28 November 2017

Drying Out

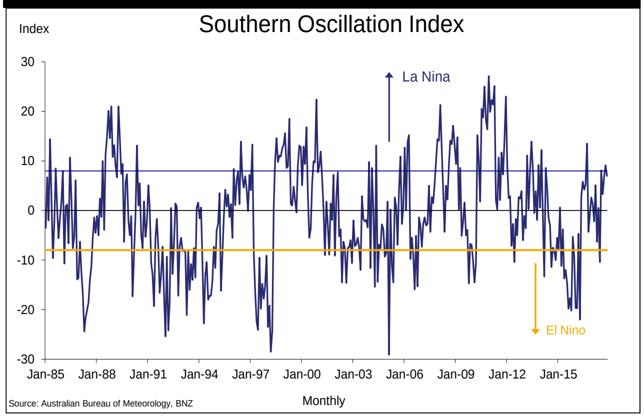
- **NZ soils drying out rapidly**
- **An economic risk worth monitoring**
- **As 2008 NZ recession attests**

The risk of drought in New Zealand is rising. That might seem like a strange thing to say when right through winter and early spring there was far too much rain. Back then grass growth was restricted by saturated soils. But conditions have been changing over recent weeks. It has been drying out – rapidly. It has got to the point now that many parts of the country have bigger soil moisture deficits compared to what is normal for this time of year according to NIWA. This is most pronounced in western areas – understandable as weather indicators get close to La Nina thresholds.

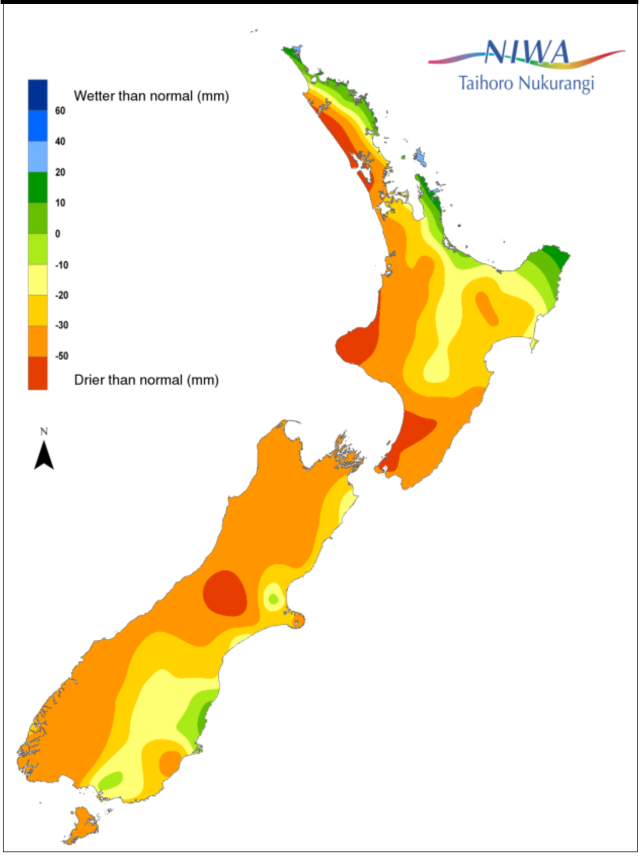
But La Nina or not, it is already getting dry and that raises concern. Dry conditions are a risk to pastoral agriculture, hydroelectric power generation, and the wider economy. Grass growth has already slowed. It is of particular concern that conditions are getting dry so early in the season, even before summer has started. Some gentle widespread rain is required, not the recent localized thunderstorms and very heavy rain that has caused flash flooding in parts of Central Otago.

At this point, we have not adjusted our economic forecasts on account of the spreading dry. But it is a risk worth highlighting, especially with near term weather forecasts showing little rain on the horizon. If dry conditions persist for too long, we would expect GDP to be lower than currently expected.

Bordering La Nina



Soil moisture anomaly (mm) at 9am on 26/11/2017



This could involve milk production falling short of our current expectation of around 1% growth on the previous season. October's production was 2.9% higher than a year ago, but now drier conditions are putting a question mark over the rest of the season. Moreover, dry conditions tend to bring added costs such as for supplementary feed. Some consolation is that if NZ milk production were to stall or fall from here, it would offer some support to dairy product prices. But it would hardly be the best way to achieve this. Our forecast for Fonterra's 2017/18 milk price currently sits unchanged at $6.30.

