The History of the Family

History of the Family 9 (2004) 425-442

# Employment and divorce among Dutch women born between 1903 and 1937

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#### **Abstract**

Women's increased economic independence is often regarded as a major contributor to the rise in the divorce rate since the 1960s. The rise in female labor-force participation and educational attainment has eroded the benefits of the traditional gender division within marriage and reduced the negative financial consequences of divorce. Women's employment may also undermine traditional marital role expectations and increase stress and marital conflict. In contrast to other countries, the Netherlands has seen virtually no empirical support for this economic independence hypothesis to date. This article tests this hypothesis by examining women born between 1903 and 1937. The results of multivariate analyses confirm the economic independence hypothesis: both a high level of education and labor-force participation significantly increase women's likelihood of divorce.

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Keywords: Labor-force participation; Economic independence; Divorce; Women

#### 1. Introduction

During the past century and a half, divorce rates have increased dramatically throughout the western world (Phillips, 1988, Chap. 13). The Netherlands is no exception to this rule, as can be observed from Fig. 1 (van Poppel & de Beer, 1993, p. 431). This figure shows a steady growth in divorce rates from the 1880s until the 1960s, interrupted by a large peak during the years immediately following the Second World War. Between the 1960s and 1990s, the divorce rates skyrocketed from 22 per 10,000 married

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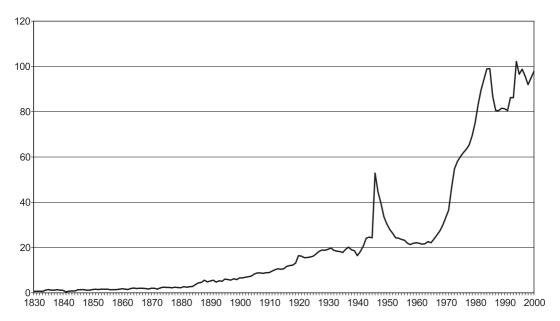


Fig. 1. Number of divorces per 10,000 married males.

men in 1965 to 102 per 10,000 married men in 1994. As van Poppel and de Beer have shown, these changes are partly related to alterations in divorce legislation. In 1883, the Supreme Court decided that a divorce would be granted if one of the parties involved pleaded guilty to one of the legal grounds for divorce. Since 1971, divorce has been permitted by mutual consent. Thus, objective evidence that just cause for divorce had been met is no longer needed. If both parties sign a petition declaring that they think the marriage has broken down irreversibly, divorce is granted automatically.

The increase in divorces during the last century can be attributed to a host of factors (Phillips, 1988, Chap. 14). One important one, which has been mentioned both by contemporary commentators and social scientists, is the increased labor-market participation and economic independence of women (Cherlin, 1981; Ruggles, 1997). This so-called economic independence hypothesis is usually underpinned by Beckers' microeconomic theory of marriage (Becker, 1981, Chap. 2 and 10), which suggested that divorce is least likely in traditional marriages where a strict division of labor between the spouses exists, with the man assuming responsibility for employment and the woman assuming responsibility for homemaking and child-rearing. When labor is divided in this way, the so-called exit costs of leaving a bad marriage are high. For men, divorce would mean having to assume all domestic responsibilities, which could derail their careers. For women who had focused on their specific gender role and invested little in education and paid employment, it would be difficult to secure (or regain) a place in the job market after divorce. The steady rise in female labor-force participation and educational attainment over the past century has eroded the benefits of the traditional gender division within marriage and reduced the exit costs. Both these factors are thought to have increased the likelihood of divorce.

In Becker's theory, economic independence is therefore seen primarily as something that can make it easier for women to leave a bad marriage. Various researchers, however, have suggested that women's economic independence may also increase the likelihood of divorce in other ways (Greenstein, 1990;

South & Spitze, 1986). If women are employed outside the home, the couple's marital role expectations, particularly those of the husband, may be undermined. Partners may also have less time for one another, the man has less control over how the household income is spent, and conflicts may arise over the division of household duties.

Many studies have reported partial or full support for the economic independence hypothesis (Brines & Joyner, 1999; Cherlin, 1979; Mott & Moore, 1979; Spitze & South, 1985; Trussell, Rodriquez, & Vaughan, 1992). These studies, however, usually focus on determinants of divorce only during the last decades of the 20th century. Little is known about the importance of women's economic independence in explaining divorce before the 1960s or 1970s. Therefore, the main aim of this study is to enlarge our historical understanding of the impact of women's economic independence on divorce by focusing on the life course of women born between 1903 and 1937 in the Netherlands.

