Executive Summary

This report covers the evaluation of the 'Prognosemodellen Justitiële Ketens – Civiel en Bestuur (PMJ-CB)' [Judicial Chains Forecast Models – Civil and Administration] carried out by SEO Economic Research at the commission of the Scientific Research and Documentation Centre (WODC in its Dutch acronym) of the Ministry of Justice. The PMJ-CB is an econometric explanatory and forecasting model, in which relationships are established between the influx of cases to the judge on one side and social (demographic and economic) background factors on the other.

Background: objectives of the PMJ-CB model
The request of the Council for the Judiciary (Rvdr in its Dutch acronym) the Ministry of Justice was that WODC and the Rvdr would together develop a model which would produce the most reliable forecast possible on the influx of cases to the civil and administrative judges, by case type and by court, for the medium term, i.e. six to seven years ahead. The model must be able to forecast per type of case at the court level, but also at the level of the national number of cases per case type. The model would specifically be used for underpinning the budget for the judiciary system and the individual courts. The forecasts are policy neutral at the request of the users (Rvdr and the Ministry of Justice). Alongside the forecasting objectives there was an ancillary objective: the model should grant the greatest possible insight into the determinant factors in appeals to a judge.

Evaluation: a divergent time horizon
At the core of this report is the request to SEO Economic Research to evaluate the model for its suitability in underpinning the courts' budget. A budget presents the forecasts for the budgetary year and the four following. For example, in the budget for 2008 a forecast is outlined for the period 2008-2012. The budget preparation for the year 2008 begins in the autumn of 2006. At that moment the realizations of 2006 are not yet known; this is why there is a need for forecasts at a 7-year horizon. For the budget of 2008 the forecasts for the year 2008 are in fact the most important! Specifically, the budgetary arrangements are exclusively relevant to that one year. The forecasts for the years 2009-2012 are only presented as background, and have no budgetary consequences.

From the above it can be deduced that the underlying evaluation has a stronger focus on the short-term forecast than the model builders' six to seven-year time horizon. This divergent time horizon of the evaluation is deduced from the request which was posed to SEO. For the budget, two forecasts are the most important:
- the forecast of the total national production per case type three years ahead; and
- the forecast of the production per court per case type two years ahead.

Research organization
The evaluation study comprised two components: the evaluation of the theoretical underpinning of the model and evaluation of the econometric techniques used.

Conclusions

The most important issue in the evaluation was whether the PMJ-CB forecast model is more suitable for underpinning the budget of the Ministry of Justice than the current forecasting model of trend extrapolation. The PMJ-CB model is a collection of models. If we compare the forecasting errors of the PMJ-CB models with those of the trend extrapolation method, we can then conclude that the PMJ-CB performs better than the forecasts of the extrapolation method, certainly at the forecasting terms which are most important for the budget: two years at district level and three years at the national level. The answer to the most important study question is yes, the PMJ-CB is more suitable for underpinning the Ministry of Justice budget than the extrapolation method.

A number of comments and criticisms must also be applied to the model. The most important concerns the approach of higher appeal cases (working with the appeal ratio instead of the influx). The choice for the divergent model specification for higher appeal cases (the appeal ratio approach) cannot be justified with the current data in around three-quarters of the higher appeal case types. There are in fact indications that the data of outflow in the first instance (on which the appeal ratio is based) needs further refinement and that a further splitting of cantonal issues and civil sector cases is probably necessary. Following improvement of the data and some further differentiation of higher appeal cases (civil sector versus subdistrict sector), it is recommended that the correctness of the appeal ratio approach be tested afresh.