In any case, there was no sign of any NZ milk supply concern at the latest GDT auction when prices fell for the fourth consecutive auction, to be down a cumulative circa 10% since September. Or if there was it was swamped by other factors. Regardless, it is something to watch for over the coming weeks and months especially if the general lack of rain in NZ continues. We have already seen a mild bid tone return to the NZX wholemilk powder futures market despite the latest softer GDT result.

Lamb markets are also showing signs that it is getting dry with reports of some pullback in store lamb pricing and more new season lambs being sent for processing as feed conditions tighten. If dry conditions extend, we would expect more of the same to the detriment of kill weights and prices (the latter of which have been very strong to date).

Weather indicators are approaching La Nina thresholds. NIWA have indicated that if La Nina conditions do develop, it is likely to be a weak one and short-lived. Interestingly, in isolation, a weak La Nina weather pattern often brings some optimism. This is because NZ agriculture, as a whole, often performs well during weak La Nina conditions as the typically more than usual rain in Eastern areas lifts grass growth and agriculture production in that region by more than the drier than usual conditions dent production in Western areas.

But every La Nina is different and some can hurt. Indeed, recall the 2008 La Nina that caused a drought in the Waikato, NZ milk production to fall 3.5% in that season, and helped tip NZ into recession ahead of the Global Financial Crisis.

That episode alone suggests it is worth keeping an eye on the skies this time around, to monitor the risks, even if longer term forecasts into Christmas and January contain good chances of rainfall being at least normal for large chunks of the country.

Likewise, we wouldn't draw very firm conclusions from the fact that the CPI has tended to be a bit higher (and the NZ TWI a bit lower), on average, during previous La Nina events than during other climatic phases. While interesting, we wouldn't over sell these results as a great guide to what will necessarily occur under any given weather pattern. For a start, as noted above, every weather event is different and the averages can hide a lot of the variation that can occur even between events of a similar nature. Also, each weather pattern type has only occurred a few times over the 25 years+ period we have analysed so the sample size is inherently small meaning the results are not as robust as they would be if the sample size was larger. And – perhaps most importantly – there are many other factors changing at the same time as the weather, and various lags to consider, so it would be quite wrong to strongly conclude that the weather has caused all the observed variation. But the correlations are interesting nonetheless.

From a central bank perspective, we'd note that if dry conditions continue long enough they may ultimately provoke the RBNZ to tone down its own GDP forecasts for the first half of 2018. Importantly, if dry conditions become severe enough they could start to have some influence on RBNZ decisions on what to do, or not do, with its official cash rate. It could see prospective interest rate hikes delayed.

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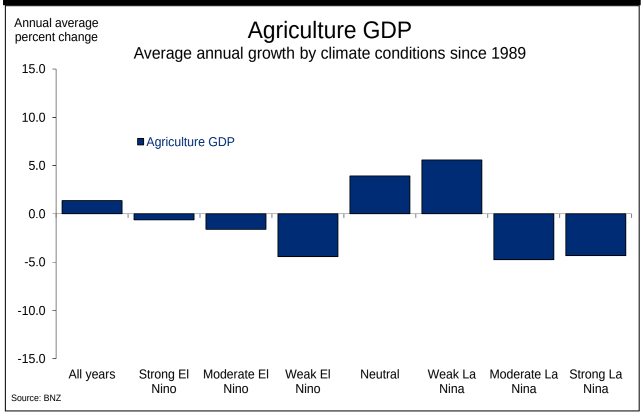
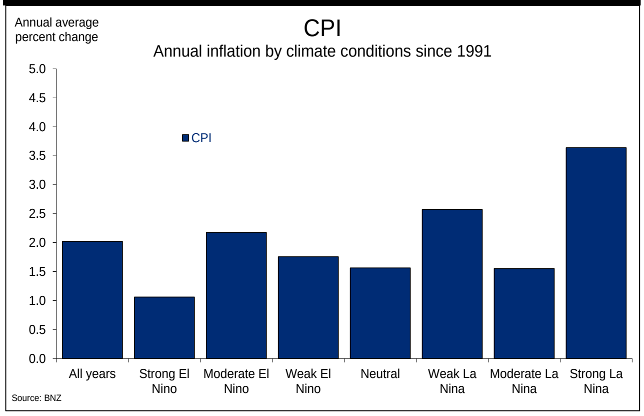
Weather Extremes Unhelpful



La Nina Inflationary?



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