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Resources, Living Arrangements and First Union Formation in the United States, the Netherlands and West Germany

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Abstract. This paper addresses the impact of the previous living arrangement (living in the parental home versus living away) on first union formation. We investigate differences between the living arrangements in the impact of individual and parental resources. Analyses are performed for three countries with different welfare regimes: the USA, the Netherlands and West Germany. Many of our findings are in line with the general hypothesis that resources matter less to union formation for those living away from the parents than for those still living in the parental home. Furthermore, the results suggest that resources matter less in Conservative Continental European welfare regimes than in the USA, a Liberal Market welfare regime.

Key words: marriage, parental home, union formation

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Résumé. Cet article s'intéresse à l'effet du mode de vie antérieur (encore au foyer des parents ou habitant un logement indépendant) sur la première mise en couple. Nous étudions précisément si l'influence des ressources individuelles et parentales sur l'entrée en union dépend du mode de logement antérieur. Les analyses sont effectuées sur 3 pays aux régimes sociaux différents : les États-Unis, les Pays-Bas et l'Allemagne de l'ouest. La plupart de nos résultats confirment l'hypothèse que l'influence des ressources sur la mise en couple est moindre quand le logement est indépendant, comparée à la situation où le jeune adulte vit encore chez ses

parents. De plus, il semble que ces ressources jouent un plus petit rôle dans les pays européens aux régimes sociaux conservateurs que dans le régime libéral américain.

Mots clés: Formation du couple, foyer parental, mariage

1. Introduction

There is a strong research tradition that aims to explain the impact of parental and individual resources on the timing of first marriage (see, for example, Oppenheimer, 1988; Axinn and Thornton, 1992; Oppenheimer et al., 1997). This is understandable because first marriage traditionally was the marker of many aspects of the transition from youth to adulthood: it marked the onset of family formation, but also the formation of a young person's first household independent from the parents. Living arrangements of young people, however, are changing in North-western Europe and North America. Cohabitation is increasing, though it is not nearly as frequent in the United States as in North-western Europe. Furthermore, the increase in young people living alone outside the family home has changed the nature of union formation. While some form their first union from the family home, now many do so from an already existing independent unit. Thus, there are not only two types of unions with different levels of commitment (marriage and cohabitation), but also two major routes into the first coresidential union: directly from the parental home, and from a situation of living singly (either in independent housing, or with roommates).[1] So, to fully understand the impact of resources on young people's trajectories from the parental household into their own families, it is necessary to not just study the timing of first marriage but to acknowledge the role of living singly and cohabitation in these trajectories.

One way in which new living arrangements may play a role in the timing of first marriage and first union formation is that, all else equal, there might be a difference in timing between those living with their parents and those living alone. Inclusion of the previous living arrangement in analyses of union formation is particularly important because of the rapid growth in the proportions of young people spending time outside the parental home before union formation. If this growth continues and the difference in union formation between those living at home and those living independently appears to be substantial, we may expect further change in union formation behavior in the near future. The few studies in which this influence of the previous living arrangement on first union formation has been addressed have produced mixed findings (see Section 2).

There are also reasons to think the impact of parental resources on first marriage and first union formation will differ between those living at home and those living away. Differences in the impact of the young adult's own resources on union formation between those living with their parents and

those living away may also be expected. This issue of differences in the impact of resources between those living with their parents and those living independently was not taken up in previous work (for example, Mitchell et al., 1989; Avery et al., 1992; Axinn and Thornton, 1992; Whittington and Peters, 1996). In this paper, therefore, our first research question is: To what extent does the previous living arrangement influence the timing of marriage and first union formation, and to what extent does the impact of parental and individual resources on first marriage and first union formation differ between those living at home and those living independently?

It is likely too, that the influence of parental and individual resources differs between countries. Particularly state support systems and housing markets may play an important role in the opportunities young people have for forming independent unions. Esping-Andersen's (1999) classification of welfare regimes has proven useful in understanding differences between countries in the process of household formation by young adults (Aassve et al., 2002; Mulder et al., 2002). Our second research question, therefore, is: To what extent does the impact of parental and individual resources on first marriage and first union formation differ between countries with different welfare regimes?

We study the likelihood of first marriage and first union formation among women in three countries: the United States, the Netherlands and West Germany (we leave out the Eastern part of Germany, because we extend our analyses to the period before 1989 when the political situation in East Germany was completely different from that in the West). The Netherlands and West Germany both have Conservative Continental European welfare regimes, and they have different housing markets with varying degrees of state support for new households. The United States has a Liberal Market welfare regime with only limited state support, and, outside of New York, almost no housing support.

We use data from the Panel Study of Income Dynamics (PSID) for the United States, from two retrospective surveys for the Netherlands and from the German Life History Study (GLHS). We focus on first marriage and first union formation coinciding with residential independence. The analyses are done using logistic regression models of person-years.

2. Theoretical and Contextual Background

Before developing the theoretical background for this paper, it is important to address the issue of the difference between married and cohabiting unions. As argued by Manting (1994, 1996) the meaning of cohabitation versus marriage is changing and differs between countries. At a given moment, the share of cohabiting couples among all households may not seem very high: around 10% in the Netherlands in 2000 compared with 4.5% in the United States and 5.5 in West Germany.[2] This low percentage has much to do with

the fact that cohabitations are frequently short-lived, either because they are dissolved or because they are converted into marriage. In the Netherlands, cohabitation is now by far the most common way of starting a coresidential relationship (see Table 1); marriage is more frequently a change in legal status of an existing union than a true transition. In the United States, direct marriage is less rare (Table 1); cohabitation is not as widespread as in the Netherlands, although it is becoming increasingly common. In West Germany, the prevalence of unmarried-couple households is more similar to the United States than the Netherlands, but cohabitation is even more common as first-union type than in the Netherlands (see Table 1). Apparently, cohabitation is often short-lived in West Germany.

In this situation, with different meanings of cohabitation and marriage in different countries and different periods, it is arguably still important to investigate cohabitation and marriage separately. At the same time, in an international comparison between countries for which the distinction between marriage and cohabitation has different meanings, it is also instructive to study the formation of actual coresidential unions regardless of their legal status. It should be noted that a separate analysis of cohabitation was impossible because of the small number of cohabiting unions in the data sets. We therefore chose to perform analyses for the formation of first marital unions and for the formation of all first unions regardless of whether they take the form of marriage or unmarried cohabitation.

2.1. THE PREVIOUS LIVING ARRANGEMENT AND FIRST UNION FORMATION

Upon first union formation, whether married or not, young people experience changes in their lives. The formation of a coresidential union provides

Table 1. First union type of women before age 25 by birth cohort, USA,[a] The Netherlands[b] and West Germany[c] (row percentages by country)

	No union by age 25			Marriage			Cohabitation		
	USA	NL	WG	USA	NL	WG	USA	NL	WG
1950–54	23	15	–	59	66	–	18	19	–
1955–59[d]	26	20	18	46	50	38	29	30	44
1960–64[e]	29	25	23	37	25	23	34	50	53
1965–69	32	23	–	31	21	–	38	56	–

[a]Source: Raley (2000; based on National Survey of family Growth, 1995).
[b]Source: SSCW and NFS (see Data section).
[c]Source: German Life History Study (see Data section).
[d]West Germany: 1954–1956.
[e]West Germany: 1959–1961.

the young couple with the opportunity to spend more time together; to confirm the commitment to each other; to start a joint 'project', which might include family formation; and to pool individual resources. At the same time, the points of departure of those still living with their parents and those living independently differ. For those living with their parents it is also a move away from the 'feathered nest' of the parental home (compare Goldscheider and Goldscheider, 1999). The direct access to parental care and the sharing of the parents' resources as household members is exchanged for new financial and housekeeping responsibilities. For those living already independently, the relationship to the parents is a much less relevant aspect of union formation. For these young people, companionship and pooled resources are traded against individual independence.

