (Minimum Pricing) (Scotland) Bill: Stage 1

**The Convener (Duncan McNeil):** Good evening and welcome to the second meeting of the Health and Sport Committee in 2012. I remind everyone present that mobile phones and BlackBerrys should be turned off, as they can interfere with the sound system.

The only item on this evening's agenda is the committee's second oral evidence session on the Alcohol (Minimum Pricing) (Scotland) Bill, which will be conducted via videoconference with British Columbia, Canada. I welcome Professor Timothy Stockwell of the University of Victoria, British Columbia, who is our witness for the session. Good morning. I understand that you wish to make a presentation. I invite you to do so before I ask committee members to ask questions. Thank you for your time.

**Professor Timothy Stockwell (University of Victoria, British Columbia):** It is my pleasure. Good evening, everybody.

I can give the committee a two-minute or a 10-minute version, depending on what it wishes. My group in British Columbia has been looking at the effectiveness of minimum pricing policies in Canada. I have results to share with the committee from a study that was published a couple of weeks ago, and I can also share preliminary results from other studies. I was going to give a little bit of context, but I do not know how long you want me to speak for. Would you be happy for me to do that before I present the results?

**The Convener:** Yes, that would be helpful, Professor Stockwell. We have around 10 minutes for a presentation. We appreciate that.

**Professor Stockwell:** There has been minimum pricing in Canada in around eight of our 10 provinces for many years in most instances. It is part of a suite of pricing strategies that can target the ethanol content of alcoholic drinks. The Alcohol (Minimum Pricing) (Scotland) Bill would do precisely that by specifying a unit of alcohol as having a minimum price. That is a very good example. The rationale for that, of course, is that the risk of alcohol-related harms depends on the dose. That applies to whether the harms are acute and short term, such as injuries or poisoning, or chronic harms that arise from various diseases resulting from alcohol consumption.

I have dose response curve illustrations. The slide shows one for breast cancer, which is a summary of all the studies that have ever been published on the risk of breast cancer. You can see the level of alcohol consumption going up to 20g, 40g, 60g and so on along the bottom. Each of the lines would be a bit more than two units. The point is that there is an exponential increase in risk with rising consumption.

The next slide relates to cancer of the oesophagus, which is another common cancer. There is a similar exponential curve.

The effect also plays out at the population level, of course. The next slide shows data on hospitalisations in the United Kingdom caused by alcohol. Members are probably very familiar with those data, which are from a period of rising per capita consumption. I understand that consumption levelled off shortly after that, although perhaps not in Scotland.

The principle of raising alcohol prices to reduce consumption is well established. There are two high-quality reviews that effectively consider every single published study on the subject. One of those reviews was done by somebody from the business world—a marketing professor in the United States—who identified 132 studies published after 1945. Across the board, his estimate was that a 10 per cent price increase leads to a 5 per cent decrease in consumption on average.

An even more careful study by Alex Wagenaar from the University of Florida had a higher bar for quality. It considered 112 studies that had been published since 1823 with 1,003 estimates. It came up with a similar conclusion but also concluded that prices affected the heavy drinkers as well. I will return to that topic.

As you are aware, there is also evidence that price and taxation have an impact on harm. We do not necessarily need to worry about effects on consumption, but there are studies that show directly that increases in price and tax reduce rates of alcohol dependence, liver cirrhosis, road trauma, assaults, sexually transmitted diseases and, in fact, all forms of alcohol-related mortality and morbidity.

Those studies concern across-the-board price rises, so why introduce minimum pricing? The theoretical reason is that we know that the heaviest drinkers gravitate towards the cheapest alcohol. One US study found that the top 10 per cent of drinkers with the highest risk paid on average 79c, compared with the bottom 50 per cent—the light drinkers—who paid nearly $5 per

standard drink. We also know that young people and high-risk drinkers are especially responsive to minimum prices.

There are some good theoretical reasons for minimum unit pricing, but there have been hardly any studies. In fact, until we published our work, we could not find a single empirical study into whether a minimum price would have any effect.

I note that our national alcohol strategy in Canada recommends—I believe that there are 43 recommendations—that every one of the Canadian jurisdictions should be encouraged to adopt minimum prices, which the strategy calls "social-reference prices", that they should be indexed to the consumer prices index and that they should be reviewed annually to report compliance.

I also note that a number of other provinces have minimum prices in bars, restaurants and hotels. The social-reference prices mostly apply in liquor stores. The Government in British Columbia owns about 200 liquor stores in the province and there are about 800 privately owned stores. It has a monopoly on distributing the alcohol, so it can set the starting price. In its own stores, it will hardly ever sell below the minimum prices—there is one exception, which I will explain.

Some jurisdictions also index the minimum prices to inflation, but British Columbia has not done that.

One of the loopholes is that, if the products are not selling well in its liquor stores, the Government can delist them and sell them for a lower price, which surprised me. However, those delisted, cheap products account for less than 1 per cent of sales. It is a tiny proportion.

Slide 13 gives you an idea of the kinds of minimum prices that are charged for a Canadian standard drink, which is nearly double a British unit; it is almost 14g, compared with your 8g unit of alcohol. However, my observation is that Scottish and British people drink alcohol in pretty similarly sized servings to the Canadians—actually, I think that they are larger servings.

The slide shows how the minimum prices vary by beverage type and across different provinces. British Columbia has some of the lowest minimum prices; Ontario is intermediate; and Saskatchewan is among the highest. Those three examples show the range in Canadian provinces.

One of the loopholes concerns 75 per cent strength rum, which is at the bottom of the slide. Because the minimum price is not set to a standard amount of ethanol, it can still be cheap per standard drink, compared with a 40 per cent spirit, such as a tequila.

The next slide is a map of Canada. British Columbia is on the left and Saskatchewan is a bit to the left of the middle. I will give you some of our analysis of the impacts of minimum pricing in those two provinces.

The first case study concerns BC, where the Government alcohol monopoly has set minimum prices for more than two decades. That is the study period in our paper. In fact, only spirit prices were regularly updated during that time. Beers, wines and alcoholic sodas were hardly ever adjusted—only two or three times—but that makes for a nice natural experiment, because there were long periods with no change followed by a sudden, substantial change and then nothing. That enables us to compare what happened with the different beverages and over time.

