

Issue
No 14

Hannover Re's Perspectives
Current Topics of
International Life Insurance

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Dorit Stobbe

*To marry or not to marry –
that is the question*

*New insights into the effect of
marital status on mortality*

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1. Introduction

Celebrities such as Heidi Klum, Claudia Schiffer, Madonna, Michael Douglas and others reflect the latest trend: a longing for commitment and family. Similarly the German magazine Spiegel published a lead story in its edition 43/2000 entitled "Happier as a couple". The article suggests that after shifting opinions in recent decades a new desire for commitment has now emerged. In a society fixated on money and career, a family holds the promise of protection, intimacy, familiarity and security.

Yet this new "spirit of the age" is not only bringing about largely positive living circumstances, it is even – in statistical terms – prolonging life! It has long been known that married people have a lower mortality than unmarried people. This fact is quantitatively reflected in the so-called "relative mortality ratio" (abbreviated to RMR). This is defined as follows:

$$\text{RMR} = \frac{\text{Mortality of unmarried persons}}{\text{Mortality of married persons}}$$

An RMR of two, for example, would mean that the mortality of unmarried persons is twice as high as the mortality of married persons. The unmarried group is subdivided into further groups, namely the non-married – referring to those people who have never been married –,

2. Relative mortality ratio

Tables 1, 4 and 7 of the Appendix indicate the RMRs as well as the corresponding sources for:

- ◆ Germany, 2004,
- ◆ England and Wales, 2002,
- ◆ USA, 2002.

The 1986 RMRs for Germany cited in [13] were based on figures for the old federal states (West Germany). Since mortalities for the entire country were determined retrospectively, the RMRs for the entire territory of Germany are indicated in the present paper.

the divorced and the widowed, and the RMRs are determined separately for each of these three groups.

Issue No. 3 of Hannover Re's Perspectives by A. H. Reich ([13]) provided the RMRs for Germany, England and Wales, the United States and Japan. It also put forward reasons for the lower mortality of married persons compared to the other groups mentioned and on this basis arrived at suggestions for incorporating marital status into the rating of life insurance policies.

The RMRs in [13] were based on publications from the years 1986 to 1992. Section 2 provides and compares the RMRs established on the basis of more recent data.

Given the fact that the past 20 years have seen far-reaching social changes, Section 3 explores whether and, if so, how the RMRs have changed and what the possible reasons might be for this change. To this end data was analysed for Germany, England and Wales as well as the United States. In addition, a literature summary is provided covering the findings of studies published in recent years with respect to possible influencing factors on the lower mortality of married people.

In addition to the current RMRs, Tables 2, 5 and 8 of the Appendix show the RMRs for Germany from 1986, England and Wales from 1992 and the USA from 1980. Tables 3, 6 and 9 of the Appendix describe the relative changes in the RMRs over time.

Since up-to-date figures from Japan were unfortunately not available to us, we were unable to analyse the development of the RMRs in Japan.

For all countries the RMRs are greater than one, hence confirming the long-known fact that married persons have a lower mortality than un-

married persons. What is more, it is evident that men benefit more from marriage than women as far as mortality is concerned.

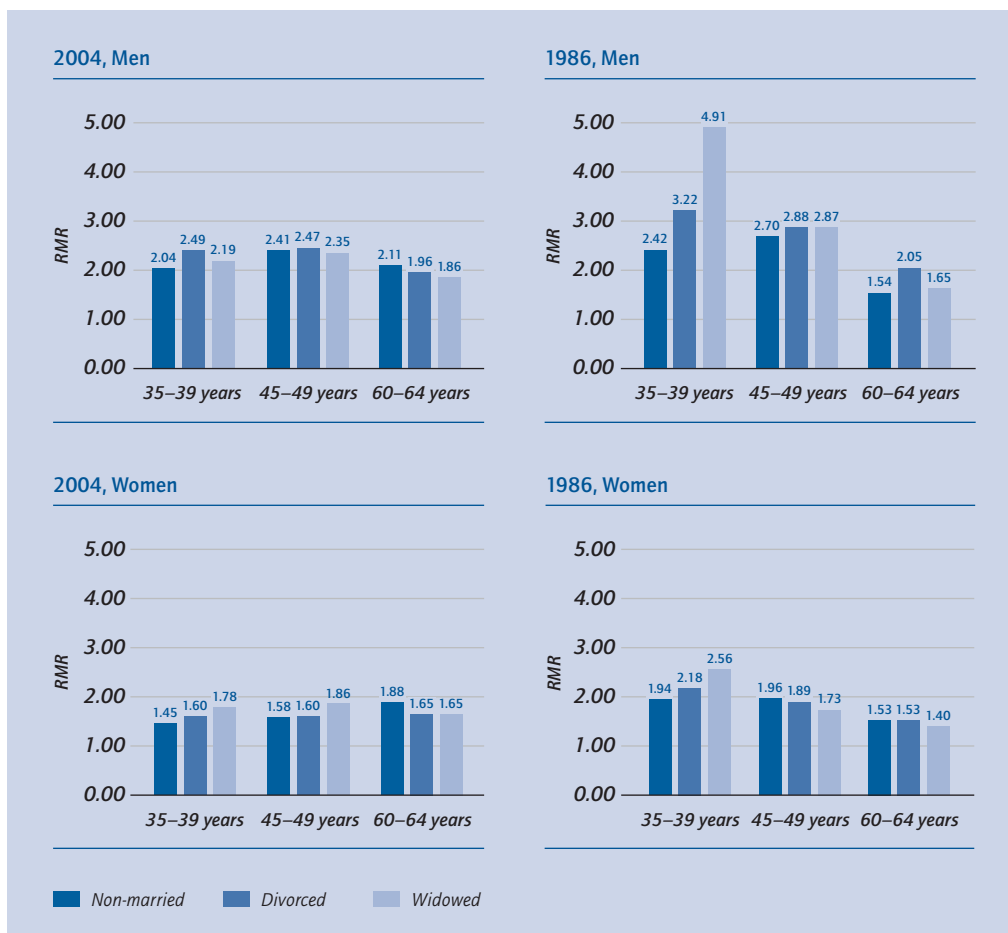
The following sections explore in greater detail the RMRs of each individual country and comparisons are made between the respective countries. The RMRs shown in the graphs do not

cover the entire age range shown in the tables of the Appendix, but instead highlight core age groups. The intention here is to pinpoint the differences between the lower, middle and upper age ranges.

