## CORRESPONDENCE

Term	Age	Rate of Interest per annum				
		2 %	21%	2 <sup>1</sup> / <sub>2</sub> %	23/%	3%
10	20	.115	.110	·108	•106	•104
	30	.128	.125	.123	•121	.110
	40	·223	•219	.215	•211	•208
	50	•473	•464	•456	•448	•440
20	20	·385	•373	•361	.350	.338
	30	•514	•498	•481	•465	•450
	40	·968	·936	·904	·873	·844
	50	2.168	2.095	2.023	1.922	1.889
30	20	-836	•797	.759	.723	•689
	30	1.281	1.217	1.126	1.000	1.042
	40	2.598	2.465	2.339	2.251	2.109
40	20	1.266	1.466	1.321	1.284	1.304
	30	2.720	2.537	2.365	2.206	2.060

estimate the values of temporary annuities at varying rates of interest, provided that the values of the corresponding annuities certain at the required rates of interest are available.

> Yours faithfully, A. C. RICHARDS

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The Joint Editors The Journal of the Institute of Actuaries Students' Society

The recent marriage and fertility data of England and Wales

## Sirs,

In his paper published in your last Part (10, 261) Mr P. R. Cox discusses the notion of a differential fertility of marginal marriages which he (rightly, I think) attributes to me. For the sake of the record I should like to mention that I put this idea forward during the war in the early days of the Royal Commission on Population as a fatal objection to the process then in favour of using nuptiality tables to standardize reproduction rates based on fertility data analysed by age and duration of marriage. This process resulted in an even gloomier view of population prospects than the ordinary reproduction rate, particularly in the early part of the war and I was convinced that this was not justified. Indeed, I was one of the few at that time who realized the weaknesses of N.R.R. and pointed out in appropriate official quarters that it gave too gloomy a view.

Mr Cox distinguishes between the idea of 'marginal' marriages and the idea of 'anticipated' marriages. In my view of the matter, the 'anticipated' (and 'delayed') marriages are included in the wider concept of 'marginal' marriages. In fact, the possibility that the low fertility of the additional marriages (whether anticipated or delayed) in the first year or two after marriage might be offset by higher fertility later on was an essential part of the point of emphasizing the significance of the marginal marriages. But this balancing-up effect, which in different conditions might work in the opposite direction, does not in any way justify the process of nuptiality standardization of, for example, the fertility data of the years 1940/42. It does not need elaborate statistical analysis to appreciate that the motives behind the increased marriages in 1939/40 were not conducive to bringing children into the world. It is ironic to-day to remember also that the improvement in the number of births during the war was chronologically associated with the entry of the U.S.S.R. into the war.

> Yours faithfully, WILFRED PERKS

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