
T Divorce and separations

There are four common ways to assess the extent to which gambling problems may be associated with divorce and separations:

- undertake a survey of gamblers, determine which of them have gambling problems and ask self-assessment questions relating to the extent to which gambling may contribute to relationship problems, including divorce and separation. This was the method used by the Commission in its *National Gambling Survey* and *Survey of Clients of Counselling Agencies*;
- undertake a survey of people who are divorced or separated, and ask them general questions about why they divorced or separated and assess the prominence of gambling among these reasons;
- undertake quantitative assessments of the probability of divorce among a sample of individuals, given a problem gambling diagnosis, holding all other variables constant; and
- undertake quantitative assessment of the extent to which regional or time series divorce rates are associated with gambling expenditure, accounting for confounding variables.

This appendix sets out the key evidence on the likely impact of gambling problems on divorces, using evidence from all of the above methods.

T.1 The Commission's data

The Commission's *National Gambling Survey* suggested that there were:

- 59 500 relationship break ups *ever* as a result of gambling (of which 39 200 were in the last 12 months); and
- 42 600 separations or divorces *ever*.

However, these numbers do not provide the numbers of current year separations and divorces, which are useful for estimating the cost impacts in chapter 9. A number of possible methods can be used to derive current year estimates.

Dickerson et al (1998, p. 79) for example, uses a range of annualisation ratios to convert lifetime events into annual rates. For divorce he applies a ratio of 20, which would suggest around 2 130 annual divorces.¹ Given the average younger age profile of problem gamblers, 20 appears a relatively high adjustment factor. The average age of people saying that they have ever been divorced or separated due to gambling is 32.6 years in the *National Gambling Survey*. This suggests that a more reasonable annualisation rate might be significantly less than 20 years (but rather more than was applied in the Commission's draft report²).

However, some definitional and methodological issues suggest care in using the raw survey numbers. In particular, there is some ambiguity about the word separation. While the word 'separation' can mean the formal separation of a couple as a legal pre-requisite to divorce, it also has a popular meaning that people physically split up from a relationship even if they were not married. It is apparent from both the Commission's *National Gambling Survey* and the *Survey of the Clients of Gambling Counselling Services* that some people saw a separation as the physical split-up of people in a non-married relationship. The evidence for this is two fold. Of the people who said that they were ever divorced or separated as a result of gambling, only 14 800 recorded their current marital status as divorced or separated (and 1 700 said they were married, which could include re-marriages). Secondly, there were a number of comments by clients of counselling services indicating that they had split up from a de facto relationship, and had described this as a separation.

This suggests that the data does not relate purely to separations and divorces as they are recorded by the ABS, but to a wider set of occasions when partners separate from relationships. While this might be thought to bias the data upwards as a source of information on officially defined divorce and separation, there are offsetting factors that suggest that the data underestimates the *lifetime* prevalence of gambling-related divorce:

¹ It is presumed that the 'ever' figure is dominated by divorces (since most separations proceed to divorce), so that it is legitimate to make no adjustment for separations in calculating the annualised divorce figure.

² In chapter 9 of its draft report, for its costing of impacts, the Commission converted the 'ever' divorced number into divorced 'in the last year' by taking the ratio of relationship break ups last year to break ups ever (a ratio of 0.66). This provides a large number, which would account for about 25 per cent of current year legally defined 'separations and divorces'. The Commission received advice from a number of experts and participants, including the Chairman of the Policy Committee on Family and Community Services, Kevin Andrews (who chaired the report *To Have and To Hold*), and the AHA (sub. D231), that these seemed significantly out of step with other research on the causes of divorce. Accordingly, the Commission has re-examined the data on divorce and separations, and in particular, looked more closely at estimates of annual gambling-related divorces.