The difference in point of departure for union formation between those living at home and those living independently is likely to lead to a difference in the timing of union formation between these two living arrangements. From the literature, three theoretical arguments on differences in union formation between those living with their parents and those living away from their parents can be derived.

The first argument stresses the difference in family-oriented attitudes between those living at home and those living away from the parents. This difference is supposedly caused by experience with non-family living, which provides those living away with independence and autonomy (compare Waite et al., 1986; Goldscheider and Waite, 1987, 1991; Manting, 1994; Berrington and Diamond, 2000). The reluctance to give up independence and autonomy might lead to the postponement of the formation of a coresidential union, particularly a married union. In contrast, those living at home are supposedly more family-oriented, leading to a greater propensity to marry or form a union. Based on this argument, a smaller likelihood of union formation, and particularly marriage, among those living independently can be expected.

The second argument is based on the opportunities young people have for union formation. Those living independently can be expected to have better opportunities for union formation because they already have a place to live. Those whose accommodation is suitable for two are able to invite their partner to move in. This reduces the cost and effort associated with household formation (Liefbroer et al., 1994). This argument leads to a competing hypothesis, compared with the first: that those living away have a greater likelihood of union formation than those living with their parents.

The third argument has to do with attractiveness on the marriage or partner market. Those living away have shown their ability to run an independent household. This is an important skill for those wanting to form a union. According to Goldscheider and Waite (1991), this skill enhances the attractiveness of young adults, albeit more so of males than of females.

The hypothesis that can be derived from this argument is the same as that derived from the second argument: Those living away are expected to have a greater likelihood of union formation.

The findings about the influence of the previous living arrangement on union formation from the existing studies are mixed: some find a delaying impact of residential independence, others an accelerating impact. This is probably partly due to differences in the events or the population under study. For the United States, Goldscheider and Waite (1987) found a delaying impact of non-family living (including both living away from the parents without a partner and unmarried cohabitation) on marriage, which was significant for females. For the Netherlands, Manting (1994) found that females living independently had a *higher* rate of union formation than those living with their parents. In contrast, Liefbroer et al. (1994) found a *lower* rate of union formation for those living independently than for those living with their parents (note that their study only included young people who had a steady dating relationship with someone from the opposite sex). Liefbroer (1991) found no significant effect on union formation, but a positive effect on unmarried cohabitation and a negative effect on marriage. For Britain, Berrington and Diamond (2000) found a strong positive effect on cohabitation for both men and women, a smaller negative effect on marriage for women, and hardly any effect on marriage for men.

2.2. INDIVIDUAL RESOURCES AND FIRST UNION FORMATION

According to Becker's (1991) classical argument, individual income potential should favor men's marriage and family formation, but discourage women's because of high opportunity cost. But, as argued by Oppenheimer et al. (1997), with a decreasing sex-specific division of labor within the family, career and income stability enhance the likelihood of marriage not only for men, but also for women. According to Rindfuss and VandenHeuvel (1990), there is a normative prescription that people should only marry when they can afford to (the so-called 'affordability clause'), which is less strict for cohabitation. It is therefore expected that individual resources matter more to the formation of married unions than to union formation regardless of the legal status.

Enrolment in education slows the tendency to marry and form families. This is not only because those in school have low incomes, but also because of normative expectations that those in school are not ready for marriage and parenthood (Oppenheimer, 1988; Blossfeld and Huinink, 1991; Blossfeld and Jaenichen, 1992). For the United States (Thornton et al., 1995) and for Sweden (Hoem, 1986) a negative impact of enrolment was found not only on marriage, but also on cohabitation. It is therefore expected that the

likelihood of union formation increases with the young woman's income and employment, and is small during educational enrolment.

For level of education (as opposed to enrolment), it is less obvious what to expect. On the one hand, level of education indicates income potential and would thus lead to earlier union formation (compare Oppenheimer, 1988). On the other hand, high education has been argued to indicate a degree of non-traditionality (Liefbroer, 1991; Manting, 1994), which would lead to later union formation (and particularly later marriage). For the Netherlands and Flanders, Liefbroer and Corijn (1999) found a small delaying impact of educational attainment on union formation. For West Germany, Blossfeld and Jaenichen (1992) found no significant effect of level of education on entry into marriage. For the United States, Thornton et al. (1995) found a positive impact on marriage for both men and women, but a negative impact on entry into cohabitation.

For those living away from the parents, owning a home might lead to a greater likelihood of first union formation. This is because owner-occupied homes are usually larger and have a higher quality than rented homes (Mulder and Wagner, 1998). Home-ownership is also a sign of wealth and financial stability. In a study of men's transition to marriage, Lloyd and South (1996) indeed found a positive impact of home-ownership on this transition.

From the literature we cannot derive hypotheses on the difference between those living with their parents and those living away in the role of individual resources. One argument leads us to hypothesize a greater impact of individual resources on first union formation for those who live with their parents. For them, union formation just requires the use of resources: From a situation in which the parents take care for them, they have to set-up a new independent household. For those who already live independently, union formation also leads to an opportunity to pool resources with the new coresidential partner.

2.3. PARENTAL RESOURCES AND FIRST UNION FORMATION

Parental resources are of major importance to young people's union formation. From the studies addressing the influence of parental resources, research for the United States emphasizes that when these resources are more amply available it can lead to a delay in union formation, although less so with rising age of the young adults (Mitchell et al., 1989; Avery et al., 1992; Axinn and Thornton, 1992; Whittington and Peters, 1996; South, 2001). Likewise, it was found for the Netherlands that a high socio-economic status of the father was associated with a lower likelihood of leaving home to live with a partner (De Jong Gierveld et al., 1991). Among the mechanisms causing this pattern, one is explicitly related to the situation in the parental

home: The parental homes of resourceful parents might be more attractive, causing reluctance to leave among the young adults (Axinn and Thornton, 1992; Goldscheider and Goldscheider, 1999). Furthermore, those with affluent parents might have higher consumption aspirations and might therefore delay union formation (Easterlin, 1980; Axinn and Thornton, 1992). Wealthier and more highly educated parents might also attach importance to later marriage and thus try to prevent their children from an early marriage or union, and they have better opportunities to do so. Conversely, once their children grow older, wealthy parents might use their resources to speed up their children's marriage (Waite and Spitze, 1981; Avery et al., 1992; Axinn and Thornton, 1992).

As long as young adults live with their parents, they are probably more dependent on parental resources, and have easier access to these resources. This is certainly true of non-transferable resources – those resources that are bound to the parental home, for example, care, companionship and home chores (De Jong Gierveld et al., 1991). Transferable parental resources, such as economic, cultural and social capital, can in principle also be used to help the children after they have left home. But in Western societies, one might expect that the own household income is the primary source of resources, whereas parental resources are only secondary. Furthermore, as long as their children live at home, parents probably exercise more control over them than once they have left. It seems reasonable, therefore, to expect that the importance of parental resources is greater for those living in the parental home than for those living away.

2.4. THE CONTEXT OF FIRST UNION FORMATION: DIFFERENCES BETWEEN THE UNITED STATES, THE NETHERLANDS AND WEST GERMANY

In Esping-Andersen's (1999) classification of welfare regimes, the United States is a Liberal Market welfare regime. The Netherlands and West Germany are Conservative Continental European welfare regimes, although the Netherlands is closer to a Social-Democratic regime than West Germany. In accordance with the welfare regimes, the state support systems are variable across the three countries. While the Netherlands and Germany have some similarities in their support systems, there are strong contrasts with the very low levels of state support in the United States.