An additional reason for focusing on this relationship among Dutch women is that Dutch research to date has found little empirical evidence to support the economic independence hypothesis (Manting, 1993; Pit & Rouwendal, 1994; Poortman & Kalmijn, 2002). One possible explanation for this lack of empirical evidence might be that whereas women's economic independence used to be a crucial consideration in whether to divorce in former times, it has ceased to be such a major consideration for younger generations. Although the Dutch studies mentioned above examined relatively young birth or marriage cohorts, the welfare state has been expanding since the 1960s. Governments have taken increasing steps to guarantee a minimum income to all citizens. One of the most important changes in the social security system, from the point of view of divorce, has been the introduction in 1965 of the General Social Security Act (van den Akker, 1984). In 1971, a few years after the introduction of this legislation, divorced nonworking women were also given entitlement to the minimum of financial support provided by the state (social security benefits), which meant they were no longer economically dependent on their former partners. Divorce has therefore also become an option for women who devote all their time and energy to the specific role of homemaker and child-rearer. Managing on social security benefits alone, however, is by no means an easy task for one-parent families (Corpeleijn, Linden, Siermann, & Veenstra, 1998).

The safety net provided by the welfare state was either not available, or less available, to women of older generations, however. Throughout much of their married lives, divorce would have meant an even greater financial setback than that experienced by the younger cohorts of women who had recourse to state support. One can therefore assume that economic independence was a crucial consideration when contemplating divorce, particularly among older cohorts of women. One would also expect to find empirical evidence to support the economic independence hypothesis among these older cohorts. This article puts this hypothesis to the test by examining a group of women born between 1903 and 1937. The central research question is whether the economic independence of women born between 1903 and 1937 played a key role in the likelihood of their divorcing.

#### 2. Other causes of divorce

Obviously, factors other than economic independence may also help to explain why some women leave a marriage (Berrington & Diamond, 1999; Manting, 1994, Chap. 7; Phillips, 1988, Chap. 14; South

& Spitze, 1986) and needs to be taken into account. The most important factors that earlier studies have shown as contributing to the likelihood of divorce are discussed briefly below, and the anticipated effects are summarized in Table 1.

## 2.1. Cohort and period

In the late 1960s and early 1970s, a number of changes took place that resulted in a greater prevalence of divorce among women of younger birth cohorts than among their older counterparts. As mentioned above, one of the most important changes was the liberalization of the Divorce Act in 1971. Before the enactment of this legislation, married couples could only obtain a divorce if both parties gave their consent and if they could prove the marriage had irretrievably broken down on one of the following four grounds: adultery, physical assault or ill-treatment, desertion with malicious intent for 5 or more years, or a prison sentence of 4 or more years imposed after the marriage took place (van Poppel & Beets, 1998, p. 19). The new act made it possible for couples to jointly petition for divorce without having to prove any of the above grounds. The net result of the act was that it lifted divorce out of the realms of guilt and shame. The next change,

Table 1 Hypothesized effects of selected covariates on the divorce rate

Variable	Expected effect
Cohort and period	
Birth cohort	+
Periods after 1971	+
Social background	
Parental divorce	+
Degree of urbanization of birthplace	+
Parental religiousness	<u> </u>
Financial capital of parental family	+
Tilialicial capital of parental failing	'
Entry position at marriage	
Age at marriage	
-Relatively young	++
-Relatively old	+
Cohabited before marriage	+
Premarital pregnancy/birth	+
Marriage characteristics	
Duration of marriage	?
Children	
-Living at home	
-Living away from home	_
Economic independence	
Level of education	+
Labor-force participation	+

particularly between 1965 and 1971, was a major shift in Dutch public attitudes toward divorce. It was probably the combined result of secularization and an increase in welfare and public debate about the new Divorce Act. Whereas in 1965 nearly half the population (48%) disapproved of divorce by unhappy couples with children at home, by 1970, this figure had shrunk to only 13% (SCP, 1992, p. 460). Finally, an important change was the broadening of the material scope for divorced women to maintain a household of their own, independently of their husbands, as a result of such things as the sharp rise in the standard of living, the expansion of the social security system (including the introduction of the General Social Security Act), and a lessening in the shortage of housing.

# 2.2. Social background

#### 2.2.1. Parental divorce

Studies into the causes of divorce show that children of divorced parents are more likely to divorce than those whose parents stay together (McLanahan & Bumpass, 1988; Tzeng & Mare, 1995). This is partly the result of earlier, anomalous demographic behavior, such as extramarital cohabitation or marrying at a young age (de Graaf, 1991). It is also often attributed to less apprehensiveness about the consequences of divorce since it is usually the father who leaves and children learn that a woman is capable of looking after the family without a husband (McLanahan & Bumpass, 1988). Last but not least, children of divorced parents appear to have a more reserved attitude toward the supposed virtues of marriage (de Graaf, 1996, Section 7.3).

