The Scottish Parliament
Pàrlamaid na h-Alba

Official Report

HEALTH AND SPORT COMMITTEE

Wednesday 10 February 2010

Session 3

Printed and published in Scotland on behalf of the Scottish Parliamentary Corporate Body by RR Donnelley.

Wednesday 10 February 2010

CONTENTS

HEALTH AND SPORT COMMITTEE
5th Meeting 2010, Session 3

CONVENER

*Christine Grahame (South of Scotland) (SNP)

DEPUTY CONVENER

*Ross Finnie (West of Scotland) (LD)

COMMITTEE MEMBERS

*Helen Eadie (Dunfermline East) (Lab)
*Rhoda Grant (Highlands and Islands) (Lab)
*Michael Matheson (Falkirk West) (SNP)
*Ian McKee (Lothians) (SNP)
*Mary Scanlon (Highlands and Islands) (Con)
*Dr Richard Simpson (Mid Scotland and Fife) (Lab)

COMMITTEE SUBSTITUTES

Joe FitzPatrick (Dundee West) (SNP)
Mr Frank McAveety (Glasgow Shettleston) (Lab)
Jamie McGrigor (Highlands and Islands) (Con)
Jamie Stone (Caithness, Sutherland and Easter Ross) (LD)

*attended

THE FOLLOWING GAVE EVIDENCE:

Dr Petra Meier (University of Sheffield)

SENIOR ASSISTANT CLERK

Douglas Thornton

ASSISTANT CLERK

Seán Wixted

LOCATION

Committee Room 3

Scottish Parliament

Health and Sport Committee

Wednesday 10 February 2010

[The Convener *opened the meeting at 10:01*]

Decision on Taking Business in Private

The Convener (Christine Grahame): Welcome to the fifth meeting in 2010 of the Health and Sport Committee. I remind everyone to turn off their mobile phones and any other electronic equipment.

Under item 1 on the agenda, I seek members' agreement to consider item 5, on a draft committee report, in private, as is usual practice, and to conduct any future consideration of that report in private. Do we so agree?

Members *indicated agreement.*

Alcohol etc (Scotland) Bill: Stage 1

10:02

The Convener: Item 2 involves an oral report on the fact-finding trip to Finland and France that was undertaken by members in January as part of the committee's stage 1 consideration of the Alcohol etc (Scotland) Bill.

Three other members of the committee—Ross Finnie, Rhoda Grant and Mary Scanlon—and I undertook a cross-party visit to Helsinki and Paris in mid-January. The main purpose of the visit was to examine at first hand the policies of the Finnish and French Governments aimed at tackling levels of alcohol consumption. On behalf of those who were on the visit, I have written to everyone who gave us assistance in Helsinki and Paris. Our trip was extremely useful. I invite members to comment on the visit.

Rhoda Grant (Highlands and Islands) (Lab): It was an excellent visit. It showed us two different ways of dealing with the issue. I was keen to find out why the drinking levels in France had been falling, and it was interesting to see that that decline in drinking levels was masking a rise in binge drinking and the drinking of spirits rather than wine. We also saw that the low level of taxation on wine did not encourage people to drink wine and that the high level of taxation on spirits did not discourage people from drinking spirits. That struck me as strange. People told us that the issue was to do with a merging of cultures across the globe and that we in northern Europe were starting to drink more wine while people in France were drinking less wine and increasing their consumption of spirits to match that in northern Europe. The visit taught me more about culture than pricing.

The Convener: On the cultural aspect—I hope that you agree with this—we were told that wine drinking was part of rural culture at one time, with a lot of cheap wine being taken without water. Consumption is dropping now, but people are drinking more good-quality wine. I think that we all accepted that it would be impossible politically to increase tax on wine in France, because just about all French politicians have a small vineyard in their area, and a tax increase on wine could mean jobs being lost and politicians having to look over their shoulder. Very few of them are prepared to go down that road. Politics, both internal and external, played a substantial role in what we found in Paris. Does somebody else want to comment on the French experience, before I go on to the Helsinki one?

Ross Finnie (West of Scotland) (LD): I want to talk about both.

The Convener: We will just do them together, then. I will say a bit about the Helsinki visit. Personally, we found the price of alcohol to be a sensitive issue. We learned very quickly how expensive it was, even given the rate of the pound against the euro, to purchase alcohol in Alko shops, which are the national retail outlets for alcohol, or in a restaurant. The price is so extortionate that it limits purchases. The problem for Finland is external, with Estonia being so close. Because the prices for alcohol in Finland are so high—of course, the tax revenues go to the state—people simply make a short trip to Estonia to load up. There are also special boat trips to Estonia. Cheap alcohol can even be ordered on the internet. For all I know, it is possible for people to get it delivered to their door, like Tesco and Sainsbury's deliveries.

Finland and France face different issues in dealing with alcohol, but both countries view alcohol as a health issue. Although criminal matters may be involved, too, alcohol is regarded as a national health issue. They look at the generality of the health of the nation, not just at the people who drink themselves to death. There is a great grey bulk in the middle who habitually drink too many units of alcohol. My impression is that what the general public view as normal consumption is actually quite a lot—I think that that may be the same in Scotland.

Ross Finnie: Obviously, we were in two countries with very different approaches to alcohol. Finland is still regarded by the World Health Organization as a low alcohol consumer, while the WHO still considers France to be a high alcohol consumer. I suppose that our experience was slightly predicated on the fact that, essentially, we met health officials. I do not disagree with what the convener said regarding what we found, but the debate was portrayed in health terms. It was interesting that, in both places, health officials were concerned about an increase in binge drinking, but their real, long-term concern was the increasing trend of persons resorting to alcohol in quantities that, in the opinion of the health officials, were not good for their long-term health. There was an absolute divide between health departments and departments of the economy, trade and industry. As the convener has observed, the parliamentarians in France were simply not prepared to consider the health issue. Indeed, although they tax spirits, it is interesting to note that their levels of taxation across the board are still considerably lower than the levels of taxation that prevail in the United Kingdom.

The situation in Finland is interesting, but the problem is not just Estonia. The sale of beer with a strength of 4 per cent of alcohol by volume and below is no longer controlled by the state monopoly, which is now only a quasi-monopoly of control of distribution. That is proving to be very difficult, as there is a substantial increase in sales of beer of that strength. I do not think that 4 per cent ABV would be regarded as an extraordinarily low level, but it was an arbitrary choice that was made when Finland entered the European Union and was asked to break up its state monopoly on distribution. The health department now deeply regrets that choice.

On cross-border trade, it is interesting to note that, although Finland reduced the duty on alcohol initially, it has increased it again by 10 per cent each year. However, 10 per cent of a tax value is not a 10 per cent increase, nor does it get Finland back to the 30 per cent by which it initially reduced the tax.

The experiences in both countries were not hugely dissimilar to the debate that the bill has engendered in Scotland. There is a strong health lobby that is concerned about short-term and long-term conditions, and a political and industry debate that gets caught in that cross-fire.

Mary Scanlon (Highlands and Islands) (Con): I point out that, in 10 years of the Parliament, I have had a trip round the care homes in the Western Isles and an overnight trip to London with Helen Eadie to look at commercial health care providers but the visit was my first out-of-the-country trip. I appreciate that resources are scarce, but the trip was enormously helpful for us. I put that point on record because I know that there is a lot of apprehension about asking MSPs to make such trips, but I have come back enormously better informed.

I will be brief. I do not want to repeat what has already been said, but Ross Finnie's point is that Scotland, Finland and France all share the health concerns that emanate from the overconsumption of alcohol. However, none of our three countries is similar to either of the other two.

In Finland, there is a state monopoly of alcohol sales, except for low-alcohol beer, which is sold in every corner shop. However, when we went to the addiction centre, we found that all the addicts seemed to drink low-alcohol beer.

The cross-border and internet sales issue is appropriate to consider. In scrutinising the bill, we must be aware that, if the price goes up here, it would be easy for people to nip over to England, Northern Ireland or the Republic of Ireland or to increase their internet purchases—I believe that internet sales are the fastest-growing retail outlet for alcohol.

