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Discussion of Detmers et al. (2018)

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Forward guidance

- Forward guidance comes in many guises
- For the purposes of this paper, we differentiate between:
 - qualitative forward guidance (monetary policy statements); and
 - quantitative forward guidance (interest rate forecasts)
- Economic logic suggests that quantitative forward guidance should be more effective, because it is both:
 - more precise; and
 - more verifiable ex post (and thus easier to support by reputational concerns)



Assessing forward guidance is hard...

- Measuring the market impact of forward guidance is difficult for a number of reasons:
 - central banks make announcements about one or more monetary policy tools at the same time, making it difficult to disentangle their financial market impact;
 - markets may interpret other monetary policy announcements as having forward-guidance-like implications for the policy rate; and
 - markets are forward-looking and typically respond only to the unexpected component of announcements – there is little to no data directly measuring market expectations of these monetary policy announcements

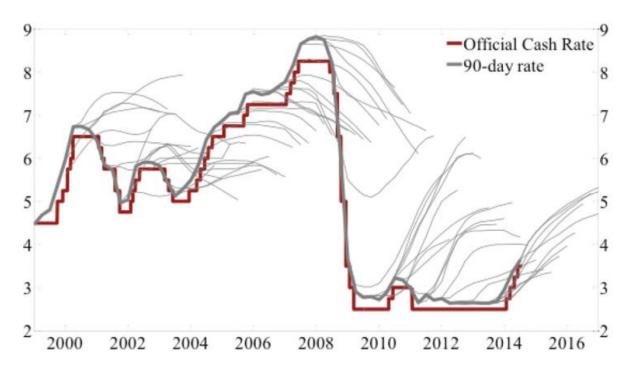


...but not impossible

- The authors address these challenges by employing a neat controltreatment methodology for a 'cleaner' identification:
 - the four annual Monetary Policy Statement (MPS) meetings include a quantitative forecast of short-term interest rates (the **treatment** group); while
 - the other four Official Cash Rate (OCR) reviews do not (the control group)
- The authors exploit this difference in the information content of monetary policy decisions to estimate the **marginal** contribution of interest rate forecasts over and above the perceived (qualitative) forward guidance to market participants



The evidence



• The RBNZ policy rate, the ninety-day OCR rate and the RBNZ ninety-day paths, 1999:Q1-2014:Q3 (Figure 10 in Svensson (2015, p. 41))



What the paper shows...

- The results of the paper are threefold:
 - market participants' reaction to information about the future course of monetary policy provided on the days of the RBNZ's monetary policy decision is very similar on MPS and OCR review days, i.e., the marginal impact mentioned on the previous slide is negligible;
 - the effects of the path factor on the yield curve are very similar on both MPS and OCR review days; and
 - on five occasions when the RBNZ provided explicit date-based forward guidance, the yield curve responded more to the path factor than on any other monetary policy decision day



...and what they infer from the results

- Based on these results, the authors draw an important implication for central bank communication:
 - the marginal effect of publishing interest rate forecasts over and above the effects of providing qualitative (i.e., descriptive) forward guidance seems to be very small; because (?)
 - market participants understand the conditional nature of quantitative interest rate forecasts
- I am perfectly happy with the first part...
- ...but less so with the second, which seems a bit of a leap: 'necessary but not sufficient'



Other interpretations (1)

Uncharitable I:

- the underlying methodology due to <u>Gürkaynak et al.</u> (2005) does not pick up what the authors are trying to do in the context of New Zealand
- unlikely!

Uncharitable II:

- the interest rate forecast is not very good → useful → believable → timeconsistent and thus ignored
- but over the entire period under observation?



Other interpretations (2)

Charitable Ia:

 economic agents in New Zealand have fully internalised the reaction function of the RBNZ, such that the interest rate forecast is simply a graphical representation of the accompanying statement about the state of the economy and the policy outlook

• Charitable Ib:

- this result is more or less what I would have expected
- assume the opposite: only quantitative forward guidance, i.e., the interest rate forecast, contains information



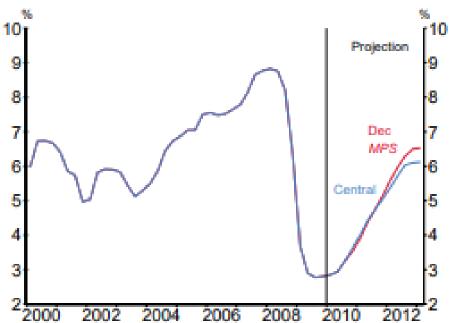
Houston, we have no problem (1)

- Let's look at the 11 March 2010 MPS day:
 - the RBNZ kept the OCR unchanged at 2.5 per cent;
 - the interest rate path which the RBNZ published on this day was very similar to the path published in the previous MPS in December 2009; but
 - the final sentence in the monetary policy press release stated that the RBNZ 'continue[d] to expect to begin removing policy stimulus around the middle of 2010'
- Is that explicit date-based forward guidance reflected in the interest rate forecast path? And is it still qualitative?



Houston, we have no problem (2)

Figure 2.3 90-day interest rate



Source: RBNZ estimates.

Given this pick-up in activity and inflation, we continue to expect to increase the OCR over the projection (figure 2.3). However, higher bank and corporate funding costs will reduce the extent of this increase.

