



Research Bulletin

Prisoner to Population Ratios in NSW, Victoria and the Netherlands

Don Porritt
Chief Research Officer

Geoff Gordon
Research Officer

A. Sutton
Senior Research Officer

Research Bulletin No.1
December 1980
ISSN 0729 2422

NSW Department of Corrective Services

No. 1 December 1980

Material published by the Research Division includes Research Digests, Research Bulletins, and Research Publications.



Research Bulletin

Department of Corrective Services

Prisoner to Population Ratios in NSW., Victoria and the Netherlands

D. Porritt
Chief Research Officer

G. Gordon
Research Officer

A. Sutton
Senior Research Officer

There are marked differences in the ratios of prisoners to population between different states and countries. This Bulletin examines some data that throw light on the sources of the differences.

Two explanations of the differences have been advanced in discussions. One is that low ratios are achieved by extensive use of alternatives to imprisonment so that fewer people are sentenced to imprisonment. The other suggests that the differences occur because in some jurisdictions prisoners serve less time in prison before release.

Both logical analysis and empirical data support the second explanation rather than the first. This note examines some data from N.S.W., Victoria and the Netherlands to illustrate the argument.

The Differences

Calculations based on the series "Australian Prison Trends" published by the Australian Institute of Criminology showed that in the 12 months ending in June 1980 for N.S.W. and Victoria there were respectively 60.5 and 41.3 prisoners under sentence per 100,000 population. For the Netherlands, data provided by the Netherlands Ministry of Justice showed that, on 31 December 1978, the ratio was 19.3 prisoners under sentence per 100,000 population. Similar data for the same date in 1965, 1970, 1973, 1975 and 1976 gave ratios ranging from 16 to 22 per 100,000. The N.S.W. and Victorian rates for December 1978, based on daily averages, were 66.1 and 37.1 prisoners under sentence per 100,000 population. The discrepancies are thus substantial and appear quite stable.

Part of the inter-State difference is due to offenders aged 18-22 held in Victorian Youth Training Centres being not counted. In 1979-80 this averaged about 100 offenders. Counting these individuals as persons under sentence raises the Victorian rate by 2.6 per 100,000 to 43.9.

Prisoner to Population Ratios in N.S.W., Victoria and the Netherlands.

Summary:-

Data are presented that show large differences in the ratios of sentenced prisoners to population in N.S.W., Victoria and the Netherlands. Two explanations are tested. Data on rates of receptions, the effects of differences between the states in remission policy, on international differences in lengths of sentences and on the effects of Attendance Centres on the Victorian ratio are examined. All the data support the explanation that smaller prison populations are achieved by releasing longer term prisoners sooner. Diverting from prison short-term prisoners who would serve less than 12 months can only have a comparatively small effect on the prison population.

Thus we have ratios of prisoners under sentence per 100,000 population of:

	N.S.W.	Victoria	Netherlands
December 1978	66.1	37.1	19.3
July 1979 -			
June 1980	60.5	43.9	Not Known

Differences in Receptions

For some years the number of prisoners received under sentence in N.S.W. has been 7,000 to 8,000, which is between 136 and 155 per 100,000. The ratio for Victoria in 1979-80 was also around 140 per 100,000. In calendar years 1978 and 1979, the rates for the Netherlands were 111 and 107 per 100,000. Thus, differences in the numbers sent to prison under sentence cannot account for the inter-state differences and can account for only part of the international differences.

Effect of the Attendance Centres

To further test the effect of alternatives to imprisonment, figures on Victorian Attendance Centres were examined. During 1979-80, the average numbers under sentence to Attendance Centres was 141. If all of those so sentenced had been imprisoned for a term similar to the term of the Attendance Order, this would add 3.6 to the 1979-80 rate of prisoners under sentence per 100,000 population for Victoria. This leaves a difference with N.S.W. of 13.0 per 100,000 to be explained.

To summarise so far, data on receptions and use of Attendance Centres by Victoria show that the differences are not in any large part due to the use of alternatives or other devices that reduce the rate at which people are sentenced to imprisonment.

Effects of Remission in Victoria and N.S.W.