One of the unfortunate consequences of that system from a policy point of view is that every time the Government dares to raise the minimum price it makes the front page of the newspapers and there is a great deal of alarm and criticism of the Government getting into our pockets, robbing us and so forth. Such moves are extremely unpopular, whereas in Australia, where the excise taxes are adjusted on a quarterly basis, no one notices. There, it is routine for the excise taxes to be adjusted in line with the cost of living.

I mentioned that the Government monopoly is partially privatised as regards where the alcohol is sold. Someone who was visiting British Columbia who went into a store would find it hard to notice whether it was a Government store or a private store; they would not know the difference. Given that the prices that the Government sells at in its stores are the prices at which it sells to restaurants and bars, which then add on their own profits, the minimum prices that it sets affect in some way, directly or indirectly, the prices of all alcoholic products that are sold, regardless of the type of outlet in which they are sold.

The graph on slide 15 shows the four main beverage types: spirits, beer, wine and coolers. We have quarterly data over the 20-year period—in fact, we have 84 quarters' worth of data on prices and sales. Each little adjustment represents an adjustment for CPI or an adjustment in the minimum price rate that has been applied to a litre of spirits, a litre of beer or a litre of wine. The top line, which shows the price of spirits, is the only one that has kept pace with inflation. The figures are in standardised, CPI-adjusted dollars. The price of the other three beverages, particularly coolers or alcoholic sodas, has tracked downwards and has not kept up with inflation.

In our time-series analyses over 20 years, we have controlled for the effects of time of year, overall trends in the data, trends in average alcohol prices and trends in household income,

and we have used inflation-adjusted minimum prices to predict the volume of alcohol sold for each main beverage. Our results are that, overall, for any one alcoholic beverage, our model suggested that a 10 per cent increase in its price would reduce its consumption per capita by 16.1 per cent in comparison with consumption of all the other beverages.

There are some substitution effects. If we look just at individual beverages and forget what is happening with the other types of beverage, we find that there is a relatively small but significant effect on beer—a reduction in consumption of 1.5 per cent—whereas there are larger effects for the other beverage types: spirits, wine and alcoholic sodas.

Overall, because of the substitution effect, we find that a 10 per cent increase in minimum price produces what appears to be a fairly modest 3.4 per cent reduction in overall consumption but, even though that looks small, we should bear in mind that it is the impact on total alcohol sales, whether they are made in restaurants and bars or private or Government liquor stores. Given that the minimum prices affect only a minority of the products that are sold, it is quite surprising that they should affect such a large proportion of total alcohol consumption.

Since then, we have looked in more detail at possible impacts on harm. We have used quarterly data on alcohol-related hospitalisations across 89 areas of the province over eight years. We have not submitted this work for publication, but I will share with you that our estimate is that a 10 per cent increase in the minimum price across the board resulted in a 4 per cent reduction in acute alcohol-related hospitalisations over the period, controlling for all the other factors. We are talking about injuries and poisonings. There was a less pronounced effect for chronic illnesses, which is pretty much what we would expect, given that we were looking at short-term impacts. It takes a number of years for chronic illnesses to develop, so that is the kind of result that we would have predicted.

18:15

Before I finish, I turn quickly to Saskatchewan. We have another paper in preparation on the situation there. There is interest in Saskatchewan because it decided to adopt a fairly radical approach to increasing minimum price. Late in 2009, Saskatchewan had a problem with a shortfall in revenue—I believe that it was to do with provincial potash sales, which are apparently important for the economy there. As luck would have it, there was a public health-inspired proposal to adjust all minimum prices in accordance with the strength of alcohol, pretty much like the Scottish Government proposes to do, although the Government in Saskatchewan did not put it in terms of the standard drink and just set different rates for different strengths. The proposal was adopted as a means of raising more revenue to make up the shortfall. There were four strength categories for beer. One category was for beers below 6.5 per cent and the highest rate was for beers above 8.5 per cent. The proposal resulted in a range of minimum prices, with higher ones for stronger alcohol. There were two strength categories for wine, two for alcopops and five for spirits.

I hope that the graph on slide 20 shows what happened, without giving you any statistics. We seasonally adjusted the data, because there were big seasonal variations in the sales of each beverage type. When we smoothed those out, we got detailed data for two years before the intervention and one year afterwards. It is clear that, before the line in the graph, which indicates the introduction of minimum pricing, there is a trend of increasing consumption and, after the line, there is a trend of steady or decreasing consumption for all the beverages. We used the same approach as we did in British Columbia and our statistical assessments suggest that there was a similar overall effect on consumption. In this case, there were stronger effects for beer, particularly high-strength beer, than there were for other beverages. There was a massive reduction in the sales of beers above 8.5 per cent in strength.

There was a stronger effect on sales off-premise rather than on-premise, which is what you would expect, because a minimum price has a more direct effect on prices in off-premises—off-licences if you like. There was also a stronger effect for higher alcohol strength varieties of beer, wine and spirits. The graph in slide 23 shows an example of the shift that occurred—the red part is the stronger beer and the green part is less strong beer.

In Canada, minimum pricing has been implemented fairly inconsistently and has differing impacts on consumption. Loopholes permit sales of very cheap alcohol and most of the minimum prices have failed to keep pace with inflation. However, periodic price increases that have occurred have triggered reductions in consumption and, it appears, some harms. It appears that reduction in consumption is more likely when the minimum price is significantly higher. That is fairly obvious—if there is a low minimum price, it will not have such a big effect. The reduction in ethanol consumption is greater when there are across-the-board increases for all beverage types instead of increases that target a particular beverage, which allows a lot of substitution.

Many people object to pricing strategies, but minimum pricing is perhaps one of the least objectionable strategies. I am sure that that is why you are considering it in Scotland. All pricing strategies have the most impact on heavy drinkers, but minimum pricing especially targets heavier and younger drinkers, because they mostly prefer cheaper drinks. Minimum prices can be adjusted so that they are higher for more hazardous products, which the Scottish Government proposes to do.

A high proportion of all alcohol consumption, whether it is in the United Kingdom or in Canada, is done in a way that is not consistent with low-risk drinking guidelines. About two thirds of all alcohol that is consumed is potentially putting the drinker at risk of some kind of harm. That should be taken into account

We are doing further studies, which are needed to confirm whether there is a disproportionate impact on alcohol-related harms from adjusting minimum prices. I am happy to answer any questions.

**The Convener:** Thank you very much.

**Fiona McLeod (Strathkelvin and Bearsden) (SNP):** Good evening, Professor Stockwell. It is great to have you here by video link. I do not know whether you remember, but I was in the audience when you were in Scotland a few months ago. I am reminded of how shocked you were when you saw the statistics on alcohol misuse and the harm caused in Scotland. Could you put Scotland's problems with alcohol misuse in an international context?

