It has never been easy to forecast coffee production, consumption and price. Now, it is even more difficult because of structural changes to the market - that affect pricing - and steep falls in coffee values - that do not allow output response to be accurately measured. Despite these reservations, I am attempting to paint a picture of what will probably happen in the next five years - providing an indication of the situation in 2005.

Bear with me as I take you through what I consider the important factors but bear in mind that I am largely providing a still picture based on the information we have today. In reality, the next five years will be a moving picture with many phenomena that may fundamentally affect the market.

Unusually, I am going to start with consumption and as a basis will show you Chart 1. This chart illustrates the reaction of coffee consumption to incomes in any country as a whole. Chart 2 will show the course of global coffee consumption over time.

The coffee consumption of an individual, who drinks coffee, will increase with income until saturation, a different level for each individual, is reached. It may increase at an even rate but the rate of increase may decline as incomes increase. In any country there will be a group of individuals that have reached saturation. An increase in income will not persuade them to drink more coffee. However, it should be clear that they can be persuaded to increase the value of the coffee they drink, given the availability of good quality coffee and skilful marketing. Some consumers, who are less well off, will react to an increase in incomes by drinking more coffee. Thus, we are not only concerned with an increase in incomes in any country but also with the distribution of incomes.

Chart 2 is similar to Chart 1 but refers to the situation in any country with time replacing income on the horizontal axis. The rate of increase in coffee consumption lessens as countries become richer and more consumers are at or near saturation. We could expect that the rate of increase in many traditional coffee drinking countries approximates that on the right-hand side of the curve. Thus, though we can expect some growth in those countries, as poorer people become richer, this will be moderate. However, I wish to emphasise that value increases can always be obtained, through skilful marketing.

The shape of both charts - an elongated S - is not new or mysterious but approximates the movement of consumption of a group of products or a brand over time. Coffee is fortunate because
although consumption is almost static, or even reducing, in some countries there is much potential in others.

I have calculated probable consumption in the year 2005 based on:

- Population increase - low in many countries in western Europe. A low birth rate may be compensated by immigration. Immigrants, with an improved standard of living, will boost coffee consumption. Urbanisation, the movement of people to towns and cities, will usually have a positive effect in newer markets - increases in consumption in China and Russia will largely depend on people living in towns - but may have a negative effect in traditional markets, as lifestyles change.

- An assessment of the improvement in real, inflation adjusted incomes. Income forecasts are provided by several multilateral institutions. However, in the light of recent events, I have tended to adopt a conservative approach and have assumed that although income growth will be positive, we cannot expect substantial increases during the next five years.

- A calculation of the reaction of consumers to increased real incomes obtained from an analysis of historic data with due attention paid to recent movements in coffee consumption and incomes.

My estimates are in Table 1.

I arranged the data in such a way as to focus on the different paths of the four major groups. It should be noted that the forecasts assume no change in real retail price. What this means for global market prices is unclear. A small rise, similar to the rate of inflation in consuming countries, is possible without affecting retail prices, but the situation is clouded by movements in exchange rates, specifically the value of the US dollar compared to other major currencies.

If real retail prices remain constant then it could be expected that global consumption would rise by 4.3 million bags, 4.2 percent, between 2000 and 2005. Clearly, a more optimistic scenario, whereby incomes rose at a greater rate than I have forecast, would produce higher growth. However, it would be unwise to assume that total consumption would be greatly in excess of 110 million bags by 2005.

I expect comparatively low consumption growth by "traditional" importers. Many countries in northern Europe are at, or near to, saturation, given current, and prospective, income distribution. Moreover, and this is really for the future, there are signs that the consumption of younger people will fail to compensate for losses among older consumers. This gloomy prospect follows from changes in life-styles and the availability, and aggressive promotion, of competing beverages.

The activities of the Speciality Coffee Association of Europe, its US counterpart and some roasters that are directed towards the improvement of quality may help to increase consumption in traditional importing countries but this will be an expensive and difficult undertaking. Arguably, however, the ability to persuade consumers to buy and drink better quality coffee will not only add value to the industry but also provide insurance against price rises. In other words, replacing price considerations by quality considerations.

The main volume increases among traditional importers are expected in southern Europe, principally Greece, Italy and Spain. These countries are still undergoing transition with new entries to the middle class. Thus, they will continue to offer opportunities for increased volumes of coffee consumption.

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<th>Table 1: Consumption (mln bags)</th>
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<td>Producers</td>
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Growth rates will be higher in the other three groups. Progress will only be restricted from inadequacy of incomes. Though income growth will be positive the earlier predictions of solid growth in this decade are unlikely to be realised fully. It make take some time for circumstances in the United States and Japan to improve and economic conditions in those two countries will have a profound effect elsewhere.

My estimates of production in 2005 are in Table 2. Again, the effects of price change are disregarded, it is assumed that average global prices in 2000 will continue to apply. However, even if global prices (in US dollars) should hold, the effect on growers and intermediaries in producing countries is not clear. For instance, weakening domestic currencies may allow growers to receive more in local terms. By contrast, if exchange rates remain stable then the influence of inflation, particularly wage inflation, will erode the value of the receipts obtained by growers.