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- The ratio of ‘last 12 months’ prevalence of relationship breakdowns to ‘ever’ is implausibly high. It seems reasonable to suppose that a greater share of relationship breakdowns due to gambling would have occurred in the past (although people who had serial relationship breakdowns might say yes to a past breakdown and yes to a current one with this referring to two or more actual relationship breakdowns).
 - This survey question was not asked of all respondents, but only of regular gamblers. It seems possible that many of the people whose past relationships have broken down due to gambling, would, over time, have changed their pattern of gambling to irregular — and thus have been excluded from the survey and its estimate of past relationship breakdowns.

For these reasons, while the data probably captures the relative degree of relationship instability between *current* problem and non-problem gamblers reasonably well, it is probably not a sound basis on which to estimate the number of divorces and separations that have *ever* taken place— in the technical legal sense of these terms — due to gambling.

However, by looking more closely at the current marital status of respondents, the *National Gambling Survey* may provide some insights into the numbers of people seeking divorce or separations in the last 12 months due to gambling. The Commission survey data base reveals that there were an estimated 4 500 people who had a relationship breakdown in the last 12 months, where the relationship breakdown had led to divorce or separation and where they were currently divorced or separated.³ Since it takes one year to obtain a divorce after separation, this would imply annual gambling-related divorces of 2 250. However, the standard error of this estimate is large and it provides a questionable basis for costing current year impacts in chapter 9.

T.2 Surveys of divorcees

There are, however, a number of other possible sources of data on the causes for divorce. Wolcott and Hughes (1999) from the Australian Institute of Family Studies provides one source on the general causes of divorce, and used a survey involving 650 respondents. Their study points to *no* divorces as a result of gambling at all, though it appears that gambling was cited as a contributing factor by one person (AHA, sub. D231, p. 27).

³ Some people may presumably get a divorce and re-marry or record their status as ‘single’ rather than as ‘divorced or separated’, but this seems unlikely if the divorce or separation has been within the last 12 months.

However, the survey used a set of pre-coded categories (Wolcott and Hughes 1999 p. 7) — such as communication problems, incompatibility, affair, alcohol/drug abuse, physical violence, financial problems, physical/mental health, work issues and work and family time, and emotional/verbal abuse — from which a respondent was to tick one as the main cause of marital breakdown. Gambling was not included as a separate category. But many of these possible reasons for marriage breakdown are symptoms of other underlying causes — for example, financial problems, physical violence, physical/mental health, and emotional/verbal abuse are all adverse impacts that can be associated with problem gambling. Because of this, such a survey strategy does not enable the data to shed much light on the issue at hand. Nevertheless, it appears highly likely that gambling-related divorce would figure relatively slightly in aggregate divorces.

Moreover, the survey is composed of two samples that, by their nature, will tend to under-represent cases of gambling related divorce. The samples were divorcing couples with a child under 18 years at the time of separation (a sample of 513 respondents) and people who had been married for 15 years or longer and with a wife whose age at separation was between 45 and 65 years (Behrens and Smyth 1999, p. 4). As gambling problems tend to emerge more frequently in young people, it seems likely that they would be more highly represented in a sample of divorcing younger couples without children — precisely the group omitted from the study.

Even with its limitations for the matter at hand, the AIFS study provides some circumstantial evidence that the prevalence of gambling-related divorce is likely to be relatively modest. The survey reveals that alcohol and drug problems accounts for 7.4 per cent of divorce cases, though it is also noted that some of these problems may be subsumed under the heading ‘physical/mental health’ (which accounts for a further 4.7 per cent of cases). Given that there is substantial evidence that the prevalence of alcohol and drug abuse is significantly higher than gambling problems, it would appear reasonable to suppose that gambling would have to contribute to some fraction of 7.4 per cent of divorces to reflect its relative prevalence.