2.1 Germany

Figure 1 shows the RMRs for Germany for the years 2004 and 1986 for selected age groups.

Figure 1:
RMRs for Germany



The figures in Table 10 serve as a further basis for the interpretation of the RMRs. On the one hand, the weighted means (Table 10a) – and on the other hand the empirical standard deviation (Table 10b) – of the RMRs within an age group are shown here. The empirical standard

deviation indicates how high the fluctuations in the RMRs for the non-married, divorced and widowed persons are within an age group.

Table 10a:
Weighted mean (RMRs Germany – unmarried persons)

Age group	35–39	45–49	60–64
2004, Men	2.12	2.43	1.99
2004, Women	1.50	1.62	1.69

Age group	35–39	45–49	60–64
1986, Men	2.69	2.79	1.72
1986, Women	2.09	1.87	1.45

Table 10b:
Empirical standard deviation (RMRs Germany – unmarried persons)

Age group	35–39	45–49	60–64
2004, Men	0.29	0.08	0.15
2004, Women	0.17	0.16	0.13

Age group	35–39	45–49	60–64
1986, Men	1.62	0.12	0.35
1986, Women	0.31	0.12	0.07

The decreased RMRs in the 35–39 and 45–49 age groups in the period between 1986 and 2004 are clearly identifiable. In the 60–64 age group, on the other hand, the RMRs increased. This gives rise to a more balanced picture across the age groups.

Last but not least, politicians have recognised the changes in the social framework and responded by exerting their influence through legislation, including for example the introduction of legally recognised partnerships without a marriage certificate.

It remains the case that the RMRs for men in all age groups are higher than they are for women.

In addition, a cohort effect can be identified with regard to women: the RMRs for women who in 1986 were in the 45 to 49 age group and in 2004 roughly fell into the 60 to 64 age group have the same dimensions.

The relatively large fluctuations within the 35–39 age group have decreased, i.e. the differences between the RMRs for the non-married, divorced and widowed groups are no longer as great as they were 20 years ago.

One can only surmise the possible reasons for this development. The decreased RMRs for young age groups may result from the fact that marriage is no longer perceived as a compulsory way of life by German society.

The media have taken up and commented on the changes in social conditions.

2.2 England and Wales

Figure 2:
RMRs for England and Wales

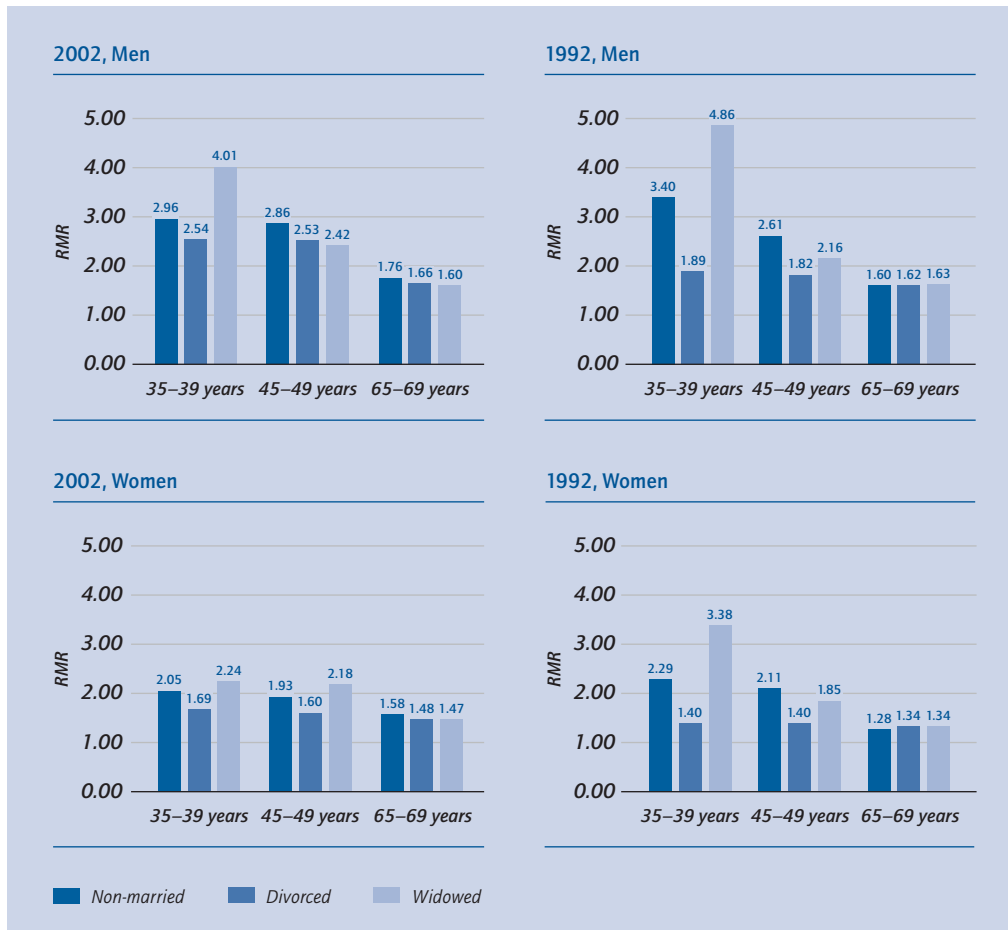


Table 11 a:
Weighted mean (RMRs England and Wales – unmarried persons)

Age group	35-39	45-49	65-69
2002, Men	2.87	2.69	1.67
2002, Women	1.93	1.76	1.49

Age group	35-39	45-49	65-69
1992, Men	2.83	2.18	1.62
1992, Women	1.85	1.63	1.33

Table 11 b:
Empirical standard deviation (RMRs England and Wales – unmarried persons)

Age group	35-39	45-49	65-69
2002, Men	0.76	0.23	0.08
2002, Women	0.28	0.29	0.06

Age group	35-39	45-49	65-69
1992, Men	1.49	0.40	0.02
1992, Women	0.99	0.36	0.03

In England and Wales it is striking that divorced persons almost consistently have lower RMRs than non-married and widowed persons. What is more, the RMRs in the lower age groups, especially among men, are relatively high and decrease with increasing age. It should, however, be borne in mind that these two effects weakened somewhat in the period from 1992 to 2002. In addition, the RMRs for divorced persons rose in the period from 1992 to 2002 practically without exception.

Overall, the RMRs for the three groups of unmarried persons became more evenly bal-

anced from 1992 to 2002, as can be seen from Table 11b. Only in the case of persons belonging to age group 60–64 can a slight increase in the empirical standard deviation be detected.