It has been argued that resources should matter less to independent household formation in Social-Democratic and Continental European welfare regimes than in Liberal Market regimes (Aassve et al., 2002; Mulder et al., 2002). A major reason for this hypothesis is that state-provided safety nets make individual experiences of job instability less of a problem in Social-Democratic and Continental European than in Liberal Market welfare regimes (Aassve et al., 2002).

Besides state support, it is also important to take account of housing markets and housing support. In the United States, there are almost no housing subsidies apart from the tax advantages of home-ownership. The provision of housing is left to the market. The Netherlands and West Germany have more generous housing subsidy systems, but, in the period under study, government expenditure on housing subsidies was considerably higher in the Netherlands. Accordingly, access to housing suitable for young couples was probably easiest in the Netherlands and most difficult in the United States. One would therefore expect to find the strongest influence of individual resources on first marriage and first union formation in the United States, and the weakest in the Netherlands.

It is not immediately obvious which differences between welfare regimes in the influence of parental resources one should expect. As argued by Attias-Donfut and Wolff (2000), the relationship between state support and parental support is not straightforward: It is not true that private transfers from parents to children compensate for a lack of state support, or that an increase in state support leads to a decline in parent–child transfers. Rather, the evidence seems to suggest that family aid is largely independent of public allowances, or even, that parents are slightly more likely to give financial help to children who receive state allowances than to those who do not. Even so, one would expect that, in countries where the necessity to resort to parental rather than state resources is greater, it matters more which resources the parents have to offer than in countries where this necessity is not so great. In a situation where state support and housing support are less generous, therefore, we expect a greater influence of parental resources. So, the hypothesis for the influence of parental resources is similar to that for individual resources.

2.5. OTHER FACTORS INFLUENCING FIRST UNION FORMATION

Those living away from home are likely to be older than those living with their parents. To rule out this age difference, it is important to control for age in the analyses.

Within countries, the local availability and cost of housing differs. The degree of urbanization forms an important indicator of the availability and cost of housing. Particularly in the United States, housing is much more costly in urban areas. Furthermore, degree of urbanization might also indicate differences in traditionality. In more urbanized areas, people tend to marry later and choose to cohabit more often (Manting, 1994). We therefore expect a decreasing likelihood of first union formation, and particularly marriage, with increasing degree of urbanization.

In the United States, it is important to distinguish between the larger regions. The South, for example, is known as somewhat more traditional

than the rest of the country and marrying directly from the parental home is somewhat more common there (Mulder and Clark, 2000).

It is also important to take account of temporal changes. Through time, the opportunity structure changes. Changes through time also include increases in real incomes and changing attitudes towards the timing of union formation.

3. Data, Methods and Variables

3.1. DATA

Data come from the PSID for the United States, from two retrospective surveys for the Netherlands and from the GLHS. In all data sets, the timing of first union formation is measured as the first year in which the respondent reported living with a partner (either married or unmarried) in a household independent from that of the parents. In the analysis of the formation of married unions, only those union formation events have been selected for which it was known that the respondent was married at the time of union formation or got married in the same year as the union formation event. For simplicity, we will sometimes use the term 'marriage' or 'getting married' as a synonym for 'the formation of a married union'. The analyses were restricted to women.

In choosing the data sets, we had to decide between maximum comparability and maximum data quality for each separate country. A choice for maximum comparability would have led us to use the PSID for the United States and the Socio-Economic Panels for the Netherlands and West Germany. However, the Socio-Economic panels have by far not run as long as the PSID and the opportunities for studying leaving the parental home are limited for the time being. Instead, we use data for the Netherlands and West Germany that are not completely comparable to the PSID, but have good quality. We followed a similar strategy for the operationalizations. Rather than trying to find measurements that are as comparable as possible, we chose operationalizations that fitted the individual data sets best.

The PSID is a panel data set of US families. The panel started in 1968. We use the 1975–93 waves, because information about educational enrolment, the completion of education, and the young adults' level of education is not reliable in the earlier waves. For the analyses of first union formation from the parental home, we selected the person-years of young women aged 18–35 who either live in the parental home or are in their year of leaving home to start living with a partner. For the analysis of first union formation independent of whether the respondents had left the parental home, we take the same respondents as in the analysis of leaving home and add the person-years when they have left home, but have not formed a marital or cohabiting union

(or have formed one in the year preceding the interview). For the analysis of first union formation from outside the parental home, we subtract from this set all those person-years included in the analysis of union formation from the parental home. As a result, we have one full set of person-years for analysis, and two subsets for different starting points with regard to living arrangement (inside versus outside the parental home). The information on year of marriage was derived from the Marriage History File, a PSID supplemental file (Hofferth et al., 2002).

For the Netherlands and West Germany, we use data from retrospective surveys. From the female respondents in these surveys, we use the information from age 18 up to union formation (or up to age 35, if they do not experience this event).

The data for the Netherlands were taken from two retrospective life history studies: the SSCW survey (ESR/STP, 1992) and the Netherlands Family Survey 1993 (NFS; Ultee and Ganzeboom, 1993). Both samples are representative of the Netherlands population aged 18 and over (SSCW) or 21–64 (NFS) in the beginning of the 1990s. The data from these two samples were pooled. The SSCW survey was conducted in 1993 among a sample of some 3000 members in about 1600 households. The Netherlands Family Survey was conducted in the period 1992–1993 among a sample of 1000 primary respondents (information was also gathered from the respondents' current partners; this information was not used for this paper). From these two data sets, those respondents were selected who were women born between 1930 and 1969.

The German data were derived from the West German samples in the GLHS. The GLHS consists of three studies, each representative of West Germans born in one or more 3-year periods. Two of these are used for this paper. The first study was conducted in 1981–83 among 2171 respondents born 1929–31, 1939–41 and 1949–51 (Mayer and Brückner, 1989). The second study was conducted in 1989 and comprised some 2000 members of birth cohorts 1954–56 and 1959–61 (Brückner and Mayer, 1995). The five cohort groups will be referred to as the 1930, 1940, 1950, 1955 and 1960 cohorts.

3.2. METHODS

A first description of the process of first union formation in the three countries uses hazard rates. These rates are calculated as the number of union formation events at a given age, divided by the average of the number of respondents at risk of forming a first union at the beginning of the year of observation and the number at risk at the end of that year. The difference between these two populations at risk consists of those forming a union in the given year and those lost for observation in that year (either upon the year of interview or, in the US data, upon dropping out of the panel); in the analysis

of those living in the parental home, it also consists of those leaving home to live without a partner in that year.

To test our hypotheses, we use logistic regression of person-years as a method of discrete-time event history analysis (Yamaguchi, 1991). The dependent variable is the log-odds of the occurrence of a first union formation event. In the model of union formation from the parental home, leaving home to live without a partner is treated as a censoring mechanism. In the models of the formation of married unions, the formation of a cohabiting union is a censoring mechanism. Because the data sets are not comparable enough to allow for pooling into one set, we had to analyze the three data sets separately.

The PSID data are household data. Within one parental family, the data of all eligible young adults are used. In the majority of families (70%), data of more than one respondent are used. Because the observations for respondents within families are not independent from each other, the standard assumptions for the calculation of standard errors are violated. The standard errors for the models based on PSID data were therefore corrected for the clustering of young adults within families (Huber-corrected standard errors; see Huber, 1967). Such a procedure was not necessary for the Dutch and German data. The German GLHS data are individual data; not more than one person per household was interviewed. The Netherlands SSCW data contain information about both adult household members, but because we ran analyses for women only this does not influence the standard errors.