What struck me about Finland was the advertising. In Scotland, we have been a bit

preachy in our approach to alcohol. We have said, "Don't do it or else this will happen." I found the 30-second advertisements in which adults questioned how their consumption of alcohol affected their children to be very moving and powerful. In France, there were social norms ads. Bill Wilson had a debate in the Parliament on the social norms approach, but the Government has not done much about it.

We knew the power of the French farmers, but we now know the power of the French wine-growers and that nobody dare question them. Ross Finnie mentioned that the French are taxing spirits; they are taxing spirits that are not made in France, such as vodka, but they are not taxing cognac or brandy, which—coincidentally—are made in France.

What I came away with from the trip was probably similar to what Rhoda Grant learned, which was that the cultural and public health issues are important.

Almost all the people whom we met, including the economists in the French Government, politely asked us why we were imposing a minimum price to increase the profits for the retailers and drinks manufacturers with nothing for the Government. They found that difficult to understand, and I can appreciate that.

10:15

The Convener: I do not completely agree with that last point.

I will make a point about the important European dimension of operating any pricing or taxation that could be considered a restrictive practice and anticompetitive. It is interesting that the Finns have shown that, where a public health benefit is demonstrated, regulations can be imposed internally that might otherwise be seen as anti-competitive. The public health benefit has to be demonstrated, but it can be done. I cannot quite remember when this came up. Ross Finnie might be able to remind me—was it something to do with our attempts to do something with tobacco? It came up in the context of something that the Finns are doing. They managed to deal with the problem by persuading the European ministers or Commission or whatever that there was a public health issue, so they were able to bring in their legislation. European legislation is not—how can I put it?—so rigid that contracts cannot be made in a different form. I find that to be quite interesting. It would be the same in France, Scotland and elsewhere in the UK, for example, as it is in Finland.

Rhoda Grant: I just want to add to what Mary Scanlon said. One of the things that was told to us almost as an aside, and which seemed to fascinate us all, was that young people under the age of 24 had decreased their drinking substantially. No research had been carried out into why that was happening; the only thing that they could point to was the adverts that Mary Scanlon mentioned. They influenced parents, who then did not drink so much in front of their children, so the children did not pick up those habits. I am interested to know why there was such a substantial decrease in the amount of drinking among young people.

The Convener: Again, it is a cultural matter. Finland had a temperance movement, and it is still pretty active. It has one month when it tries to get people to abstain from drinking alcohol but, being clever Finns, they picked February because it has only 28 days. I thought that that was rather charming. I thank you for the observations. They were an extremely useful backdrop to our next item of business.

Item 3 is our first oral evidence session on the Alcohol etc (Scotland) Bill. Its purpose is to focus on the content of the University of Sheffield report on minimum pricing. We have with us Dr Petra Meier, senior lecturer in public health at the school of health and related research at the University of Sheffield. Dr Meier was the senior author of the Sheffield report on minimum pricing. The report has played a key part in the formulation of the Scottish Government's minimum pricing policy as a means to address the public health issues surrounding the high level of alcohol consumption in Scotland. Members will note from the agenda that we were due to have Dr Peter Anderson, who is one of the leading international consultants on public health issues. Unfortunately Dr Anderson has had to send his apologies for this meeting at short notice for personal reasons. He wanted me to say to the committee that he would be happy to assist in any way he can with our stage 1 consideration of the bill, if we so wish. If members had any questions lined up for Dr Peter Anderson, or if any arise during the course of questioning Dr Meier, we will put them in writing to Dr Anderson and enter into a dialogue in that way.

Dr Richard Simpson (Mid Scotland and Fife) (Lab): First, I welcome Dr Petra Meier and thank her for coming here. I know how busy university life can be these days. Her team's literature review has been enormously helpful in allowing me to formulate my views on the subject. The review was done for the Department of Health, which wanted the team to look at the particular issue. I have some questions by way of an introduction to the subject.

The review was a study review. Have you had some peer-reviewed published papers from it?

Dr Petra Meier (University of Sheffield): By way of background to our Scottish work, I say that

we were initially commissioned by the Department of Health in England to do a systematic review of the literature on pricing and consumption, pricing and harm, promotion and advertising, how consumption and harm are related, and what we could expect if consumption drops by a certain amount. That was the first report to come out of the project. The second report was a modelling study that was not dissimilar to the current one but which also covered advertising, general price rises and taxes targeted at lower-price alcohol. Slightly more policy options were considered than in the Scottish work, which focused on the discount ban and minimum pricing.

There was no systematic review published. At the same time that we carried out our review for the Department of Health, two meta-analyses came out that considered literally thousands of estimates of the relationship between pricing and consumption. One was by Gallet et al and the other was by Wagenaar et al, and both of them came up with similar answers. They were comprehensive, involving thousands of studies, and were published when we were just about to finalise our results, so there was no point in our trying to publish a systematic review specifically.

On the modelling work for the Department of Health, a paper is due to be published shortly in *The Lancet*, and *Addiction*, which is the top journal in the field, is also going to publish part of our work.

Dr Simpson: That is helpful. You paper refers to Gallet and Wagenaar as the major meta-analyses on the subject.

The big debate up here at present is about minimum pricing. I hope that no one up here denies that pricing is an important driver. The WHO considers pricing to be one of the top drivers along with availability. Those two things appear to be the main drivers, although I would add a third: culture. As we have heard this morning, culture is a hugely important factor that we should not lose sight of, although it is almost impossible to ascertain.

Dr Meier: We sometimes hear about the three big As—affordability, availability and advertising—as the three major things that may affect culture. If alcohol is freely available, is quite cheap and is advertised widely it is imaginable and plausible that that shapes cultural attitudes in a major way.

Dr Simpson: We should not lose sight of that third driver when we get into the debate on the pricing issue.

In your literature review, you looked at 4,000 papers or thereabouts and narrowed those down to about 400 that you considered papers of value that should be reviewed, including the two meta-analyses. However, I could find only one paper on minimum unit pricing.

Dr Meier: That was not very relevant.

Dr Simpson: That was the Cook study on an aboriginal community in Australia.

On the concept of minimum pricing, your evidence statement says that the evidence is “low quality but demonstrable”. I would like your help in unpacking that statement. As a doctor, I look to the Scottish intercollegiate guidelines network—SIGN—guidelines, which classify evidence at levels 1 to 4 or 1 to 5, depending on which system is used. Low-quality evidence is basically opinion—not good evidence at all, although opinion is nevertheless important. In this case, I take it that “low quality” means that there are no papers that demonstrate the effectiveness of minimum pricing apart from the one that I have cited. The “demonstrable” part is about your modelling study—in other words, you can demonstrate through a mathematical modelling process, within a range of possibilities, the likely effect of a minimum pricing regime. Am I correct in that assumption?

Dr Meier: No. The evidence statement did not refer to our modelling, which we had not done at the time. There is one paper on the subject, which we would not call relevant to the UK study; nevertheless, it has been peer reviewed and published in a decent journal. However, there are other studies, such as the Paul Gruenewald study, which looks specifically at what happens if the price is increased for low-priced products only, which is what happens with minimum pricing. Although it is not a minimum pricing study, its findings are applicable. That is why we said that there is some evidence on the effectiveness of minimum pricing. However, nobody has done any research on minimum pricing in a similar context to us, in a western culture, because nobody has tried it outside alcohol monopolies except in Canada, where the situation is again not comparable to the situation here.

Dr Simpson: My next point was to be about the Canadian experience of social reference pricing. We have corresponded with Tim Stockwell in Canada—I believe that he has made a big grant application and I hope that he succeeds, because the policy needs to be studied. There is no published evidence on social—

Dr Meier: We have just heard that that grant application succeeded.

Dr Simpson: That is excellent.

Dr Meier: We will collaborate on that work, so we will know more in due course.

Dr Simpson: One of our concerns is that we have heard that the consumption of spirits is rising

in Canada. That is an interesting phenomenon for the approach that is the closest to our minimum unit pricing.