Summing up, it is evident that the weighted mean for unmarried persons in all age groups has risen slightly. This means that the institution of marriage continues to constitute the basis of social life, although the group of unmarried persons to which one belongs no longer makes any significant difference.

2.3 United States

Figure 3:
RMRs for the USA

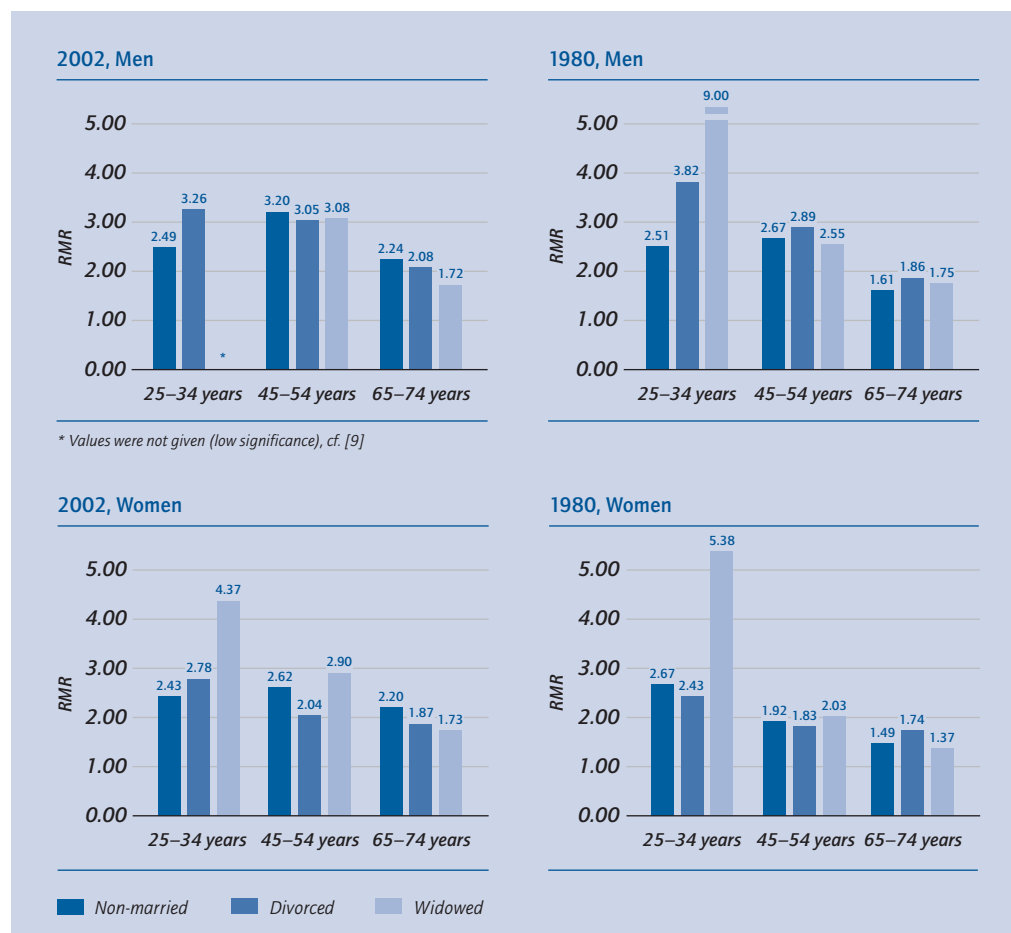


Table 12a:
Weighted mean (RMRs USA – unmarried persons)

Age group	25–34	45–54	65–74
2002, Men	2.57	3.11	1.84
2002, Women	2.52	2.31	1.76

Age group	25–34	45–54	65–74
1980, Men	2.82	2.75	1.73
1980, Women	2.67	1.92	1.41

Table 12b:
Empirical standard deviation (RMRs USA – unmarried persons)

Age group	25–34	45–54	65–74
2002, Men	0.55	0.08	0.27
2002, Women	1.04	0.44	0.24

Age group	25–34	45–54	65–74
1980, Men	3.34	0.17	0.13
1980, Women	1.64	0.10	0.19

In the case of the USA particularly high RMRs can be identified for widowed persons in the 25 to 34 age group. For 2002 no mortality was indicated in [9] for widowed men in the age group 25 to 34 because the number of observed values was so minimal that it did not satisfy the required accuracy standard. Consequently, no RMR could be determined or shown for this group.

In the 25 to 34 age group the RMRs fell on average, whereas in the other two age groups they increased. The RMRs for 1980 decrease as the age group rises. For 2002 this attribute can similarly be observed among women, albeit to a lesser extent. The RMRs for men, on the other hand, exhibit a "pyramid structure" in 2002, i.e. the RMRs are highest in the middle age group.

