

**An interview with Don Brash the Governor of
The Reserve Bank of New Zealand
Time and Date: 9:15 AM, Wednesday 27 March 2002
Location: Don Brash's Office at
The Reserve Bank of New Zealand
2 The Terrace
Wellington**

Razzak Thank you very much for this, I really appreciate this opportunity.

Brash You're very welcome. I really enjoyed your farewell party last night. By the way, it was fun.

Razzak Thank you very much. Lets just start with the second question.

You started your job here in September 1988. Inflation was no longer in the double digits, but was still reasonably high (CPIX inflation stood at 7.8 %). We then saw a large disinflation with inflation falling to 4.8% in September 1990 (two years after you started), and falling further to below 3% in 1992. How did you disinflate the economy? Back then there was no output gap in the Bank's literature, you did not control the interest rate (cash rate) directly, and the exchange rate was floating. So how did you do it? Describe how you think the process worked.

Brash I'm not sure that I can give you a completely satisfactory answer, but let me try. When I came on 1st September 1988, I don't think that either the Bank or I had a very clear understanding of the monetary policy transmission mechanism. I think we knew the difference between tight policy and loose policy, but I don't think we had a clear understanding of what drove the inflation process. I recall rather clearly on the second day I was at the Bank we had a meeting what was called the T-bill Committee, which eventually became the MPC. We met on a Friday afternoon, and there was a lot of concern expressed about the impact on prices of the fairly sharp exchange rate movement, which had taken place the previous month. That led to a discussion during which there was a lot of focus on the direct pass-through of the exchange rate to prices and certainly at an early stage that was the way I tended to think about how you might bring down inflation. In other words, how did we adjust the level of settlement cash, which was our instrument, in order to ensure that monetary conditions, by which we were thinking very much of the exchange rate at that point, would influence prices in a downwards direction.

Razzak The policy instrument was the quantity of settlement cash...

Brash Well certainly the quantity of cash. I think at that point we referred to primary liquidity, which was both Reserve Bank bills and money on deposit with the central bank by the banks. That was, I think, our main instrument and we wanted to adjust some monetary conditions to produce a lower inflation rate and the exchange rate was very much in the front of our mind.

Razzak The exchange rate.

Brash Yes. We knew interest rates were relevant, but we didn't have any clear understanding of what level of interest rates would be required to produce a reduction in inflation. We were thinking very much of the direct price effects of the exchange rate in much, the same way that Singapore did through the first party of the 90's, and indeed Israel also did when they were disinflating. Both were looking at direct exchange rate pass-through effects and it's my impression that we used those to my recollection. I haven't gone back to check the records very carefully, but my recollection is that we were very much influenced by those direct price effects. The market knew what our pass-through coefficient was, which at that point was about 0.4, and they knew what our inflation target was (if not in September 1988 they had a clear understanding soon after) 0-2, but they didn't know precisely by when we had to achieve that. The early 1990's was the expression, I think, the Minister of Finance used. There was no date put on that until the middle of 1989 when we were finalising the Reserve Bank's Annual Report for the year to March 1989. We then had March years and in the course of showing the Minister of Finance my draft Annual Report I had referred at that point to saying we expected to be able to get 0-2 by the end of our 1992/93 March year. He said, could you make it by December 1992 instead of March 1993? And I said, well, we probably could, and he said well that makes it a calendar year, which people think in terms of. Since it was only a three-month difference and we were still more than 3 years out from the target, I was comfortable saying yes we can make it by the end of calendar 1992. That was the first time I think we had articulated the precise date to the market.

Razzak But disinflation happened earlier than 1992...

Brash Oh yes, that's true. That's because, like many others, we were surprised at the speed at which inflation fell towards the end of the process. I think that most of us thought that getting inflation down from double digits to about 5 would be the relatively easy bit, but getting it below 5 would be very very difficult because of the inertia in wages and prices and so on. There was a very sharp increase in national oil prices late in 1990 with the Gulf War developing: the oil price had gone up very sharply, as you recall. All of those things made us think that we were going to be struggling to get there by 1992 and indeed we were also conscious of the fact that the current account deficit was looking rather large. There was probably a need for some reduction of the real exchange rate and the simplest way of getting there might be some reduction of the nominal exchange rate. When the incoming government was looking at the wording of the Policy Targets Agreement (PTA), they urged a slightly slower disinflation. The government changed the target from 0-2 by the end of 1992 to 0-2 by the end of 1993. We were pretty comfortable with that because we expected some downward movement in the exchange rate, the nominal exchange rate, and as you say we got there by the end of 1992 to, I think, everybody's surprise. I am comforted somewhat by the fact that Australia had a very similar experience. Australia also saw significantly faster disinflation in the early 1990's than they had expected.