You use a highly complex statistical model. It is beyond the ability of most of us to understand fully the different effects of attrition, potential attrition and all the rest of it. I understand that the hoped-for decrease in total consumption in Scotland from minimum pricing at 40p alone is 2.7 per cent. I think that that is correct—your summary for today's meeting says that.

Dr Meier: I do not have the figures in front of me—I have only those that include a discount ban—but that sounds right.

Dr Simpson: The modelling study refers to a group that concerns us—18 to 24-year-olds, who are drinking volumes more and are binge drinking. That group will produce the harm for the future and its behaviour reflects the rise in consumption. Your study shows that MUP would reduce consumption by only 0.7 per cent among those people. What is the reason for the difference in that group?

Dr Meier: That is because minimum pricing is targeted at the off-trade—at cheap supermarket prices—whereas a major share of what 18 to 24-year-olds drink is drunk in the on-trade, so they would be less affected by minimum pricing than some other groups would be .

Dr Simpson: So that figure is correct.

Dr Meier: I do not quite agree that those people will continue to drink in exactly the same way and will experience the relevant harms. When people who are now 30, 40 and 50 were 18 to 24-year-olds, the pattern was the same—they drank more in the on-trade. People subsequently switch to the off-trade, bringing with them their high drinking patterns but tending to stay at home to drink.

Dr Simpson: As ex-students, we probably realise that that is the case. The trend continues to pensioners, among whom consumption is even lower. That is the trend over time, but the volume and extent of drinking by 18 to 24-year-olds concern us.

Mary Scanlon: I have a supplementary question to Richard Simpson's point about binge drinking—I apologise for interrupting.

Page 29 of the Sheffield report says:

"due to insufficient observations ... it has not been possible to construct estimates of the price elasticity of bingeing behaviour (in terms of either frequency or magnitude of bingeing)."

How can Petra Meier discuss binge drinking when the researchers could produce no estimates of the effect of minimum pricing on binge drinking?

Dr Meier: That is not quite true. I will clarify how—

Mary Scanlon: I read from your report.

The Convener: Let Dr Meier answer.

Dr Meier: I will explain. Econometrics is part of the model. Whether econometric estimates are produced for the total population or for a sub-group is determined by how many data are available. All that that does is tell us whether moderate drinkers and harmful drinkers, for example, respond slightly differently to price increases. We found that to a degree, but not in a major way. Although we do not have separate econometric price elasticities for binge drinkers in particular, we know how different age and gender groups and moderate and harmful drinkers respond to prices and we can model that. If we know how people respond to a price increase in on-trade beer, for example, and we know that binge drinkers tend to buy a certain amount of a particular beer, we can estimate the effect on consumption.

10:30

Dr Simpson: For background, it is important that we get the definitions right. I hope that you agree that although we use the elements of the abstainer, the moderate drinker, the hazardous drinker and the harmful drinker, there is a continuum. However, those are the generally accepted groups and we have definitions of them.

The current figure is that 30 per cent of men in Scotland are hazardous drinkers. That is down from 34 per cent, which is regarded as a significant drop. The number of women in the group has dropped by about 2 per cent, from 22 to 20 per cent, which is regarded as a trend, but not as significant. Does that 30 per cent of men who are hazardous drinkers include the harmful drinkers? In other words, are 70 per cent of men either moderate drinkers or abstainers, while 30 per cent are hazardous or harmful drinkers?

Dr Meier: No, the groups are mutually exclusive as far as our modelling is concerned. The harmful drinkers are harmful drinkers and the hazardous drinkers are those who drink below the harmful level.

Dr Simpson: Right, but in relation to the definitions in the household survey of 8,500 people in Scotland, are another 7 or 8 per cent of men harmful drinkers, on top of the 30 per cent of men who are hazardous drinkers, or does that 30 per cent include both groups—let us call them excessive drinkers?

Dr Meier: I do not know exactly how the Scottish household survey defines that when it reports its results. I can say only that we used the

Scottish survey, but we did not use its definitions. We split up the population into those who drink up to 21 or 14 units a week; those who drink over that but below 50 or 35 units a week; and then the people who drink above the harmful levels.

Dr Simpson: I accept the categorisation. Perhaps someone else can help us with the issue. I just want to find out the total number of drinkers.

My final question—

The Convener: Yes, it must be, because you have had a good slice and I have a queue of members waiting to ask questions.

Dr Simpson: I know—I am sorry.

Am I right that the literature review indicates that harmful drinkers are less price elastic, in your terms—in other words, less responsive to price changes—than hazardous drinkers and that hazardous drinkers are less responsive than moderate drinkers?

Dr Meier: The literature suggests that harmful binge drinkers, as one group, tend to be less price elastic than moderate drinkers. However, the only review of that is the Wagenaar analysis. Basically, he included studies on young binge drinkers, so they were not harmful or dependent drinkers per se.

Dr Simpson: Most 18 to 24-year-olds are hazardous drinkers and there are very few harmful drinkers.

Dr Meier: Exactly. The argument that we sometimes hear about how dependent drinkers would respond is not covered by that meta-analysis because there were no separate estimates that could be used.

Dr Simpson: So if the purpose of introducing a minimum unit price is to deal with the most harmful drinkers—the ones who go to health professionals for treatment and about whom there is concern—it will not be as effective as straight price increases would be.

Dr Meier: That is not true according to what we found in the modelling in our econometric analysis. We found that harmful drinkers might actually respond more. We found that minimum pricing is targeted more at harmful drinkers because they select cheaper alcohol. The issue is not so much how they respond to price changes; it is that they consume more of the products that are targeted by minimum prices. Our modelling shows that the decreases in consumption among harmful drinkers would be far more than the average that you mentioned earlier.

Dr Simpson: The figures are 16 per cent for moderate drinkers, 23 per cent for hazardous drinkers and 35 per cent for harmful drinkers, in terms of their average spend.

Dr Meier: Yes, that is the spend—that is not a consumption reduction, I hasten to add.

Mary Scanlon: I want to put on record that page 29 of the Sheffield report states:

"Attempts to produce on-trade binge elasticities failed due to insufficient observations in the data."

Does Petra Meier accept everything that is in the policy memorandum, explanatory notes and so on, which suggest that Scotland has a unique cultural relationship with alcohol? The policy memorandum highlights the differences in chronic liver disease, alcohol-related mortality and so on. Do you accept and confirm that we have a unique relationship with alcohol?

Dr Meier: I am not in any way qualified to comment on Scotland's cultural relationship with alcohol. It is not my area of expertise.

Mary Scanlon: So you think that Scotland can just be lumped in with any other country.

Dr Meier: That is not what I am saying; I am saying that I cannot comment on that.

The Convener: Dr Meier is here specifically to answer to the Sheffield report.

Dr Meier: Yes.

Mary Scanlon: But what I am asking is important. I have read the Sheffield report. We do have a unique relationship with alcohol. I picked out 16 examples of what you did with information on elasticities, market research, off-trade discounts and morbidity. You assumed that health conditions are the same in Scotland as in England and Wales. I could go on. You state:

"the key ... ingredient for estimating ... policy impacts ... is ... subject to considerable ... uncertainty".

You used a set of countries in the meta-analysis that are not particularly representative of England or Scotland. I picked out 18 pieces of information relating to the economics of the study that bear no relationship to Scotland—they are not based on evidence from Scotland.

Dr Meier: Of course we would have wished to have Scottish data on everything, but we have made substantial efforts to take into account all the Scottish health data, crime data, expenditure on food data, survey data on purchasing and Scottish consumption data. Accusing us of not making the best effort to take Scottish data into consideration is not quite fair. However, we are currently updating the model. We have been commissioned by the Scottish Government to take into account even more Scottish data, as they have become available, such as the 2008 Scottish consumption data. The expenditure and food survey is going to be validated according to Scottish Nielsen data—purchasing data from Nielsen that are just on Scotland—to see whether

that information holds up. We have new data on crime and health conditions—a newer period of data. We are just modelling that at the moment.

Mary Scanlon: I am not accusing you of anything; I am stating a fact. I will read whatever you produce in the future, but all I have at the moment is the data that are in front of me and in front of every member of the committee—the Sheffield study.