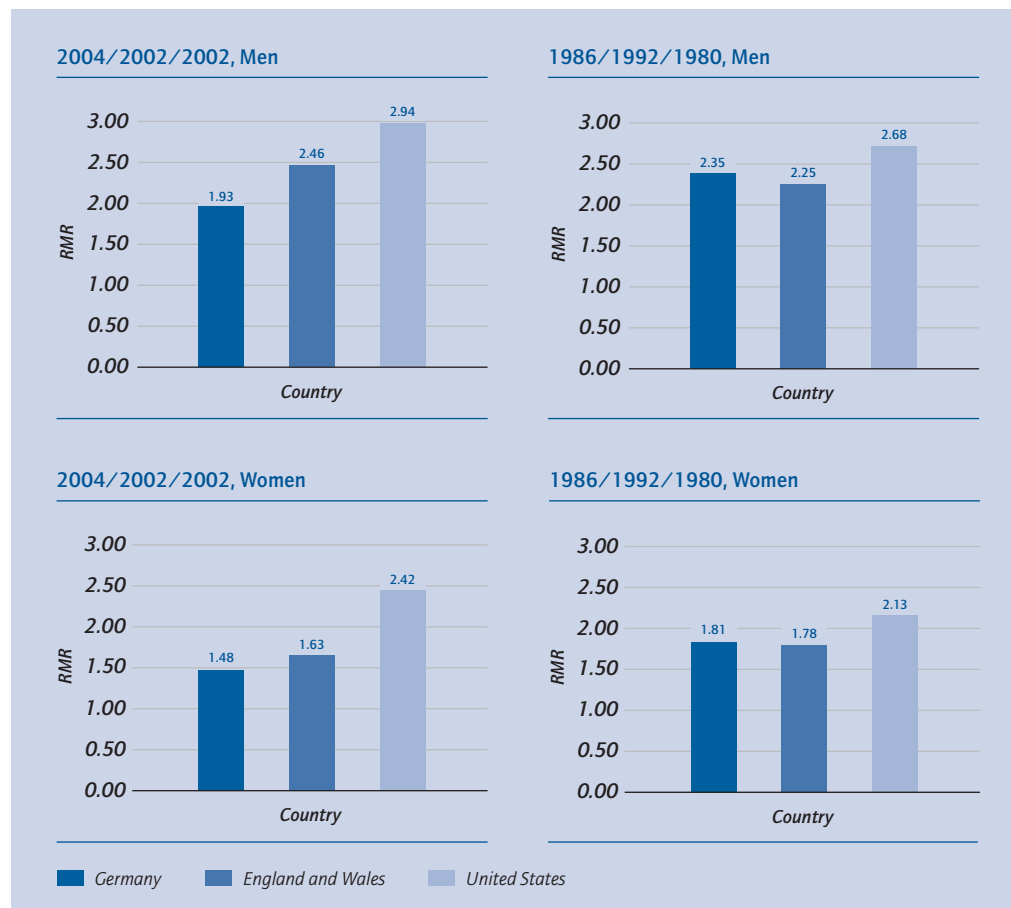
2.4 Differences between countries

As is evident from the previous sections, the changes in the RMRs in the three countries under consideration differ greatly according to development over time, sex, age group and belonging to a particular marital status.

In order to obtain an overview of the overall development, weighted means were established across the RMRs for the 25 to 64 age

range and translated to graphs in Figure 4 so as to provide a comparison of the RMRs for Germany, England and Wales and the United States. It should be borne in mind that in this context a distinction is not made between the various groups of unmarried persons and age groups. This presentation of the data nevertheless opens up a simplified view of the development of the RMRs over time.

Figure 4:
Weighted RMRs (across ages 25 to 64)



The RMRs were and are highest for the USA. They have even increased somewhat in recent years. In England and Wales the RMRs for men rose, while those for women fell slightly. In Germany the RMRs decreased for men and women and now stand at their lowest levels.

It is difficult to interpret these findings. It might be inferred that marriage continues to be regarded as the usual form of cohabitation in the consciousness of the American population.

3. Reasons for mortality differences based on marital status

3.1 Selection

The preference for healthy persons when choosing a partner gives rise to a selection effect ([13]).

What is more, reference is made *inter alia* in Lillard and Panis [11] to an antiselection effect. Their analyses, based on data for the male participants in the PSID study (representative long-term study of roughly 5,500 US households), re-

vealed that divorced men over the age of 50 who do not feel in good health remarry especially quickly and also stay married longer. However, men in poor health are also considered less attractive and it is not so easy to find a woman who is willing to marry and support them. Nevertheless, for divorced men over 50 the antiselection effect outweighs the selection effect.

3.2 Protective effect of marriage/Lifestyle

It is generally known that by providing each other with protection married people have a lower mortality. Their lifestyle is healthier and characterised by a lower propensity to take risks ([13]). The following factors play a role in these attributes:

3.2.1 Emotional support

Ross et al. [15] provide a bibliographical overview of internationally published works on the topic of "The Impact of the Family on Health". *Inter alia*, the greater psychological well-being that influences physical wellness and vice versa is attributed to emotional support, such as being cared for, loved and appreciated and having someone to turn to with one's problems on a trusting basis.

Gardner and Oswald [4] explore emotional well-being as a function of marital status. In particular, they explore the question of whether couples that divorce benefit from the separation. The data are taken from the British Household Panel Study. This is a representative national study in which 5,000 British households have been surveyed each year since 1991. The GHQ (General Health Questionnaire) index, considered an indicator of tension and psychological stress by medical researchers and psychiatrists, is used to examine how well-being changes over time. The twelve GHQ questions are:

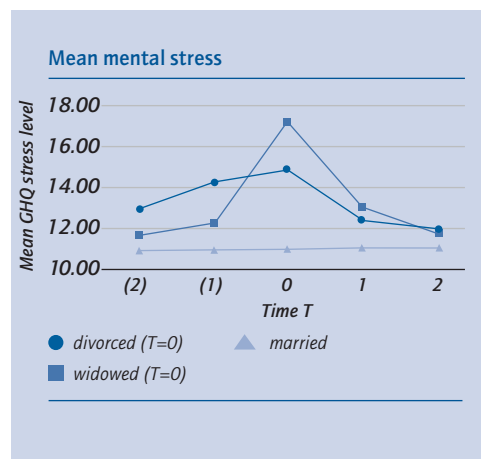
Have you recently:

1. Been able to concentrate on whatever you are doing?
2. Lost much sleep over worry?
3. Felt that you are playing a useful part in things?
4. Felt capable of making decisions about things?
5. Felt constantly under strain?
6. Felt you could not overcome your difficulties?
7. Been able to enjoy your normal day-to-day activities?
8. Been able to face up to your problems?
9. Been feeling unhappy and depressed?
10. Been losing confidence in yourself?
11. Been thinking of yourself as a worthless person?
12. Been feeling reasonably happy all things considered?

Each question can be answered on the basis of a four-point scale, with the responses being coded in such a way that the lowest level of well-being is valued at three and the highest level of well-being is rated zero. The sum total of points across all the questions is taken as a measure of mental well-being. The prevailing medical opinion is that healthy individuals score a test result in the range of roughly 10 to 13; scores approaching 36 occur seldom and point to depres-

sion in the clinical sense of the term. Statistical analyses have revealed that married persons exhibit significantly lower levels of mental stress than the other persons in the survey sample. While the group of divorced persons exhibits higher levels of mental stress relative to the group of married persons, the picture is different if the mental stress shortly before and after divorce is examined. The content of the figure below was taken from Gardner and Oswald [4]:

Figure 5:
Mean mental stress



The figure can be used to explore the mean mental stress of the group of those persons who remain married, those who divorce and those whose spouse dies. In this context, the point in time zero is the time when the change in marital status – where applicable – occurs. The time of divorce is taken to be the point in time that the persons consider to be the time when their marriage ended. This can be the date when the marriage was divorced or the point in time when the mental stress is at its highest. It is evident that the average mental stress rises in the two years prior to divorce and subsequently drops appreciably. Yet the data also reveal that couples which separate are under greater stress than the average level for married couples. In other words couples who no longer get along actually benefit from the divorce after some time. Further statistical analyses have shown that this statement is equally true of men and women.