Razzak Even Britain. Let's move along please...

Brash Incidentally there is some discussion of that question in the content of my Atlanta speech (The AEA 2002). You recall I talked a bit about how the method of reducing inflation had changed over the years.

Razzak Various RBNZ publications and yourself discuss uncertainty at great length. You actually started talking about uncertainty more in 1997. You tell the public that you are uncertain about the shocks that hit the economy, that you are uncertain about the model of the economy and finally you are uncertain about the lag at which policy will affect economic variables like inflation and output. If so, then how do you explain your reliance on a single model, FPS, to compute the future path of the economy and to set policy every quarter? It suggests that you have made up your mind about how the NZ economy works, and that you understand how the shocks propagate. Is this true?

Brash Let me say that I think FPS is a good model. I don't know a lot about models or alternative models but FPS as you know is an adaptation of a Bank of Canada model. We have had a number of very good people working on it so I think it is a good model to start with. Secondly, I think we regularly test at least some of the parameters for "reasonableness" and that encouraged me to think it's kept reasonably up to date. I think also there are two other things which give me some comfort. One is the forecast of the market. The market clearly understands what our objective is; they also have perspectives on the New Zealand economy, where it is currently, how it works. We rightly pay quite a lot of attention to what other market commentators think is going on and what these inflation projections are. If our projections or our policy judgement is radically inconsistent with what the market consensus is, then we better be pretty sure that we know why. We inevitably, I think, pay quite a lot of attention to what the market's forecasting and expecting us to do. In addition, as you know, we keep an eye on the Taylor rule to see what that different approach might suggest policy should be doing. Now as you know we don't take the Taylor rule as some kind of gospel. We're not sure it's as relevant to a small open economy as it is to a much larger economy because of the importance of the exchange rate in a small open economy, but I think it's an additional check on what FPS is telling us.

Razzak Therefore you feel comfortable using the model to communicate and tell a story?

Brash I think so, yes.

Razzak But you still are unsure about how the world evolves. Because you started by saying we didn't know the transmission mechanism in the early stages and we change our thoughts all the time. So you are willing to see a different kind of modelling?

Brash Absolutely. I am not sure that FPS is the end of history but certainly for the moment I think it is serving us well and I particularly like the fact that we can treat monetary policy endogenously. I think it is a very attractive feature of FPS.

Razzak But on that note let me just say something, you might want to comment on. People criticise the Bank of England for not having endogenous monetary policy reaction function. Can you tell me what's wrong with the Bank of England? It's

been doing great and its performance is fantastic so what is this nonsense all about.

Brash I think that's an absolutely fair point¹ and indeed of course we didn't have an endogenous framework before FPS ourselves and we got inflation down into the target and indeed we kept it more clearly within the target in the first three or four years before we had an endogenous model.

Razzak So you really think that there is more art than science?

Brash Well there is certainly some of both, no question.

Razzak Blinder says that the Fed takes a lot more flak when it raises interest rates than when it lowers them. Do you think there is a similar situation in New Zealand? Alex Cukierman shows that if the policymaker behaves in such a manner "inflation tendency" arises. Are you concerned and what is your assessment? You know Alan Blinder, is quite on the record among other people who talked about central bank's preferences...

Brash A couple of comments. First, I think, yes there is certainly more media criticism when rates are being raised than when they are being reduced, and, there's no doubt about that at all. It is interesting that we do a survey roughly every six months on attitudes among the New Zealand public towards the Reserve Bank and the latest survey we did was, I think, about a month or two ago and we reached the highest "favourability-rating" we have ever had about 6 or 8 weeks ago when we did the last survey. That isn't surprising. The economy is pretty robust, interest rates are the lowest they have been almost ever, but not quite, but they are well down by most people's judgement and that makes us quite popular. But it is not true that we take no flak when rates are reduced. Interestingly, I probably get more letters complaining when rates go down than when they go up. But it's not visible in the media. I don't get a huge number of letters in any event, but I probably get at least as many when rates are reduced as when they go up and probably somewhat more and they are from people who are often older. Sometimes elderly citizens say "look I've got savings, the Government has been trying to encourage me to save and now you reduce interest rates. That is crazy because I can't live. What's the point of saving when rates are only 4.5%."