### 2.2.2. Degree of urbanization of birthplace

New trends tend to emerge first in larger cities because of the less traditional and more tolerant attitudes of average city-dwellers (Fischer, 1995). Not surprisingly, various studies have shown that those who were born in or who live in cities are most likely to divorce (Manting, 1993; Mott & Moore, 1979; Poortman & Kalmijn, 2002; South & Spitze, 1986).

# 2.2.3. Religion

The prevalence of divorce decreases in proportion to how religious individuals are and whether they come from religious backgrounds (Johnson & Skinner, 1986; Manting, 1993; Poortman & Kalmijn, 2002). This, too, will come as no surprise. Compared to non-religious people, those with religious convictions are more apt to perceive marriage as the ultimate life-fulfilling experience, motherhood as the most important role a woman can fulfill, and marriage as a lifelong commitment. This latter sentiment is directly derived from Jesus' words: "Those whom God hath joined together, let no man put asunder" (Matthew 19:6).

#### 2.2.4. Financial capital of the parental family

Although little research has been carried out on the impact of the parental family's financial assets on the likelihood of divorce, some effect seems likely (Bumpass, Martin, & Sweet, 1991; Klijzing, 1992), given that children from well-to-do families are more able to rely on financial support from their families in the event of divorce. Children from higher social strata may also have relatively higher expectations of marriage. Van Poppel (1997), however, did not find significant differences in divorce rates between social classes.

# 2.3. Entry position at marriage

# 2.3.1. Age

People who marry young, before the age of 20, have a relatively high likelihood of divorce (Booth & Edwards, 1985; Manting, 1994, Chap. 7; Poortman & Kalmijn, 2002; South & Spitze, 1986). This could be due to a number of factors. Couples who marry young will have taken less time to find the right partner, generally have fewer economic and social resources, and have less experience dealing with the problems that emerge in relationships. In addition, choosing to marry at a young age is often a response to negative external factors, such as seeing marriage as a way of escaping from the parental home or—as was certainly the case in former times—as a means of legitimizing a child. But marrying fairly late in life can also increase the likelihood of divorce (Booth & Edwards, 1985). Possible explanations are having only a limited number of potential marriage partners, settling for a less suitable partner so as not to "miss the boat", and and being less able or willing to adapt after prolonged independence.

## 2.3.2. Type of relationship

Unmarried cohabitation has been uncommon in Dutch society during most of the 20th century. Since the rapid increase in the occurrence of unmarried cohabitation starting in the 1970s, however, much research has focused on how the experience of cohabitation influences the likelihood of divorce. On the one hand, those who have previously cohabited might be less likely to divorce, given that cohabitation effectively amounts to a "trial marriage". On the other hand, they might be more likely to divorce, given that they tend to have less traditional attitudes than couples who do not cohabit before getting married (Axinn & Barber, 1997). Because more empirical evidence has been found to support this latter hypothesis (Bumpass et al., 1991; Lillard, Brien, & Waite, 1995; Poortman & Kalmijn, 2002), and since the stigma attached to unmarried cohabitation was stronger among cohorts born during the first half of the 20th century than among couples born in the second half of that century, we expected to find an increased likelihood of divorce among couples who had cohabited before marriage.

# 2.3.3. Premarital pregnancy/birth

During the past few decades, the widespread availability of reliable contraceptives has made birth control easier, resulting in fewer unplanned pregnancies. In addition, the stigma attached to having a child out of wedlock has nearly disappeared, in stark contrast with former times, when unintended pregnancies had to be quickly "remedied" by the couples marrying, regardless of whether they were financially, psychologically and/or socially prepared to do so and whether the relationship had any meaningful basis (Kooy & Cramwinckel-Weeda, 1975). It is hardly surprising that studies have shown that "forced" marriages entered into as a result of unintended pregnancy were much more likely to fail (Greenstein, 1990; Manting, 1994, Chap. 7). But despite the prevailing norm, not all premarital pregnancies were remedied by marriage. Research has also shown a woman who bears a child out of wedlock is considerably more likely to divorce if she eventually marries (Greenstein, 1990; Tzeng & Mare, 1995). Perhaps having a child out of wedlock is an impediment to other activities, such as completing one's education and looking for a suitable marriage partner. The experience of bearing and raising a child single-handedly may also give women a sense of empowerment.