As anticipated, the death of one's spouse presents a considerable emotional burden. Yet two years after the death of the spouse the mental stress returns to the level of roughly two years before the partner's death, and it is actually slightly lower than the mental stress felt by a person two years after divorce.

The question as to whether multiple marriages bring mental benefits must be answered in the negative. Wilson and Oswald [24] cite a study by Barrett (2000) which had access to the complete history of the marital status and mental well-being of a group of adults from North Carolina. The authors confirm the considerable psychological benefits of marriage; they also established, however, that second and third marriages brought about only a minimal improvement in mental well-being.

3.2.2 Economic circumstances

According to the works cited in Ross et al. [15], married persons, especially married women, display an increased level of financial prosperity. In many studies it has been demonstrated that financial prosperity has a considerable influence on health, cf. e.g. Ross et al. [15], Kallan [8] (USA) as well as Attanasio and Emmerson [1] (Great Britain). A high income offers a lifestyle characterised by a high level of education, access to medical treatment, appropriate nutrition, good living conditions, permanent employment, regular exercise and low consumption of alcohol, nicotine and drugs. What is more, depressions, anxiety and other psychological complaints are reduced with a higher socioeconomic status. Rogers [14] demonstrated on the basis of studies carried out in the USA that a high income in married life further increases the protective effect of marriage.

3.2.3. Social contacts

Social contacts have a positive influence on mortality ([13]). Gardner and Oswald [5] point to studies in which persons with an extended social network have lower mortality, although an independent effect of the marriage remains. Furthermore, the positive effects of social networks appear to be felt most strongly among

older persons who have few other social relations. A study conducted by Rutledge et al. [16] was based on a sample of American women aged 65 and older. Both married women and women with extensive social contacts display a reduced mortality. If the two criteria are combined, the effect is even greater than with just one of the two studied criteria. Numerous studies show that married persons have a particularly large number of social contacts.

3.2.4 Cohabitation in a single household

In the past, it was often presumed that the presence of another person in the household could explain the greater well-being of married people. Investigations conducted by Hughes and Gove [7] on the basis of a sample in the USA, however, have revealed that unmarried persons living in a single-person household are not unhappier than those living together with other adults in a non-marriage-like form. Thus, difficult situations can arise if unmarried adults live together with their parents and under their supervision or if persons who have been widowed live together with their adult children.

Consequently, the presence of another person in the household cannot alone explain why marriage enhances well-being.

Yet according to Schoenborn [17] even cohabitation with a partner in a marriage-like union does not offer the same benefits as marriage. The correlation between state of health and marital status was examined on the basis of the National Health Interview Surveys (NHIS), a representative study of the US civilian population in the years 1999–2002. Marital status is subdivided into a number of groups – married, widowed, divorced or separated, never married and cohabitation with a partner. It emerged that adults who live together with a partner have health problems more often than married adults and – based on the investigated criteria – can be allocated more appropriately to the group of divorced and separated persons.

3.2.5 Further reasons

For Ross et al. [15], the question of why married people enjoy a high level of psychological

and physical well-being has not been entirely resolved. One possible explanation is that non-married persons have social contacts that do not produce such a high emotional protective effect and that they have fewer social contacts overall. Furthermore, it can be helpful that the persons who provide the greatest emotional support live in the same household and hence are constantly available.

Why do men apparently benefit more from marriage than women?

It is known that single, especially younger, men expose themselves to hazardous situations to a greater extent than women. The following examples may be mentioned:

- ◆ Driving at excessive speeds while also under the influence of alcohol.
A compendium of facts on alcohol and traffic in Germany [6] states, for example, that in 1998 26,281 men and only 2,784 women were involved in accidents causing bodily injuries where alcohol played a role.
- ◆ Extreme sports and gender.
The Swiss Office for the Prevention of Accidents [18] investigated sports-related deaths in 2003 on the basis of age category and gender. In all age categories there were significantly more male than female fatalities, e.g. in the 17 to 64 age range 107 men and only 25 women died as a result of sporting accidents.

In my assessment, a crucial factor would appear to be that men have a far greater potential to desist from risky behaviours. Their willingness to desist evidently grows when they enter into marriage if, on the one hand, additional responsibility is assumed for another person and, on the other, the moderating influence exerted by women towards leading a lower-risk life proves successful.

In Ross et al. [15] it is pointed out that the generally healthier lifestyle of women could be the reason why men's health habits are improved more than women's due to marriage.

In contrast to the positive factors described above, the aforementioned study of the US civilian population spanning the years 1999–2002 [17] establishes that married people, especially men, are more commonly overweight than unmarried people.

3.3 Social change/social climate

3.3.1 Germany

On the basis of Tables 2.12 from the Statistical Yearbook [Statistisches Jahrbuch] for 1996 [20] and 2004 [21], the population proportions broken down by age groups and marital status were compared for Germany (see Tables 13 to 15 of the Appendix). It can be seen that the proportion of non-married persons – especially in the mid-range age groups – has risen sharply. This suggests that Germans are getting married later in life and to a diminishing extent, as shown by the ratio in the "married" column.

The trend towards marrying ever later in life is also described in [2]: the average age at the time of the first marriage is approaching 30. In 2001 the average age of women in western Germany at the time of their first marriage was 28.4; the average age of men was 31.2. In the 1970s people got married for the first time around 5 years earlier in life.

On the basis of the data contained in the Statistical Yearbook 1996, it was assumed in [13] that the proportion of married people in the insurance-relevant age range stood at approximately 80%. According to the figures contained in the Statistical Yearbook 2004, this figure must be reduced to around 70%.

Given the decline in the proportion of married people, it could be anticipated that the proportion of divorced people has also fallen.

The influencing factors discussed here cannot of course be considered in isolation. Based on the overview of the literature provided by Brown and Di Meo [3], for example, it can be deduced that the factors socioeconomic status, gender, education and income are correlated with both marital status and mortality.

Yet this is only the case with respect to the lower age groups. This reduced proportion of divorced people in the lower age groups does not, however, derive solely from the reduced proportion of married people, but also – according to [2] – from the fact that the point in time when people divorce is moving consistently higher over time. Whereas in 1970 the highest frequency of divorce was still found in the second year of marriage, this had shifted to the sixth year of marriage by 2001.