The forecasts are based on an assessment of coffee planted at present or due to come into production shortly and my analysis of reduced output response, following poor prices. However, let me make two points:

First, I find it difficult to believe that a grower will not harvest the crop as long as the receipts from sales exceed the cost of harvesting and associated activities. Any "profit" will serve to compensate the grower for the cost of husbandry prior to harvest.

Second, I do not believe the economic textbooks when they state that a reduction in wages will lead to the substitution of labour by leisure. Most of us have family and other responsibilities that force us to work. A fall in remuneration could even persuade us to work longer hours. A coffee grower often has little choice but to grow coffee if there is a requirement for cash. Planting or replanting coffee is another matter and industrialised coffee estates may have greater flexibility.

Thus, although the recent run of low prices is bound to have some effect on output, particularly through a reduction in the application of cash inputs, production will not collapse and will be largely maintained in those areas where wages are low - south-east Asia - or where mechanization can replace labour, as in some regions of Brazil.

Brazil, for Arabica (and increasingly for Robusta), and Vietnam, for Robusta, are the driving forces at present and will almost certainly remain so for the next five years. Potential annual crops exceed 40 million bags for Brazil and 15 million bags for Vietnam. The potential is not far short of half the expected global output in 2005.

There may be another cloud on the horizon. Brazil and Vietnam both have a comparative advantage in production but there are other countries, in south-east Asia that could produce coffee, Arabica and Robusta, and have low labour costs. Cambodia, Laos and Myanmar are not likely to be important producers over the next five years but could gain in importance thereafter.

Now for a different kind of cloud. Though the producer of really good coffee would expect to receive a premium the cost and reward structures are not very simple. There is a danger, a grave danger, that the current low price scenario will lead to a significant shortage of the best grades during the next few years. We could expect, for instance, that harvesting rounds will be curtailed or that the constant price pressures experienced by both growers and intermediaries will lead to a partial failure in local marketing. These price pressures will be binding and will largely determine the actions of growers, processors and exporters at, and after, harvesting. If coffee roasters and traders wish to continue to receive very good quality coffee then they will have to spend time and money transmitting the appropriate signals. As an aside, this conference should, either as a result of formal presentations or from informal discussions in the lobbies and corridors, assist in clarifying and repairing the situation of coffee. For coffee needs clarity and the current low-price, low-interest situation needs repair.

<table>
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<th>Table 2: Production (mln bags)</th>
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<tr>
<td>Total</td>
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Although accurate commodity price models are a rare breed it was possible, for coffee, to specify and estimate a fairly satisfactory price model in the early 1990s. This model explained over 90 percent of the price variation resulting from changing fundamentals. Models incorporating recent data are far less accurate. If it was still applicable then the price predicted by the model for the coffee year ending in 2000 would have been some 50 US cents higher than the actual price. However, there appears to have been some form of structural break with fundamentals - stocks, expected production - appearing to exert less influence on price formation than was the case in the past.

Why should this be so?

We are all aware of the remarkable improvements in the exchange of information and operational logistics. By themselves, these two factors would reduce prices through efficiency. There is now less need, for instance, for traders and roasters to finance stocks. Flavour management, the replacement of one growth of coffee by another or, in its extreme, the replacement of Arabica by Robusta, allows roasters to blend more optimally in terms of price criteria and also reduces the requirement for stocks. Fundamentals are now worth less in price formation. Thus, though fundamentals may appear positive we have experienced dampened prices.

My estimates of consumption and production for 2005 will, if upheld, provide little comfort for coffee producers. Even if the estimates of consumption are too pessimistic and those for production too optimistic there is still the very strong likelihood of a coffee surplus. It is probable, even likely, that global coffee prices will remain weak though we are approaching a price scenario, which, if prolonged, will make it scarcely worthwhile for some origins to ship.

Is there any comfort?

I detect a greater willingness for cooperation between coffee professionals on the producing and consuming sides. There is an increased realisation of common interest and an acceptance that neither weak nor excessive prices are in the interests of the market as a whole. This commonality of interest is evident as so many coffee professionals are at this conference, are involved, through the ICO, in the Private Sector Consultative Board and are members of speciality associations and institutions such as ASIC.

However, this may not be enough! Approximate stability in the longer term may only be achieved by two methods. First, production and consumption must more closely coincide, allowing for weather induced variations in output. In practical terms this suggests some form of logical production policy, preferably with the necessary sacrifices compensated in some way. Second, and probably more acceptable, the methods of trading may have to be largely altered to provide some sense of longer term price security for producers and consumers. A discussion of these two points would fill up several conferences and is bound to be controversial. I hope that some of you agree with me that we really have to bite the bullet before it is too late.

To summarise

- Slow growth in consumption in traditional markets.
- Faster growth elsewhere.
- Doubtful economic conditions will restrict gains in consumption over the next five years.
- Value increases are possible through quality sales. These will give some impetus to saturated markets.
- Quality will buttress consumption following any retail price increases.
- Brazil and Vietnam are the keys to output.
- Output is forecast to increase and will continue to exceed consumption in the medium term.
- Prices will remain weak.
Crisis can only be averted by an equitable and logical production policy or by improving trading to offer more price security to producers and consumers.