Blinder was talking about business. He was talking probably also about the media. The cynics have said that's because most journalists have big mortgages and I don't know if that's a fair comment or not, but certainly it's right that businesses don't like rates going up and they think low inflation and low interest rates ought to be the way the world is. I think that what I'm saying is, yes it's probably generally true that raising rates engenders more public hostility than reducing rates, but there are certainly people who are pretty unhappy when rates go down. Now the second issue is, does that engender an inflation bias? I guess I'm sympathetic to Rogoff's argument that governments deliberately, or should deliberately, appoint a conservative central banker.

Razzak Do you consider yourself one?

¹ He means the criticism against the Bank of England.

- Brash I think probably I am in the sense that I am absolutely convinced that low inflation is the best contribution monetary policy can make to economic growth, and to social justice.
- Razzak So when you made policy decisions, were you be concerned about particular segments of the population?
- Brash No.
- Razzak But you feel uncomfortable surely?
- Brash When I raise rates?
- Razzak When some portion of the society complains.
- Brash Of course. I mean one would be less than human if one was to totally ignore that, and clearly if people complain a lot, I've got to think, was that the right decision? Do they know something that I have missed? As you know, we've increased the cash rate very recently and a lot of people were very unhappy about that. I must say that none of the data available to the Bank before the decision was finally taken, and even more clearly none of the data available since that decision was taken, suggest it was wrong. It's fairly clearly in my view that the right decision was taken.
- Razzak Most people thought you should have raised the official cash rate, but not now (in March 2002), I mean they are talking about timing.
- Brash That's right.
- Razzak How do you know whether it's now or next week, or who knows?
- Brash I take some comfort from the fact that, as you probably know, we had our normal OCR advisory group of six internal people. In addition, this time (March 2002) we had Gordon Thiessen, formerly Bank of Canada's Governor, Professor Peter Kenen, and Professor Takatoshi Ito, plus our two external monetary policy advisers, Brent Layton and Kerrin Vautier. And of those eleven people, all but one thought that an increase in the OCR was appropriate, so it was a very strong consensus. The data since that decision was taken have even more clearly shown that it was the right decision in my view. I think that to be a central bank governor one has to be somewhat impervious to public abuse. None of us is totally used to public abuse, but I think I am appropriately impervious.
- Razzak Lets move on.
- Brash Can I just make one other point? One of the reasons I feel quite strongly about low inflation, I mentioned growth and I mentioned briefly social justice. I think that the Romer and Romer argument that if you care about social justice or social equity then you will favour low inflation is very compelling point because affluent people, and certainly people with assets, can, not only protect themselves against inflation they can also make money out of inflation. Now if they are

making money out of inflation, they are making money out of it at someone else's expense, by definition, since there are no additional goods and services produced and the people they make money out of are the people who can't protect themselves against inflation. So even if I was a total softy and cared mainly about social justice and not at all about low inflation, I would want low inflation.

Razzak Thank you. I guess yesterday you were given a presentation about the central banks loss function. Think of this issue as you're making the decision and in decision theory you basically want to minimise your costs. I am thinking that the volatility of output, the volatility of inflation and the volatility of the exchange rate are all costs that you want to make smaller. Since you stabilised inflation; how much do you care about the rest?

Brash Well I think one of the difficulties in interpreting the New Zealand data on output volatility is that a very small economy is almost by definition going to have higher output volatility than a large economy. You don't have single small events being offset by other single small events. I guess a good example of that last year was the third quarter GDP number, which was very low because the electricity shortage meant that a couple of sectors had negative output growth in that quarter. Was that a monetary policy phenomenon? Of course it was not. So to some extent, the volatility of output in a small economy is inherently bigger than the volatility of output of a larger economy. I think that, subject to keeping inflation under control, if one can additionally reduce the volatility of output that's a gain.

Razzak Of course.

Brash Yes, and I think most of the evidence suggests that we have seen a lower volatility of output in the 1990's than in the 70's and 80's, which means we've got both lower inflation volatility and lower output volatility and that is obviously great. So I interpret the mandate (the last PTA's Clause number 4c) to keep an eye on output volatility as saying something about the speed at which we have to reduce or increase inflation if it's outside the range or close to the edges of the range, and currently I guess it's a very good illustration – we are tightening policy now with the objective of getting inflation back to near the centre of the target over *a two year* time-frame roughly. If we were to do it over *a one year* time-frame, we would almost certainly have to tighten policy very aggressively and use the direct pass-through effect of the exchange rate or some of the short acting policy channels to get inflation down very quickly and that would almost certainly have very dramatic effects on output. Subject to inflation being kept under control, if we can reduce output volatility that's all for the good. I don't have much confidence that I can reduce exchange rate volatility I have to say. Do you want to talk about that at this point?