Another key relevant study is a telephone survey conducted in September 1998 by Relationships Australia among 1 402 Australians. Across the whole sample, around 4.1 per cent nominated gambling as a source of a relationship problem with a partner — which is consistent with a prevalence rate of gambling problems of around 2 per cent (close to the estimate provided by the Commission). Among divorcees, however, gambling figured more prominently, and was mentioned by 7 per cent of people as a contributing factor to problems. Since, however, people typically nominated more than one factor, it is necessary to reduce the share of divorces and separations due to gambling to a smaller number that accounts for this

double counting. In this case, a reasonable adjustment may be the share of total mentions of all possible causes — which reduces the importance of gambling to 3.1 per cent. ABS data⁴ suggests that there were 51 370 divorces in 1998. This implies that there were around 1 600 gambling-related divorces in Australia in 1998 and another 1 600 separations (next year's divorces) that might be ascribed to gambling, or 3 200 divorces and separations altogether.⁵

Of course these numbers will ignore the breakdown of relationships outside of marriage. There are likely to be a significant number of these, particularly since the highest risk group for problem gambling are the young.

Table T.1 Reasons for relationship problems
September 1998

	<i>Divorced or separated</i>			<i>Other marital status</i>			<i>Total</i>		
	NM	SNM	SS	NM	SNM	SS	NM	SNM	SS
	No.	%	%	No.	%	%	No.	%	%
Loss of a job	20	6.9	15.5	170	7.3	13.4	190	7.3	13.6
Work or study demands	28	9.6	21.7	323	13.9	25.4	351	13.4	25.0
Having or bringing up children	34	11.7	26.4	301	13.0	23.6	335	12.8	23.9
An accident or traumatic events	32	11.0	24.8	266	11.5	20.9	298	11.4	21.3
Financial difficulties	54	18.6	41.9	345	14.9	27.1	399	15.3	28.5
Serious illness or disabilities	24	8.2	18.6	252	10.8	19.8	276	10.6	19.7
Gambling	9	3.1	7.0	48	2.1	3.8	57	2.2	4.1
An affair	20	6.9	15.5	80	3.4	6.3	100	3.8	7.1
Alcohol or drug abuse	24	8.2	18.6	142	6.1	11.2	166	6.4	11.8
Violence	13	4.5	10.1	49	2.1	3.8	62	2.4	4.4
No major difficult times	19	6.5	14.7	297	12.8	23.3	316	12.1	22.5
Some other cause	12	4.1	9.3	45	1.9	3.5	57	2.2	4.1
Don't know/can't recall	2	0.7	1.6	5	0.2	0.4	7	0.3	0.5
Total	291	100.0	225.6	2323	100.0	182.5	2614	100.0	186.4

a₀ NM is the number of times the factor was mentioned by a respondent. Respondents could mention more than one factor as a contributor to relationship problems. SNM is the share of total mentions for each category, and will sum to 100. SS is the share of the total sample (which was 129 for people who were divorced or separated and 1 402 altogether). SS will sum to more than 100.

Source: Data provided by Relationships Australia and Bateman and Conroy (1999).

⁴ ABS, 1999e, *Marriages and Divorces, Australia*, Cat. No. 3310.0.

⁵ Another possible *indicative* method of estimating the share of divorces is to examine the ratio of problems caused by gambling to alcohol and drugs in the Relationships Australia survey and apply that to the AIFS study. This yields an estimate of gambling related divorce share as $3.1/8.2 \times 7.4 = 2.8\%$.

T.3 The logistic approach

The NORC study (Gerstein et al 1999) for the US National Gambling Impact Study Commission undertook logistic analysis of its sample respondents to examine the extent to which the odds for divorce increased with a diagnosis of problem gambling. They found that once confounding variables had been taken into account, 'pathological' gamblers had 2.3 times the odds of getting divorced. If these heightened odds were also roughly relevant to Australian problem gamblers then this would imply that the annual divorce rate per 1000 problem gamblers would be around 29 people per 1000 marriages (ie 2.3 times 12 per thousand⁶). Among the 293 000 current problem gamblers there are about 140 000 who are married (in the overwhelming number of cases to a non-problem gambler), and thus about 140 000 couples in which one party is a problem gambler.⁷ Using the US odds would imply annual gambling-related divorces of around 4 000 in Australia.

