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Does the cohort approach say more about convergence in divorce trends? The case of post-socialist Czechia and Slovakia after dissolution in 1993

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Abstract

This study investigates whether convergence or divergence in divorce trends occurred in two countries with common history and legislative framework measured both by transversal and cohort methods and tries to predict some short-term trends as well. Slovakia and Czechia are countries with a common history and divorce legislation, in which the post-1989 social transformation began at the same time as the start of independent development. It is therefore possible to compare retrospectively the transformation of marital dissolution over three decades in the context of social transformation as well as the development in separate state units. Despite the attractiveness of research so focused, there are surprisingly few comprehensive comparative studies of marital dissolution in such countries. Several transversal and longitudinal indicators have been calculated to compare both countries in the last three decades. A synthetic index of differentiation has been applied then. The Arima model for prediction has been applied and qualitative assumptions on divorce factors are discussed, too. Seemingly clear differences and developmental patterns in the intensity of divorce measured in a transversal way are not as evident in the case of longitudinal analysis of marriage cohorts. The reality of the transformation of family dissolution is simply more complex; the factor of the changing timing of the process – the duration of a marriage – also comes into play and cohort analysis is essential in discovering the changing divorce patterns.

Keywords: Divorce, Czechia, Slovakia, Longitudinal, Transversal

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1. Introduction

Despite the existence of a broad methodological apparatus in demography, divorce is studied less frequently, especially when compared to marriage. There is a relatively large number of studies, particularly from the USA, that focus on the development or factors of divorce from a longitudinal perspective, though most studies approach this data transversally. Deep knowledge of the development of the divorce rate in terms of its timing, structure and intergenerational changes is key for understanding the factors or predictors that affect it. Factors such as age at the time of marriage, economic development, the length and frequency of premarital cohabitation, religion, race or other demographic and sociological traits are commonly discussed in research (Lipman-Blumen 1975; South 1985; Booth & Edwards 1985; Charles & Stephens 2004; Rainer & Smith 2010; Amato 2010; Rotz 2012; Cohen 2014; Milosh 2014; Farzanegan & Gholipour 2016; Boertien & Härkönen 2018; Cohen 2019; Zahl-Olsen 2022). As Amato (2010) or Chiriboga & Catron (1991) note in their work, for example, not only economic development, demographic and the sociological characteristics of individuals affect the stability of marriage, but also events that occur during the marriage. These can cause a change in the life path of men and women, which can ultimately lead to divorce (Chiriboga & Catron 1991). Domestic violence, infidelity, frequent conflicts, many perceived problems in the relationship, an indifferent approach to marriage or a low level of love and trust between partners are often mentioned as direct causes of divorce (Amato 2010; Guminski Cleek & Pearson 1985; Eyo 2018; Canales 2021). The departure of children from the common household of parents or the absence of children in common can also reduce constraints to a decision to divorce, particularly in the case of already disrupted marriages (Lin et al. 2016). Despite the significant efforts of authors to determine the predictors of the divorce rate and to quantify their impact, the results are not fully clear, which is also seen in the case of Czechia and Slovakia.

Czechia and Slovakia are suitable as research case studies for family dissolution, as they developed in a single state unit, in the same legislative environment. After 1993, the year the common state split into two independent countries, certain processes of divergence occurred along with rapid demographic and cultural changes. There is a lack of data on the structure of marriage cohorts in both countries; therefore, this study is limited only to the analysis and comparison of the development of the divorce rate of selected marriage cohorts. The analysis of the timing and quantum of divorce in the selected marriage cohorts indicates a gradual transformation of divorce behaviour over the roughly three decades since the division of the common state. The analysis of family dissolution relates to the period from 1992 to 2020, which was a period of drastic post-socialist societal changes. At the same time, 1993 is the beginning of the stage of independent development of these countries. Up to this year, they had developed under the same legislative environment; after 1993, divergence also took place in terms of divorce law. The 1990s also meant an increase in social uncertainty in both countries, a sharp increase in what until then was virtually zero unemployment, and a change in the intensity and timing of reproduction. The changes in demographic trends can also be labelled as a period of catching up with the demographic trends of

Western Europe, a process that is still continuing in both countries up to the present. It should be added, however, that this "catching up" with demographic trends is taking place differently in Czechia and Slovakia. The analysis ends in 2020 specifically to eliminate the disruptive impact of the COVID-19 pandemic. Several studies have examined the impact of the pandemic (e.g. Settersten et al. 2020; Garajová & Bleha 2022), but this issue is beyond the scope of this study.

The primary research objective is to compare the two countries in two ways, that is, in a transversal and longitudinal way, as explained later. In the countries of the former Eastern bloc, works focused on comparing the results of a transversal and longitudinal view of the divorce rate are truly rare (e.g. Zeman 2003; Šprocha 2021). Although comparing the divorce rate of two countries developing over four decades together and then decades separately in a new social order has interesting research potential, such studies are also surprisingly very rare, although some do exist (e.g. Zeman 2003; Garajová 2021; Garajová 2022). The same also applies to the countries of the former Yugoslavia and the former Soviet Union (e.g. Philipov & Dorbritz 2003; Coleman 2013; Härkönen, Billingsley & Hornung 2020).

The research hypothesis is that after 1993 certain diverging trends were manifested in family dissolution in the countries joined together up to then, and these should be demonstrable in a transversal and cohort manner, despite the fact that even before – in the common state – there were clear differences in family behaviour generated by the different religious, educational or ethnic structures (e.g. Pavlík et al. 2002; Langhamrova et al. 2014; Fiala et al. 2018; Garajová 2022). These differences have an older and deeper background. The Hajnal line already indicated this in the case of marriage, when its border ran between Czechia and Slovakia (Hajnal 1965).