For each of the three countries, and for all first unions and first married unions, separate models are presented for first union formation in a given year for all women, for women who live in the parental home, and for women who have left the parental home. In order to assess whether differences in the impact of resources between those living at home and those living away were significant, additional models were estimated for all women. These models included not only the effects shown below, but also all interactions between resource indicators and a dummy variable indicating whether the respondent had left home. The parameters of these additional models are not shown, but the significance of the contribution of the interaction terms to the models, derived from a Wald Chisquare test, is shown in separate tables.

3.3. INDEPENDENT VARIABLES

The previous living arrangement was measured in three categories: living with parents, homeowner, and living away from the parents without owning a home (as an independent renter or in semi-independent accommodation). Level of education was measured in four categories for all three countries. In each country, the lowest level indicates completion of primary education and the highest level indicates completion of university, college or higher

vocational education. The two middle categories are somewhat less comparable because of the differences in the educational systems. 'Employment status' indicates whether the respondents are in paid work, in full-time education, or otherwise not working. People who exit from the labor market in the year of first union formation are given the status 'working' for that year, because some women might retreat from the labor market because of their marriage. Annual income was measured in 10,000s of US dollars for the United States. For the Netherlands and West Germany we do not have direct income measures, but we have socio-economic status of the respondent's job measured according to the International Socio-Economic Index (Ganzeboom et al., 1992). This index runs from 10 to 90 and was divided by 10 to obtain better readable parameters. People with unknown socio-economic status were assigned the average status; a separate dummy indicates whether missing substitution has taken place. The respondent's age was measured in seven small categories to acknowledge the different age profiles of union formation that may exist in the three countries.

The measurement of the father's education is similar to the respondent's, but for the Netherlands and West Germany we had to collapse some categories and add a category 'unknown' to account for the large number of missing values. Parental income and the father's socio-economic status are measured in the same way as those of the respondent. An interaction term for parental income (United States) or socio-economic status (the Netherlands and West Germany) by age (measured as a continuous variable) is added to test the hypothesis of a diminishing effect of parental resources by the young adult's age. For the United States, we have a measure for parental home-ownership and the value of the parents' home. For West Germany, we have parental home-ownership. For the Netherlands, parental home-ownership could not be included because it was not measured in the SSCW data.

Different measures were used for degree of urbanization. In the PSID, 'city size' stands for the number of inhabitants of the largest city or village in the respondent's county of residence. In the GLHS, respondents were asked to classify their place of residence as a house outside a village, a village, small town (up to 30,000 inhabitants), mid-size town (30,000–100,000 inhabitants) or large city (100,000 or more inhabitants). In the Dutch data the municipalities where the respondents lived were coded according to degree of urbanization (measured as address density).

The temporal context is expressed in a period variable in the US data, and in cohort variables in the German and Dutch data. In the PSID, a period approach is most compatible with the annual observations of the panel of respondents. In the retrospective Dutch and German data, a cohort approach is a somewhat more obvious choice. More importantly, in the GLHS cohorts

are spaced 10 years apart, which makes a period approach less feasible because in each period different age groups are observed.

Descriptive measures of the independent and dependent variables are in Table 2.

4. Results

4.1. BIVARIATE RESULTS

The three countries have similar age profiles of first union formation, with the highest rates for the women in their early to mid twenties (Figure 1). The formation of married unions peaks somewhat stronger and at somewhat younger ages (Figure 2). The rates are highest in the Netherlands and lowest in the United States. As Figures 3–6 show, this difference between the countries is most pronounced for union formation from the parental home. The results suggest that, at ages 22 and below, the rate of union formation for those living away from the parents is higher for the United States than for the Netherlands and West Germany. It should be noted, however, that the number of respondents already living away from the parents and forming unions at these young ages is small, so the estimates of the hazard rates are not very reliable.

From a comparison of Figures 3 and 5, the impression is that those living away from the parental home are more likely to form first unions than those living in the parental home in all three countries. This finding lends preliminary support to the hypothesis derived from the idea that those living away have better opportunities to form first unions or are more attractive on the partner market. For first marriage, a similar result is found for the United States but not for the Netherlands and West Germany (see Figures 4 and 6).

4.2. MULTIVARIATE RESULTS: UNITED STATES

For the United States, a marked difference in the effect of level of education on first union formation is found between those who live in the parental home and those who have left home, and also between first married unions and all first unions (Table 3). For those at home, higher levels of education are associated with a greater likelihood of first union formation. For those young people, higher education apparently mainly stands for a higher income potential. For those away from home, the impact of higher levels of education is much smaller and insignificant. Furthermore, the positive impact of higher education is much stronger for married than for all unions – at least, for those who have left the parental home.

In contrast to the *level* of education that has been completed, *enrolment* in education is associated with few resources and with normative expectations

Table 2. Frequencies and means of independent and dependent variables

	USA		Netherlands		West Germany	
	% (mean)	Std dev	% (mean)	Std dev	% (mean)	Std dev
Education						
Less than high school[a]/Primary[b,c]	19.9		15.8		58.7	
High school[a]/lower secondary/lower vocational[b,c]	42.2		41.2		20.2	
Some college[a]/higher secondary/middle vocational[b,c]	22.8		21.6		6.1	
College degree[a]/higher vocational/university[b,c]	15.1		21.4		15.1	
Daily activity						
Working	43.0		56.9		68.5	
In education	43.0		30.0		6.1	
Other not working	22.5		13.1		25.4	
Income ($10,000s)[a]/ISEI[b,c]	0.83	1.12	4.67	1.47	4.54	1.49
Age group						
18–19	28.0		29.2		29.4	
20–21	21.2		25.2		23.5	
22–23	15.1		18.0		16.5	
24–25	10.7		10.7		11.1	
26–27	8.0		6.1		7.6	
28–30	8.6		5.7		6.9	
31–35	8.4		5.2		5.1	
Housing situation						
Renter	33.7		30.0		36.0	
Owner	2.8		2.0		2.8	
With parents	63.5		68.0		61.3	
Father's education						
Less than high school[a]/lower[b,c]	50.8		33.7		70.1	
High school[a]/middle or higher[b]/Middle[c]	27.2		19.6		9.2	
Some college[b]/higher[c]	10.4				12.6	
College degree/unknown[b,c]	11.6		46.7		8.1	
City size						
Under 10,000[a]/urbanization: countryside[b,c]	11.9		17.7		31.8	
10,000–24,999[a]/weakly urbanized[b,c]	8.5		30.0		19.5	
25,000–49,999[a]/urbanized[b,c]	7.5		23.3		17.3	
50,000–99,999[a]/strongly urbanized[b,c]	11.3		29.0		31.4	

Table 2. Continued

	USA		Netherlands		West Germany	
	% (mean)	Std dev	% (mean)	Std dev	% (mean)	Std dev
100,000–499,999[a]	23.5					
≥500,000[a]	37.2					
US Region						
Midwest	23.9					
Northeast	17.9					
South	45.8					
West	12.4					
Parents' income ($10,000s)[a]/Father's ISEI[b,c]	4.61	4.66	4.47	1.55	14.52	16.23
Father's ISEI missing: 4			16.2		28.6	
Parents' housing tenure						
Rent	35.2				47.1	
Owner, house value lower 33%[a]/Own[c]	28.7				52.9	
Owner, house value middle 33%[a]	18.2					
Owner, house value upper 33%[a]	17.9					
Birth cohort[d]						
1930–39[b]/1930[c]			17.8		18.7	
1940–49[b]/1940[c]			24.5		18.1	
1950–59[b]/1950[c]			34.6		17.9	
1955[b]					23.1	
1960–69[b]/1960[c]			23.1		22.1	
Period						
1979–84	30.5					
1985–89	27.8					
1990–93	19.5					
Formed union						
Not (yet)	93.1		88.2		88.0	
Yes	6.9		11.8		12.0	
Among which marriage (% of all unions)	84.3		70.0		73.2	
Among which type of union unknown (% of all unions)	3.1		0.1		0.0	
N person years	18,747		8829		12,955	
N respondents	2982		1292		1903	

Percentages/means measured over person years; [a]US, [b]The Netherlands, [c]West Germany, [d]Percentages measured over respondents.