## 2.4. Marriage characteristics

# 2.4.1. Duration of marriage

There is little consensus about the impact of marital duration on the likelihood of divorce. For example, the theory of accumulated irritations of Trussell et al. (1992, p. 58) suggests that the likelihood of divorce increases with marital duration as a result of both partners' growing frustration with each other's idiosyncrasies, shortcomings, behavior, and habits. The theory of growing acceptance (Trussell et al., 1992, p. 58), on the other hand, assumes exactly the opposite: the likelihood of divorce decreases the longer couples remain married as a result of their growing ability to accept each other's faults. But this pattern could also be partly due to marriages of less compatible partners having already ended in divorce. A third theory revolves around the sickle model of Diekmann and Klein (1991), which suggests that after an initial increased likelihood of divorce in the early years of a marriage (a period during which both partners make many mistakes and reveal many "faults"), the likelihood of divorce gradually declines. Since the above-mentioned studies produced no unequivocal confirmation of any of these theories, however, we had no specific expectations about the impact of the duration of marriage on the likelihood of divorce.

#### 2.4.2. Children

Divorce is substantially more common among childless married couples than those with children (Diekmann & Klein, 1991; Greenstein, 1990; Klijzing, 1992; Manting, 1993; Tzeng & Mare, 1995). This is particularly true of married couples who still have children living at home. Two explanations are generally given to account for this: firstly, that married couples who are unsure about their relationship postpone having a family, and secondly, that having children makes couples reluctant to divorce. An additional reason for a low level of divorce among the generation of women central to this study was their view that divorce was detrimental to the children's welfare, which was more widespread among them than it is nowadays. Only recently has the majority of the population come to believe that being raised in a one-parent family may actually be better for children than being raised in a home where the parents have stayed together only for the sake of the children (SCP, 1994, p. 541).

#### 3. Methods

## 3.1. Data

This study is based on data from the 1992 NESTOR survey *Living Arrangements and Social Networks of Older Adults* (NESTOR-LSN) (Knipscheer, de Jong Gierveld, van Tilburg, & Dykstra, 1995). Interviews were conducted with 2,196 men and 2,298 women between the ages of 55 and 89, who had been born between 1903 and 1937. A stratified random sample was derived from the population registers of 11 municipalities: Amsterdam and two adjacent rural towns in the west, Zwolle and four rural towns in the northeast, and Oss and two rural towns in the south of the country. The response rate was 61.7%, which is comparable to response percentages obtained in surveys conducted by Statistics Netherlands (de Heer & de Leeuw, 1999, p. 63). Broese van Groenou, van Tilburg, de Leeuw, & Liefbroer (1995) contains further information about the representativeness of the sample and the survey in general.

The NESTOR-LSN survey enables the reconstruction of life courses of individuals born between 1903 and 1937. What is particularly important from the point of view of our study is that the survey provided extensive information about the employment and marital histories of the respondents. With regard to employment histories, it provided information about the ages at which respondents entered and left the labor market. The survey also provided data about periods in the respondents' lives when they were not gainfully employed, and why this was the case (see Fokkema & van Solinge, 1998, for a detailed description of how career breaks were determined). The marital careers of the respondents were reconstructed based on data about the unions in which they had been involved, whether within the context of marriage or unmarried cohabitation. The survey provided data about the year in which each of these relationships had begun, whether they were still ongoing, and, if they had dissolved, the year in which this had occurred and the reason why—as a result of divorce, separation, or the death of the partner.<sup>1</sup>

## 3.2. Method of analysis

To answer our central research question we used hazard analysis in which the impact of a set of covariates on the hazard rate is modeled. A hazard rate, h(t), indicates the likelihood of someone experiencing an event—in this case, getting divorced—at time t, given that this individual had not previously experienced this event. We used an exponential hazard model in our analyses that included both time-constant and time-varying covariates. The functional form of the model (Blossfeld & Huinink, 1991, p. 152) is

$$h_{(t)} = a * b_k X_k$$

Interpreting the results of a hazard model resembles interpreting results from a logistic regression analysis. Effects greater than 1 suggest that the rate of divorce is elevated for that specific category or that the rate of divorce increases with an increase in the value of the specific covariate. Effects smaller than 1 have the opposite interpretation. The interpretation of the parameter estimates will be discussed more extensively in the Results section.

Our data set contains annual information about the marital status of the respondents. Therefore, the dependent variable is the likelihood of a woman getting divorced in a particular year.<sup>2</sup> Our analysis concentrated on first marriages only, since our data set contains relatively few second marriages that ended in divorce. In addition, decisions to end second (or subsequent) marriages may have partly revolved around other factors, such as difficulties in dealing with stepchildren, than did the decision to end a first marriage.

Because only married couples divorce, we began by compiling a file that only included married women (N=1889). This file was then converted into person-years. The first year of observation was the year in which the respondent had married; the last year of observation was the year in which the woman had either reached the age of 55 or, if she had divorced before 55, the year in which the relationship had

<sup>&</sup>lt;sup>1</sup> Information was collected about the time when the respondents had separated. In many cases, this time preceded the date when the divorce was declared official.