Razzak We'll talk about that later. Perhaps we'll have to talk about it sooner rather than later. But then you have a single objective basically, which is the volatility of inflation that you look at and you're thinking that, if the output volatility can be achieved without jeopardising the inflation target – that's gain – what if it doesn't?

Brash In answering your question, the Reserve Bank Act is hierarchical if I understand the expression.

Razzak The debate is still on now. We are talking about whether you have output objectives in reaction function or not explicitly. Professor Lars Svensson takes this argument one step ahead. He says you have to commit yourself to reducing the volatilities of inflation and output. You are not only have to have in your model a reaction function that includes both inflation and output, but you have to go outside the Bank and tell the public exactly what are you really concerned about (and the weights attached to each element in the loss function).

Now, I want to talk about the issue of the inability of economists, even non-economists, of telling apart the nature of the shock, telling apart the permanency of the shock. It's a crucial issue for policy. We get hit with the shocks that are sometimes friendly and sometimes they're really nasty and when they're nasty they also could be short lived and they disappear so we don't need to do anything about them. But sometimes they stick with us. Telling these things apart is extremely difficult, and that's why we take time to think about them. I think the question that I am going to ask you is quite related to the one before and the one even before that, so I am looking for a consistent answer here. You talked about that situation I think last year in your speech about stagflation.

Brash uh huh

Razzak Here is the question. Some might argue that the NZ economy was recently hit by two shocks simultaneously, an increase in exports stemming from lower value of the Kiwi dollar (demand shock) and an oil price shock because OPEC raised crude's prices (negative supply shock). Suppose that this situation had continued and that your staff judged that the supply shock was much bigger than the demand shock. As a result, output falls below your best estimate of potential and inflation starts to rise.

Brash I think you've got to somehow try to get a handle on what is causing the inflation part of the stagflation. Now, if we see an increase in the price level or increase in prices as a consequence, say, of an increase in international oil prices, but there is not much else going on to drive up prices domestically, you may conclude that that is a one-off price shock that you can look through.

Razzak How do you establish that?

Brash Well, you can't establish that definitively, but you look for other measures of inflation, you look at weighted medians, you look at what is happening to non-tradable inflation, you look at what is happening to inflation expectations, you look at what is happening to wage and salary behaviour, etc. And if all of those remain reasonably well anchored at a low inflation rate and the only reason the CPI has gone up is because of this external shock then you might decide that it does not require any policy adjustment.

Razzak Suppose that's the case and you don't make any move. But, this process takes time because the way the shock propagated into the economy is really slow and the recession is prolonged.

Brash You begin to un-anchor behaviour and inflation expectations and so on.

- Razzak Yes, I mean, we're at a point now where we'd be lowering interest rates.
- Brash Yes.
- Razzak And then all of a sudden you start to see signs of inflation and pressure coming all over the place, maybe they were building up and we didn't see them.
- Brash Yes, mind you in some sense that conclusion is inconsistent with the hypothesis. I mean the hypothesis you've got is a very weak economy with excess capacity and so on. So, on the face of it there isn't a positive output gap; if anything, there's a negative output gap.
- Razzak Right.
- Brash But supposing nevertheless that you get a strong, let's say, wage pressure to compensate for the fact the cost of living has gone up because petrol prices have gone up etc. At that point I think you are forced to tighten policy – because of the reality that New Zealanders can't compensate themselves for a sharp upturn in international oil prices.
- Razzak They can't?
- Brash They cannot. I mean that's effectively a cost to New Zealand Inc. and if we try to compensate ourselves for those costs we just engender an ongoing inflationary dynamic, so its very important we don't see that emerge and we would need to tighten policy. I mean, in a sense, I don't know the example in detail, I think it is what Japan saw in the 70's when international oil prices went up. The Japanese CPI rose sharply, but then stopped going up. They didn't see the inflationary dynamic get underway as we did here in New Zealand.
- So, I think it's important that if we were to see inflation expectations changing wage and salary behaviour, changing pressures in other areas of the economy, see inflation emerging, I think we'd have no choice but to tighten policy.²
- Razzak All along we have said in public that if the *banking system* falls apart don't expect us to bail it. So the central bank is not “the lender of last resort.” And, so far you have told me that you really care about inflation first. Do you confirm that if the banking-sector collapses and a *recession, a major recession*, is at hand you would do nothing? Remember that all our banks are Australian banks, or the majority of them are Australian banks, so we're really in the hand of the Aussies here. We are reliant on them 100%. I asked the Banking Supervision Department once, what happens if the Australian banking market/banking system collapses, they said we collapse in a heartbeat.
- Brash We collapse.
- Razzak In a heartbeat.