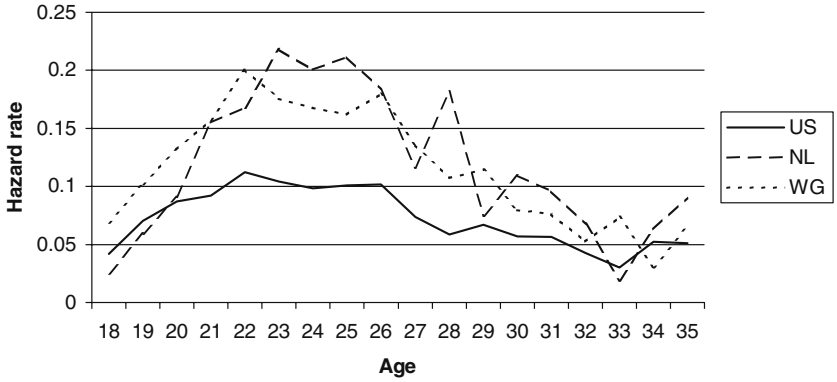

Figure 1. Hazard rate of first union formation by age, United States, the Netherlands and West Germany, all females.

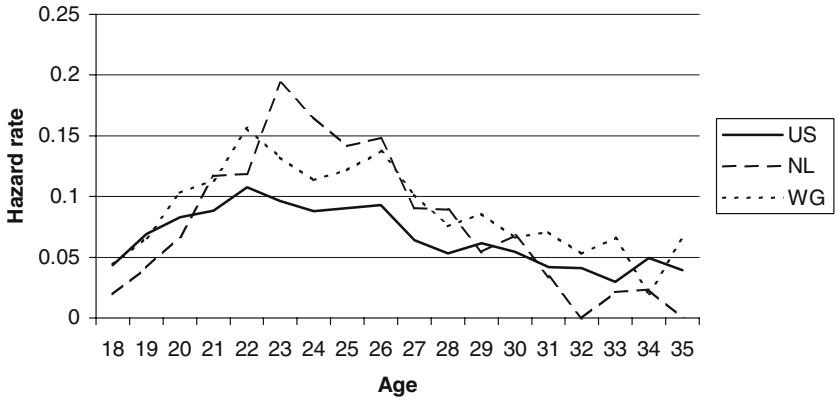

Figure 2. Hazard rate of first married union formation by age, United States, the Netherlands and West Germany, all females.

preventing young people from marrying and forming families. It has a strong negative effect on first marriage and first union formation for those at home, and a much smaller impact for those away from home. Non-employment has a negative effect on first marriage and first union formation among those away from home and on first marriage from the parental home. Surprisingly, it has a positive effect on all first union formation for those still at home. Possibly, this effect is due to a category of women who are not oriented towards the labor market but hope to find a partner to look after them.

For those away from home, individual income has the expected positive effect on first marriage and first union formation. This is not true for those living at home. For those at home it mainly seems to count whether one has an income of one's own exceeding a certain minimum level, rather than what this income amounts to exactly (Mulder and Clark, 2000). It is possible that

Figure 3. Hazard rate of first union formation by age, United States, the Netherlands and West Germany, females living in the parental home.

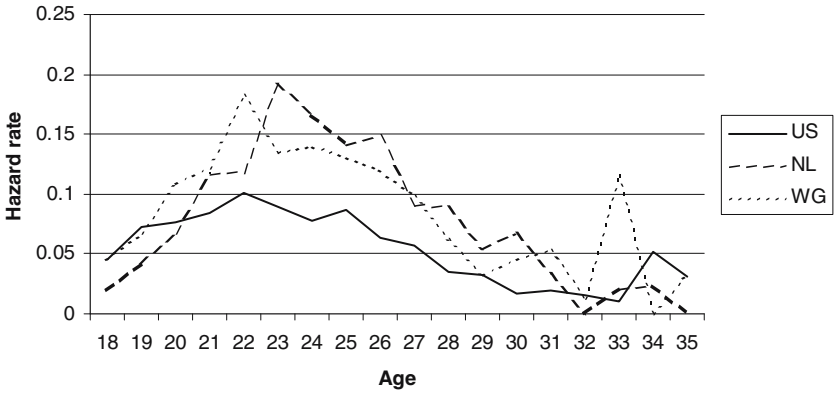

Figure 4. Hazard rate of first married union formation by age, United States, the Netherlands and West Germany, females living in the parental home.

some young women are reluctant to leave home as long as their income is needed in the parental household. In conclusion, our hypothesis of a weaker effect of individual resources among those away from home is supported with regard to level of education and enrolment in education, but not for employment and individual income.

As expected, a positive effect of individual home-ownership is found, but it is significant only for the formation of married unions. No difference between those living at home and those living with their parents is found in the model of all first union formation, but those living with parents do have a significantly higher likelihood of forming a first married union. So, for the United States, the hypothesis based on experience with non-family living is supported whereas the hypothesis based on opportunities for union formation and attractiveness on the marriage market is not.

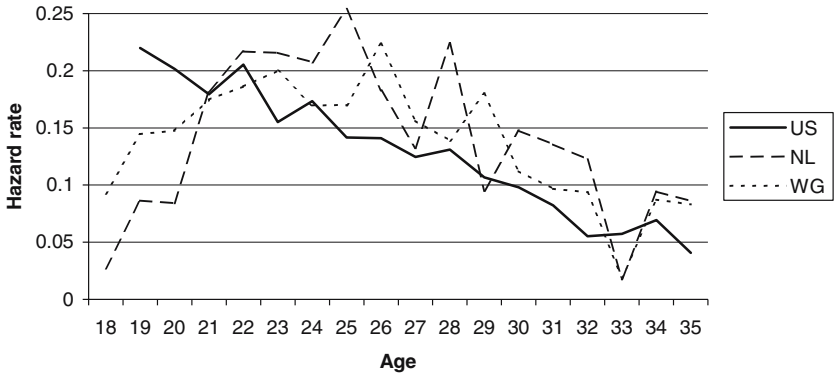

Figure 5. Hazard rate of first union formation by age, United States, the Netherlands and West Germany, females living away from the parental home.

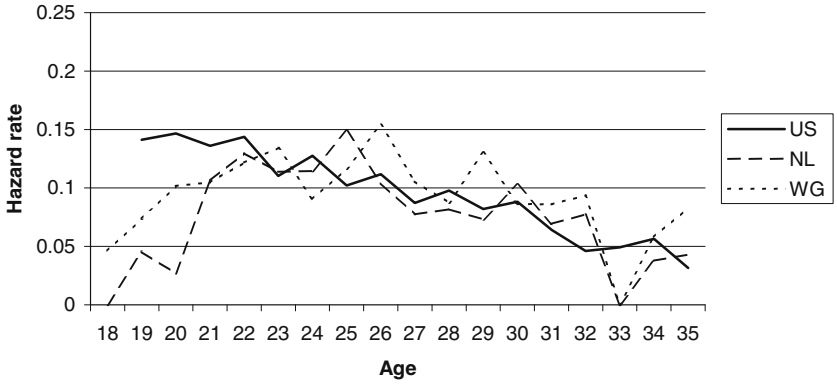

Figure 6. Hazard rate of first married union formation by age, United States, the Netherlands and West Germany, females living away from the parental home.