The second research task has predictive essence. There are rare studies that predict the future development of divorce rates, not to speak of more detailed indicators of the divorce rate associated with its tempo. The work of Wolfinger (2018) or Zahl-Olsen (2022) can be presented as examples. We attempt here to make a projection of future development based on statistical methods and in parallel to postulate some qualitative hypotheses regarding future development based on previous analysis and recent data.

2. Data and methods

The data used in the analysis come from various sources. The Slovak data came from the Demographic Research Centre and the Statistical Office of the Slovak Republic, while the Czech data was from the Czech Statistical Office. Some of the data used are not publicly accessible, some we got on direct request. Data from both countries from the period 1992 to 2020 are well comparable, despite modifications to the data collection methodology. This is also the reason for the choice of the mentioned period.

We use transversal and longitudinal indicators for the divorce rate. Transversal data are annual throughout cohorts, whereas longitudinal data study the marriage cohorts (people married in respective year or period) separately. From the many transversal indicators available, the indicators

selected were the general divorce rate, or Refined Divorce Rate (RDR), the Age-Sex-Specific Divorce Rate calculated per persons living in marriage, and finally the Divorce Rate According to Marriage Duration. The reason for selecting these measures was their ability to express the development of the divorce rate in terms of persons exposed to the risk of divorce, while also pointing out structural changes in the divorce rate in selected time periods. We calculated transversal rates for the time periods 1992 – 1994, 2000 – 2002, 2010 – 2012, 2017 – 2019 and 2020. The year 2020 was calculated separately, since it is the first year of the start of the pandemic.

$$\text{Refined Divorce Rate (RDR)} = \frac{D}{P_{mar}^{f,m}} * 1000 \quad (1)$$

where

D – is the number of divorces,
$P_{mar}^{f,m}$ – is the number of married females or males.

We calculated this rate annually for the period from 1992 to 2020.

$$\text{Age-Sex-Specific Divorce Rate (ASDR)} = \mu_x = \frac{D_x^{f,m}}{P_{mar\,x}^{f,m}} \quad (2)$$

where

$D_x^{f,m}$ – refers to the number of divorces of females/males x age in a year,
$P_{mar\,x}^{f,m}$ – refers of the number of married females/males x age at the middle of the year. The rate was calculated per 1 person.

$$\text{Divorce Rate According to Marriage Duration (DRAMD)} = \frac{D_i}{\frac{M_i - M_{i-1}}{2}} \quad (3)$$

where

D_i – is the number of divorces in a specific marriage duration (i),

$\frac{M_i - M_{i-1}}{2}$ – represents the average number of the marriages with the same duration (i). The rate was calculated per 1 person (Siegel & Swanson 2004).

Two indicators of the dynamics of the cohort divorce rate were calculated from the data on marriage cohorts. These were the cohort divorce rate and the share of lasting marriages based on the duration of the marriage cohorts. Both indicators were calculated for the averages of the marriage cohorts 1992 – 1994, 2000 – 2002 and 2010 – 2012 in the same way as in the case of transversal indicators.

Cohort Divorce Rate $CDR^{x}_{x+i} = \frac{D^{x}_{i+1}}{C_x} * 100$ (4)

where

x – refers to the specific marriage cohort that is gradually divorcing,
D^{x}_{i+1} – refers to the number of divorces of the same marriage cohort x, which were divorced in a year,
C_x – refers to marriages C in the same marriage cohort x.
The indicator expresses how many divorces occur per 100 marriages in one marriage cohort during its duration, in the absence of migration and mortality.

Proportion of Lasting Marriages by Duration of Marriage Cohorts (PLMDMC)

$PLMDMC = \frac{C_x}{C_{x+i}} * 100$ (The Result is in %) (5)

where

C_x – refers to marriages C in a specific marriage cohort x,
C_{x+1} – refers to lasting marriages C in the same cohort x in year i.

We also applied the differentiation index to the age-specific divorce rates of men and women, the divorce rate based on the length of marriage and the cohort divorce rate, so that we could compare the differences between countries in a more synthethic way. We calculated the index in the following way:

Index of differentiation (ID) = $\frac{D_{x/i}}{\overline{DCSK}_{x/i}} * 100 - 100$ (in %)
(6)

where
$D_{x/i}$ – compared indicator

$\overline{DCSK}_{x/i}$ – average value for Czechoslovakia. By subtracting the number 100, we get a percentage of the increase/decrease of the rate versus the average value.

We compared the calculated country indices as follows:
$ID_{SK} - ID_{cz}$ (in %) (7)

In relation to the prediction, some methods suitable for the extrapolation of the curves provided by the R Studio program were applied. We first applied simple methods of forecasting developmental

trends, such as MEAN, NAIVE, RWF (Random Walk Forecast), ETS (Exponential smoothing) or Holt's exponential smoothing, to the cohort divorce rate. Finally, the ARIMA model was used. We first applied an automatic ARIMA model to the data; we then adjusted the model based on the results of Time plot, ACF, PACF and residual control. Furthermore, we tracked the AIC statistic of the resulting ARIMA model. We always selected from several possible models so that the data were stationary, at least approximately normally distributed for the forecast errors, and the AIC was the lowest among the models. The ARIMA model results for the individual cohort divorce rates likely correspond most closely to the possible real future trend, in contrast to the simpler forecasting methods tried above (Hyndman, & Khandakar 2008; Coghlan 2010; Bora 2021).
The non-seasonal ARIMA (p,d,q) model can be described using a system of equations as follows:

$$\hat{y}_t = c + \varphi_1 y_{t-1} + \varphi_2 y_{t-2} + \cdots + \varphi_p y_{t-p} + \varepsilon_t \quad (8)$$

where
p (AR) – regression model with delayed values of y, which we observe up to the p-th time in the past as predictors,
p – the number of delayed observations in the model,
ε – the "white noise" at time t,
c – constant,
ϕ – parameters,
d – the number of non-seasonal differences which are necessary for the stationarity of the trend. The difference increases until the time series is stationary. A stationary time series is a time series whose properties do not depend on the time in which the time series is observed. If d = 0, the time series is stationary, oscillating around one value.