I also want to hear your view on our minimum pricing proposal, given the amount of work that you have done on the subject—in Australia as well as in Canada, if I remember rightly. Do you think that the proposal will have the desired result, which is a reduction in the harm caused by alcohol misuse?

One of the witnesses in our session this morning said that your data could not be disaggregated for moderate, hazardous and harmful drinking. However, I remember that, when you were here in Scotland, you spoke about the data that you had collected in those terms, and that is clear from the Meier and Wagenaar studies that you mentioned in your presentation this evening. Could you expand on that?

**Professor Stockwell:** Sure. It is very nice to see you again, at more of a distance this time. You are correct in thinking that I was a little shocked—you can tell from the way that I speak that I am a Sassenach and originally from the UK. When I left, around 25 years ago, Britain was about 25th in the international rankings for per capita consumption; it was very moderate and a long way behind. Within about 15 years, after I went to Australia, I noticed that Britain had shot up in the rankings; I think that at one point it was third.

Scotland and the north—particularly the north-east—of England have always had the highest consumption in the UK. From memory, the statistics that I saw on per capita consumption in Scotland show that it is roughly 50 per cent higher than in Canada.

I was also quite shocked at how low the prices are in Britain and, when I have been out in the streets and cities on going back home, at how much vandalism and disorderly behaviour there is. It often does not feel very safe. I find that quite depressing, as I am sure you do, too.

I am convinced that the bill will be effective. In review after review of the evidence of what works in the alcohol policy area to improve public health and safety across the whole population, pricing and taxation strategies always come up as number 1. The problem is, of course, that those strategies are the most unpopular with the general public, so it is brave of you to follow that course.

You will be doing something that—from the scientific point of view—will without a shred of doubt save lives, reduce healthcare costs, prevent death and injury on the roads, prevent birth defects, and reduce public violence and a range of other things.

However, minimum pricing is felt to be an attack on individual freedoms; the right to drink is very dear to many people, and particularly the Scottish. If you can get the bill through with enough public support, it will certainly work. I believe it to be the most effective type of pricing strategy, not because it is just politically viable or a little bit more palatable than a strategy across the board but because—as I have mentioned—there is now evidence from three countries. I have seen evidence in Canada that I have not shown to you: we have a survey of what people pay for their alcohol according to whether they are moderate, light or heavy drinkers. As in the UK and in the USA, the heavier drinkers gravitate towards the cheaper alcohol. I think that the bill will be effective.

On the question whether we have any disaggregation, each study cannot cover the whole area; we should not look to just one study to answer every single question. The study that we have published answers one very important piece of the question: in public health, the total consumption of alcohol is known to be very predictive of the levels of harm. Scotland has much higher rates of liver cirrhosis and alcohol-impaired road traffic problems than Canada because its per capita consumption is so high. Our study looked at total sales data, but it is very good

on class sales data too. It is just part of the overall puzzle.

**Richard Lyle (Central Scotland) (SNP):** Good evening. One of your presentation slides shows minimum prices in Canada by jurisdiction. Eight out of 10 provinces have minimum pricing in Government and private liquor stores, but Alberta and Quebec do not. How do those two provinces compare health-wise to the other provinces? Is health in the other eight provinces improving compared to Alberta and Quebec? Do you have any data to back up that suggestion?

**Professor Stockwell:** That is a very good question and we are currently looking into it. Unfortunately, although we have world-class sales data, it is hard to get data on alcohol-related health problems across all the provinces and we are in the process of accessing that. I can say that the consumption of alcohol in Alberta is high among Canadian provinces.

Quebec has a slightly different system, which is a partial alcohol monopoly, and there is a very French approach to drinking there. The people there appear to have different drinking patterns and patterns of harm.

The best way of determining whether a policy works is not to compare cross-sectionally at one point in time between neighbouring jurisdictions, because there are so many differences. The most scientific and appropriate way is to look at changes over time in one jurisdiction compared with another in which there has been no change. When such studies have been conducted, pricing strategies have always emerged as being incredibly effective.

**The Convener:** Professor Stockwell, I have a question on the theme of the provinces where there is price control. Do you have any comment to make on the point that, although the price of alcohol is broadly the same across the UK, Scots drink 20 per cent more than our neighbours south of the border? Are there any data comparable to that in the Canadian provinces? I am talking about the cultural issues that you referred to such as the different behaviour in the French-speaking provinces.

**Professor Stockwell:** Most of the northern provinces and territories—places such as the Northwest Territories, Nunavut and the Yukon—have the highest level of consumption. The western provinces such as Alberta and British Columbia also tend to have pretty high levels. Over on the east, we have some lower-consuming provinces, such as Ontario, where consumption is fairly low. We have a fair amount of variation.

The best way to see whether a policy works is to look at changes in a province over time. In the evidence from Saskatchewan that I showed you, the level of consumption goes in one direction and then goes in the other direction after an increase in the minimum price. That is a more effective and scientifically appropriate way of judging the effectiveness of the price increase than comparing it with another place that has a different culture, different laws and who knows how many other differences.

**Bob Doris (Glasgow) (SNP):** Thank you for the presentation, which was very helpful. All the pieces of the jigsaw seem to be falling into place and the evidence is showing that an increase in price means that consumption goes down. This is the latest in a long line of studies, and I do not believe that we have got a study that shows anything other than that.

It is obvious that many people in Scotland want to get on and introduce the minimum price. One of the pieces of evidence that the Scottish Parliament is looking at to show the benefits that come from reduced consumption is the Sheffield study. I was interested to find out that research from British Columbia shows that a 10 per cent increase in price led to a 4 per cent decrease in the number of acute alcohol-related hospital admissions. Have you had a chance to look at the Sheffield study data? In particular, the modelling shows that year 1 alcohol-related hospital admissions could reduce by as much as 1,200 in a single year. Is that the kind of impact that you would expect to see if minimum pricing comes in in Scotland?

**Professor Stockwell:** Absolutely. I worked with the Sheffield group and was on the advisory committee when it developed its first model. Of course, the impact is determined by where the minimum price is set, and I know that the Sheffield group is preparing a model for the Scottish Government that will look at different impacts according to whether the minimum unit price is 30p, 40p, 50p, 60p or 70p.