For all indicators of parental resources, we find a consistently smaller impact for those living away from the parental home than for those still living at home. This confirms our hypothesis. The impact of higher parental education tends to be positive. For those living at home we find the expected negative impact of parental income that becomes smaller at higher ages (see interaction effect). A smaller and statistically insignificant impact of parental income is found once the young women have left home. Children of homeowners have a greater likelihood of forming a first union in a given year than children of renting parents.

From the additional models including interactions with the previous living arrangement, it was found that several differences in resource effects between previous living arrangements were statistically significant (see Appendix A, Table A.1, for a summary). This was true of level of education (for marriage:

Table 3. Logistic regression of first union formation of women in a year, US

	All respondents		Respondents who live in the parental home		Respondents who have left the parental home	
	Marriage	All unions	Marriage	All unions	Marriage	All unions
Education (less than high school = 0)						
High school	0.25**	0.10	0.60***	0.63***	0.18	−0.03
Some college	0.37***	0.20*	0.82***	1.01***	0.24	0.04
College degree	0.46***	0.21	1.08***	1.21***	0.53**	0.16
Employment status (working = 0)						
In education	−1.35***	−1.25***	−1.53***	−2.79***	−0.55*	−0.45*
Other not working	−0.15	−0.07	−0.33**	0.33**	−0.36**	−0.23*
Income/10,000	0.23***	0.34***	−0.31***	−0.23**	0.08**	0.22***
Age group (18–19 = 0)						
20–21	0.11	0.13	0.00	−0.12	−0.23	−0.49*
22–23	0.23*	0.21*	0.25	0.11	−0.50	−0.78***
24–25	0.11	0.06	0.09	−0.04	−0.76**	−1.07***
26–27	−0.11	−0.21	−0.23	−0.31	−0.99**	−1.40***
28–30	−0.53***	−0.70***	−0.90**	−1.07***	−1.34***	−1.80***
31–35	−1.14***	−1.28***	−1.72***	−1.89***	−1.89***	−2.33***
Housing situation (renter = 0)						
Owner	0.20	0.07			0.37**	0.25
With parents	0.25***	−0.01				
Father's education (less than high school = 0)						
High school	0.16*	0.13	0.34**	0.39***	−0.06	−0.05
Some college	0.04	0.09	0.06	0.22	−0.09	0.02
College degree	0.03	0.01	0.22	0.34**	−0.30	−0.24
Parents' income/10,000	−0.14***	−0.13***	−0.26***	−0.22***	−0.10	−0.09
Parents income by age	0.01**	0.00**	0.01***	0.01***	0.00	0.00
Parents' tenure and house value (renter = 0)						
Owner, house value lower 33%	0.34***	0.29***	0.36**	0.39***	0.31**	0.24*
Owner, house value middle 33%	0.43***	0.40***	0.53***	0.61***	0.38**	0.41***
Owner, house value upper 33%	0.40***	0.29**	0.53***	0.62***	0.54***	0.34**
City size (under 10,000 = 0)						
10,000–24,999	−0.20	−0.15	0.00	0.03	−0.46*	−0.21

Table 3. Continued

	All respondents		Respondents who live in the parental home		Respondents who have left the parental home	
	Marriage	All unions	Marriage	All unions	Marriage	All unions
25,000–49,999	−0.18	−0.12	−0.20	−0.16	0.02	0.12
50,000–99,999	−0.08	−0.08	0.08	0.07	−0.02	0.01
100,000–499,999	−0.40***	−0.35***	−0.29*	−0.25	−0.32*	−0.21
≥500,000	−0.76***	−0.69***	−0.94***	−0.91***	−0.45**	−0.36**
Region (midwest = 0)						
Northeast	−0.06	−0.09	0.02	−0.02	−0.14	−0.09
South	0.08	0.10	0.26*	0.28***	−0.13	−0.05
West	0.20	0.18	0.34*	0.30	0.06	0.08
Period (1979–84 = 0)						
1985–89	−0.23***	−0.17**	−0.34***	−0.29***	−0.03	−0.02
1990–93	−0.33***	−0.21**	−0.67***	−0.60***	0.12	0.18
Constant	−2.79***	−2.49***	−2.70***	−3.02***	−1.63***	−1.16***
−2 Log likelihood	6741	7706	3409	3423	2816	3541
Wald Chi^2	421	524	320	316	173	237
df, p	32, 0.00	32, 0.00	30, 0.00	30, 0.00	31, 0.00	31, 0.00

*$p < 0.10$; **$p < 0.05$; ***$p < 0.01$.

at the 0.10 level), employment and enrolment status, and father's level of education (at the 0.10 level).

As expected, larger city sizes are associated with a smaller likelihood of first union formation among those at home. This effect, too, is smaller for those who live independently. And even the period effect, indicating postponement of first union formation among those living at home, is smaller and insignificant among those living independently.

4.3. MULTIVARIATE RESULTS: THE NETHERLANDS

When comparing the impact of education and employment for the Netherlands with that for the United States, a first observation is that this impact is much smaller (Table 4). This finding confirms our hypothesis about the difference between welfare regimes. It should also be noted that, for those living at home, the impact of level of education is opposite to that in the United States. In a previous paper, we suggested this might indicate that the resource effect of high education is overruled by a non-traditionality effect in the Netherlands (Mulder et al., 2002). Just as in the United States, the effect

Table 4. Logistic regression of first union formation of women in a year, The Netherlands

	All respondents		Respondents who live in the parental home		Respondents who have left the parental home	
	Marriage	All unions	Marriage	All unions	Marriage	All unions
Education (primary = 0)						
Lower secondary/lower vocational	−0.12	−0.08	−0.24**	−0.22**	0.28	0.36
Higher secondary/middle vocational	−0.20	−0.18	−0.23	−0.26*	0.02	0.14
Higher vocational/university	−0.51***	−0.38***	−0.71***	−0.52***	0.02	0.00
Employment status (working = 0)						
In education	−0.96***	−0.54***	−0.95***	−0.60***	−0.91***	−0.32**
Other not working	−0.69***	−0.49***	−0.04	−0.09	−0.37	0.17
Socio-economic status (ISEI)	−0.04	−0.04	−0.03	−0.06*	−0.13**	−0.02
Status unknown	0.31	0.17	−0.16	0.08	−0.43	−0.88*
Age group (18–19 = 0)						
20–21	0.85***	0.92***	0.84***	0.93***	1.02**	0.80***
22–23	1.28***	1.32***	1.30***	1.33***	1.48***	1.27***
24–25	1.21***	1.31***	1.39***	1.48***	1.54***	1.30***
26–27	0.81***	0.94***	1.08***	1.17***	1.17**	0.93**
28–30	0.33	0.61*	0.24	0.43	1.05	0.94*
31–35	−0.82	−0.28	−0.89	−0.80	0.46	0.51
Housing situation (renter = 0)						
Owner	−0.10	0.00			−0.32	−0.20

With parents	−0.15	−0.32***				
Father's education (up to lower secondary = 0)						
Middle or higher	−0.28*	−0.16	−0.14	−0.07	−0.35	−0.18
Unknown	−0.01	−0.01	−0.01	−0.02	−0.20	−0.08
Father's socio-economic status	−0.07	−0.04	−0.11**	−0.06	0.04	0.02
Fathers status by age	0.01**	0.01	0.02**	0.02*	0.00	−0.22
Father's status unknown	−0.51***	−0.44***	−0.42***	−0.41***	−0.40*	0.00
Degree of urbanization (hardly urbanized = 0)						
Weakly urbanized	0.00	0.04	0.13	0.17	−0.30***	−0.12
Moderately urbanized	−0.13	−0.07	0.17	0.19	−0.71***	−0.39*
Strongly urbanized	−0.28**	−0.10	0.06	0.16	−0.80***	−0.33*
Birth cohort (1930–39 = 0)						
1940–49	0.38***	0.41***	0.59***	0.57***	0.08	0.24
1950–59	0.49***	0.73***	0.79***	0.93***	−0.26	0.36*
1960–69	−0.14	0.80***	0.16	0.98***	−0.70**	0.49**
Constant	−2.41***	−2.59***	−2.67***	−2.81***	−1.89***	−2.67***
−2 Log likelihood	4424	5842	3636	4272	1261	2031
Improvement compared with null model, df, p	465, 26, 0.00	473, 26, 0.00	430, 24, 0.00	435, 24, 0.00	115, 25, 0.00	75, 25, 0.00

*$p < 0.10$; **$p < 0.05$; ***$p < 0.01$.

of education and employment is smaller for those living independently than for those living with their parents. Socio-economic status does not have the expected positive effect on first union formation. In contrast, the effect of socio-economic status is negative and, for most models, significant, particularly for married unions.