The synthetic index of differentiation used in the last part of the empirical analysis can be written as follows:

B$y_t = y_{t-1}$, B = reverse operator,
n-order difference equation: $y_t^n \ (1 - B)^d y_t$ (9)

q(MA) = the moving average model; the model uses a similar principle to a regression model based on past errors,

$$\hat{y}_t = c + \theta_1 \varepsilon_{t-1} + \theta_2 \varepsilon_{t-2} + \cdots + \theta_q \varepsilon_{t-q} \quad (10)$$

where
ε – the "white noise" at time t,
c – constant
θ – parameters,

We calculate the non-seasonal ARIMA (p,d,q) model through the combination of the equations above (models):
equation:

$$y_t^n = c + \varphi_1 y_{t-1}^n + \varphi_2 y_{t-2}^n + \cdots + \varphi_p y_{t-p}^n + \theta_1 \varepsilon_{t-1} + \theta_2 \varepsilon_{t-2} + \cdots + \theta_q \varepsilon_{t-q} + \varepsilon_t \quad (11)$$

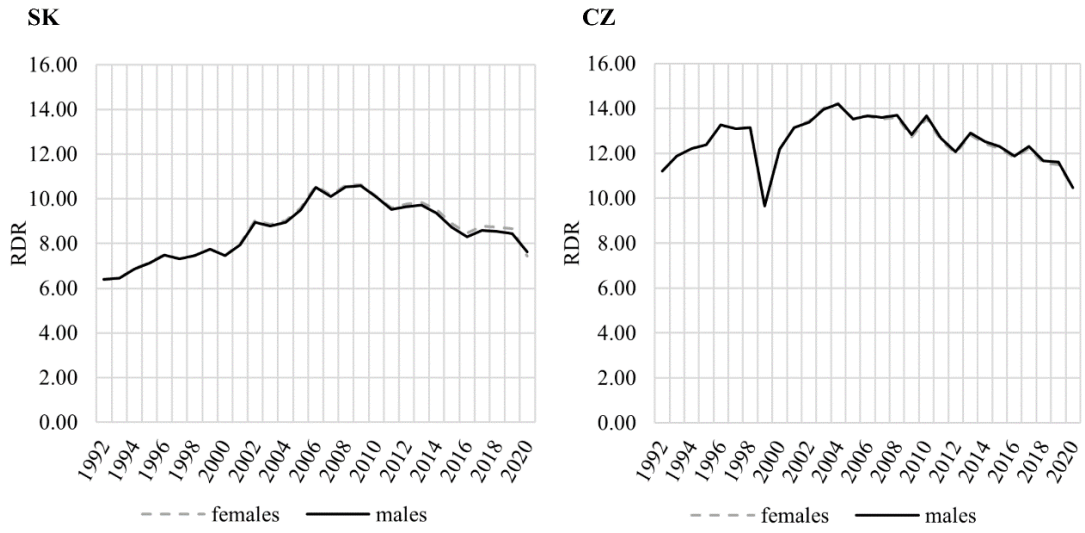
(according to Hyndman & Khandakar 2008; Bora 2021)

3. Results

3.1. Transversal analysis

In the case of the refined divorce rate in both countries, a gradual increase occurred in the general divorce rate from 1992 up to the second half of the first decade of the 21st century (Fig. 1). This is a continuation of the trend of rising divorce rates from the socialist era. Subsequently, a gradual but undeniably significant reduction occurred in the general divorce rate in both countries. The similarity of the curve trajectories is of interest, but it is the only common element of the general divorce trends in Czechia and Slovakia. From the viewpoint of the divorce rate quantum, both countries have been at opposite poles since the beginning of the monitored period. While Slovakia is ranked among European countries with a low quantum of divorce, Czechia has long been among the leaders in Europe. During the monitored period (1992 – 2020), the divorce rate per 1,000 persons living in a marriage in Slovakia was approximately 1.5-times lower than in Czechia. As a consequence of the different tempo of growth and decline in the divorce rates during the monitored period, the curves converged slightly in Czechia and Slovakia. While the general divorce rate in Slovakia in 1992 was approximately 2-times lower than in Czechia, since 2016 the divorce rate calculated per 1,000 married persons in Slovakia is only about 1.4-times lower than in Czechia. A similar trend can be seen in the case of other indicators (Garajová 2021; Garajová 2022). The sudden fall in the divorce rate from 1999 in Czechia calls for separate attention. It is generally linked with the introduction of the new law on the family, Act No. 91/1998 Coll., by which the divorce of marriages existing only “de facto” became simplified in Czechia, while the conditions for divorce of marriages with minor children were also tightened.

Figure 1: Trend of the Refined Divorce Rate in the Period 1992 – 2020 in Slovakia and Czechia



Source: DRC (2022); CZ SO (2022a)

A common feature of the development of age-specific divorce rates per 1 married woman or man in both countries is the continuous sliding of the highest risk of divorce to an older age and its more even distribution. Thus, during the monitored period, the curves in both countries gradually flatten out. The concentration of divorces around the median value remains more pronounced in the age-specific divorce rates in Czechia (Figure 2). In 2020, the most significant risk of divorce was among Slovak men living in marriage in the 40 – 44 years age category, and in the case of married women the highest risk of divorce was in Slovakia in the 20 – 24 years age category, though the risk also remains high up to the 40 – 44 years age category. In Czechia, the highest risk of divorce in all the time periods has been for both sexes between the ages of 20 – 24 years. On the other hand, up to 2020 in Czechia, the risk of divorce among persons older than 40 years and living in marriage clearly shows a rise.