Indeed, in the middle and upper age groups the proportion of divorced persons has actually increased markedly. With just a few exceptions for brief periods of decline, this trend towards a rising number of divorces in Germany has been sustained uninterrupted since it was first reported in the 1888 statistics. This state of affairs is borne out by the data in [2] and over the past three decades by Figure 6.

The proportion of widowed persons has fallen. This finding corresponds to the lower proportion of married persons, although it may also hint at more rapid remarriage among widowers. In the lower age categories the statistical significance is limited on account of the low number of deaths. In the higher age categories, however, it is evident that the proportion of widowed persons has declined more sharply than the proportions of married persons, something which can also be attributed to longevity trends.

3.3.2 United States

Table 16 of the Appendix shows the population breakdown by marital status for the United States (as at 2002), as determined from the numbers indicated in Table III in Kochanek et al. [9].

The analysis of the population breakdown by marital status in the USA over time draws on Tables 17 and 18 of the Appendix. Table 17 is based on the figures in [23]. While the proportion of non-married persons rose sharply between 1980 and 2002, it is still low compared to Germany.

Furthermore, the RMRs for the USA (2002) are higher than for Germany (2004), cf. Section 2.4 as well as Tables 1 and 7 of the Appendix. This reinforces the impression that the institution of marriage still has deeper roots today in the United States than in Germany. Nevertheless, in the USA the trend can be discerned towards no longer considering marriage an obligatory way of life.

Thus, the title story "Who needs a Husband?" in Time Magazine [22] points out that in the USA the proportion of married women fell sharply in the period from 1960 to 2000: from 83% married women in the 25 to 55 age range to 65%.

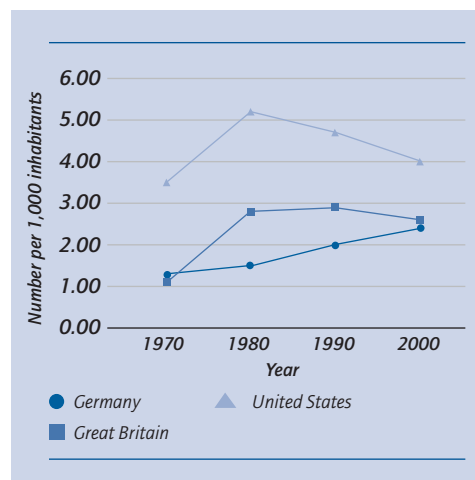
As a further factor, many couples first test the sustainability of their relationship. Wilson and Oswald [24] point out that the group comprised of couples cohabiting in a life partnership is growing sharply in Western society. In the USA more than half of couples live together before they marry. Compared to 1970, when half a million couples were cohabiting in the USA, the figure now stands at four million.

The proportion of divorced persons has fallen among younger people and risen among those who are older. The reasons may be similar to those cited for Germany, which is witnessing a similar trend.

3.3.3 Comparison of divorce frequencies

The figure below illustrates the development of divorce frequencies in Germany, Great Britain and the United States. It is based on the data in Table 1.11 of the "International Statistical Yearbook 2004" [21].

Figure 6:
Divorces



For Germany, the already described tendency towards an increase in divorces can be clearly discerned; in the United Kingdom the number of divorces has remained relatively stable over the past twenty years, while in the USA a modest decrease in the relatively high number of divorces in the past can be observed. Since the figure for the USA for the year 2000 is not available, the figure for 2001 was used instead. It may be concluded from the trend that the relative number of divorces in the three countries concerned is moving towards the same level.

4. Summary

Summing up, reference may be made to the international publications cited in Wilson and Oswald [24], which assert that married persons exhibit superior physical health, longevity, mental health and well-being. In the aforementioned respects married people display considerably higher values than those who have never been married, followed by those who are divorced, separated and widowed.

The French writer Lelord sends his hero Hector on a journey to find happiness ([10]). Through his experiences on the journey Hector learns a number of lessons, including the following.

"Lesson No. 8:
Happiness is being together with the ones you love."

"Lesson No. 9:
Happiness is a family that lacks for nothing."

Hence, inspired by Shakespeare, we can still say:

To marry or not to marry – that is the question.

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6. Appendix

Relative mortality ratios

The RMRs indicated below were established as a quotient of the mortalities of the non-married, divorced and widowed persons and the mortality of the married persons.

For Germany (entire country) the Federal Statistical Office was kind enough to provide us with previously unpublished tables for the years 1986 and 2004. Based on these tables mortality, according to age groups and marital status, and the RMRs were determined.

The table for England and Wales was compiled using the mortalities indicated in [12] (Table 10).

The values for the United States were determined with the aid of the mortalities pub-

lished in Table 25 in Kochanek et al. [9]. Since the figures for 2002 were only provided for age groups with 10-year intervals, whereas for 1980 figures for five-year intervals were available, only 10-year periods were considered for the relative change in the RMRs. To this end, for reasons of simplification, the arithmetic mean was in each case established from two 5-year periods instead of the weighted mean of the RMRs. This approach was also used in the preparation of Figure 3 and Tables 12, 17 and 18.

The age definition applied for the tables was the last birthday.

Table 1:
RMRs for Germany 2004

Age group	Non-married		Divorced		Widowed	
	male	female	male	female	male	female
20–24	1.01	1.03	3.03	1.87	9.91	–*
25–29	1.26	1.19	1.64	1.96	10.31	3.32
30–34	1.63	1.32	1.95	1.43	3.92	3.72
35–39	2.04	1.45	2.49	1.60	2.19	1.78
40–44	2.27	1.38	2.57	1.60	2.47	1.84
45–49	2.41	1.58	2.47	1.60	2.35	1.86
50–54	2.33	1.67	2.18	1.58	2.03	1.77
55–59	2.11	1.71	2.05	1.63	1.83	1.73
60–64	2.11	1.88	1.96	1.65	1.86	1.65
65–69	1.85	1.84	1.78	1.66	1.76	1.58
70–74	1.43	1.61	1.50	1.65	1.54	1.49
75–79	1.10	1.54	1.28	1.56	1.36	1.44
80 and older	0.66	1.71	0.81	1.99	1.25	1.99