² Therefore, when the economy is in a recession but inflationary expectations are up the policy response of Brash is to tighten monetary policy.

- Brash Yes, yes.
- Razzak That means, we may have a major *depreciation*. What would you do? Do you raise interest rate, do you lower interest rate, what do you do?
- Brash I think there are two different issues you are raising – one is what do we do with the banking system in our role as registrar and supervisor of the banks, that's one issue. The second issue is what we do with monetary policy.
- Razzak I'm concerned about the second.
- Brash Monetary policy, okay.
- Razzak I'm concerned about the lender of last resort. Would you let the economy go down the drain when the banking system has collapsed.
- Brash Well.
- Razzak Would you do that?
- Brash But I think, again it seems to me the hypothesis is an unusual one. Why would you expect to see inflation with the banking system collapsing?
- Razzak No, I don't see inflation I see output falling, I see a recession.
- Brash Okay, okay, but I mean we have a symmetrical inflation target. We have to keep inflation above zero as keep it below 3, so we would be looking to ease monetary policy, potentially quite aggressively.
- Razzak Okay.
- Brash If we saw a major deflationary shock, like the collapse of one or two banks, and by definition the whole banking system...
- Razzak What if the banking system collapsed and we got a recession, but no deflation?
- Brash Um.
- Razzak It could possibly happen. Would you still bail them out? Would you still lend money?
- Brash Well, we are very reluctant to pre-commit to that, as you know.
- Razzak Though, it is written in our Act, it is one of the functions of the Bank.
- Brash I think that's right, although it's never very clear what that term means.
- Razzak You know, when I and have dinner with Kiwis, they're pretty sure that if the banking system, or one bank at least, collapsed, the government would pay them back.

Brash Yes, though interestingly we've done some market research on that and we were quite surprised. I think there was something like 50% of New Zealanders did not expect the government to bail them out. I've forgotten the exact numbers. The survey was done some years ago. But it was a higher percentage of people who were not expecting the government to bail them out than I had expected, because, like you I had assumed that New Zealanders would all assume, as they do in most countries, that if a bank fails, the government bails them out. There was quite a substantial number of New Zealanders who do not expect that.

Well, I think we should make a distinction between injecting liquidity into the banking system and lending to a potentially insolvent bank. I think those are two different issues. And we would certainly want to inject more liquidity. We would certainly want to reduce interest rates in the event of a major banking sector problem which threatened recession, because it would threaten the inflation target.

Razzak That should be made clear, right? We're making people think hard to interpret these statements by saying we're not lending if you...

Brash If the bank fails.

Razzak If the bank fails, we're not lending. Make sure that's not going to happen, don't count on us. These are all kinds of threatening statements.

Brash Yes.

I mean we have given speeches from time to time, most recently in November, when I did the road-show speech around the country. I made it very clear, again, that our inflation target is symmetrical so that if we are faced with a negative shock, as we were post 11 September and so on. We would think it appropriate to ease monetary policy because we don't want inflation to go below zero – we don't want deflation. So we ease monetary policy. Similarly if there is a major confidence shock, which would be caused by a bank failing, clearly the chances are we would need to ease monetary policy. It's a different question from saying we would need to bail out bank X. We don't want the public to think we'd bail out bank X.

Razzak We're not going to bail out bank X when it fails, however, if the banking system is in trouble such that output falls (recession), and only when deflation occurs, policy easing follows.

Brash And deflation, absolutely.

Razzak You want to make sure of the macroeconomic content of that. Are you willing to do that?

Brash Absolutely, no questions.

Razzak Because its hard for people to read the macroeconomic consequences of that argument.

Brash Yes, I guess we haven't seen that threat in New Zealand. Therefore, it hasn't been a major focus of my speeches. But as I say, the point that the inflation target is symmetrical and that we're just as keen to avoid deflation as inflation, is certainly one we've made many times.