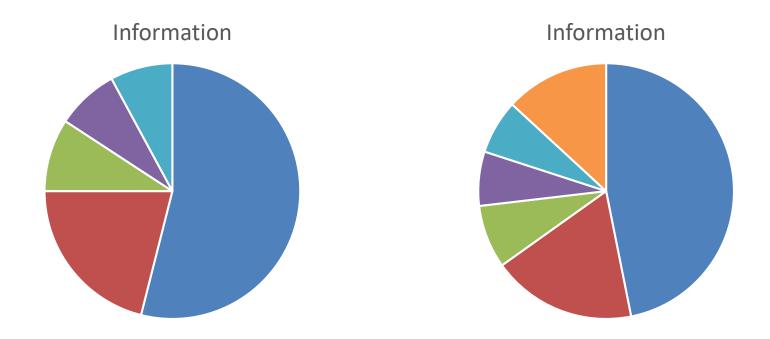


More fundamentally...

- The authors say:
 - In this paper, we exploit the difference in the amount of information the RBNZ communicates with its interest rate decisions to answer the following questions: does the nature of forward guidance matter? More specifically, does it matter for market participants' perceptions regarding the future monetary policy stance whether the central bank provides quantitative forward guidance by means of interest rate forecasts, or whether it provides qualitative forward guidance in policy statements? Do market participants infer similar information from them? What is the marginal value of publishing quantitative interest rate forecasts relative to providing qualitative forward guidance in policy statements?



Other interpretations (3)



• There is no difference in the overall amount of information: it is just that one cake has five slices and the other one – of the same size – has six

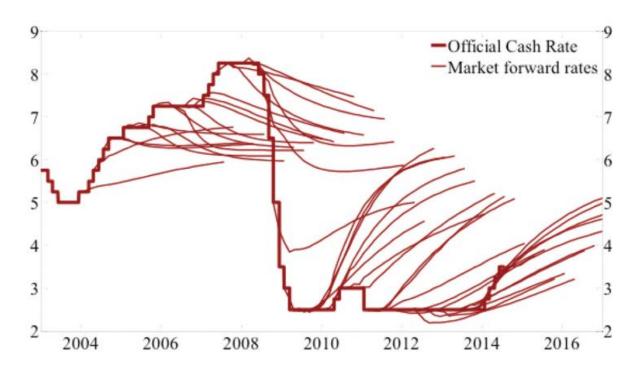


Some puzzles of my own (1)

- While the paper considers **changes** in the official interest rate forecast between MPS meetings (proxy variable $rfg_{4,t}$)...
- ...that variable has the second smallest coefficient estimate in Table 4
- The authors do not consider **differences** between the official interest rate forecasts in the MPS and the market policy rate paths, say (unless that is what proxy variable $rfg_{3,t}$ captures)
- A priori, it appears to me that we might expect more of a marginal effect on that measure



Market expectations



• The RBNZ policy rate and market policy rate paths, 2004:Q1-2014:Q3 (Figure 11 in Svensson (2015, p. 42))



Some puzzles of my own (2)

- For that reason, I would have liked to see some of the more sophisticated proxy measures of central bank policy rate forecast surprises mentioned in footnote 17...
- ...especially those capturing possible differences in views between market participants and monetary policymakers
- As the authors themselves say:
 - ...some of the changes in the RBNZ's interest rate forecast may have been anticipated by market participants (p. 12)



Some – possibly stupid – questions (1)

- The authors advocate looking at large values in the time series of the path (forward guidance) factor (p. 13), but does a zero value for that factor tell us anything?
- Are the structural assumptions underlying the factor rotation really as innocuous as they sound?
- I am somewhat sanguine about whether monetary policy decisions are independent or not (...because Mervyn King said they are) should I be more worried?
 - can we investigate the time-series properties of $rfg_{4,t}$ to get some idea?

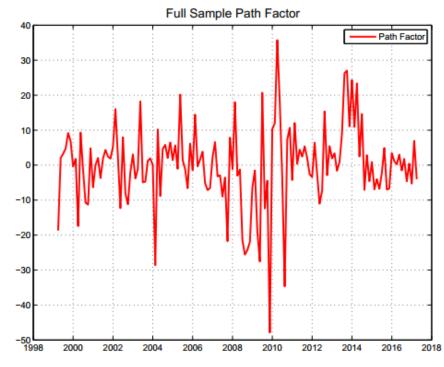


Some – possibly stupid – questions (2)

• Given that the rotated factors/principal components, Z_1 and Z_2 , are generated regressors in equation (3), is that a problem? Equivalently, how large is the data matrix X and do the results from Stock and Watson (2009, 2011) apply?



Some – possibly stupid – questions (3)



Is there further information in the second factor in the full sample (i.e., including MPS and OCR meetings)?



Final thoughts

- Bit of a roundabout way of achieving identification: yield curve data → atheoretical, purely statistical principal components → factor rotation → marginal contribution of path factor is very small
- The interest rate forecast is the monetary policy statement and the monetary policy statement is the interest rate forecast
- Try and capture possible differences in views between market participants and monetary policymakers
- What is the policy implication? Do not publish an interest rate forecast?



References (1)

Gürkaynak, R S, Sack, B and Swanson, E (2005), 'Do actions speak louder than words? The response of asset prices to monetary policy actions and statements', *International Journal of Central Banking*, Vol. 1, No. 1, pages 55-93. http://www.ijcb.org/journal/ijcb05q2a2.pdf.

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Stock, J H and Watson, M W (2011), 'Dynamic factor models', Chapter 2 in Clements, M P and Hendry, D F (eds), *The Oxford handbook of economic forecasting*, Oxford, Oxford University Press, pages 35-60. https://www.princeton.edu/~mwatson/papers/dfm oup 4.pdf.

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