

**Table A3: Risk-Adjusted Coverage Ratios, 1900–2019**

This table shows, for 11 asset allocations with different proportions of stocks ( $S$ ) and bonds ( $100 - S$ ), over 91 rolling 30-year retirement periods beginning with 1900–1929 and ending with 1990–2019, the risk-adjusted coverage ratio as defined in expression (2) for all the countries in the sample. The analysis is based on a \$1,000 retirement portfolio, a 4% initial withdrawal rate, 30 annual withdrawals adjusted by inflation, and annual rebalancing. The figure highlighted indicates the optimal strategy for each country. The data is described in Table A1.

$S \rightarrow$	100%	90%	80%	70%	60%	50%	40%	30%	20%	10%	0%
<b>Australia</b>	1.55	1.59	1.59	1.57	1.52	1.45	1.38	1.31	1.24	1.20	1.18
<b>Austria</b>	1.09	1.10	1.10	1.09	1.08	1.07	1.07	1.08	1.09	1.12	1.16
<b>Belgium</b>	0.92	0.92	0.94	0.95	0.96	0.99	1.01	1.04	1.07	1.11	1.16
<b>Canada</b>	1.77	1.96	2.08	2.10	1.99	1.82	1.63	1.47	1.32	1.20	1.11
<b>Denmark</b>	1.29	1.22	1.16	1.12	1.08	1.06	1.04	1.04	1.04	1.06	1.09
<b>Finland</b>	0.80	0.82	0.84	0.85	0.86	0.87	0.89	0.91	0.95	1.02	1.15
<b>France</b>	0.83	0.82	0.82	0.82	0.83	0.84	0.86	0.88	0.91	0.94	0.98
<b>Germany</b>	0.49	0.56	0.64	0.73	0.83	0.94	1.04	1.14	1.21	1.28	1.33
<b>Ireland</b>	0.93	0.94	0.95	0.95	0.94	0.94	0.93	0.93	0.94	0.96	1.00
<b>Italy</b>	1.16	1.14	1.12	1.10	1.09	1.08	1.07	1.05	1.02	0.98	0.94
<b>Japan</b>	0.60	0.67	0.77	0.90	1.06	1.27	1.48	1.64	1.67	1.59	1.45
<b>Netherlands</b>	1.10	1.11	1.13	1.14	1.16	1.19	1.23	1.28	1.35	1.44	1.55
<b>N. Zealand</b>	2.09	2.14	2.10	2.01	1.88	1.74	1.61	1.50	1.40	1.31	1.24
<b>Norway</b>	0.85	0.87	0.89	0.91	0.94	0.97	1.01	1.05	1.09	1.13	1.15
<b>Portugal</b>	0.93	0.92	0.91	0.89	0.89	0.90	0.92	0.95	1.01	1.08	1.17
<b>S. Africa</b>	1.67	1.75	1.82	1.86	1.88	1.88	1.86	1.82	1.78	1.75	1.74
<b>Spain</b>	0.69	0.71	0.74	0.77	0.82	0.87	0.93	1.01	1.10	1.19	1.30
<b>Sweden</b>	0.90	0.90	0.89	0.90	0.91	0.93	0.96	1.01	1.07	1.15	1.24
<b>Switzerland</b>	1.54	1.61	1.68	1.76	1.84	1.93	2.02	2.10	2.17	2.21	2.21
<b>U.K.</b>	1.31	1.30	1.28	1.25	1.22	1.19	1.16	1.13	1.12	1.11	1.12
<b>U.S.</b>	1.63	1.79	1.88	1.86	1.78	1.67	1.56	1.46	1.38	1.33	1.30