Razzak Okay, thank you. So, let's talk about this currency union issue. New Zealand has the cleanest floating exchange rate system in the world. The exchange rate fluctuates considerably, and is prone to deviate from its long run perceived fundamental value for extended periods of time. For example, in mid 1990s it appreciated sharply and exporters were upset. It has depreciated since and exporters seem happy. This is understandable because this is an open economy, and exporters are vocal. Recently many argued that the NZ dollar is not an important currency, among other things, and that we should adopt the US dollar or the Australian dollar. You addressed these issues in your speeches. The issues regarding currency union are not resolved. You once told me that you would dollarise (i.e., adopt the US dollar) if the US gives you a free trade agreement. Explain your reasoning please.

Brash Well, I am genuinely agnostic about whether we should abandon the New Zealand dollar in favour of either the Australian dollar or US dollar. I don't think there are any other candidates at this point. Now, there are some significant benefits in adopting the Australian dollar. There would be some significant benefits in adopting the US dollar and there'd be some significant costs in both. So, I don't know where I come down on finding the desirable outcome. The reason I made that comment to you in the email was that if we were to adopt the US dollar there would be a gain to the US taxpayer through the seignorage income that the US would derive because we're using US dollars, unless we could do a deal with the US in perpetuity.

Razzak But that's very little for America.

Brash Well, it is not very big. Let's say we earn currently NZD \$150 million a year in seignorage income. If we adopted the US dollar, an amount of something similar to that would accrue to the US.

Razzak USD \$60 million.

Brash A year.

Razzak A year.

Brash And that is not much, but it is not chicken feed either. At present value, it depends on the discount rate. But what I was really thinking was if we had to surrender that amount of revenue to the US in perpetuity, the US would provide resources by which it could, in principle, compensate some of those US industries which would be adversely affected by a free trade deal with New Zealand. Now, in reality a free trade deal with New Zealand would benefit the United States and it would benefit New Zealand without any compensation, without seignorage income or whatever. It would benefit both countries, as you know. But, I am conscious of the fact that there are very noisy lobby groups in the US that would see a free trade deal as being threatening to their narrow vested interests.

- Razzak If they (the Americans) give us a free trade right now, and the Prime Minister came back (from the US) and she said we have a free trade deal in the works with America, what would you do? Would you react, would you say okay, lets drop the kiwi dollar?
- Brash No, no, on the contrary, I wasn't suggesting we should drop the kiwi dollar because we got a free trade deal.
- Razzak That is not what you meant?
- Brash No, I mean I think a free trade deal makes sense in its own right. What I was saying was if the real politic of getting a free trade deal with the Unites States requires the US government to compensate those vested interests in the US, which would be adversely affected even though the US economy as a whole is better off, if it were necessary to compensate the farming industry, say, then adopting the US dollar would give the US some resources through our surrendering this seignorage income, in order to achieve that. And maybe overall that would be a fair deal for both countries.
- Razzak So, the two things in your mind are independent.
- Brash Yes. Let me say that there are three issues in a sense. One is, is a free trade deal desirable with the US, desirable for the US and New Zealand? I'm convinced it is. Forget currency completely, it's a good deal, for both countries. Second question is, without a free trade deal should New Zealand adopt the US dollar? I think there are some benefits and costs. I'm not sure which way I come down on that. The third question is, given that one of the benefits to the United States and New Zealand in adopting the US dollar would be this seignorage income which the US would secure, linking the two, the free trade deal and the currency, dollarisation, would enable the US perhaps to sell more easily a free trade deal in the United States to the people who oppose it. There is no particular academic link that I was looking at.
- Razzak So you still keep an open mind on this issue?
- Brash I have an open mind.
- Razzak You think question four is quite technical is that what you told me?
- Brash Well I am happy to try and answer to it. I'm just not sure that I will give you a very satisfactory answer. I'm happy to try answering if you like.
- Razzak Well I'm wondering if the Board is going to actually keep nagging on this issue. Clause 4c in the new PTA talks about avoiding unnecessary fluctuations in real output, the exchange rate and the interest rate while maintaining price stability. Do you accept this clause? How do you intend to demonstrate that you are doing so? There are many different ways of calculating volatility and people disagree on them. We also disagree about the meaning. There is also the question of defining and measuring "unnecessary". Clause 4c is very difficult and it could backfire.