* Insignificant number of widowed persons

Table 2:
RMRs for Germany 1986

Age group	Non-married		Divorced		Widowed	
	male	female	male	female	male	female
20–24	1.43	1.35	2.40	1.98	32.59	32.07
25–29	1.96	1.85	2.93	2.35	24.38	7.33
30–34	2.26	1.73	3.20	2.20	7.23	3.51
35–39	2.42	1.94	3.22	2.18	4.91	2.56
40–44	2.64	2.10	3.05	2.10	3.82	1.93
45–49	2.70	1.96	2.88	1.89	2.87	1.73
50–54	2.22	1.76	2.66	1.75	2.29	1.56
55–59	1.74	1.80	2.31	1.78	1.87	1.45
60–64	1.54	1.53	2.05	1.53	1.65	1.40
65–69	1.33	1.41	1.88	1.54	1.47	1.32
70–74	1.28	1.17	1.65	1.36	1.35	1.12
75–79	1.18	1.13	1.49	1.26	1.20	1.09
80 and older	0.93	1.27	1.65	1.68	1.23	1.23

Table 3:
Relative change of RMRs for Germany 1986 to 2004

Age group	Non-married		Divorced		Widowed	
	male in %	female in %	male in %	female in %	male in %	female in %
20–24	(29.7)	(23.5)	26.6	(5.3)	(69.6)	–*
25–29	(35.5)	(35.8)	(44.0)	(16.4)	(57.7)	(54.7)
30–34	(27.7)	(23.4)	(39.2)	(34.7)	(45.8)	6.0
35–39	(15.7)	(25.2)	(22.6)	(26.5)	(55.4)	(30.3)
40–44	(14.1)	(34.6)	(15.7)	(23.8)	(35.3)	(4.4)
45–49	(10.6)	(19.3)	(14.4)	(15.4)	(17.9)	7.9
50–54	5.1	(5.4)	(18.0)	(9.4)	(11.3)	13.6
55–59	20.8	(4.9)	(11.2)	(8.5)	(2.2)	18.7
60–64	37.3	23.1	(4.5)	8.3	12.5	17.8
65–69	38.9	30.4	(5.5)	7.7	19.4	19.8
70–74	12.1	38.2	(8.7)	21.2	14.5	33.8
75–79	(6.8)	37.1	(14.2)	23.5	13.5	31.9
80 and older	(28.8)	33.9	(50.7)	18.1	1.8	61.7

* Insignificant number of widowed persons

Table 4:
RMRs for England and Wales 2002

Age group	Non-married		Divorced		Widowed	
	male	female	male	female	male	female
25–29	2.00	1.33	3.43	1.52	–*	6.93
30–34	2.69	1.63	2.65	1.65	4.96	2.30
35–39	2.96	2.05	2.54	1.69	4.01	2.24
40–44	3.04	1.99	2.58	1.60	3.33	2.20
45–49	2.86	1.93	2.53	1.60	2.42	2.18
50–54	2.23	2.01	2.11	1.38	1.95	1.71
55–59	2.40	1.96	2.02	1.44	1.84	1.62
60–64	2.13	1.61	1.89	1.41	1.77	1.49
65–69	1.76	1.58	1.66	1.48	1.60	1.47
70–74	1.58	1.39	1.56	1.35	1.55	1.42
75–79	1.45	1.45	1.43	1.49	1.45	1.34
80–84	1.11	1.34	1.27	1.52	1.31	1.29

* Insignificant number of widowed persons

Table 5:
RMRs for England and Wales 1992

Age group	Non-married		Divorced		Widowed	
	male	female	male	female	male	female
25–29	2.00	1.95	1.65	1.71	–*	6.83
30–34	2.85	2.26	1.72	1.71	7.14	5.03
35–39	3.40	2.29	1.89	1.40	4.86	3.38
40–44	3.07	2.31	1.88	1.53	3.36	2.29
45–49	2.61	2.11	1.82	1.40	2.16	1.85
50–54	2.27	1.71	1.75	1.37	2.18	1.55
55–59	2.05	1.71	1.70	1.38	1.90	1.53
60–64	1.74	1.33	1.69	1.33	1.77	1.44
65–69	1.60	1.28	1.62	1.34	1.63	1.34

* Insignificant number of widowed persons

Table 6:
Relative change of RMRs for England and Wales 1992 to 2002

Age group	Non-married		Divorced		Widowed	
	male in %	female in %	male in %	female in %	male in %	female in %
25–29	0.0	(31.6)	107.6	(11.2)	–*	1.4
30–34	(5.5)	(28.1)	54.3	(3.5)	(30.5)	(54.3)
35–39	(13.0)	(10.3)	34.5	20.8	(17.4)	(33.8)
40–44	(0.9)	(13.9)	37.2	4.7	(0.8)	(3.7)
45–49	9.6	(8.7)	38.9	14.5	11.9	18.0
50–54	(1.9)	17.4	20.3	1.1	(10.6)	10.3
55–59	16.9	14.5	18.9	4.0	(3.4)	6.0
60–64	22.1	20.7	11.8	6.1	0.3	3.2
65–69	10.0	23.2	2.2	10.2	(1.9)	9.7

* Insignificant number of widowed persons

Table 7:
RMRs for the United States 2002

Age group	Non-married		Divorced		Widowed	
	male	female	male	female	male	female
25–34	2.49	2.43	3.26	2.78	–*	4.37
35–44	3.78	3.25	3.53	2.53	4.84	3.38
45–54	3.20	2.62	3.05	2.04	3.08	2.90
55–64	2.33	2.20	2.52	1.77	2.63	2.22
65–74	2.24	2.20	2.08	1.87	1.72	1.73
75 and older	1.65	2.85	1.60	2.17	1.91	2.32

* No figures indicated (degree of accuracy too low), cf. [9]

Table 8:
RMRs for the United States 1980

Age group	Non-married		Divorced		Widowed	
	male	female	male	female	male	female
25–29	2.24	2.39	3.72	2.58	9.11	6.06
30–34	2.77	2.95	3.91	2.28	8.89	4.70
35–39	3.44	2.93	3.27	2.17	6.92	3.16
40–44	2.70	2.59	2.80	2.11	4.35	2.41
45–49	2.70	2.05	2.92	1.92	2.77	2.22
50–54	2.64	1.79	2.85	1.74	2.32	1.84
55–59	2.08	1.83	2.47	1.70	1.96	1.59
60–64	1.76	1.17	2.15	1.67	1.80	1.58
65–69	1.61	1.48	1.95	1.73	1.88	1.38
70–75	1.61	1.49	1.77	1.74	1.61	1.36

