Summary

A model of juvenile judicial capacity

Since 1998 the WODC (Research and Documentation Centre) has been charged with the yearly release of forecasts of the capacity needed for the execution of various judicial sanctions and measures in the Netherlands. In this connection, the WODC aims at improving the methodological quality in the various areas covered by the forecasts. The present report describes an explanatory and forecasting model of the capacity needed in the fields of child protection and juvenile justice.

Juveniles enter the judicial system either by a civil law or by a penal law procedure. The model explains the inflow into both channels by various socio-economic, demographic and law enforcement variables: income, number of juveniles, divorce rate, migration, percentage of non-natives and the arrest rate. An error-correction model is used to allow both for long-term and short-term relations of the variables. Long-term relations dominate the results. Some 20% of the inflow into the civil law channel is accounted for by the explanatory variables and 40% by trend. This is acceptable for forecasting purposes but unsatisfactory in terms of explanation.

The inflow into the penal channel (the number of juvenile suspects) is differentiated according to four types of offences (simple theft, aggravated theft, violent crime and other offences). With the exception of the latter type the explanatory variables account for 50% to 60% of the variance, whereas the trend accounts for less than 10%. This is quite satisfactory, especially since violence, the most important type of offence in terms of capacity requirements, is mainly accounted for by the percentage of second-generation non-natives. Unlike most other explanatory variables the percentage of second-generation non-natives can be quite precisely forecasted.

A second stage of the model estimates the transformation of the inflow into community service orders of different kinds (alternative forms of punishment and task sanctions) and required placement capacity in detention and remedial juvenile institutions. In order to allow for the long duration of civil and penal measures, the associated capacity requirements have been modelled by means of a stock flow model. Due to data problems the modelling of the second stage of the model is sketchy in several parts.

The present explanatory model is thought to be the best that is currently available. Substantial improvements can be effected when more detailed information becomes available.