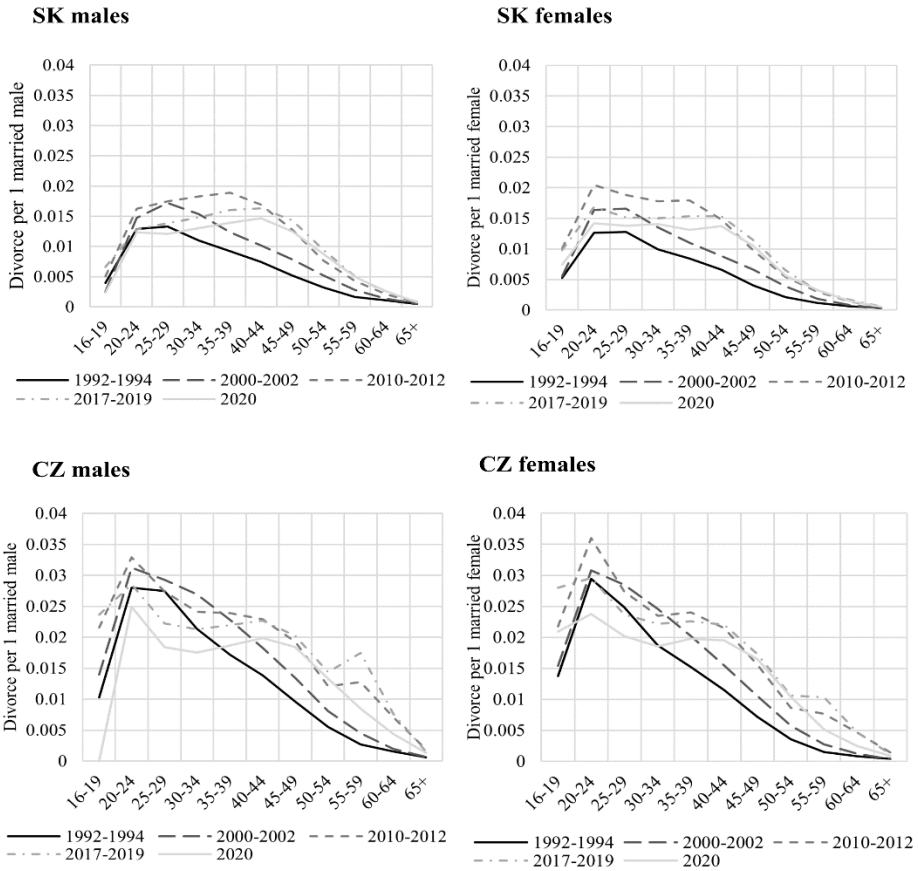
In both Slovakia and Czechia, the divorce rate among people over 50 years old, the so-called "grey divorce", has risen significantly since the 1990s (Lin et al. 2016). In Slovakia between 1992 and 2020 the share of divorces in the over-50 age category tripled for both sexes, and in Czechia the proportion of divorces among those over 50 years old increased more than four-fold in the same period. While from 1992 – 1994 the share of divorced persons in Slovakia over the age of 50 was 8% for men and 5% for women, the same share since 2018 has not fallen below 23% among men and below 15% among women. In Czechia, the proportion of divorces in the over-50 age category for men increased from under 8% in the years 1992 – 1994 to almost 32% in 2018 – 2020, and among Czech women, this increase was from 4.5% in 1992 – 1994 to more than 21% in 2018 – 2020. In view of the gradual rise in the age at first marriage, we assume that the increase in divorces among those over 40 and 50 years old is to a certain extent caused by the higher age profile of divorcees (Šprocha et al. 2021). The second factor is the notable increase in the number of

households of childless couples in both countries that occurred during the monitored period (Šprocha et al. 2014; Miettinen et al. 2015). Though Lin et al. (2016) did not confirm any influence of the so-called of the "empty nest syndrome" on the higher rate of divorce among those over 50, they do specifically note that the absence of common children in the marriage is among the predictors of divorce among persons over 50. They also state that another significant predictor of the divorce rate over the age of 50 is repeated marriages. It is therefore likely that family dissolution in Slovakia and Czechia is acquiring features that were already common in Western Europe in the last decades of the 20th century.

Changes in terms of the risk of divorce based on the duration of the marriage are sizeable. Although the risk of divorce during the whole observed period in both countries is highest in the duration range of 3 to 6 years after the marriage, the amount of this risk varies considerably between time segments. On the one hand, the risk of divorce within 6 years of marriage is constantly falling between individual time segments; on the other hand, the risk of divorce in older marriages is increasing considerably. The concentration of divorce rates around a median value increased during the monitored period in Slovakia (Figure 3).