The answer to your other question is that, yes, I would expect those kind of impacts. The group has done a great job of creating its model. It is working with us to apply the model to Canada as well, in Ontario and British Columbia. It is using some of the new estimates from our work to refine its model. The model is based on the best-available data, but it is only a model. However, ours is the first study to make a direct empirical estimate of responsiveness in terms of consumption and harm. In some ways I wonder whether, when we have that data, we need the models, but of course we need a better predictor for different jurisdictions of what the effects are going to be. A reduction of 1,200 in hospital admissions in the first year is entirely believable. The number will go up or down depending on where you are brave enough to set the minimum price.

18:30

**Bob Doris:** Thank you for that answer. I also have a question on moderate drinkers. The evidence that we heard at this morning's committee meeting suggests that all groups of drinkers, whether moderate or hazardous, will get a public health benefit from minimum alcohol pricing. I would be interested to know about that.

In garnering public support for minimum pricing strategies, is the argument made strongly in Canada that all drinkers and those who do not drink at all see the social ills of overconsumption of alcohol in society, whether in terms of crime and law and order, acute admissions to hospital or the long-term cost of chronic conditions? Have arguments in that regard been marshalled effectively in Canada to gain public support for minimum pricing? Such arguments have been very effective here, so I am curious to know what the experience has been over in Canada.

**Professor Stockwell:** You are probably way ahead of us in that. You have to be, because you have lodged a bill in Parliament on minimum alcohol pricing. You might say that we are already doing that in a way in our provinces, but I think that I showed the committee that most of the provinces do not peg the price to inflation and that there are loopholes because they do not link the price to the ethanol content of the drinks.

In the past two decades there has not been much public dialogue on the issue. For example, we produced a report that I think was the first one to recommend a standard minimum price for a standard drink or unit of alcohol and which led the Sheffield group to do its modelling and make its recommendations.

We developed a number of recommendations for national policy on alcohol pricing. A member of the expert committee took that to the finance committee in Ottawa and said "Look, here's the case for adjusting excise taxes. You've adjusted them once in the last 25 years. This is not a good thing for public health." The reaction was "Well, we've heard this from the tobacco people but we've never heard it from the alcohol people." That was the reaction from the finance people in the federal Government, who had never heard that information before.

It is apparent in most provinces or jurisdictions that there is no conversation between health and finance, yet the financial or economic policy issue is the most significant and potentially effective for health. We need more conversations and they are beginning to happen. Certainly, in the past three or four years there have been a lot more conversations about the issue, but I think that we lag behind you in that regard.

**Bob Doris:** Thank you very much, Professor Stockwell. I may have some more questions later on, but I will let some of my committee colleagues come in now.

**The Convener:** I have a list of members here, but I just have one question for Professor Stockwell first. You challenged us to be brave enough about the minimum price per unit. How brave should we be?

**Professor Stockwell:** If we do direct equivalences, which is a dangerous thing, I guess that the highest minimum price in Canada at the moment, which I think is a pretty good starting point, is $1.50 Canadian for a Canadian standard drink. That would work out at—I have to do this pretty quickly in my head—about $1.10 Canadian per unit of your units. If we translate that at the current exchange rate, it would be about 75p at the higher end. So 75p per unit of alcohol is at the highest level. That is pretty much what Saskatchewan introduced, and I showed the committee some of the impacts on consumption there in my presentation.

In the months after the pricing change, the chief of police in one of the big cities in Saskatchewan—I think that it was Saskatoon, but it might have been Regina—commented on a dramatic reduction in public order problems around late-night entertainment venues in cities at the weekends. He said that crime had gone right down and that public order problems had reduced.

A minimum unit price of 75p or 80p would be a good starting point; you could then peg it to inflation.

**Gil Paterson (Clydebank and Milngavie) (SNP):** It is nice to hear from you, Professor Stockwell. Have you an idea of how the costs that you mentioned relate to average disposable income? A direct comparison with Scotland in money terms will not work unless we know the average wage. We could probably find that out, to learn whether there is a correlation in relation to the higher minimum price that you suggested for Scotland.

**Professor Stockwell:** As I said, it is dangerous to make the comparison. The issue needs a little more careful inquiry.

**Gil Paterson:** I wonder whether the minimum price's effect flatlines. If we want the effect to continue and be maximised, must we stimulate a price increase every so often?

**Professor Stockwell:** We should look at the issue from the other end and try to fight against a decline in the value of the minimum price. What typically happens is that a price is set at a particular level but then declines in value, and consumption goes up. At the very best, we get

periodic adjustments in line with inflation—that has happened for some beverages in some provinces—but by and large the minimum prices seem to have gone down in value.

What you do will depend on the effect that you want. If you want an increasing benefit, you will gradually increase the value of the minimum price. Given that you are making a monumental political effort to make minimum pricing happen, I suggest that you set the price at a very good level and ensure that you adjust it for inflation. I reckon that you should adjust it quarterly for inflation; you will have your own mechanisms for doing that. The more often you do it, the less people will notice. It is such a political hot potato and so controversial to increase the price of our favourite drug. It is a courageous thing that you are doing.

**Gil Paterson:** Strictly speaking, is it the cost that has the effect, rather than the shock tactics of the price going up?

**Professor Stockwell:** I believe so. There are price adjustments all the time. In a typical Government liquor store there are 5,500 different products, with a range of prices. I am sure that some of the heavier drinkers are price savvy and keep tabs on where they can get the best deals. However, if there is a minimum price, the price cannot go below that—a person just cannot get a popular beverage at a price below the minimum price. There might be a shock, but it does not wear off. People have their disposable income, whatever the amount. At the very least, you must maintain the value of the minimum price and ensure that it does not decline, to keep the effect.

**Gil Paterson:** Thank you. I might come back to you later.

**Jim Eadie (Edinburgh Southern) (SNP):** Good morning, Professor Stockwell. In your paper on the experience in British Columbia and in your presentation, you made it clear to the committee that the impact of minimum pricing is a substantial reduction in alcohol consumption, which is interesting. In your responses to Fiona McLeod and Bob Doris you were confident about the positive impact that minimum pricing would have in Scotland.

You said that a 10 per cent increase in the minimum price brought about a reduction in consumption of all beverages of 3.4 per cent. Such a reduction does not appear significant, as you said, but for specific types of alcoholic beverage, such as alcoholic sodas and packaged cider, the reduction was substantially greater. Will you say a little more about the differential in the decrease in consumption?

If we apply the lessons of Canada to Scotland, are you in a position to comment on whether minimum unit pricing will put Scotland in a better position in relation to the substitution effect that is the result of the particular way in which reference pricing works in Canada?