Table 9:
Relative change of RMRs for the USA 1980 to 2002

Age group	Non-married		Divorced		Widowed	
	male in %	female in %	male in %	female in %	male in %	female in %
25–34	(0.7)	(9.1)	(14.5)	14.3	–*	(18.8)
35–44	23.2	17.9	16.3	18.3	(14.1)	21.2
45–54	18.6	29.8	4.4	6.6	12.0	33.5
55–64	21.6	46.9	9.2	5.0	40.2	39.9
65–74	39.3	48.1	11.6	8.0	(1.7)	26.1

* Insignificant number of widowed persons

Table 13:
Population breakdown in Germany 2002 by age groups and marital status

Age group	Non-married		Divorced		Widowed		Married	
	male in %	female in %	male in %	female in %	male in %	female in %	male in %	female in %
20–24	95.2	87.1	0.2	0.6	0.0	0.0	4.6	12.3
25–29	78.1	61.6	1.6	3.1	0.0	0.2	20.2	35.1
30–34	54.5	37.5	4.8	6.8	0.1	0.4	40.6	55.2
35–39	35.1	22.5	8.7	10.7	0.3	0.9	56.0	65.9
40–44	22.5	13.6	11.9	13.1	0.5	1.8	65.1	71.4
45–49	15.0	9.1	12.8	13.5	0.9	3.3	71.3	74.1
50–54	10.6	6.4	12.0	12.8	1.5	5.6	75.9	75.2
55–59	8.2	4.9	10.8	11.7	2.4	9.0	78.6	74.4
60–64	7.0	4.7	8.2	9.5	4.0	14.8	80.8	71.0
65–69	5.5	5.2	5.9	7.3	6.4	24.2	82.1	63.2

Table 14:
Population breakdown in Germany 1994 by age groups and marital status

Age group	Non-married		Divorced		Widowed		Married	
	male in %	female in %	male in %	female in %	male in %	female in %	male in %	female in %
20–24	93.1	80.7	0.2	0.6	0.0	0.1	6.7	18.6
25–29	67.7	46.7	1.9	3.4	0.1	0.2	30.4	49.7
30–34	37.0	21.8	5.2	6.9	0.2	0.6	57.6	70.7
35–39	21.0	12.3	7.9	9.2	0.3	1.2	70.8	77.2
40–44	13.9	8.1	9.2	10.9	0.6	2.2	76.4	78.9
45–49	10.0	5.7	9.7	11.4	0.9	3.7	79.4	79.2
50–54	8.4	4.9	9.0	10.4	1.6	6.4	81.1	78.3
55–59	6.9	5.2	7.1	8.2	2.7	11.1	83.4	75.6
60–64	5.1	6.1	5.1	6.4	4.5	19.3	85.2	68.2
65–69	3.7	7.8	3.7	5.7	7.6	30.1	85.0	56.4

Table 15:
Relative change of population breakdown in Germany 1994 to 2002

Age group	Non-married		Divorced		Widowed		Married	
	male in %	female in %	male in %	female in %	male in %	female in %	male in %	female in %
20–24	2.3	7.9	0.0	0.0	–*	–*	(31.3)	(33.9)
25–29	15.4	31.9	(15.8)	(8.8)	–*	0.0	(33.6)	(29.4)
30–34	47.3	72.0	(7.7)	(1.4)	(50.0)	(33.3)	(29.5)	(21.9)
35–39	67.1	82.9	10.1	16.3	0.0	(25.0)	(20.9)	(14.6)
40–44	61.9	67.9	29.3	20.2	(16.7)	(18.2)	(14.8)	(9.5)
45–49	50.0	59.6	32.0	18.4	0.0	(10.8)	(10.2)	(6.4)
50–54	26.2	30.6	33.3	23.1	(6.3)	(12.5)	(6.4)	(4.0)
55–59	18.8	(5.8)	52.1	42.7	(11.1)	(18.9)	(5.8)	(1.6)
60–64	37.3	(23.0)	60.8	48.4	(11.1)	(23.3)	(5.2)	4.1
65–69	48.6	(33.3)	59.5	28.1	(15.8)	(19.6)	(3.4)	12.1

* No reliable information on change available

Table 16:
Population breakdown in the United States 2002 by age groups and marital status

Age group	Non-married		Divorced		Widowed		Married	
	male in %	female in %	male in %	female in %	male in %	female in %	male in %	female in %
15–24	92.1	85.6	0.5	1.0	0.0	0.1	7.4	13.3
25–34	43.4	31.2	5.1	7.5	0.1	0.5	51.4	60.8
35–44	19.1	13.1	10.9	14.0	0.4	1.4	69.6	71.5
45–54	10.9	8.9	14.3	17.7	1.1	3.3	73.6	70.2
55–64	6.4	5.4	12.5	17.6	2.5	10.4	78.6	66.6
65–74	4.0	3.5	8.4	10.8	8.6	30.2	78.9	55.5

Table 17:
Population breakdown in the United States 1980 by age groups and marital status

Age group	Non-married		Divorced		Widowed		Married	
	male in %	female in %	male in %	female in %	male in %	female in %	male in %	female in %
15–24	82.5	71.0	0.9	2.1	0.0	0.1	16.6	26.8
25–34	26.1	16.8	6.4	9.5	0.1	0.8	67.5	72.9
35–44	7.9	5.7	8.1	10.8	0.4	2.4	83.6	81.1
45–54	6.4	4.7	6.9	9.1	1.8	7.8	85.0	78.3
55–64	5.9	4.7	5.2	6.7	4.3	20.0	84.6	68.7
65–74	5.1	5.6	4.0	4.1	9.4	40.8	81.4	49.5

Table 18:
Relative change of population breakdown in the United States 1980 to 2002

Age group	Non-married		Divorced		Widowed		Married	
	male in %	female in %	male in %	female in %	male in %	female in %	male in %	female in %
15–24	11.6	20.5	(46.8)	(51.0)	-*	(20.9)	(55.3)	(50.4)
25–34	66.5	85.2	(19.7)	(21.1)	17.3	(33.4)	(23.9)	(16.6)
35–44	143.1	128.8	33.8	29.8	5.3	(40.9)	(16.8)	(11.9)
45–54	70.0	86.6	108.4	93.6	(38.2)	(58.5)	(13.3)	(10.3)
55–64	8.6	15.3	139.3	163.9	(43.1)	(47.7)	(7.0)	(3.1)
65–74	(22.0)	(37.4)	108.4	162.1	(8.5)	(26.0)	(3.0)	12.2

* No reliable information on change available

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30625 Hannover, Germany

Cord-Roland Rinke, Editor
Telephone +49/5 11/56 04-0
Fax +49/5 11/56 04-11 88

www.hannover-re.com

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