You mentioned the crime model. On page 46, the report states that youth offending data—on people aged 10 to 25—for England and Wales were used for Scotland because you did not have any data for Scotland, so you did not use Scottish figures. That is stated in the report.

The Scottish household survey stated that between 2003 and 2008 there was a 9.3 per cent fall in average alcohol consumption. That fall among the over-16s did not lead to any similar reduction in health harms, justice harms or any other harms.

Richard Simpson says that a 40p minimum price would lead to a 2.7 per cent reduction in consumption. The 9.3 per cent fall in consumption equates to a 55p minimum price. However, we have experienced a 9.3 per cent reduction but we have had none of the projected reductions in all the harms that are listed in your study. Why is that?

Dr Meier: There is a difference. For the chronic harms, we would expect a time-lagged effect—one hopes that it will occur. With crime, we would expect a fairly rapid effect if the consumption reduction occurred among the group of people who committed the most crime, that is young males. I have not looked at the figures in detail, although I can do so if you want me to.

From our first look at the 2008 Scottish health survey, it does not seem as if the consumption reduction was in young male people. You might know the figures better. We would expect the consumption reduction to have an effect only if it occurred in that group.

Dr Simpson: The effects on chronic health harms tend to lag 10 years behind—the effect is long term—so we would not expect to see the effects in the shorter term. However, we might expect to see an effect on the number of accident and emergency and other hospital admissions.

Mary Scanlon: And we have not seen that.

You mentioned that people who are hazardous, harmful or even moderate drinkers are very clever when it comes to substitute drinks. Did you examine the cross-price elasticity of demand? Did you examine the marginal propensity to consume of Scottish drinkers compared with others? Did you consider the substitute—

The Convener: Could we have one question at a time?

Mary Scanlon: No, I just—

The Convener: They will be answered, but they are all—

Mary Scanlon: They are all on the same topic.

The Convener: Dr Meier, can you answer all those questions if they are put to you in a list like that? I want to give you the opportunity.

Dr Meier: I am trying to write notes.

Mary Scanlon: The point is that the cross-price elasticity of demand is the key active ingredient for—

The Convener: Hold on, Mary. Your questions are not a problem—it is just a matter of hearing them one at a time, so that Dr Meier can answer them. Your first one was?

Mary Scanlon: They are all related—the marginal propensity to consume, the cross-price elasticity of demand and the substitute effect.

Dr Meier: Okay. I am not sure what you mean by "the substitute effect", as I understand that to be the cross-price elasticity, which we did estimate. As you saw in the report, there is a mixture of Scottish and English data at the moment, but the next iteration will be based on Scottish data.

Mary Scanlon: Did you consider the cross-price elasticity of demand between one drink and another? As I have mentioned before in the committee, the point has been raised with me that many young people in the Highlands may find illegal drugs more attractive should there be a minimum price for alcohol. It is therefore a matter of the cross-price elasticity of demand for two goods, or within one good.

Dr Meier: We did not consider the effects with drugs. There is no good evidence on which we could base such a model. It is acknowledged in the discussion section of the report that that would have to be monitored carefully.

We did indeed consider cross-price elasticity between alcoholic products. One of the strengths of minimum pricing is that the capacity for swapping a product for something cheaper is somewhat restricted, because all products are subject to the minimum price. If a minimum price were introduced to cover all products, as has been discussed, rather than just ready-to-drinks—RTDs—or spirits, for instance, people would not be able to change from a cheap vodka to a cheap cider, because they would be priced according to the same minimum level at least.

If you look at our elasticity matrices, you can work out exactly what would happen. Would people swap to the on-trade from the off-trade? Would more people go into pubs if there were a minimum price? At what levels would that occur?

Mary Scanlon: We are considering the overall consumption of alcohol. In Finland, when high prices were applied to drinks, it was discovered that people actually consumed more, because of cross-border trading with Estonia. All that happened was that the duties were lost. The issue is the overall consumption of alcohol.

Dr Meier: Okay. I thought that you were talking about price elasticity, not cross-border trade.

Mary Scanlon: Yes—and the substitute effect. The issue is how people overcome a minimum price.

Dr Meier: That is important.

Dr Simpson: Just to—

10:45

The Convener: Just a minute—there is supposed to be a convener here. I have a light touch, but I am not invisible. We will move on, as Ross Finnie and Michael Matheson are waiting. I will then call Helen Eadie and Rhoda Grant. You can come back in after that.

Ross Finnie: Good morning. I will ask a question that is different from the one that I originally intended to ask. I followed Richard Simpson's line of questioning, and I want to give Dr Meier the opportunity to put it into context. We have to evaluate what your report actually demonstrates, and, as with any report, there will be pluses and minuses.

Given that—with one or two minor exceptions—a policy of minimum pricing has not been attempted anywhere else, what other type of model could you, as a senior lecturer in public health, have produced to help a debate on whether there are any, or sufficient, indicators to show that such a policy might have a reasonable effect? There seems to be a slight drift to the idea that we cannot produce a model now because we would have to implement the policy first and after it had been in place for 10 years we would have all the evidence to demonstrate the effects, then we could carry out a study that would produce completely different results. However, unless I have misunderstood, that is not the proposition. You are trying to produce a public health model, and you are not claiming that it is based on complete evidence, because a minimum pricing policy has not been implemented before. What else could we have reasonably expected?

Dr Meier: I do not know. We used a model because the policy has not been introduced, and we had to project what would happen. It is like the weather forecast; you do not evaluate it afterwards. It is a model. If the policy is introduced, we will obviously want a very strong evaluation to be carried out—the whole world, not just Scotland, will be interested in that. Scotland is currently the focus of the international community with regard to minimum pricing precisely because such a policy has not been attempted before, and people want to see what happens if it goes ahead.

We can study what happens when prices change and make an assumption about how prices would change under a minimum pricing policy. We can consider what changes in consumption we might expect to see, and relate those to various factors. The international and UK literature is important in that respect, as we need to consider how much of the harm from alcohol can be attributed to consumption.

With regard to your question about other models that we could have used, we could, if we were not interested in the health side of things, have created a model to study how suppliers might respond to a minimum price. However, that would also be based on projections, because we do not know exactly how the supply side—the industry—would respond. Someone may have commissioned work around that, but it is not what we are good at. We were tasked with examining how harm reduction might occur in relation to health and crime and the wider employment agenda.

Ross Finnie: I will ask a brief supplementary on that point before I move on to my second question. It is clear that, on that basis, you have made assumptions; the question is whether they are reasonable or unreasonable.

Mary Scanlon referred to page 29 of the report, and raised the issue that there was not sufficient evidence to allow you to reach a conclusion on the elasticities as they affect binge drinking. However, the next paragraph—unless I have misread it—explains what you tried to do. Under heading 2.2.2.3, you clearly and openly state—as Mary Scanlon said—precisely what you could not do, but in the second paragraph under that heading you go on to state:

> "it is possible to map the scale of bingeing from the mean intake using standard statistical regression model techniques, using age and gender as covariates."

Am I right to assume that you made that reasonable assumption in the absence of other data?

Dr Meier: I think so. We thought long and hard about how best to approach things. We had to make assumptions, and I think that we were open

about where assumptions were made. The work went through various rounds of peer review and people generally agreed that our assumptions were the best that could have been made. On occasions, people suggested alternatives, which we used as sensitivity analyses. For example, when people were not happy with the econometrics that we used, we used alternative evidence from Chisholm and from Huang, who did a previous UK study—I think that it was for HM Revenue and Customs. We checked how sensitive our model was to alternative assumptions, and although there were some variations we generally found that it was not far out in terms of the scale of effect.