**Professor Stockwell:** Theoretically, you are in a much better position. Yours is the purest approach because you are starting from the public health aspect. Usually, minimum prices are introduced to protect Government revenue while health considerations, if they were ever there, are not at the forefront of people's minds. As I said at the beginning, it is the ethanol that does the harm. The approach is to price according to ethanol content and then give incentives for people to choose lower-strength beverages because they become cheaper than the higher-strength alternatives.

We are learning about particular beverage effects. Almost every day, we do more analyses and I learn more. All that I can say at present is that, when we found that beer was not affected as much as other drinks were, we thought that that was normal because we knew that demand for beer is less affected by price changes than demand for spirits and wine is. However, in Saskatchewan, we found that beer was the most affected, probably because there were particularly heroic minimum price increases on beer that were graded according to strength. From memory, for stronger beer above 8.5 per cent, I think that a 10 per cent price increase led to a reduction in demand of about 25 per cent.

There are many complexities to do with cross-price elasticities. If the price of one product goes up, there is substitution with another. We saw that clearly in BC and Saskatchewan. Spirits were really hammered throughout the 20-year period and there was a substitution effect of increasing beer and wine consumption as a result. However, in Saskatchewan, when beer was hammered, there was an increase in the consumption of alcoholic sodas or alcopops with a lower alcohol content. That is because there was a differential increase. The increase in the minimum price of beer was much bigger than that for alcopops.

The proposals in Scotland should create a fairly level playing field, although there are complexities because the starting point for each beverage type is different. I suspect that, by and large, beer is about the cheapest beverage and spirits are the most expensive, with wine somewhere in the middle.

It will be fascinating to see what happens. A 3.4 per cent reduction in consumption might not seem large but, as I said, it is across the board. The figure depends on by how much the minimum price increases. A minimum price of 70p or 80p would in effect be an 80 per cent increase in the minimum price in Scotland, compared with the cheapest alcohol now. The issue is complicated,

but the proposals in Scotland will be good for preventing substitution.

**Jim Eadie:** That is helpful.

In your presentation, you mentioned the 4 per cent reduction in hospital admissions that occurred in Canada as a result of the changes that were made. Bob Doris referred to that. Has any other impact assessment been done of the public health and public safety benefits of the reduction in alcohol consumption for wider society in the provinces that have adopted reference pricing?

**Professor Stockwell:** Unfortunately, no—there have just been the two things that I mentioned. One was the observation from the Saskatchewan police. That was not a formal scientific report, but it used the police's crime data. That observation was that crime in public places at weekends in big cities in Saskatchewan had gone right down.

What you raise is the reason why we are doing our research, which we started about two years ago. Minimum pricing is an interesting emerging issue. Canada is one of the few jurisdictions that has minimum prices and nobody had studied the effects. If you ask us again in about a year, I hope that we will have more case studies to report and that a Canadian version of the Sheffield model will have been developed.

**Jim Eadie:** Finally, can you say a little about the differences between the UK and Canadian alcohol markets? Is there anything in those differences that would undermine your confidence in the positive impact of introducing minimum unit pricing? Are you concerned that, because of the differences in the markets, the UK would have to adopt certain aspects of the alcohol market in Canada in order to derive the benefits that have been derived there?

18:45

**Professor Stockwell:** I guess that the critical issues will be compliance and enforcement. You have a totally different situation. It is easy for most Canadian provinces to set a minimum price, as they have a monopoly on distribution. They simply sell the stuff for a particular price, and they will not sell it below a certain price. I guess that, in Scotland, you will simply have to keep tabs on whether the retail prices are compliant.

There is quite a complex calculation to make when there are thousands of different products with different strengths and volumes. Will the shelf price be compliant? How will you check? That is one difference. Apart from that, consumers do not really notice whether they are in a Government or private liquor store or a bar—people's drinking and purchasing practices are very similar. They drink and purchase on the basis of the beverages that they like and their price. I do not think that who takes the profits matters.

**Drew Smith (Glasgow) (Lab):** I welcome Professor Stockwell. You said that the situation in Scotland is completely different from that in Canada, particularly in relation to the market and how retail works. That appears to be the case. Essentially, Canada has a nationalised retail system, whereas we have an almost completely unregulated market. For that reason, one criticism of minimum pricing is that it would create a windfall for supermarkets.

Can you tell us a little bit about the extra revenue that is raised because of minimum pricing? How is that money spent? What effect does it have? Does it simply go into general revenue or is some of it focused on tackling alcohol harm? Are there any wider issues that relate to the accessibility of alcohol sales in Canada that we should bear in mind as well as the pricing element?

**Professor Stockwell:** You have asked a lot of very good questions. There are many Governments in Canada: there are 13 provincial and territory Governments and there is the federal Government. With one or two exceptions, the provincial Governments simply put minimum pricing revenue into general revenue. In French-speaking Quebec, there is the prevention and education éduc'alcool programme—I am very bad at French. A proportion of the revenue is put into media campaigns. In fact, a media campaign has been launched just today that is funded from liquor taxes in Quebec and which promotes our new national low-risk drinking guidelines.

I do not want to exaggerate or minimise the differences in the Government systems. It is really about distribution. Only around half of all the off-sales are made through Government liquor stores, and half are private. There is a monopoly on the distribution of alcohol, so prices can be set. Therefore, there are some differences, but I do not think that they are material.

The revenue almost adds up to the direct costs. A nice national study was done in which the direct crime and health costs attributable to alcohol in every province were looked at, including the costs of policing and hospital beds. In every province, those direct costs just about exceeded the revenue collected. That does not include all the indirect costs—the costs for industry and so on. On private profits, part of me thinks from a public health and safety point of view that it does not matter who takes the profits; rather, what matters is having fewer dead and sick people and more healthy babies.

I understand that the windfall has given you the opportunity to introduce a special levy on alcohol

sales in supermarkets. If an adjustment could be made according to the amount of ethanol sold, that would be even more effective. It could give an incentive to sell drinks with a lower alcohol content. The difference is interesting, and I am sure that the issue will be controversial, but you have the best of both worlds in supplementing minimum pricing with a levy on supermarket sales.

**Drew Smith:** Unfortunately, the levy has not been implemented.

I want to ask about the mark-up of products and the variation in the minimum permitted price within a range of products. We have little evidence on what industry might do in response to minimum pricing and on whether unintended consequences might arise. What evidence do you have on what happens to the price of other products when the price of a particular product changes? How does industry react?