The Commission also undertook its own logistic analysis of respondents to the *National Gambling Survey* to see what factors might determine whether a person recorded their marriage status as divorced or separated. Problem gambling, age and unemployment were all statistically significant factors in explaining divorce (based on 3 463 observations). Overall, the analysis suggested that a problem gambler had 1.7 times the odds of being divorced compared to others, controlling for other risk factors. Using the above methods, this would imply annual gambling-related divorces in Australia of around 2 900.

Table T.2 **Summary of divorce prevalence comparisons between
'pathological', problem and low-risk gamblers**
US NORC study

	<i>Rate of divorce ever per gambler</i>	<i>Odds ratio relative to low risk</i>	<i>Predicted rate for divorce without gambling</i>	<i>Rate of divorce for low-risk gamblers</i>
	%	ratio	%	%
Problem gamblers	39.5	1.38	32.1	29.8
Pathological gamblers	53.5	2.29	33.5	29.8

^aφThe term 'pathological' gambler is closest to the terminology 'problem gambler' used by the Commission. People termed as 'problem' gamblers in most US studies are not categorised as having gambling problems using the thresholds applied in Australia.

Source: Gerstein et al (1999 p. 55).

⁶ 12.4 per thousand is the annual divorce rate given by ABS data for 1998 (Cat. No. 3310.0).

⁷ Around 47 per cent of problem gamblers report being married. The *National Gambling Survey* also asked people if they knew someone who was a problem gambler. Using this as the basis there were around 125 000 couples in which one was problem gambler.

T.4 Regional studies

Nichols et al (1999) examined divorce rates in a group of eight casino communities in the US compared to five matching control non-casino communities. They found no evidence that divorce rates were higher in casino communities than non-casino communities.

However, models of aggregate divorce rates tend to explain relatively little of the variation of divorce (across regions or time⁸) because so many idiosyncratic hard-to-observe factors are at work. As noted by McAllister (1999, p. 2):

Aggregate statistics and quantitative surveys are poor instruments for measuring the process of marital breakdown and the changes accompanying different stages of it

To illustrate this, suppose that the recent rapid growth in gambling in Australia had roughly doubled the number of problem gamblers who are in marriages in the last decade. Assuming a fixed risk of divorce of 1.7 times that of other marriages (as in the previous sub-section), this implies that there would have been about an additional 1 500 divorces in 1998 compared to a counterfactual of a static gambling environment. But 1 500 divorces is only 2.9 per cent of divorces in 1998, and in this case would represent a gradual increase in divorces due to gambling of 0.29 per cent per annum over the decade. Picking that up in an econometric method is probably beyond the capacity of the data — an issue that is discussed more generally in chapter 7.

T.5 Summary

Anecdote and data on problem gamblers (whether from general populations or help groups) leave little doubt that problem gambling is instrumental in the breakdown of some marriages and relationships. But measuring the aggregate number of gambling-related Australian divorces with precision and separating gambling problems from other factors that may be present is difficult. Using methods that have some capacity to uncover the contribution of problem gambling suggests that problem gambling is connected with something between 1 600 and 4 000 divorces a year (and therefore around double this number of annual divorces and separations).

In its analysis of the costs of problem gambling, the Commission has taken the least of these numbers — or around 1 600 gambling-related divorces per year.

⁸ If the influence of lagged dependent variables are taken into account.

Table T.3 Various estimates of gambling-related divorces per annum

<i>Method</i>	<i>Estimated annual gambling-related divorces</i>
	Number
Annualising the 'ever' divorces	2 130
Last year relationship breakdowns that resulted in divorce or separations.	2 250
The Relationships Australia data	1 600
Using the NORC logistic odds	4 000
Using the Commission logistic odds	2 900

Source: Commission estimates.