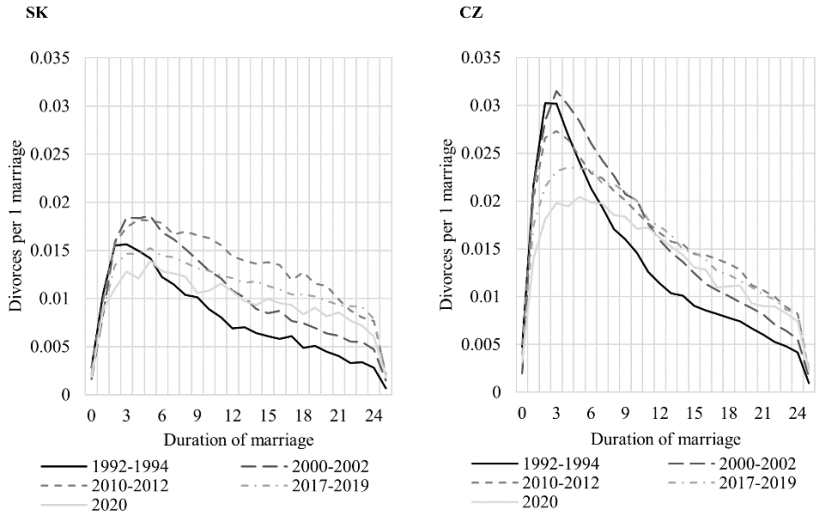
Comparing the shares of divorced couples within 6 years and over 15 years of marriage duration, the differences between the beginning and the end of the observed period are marked. In Slovakia, the share of divorces within the first 6 years of marriage fell from 38% from 1992 – 1994 to just under 26% by 2020. In the previous period, however, from 2017 – 2019, we come across the share of divorces within 6 years at a level that did not surpass 24%. In contrast, the share of divorces after 15 years of marriage in Slovakia increased, from less than 27% to 46.5%. In Czechia, the share of divorcees within 6 years of marriage fell from 43% in 1992 – 1994 to approximately 26% in the years at the end of the monitored period. The share of divorces among marriages of more than 15 years duration in Czechia rose from 27% at the beginning of the monitored period to 43% at the end. The risk of divorce of long-term marriages thus increased more in Slovakia than in Czechia, but long-term marriages are in general becoming more fragile in both countries. There may be several reasons for the ongoing increase in the risk of long-lasting marriages. In the case of Czechia and Slovakia, however, this may only be a process in which the period between the separation of the spouses and the formal divorce is extended. For example, according to the report of the British law firm Divorce Negotiator (2020), in 2020 an increase occurred in the number of filings for divorce, but these were mostly requests from couples who had been separated for several years prior to the divorce.

Figure 2: Trend of the age-specific divorce rate in selected periods



Source: DRC (2022) ; CZ SO (2022a) ; authors' calculations

Figure 3: Trend of the divorce rate according to marriage duration in selected periods



Source: DRC (2022) ; CZ SO (2022 a), authors' calculations

3.2. Cohort analysis

Even in the case of the intensity of divorce among marriage cohorts, a significant difference can be seen between Czechia and Slovakia. The intensity in all three analysed marriage cohorts in Slovakia was at least 1.5-times lower than the values in Czechia.

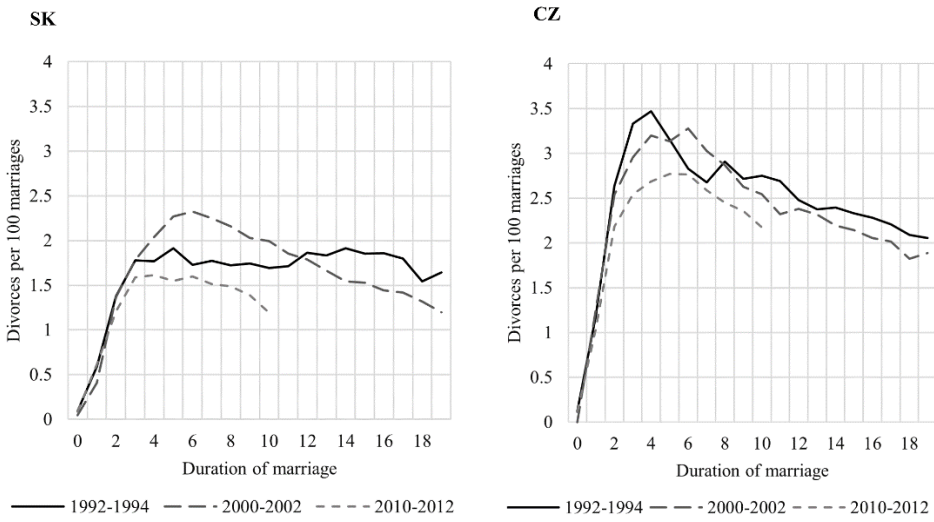
The marriage cohort from 1992 – 1994 in both countries is marked by a significant increase in the divorce rate even in the first years after its creation. While the divorce rate in Czechia begins to decrease 6 years after the origin of the 1992 – 1994 marriage cohort, in Slovakia the divorce rate in this cohort, after an initial increase, remains the same even after not quite 20 years since its origin. The divorce rate of the Slovak 1992 – 1994 marriage cohort thus remains significantly different compared to other monitored Czech and Slovak cohorts. In the case of the first monitored Czech marriage cohort, of interest is that the previously mentioned legislative change in 1998 did not lead to a more significant decline in the divorce rate. It can be state that in both countries the marriage cohorts from the early 1990s are probably the most affected by the increase in the family dissolution rate from the first two decades of the transformation period (Figure 4). In this case a parallel can be seen between the pre-announced termination of the provision of favourable loans for newlyweds, the rise in the marriage rate and subsequently the divorce rate in both countries (Langhamrova et al. 2014). The good accessibility of one's own housing without the necessity of lifelong indebtedness may still be the cause of the relatively high divorce rate in the first observed marriage cohort in both countries. Another reason for the high rate of divorce in the 1992 – 1994 marriage cohort in both countries may be the entry of the generation born in 1973 – 1982 into the marriage market. The demographic behaviour of this specific birth group is associated with the second demographic transition (Sobotka et al. 2003).