**Professor Stockwell:** Industry will, indeed, try to react: companies will work out the types of product that will be most profitable for them. I am not sure that it is relevant, but I will tell the committee of an experience in Australia. Tax changes were introduced to encourage sales of beer with a lower alcohol content, and some curious things happened. A threshold of, I think, 3.1 per cent alcohol was applied. Some beers, although not many, were already below 3.1 per cent alcohol, but a little tax benefit was offered for beers below 3.1 per cent. In Northern Territory, some beers were 3.2 or 3.3 per cent alcohol, and when the new law came in, the manufacturers just changed the strength to 3.1 per cent and flogged the beers to take advantage of the tax break.

I can think of examples where such pricing structures have encouraged the industry to provide beverages with a lower alcohol content. Structures can also give incentives to consumers to choose beers with a lower alcohol content, and they should also encourage retailers, if they can get more profit, to promote and display lower-strength beverages at the cheaper end of the range. That may be a good thing.

**Drew Smith:** Different systems operate in Canada, where provinces make their own decisions. Will you tell us more about how that affects competition? Are there illicit sales? Have online sales increased? Do people cross a border to buy something slightly more cheaply?

**Professor Stockwell:** That happens—but there is a real difference between our countries. Canada is huge. It is enormous. Our border with the United States is extraordinary; it is thousands of miles long. There are lots of entry points, and the border police are very strict. The border between England and Scotland does not have line-ups, with customs officials looking in the boots of people's cars to check whether they are smuggling drink.

What you suggest might apply a little across the Canadian provinces. We have the Rocky Mountains. It is quite hard to get to Alberta from most parts of BC, except for a few places. Local, geographic conditions would apply. However, by and large, people go for convenience and buy locally, although there are some mail-order sales.

Another loophole involves things called u-brew and u-vin, which Scotland does not have. It is extraordinary. Companies will brew beer for people, but it is called home brew because, at some point in the process, people are allowed to come in and drop a little bit of yeast into the mixture. The beer is then considered to be home brewed, and no tax applies. The cheapest wine and beer can be obtained in that sort of way, but it requires a bit of organisation and discipline, and it accounts for only about 4 per cent of alcohol sales in BC and Ontario.

**Dr Richard Simpson (Mid Scotland and Fife) (Lab):** We have had quite a long discussion about the difference in the market. Supermarkets here are now the main drivers of the increase in the consumption of alcohol, and that is a big change. It used to be that 50 or 55 per cent was off-trade and 45 or 50 per cent was on-trade, but now 70 per cent is from the supermarkets or off-trade and only 30 per cent is from the pubs and restaurants. Indeed, harmful drinkers get 90 per cent of their alcohol from supermarkets. Therefore, what the supermarkets do in response to minimum pricing will be fundamental to whether the measure works.

We have learned that the average unit price in the basket of alcohol of a group of harmful drinkers—I am talking about drinkers who were drinking 197 UK units a week, which I suppose would amount to about 100 Canadian standard drinks—was 43p, so it does not look as if a minimum price, which it was originally proposed would be set at 45p, would make a difference. There will be quite a lot of substitution. That does not take into account what the supermarkets will do.

Do you agree that that market element will be pretty important to whether minimum pricing works? We cannot control what the supermarkets will do with drinks that are just above the proposed minimum price. It is possible that they will reduce the cost of those drinks, particularly if they are more profitable.

**Professor Stockwell:** The only observation that I can make relates to a specific change in a minimum price that I have looked at in detail. In 2010, there was a significant change in the minimum price of spirits in British Columbia,

whereby the price of a litre of spirits went up from $30.66 Canadian to $31.66 Canadian. That affected the price of roughly 26 per cent of the several hundred products that were spirits. We were interested to see what effect that would have on the slightly more expensive beverages, which I think is what you are referring to. There was a ripple effect upwards.

That situation is not comparable with the situation in Scotland—we were looking at liquor stores in British Columbia, not at Sainsbury's, Tesco or Waitrose. However, there was certainly an upward ripple in the prices of all the other products. I have had advice from industry sources—brewers in Canada—that when there is an increase in minimum price, there tends to be a ripple effect all the way up, because they like to make a distinction between their premium drinks and their cheap ones.

You are quite right. We do not know what will happen. What is in Scotland's favour, I guess, is the amount of disposable income that people have. If some of the very cheapest drinks are eliminated, minimum pricing should still work in your favour, even if there are some slight compensations as regards the higher-priced drinks. The situation will have to be monitored. Minimum pricing will be more in your favour if you can apply the levy that I thought was going to go ahead, which I gather has been stalled. It would be particularly in your favour if that levy were based on the amount of alcohol—and, in particular, the amount of ethanol—that was sold.

**Dr Simpson:** Thank you.

My other question is about differences in pricing within particular categories of alcohol, which might be important. It is clear from the papers that you have sent us and from others that the minimum price in Canada—the social reference price, as it is called—is set at different levels not only on different types of alcohol, but at different levels within the same type. You have already mentioned that rum and tequila are priced quite differently, so there does not appear to be an ethanol-based uniformity.

**Professor Stockwell:** Exactly.

**Dr Simpson:** I know that when our predecessor committee was considering the Alcohol etc (Scotland) Bill in the previous session of Parliament, it received evidence on a problem that had emerged in one province in relation to beer with a strength of 10 per cent. A substantial SRP was imposed on such products, which reversed the increase in their sale. There was a lot of substitution, but the increase in sales of very strong beer was reversed.

How important is the difference between what is proposed here, which is a uniform, flat, ethanol-based price, and the existence of differentials between products in Canada? To what extent will that make it more difficult to apply what is happening in Canada?

**Professor Stockwell:** Theoretically, from a purely public health perspective, the idea of pricing ethanol in such a way that the more ethanol someone purchases for their consumption, the more expensive it will be, what is proposed in Scotland is perfect. I guess that it would be more perfect if the same could be done for excise taxes as well, but that is another issue.

You commented on the difference in pricing between tequila and 75 per cent rum. You are absolutely right that in that instance the minimum price was applied to a litre of beverage, not a litre of ethanol. The fact that it was not an ethanol-based approach that was adopted resulted in some of the most dangerous products being given a price advantage.

19:00

It is essential that you persevere with having a minimum price per unit of alcohol. I imagine that, in the modern computer age and with the way in which all products and prices are set up, it ought to be possible to programme pricing to take account of unit minimum pricing. There should be programmes that do that very readily.