No significant impact is found of individual home-ownership, but in contrast to the United States, it tends to be negative. Also in contrast to the United States, those living with their parents are significantly less likely to form first unions than those living away. So, unlike for the United States, for the Netherlands no support is found for the idea that experience with non-family living leads to postponement of first union formation. The findings do lend support, however, to the argument that those living away have better opportunities to form unions or are more attractive partners.

Of the parental resources, a higher level of education has a negative impact on first union formation, which is significant only in the model of marital unions for all respondents. This is opposite to the effect found for the United States. The effect of parental socio-economic status, however, is similar to that found for parental income in the United States, at least for marital unions of those living in the parental home: a negative impact but less so for higher ages. A negative impact is found for an unknown status of the father. This might indicate an impact of family structure; in many cases where the father's status is unknown this is caused by the fact that the father was not alive or absent when the respondent was 15 years old.

The following differences in resource effects between the previous living arrangements were significant (result from additional models with interactions; see Appendix A, Table A.2): level of education, both for married unions and for all unions; employment and enrolment status and whether the respondent's socio-economic status was unknown, for all unions; whether the father's status was unknown for all unions, at the 0.10 level.

The expected negative impact of degree of urbanization is mainly found for women living away from the parental home.

4.4. MULTIVARIATE RESULTS: WEST GERMANY

The findings for West Germany (Table 5) show many similarities, but also some remarkable differences compared with those for the United States and the Netherlands. Like for the Netherlands but unlike for the United States, the impact of a high level of education on first union formation is negative. Like for both other countries, the impact of enrolment in education is strongly negative; more so for marriage than for all unions. Much more clearly than for the other countries, support is found for the idea that non-employment for reasons other than enrolment in education should depress the likelihood of first union formation.

Table 5. Logistic regression of first union formation of women in a year, West Germany

	All respondents		Respondents who live in the parental home		Respondents who have left the parental home	
	Marriage	All unions	Marriage	All unions	Marriage	All unions
Education (primary = 0)						
Lower secondary	−0.13	−0.11	−0.05	−0.02*	−0.22	−0.20
Higher secondary	−0.27	−0.19	−0.12	−0.19	−0.45	−0.21
Tertiary	−0.53***	−0.46***	−0.85***	−0.70**	−0.52**	−0.38**
Employment status (working = 0)						
In education	−1.60***	−0.82***	−1.40***	−0.59**	−4.12	−0.54
Other not working	−0.61***	−0.57***	−0.30***	−0.27***	−0.33**	−0.50***
Socio-economic status (ISEI)	0.04	0.00	−0.03	−0.05*	0.07	0.03
Age group (18–19 = 0)						
20–21	0.62***	0.49***	0.74***	0.65***	0.71***	0.38**
22–23	0.92***	0.78***	1.14***	1.05***	0.94***	0.57***
24–25	0.69***	0.62***	1.12***	1.07***	0.71***	0.43**
26–27	0.71***	0.59***	1.03***	0.95***	0.97***	0.55***
28–30	0.23	0.17	0.44**	0.34	0.71**	0.30
31–35	−0.13	−0.29	0.31	0.22	0.21	−0.35
Housing situation (renter = 0)						
Owner	−0.74***	−0.71***			−0.81***	−0.74***
With parents	−0.43***	−0.45***				
Father's education (lower = 0)						
Middle	−0.15	−0.17	−0.09	−0.02	−0.08	−0.23

Table 5. Continued

	All respondents		Respondents who live in the parental home		Respondents who have left the parental home	
	Marriage	All unions	Marriage	All unions	Marriage	All unions
Higher	−0.07	−0.08	−0.02	−0.05	−0.06	−0.07
Unknown	0.13	0.11	0.09	0.08	0.21	0.18
Father's socio-economic status	0.00	0.01	−0.03	−0.04	0.03	0.06
Fathers status by age	0.00	0.00	0.00	0.00	0.00	0.00
Father's status unknown	−0.05	−0.47	0.97	1.51	−1.42	−2.32*
Parents owned a home	−0.24***	−0.22***	−0.27***	−0.30***	0.00	−0.04
Degree of urbanization (hardly urbanized = 0)						
Weakly urbanized	0.06	0.13	0.23**	0.30***	−0.07	−0.02
Moderately urbanized	−0.20**	−0.06	0.15	0.25**	−0.52***	−0.25*
Strongly urbanized	−0.41***	−0.12	0.00	0.23**	−0.66***	−0.29**
Birth cohort (1930 = 0)						
1940	0.29***	0.28***	0.32***	0.31***	0.38**	0.36**
1950	0.52***	0.51***	0.75***	0.74***	0.28	0.30*
1955	0.00	0.67***	0.73***	1.17***	−0.82***	0.27*
1960	−0.42***	0.58***	0.20	1.03***	−0.88***	0.29*
Constant	−2.22***	−2.17***	−2.63***	−2.52***	−2.35***	−2.17***
−2 Log likelihood	9250	9045	6282	6090	3824	3534
Improvement compared with null model, df, p	884, 28, 0.00	480, 28, 0.00	759, 26, 0.00	404, 26, 0.00	201, 27, 0.00	112, 27, 0.00

*$p < 0.10$; **$p < 0.05$; ***$p < 0.01$.

As in the Netherlands, those living with their parents are less likely to form unions than those living away. An unexpected negative effect is found of the young adult's home-ownership. In previous work, we have shown that home-ownership is strongly related to marriage and family formation in West Germany; stronger so than in the Netherlands (Mulder and Wagner, 1998). Possibly, those owning homes without having formed a union are a selective category of people who are not very much inclined, or do not anticipate, to form unions or families.

For those living at home, home-ownership of the parents is also negatively associated with union formation. This finding contradicts that for the United States and supports the hypothesis of reluctance to move from a high-quality parental home. No impact of parental home-ownership is found for those living away from the parents. Other parental resources are not found to have a significant impact on first union formation.

The indications of smaller resource effects among those who live away from the parents than among those who live at home are less clear than in the other two countries. A remarkable example is the impact of non-employment for other reasons than enrolment in education. No indication whatsoever is found of a smaller impact of this factor for those not living with their parents. Two differences in resource effects between the previous living arrangements were statistically significant: level of education and whether the parents owned a home (both at the 0.10 level; result from additional models with interactions; see Appendix A, Table A.3).

Remarkably, the effect of degree of urbanization on first union formation is positive for those living with their parents and negative for those living away.

4.5. MULTIVARIATE RESULTS: SYNTHESIS

The multivariate results indicate that both individual and parental resources indeed matter to first union formation, but not always in the same way for those living in the parental home and those living away, for first married unions and for all unions, and for the United States, the Netherlands and West Germany. Living with parents is associated with a greater likelihood of first married union formation in the United States, but to a smaller likelihood of first union formation in the Netherlands and West Germany. Note that this greater likelihood of first marriage for those living away for the United States is only found in the multivariate analysis; the bivariate finding indicates a greater likelihood of first married union formation for those living away (see differences in age-specific hazard rates between Figures 4 and 6). This difference between the multivariate and the bivariate findings is mainly caused by controlling for enrolment in education: enrolment has a negative impact on first union formation and is more common among those living with their parents.

