COMMENT

DETERMINATION OF THE NUMBER OF MEMBERS OF THE HOUSE OF REPRESENTATIVES FROM THE STATES

BY RICHARD W. CULLEN*

Introduction

Section 24 of the Australian Constitution reads:

> The House of Representatives shall be composed of members directly chosen by the people of the Commonwealth, and the number of such members shall be, as nearly as practicable, twice the number of the senators.
>
> The number of members chosen in the several States shall be in proportion to the respective numbers of their people, and shall, until the Parliament otherwise provides, be determined, whenever necessary, in the following manner:
>
> (i) A quota shall be ascertained by dividing the number of the people of the Commonwealth, as shown by the latest statistics of the Commonwealth, by twice the number of the senators:[1]
>
> (ii) The number of members to be chosen in each State shall be determined by dividing the number of the people of the State, as shown by the latest statistics of the Commonwealth, by the quota; and if on such division there is a remainder greater than one-half of the quota, one more member shall be chosen in the State.
>
> But notwithstanding anything in this section, five members at least shall be chosen in each Original State.

Section 24 of the Constitution is thus the section which governs the number of Members of the House of Representatives from each State who may sit in the Federal Parliament. Members of the House of Representatives who represent the Territories on the other hand are elected pursuant to s. 122 of the Constitution, which confers plenary power on the Commonwealth Parliament to legislate with respect to territories.

In contrast to this relatively unfettered power to legislate on Territory representation, State representation in the House of Representatives is subject to the requirements in s. 24 that first, the number of members chosen in the several States shall be in proportion to the respective numbers of their people and second, that there be 'as nearly as practicable' twice the number of State members of the House of Representatives as there are State Senators. The section itself provides its own arithmetic formula for

* A Student of Law at the University of Melbourne. The assistance of Mr R. J. Rowlands, Computing Manager, CSIRO Division of Protein Chemistry, in the early stages of preparation of this comment was much appreciated.

[1] For the purposes of this formula, Stephen J. in *Attorney-General for N.S.W. (at the relation of McKellar) v. Commonwealth* (McKellar's case) (1977) 12 A.L.J.R. 129 concluded that in sub-paragraph (i), people of the Commonwealth is confined to the people of the States and the reference to Senators is similarly restricted.

meeting these requirements 'until the parliament otherwise provides' a suitable replacement formula.

In fact the s. 24 formula was incorporated in s. 10 of the Representation Act 1905, to provide the manner in which the number of members of the respective States were to be chosen in accordance with the nexus and proportionality requirements. It should be noted in particular that this formula entitles a State to an extra member when the State division sum yields a remainder greater than one half of the quota. One practical consequence of the application of this formula is that relatively small shifts in the population of a State can disentitle a State to one of its seats in the House of Representatives.

In 1964 the formula in s. 10 of the Representation Act was modified by the Attorney-General, Mr Garfield Barwick (as he then was), to allow the addition of an extra member for any remainder left after a State's population had been divided by the national quota. In *Attorney-General for Australia (at the relation of McKinlay) v. Commonwealth* (McKinlay's case)[2] Gibbs J., when dealing with the questions raised concerning the putting into effect of new determinations, implied that s. 10 of the Representation Act was conspicuous by its absence from the list of sections of that Act which were under challenge.

In 1977 in *Attorney-General for N.S.W. (at the relation of McKellar) v. Commonwealth (McKellar's* case)[3] the section was challenged, and found to be unconstitutional. Amendment of the Representation Act to restore the formula to its pre-1964 wording followed in the same year.

This examination of the effects of the formula contained in s. 24 of the Australian Constitution and now incorporated in s. 10 of the Representation Act 1905 was prompted by the observation that only once since Federation would today's operative formula and the modified formula (introduced by Attorney-General Barwick) which prevailed from 1964-77 have produced the same number of members of the House of Representatives.[4]

In the following material, the range of possible results flowing from application of the current formula are described. Some comparisons with the 'Barwick formula' are also made.

The Possibilities

Legend: Σ symbolizes sum of
$>$ symbolizes greater than
$<$ symbolizes less than
rem. is an abbreviation of remainder

[2] (1975) 135 C.L.R. 1.
[3] (1977) 12 A.L.J.R. 129.
[4] In *Attorney-General for N.S.W. (at the relation of McKellar) v. Commonwealth (McKellar's* case) Stephen J. observed that in the 1954 determination the pre- and post-1964 methods would have produced 122 State Members of the House of Representatives (MHRs).

The sum of the remainder fractions (expressed as decimal fractions of the quota) must equal a whole number for all practical purposes.

As there are six States this whole number can only be 1, 2, 3, 4 or 5 (0 is theoretically possible but the chances of 7 divisions into parts of and the whole of the Australian population all producing remainder free results are very low.)