<sup>&</sup>lt;sup>2</sup> Unmarried cohabitation was extremely rare among the cohorts examined here. When we repeated the analyses without making a distinction between consensual unions and marriages, the results remained largely the same, although consensual unions of these cohorts of women were much more unstable than marriages of other women in the same cohort.

ended either as a result of divorce or of her partner's death. The reason why we imposed an upper age-limit of 55 was because we were focusing on the impact of women's labor-force participation on divorce. A study by van Solinge & Fokkema (2000) had shown that the great majority of women born between 1903 and 1937 permanently left the labor market by age 55. In all, 18% (*N*=337) of the relationships were found to have ended before the women turned 55—120 as a result of divorce and 217 as a result of the woman's partner dying.

# 3.3. Measurements

# 3.3.1. Educational and employment characteristics of married women

Economic independence was measured on the basis of the women's labor-force participation and level of education achieved. The latter was regarded as an indicator of the woman's chances in the labor market and the former indicated whether she was actually engaged in paid employment.

The women's level of education was determined by asking respondents their highest level of education completed with a qualification or diploma. Three levels of education were differentiated in the analyses presented here: low (where primary education had been fully or partly completed), intermediate (vocational training at the secondary-school level, and general education at lower secondary), and high (further secondary general education, higher vocational training, and university).<sup>3</sup>

To assess the impact of the women's labor-force participation on their likelihood of divorce, we first created a time-varying dummy variable with a value of 1 for the years when the woman was engaged in paid employment, and a value of 0 for the years when she was not. Next, a number of refinements were introduced. Periods of employment were subdivided into periods of continuous employment from the start of the marriage (women who fell into this category being characterized as "continuous workers"), and those following a single break from the labor force (these women being characterized as "returners"). This latter period was subsequently subdivided into the first year since labor market reentry and subsequent years since labor-market reentry. Periods of non-employment were subdivided into periods not preceded by prior employment during marriage ("never worked") and periods which were preceded by prior employment ("stoppers"). To illustrate the time-varying nature of this variable, for example: if a woman had been employed at the time she married, then stopped working at a certain point, and subsequently returned to paid employment, she would fall first into the category of "continuous worker" for a number of years, then into the category of "stopper," and finally end in the category of "returner."

## 3.3.2. Control variables

The birth cohort variable indicates the respondent's year of birth (value: 3–37). To assess how strong an impact the changes that took place in the late 1960s and early 1970s (including the simplification of divorce legislation in 1971) had on the likelihood of divorce for these birth cohorts, we also constructed a time-varying dummy variable that indicated whether the person-years in question occurred after 1971.

Respondents were asked whether their parents had ever divorced. Their replies (coded no=0, yes=1) provided the parental divorce variable.

<sup>&</sup>lt;sup>3</sup> The effect of educational attainment was non-linear. Therefore, we experimented with various classifications of educational attainment. The classification used here provided the clearest pattern for the effect of educational attainment.

The degree of urbanization of birthplace variable was obtained by classifying the places of birth given by the respondents according to the so-called address density of the surrounding area, i.e., the average address density within a radius of 1 km of an address in the area (den Dulk, van de Stadt, & Vliegen, 1992). Five categories resulted ranging from (1) rural to (5) highly urbanized.

The parental religiousness variable was measured based on the answers to the item "Issues concerning faith and the Church were very important to us at home," with possible replies being "not true," "fairly true," and "true" (value: 1–3). Information about the respondents' own religiousness at the time of the interview was not used because women divorcees, in particular, might conceivably have become estranged from religion.

Table 2
Information about the variables used in the analysis

	M	%
Cohort and period		
Birth cohort (range: 1903–1937)	1920	
Person years after 1971 (%)		19.4
Social background		
Parents had divorced (%)		3.1
Degree of urbanization of birth place (range: 1–5)	3.0	
Parental religiousness (range: 1–3)	2.1	
Father's level of education (range: 5–18)	7.1	
Respondents whose mothers worked during their childhood (%)		16.2
Entry position at marriage		
Level of education (%)		
-Low	58.9	
-Intermediate	33.3	
–High	7.8	
Prestige of first occupation (range: 17–75)	27.6	
Experienced premarital birth (%)		3.2
Married before age 20 (%)		5.9
Married at age of 30 or older (%)		15.3
Marriage characteristics		
Cohabited before marriage (%)		1.9
Duration of marriage up to age 55 (in years)	27.1	
Parental career		
Children living at home (% person years)		81.1
Children living away from home (% person years)		5.6
Career		
Never worked during marriage (% person years)		66.7
Never worked, but worked previously during marriage (% person years)		11.3
Recently back in work, ever stopped (% person years)		0.4
Prolonged employment, ever stopped (% person years)		4.5
Working, never stopped (% person years)		17.1

Various indicators of the financial capital of the parental family were available, namely the father's and mother's levels of education, the father's occupation, whether the mother had been in paid employment or involved in voluntary work, and the financial capital of the parental family compared to other families. Preliminary analyses showed that the variables "father's level of education" and "mother worked" had the strongest relationship with the women's likelihood of divorcing. The father's level of education was converted into the number of years that would be required to achieve that level of education (value: 5–18). Information about the father's level of education was unavailable for 4.9% of the respondents, who were given the mean number of years of education. "Mother worked" was a dummy variable constructed on the basis of the question "Was your mother in paid employment or did she do paid work at home for more than 1 year when you were young?" The reply category was yes or no.