Ross Finnie: I have not often looked at models, and some of the formulae left me slightly askew. Because you started with reference points in relation to indicators of harm, I found it difficult to go back—I am thinking about the table that Richard Simpson mentioned. The other problem is that of course the report would go on for a mile if we had all the data, so you picked an illustrative minimum price of 40p in the five main appendices—there is nothing wrong with doing that; it means that you get a series of figures. There is the overall 2.7 per cent reduction in consumption if the minimum price is 40p, and there is the 5.4 per cent reduction if there is both a minimum price and a ban on off-trade discounting. That seems perfectly all right. For harmful drinkers—the ones whom we are interested in—the reductions are 4.7 per cent and 8.7 per cent.

That sounds okay, but I have had difficulty understanding exactly what it all means. An 8.7 per cent reduction would mean that a harmful drinker drank 5.65 units less per week, but I have enormous difficulty in knowing whether that would make a difference, given that the definition of harmful drinking is consumption of 50 units or more per week. You correctly recorded what the mathematical model showed, but in the absence of an additional narrative I have found it difficult to determine what that means in public health terms. I understand where the data come from, but where could I get further interpretation? I do not mean to be unkind. You are the expert on the model.

Dr Meier: Ours is a population-based model, so it is not useful to consider the individual drinker and say, "Joe Bloggs, who drinks 48 units at the moment, will reduce his consumption by exactly 5 per cent and thus reduce his personal risk." We looked at population risk. We can work out how a 5 per cent across-the-board decrease in consumption in a certain group translates into reduced numbers of deaths and hospital admissions—the information on harmful drinkers is in the table on page 88—and we can put a price tag on that, using standard health economics valuations. However, because the model does not consider the individual, a narrative around the amount by which an individual's drinking would be reduced would probably not be helpful in this context.

Ross Finnie: Someone like me, who is unfamiliar with public health modelling of this kind, must constantly remind themselves that, although we get down to precise figures, they relate to populations and not to individuals, which leads us to a different conclusion.

The Convener: Do the figures not relate to particular sub-groups?

Dr Meier: They relate to the sub-groups that we specified. We made separate estimates for moderate drinkers, but we are talking about all moderate drinkers, rather than predicting what an individual moderate drinker would do.

Mary Scanlon: Can I ask about an issue that Richard Simpson and Ross Finnie raised?

The Convener: I will come back to you. I want to let members ask more questions.

Michael Matheson (Falkirk West) (SNP): Like Ross Finnie, I am not familiar with the modelling approaches that are used in public health. I am interested in whether Dr Meier's approach is commonly used when people are trying to understand the impact of public health policies on the population. That will help me to understand whether the report stands out in its approach or whether a common approach has been used.

Dr Meier: It is common now to model the effect of policies, especially where there is uncertainty because they have not been introduced in exactly the same way before in the same country. The National Institute for Health and Clinical Excellence recommends that approach and uses it in all cases. We have just done work for NICE on possible alcohol policy options around screening, brief intervention and so on. Cost-effectiveness modelling is a standard part of such work.

Michael Matheson: So this type of modelling is not a new approach to dealing with such matters—it is a well established, academically recognised approach.

Dr Meier: Yes.

Michael Matheson: You mentioned that you are doing some further modelling work and referred to a few areas in which you will seek to use additional Scottish data. Can you say more about the extent of that new modelling? I am conscious of the fact that your findings may be substantially different once that work has been done. As a committee member, I would like to question you again when your new report has been published. What impact do you think the work may have? Will you use a similar model?

The Convener: Before you respond, can you advise us when the supplementary report will be available?

Dr Meier: I am not entirely sure what the publication schedule is, but our draft report is due by March. There will be a short period of back and forth, but it should be available in the not-too-distant future. We have some preliminary results that I am not happy to share in detail, but it does not appear that there will be substantial changes as regards the overall effectiveness of the different policies.

The Convener: I advise the committee that we have scope during stage 1 to consider and ask questions about the supplementary report, if we wish.

Dr Meier: The same methodology will be used for the updates. The issue is that new data have become available. There is interest in using the most recent Scottish health survey—for 2008—which was not available when we started the work, to update the consumption data. We also have the price data from Nielsen, the market research company that has detailed Scottish prices against which we can validate the expenditure and food survey data that we use at the moment.

Michael Matheson: Those comments are helpful.

Helen Eadie (Dunfermline East) (Lab): So the committee is at the point of being able to say clearly that your approach has been based solely on modelling and not on evidence. My closest parallel—

The Convener: I must let Dr Meier respond to that.

Dr Meier: I do not see how modelling can be placed on one side and evidence on the other. We used a recognised approach of making predictions based on actual data, not fictional information that we just made up.

Helen Eadie: So you assert that everything that you say is based on evidence.

Dr Meier: It is not an evaluation—it is based on real data and evidence.

Helen Eadie: It is based on data, but not on evidence of policies that have been implemented elsewhere.

Dr Meier: It is based on evidence—it is not an evaluation.

Helen Eadie: It is not based on evaluation of any evidence of any other practice elsewhere in the world.

Dr Meier: It is not correct to say that it is not based on evidence of any other practice. It is not based on evaluation of minimum pricing elsewhere.

Helen Eadie: My only experience of modelling concerns the transport policy of the City of Edinburgh Council—we know of the chaos to which that led.

Based on your modelling, can you spell out for the record the revenue that would accrue to retailers from minimum unit pricing of 50p and 60p?

Dr Meier: Okay.

Helen Eadie: In Scotland.

11:00

Dr Meier: Of course in Scotland. I am just not sure that I have those figures to hand. Can you make a note of that and I will supply the information in the next few days?

The Convener: Certainly.

Helen Eadie: What modelling studies have you done or what specialist marketing opinion has been published on the likely market response to minimum unit pricing?

Dr Meier: That was specifically excluded from what we were tasked to do.

The Convener: Dr Meier has already addressed that point.

Helen Eadie: Can you comment on European work on this issue? For example, a report on alcohol that was produced last October by the European Economic and Social Committee and a report by Peter Anderson, who was to be a witness this morning, took a public health perspective on alcohol in Europe and both recommended a much more holistic approach to alcohol issues. What are your views on that?

Dr Meier: Recently, I have attended many European meetings, and you are right to say that a holistic approach—in other words, an approach using multipronged policies—has been recommended. However, at every meeting, it has almost been taken as read that price is the most effective lever that Governments have at their disposal and that something must be done about it. It has also been made clear that something has to be done about availability.

Helen Eadie: The European Economic and Social Committee's verdict is that pricing is important. However, it is talking about pricing in general, as distinct from minimum unit pricing, with the implication that it is the responsibility of the state to recover any duties. The majority of that committee, which has 129 members—by coincidence, the same number of members as the Scottish Parliament—concluded that pricing, not

minimum unit pricing, was the issue, with only five members taking a minority view.

Dr Meier: I do not see that the issues are different. The committee highlighted pricing to allow member states to decide the pricing mechanisms that work best for them. For example, we have quite a complicated tax system that treats different products differently. Other countries are starting to think about introducing a tax based on alcohol strength, and there is the option of a more targeted approach, such as minimum pricing, which affects only the cheapest part of the market.

Helen Eadie: Have you published any papers on or carried out any review of the alcohol policies in the 29 member states?

Dr Meier: No. Peter Anderson, who would have been here, is the person for European comparisons. We are not particularly interested in that issue.

The Convener: Members who wish to ask Peter Anderson anything should tell the clerks, who will put the questions into a letter and seek his response.

Rhoda Grant: On page 2 of your submission, you set out the percentages for the overall reduction in consumption for different minimum prices coupled with a discount ban. I take those to be the average figures. Have you worked out any figures for different income groups? Is the impact different for, say, low income, average income and high income drinkers?

Dr Meier: We would love to do that work, but we were not commissioned to look at different income groups for this report.

Rhoda Grant: As you will probably acknowledge, the impact will be different for different income groups. An average drinker in a low-income group, who might buy a value brand bottle of spirits and a cheap bottle of wine a week, will pay substantially more if there is, say, a 40p minimum price. For example, their weekly spend will rise from £6.95 to £10.50 for the spirits and from £3 to £3.65 for the wine, which is about a 41 per cent increase. However, someone on a moderate income who buys a bottle of malt and an expensive bottle of wine will feel no impact at all. Can we assume that there will be more of an impact on lower income groups and that the average reductions in consumption that you set out in your submission apply more to those groups rather than to moderate or higher income groups?