- Brash The Board clearly is very conscious of Clause 4c and at almost every Monetary Policy Statement they ask did we adjust interest rates because of 4c, and the argument that I make to them is that look, 4c simply puts in writing really what we were doing previously as I discussed before. Clearly, we want to get inflation under control and it's our *primary objective*. If we can do that without throwing the real economy around too violently, then so much the better, and in a sense the clause is helpful to us in one sense in that it does suggest that moving pre-emptively is probably desirable in keeping output volatility down. If you wait until the economy is booming like crazy, then almost inevitably you have to tighten policy much more aggressively than you would have to if you had moved pre-emptively, and that means you are going to get more interest rate volatility, probably more exchange rate volatility and certainly more output volatility. Myself, I don't see a great problem with Clause 4c.
- Razzak My question is about how. I asked that question because I think we are not sure about the metric. Just like we were not sure what measure of inflation we use. We experiment.
- Brash Still experimenting.
- Razzak We are still experimenting and trying to find the measure of inflation that is suitable. Measurement, however, doesn't prevent us from making policy. I mean, we have had measurement problems ever since we've had economics, right? We made policy. This is really very slippery. I mean you accepted that Clause, you signed off on it, I don't know what happened when you signed it.
- Brash I felt very comfortable signing it.
- Razzak You felt very comfortable.
- Brash Very comfortable, because, as I say first, I think it simply puts into writing what we had been doing, and secondly, it provides formal support for pre-emptive monetary policy.
- Razzak Are you trying to say that if you reduce the volatility of inflation you get a lower volatility of output, you need to think about that for a second because we still don't know. It makes sense to me, but many economists don't accept that the volatility of inflation and the volatility of output are positively related.
- Brash Well certainly, I guess New Zealand's experience in the 1990's would suggest there is no trade-off. As you say, we have less output volatility and less inflation volatility than we did previously, and I think that's even true with the United States isn't it? They've had less.
- Razzak John Taylor says that there is a trade-off at a particular point in time. When policy becomes more efficient, for example, when the American abandoned the Bretton Woods system there was a lot of efficiency gain in policy, the trade off disappeared. Both, the variances of output and inflation fell. It is true that when we moved from high inflation to inflation targeting we experienced lower volatility of inflation, lower volatility of output. However, right now between this

quarter and maybe next year there is a trade-off, and it seems to me that this trade off is quite a dangerous business because it is really a short horizon trade off that requires a lot of juggling of interest rate and if you get it wrong, you'd probably juggle the interest rate too much, causing a lot more trouble and that has implication for Clause 4c. See that is why this paradigm (the trade-off) can be quite dangerous. It's quite slippery, because your advisers keep telling you mind the trade-off and you're trying to pick up the interest rate that brings the balance and in the process you keep moving it up and down in a very short period of time and that spills into Clause 4c. The Board is going to come and say well, that's right you brought inflation down, you probably lowered a little bit of output volatility, but then the interest rate increased and the exchange rate moved around.

Brash Exactly, which is why I think you can't be confident at all of delivering low volatility of four things (inflation, output, interest rate, and the exchange rate). In fact, to reduce the volatility of inflation you may need to have more volatile output.

Razzak Would they (the Board) accept that?

Brash I think the Board would. I think the Board is very strongly of the view that inflation is the key thing. They have a very hierarchical objective function, so they are nervous about 4c for two reasons, one is because it makes their monitoring job more difficult, but partly they worry that I may put too much weight on output, interest rates or the exchange rate at the cost of inflation so they are watching me to see that I don't play down the importance of keeping inflation under control. There is no risk of that, but that's what worries them.

Razzak So basically you are going to keep telling the public what is your primary objective is, and then 4c is a secondary related objective.

Brash It is expressed that way in the PTA. It is very clear, in keeping inflation under control, keep that in mind. It's very much secondary or tertiary.

Razzak Yes, okay, that's quite satisfactory. I'm going to skip this question because I can understand why you are nervous about it. I hope you understood what I meant.³

Brash I did, it's a very important issue right now.

³ The question we decided to leave out was [In 2001 you published a paper entitled "The Impact of Monetary Policy on Growth." In this paper you say, "If the Bank, for example, under-estimates the economy's sustainable growth capacity, then it would interpret any particular growth rate as potentially a greater inflation risk than actually it was and would run monetary policy too tightly as a result. The converse would happen if we over-estimated the economy's sustainable capacity to grow. Then you proceed to say, "However, to make this error for a significant period the RBNZ would have to consistently fail to recognise the clues that an economy gives if it is under-performing or over-heating. The most important clue would be that the Bank's expectations for inflation, which it makes public, would be consistently wrong." I think you mean "the forecast" when you say "expectations." Are you saying that it is not possible for the policymaker to make systematic mistakes that can harm the economy and you can always correct your actions such that the economy is not significantly adversely affected? FPS quarterly one-year ahead forecasts of inflation from 1999 onwards clearly show that we have made systematic mistakes for about 3 years. We systematically under-forecast inflation for three years. Thus, interest rates were set accordingly. That is the problem that you don't address in your speech. Comments please."