Two dummy variables were included for age at marriage: one indicated whether the woman had married at a relatively young age (less than 20), and the other, whether she had married fairly late (30 or older). The dummy variable for premarital birth was obtained by comparing the woman's age when her first child was born with her age at marriage.<sup>4</sup> This variable was given a value of 1 if the woman had married after the birth of her first child.

The duration of marriage (the number of years the woman had been married) was a time-varying variable. The square of the number of years of marriage was also included because of the possibility of the duration of marriage having a non-linear effect.

And finally, two time-varying dummy variables were constructed for the presence of children. The first indicated whether any children still lived at home, the second, whether all the children had already left the parental home.<sup>5</sup> "No children" was used as the reference category. Table 2 provides detailed descriptive information about each of the independent variables.

#### 4. Results

How prevalent was divorce among women born between 1903 and 1937, and what was the effect of duration of marriage on this prevalence? Fig. 2 shows that 9% of these women divorced before they reached the age of 55, which means a maximum of 40 years of marriage in this study. Furthermore, the likelihood of divorce was lowest during the first years of marital life and after a long period of marriage. After 5 years of life together, less than 1% of these women were divorced; after 15 and 25 years percentages increased to 3.6% and 6.3%, respectively.

Next, we turn to the analysis of the determinants of the likelihood of divorce. Table 3 shows the results of various hazard models. The impact of a variable is expressed as a relative risk. The interpretation of these relative risks differs to some extent according to whether variables are continuous or categorical. In the case of continuous variables, the relative risk indicates the extent to which the likelihood of divorce increases or decreases per unit change in the independent variables. An effect of 1.02 for a birth cohort, for example, means that the likelihood of divorce increases 2%

<sup>&</sup>lt;sup>4</sup> Unfortunately with the NESTOR-LSN data set we could not examine the impact of "forced" marriages, i.e. those precipitated by a pregnancy. The data set only provided information about the year in which the marriage occurred and the first child was born as opposed to the exact dates for both events.

<sup>&</sup>lt;sup>5</sup> Since the database contained no information about when stepchildren or adopted children had become part of the respondents' households, they were excluded from our analysis.

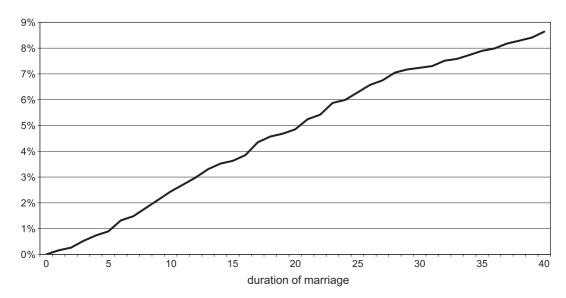


Fig. 2. Cumulative percentage of women born between 1903 and 1937 who divorced, by the number of years of marriage.

per 1-year birth cohort. In the case of categorical variables, the relative risk indicates the relationship between the likelihood of divorce in that particular category and in the reference category. For example, an effect of 0.51 for "children living at home" meant that women who had children living at home were 49% less likely to divorce than those who had no children (being the reference category).

We began by assessing impact of non-economic variables on the women's likelihood of divorce. Model 1 of Table 3 shows the results of this analysis. First, the likelihood of divorce increased the younger the birth cohort of the women, although no additional increase in the likelihood of divorce was found after 1971 for these older cohorts. Second, the likelihood of divorce varied considerably according to the women's social background. Respondents whose parents had divorced and whose mothers had been in paid employment during (part of) the childhood of these respondents were more likely to divorce. Also, respondents were more likely to divorce if they had been raised in more urbanized regions, and had fathers who achieved a higher level of education. Parental religiousness, on the other hand, seemed to have no significant effect on the likelihood of divorce. Third, the respondents' entry position at marriage was also important. Those who had married before age 20 were twice as likely to divorce as those who had married between ages 20 and 29. Premarital cohabitation and having a child out of wedlock seemed to increase the likelihood of divorce, but these effects were not statistically significant, and few women experienced these events anyway. Finally, the likelihood of divorce depended upon characteristics of the marriage itself. Initially, the likelihood of divorce increased the longer the respondents were married, but then decreased after about 14 years. As expected, having children clearly reduced the likelihood of divorce. Whether the children were still living at home did not make much difference.