According to Hubálovská (2016) and Šprocha (2021), the marriage cohort from the start of the new millennium was also significantly influenced by the increase in the divorce rate in the first two decades of the transformation period in Czechia and Slovakia. The divorce rate of the 2000 – 2002 marriage cohort shows a similar course in both countries. In the first phase, there is a sharp rise in the divorce rate, which is followed almost immediately by a decrease. The Slovak 2000 – 2002 marriage cohort, especially in the first years from the cohort's inception, significantly exceeds the dynamics of the divorce rate of the previous marriage cohort. It is probably expressing the effects of the transformation period, including high unemployment, which reached 20% at the turn of the millennium. Though the shares of non-divorced marriages in both cohorts evened out in the years that followed, the marriage cohort from the beginning of the millennium still shows a higher proportion of divorced marriages even after not quite twenty years in duration. This, however, cannot be stated in the case of the Czech marriage cohort from the start of the millennium, in which the dynamics of the divorce rate remain roughly the same as those of the cohort from the beginning of the 1990s. The Czech 2000 – 2002 marriage cohort, in contrast to the Slovak one, is characterised by a slightly higher share of preserved marriages at the end of the monitored period compared to the marriage cohort from the beginning of the 1990s (Figure 5). We assume that the divorce rate of the 2000 – 2002 marriage cohorts of Czechia and Slovakia was

largely affected by the previously mentioned entry of those born in the years 1973 – 1982 into the marriage market, as a significant portion of this group of people reached the age where the probability of marriage is the highest around the year 2000. In addition to this being a large group, it is also the first teenage generation under the new regime. As Sobotka et al. (2003) indicate, this change contributed to a great extent to the different demographic behaviour of the generation born in 1973 – 1982 in Czechia and Slovakia in particular.

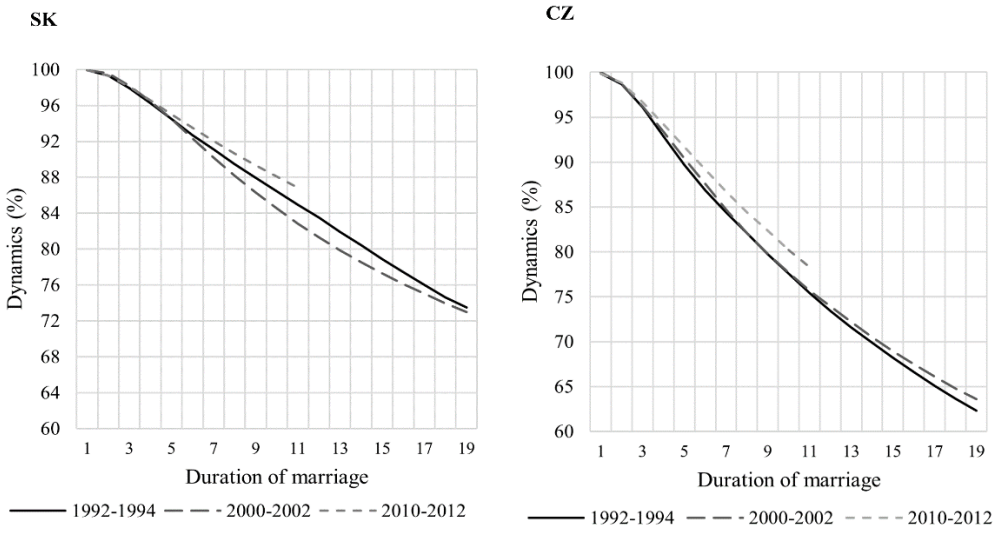
The third marriage cohort in both countries was divorced with the lowest quantum during the monitored period. After an initial rise in the divorce rate, a gradual decrease also occurred in the divorce rate among this marriage cohort in both countries, while the tempo of this decrease is notably slow in both countries. We have thus far observed a more piecemeal decline in Slovakia. The period after 2010 is typified by a gradual fall in the divorce rate in both countries and overall stabilisation. Ever smaller birth cohorts are arriving on the marriage market. Up to 2012 a significant change also occurred in the ownership structure of housing, when in both countries the possibility of living in state or municipal-owned or company flats was significantly lacking (Hogenova 2020; Ministry of Transport of the Slovak Republic 2020; MMR ČR 2021). To a significant measure, this limits the availability of housing for young families or for persons after a divorce, since rental and social housing seem to be among the most common choices of people after a divorce (Mikolai & Kulu 2017; Mikolai, Kulu & Mulder 2020).

Figure 4: The cohort divorce rate in selected periods



Source: SO SR 2022; CZ SO (2022a,b), authors' calculations

Figure 5: The proportion of lasting marriages by duration in marriage cohorts in selected periods



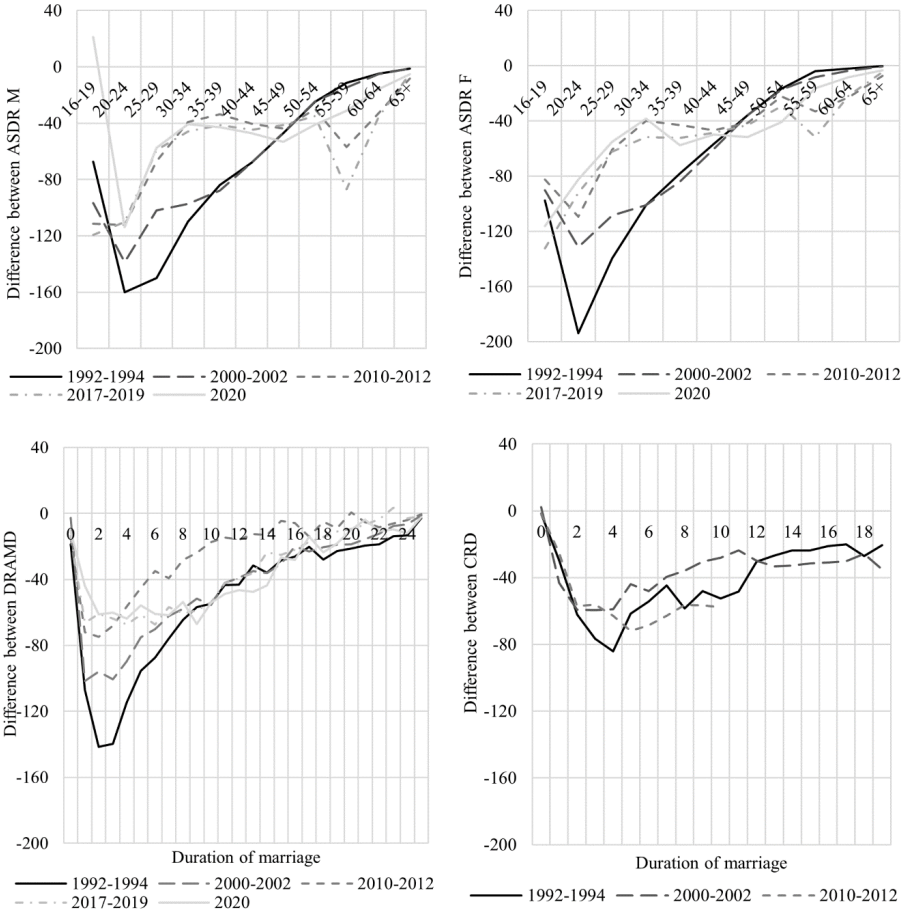
Source: SO SR 2022; CZ SO (2022a,b), authors' calculation