Dr Meier: It depends. In general, the impact on moderate drinkers would be fairly minor, especially if the minimum price were in the lower range—up to 50p per unit, say. If I remember rightly, the estimated increase for moderate drinkers was £11 per year. Even for a low-income drinker, that would not be a dramatic amount. There might well be income effects for harmful drinkers, but we do not know. On average, harmful drinkers spend about £2,000 per year on alcohol, so an increase of 5 or 10 per cent would be a substantial amount. The difference that it made would depend on how much money the person had available to buy alcohol. As I said, we have not looked at the issue in detail.

Rhoda Grant: My assertion is that to someone who is on a low income, an increase of £4 or £5 a week—

Dr Meier: The estimated increase is £11 per year, which is less than £1 per month, or 25p a week.

Rhoda Grant: What do you base that level of consumption on?

Dr Meier: On what the average moderate drinker buys.

Rhoda Grant: Does the moderate drinker category include people who do not drink regularly? My back-of-an-envelope calculations were based on the assumption that a moderate drinker would drink within the recognised levels.

Dr Meier: We are talking about the average moderate drinker. That does not include people who do not drink, but does include a range of people who drink, from those who do not drink regularly to those who drink right up to the limit.

Rhoda Grant: So it includes people who do not drink on a weekly or a monthly basis.

Dr Meier: I think that it includes people who drink more than one unit a week, if I remember right. It includes some very low-level drinkers and some people who drink a little more.

The Convener: We have established that it is an average.

Rhoda Grant: But that does not tell us the cost of the proposal to a moderate drinker who drinks up to the number of units that it is considered safe to drink.

Dr Meier: You mean a moderate drinker who drinks exactly 21 units per week.

Rhoda Grant: Yes.

Dr Meier: You could work that out, but we have not looked at that. For us, a moderate drinker is anyone who drinks below the threshold. The large majority of moderate drinkers do not all drink 21 or 14 units a week; there is a spread.

The Convener: I will let Rhoda Grant work that out. I am getting a headache at the thought of working out the increase in cost for someone who drinks 21 units a week. What would that amount to?

Rhoda Grant: A bottle of vodka and a bottle of wine, or something like that.

The Convener: No—I am talking about what the increase in cost would be. That is like the story about the bath and the buckets of water.

Dr Meier: It would depend on what the person drank. If their 21 units were made up of whisky, the minimum price would not change anything. If their 21 units were made up of cheap cider, the effect would be more noticeable. The extent of the increase would depend very much on what we call the basket of goods that makes up a person's average consumption.

Rhoda Grant: Have you done any modelling to find out what people in lower income groups drink? They will obviously not buy malt. Have you looked at what they consume?

Dr Meier: As I said, no separate modelling has been done by income group. Income is accounted for in the econometric model in terms of how people respond to price, but we were not asked to produce separate tables on low-income groups. That is something that could be done with the data.

Dr Simpson: That is fundamental.

The Convener: Yes, but that information is not in the report. We have found out that that work has not been done.

Do you have any more questions, Rhoda?

Rhoda Grant: My next question was going to be whether you had done any modelling by income group of the effect on hazardous drinkers and dangerous drinkers. Can I assume that you have not, given that you did not do so for moderate drinkers?

Dr Meier: Yes.

Ian McKee (Lothians) (SNP): I found your paper very interesting. Earlier, Dr Simpson used the quotation:

"There is low quality but demonstrable specific evidence to suggest that minimum pricing might be effective as a targeted public health policy in reducing consumption of cheap drinks."

For the record, can I establish that it came from your report to the Department of Health in 2008, rather than from your report for the Scottish Government?

Dr Meier: Yes.

Ian McKee: Has the extra research that you thought should be done strengthened or weakened the case for suggesting that

"minimum pricing might be effective as a targeted public health policy"?

Dr Meier: I think that it has strengthened it.

Ian McKee: I want to ask one more question about the report to the Department of Health. It says:

"There is also evidence to suggest that such a policy may be acceptable to many members of the community."

What was that statement based on?

Dr Meier: At the time, there were various opinion polls on minimum pricing. There was, for example, the north-west drink debate, or the big drink debate, as it was called. High levels of support for minimum pricing were found. Support for minimum pricing was higher than that for taxation, for example.

Michael Matheson: You are clearly involved in the issue of how we tackle alcohol misuse and your response to Helen Eadie's questions on the European studies that have been undertaken showed the different approaches that could potentially be used to deal with it. It is clear that there is a healthy level of scepticism among committee members about the modelling and the assumptions that have been made, despite the fact that we are talking about a well-established modelling process that is used for assessing policy decisions.

The committee has received 170 responses to our call for evidence on the bill and some 67 per cent of respondents were in favour of the idea of minimum pricing. The respondents clearly divide into the health lobby—those who work with people with alcohol problems—and the trade, which is largely opposed to minimum pricing. In your experience, is that divide unusual internationally? Are you surprised by how the evidence that the committee has received appears to break down?

Dr Meier: Not at all. There are the same kinds of responses on advertising restrictions, for example. Health people tend to be in favour of such things and cite the evidence, but the industry will be more cautious. Similarly, every time the issue of tax is raised, the health lobby will say, "Yes, that's a good idea" and the industry will say, "No, that would be an absolute catastrophe for the country." So the responses do not surprise me very much, although I am surprised that there has been so much of a response from the health lobby. When such policies are proposed, the health lobby is usually slower off the mark to comment than the industry. The divide between respondents and how they responded was entirely predictable.

Dr Simpson: I want to pursue the income group issue, because that is fundamental to one of my objections to minimum unit pricing. Seventy per cent of people are moderate drinkers or

abstainers. Roughly 10 per cent are abstainers, so minimum unit pricing or taxation would have an effect on 60 per cent of the population. However, let us consider a tax being put on safe, moderate drinkers of modest means who buy less expensive alcohol because of the constraints on their means. Let us consider a couple who buy cheaper alcohol—my colleague Rhoda Grant gave the example of spirits and wine—and spend £10 on it every 10 days. A pensioner couple has come to me to complain about the potential policy. With minimum unit pricing, the price of their alcohol would be £14.15—the own-brand vodka that they currently buy for £6.95 would go up to £10.50 and the wine that they buy for £3.05 would go up to £3.65. They spend roughly £10 on alcohol every 10 days, which puts them in the upper bracket of moderate, safe drinkers, but nevertheless within the confines that the health lobby tells us is appropriate. Under the minimum pricing mechanism, they would be taxed at 41.5 per cent. If VAT went up by 10 per cent, which would produce as great a response as minimum unit pricing, according to your studies, those people would pay an extra £1. In my view, we will all have to pay a price to deal with the alcohol problem, but I am radically opposed to any system that attacks people who are moderate drinkers and of modest means. Such people make up a substantial proportion of the population. If the proposal had a massive effect on the hazardous drinking group, we might still have to consider it, but that group will be affected in a similar way, in that those on low incomes will be affected but those who have higher incomes will not. Although the problem is skewed in relation to deprivation and the skew has got worse, it is not sufficient to lead us to implement a new policy that has no evidence base, apart from the matters that we have discussed, and which is based almost exclusively on a modelling study. It will have a serious effect on moderate drinkers with low incomes.

11:15

The Convener: You have made your point, Richard.

Dr Meier: I encourage the committee or researchers in general to look into whether it is true that moderate drinkers buy the very cheap stuff that is targeted. You should consider whether that is just an anecdotal example of what one couple buys, and how common that is. You would want to know those things, and to know how people on low incomes would be affected, and then you will balance that somehow against the health benefits that you assume. At present we have not looked into that, so I would hesitate to say that that is the general pattern of consumption of low-income drinkers. My gut feeling is that they are probably more likely to drink in the on-trade, where minimum pricing will not have much effect, but we need to establish the facts before we can draw those conclusions.