It is not known whether prison sentences given in the two States are much different. The policy on remission is, however, known to be quite different. Victoria allows 15 days remission for each month served on both the minimum sentence (if set) and the maximum sentence. This is equivalent to N.S.W. giving a third remission on both the non-parole period and the head sentence for all offenders. N.S.W. at present gives remission off head sentence only and allows a third to those serving a first prison term over 3 months and a quarter to those who have served a previous term over 3 months. In N.S.W., the non-parole period attracts no remission.

To test the possible effects of this difference the second and third authors conducted a simulation study of the effect of applying the Victorian remission policy to prisoners under sentence in N.S.W.

A sample of 944 N.S.W. prisoners serving sentences of over 3 months was drawn. The Victorian remission formula was applied to each prisoner's sentence. Life Sentence and Governor's Pleasure prisoners were assumed to be unaffected. It was found that 29.2% of the sample (276 of 944) would, on this formula, have already reached their release date.

Before this result can be interpreted certain other facts must be taken into account. These are:

1. Prisoners serving less than three months were not included. Calculations suggest that in a sample including these, at least 28% of the total sample would have reached their release date by the day the sample was taken.
2. Some prisoners lose part or all of their remission for offences against prison rules.
3. Some prisoners gain extra remission for study or work performance.

Point 1 has been allowed for. Thus we can simply reduce the ratio found for N.S.W. by 28%. This reduces the ratio for 1979-80 from 60.5 to 43.6 persons under sentence per 100,000, which is almost identical to the rate for Victoria when adult 'youth trainees' are included.

It is more difficult to take account of points 2 and 3. Thus, the reduction calculated states the maximum effect of applying remission of a third to both non-parole periods and to head sentences. The effect in practice would be somewhat less.

Even with this reservation it seems clear that it is differences in the length of time served rather than in the numbers sentenced which explains the major part of the difference in the N.S.W. and Victorian ratios of sentenced prisoners to population.

Length of Sentences in the Netherlands

The Director of the Research and Documentation in the Netherlands Ministry of Justice was kind enough to supply data on lengths of sentences for calendar years 1978 and 1979

and for persons convicted of selected offences included in a sample of prisoners held between 1973 and 1976.

The data (see Appendix) show that sentences are markedly shorter than in N.S.W. even if non-parole periods are taken into account. The N.S.W. data in Table A were based on N.P.P. (where set) or head sentence if no N.P.P. was set. Even with a rough allowance for remission we would expect nearly 18% of persons sentenced to prison in N.S.W. in 1976-77 to actually serve over 12 months while in the Netherlands the percentage would be only 5%.

The actual sentences given for similar offences are much longer in N.S.W. than in the Netherlands. Table B gives data for murder, manslaughter, rape, robbery and for break, enter and steal (N.S.W.) and the most similar Dutch offences. For each offence type, data are given on total sentence where no N.P.P. was set; and on total sentence and N.P.P. where set. Some selected figures illustrate the difference. Combining those with and those without N.P.P.'s, only 20% of premeditated murderers in the Dutch sample would serve more than 3 years compared to all the N.S.W. murderers. For other homicide in Holland, 8% would serve over 3 years, in N.S.W., 65% of those convicted of manslaughter would serve over 3 years. For rape, none of the Dutch sample would serve over 3 years, while 39% of the N.S.W. sample would do so. For robbery (theft involving assault) 8% of the Dutch sample and 62% of the N.S.W. sample would serve 2 years or more. For the Dutch convicted burglars and N.S.W. break, enter and steal offenders, respectively, none and 24% would serve 2 years or more. Thus, in the Netherlands sentences for similar offences are much shorter than in N.S.W. The difference in prisoner to population ratio cannot be attributed to the Dutch committing only less serious offences.

The Evidence in Perspective

The evidence from the three jurisdictions all points to the importance of the length of sentence served in controlling the relative size of the prison population. The ratio of receptions to populations were either very similar or much less than the difference in ratios of sentenced prisoners to population. The major factors affecting differences in time served between Victoria and N.S.W. appears to be the more liberal Victorian remission policy. This policy difference could account for all the interstate difference while the use by Victoria of Attendance Centres makes only a small contribution. In the Netherlands, sentences given are very much shorter than in N.S.W.