A synthetic view of the difference between countries over time (Fig. 6) indicates that the differences have decreased over time in the case of transversal indicators. The differences between the rates in both countries for both of the mentioned transversal indicators were most evident in the 1990s. These were the categories with the highest probability of divorce, and in the case of age-specific divorce rates in the 1990s, this concerned the categories between 20 and 34 completed years of age. If we look at the divorce rate according to length of marriage at the time of divorce, the probability of divorce in the 1990s was highest between 2 and 6 years of completed marriage. Then, with both transversal indicators, the differences in the categories where the probability of divorce was once highest in the 1990s decreases in each subsequent time segment. With age-specific divorce rates, the differences between countries in age categories over 50 years of age began to grow across the time segments, and a significant difference is also found between genders. For men, the differences between Czechia and Slovakia are significantly higher.

An important finding is that the differences in the divorce rate of individual marriage cohorts between countries showed different development using the transversal data. The reduction of disparities is not nearly as clear-cut in the case of a longitudinal approach. Although the differences between the Slovak and Czech divorce rates slightly decreased between the first and second monitored marriage cohorts, this was only a part of the period of existence of these cohorts. The differences then increase after 12 years of the duration of the first and second observed marriage cohorts. After 18 years, the differences again decrease and does so below the level of the difference observed in the first marriage cohort. In the third monitored marriage cohort, the differences between the Czech and Slovak divorce rates are roughly at a similar level as in the first marriage cohort. A slight decrease was recorded in the differences in divorce rates in the third marriage

cohort compared to the first marriage cohort only in the duration of the cohorts 2 to 4 years after marriage.

Figure 6: Synthetic index of differentiation (comparison SK-value minus CZ-value)



Source: SO SR 2022; CZ SO (2022a,b), authors' calculation

4. Projection and assumptions on future factors

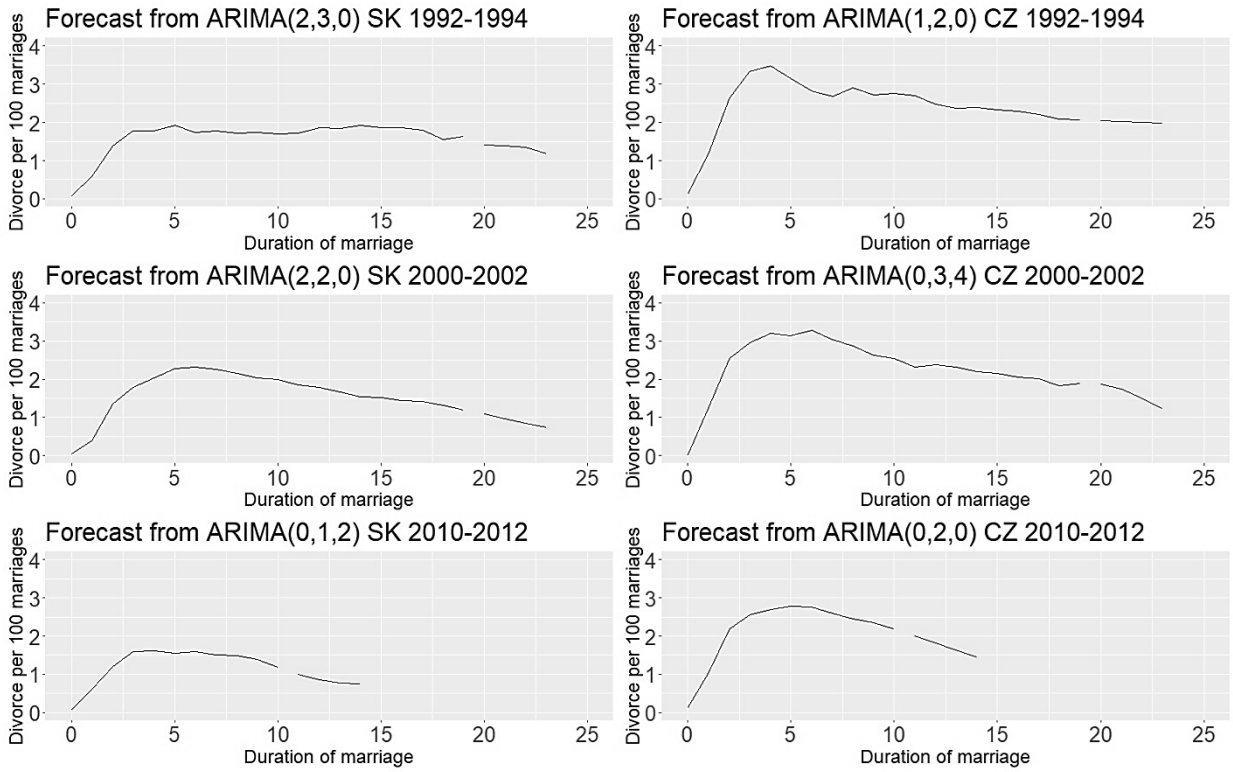
According to the ARIMA model, the divorce rate in the monitored marriage cohorts should gradually decrease in the next four years (Figure 6). The development of the divorce rate in the 1992 – 1994 Slovak marriage cohort is very similar to that of the 1990 Slovak marriage cohort, in which the divorce rate decreased considerably after 20 years of marriage. The divorce rate thus would also begin to decrease significantly in the 1992 – 1994 Slovak marriage cohort. In the case of the 1992 – 1994 Czech marriage cohort, we assume a more step-by-step decrease, as is indicated by the development of the divorce rate in the previous Czech marriage cohorts of 1979/1980 and 1989/1990 analysed in the work of Hubálovská (2016). It depends also on the future educational composition because of education-based differentials (Fučík 2023).