The result when Tasmania's population is divided by the quota currently is $>$ 3.5 thus entitling it to 4 members. Section 24 provides for a minimum of 5 members from original States, however, so an extra 1 is added on to the overall total as a result of Tasmania failing to have more than 4.5 quotas and this is generally reflected in the following material. Provided the Tasmanian population is $>$ 3.5 quotas and $<$ 4.5 quotas the following outline is suggested as representing the theoretical limits of membership of the House of Representatives, and the varying circumstances which can produce the given range of results.

The Calculations

1. If the sum of the remainders is 1 a maximum of 1 remainder can be $>$ .5

A.	120 — 1 (deduct Σ rems.)	=	119 + 1 (add rounded rem. $>$ .5)	=	120 + 1 (extra Tas. member)	=	**121**

It then follows when all rems. are $<$ .5

B.	120 — 1 (deduction of Σ rems.)	=	119 + 0 (add rounded rem. $>$ .5)	=	119 + 1 (extra Tas. MHR) NB: It is assumed for this case that Tasmania's population is $>$ 4 quotas and of course $<$ 4.5 quotas.	=	**120**

2. If the sum of the remainders is 2 a maximum of 3 remainders can be $>$ .5

A.	120 — 2 (deduct Σ rems.)	=	118 + 3 (add rounded rem. $>$ .5)	=	121 + 1 (extra Tas. MHR)	=	**122**

It then follows:

	When only 2 remainders are $>$ .5						
B.	120 — 2	=	118 + 2	=	120 + 1	=	**121**
	When only 1 remainder is $>$ .5						
C.	120 — 2	=	118 + 1	=	119 + 1	=	**120**
	When no remainder is $>$ .5						
D.	120 — 2	=	118 + 0	=	118 + 1 (extra Tas. MHR) NB: It is assumed for this case that Tasmania's population is $>$ 4 quotas.	=	**119**

3. If sum of the remainders is 3 a maximum of 5 remainders can be $>$ .5

A.	120 — 3 (deduct Σ rems.)	=	117 + 5 (add rounded rem. $>$ .5)	=	122 + 1 (extra Tas. MHR)	=	**123**

It then follows:

	When only 4 remainders are $>$ .5						
B.	120 — 3	=	117 + 4	=	121 + 1	=	**122**
	When only 3 remainders are $>$ .5						
C.	120 — 3	=	117 + 3	=	120 + 1	=	**121**

When only 2 remainders are > .5

D. 120 — 3 = 117 + 2 = 119 + 1 = **120**

When only 1 remainder is > .5

E. 120 — 3 = 117 + 1 = 118 + 1 = **119**

(N.B.: for all practical purposes, at least 1 remainder must be > .5 if the sum of remainders is 3. Theoretically it would be possible for the original division sum to produce no remainder and for the six State division sums to all produce remainders of exactly .5 resulting in a sum of remainders of 3 and no remainder greater than .5. The likelihood of such an event occurring is extremely remote.)

4. If the sum of remainders is 4 a maximum of 6 remainders can be > .5

A.	120 — 4 (deduct Σ rems.)	=	116 + 6 (add rounded rem. > .5)	=	122 + 1 (addition of extra Tas. MHR)	=	**123**

It then follows:

When only 5 rem. > .5

B. 120 — 4 = 116 + 5 = 121 + 1 = **122**

When only 4 rem. > .5

C. 120 — 4 = 116 + 4 = 120 + 1 = **121**

When only 3 rem. > .5

D. 120 — 4 = 116 + 3 = 119 + 1 = **120**

(N.B.: at least 3 rems. must be > .5 when the sum of rems. is 4.)

5. If sum of remainders is 5 a maximum of 6 remainders can be > .5

A.	120 — 5 (deduct Σ rems.)	=	115 + 6 (add rounded rem. > .5)	=	121 + 1 (addition of extra Tas. MHR)	=	**122**

It then follows:

When only 5 rems. > .5

B. 120 — 5 = 115 + 5 = 120 + 1 = **121**

(N.B.: at least 5 rems. must be > .5 when the sum of rems. is 5.)

Examples from Actual Determinations

(i) In the determination for 1979 (the basis for the 1980 Federal Election) a total of 122 MHRs was determined to represent the six States.[5]

Table of Results 1979 Determination

State	Results of Divisions	No. of MHRs	No. of MHRs "Barwick Formula"
New South Wales	43.234	43	44
Victoria	32.895	33	33
Queensland	18.672	19	19
South Australia	11.083	11	12
Western Australia	10.553	11	11
Tasmania	3.563	4	4
Adjustment for Tasmania		+1	+1
		122	124
A.C.T.(2), N.T.(1) MHRs		+3	+3
TOTAL MHRs		125	127

(Σ of rem. = 3, 4 rem. > .5 = circumstance 3B.)