In a second step, we examined the impact of educational attainment and labor-force participation on the women's likelihood of divorce. The results of this analysis are shown in Model 2 and strongly

Table 3
Relative risk of divorce of women born between 1903 and 1937

	Model				
	1	2	3	4	
Cohort and period					
Birth cohort	$1.02^{\dagger}$	1.01	1.01	1.01	
1972 or later (versus pre-1972)	1.02	0.88	0.84	0.83	
Social background					
Parental divorce	$1.79^{\dagger}$	$1.80^{\dagger}$	$1.96^{\dagger}$	$1.96^{\dagger}$	
Degree of urbanization of birthplace	1.17*	$1.13^{\dagger}$	1.11	1.11	
Parental religiousness	0.86	0.87	0.88	0.88	
Father's level of education	1.12**	$1.06^{\dagger}$	$1.06^{\dagger}$	$1.06^{\dagger}$	
Mother worked	$1.48^{\dagger}$	1.37	1.34	1.34	
Entry position at marriage					
Married before age 20 (versus married between ages 20 and 30)	2.09*	1.84*	1.88*	1.88*	
Married at age 30 or older (versus married between ages 20 and 30)	0.68	0.63	0.65	0.65	
Cohabited before marriage	1.97	1.48	1.53	1.53	
Premarital birth	1.81	1.65	1.67	1.67	
Marriage characteristics					
Duration of marriage	1.11*	1.10*	$1.09^{\dagger}$	$1.09^{\dagger}$	
Square of duration of marriage	0.997*	0.997*	0.997*	0.997*	
Children living at home (versus no children [yet])	0.51**	$0.64^{\dagger}$	$0.62^{\dagger}$	$0.62^{\dagger}$	
Only children living away from home (versus no children [yet])	0.44	0.48	0.46	0.46	
Indicators of economic independence					
Intermediate (versus low) level of education		1.05	1.03	1.03	
High (versus low) level of education		2.46**	2.14*	2.14*	
Working (versus not working)		3.14**			
Not working, ever worked (versus not working, never worked)			$1.79^{\dagger}$		
Working, ever stopped (versus not working, never worked)			5.65**		
Working, never stopped (versus not working, never worked)			3.05**		
Not working, ever worked (versus not working, never worked)				$1.79^{\dagger}$	
Recently back in work, ever stopped (versus not working, never worked)				5.03*	
Prolonged employment, ever stopped (versus not working, never worked)				5.72**	
Working, never stopped (versus not working, never worked)				3.05**	
Log-likelihood	-808.7	-786.3	-782.7	−782.7	
$-2 \times \Delta \log$ -likelihood		44.8	7.2	0.0	
$\Delta df$		3	2	1	

<sup>\*\*</sup> *p*<0.01.

support the economic independence hypothesis. First, educational attainment did exert the expected impact on their likelihood of divorce, although the effect was not linear. Women who had completed at least higher secondary education for girls (MMS) were found to be more than 2.5 times as likely to divorce as women who had achieved less than this level of education. No differences in the likelihood of

<sup>\*</sup> *p*<0.05.

<sup>†</sup> p < 0.10.

divorce were found among women with low and intermediate levels of education, however. Second, Model 2 revealed that women's labor-force participation had the expected positive impact on their likelihood of divorce. Women who were in paid employment were 3 times more likely to divorce than those who were not employed. Both level of education and labor-force participation were influential factors. Therefore differences in the likelihood of divorce because of differences in educational level cannot be entirely attributed to highly educated women having a relatively greater tendency to be in paid employment. Non-working, highly educated women also seemed more inclined to seek divorces.

The key importance of educational attainment and labor-force participation in accounting for the likelihood of divorce among these cohorts of women also becomes apparent from the change in the impact of other variables between Models 1 and 2. The impact of many of these variables diminished considerably when educational attainment and labor-force participation were included in the analysis. This was true for the degree of urbanization of one's place of birth, father's level of education, early marriage, and having children living at home. Even the impact of birth cohort and mother's employment ceased to be statistically significant after level of education and labor-force participation were incorporated into the analysis. Educational attainment and labor-force participation were obviously important intermediate variables in explaining the impact of other relevant variables. For instance, the higher the educational level of the fathers of our respondents, the more likely these women were to experience a divorce. Half of this effect, however, can be explained by the fact that women who had highly educated parents were more likely to be highly educated themselves and to be gainfully employed than women who came from a low educational background.