So, hats off to Scotland. It is a problem here in Canada that we are not doing the same—that is, apart from Saskatchewan. That may have been the province to which Dr Simpson was referring; it really hit the strong beer, and consumption of it fell through the floor.

**Dr Simpson:** The UK Government is talking about two things. On the one hand, it has continued what the previous UK Government said that it would do, which was to increase the excise duty by 2 per cent above inflation annually for the next few years. That is not a huge reversal of the previous increase in affordability, but when combined with a reduction in income as a result of the credit squeeze it could be quite significant. On the other hand, the UK Government has talked about two other measures: taxing higher-strength beers more firmly with greater excise and taxing white cider, which is a particular problem here. That cider has not seen much of any fruit—someone has waved a pear or an apple over a sort of ethanol production line and called the product cider.

Those measures have been taken at a UK level, so anything that we do in Scotland will have to be looked at in terms of its effect and whether it works. It will have to be looked at against that set of variables. I am sorry—this is a rather long-winded way of saying that minimum pricing will be

introduced because the party that is sponsoring it has a majority now, so minimum pricing will be with us whether some of us like it or not.

Do you agree that to determine whether minimum pricing is effective, a study should be done controlling for that variable by comparing groups in England, where there will not be a minimum price, with groups in Scotland of both hazardous drinkers and harmful drinkers? If there is a difference, the control variable will be minimum unit pricing. Such a study would give us an opportunity to see whether minimum pricing is having the effect, or whether other things such as income and general excise duty are having the effect.

**Professor Stockwell:** Yes. A study should definitely be done with control areas. I suggest the north-eastern parts of England for that. The whole of England could be looked at, but I think that the high-consuming parts close to Scotland may be a more precise control.

There are lots of different schools of thought on how to approach evaluations, but I would counsel against having survey-based evaluations, because I have some scepticism about their value. They tell us some things, but they are not very precise measures. You may be aware that they involve doing a survey of what people drink, but self-reports usually account for only 40 or 50 per cent of the total alcohol sales. Such surveys are useful for looking at whether heavy drinkers, moderate drinkers or low-consumption drinkers spend more or less, but they are not very precise in assessing change over time.

Such surveys might work, but it is more important to go straight to the harm measures and to look at the measures of consumption of the most hazardous products and get very good sales data on them—such data is usually very solid. It is also important to look at measures of harm such as hospitalisation data and, in particular, mortality data. The latter can be difficult to use, but perhaps studies could be done in that regard in five years' time. However, data on presentations to emergency departments would be good, and alcohol-related hospital admissions would be another very good indicator, along with impaired-driving rates on the road. Public order offences in cities late at night might be another good measure in which Scotland could be compared with Newcastle and other northern parts of England.

**Dr Simpson:** That is very helpful.

My last question is on the slightly different topic of caffeinated alcohol. It will not be affected by minimum pricing, but it is nevertheless something of an issue in a particular region of Scotland; the west of Scotland is affected by mixed drinks that include caffeine.

Do you have any observations on that? I am sorry that I missed your earlier seminar, but I had another meeting. However, I know that you commented on that issue. Will you comment on the issue of caffeinated alcohol now that the Food and Drug Administration has banned mixed caffeinated alcoholic drinks?

**Professor Stockwell:** Caffeinated drinks are a concern, especially when they come in a container that has five or six units of alcohol, because the drink is so strong, along with the equivalent of about 10 cups of coffee. It is an age-old tradition to mix uppers and downers, such as heroin and cocaine or brandy and coffee and tobacco, and caffeinated alcohol is just the latest variation of that. As I am sure everyone is aware, the purpose is to keep the drinker awake so that they can drink more and party longer. Of course, the consequence is that people drink more alcohol and caffeine, both of which have their risks, especially the alcohol. Another consequence is that people are less aware of their level of impairment. They believe that they are alert, but even though someone feels alert, when they get behind the wheel of a car, there are certain deficits of which they are not aware. Reaction time and split attention skills are absolutely wrecked if someone has had too much to drink, despite the caffeine.

I am surprised by what you said, if I understood it correctly. I think you said that, if caffeine is put in a drink, no minimum price will be applied, which seems curious. I thought that the minimum price would apply to all alcoholic drinks, even if they have a little bit of caffeine in them.

**Dr Simpson:** I am sorry—perhaps I misled you slightly. The main product that is giving concern in Scotland is sold at a price that is above anything that has been suggested for the minimum unit price. Because of the number of units in the bottle, its price is already well above the proposed minimum level.

**Professor Stockwell:** Yes. I am trying to remember the name of that drink. Can you remind me? It is made by monks, I think.

**Dr Simpson:** Yes, it is made by monks—at least, one variety is. We must be careful for reasons of advertising and so on that we do not decry one particular drink, but there is a drink that is produced by monks and which is of particular concern. It is the main one, although there are others.

**Professor Stockwell:** Yes, it is famous. I guess that that could be a concern. It is not the only purpose of your alcohol policy to remove such products. It would be nice if local area licensing authorities could take action on that. I moved from Australia and now live in Canada, so I know that

Australia, like Scotland, has very little effective regulation of alcohol, which I find extraordinary. Even in Alberta, where retail outlets are privatised, 12 per cent strength beer has simply been banned and is not distributed.

A range of strategies is possible. Minimum pricing will be effective, because it affects drinking across the board and throughout the country. Anyone who drinks exposes themselves to all manner of risks. A minimum price will probably impact on most people, and even those who do not drink, as they will feel safer in public places. However, other strategies are needed. Minimum pricing will not be the panacea. You might need special restrictions. That mysterious product that is made by monks in the south-west of England could be packaged in plastic containers rather than glass ones. I understand that one problem is that the bottles are used as a weapon. Other measures can be considered.

**The Convener:** Do members have any other questions?

**Gil Paterson:** I have just a wee quick one. This is just as a matter of interest, although the answer might be no. Professor Stockwell, you said that the policy in Canada is driven by the need for revenue for the Administrations. Nevertheless, has the news of Scotland's attempts and the way in which we intend to proceed received any interest in Canada? Has the proposal been talked about in any way?

**Professor Stockwell:** It has been talked about throughout North America. I have been following some blogs and newspapers. Your activities were discussed yesterday in *The Washington Post* and the day before that in *The Huffington Post* and the *Chicago Tribune*. What you are doing is being looked at across the world.