Alternatives to imprisonment in N.S.W. are usually proposed only for prisoners who would otherwise serve less than 12 months. There are logical arguments to show that this can have only a small effect on the numbers in prison, despite the large number of such persons received in a year. As Table A shows, at least 80% of receptions of sentenced persons in 1976-77 would serve 12 months or less. On June 30, 1977, only 31% of persons under sentence (excluding periodic detainees) had N.P.P.'s or sentences (if N.P.P. not set) of less than 12 months. The difference is due to the fact that while many people are received to serve less than 12 months, they are also released fairly quickly. Those with longer sentences "build up". The shorter the sentence to be served by a group, the less effect diversion of that group from prison will have on the numbers in prison on a day.

Conclusion

Major differences in ratios of sentenced prisoners to population are due to the periods that longer term prisoners are held. If a substantial reduction of prison populations is desired, this can only be achieved by releasing longer term prisoners considerably sooner. Alternatives to imprisonment for short term prisoners have a very limited effect on the size of the prison population.

APPENDIX: Data on Length of Imprisonment

TABLE A

Length of Sentence for Persons Received, Holland and N.S.W.

12 months Ending:	The Netherlands		N.S.W.
	31-12-78	31-12-79	30-6-77(a)
Sentence			
> 1 year	4.7%	5.4%	19.6%(b)
6-12 months	6.6%	6.5%	20.0%
3-6 months	12.7%	13.0%	11.0%
1-3 months	17.4%	17.7%	17.8%
≤ 1 month	58.5%	57.3%	31.5%
Number Sentenced	15568	15026	8001

(a) Based on non-parole period (if set), otherwise on total sentence.

(b) If all those serving 1-2 years without a non-parole period (278 persons) earned a third remission, those sentenced to 12-18 months without N.P.P. would be released under 12 months. Assuming a half of 278 are involved, then 17.9% serve over 12 months.

TABLE B

Length of Sentence for some Serious Offences

Country	Offence	N.P.P. Set	Sentence (months)						n
			<3	3-6	6-11	12-24	24-36	>36	
Neth.	Premeditated Murder	NO	-	-	13%	31%	28%	28%	29
		YES: Total	-	-	100%	-	-	-	12
		N.P.P.	-	-	100%	-	-	-	12
N.S.W.	Murder	NO	-	-	-	-	-	100%	48
Neth.	Other Homicide	NO	-	-	35%	33%	19%	13%	75
		YES: Total	-	-	100%	-	-	-	47
		N.P.P.	-	-	100%	-	-	-	47
N.S.W.	Manslaughter	NO	-	-	-	-	..100%..		
		YES: Total	-	-	-	-	..100%..		27
		N.P.P.	-	-	22%	19%	30%	29%	27
Neth.	Rape	NO	-	41%	32%	..27%..			91
		YES: Total	-	53%	47%	-	-	-	76
		N.P.P.	-	83%	17%	-	-	-	76
N.S.W.	Rape and Attempted Rape	NO	-	-	-	-	..100%..		12
		YES: Total	-	-	-	1%	..99%..		88
		N.P.P.	-	-	17%	24%	28%	31%	88
Neth.	Armed Robbery	NO	19%	10%	21%	35%	15%		110
		YES: Total	24%	29%	47%	-	-	-	85
		N.P.P.	47%	29%	24%	-	-	-	85
N.S.W.	Robbery (With Violence)	NO	-	-	10%	5%	..85%..		39
		YES: Total	-	-	-	4%	..96%..		152
		N.P.P.	-	-	18%	26%	26%	30%	152
Neth.	Burglary by Multiple Persons	NO	23%	44%	48%	20%	-	-	204
		YES: Total	12%	38%	50%	-	-	-	277
		N.P.P.	40%	45%	14%	-	-	-	277
N.S.W.	Break, Enter and Steal	NO	8%	11%	33%	21%	..27%..		258
		YES: Total	-	-	-	29%	..71%..		337
		N.P.P.	-	-	45%	32%	12%	11%	337