The next issue to be addressed is whether women's current labor-force participation, or having labor-market experience as such, was the most important determinant of divorce risks. The results in Model 3 show that both aspects seemed to be important. Women who had worked at some point during their marriage but had then stopped were found to be somewhat more likely to divorce than those who had never worked since marrying. The difference between these two groups was not statistically significant (p<0.10), however. Working women who had previously interrupted their careers were more likely to divorce than those who had not taken any career breaks (p<0.03). On the other hand, current employment proved to be important as well. Women currently working, both with and without former interruptions in their labor-market careers, had higher divorce risks than those not working.

Since women who had gone back to work after a career break were extremely likely to divorce, they may have anticipated divorce at some point in the future (Poortman, 2002, p. 83; Willekens, 1991, pp. 14–15). To assess the plausibility of this alternative explanation, we subdivided the working women who had taken a career break—the so-called returners—into two groups: those who had only been back in paid employment for 1 year and those who had been back in paid employment for several years. As Model 4 shows, there was no significant difference between the two groups. The previously observed impact of employment on the likelihood of divorce cannot therefore be attributed to anticipatory behavior by women who were in an unhappy marriage.

# 5. Summary and discussion

Women's increased economic independence has often been cited as the primary reason behind the rising divorce rates during the 20th century. This hypothesis, however, has only been tested on relatively young cohorts. Therefore, it remains unclear whether economic independence played an important role

in divorce decisions in cohorts of women for whom divorce was still a rare event. To fill this gap in our historical knowledge, this article has focused on the impact of economic independence among Dutch women born between 1903 and 1937. In contrast to younger cohorts of women, these older cohorts were unable to rely on the safety net provided by the welfare system and therefore economic independence might be a key prerequisite for divorce for this group in particular.

The results provide conclusive support for the economic independence hypothesis. First, level of education was found to play an important part in these women's decisions to divorce. The likelihood of divorce, however, did not increase linearly with the level of education they had achieved. Higher secondary education (MMS) was the cut-off point: women who had achieved at least this level of education were almost 2.5 times as likely to divorce as women who had completed a lower level of education. Second, the women's likelihood of divorce was strongly influenced by whether they were in paid employment: those in paid employment were more than 3 times as likely to end their marriages. Employment had a major impact, particularly bearing in mind that household income was not controlled for. When married women went out to work, their economic dependence on their partners not only decreased, but the family's income also increased. In contrast to the impact of employment, this income effect reduced the likelihood of divorce (Cherlin, 1979; Greenstein, 1990; Janssen, Poortman, de Graaf, & Kalmijn, 1998).

Within the category of working women, the impact of employment on the likelihood of divorce was even more pronounced among women who had interrupted their careers than among those who had remained continuously employed. This difference cannot be attributed to anticipatory behavior on the part of women in unhappy marriages in the sense that they might have returned to work in anticipation of possibly divorcing in the future. After all, no major difference in the likelihood of divorce was found between women who had only been back in work for 1 year and those who had been back in work for several years. Therefore, a different explanation is needed. Perhaps most of the women who returned to the labor market reentered because they were no longer happy with the traditional division of labor within their marriages. Working reduced women's dependence on their husbands. But reentering the labor force also necessitated a reorganization of the couple's married life—sometimes radically. In marriages where the woman had always worked, the husband and wife would have established a modus vivendi early on to reconcile both their career aspirations. This was something that returners had to "renegotiate". If the couples were unable to do this to their mutual satisfaction, divorce became an option.

There was still another way in which this study reveals that educational attainment and labor-force participation played a key role in the decision to divorce of this older generation of women. Educational attainment and labor-force participation mediated the impact of events and experiences that occurred earlier in the life courses of these women. For example, women born in more urbanized regions, those who came from reasonably well-off backgrounds, and those whose mothers had worked were more likely to achieve a high level of education and to be in paid employment and, partly as a result of this, to be more likely to divorce.

Some questions, however, could not be answered by this study. In addition, the results raise new questions. For example, the reason why having a job increased the likelihood of divorce remains unclear. Was it because working women were less financially dependent on their partners, or could it also have been because women who worked had different attitudes to family and relationships than non-working women? Another interesting issue would be whether the effects found in this study would also apply to even older cohorts of women, but it will probably be impossible to answer it satisfactorily. Life history

data of good quality would be required, and it would be extremely difficult to collect for cohorts born before the beginning of the 20th century.

## Acknowledgments

This article is based on data derived from a survey of the living arrangements and social networks of older adults. The departments of Sociology and Social Gerontology and of the Methods and Techniques for Socio-Scientific Research of the Free University of Amsterdam and the Netherlands Interdisciplinary Demographic Institute (NIDI) carried out this joint initiative. It was partly funded by the Netherlands Program for the Promotion of Research on Older Adults (NESTOR). Research for this article was partly funded by the Dutch Ministry of Health, Welfare, and Sport. The authors would like to thank the members of the seminar *Divorce in the Netherlands* for their comments on an earlier version.

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