[5] The Chief Electoral Officer's Certificate pursuant to the Representation Act 1905 is dated February 8, 1979.

(ii) In the determination for 1977 (the basis for the 1977 Federal Election) a total of 121 MHRs was determined to represent the six States.[6]

Table of Results 1977 Determination

State	**Results of Divisions**	**No. of MHRs**	**No. of MHRs "Barwick Formula"**
New South Wales	43.268	43	44
Victoria	33.020	33	34
Queensland	18.610	19	19
South Australia	11.129	11	12
Western Australia	10.383	10	11
Tasmania	3.590	4	4
Adjustment for Tasmania		+1	+1
Total MHRs for States		121	125
A.C.T.(2), N.T.(1) MHRs		+3	+3
TOTAL MHRs		124	128

(Σ of rem. = 2, 2 rem. > .5 = circumstance 2B.)

(iii) From the point of view of this comment, the determination of 1954 is of most interest. In that year it was determined that 122 MHRs should represent the States.[7]

Tasmania's population was then between 4 and 4.5 quotas. The 5 other remainders were > .5. An extra seat was added for Tasmania because of the minimum State representation proviso. The net result was that under either the s. 24 formula or the Barwick Formula, 122 would have been determined from the population figures of the time.

Table of Results 1954 Determination

State	**Results of Divisions**	**No. of MHRs**	**No. of MHRs "Barwick Formula"**
New South Wales	45.986	46	46
Victoria	32.939	33	33
Queensland	17.639	18	18
South Australia	10.707	11	11
Western Australia	8.582	9	9
Tasmania	4.147	4	5
Adjustment for Tasmania		+1	(not required)
TOTAL MHRs FOR STATES[8]		122	122

(Σ of rem. = 4, 5 rem. > .5 = circumstance 4B.)

Conclusion

The theoretical limits on the total number of MHRs, *excluding the Tasmanian adjustment* are:

[6] The Chief Electoral Officer's Certificate pursuant to the Representation Act is dated March 21, 1977.

[7] The Chief Electoral Officer's Certificate pursuant to the Representation Act 1905 is dated November 4, 1954.

[8] In 1954 there was a Representative from the Northern Territory but as he did not have full MHR status he is not included in this table.

Minimum State MHRs 118 (2D, 3E)	and	Maximum State MHRs 122 (3A, 4A)

with the most likely number being 120 (circumstances 1A, 2B, 3C, 4C, 5B). Under the scheme where extra seats were allocated for *any* remainder the theoretical limits on the total number of MHRs *excluding the Tasmanian adjustment* would be:[9]

Minimum State MHRs 121 (where sum of remainders was 5)	and	Maximum State MHRs 125 (where sum of remainders was 1)

The odds are therefore in favour of the s. 24 formula producing exactly twice the number of State MHRs to State Senators. Ratios of less than 2:1 or greater than 2:1 are still possible but the formula does meet the requirement of producing 'as nearly as practicable twice the number of senators' much more satisfactorily than did the Barwick formula while it operated.

It has been observed, however,[10] that Aickin J., in his judgment in *McKellar's* case, in effect read s. 24, not as guaranteeing that the Senate will never be outnumbered by the House of Representatives *by more* than two to one, but as guaranteeing that the House of Representatives will never outnumber the Senate *by less* than 2:1.

On such a reading, even if the Territory senators are left out of the calculation (Aickin J. said they should not be omitted in McKellar's case) the s. 24 formula can produce a result at odds with a requirement of a ratio of 2:1 or greater.

With Tasmania's population *at its present level*, circumstance 3E makes it possible for a House of Representatives determination to currently result in less than twice the number of State MHRs to State senators — that is, 119 MHRs (excluding Territory MHRs).

The opportunity is therefore open for the Aickin reading of s. 24 to be used as the basis for attempting another legislative variation to s. 10 of the Representation Act to achieve a small relative increase in the size of the House of Representatives, designed to ensure that the ratio between the Houses never falls below 2:1, without the need for any constitutional amendment.

Finally, it is interesting to note that with this 'guaranteed minimum' reading of s. 24, the 'Barwick formula', in one respect, is more in harmony with the purpose of s. 24 than the other formula. The Barwick formula does guarantee that the total number of State MHRs can never be *less* than twice the number of State senators.

[9] In the highly unlikely event that none of the division sums involved in making a determination produced a remainder, Barwick's scheme is theoretically capable of producing 120 MHRs.

[10] Howard C., Case Note on McKellar's case (1977) 11 *M.U.L.R.* 133.