We also assume that the fall in the divorce rate will gradually accelerate even in the 2000 – 2002 marriage cohorts in both Czechia and Slovakia. The course of the divorce rate in the 2000 – 2002 Slovak marriage cohort is largely similar to that of the divorce rate of the Slovak marriage cohort from 1980, where an intermittent decrease in the divorce rate is expected to occur. According to the transversal data analysed, the fall in the divorce rate in the Czech and Slovak marriage cohorts could be slowed by the aging of divorcees, which largely affects the probability of divorce for people over 40 or 50 years of age.

After three decades, family dissolution is now an accepted form of resolving problems between couples, although there are, of course, still differences across social or religious groups, or regions. This is why, the "existential" factors mentioned below play a significant role. In the conditions of Czechia and Slovakia, we consider the affordability of one's own or rented housing for individuals or women with minor children to be important, as this can greatly influence the decision to end a dysfunctional marriage with a divorce. Even though opinions on the issue of housing prices in relation to the divorce rate differ (Rainer & Smith 2010; Milosh 2014; Farzanegan & Gholipour 2016; Mikolai & Kulu 2017; Mikolai et al. 2020), we are more inclined to the consideration that after a divorce a reduction of income occurs on both sides; therefore, a divorce may mean temporary or even permanent financial problems for one of the partners. The situation on the market with rental flats in both countries is not favourable, and in 2022 the availability of housing begins to drop in connection with the growth of interest rates. This is also reflected in the falling interest in mortgages and the overall cooling of the real estate market. Furthermore, prices are high for commercial rents and availability low for social housing and rental flats, and it is difficult to anticipate how long such unfavourable development will last.

We also consider socioeconomic development, price levels and the labour market, in particular, to be important. If there is a rise in instability in the labour market, the divorce rate could, at least in the short term, decrease faster in the various marriage cohorts. On the other hand, several authors hold the view that unemployment is one of the factors that can contribute, under certain conditions, to an increase in the family dissolution rate, and societal changes due to economic crisis or war could also largely drive changes in cohort marriage rates (Lipman-Blumen 1975; South 1985; Charles & Stephens 2004; Cohen 2014). Both examined countries, but Slovakia in particular, have significant regional disparities (Korec 2014). The reduction of regional differences is slow and may contribute to the preservation of socio-pathological phenomena affecting the intensity of divorce.

Figure 7: ARIMA projection of the cohort divorce in selected years



Source: SO SR 2022; CZ SO (2022a,b), authors' calculations

5. Conclusion

In the first monitored decade of the period 1992 – 2020, a gradual increase is observed in the general divorce rate in both Czechia and Slovakia. The rise in the divorce intensity remained until the middle of the first decade of the new millennium. Subsequently, up to 2020, a constant decrease is observed in the divorce rate in both countries. This happened in parallel with the increase in the marriage rate. At the same time, the divorce rate decreases earlier and at a more significant rate in Czechia than in Slovakia, and it is this aspect that contributes to the converging of the intensity of divorce in both countries. At the same time, during the monitored period from 1992 to 2020, a significant aging of the age profile of divorcees is seen in both countries based on the age-specific rates of divorce, and there is also a constant increase in the probability of divorce in older marriages in both countries.

Although the results of the transversal analysis are relatively unambiguous, in the analysis of selected cohorts the results are not crystal-clear. An important finding is that the differences in the divorce rates of individual marriage cohorts between the countries developed differently as compared to transversal data. With the longitudinal approach the reduction of differences is not

nearly as clear-cut. Although differences between the Slovak and Czech divorce rates decreased between the first and second monitored marriage cohorts, this was only part of the period of existence of these cohorts. Similarly, as with fertility research, with divorce rates it also seems greatly important to combine transversal and longitudinal approaches.

Based on the forecast, we expect to see a decrease in the divorce rate in all monitored marriage cohorts in the next four years. The dynamics of this decrease will depend on the specific marriage cohort and input factors. We expect that in the coming four years, the dynamics of the decline in the family dissolution rate will increase in the first two marriage cohorts in Czechia and Slovakia, and we expect the divorce rate in the last observed marriage cohort to decrease only very slowly in both countries. It seems that despite separate development and certain differences in the legislative framework of divorce proceedings, similarities in the dissolution of families still remain, and there are also several other potential determinants associated with marriage rates, the development of divorce legislation and structural factors related to the growth of individual households. In both countries, more than 40 percent of children are born out of wedlock, although this number has stopped rising in recent years. Marriage has also stabilised. After a significant decline in the 1990s and hitting bottom in the first decade of this millennium, a turnaround occurred, leading to a slight increase in their values.

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