Razzak I think we can conclude by asking the one million dollar question. It is an extremely important question and I attach weight to it because it's along the lines of the credibility of the system and the Government very well understands the importance of the credibility of the system. In fact people who were speculating that you would leave office when Winston Peters came to power. That never happened I think because the Government understands that removing a successful central banker at that point in time would cause more harm than benefit, so you are the longest serving central banker in the western world.

Brash Oh no, Greenspan has been one year longer. Apart from Greenspan, I'm the longest in the western world.

Razzak With a track record, so far, that is quite solid. Normal people whether they are farmers or blue-colour workers, whoever they are, grandmothers who are retiring or something, take that fact in their decision making process. They want to know X years from now, is inflation going to be under control. They want to make decisions about what do they do with their money. They need to reduce all kind of uncertainties when they make their decisions. So are you willing to tell the public whether are you going to accept another term in office if you were offered one?

Brash Well, I haven't decided that question yet, in fact there are three different parties that need to reach a view on the next Governor. One is me of course: I have to decide if I would accept another term if it were offered. The Board has to decide whether to recommend me, and the Minister has to decide whether to reappoint me. I think the framework is a very good one in that the Governor, as you know, under our framework is appointed by the Minister, but the Minister can only appoint somebody who has been recommended to him or her as the case may be, by the Board. And the Board has a clear understanding the framework requires monetary policy to be used for keeping inflation under control so they will only recommend to the Minister someone that they feel confident will meet that statutory objective. So I don't think the public needs to be worried about who would be appointed if I were not to be.

Razzak Why not?

Brash Because as I say the Board will choose someone to recommend to the Minister. There may be a brief period of wondering, what person X or Y would be like.

Razzak You mean because the government decides on the goals or the objectives of monetary policy the public should not worry about the Governor?

Brash The Act specifies the objective of price stability. The requirement that the Policy Targets Agreement requires the Government to put its instruction in writing and in public so that that requirement would act as a severe constraint on the Government choosing an inflation target that is inconsistent with the Act. And as I say the Board will choose someone who is willing to meet those objectives. Now, I think there are at least three or four people, whom I can think of without difficulty, who would be a conservative central banker in the Rogoff sense immediately available to us.

- Razzak Would you want to say who these people are?
- Brash No, but I can think of three or four without difficulty, in New Zealand.
- Razzak How would the Board know? Do these people apply for the job?
- Brash Well we haven't yet appointed a Governor under the new Act since that came into force. Let me go back. On each of the two times that I was reappointed, at the end of my first term and at the end of my second term, the Board met without me to discuss whether or not they thought that I should be offered another term, and they quite carefully considered whether they thought that offering me another term was sensible. To discuss whether one more term would make sense for me, and in the second term at least they, I think, evaluated the number of other alternatives before deciding that on balance the devil they knew was better than the devil they didn't. I think that is entirely appropriate. I think they should do that. That is their proper function, so I suspect that in this case they will do something similar. They will decide if it is something they want to advertise.
- Razzak Oh, they decide...
- Brash They decide because they have to make a recommendation to the Minister. You see, the Minister can't appoint someone unless the Board recommends them.
- Razzak I always thought it was a political appointment.
- Brash Well the Minister appoints, so in that sense it is a political appointment.
- Razzak But the people still apply.
- Brash The Board has to recommend.
- Razzak I see. The Board recommends, but we still don't know what they are going to do, right?
- Brash That's right. The Board hasn't thought about it yet.
- Razzak It's totally under their discretion.
- Brash Correct, well I mean whether they advertise or not is at their discretion. If the Board meets sometime between now and the end of my term and says Brash is doing a fine job we think the best option would be to have him reappointed, they would then presumably discuss that with me and if I were willing to do another term they would then recommend it to the Minister, and the Minister might say I've had enough of Brash, come back with another recommendation, and the Board would have to do that, but the Board would decide whether they would simply shoulder tap or whether they would advertise. My guess is they would advertise so that people who were interested in the job would then apply. My assumption is that the Board would probably appoint a sub-committee of the Board to interview applicants, and having done that they would then recommend to the Minister one of those people and I don't have much doubt that there would be quite a few applicants if I were not.

Razzak I am sure there would be.

Brash Quite, but more important I have no doubt that there are people available who would be very good successors.

Razzak Thank you, that's my last question, I think we can stop there.

Brash You are very welcome.