We did look at general price rises. That is not the same as taxation, of course, because a 10 per cent tax increase affects only the taxed part of a good, which can be a large amount if it is sold at below cost price or a small amount in the on-trade. A 10 per cent price increase is different from a 10 per cent tax increase. The latter would be much less effective than a policy that introduced a 10 per cent price increase across the board, which is what we used as a benchmarking example in the Department of Health report.

Helen Eadie: There is no doubt that every single member around the table is concerned about those whose drinking is hazardous and harmful, whom we are trying to target the most. I was interested to read the papers that are before us, one of which points out the fundamental contradiction in the Sheffield report, namely that the modelling assumes that heavier drinkers are the most price sensitive, even though the systematic review cites studies that suggest the opposite. It states—

The Convener: Just a minute, Helen. Can you tell us where that is, and in which paper?

Helen Eadie: It is in the Centre for Economics and Business Research paper that was placed on the table this morning. It states that the University of Sheffield modelling systematically shows

"a greater responsiveness to overall price changes amongst heavier drinkers, a direct contradiction of the evidence presented which shows that hazardous and harmful drinkers are least responsive to price changes overall."

Given that we are trying to target hazardous and harmful drinkers, it has an impact on my thinking when I read that. Do you want to comment on that?

The Convener: I am a bit lost. Members have not seen that paper. Is it the document "Minimum alcohol pricing: A targeted measure"?

Helen Eadie: Yes. It was among our papers that were put on our table this morning.

The Convener: By whom? It was not placed by the clerks.

Helen Eadie: Perhaps it was my researcher who handed it in.

The Convener: We do not have it.

Helen Eadie: My researcher brought it to my attention.

The Convener: Okay. Can I possibly have the report passed to Dr Meier? She may not want to answer the question.

Dr Meier: No, I can answer it. I am very familiar with the CEBR report on our work.

The Convener: The clerk will pass the report to you—that is only fair. I am sure that you are perfectly able to comment, but I want to ensure that you have got it, because none of the rest of us know what this document is.

Dr Meier: CEBR took two out of several hundred elasticities from our report and said, "Oh, look. This shows that hazardous and harmful drinkers are less price sensitive compared to moderate drinkers." Those were overall aggregate elasticities, not the actual ones that we present later, which the CEBR report ignores, and which include cross-prices: how people shift between different products if faced with a price change. We know that harmful drinkers are more likely to shift when confronted with price changes, so that makes a difference to the elasticities.

After being confronted with that criticism, we thought that we would look at how much of a difference it makes. We put in the alternative figures cited—the ones in Wagenaar—and we also used ones from Chisholm, which is the initial study that Wagenaar cited. The figures are available, if you want them, in a NICE report—a sensitivity analysis that we conducted—that shows exactly what difference the assumption makes. The report shows the difference between basing the analysis on our own data or on international data that suggest that some price sensitivity differences might exist. The difference is not very large; the main effect on harmful drinkers is so big because of their choice of beverages, not because of how price sensitive they are.

Helen Eadie: Manning et al stated, in 1995, that the 5 per cent of heaviest drinkers have

"an elasticity not significantly different from zero".

That is, their consumption would remain almost the same regardless of any price increase. Wagenaar et al, in 2008, also found a mean elasticity of −0.28 for heavy drinkers compared to −0.51 overall.

Dr Meier: As I said, we conducted the Wagenaar sensitivity analysis. The Manning study is done quite differently and it is quite old data, so we have not included it as another analysis. It is not particularly relevant. The Wagenaar study is relevant, but, as I said before, the people in the Wagenaar meta-analysis are mainly binge drinkers rather than heavy, dependent drinkers, so they are different from our hazardous and harmful drinkers. Our analyses are based on the most recent data that was available in the UK. Of course, you can find alternative evidence abroad and so on, and we are happy to show how different our results would have been if we had based our work on that international, older literature, but we maintain that our model is based on local purchasing data.

Helen Eadie: The literature review by Ludbrook, in 2004, outlined that although there is "unconvincing evidence" that price affects consumption in heavy drinkers, there is more convincing "indirect evidence" that it does, which comes from studies that have shown a decrease in alcohol-related problems following increases in taxation. Would you comment on that?

Dr Meier: That study is from 2004 and the Wagenaar study is from 2008. It is the same kind of study, but Wagenaar is slightly more up to date. I have seen studies that suggest that dependent drinkers are price sensitive because they tend not to have much money, but I have seen other studies that suggest that binge drinkers are not very price sensitive. We can only work from the data we have about how it works in the UK.

Helen Eadie: Do you accept that Ludbrook is a valued study and that it has integrity equal to your own studies?

Dr Meier: Yes.

The Convener: We will move on. Mary Scanlon has some questions.

I think that this is round two. You are doing very well, Dr Meier. It is not gin in your glass—it is just water—so there is no point raising your glass.

Dr Meier: I was going to say how inappropriate that would be.

The Convener: It would not be appropriate at this committee on this particular bill.

Mary Scanlon: My question follows on from Rhoda Grant and Richard Simpson's point on income elasticity and so forth. "The Scottish Health Survey 2008" says:

"Levels of consumption were highest among women in managerial and professional households, in the highest income quintile and among those living in the least deprived areas."

Also, the Office for National Statistics confirmed that women in managerial and professional households drink 13.8 units per week compared to 10.6 units.

The Convener: Do not look at me when you are saying that, Mary.

Mary Scanlon: That confirms the earlier point on elasticities. Price changes are not so severe for people who have high incomes.

The Convener: I will let in Dr Meier. She looks as if she is about to explode.

Dr Meier: Not quite.

Setting out the relationship between income and consumption does not say anything about how people respond to price changes. What is usually said is that people on lower incomes drink more and that deprivation is a big factor that drives drinking. Recently, we have seen that that is not necessarily the case among women: we now know that professional women drink more than women who have not got much money. The link between drinking and not having much money does not necessarily hold in the UK.

Mary Scanlon: So, are you saying that minimum pricing would affect a managerial or professional woman in the highest income quintile who drinks more than the weekly average in the same way that it would affect someone in a deprived area who is less well off? Are you honestly saying that their response to minimum pricing will be the same?

Dr Meier: As I said, we have not modelled it, but we know that managerial and professional women drink more.

Mary Scanlon: Earlier, when I mentioned the figure of 9.3 per cent for the reduction in consumption between 2003 and 2008, you said that you could not predict health outcomes. In fact, you do predict the effect of minimum price—

Dr Meier: Could you please tell me where you are?

Mary Scanlon: Page 58.

The Convener: It feels as if the jackets are off, Mary. I ask for courtesy please, ladies.

Mary Scanlon: I did not have the figures to hand in putting the question earlier, convener. I apologise for that.

On page 58, you talk of a 40p minimum price and a drop in weekly consumption of −2.7 per cent. If we work the figures over a five-year period, we would not be too far from the −9.3 per cent figure I quoted. You state that health effects within one year will be 40 fewer deaths, 800 fewer hospital admissions, 1,100 fewer crimes and so forth. You have predicted what will happen in one year and yet a cumulative reduction in consumption of 9.3 per cent over five years saw increased deaths, hospital admissions and—I think I am right—crime. In addition, there is undoubtedly the issue of increased health costs.

Dr Meier: I am not sure how that differs from the earlier point on the health—

Mary Scanlon: The point is that—

The Convener: Please do not talk over each other. I have a little headache coming on.

Mary Scanlon: The point is, what happened in 2005 to 2008 is very different to your predictions. Our real-life experience of a reduction in consumption and the effect on our population is the opposite to your predictions.

11:30

Dr Meier: I am not sure that that is true. The evaluation stands as it is. You have a figure for 2003 to 2005, but you cannot simply apportion it to year-on-year consumption. For example, we know that the consumption curve went up first and then down again.

In addition, we have modelled consumption knowing that there is a lagged effect on health. For example, one would not assume that people will not develop cancer just because they have recently decreased their alcohol consumption. The model includes a projection of what will happen over 10 years, so references to the "full effect" are to what will happen 10 years down the line. Details of the full effect are given along with the figures for reduction in crime and so on that you mentioned. We presume that consumption reductions need time to take effect. I do not know whether the effect of those consumption reductions on crime has been evaluated.