**Gil Paterson:** I hope that you take this as a compliment: I did not think that I would ever hear from an Englishman who knows more about drink than a Scotsman.

**Professor Stockwell:** I have spent quite a long time studying it. I worked and lived in Greenock in Scotland for a while when I was 19, and I learned more about alcohol than I probably should have done.

**Bob Doris:** I want to ask you a similar question to the one that I asked the witnesses in our earlier meeting today. In my experience of the drinking culture in Glasgow, which is the area that I represent, many young people pre-load on cheap alcohol in their homes after buying it from off-sales. With the minimal amount of money that they have left, they go into the town centres, pay the ticket price for clubs and have one or two drinks; often they are already drunk before they present in the large urban areas, which can cause social chaos.

I asked this morning's witnesses whether they thought that minimum pricing would start to erode that damaging culture, and they thought that it would. Has there been a similar culture in Canada, and has there been a change in that culture because of the various forms of minimum pricing?

**Professor Stockwell:** That is a very interesting question. I would love to know whether there has been a change in Saskatchewan in that regard, given that it had such a big increase in the minimum price.

In all the countries that I have visited, pre-loading happens—Canada is no exception. The economics are obvious: people spend at least two or three times more per standard drink in a bar than in a liquor store. Young people are very price-sensitive, and pre-loading is time-honoured. When I was 19 and living in Greenock, a lot of pre-loading happened before going to the pub or a dance, with Carlsberg—I am sorry; I must not mention particular brands.

Inevitably, the market that will be impacted by minimum pricing will be liquor store or off-licence sales, where people do their pre-loading, so less of that will go on. Pre-loading will continue, and it will still be way cheaper to buy alcohol from a liquor store or a supermarket than from a bar, but there will be slightly less of it.

**Bob Doris:** Thank you for that, Professor Stockwell. I should point out that our convener represents Greenock in his constituency; I wonder whether you are of a similar age to him and perhaps frequented the same hostelries when you were 19. Perhaps that is one for another day. Thank you for your time this evening.

**Professor Stockwell:** We can do that off-line, perhaps.

**The Convener:** Yes.

**Dr Simpson:** One of the concerns that we raised with the witnesses this morning was highlighted in the recent study by the Institute for Fiscal Studies, which showed that minimum pricing has a disproportionate effect on lower-income groups. We know that in Scotland the proportion of hazardous drinkers is actually greater with each rising decile of income. The harmful drinkers tend to drift towards the lower socioeconomic groups: they lose their jobs, housing and families—everything—and they end up in those groups, so they are not distributed in the same way.

Minimum pricing will surely—just intuitively—more substantially affect lower-income groups. Have you looked at that issue at all? Would you care to comment on it?

**Professor Stockwell:** Yes. That is the most commonly raised objection to all pricing policies. To put it more precisely, the group that will be affected the most consists of low-income individuals who drink a lot. People who drink a small amount will be affected by a few cents per week if they choose not to reduce their consumption. In all likelihood, most people on lower incomes who drink alcohol would slightly reduce their consumption if they are drinking within a budget. I guess the concern is that they may still carrying on drinking just as much, and not have as much money for essentials and other things.

From an Olympian perspective, looking at all the possible policies that could be implemented, I do not think that you should sacrifice tremendous public health benefits—the hundreds of lives saved and the thousands of hospitalisations and economic costs prevented—because a small number of people would be affected. That is particularly the case as the health of other low-income individuals will improve as a result of the policy. If their uncles, brothers and fathers drink less, they may suffer less from some of the unfortunate consequences of alcohol consumption.

19:15

The extra revenue could be used for other welfare arrangements for people on low income, giving them the concrete, specific supports that they need. One of the more controversial programmes, which is getting a lot of traction here in British Columbia and Ontario, is for the most affected: people who are homeless, dependent drinkers—the skid row stereotype. Authorities have set up managed alcohol programmes in which alcohol is given to them for free. They receive one standard drink on the hour every day. The evaluations show that that has resulted in much less and much steadier and more controlled consumption, with fewer visits to the emergency departments or troubles with the police because people are not getting drunk as soon as they get access to cheap alcohol.

We need to think of the big picture. We must acknowledge that, with such a major change, there will be some unintended negative consequences, but they can be managed in other ways. The overall public health safety benefits are massive and should not be sacrificed for such concerns.

**Dr Simpson:** Thank you.

**Richard Lyle:** Professor Stockwell, your evidence has been enlightening and excellent. You were asked what the minimum price should be set at. I note that for some products the price in Saskatchewan is nearly double the price in British Columbia. Who has the better health stats?

**Professor Stockwell:** I will tell you that in about a year's time, but again I counsel against making direct comparisons of that type. It may be that Saskatchewan had a really bad problem and that the statistics reflect that. Scotland is unique in wanting to introduce minimum pricing and it may be that in six months' time you will have it. You could then compare Scotland and England and ask who has the worse problem. Scotland will probably still have the worse problem as it will not just go away: it will reduce.

We need to look at the direction of change: is the amount of harm going down after minimum pricing is introduced? There are one or two interesting exceptions, but I can assure you that in 98 of 100 cases an increase in price means that harms go down. I suggest that you comfort yourself with that fact and that you should not be too anxious about other comparisons.

**Richard Lyle:** Thank you.

**The Convener:** There are no other questions from committee members. Professor Stockwell, on behalf of the committee I express our appreciation for your time. I hope that you enjoy the rest of your day; we are now going home in the dark. All the very best and thanks for your evidence this evening.

**Professor Stockwell:** My pleasure—and very best wishes to you all.

*Meeting closed at 19:18.*

Members who would like a printed copy of the *Official Report* to be forwarded to them should give notice to SPICe.

Members who wish to suggest corrections for the revised e-format edition should e-mail them to official.report@scottish.parliament.uk or send a marked-up printout to the Official Report, Room T2.20.

Available in e-format only. Printed Scottish Parliament documentation is published in Edinburgh by RR Donnelley and is available from:

All documents are available on
the Scottish Parliament website at:

www.scottish.parliament.uk

For details of documents available to
order in hard copy format, please contact:
APS Scottish Parliament Publications on 0131 629 9941.

For information on the Scottish Parliament contact
Public Information on:

Telephone: 0131 348 5000
Textphone: 0800 092 7100
Email: sp.info@scottish.parliament.uk

e-format first available
ISBN 978-1-4061-8095-4

Revised e-format available
ISBN 978-1-4061-8107-4

Printed in Scotland by APS Group Scotland