Level of education, and for the Netherlands and West Germany also enrolment in education, matters more for those in the parental home than for those living independently. Individual income or socio-economic status, however, does not matter less for those living away; for the United States, income was associated positively with the likelihood of first union formation for those living away, but negatively for those living in the parental home. For parental resources, the results are more in line with the hypotheses: these are generally found to matter more to first union formation from the parental home than from independence, and more to first union formation in the United States than in the Netherlands and West Germany.

5. Conclusions

This paper addressed the impact of differences between previous living arrangements (living in the parental home versus living away) on first union formation. Unlike most previous research, we did not just include the previous living arrangement in the analyses as a single variable, but we investigated differences between the living arrangements in the impact of individual and parental resources. Analyses were performed for three countries with different welfare regimes: the United States, the Netherlands and West Germany.

For the Netherlands and West Germany, those living with their parents were found to be less likely to form first unions than those living away from their parents. This finding lends more support to the interpretation that those living away have better opportunities for first union formation, or are more attractive partners, than to an interpretation based on differences in family-oriented attitudes. For the United States, however, the opposite association between the previous living arrangement and first union formation was found, but only for married unions and only after controlling for the other factors in the models.

Many of our other findings are in line with the general hypothesis that parental resources matter less to union formation for those living away from the parents than for those still living in the parental home. Furthermore, the results suggest that parental resources matter less in Conservative Continental European welfare regimes than in the United States, a typical example of a Liberal Market welfare regime. For individual resources, however, the results were much less conclusive.

In some instances, it was found that resources matter more to the formation of first married unions than for all first union formation regardless of the legal status. This difference was not spectacular, however, so we have found only limited evidence for the idea that affordability is particularly prescribed for marriage.

The international comparison was particularly instructive, not only because it permitted an interpretation of the results in terms of differences

between welfare regimes, but also because it sheds light on other, partly unexpected differences between the countries. The impact of level of education, for example, appeared to be the opposite for people living with their parents in the United States compared with the two European countries. In West Germany, there was an unexpected negative impact on first union formation of home-ownership of the young adult. These differences between the countries illustrate that interpretations of differences in terms of welfare regimes are not always sufficient. Moreover, even though some of the findings are in line with differences between welfare regimes, we cannot be certain that differences between welfare regimes are the cause of differences in the role of resources and not, for example, differences in the importance attached to independence from parents or state resources.

One of the limitations of our findings is that they are based on different types of data sets: panel data for the United States, and retrospective data for the Netherlands and West Germany. It is unknown how this difference affects our results. It is possible that the rate of first union formation is underestimated in the US data, because some respondents have dropped out of the panel upon the formation of a new household.

In many Western countries, increasing proportions of those leaving the parental home do not immediately form a union, but start living independently or with roommates instead. If these proportions keep rising, one would expect a decreasing role of parental resources in the timing of union formation. This is not to say that the impact of resources on the household formation of young adults diminishes in general. As we have shown in a previous paper, individual and parental resources matter more to leaving home to live without a partner than they do to leaving home to form a union (Mulder et al., 2002). So, we see an interesting shift in the role of resources in household formation. Whereas first union formation is increasingly occurring from residential independence and is thus less influenced by resources than previously, resources now matter more in an earlier stage, namely, upon leaving the parental home for independence.

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Notes

[1] First union formation, in this paper, is the entry into the first independent coresidential union with a marriage or cohabiting partner. This includes all first unions formed by moving into a home shared with a partner or by having a partner moving into a housing unit already occupied by a person, but it excludes unions formed inside the parental home (these unions

start counting only after the couple move to independent housing). For convenience, the term '(first) marriage' is used sometimes to denote 'the formation of a first married union'.

[2] Sources: For the USA: U.S. Census Bureau, Family and living Arrangements, 'Current Population Survey' and 'Census of Population'. For the Netherlands: Statistics Netherlands. For West Germany: 1970 Census; 'Die Familie im Spiegel der amtlichen Statistik'; Statistisches Jahrbuch 2002 für die Bundesrepublik Deutschland.

Appendix A

Tables A.1 to A.3 show the significance of interaction effects between all independent variables in Tables 4 and 5 with a variable indicating the living arrangement before the union formation (living in the parental home versus having left the parental home). In most cases the results are as expected from the separate models with main effects only: large differences between parameter estimates tend to be associated with significant interaction terms. But this is not always the case. For example, the coefficients in the model for the United States for income for the two living arrangements differ by 0.21 for males and 0.45 for females; yet the interaction among males is significant and that among females is not. In the separate models for males in West Germany, the coefficients for socio-economic status of the father are both 0.02, yet the interaction is significant. There are two possible causes for such unexpected findings. First, lack of statistical power may prevent some larger differences between parameters from being significant in the interactions. Secondly, the inclusion of certain interaction effects may change the estimated coefficients of other variables.

Table A.1. Significance of interactions between a dummy variable 'has the respondent left the parental home?' and other independent variables, United States (interactions added to the model for all respondents in Table 3)

	Marriage			All unions		
	Wald	df	Significance	Wald	df	Significance
Education	6.62	3	0.09	16.51	3	0.00
Employment status	14.04	2	0.00	18.00	2	0.00
Income	12.64	1	0.00	1.93	1	0.17
Age	4.49	1	0.03	0.44	1	0.51
Father's education	6.87	3	0.08	7.12	3	0.07
Parent's income	1.48	1	0.22	1.08	1	0.30
Parents' tenure and house value	1.76	3	0.62	0.77	3	0.86
City size	14.34	5	0.01	12.96	5	0.02
Region	6.13	3	0.11	5.43	3	0.14
Period	16.58	2	0.00	18.60	2	0.00

Table A.2. Significance of interactions between a dummy variable 'has the respondent left the parental home?' and other independent variables, the Netherlands (interactions added to the model for all respondents in Table 4)

	Marriage			All unions		
	Wald	df	Significance	Wald	df	Significance
Education	8.52	3	0.04	6.92	3	0.00
Employment status	2.05	2	0.36	15.66	2	0.00
Socio-economic status	0.86	1	0.35	0.56	1	0.46
Status unknown	1.31	1	0.25	9.05	1	0.00
Age	1.59	1	0.21	1.69	1	0.19
Father's education	0.68	2	0.71	0.44	2	0.80
Father's socio-economic status	1.59	1	0.21	0.02	1	0.88
Father's status unknown	0.83	1	0.36	3.85	1	0.05
Degree of urbanization	5.91	3	0.12	3.32	3	0.35
Cohort	14.05	3	0.00	6.51	3	0.09

Table A.3. Significance of interactions between a dummy variable 'has the respondent left the parental home?' and other independent variables, West Germany (interactions added to the model for all respondents in Table 5)

	Marriage			All unions		
	Wald	df	Significance	Wald	df	Significance
Education	4.69	3	0.20	6.92	3	0.08
Employment status	2.70	2	0.26	0.49	2	0.78
Socio-economic status	0.32	1	0.57	0.20	1	0.65
Age	2.41	1	0.12	0.00	1	0.96
Father's education	0.61	3	0.90	1.59	3	0.66
Father's socio-economic status	0.25	1	0.62	2.25	1	0.13
Father's status unknown	0.42	1	0.52	2.60	1	0.11
Parents owned a home	3.59	1	0.06	3.35	1	0.07
Degree of urbanization	7.64	3	0.05	5.34	3	0.15
Cohort	47.37	4	0.00	22.55	4	0.00

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