Mary Scanlon: I have quoted your predictions on what will happen in the first year of implementation. All the figures that I quoted from pages 58 and 59 of your paper relate to the first year of implementation.

Dr Meier: I am sorry—I may have misunderstood you.

One would need to look at how that sub-group responded in a year when a consumption reduction of 2.7 per cent took place. As I said, the effect on crime will depend on whether any consumption reduction was observed in the groups that commit crime. If those groups reduced their consumption but crime levels increased, another explanation would obviously be needed. However, I have not seen that analysis.

The Convener: It is interesting that cancer has been mentioned. In a discussion during our visit to Paris, I learned that excessive consumption of alcohol is the second most common cause of many types of cancer. Not many people are aware of that, but it ties in with the point about the long-term effects.

The next question is from Ian McKee.

Ian McKee: I will lower the excitement a bit, I suppose.

The Convener: Surely not. You are not known for that.

Ian McKee: I have a simple question, because I am getting confused by the various figures. How many Scots adult men are hazardous and

dangerous drinkers? What is the percentage when those two figures are added together? What proportion of Scottish women are in that category? I am confused about whether the 30 per cent figures includes all those drinkers or only some of them. Can you spell that out for me?

Dr Meier: I do not have the male versus female split with me, but I can give the total numbers of the population who come into those categories. There are 2.4 million moderate drinkers. There are about 950,000 hazardous drinkers and about 273,000 harmful drinkers. Those are our baseline figures before modelling the effects of any policy changes.

Ian McKee: You do not have the figures on how that splits between men and women.

Dr Meier: I do not have those figures to hand, but I can provide them.

The Convener: That would be useful.

Ian McKee: We can probably assume that there are more hazardous and dangerous drinkers who are men, so the percentage will be high.

Dr Meier: Yes—that is true for hazardous and harmful drinkers, but it is not so true for moderate drinkers.

Ian McKee: I would be grateful for those figures, in order that we can place the debate in context.

Dr Meier: No problem.

Rhoda Grant: I want to ask about what was taken into account in the modelling. As I mentioned earlier—I think that Dr Meier was in the room at the time—in France, wine was previously untaxed yet wine drinking fell steeply while consumption of vodka, which was highly taxed, actually increased. However, the increase in consumption of spirits was masked by the fall in the consumption of wine. For me, that contradicts the whole minimum pricing model. I know that such things are difficult to capture in a model, which is not based on reality, but did your model take into account trends and fashions? You mentioned advertising, earlier.

Dr Meier: No—it is notoriously difficult to predict what will happen with such things. As soon as one tries to make a prediction, someone will have a different attitude about what will go down and what will go up. I am not sure what the pricing levels of wine and spirits are in France. Spirits are taxed, but are they still quite cheap, or are they very expensive?

That trend is surprising, in a way, because much evidence suggests that consumption drops when prices go up. Literally thousands of studies have observed that over time. It would almost be odd if, following a large increase in the price of one good, people started to shift towards it. That does not make sense either according to economic theory or in judging from observations in literature from everywhere. That trend could not be easily explained unless there was a very strong marketing trend of promotions and advertising of spirits, which would help us to understand that. That is worthy of study.

Rhoda Grant: The French were taxing vodka particularly heavily, because they viewed it as the target drink. It was made very expensive even in comparison with its price here, although alcohol is quite cheap in France. Wine is very cheap because, politically, the French cannot tax it, so they taxed vodka very highly because they saw it as the problem, and consumption has still been increasing. They did not find that it was to do with advertising, on which they have strict rules. It has not been researched, but it has been suggested that there is a global culture in drinking, with which the French were out of synch because they drank a lot more wine and very little by way of spirits. A convergence was said to be going on, and we are perhaps operating on a different level here, with the volume of wine drinking going up and that of spirits drinking going down. The French tried to use very high taxation to stall consumption, but it did not succeed.

Dr Meier: I am not familiar with the figures, the results or the details of who drinks vodka and how they are affected by its price. I cannot really comment further.

The Convener: We cannot expect you to.

Dr Meier: It might be worth putting that point to Peter Anderson.

Ross Finnie: Richard Simpson asked a question earlier that was along similar lines to what was going to be my final question, so I would like to follow up his question. He spoke about the marginal effect—almost expressing it as a tax—of an increase in price on low-income drinkers, and he put a question to you. I understood your answer in general terms, about the difference between price and tax. I followed that. However, I was not clear—whether it was in Richard Simpson's question or your answer—about whether a 10 per cent increase in tax, as opposed to the imposition of a minimum price, would have the same effect in health terms as is suggested in your report. I am sorry if I am mangling Richard Simpson's question.

Dr Simpson: No—you are not.

Ross Finnie: Perhaps it would be better if Dr Simpson were to repeat the question. He posited a 10 per cent increase in tax.

Dr Simpson: Yes—in tax, not price. There is a difference.

Ross Finnie: I understand that. We have a 10 per cent price increase and the imposition of a minimum unit price at 40p. Would they have the same effect on public health?

Dr Meier: No. The reference is not to the Scotland report, but to the Department of Health report, which I do not have with me. If we consider the total valuation of the changes to harm, we find that the 40p minimum price comes out stronger than the 10 per cent across-the-board price increase because, in the balance of effect, the minimum price had a greater effect on the harmful drinkers than it did on the moderate drinkers. Although the populationwide consumption reduction was very similar, the effects on harm were slightly increased by the minimum price compared with the 10 per cent across-the-board price increase.

Ross Finnie: That is helpful. That leaves us only the unanswered point about the proportionality within those elements. You were not asked to answer this point, but the issue of the proportions among the moderate, harmful and hazardous groups—and lower, middle and higher incomes—is left outstanding, and only once we know about them can we tell who would be affected by a marginal increase in price of that sort.

The Convener: Thank you—that was an interesting question, Ross.

I now conclude this evidence session, you will be pleased to know—or perhaps not, Dr Meier. Perhaps you are just getting into your stride. There will be no round 3 today. Thank you very much for your evidence. You have faced intense questioning, sitting there all alone, and you stood up to it very well. It is a controversial issue, as you can tell.

11:41

Meeting continued in private until 12:45.

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

Members who wish to suggest corrections for the archive edition should mark them clearly in the report or send it to the Official Report, Scottish Parliament, Edinburgh EH99 1SP.

PRICES AND SUBSCRIPTION RATES

OFFICIAL REPORT daily editions

Single copies: £5.00
Meetings of the Parliament annual subscriptions: £350.00

WRITTEN ANSWERS TO PARLIAMENTARY QUESTIONS weekly compilation

Single copies: £3.75
Annual subscriptions: £150.00

Printed and published in Edinburgh by RR Donnelley and available from:

Scottish Parliament

All documents are available on the Scottish Parliament website at:

www.scottish.parliament.uk

For more information on the Parliament, or if you have an inquiry about information in languages other than English or in alternative formats (for example, Braille, large print or audio), please contact:

Public Information Service
The Scottish Parliament
Edinburgh EH99 1SP

Telephone: 0131 348 5000
Fòn: 0131 348 5395 (Gàidhlig)
Textphone users may contact us on **0800 092 7100**.
We also welcome calls using the Text Relay service.
Fax: 0131 348 5601
E-mail: sp.info@scottish.parliament.uk

We welcome written correspondence in any language.

Blackwell's Scottish Parliament Documentation Helpline may be able to assist with additional information on publications of or about the Scottish Parliament, their availability and cost:

Telephone orders and inquiries
0131 622 8283 or
0131 622 8258

Fax orders
0131 557 8149

E-mail orders, subscriptions and standing orders
business.edinburgh@blackwell.co.uk

Blackwell's Bookshop

53 South Bridge
Edinburgh EH1 1YS
0131 622 8222

Blackwell's Bookshops:
243-244 High Holborn
London WC1 7DZ
Tel 020 7831 9501

All trade orders for Scottish Parliament documents should be placed through Blackwell's Edinburgh.

Accredited Agents
(see Yellow Pages)

and through other good booksellers