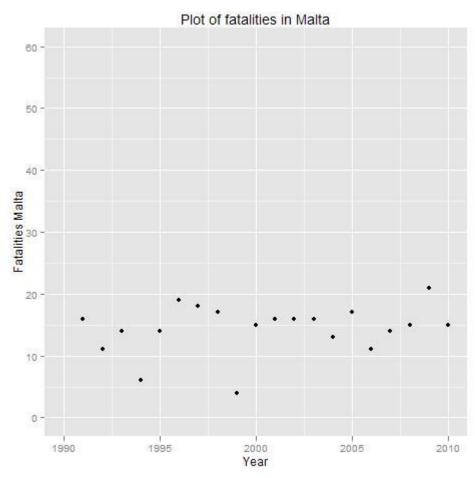
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Fatalities



The fatality series ranges from a low of 4 in 1999 to a high of 21 in 2009. In general the series is fairly flat and displays the variation expected with small numbers.

There is no exposure data that can be usefully applied in the Latent Risk Model. Therefore a simple Local Linear Trend model [2,5] was used to model the fatalities with a fixed level and fixed slope.



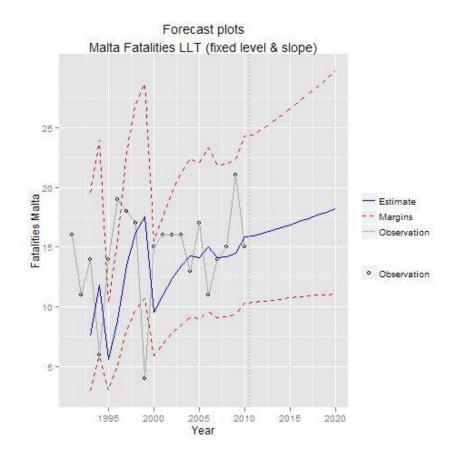


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Forecasts to 2020

If the past development continues the following forecasts can be made for the number of fatalities in 2020:

If road-safety continues as observed up to 2010, the forecasted number of fatalities in 2020 is 18



Forecast of road-traffic fatalities in Ireland up to 2020

Year	Prediction	Lower CI	Upper CI
2011	16	7	37
2012	16	7	38
2013	16	7	39
2014	17	7	40
2015	17	7	41
2016	17	7	42
2017	17	7	44
2018	18	7	45
2019	18	7	47
2020	18	7	48

Disclaimer

- Statistical forecasting does not offer a definite prediction of what is actually going to happen in the future.
- The estimates are based on the "business as usual" assumption: no principal changes between past and future development.
- Even in these conditions future outcomes are uncertain. This uncertainty is represented in the confidence intervals (plotted in the red margins: 68%; printed in table: 95%).



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References

- [1] EC National Expert for road accident statistics and road safety performance indicators.
- [2] Dupont & Martensen (Eds.) 2012. Forecasting road traffic fatalities in European countries. Deliverable 4.4 of the EC FP7 project DaCoTA.
- [3] Bijleveld F., Commandeur J., Gould P., Koopman S. J. (2008). Model-based measurement of latent risk in time series with applications. Journal of the Royal Statistical Society, Series A, 2008.
- [4] Martensen & Dupont (Eds.) 2010. Forecasting road traffic fatalities in European countries: model and first results. Deliverable 4.2 of the EC FP7 project DaCoTA.
- [5] Commandeur, J. & Koopman, S.J. (2007). An Introduction to State Space Time Series Analysis. Oxford University Press.

