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‘Til Laws Do Us Part? The Impact of Changing Divorce Laws on Divorce Rates in Mexico

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Abstract

The increased prevalence of marital dissolution in Latin America has raised concerns that recently liberalized divorce laws are to blame. Current evidence on the effects of divorce law reform has been conflicting and has yet to address these effects in the context of developing societies. As one of the earlier adopters of liberalized divorce statutes in Latin America, Mexico’s modernization of family civil codes at the state level provides us with a unique opportunity to investigate, in a panel framework, the impact of expanding divorce provisions on divorce rates. Specifically, the law changes we consider include the adoption of domestic violence, separation, and incompatibility as legal causes for divorce and the use of ‘administrative’ divorce to expedite the divorce process. In this paper, we compile data on state level divorce rates and construct the coding for the dates of each state’s divorce law changes between 1990 and 2005. Our difference-in-differences estimates suggest that liberalization of the divorce laws did not have a statistically significant effect on divorce rates and would explain at most 19% of the doubling of Mexico’s divorce rate over this time period. We find that these results are robust to various specifications of the law changes and specifications which allow the effects of the laws to adjust dynamically.

Keywords: Divorce Law, Marital Dissolution, Mexico, Latin America
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I. Introduction

During the 1990s many states in Mexico began to reform their civil codes on divorce by adopting or changing provisions that liberalized a state's divorce law. Legal changes include allowing domestic violence or incompatibility of characters to be a cause for divorce, eliminating the requirement for mutual consent in the case of separation, and enacting procedures that, under certain conditions, grant a divorce within fifteen days of filing. While divorce policies have become increasingly relaxed, the average national divorce rate has nearly doubled during the same time period. Exploiting arguably exogenous state-level divorce law reforms, we use a difference-in-differences identification strategy to investigate whether legislative changes in divorce contributed to the rise in Mexico's divorce rate.

To date, most of the divorce literature has focused on developed countries, such as the United States or European nations. Little is known about the role that divorce law liberalization has played in the rising rate of marital dissolution experienced by some developing countries and in particular, Latin America. Understanding the causes and effects of divorce are of particular interest in the context of Latin America and other developing countries because conditions that men and women face are different from those in developed countries. For example, in developing countries there may be fewer public support programs for abandoned women and children. In addition, there is evidence that women in developing countries often have difficulty enforcing alimony and child support payments from their ex-husbands even if there is a legal right, (Goode, 1993). The opportunities available outside a marriage are quite different in this context and therefore the effects of divorce law changes could be unique as well. If there are negative effects as a result of divorce, the severity could be magnified in developing countries.

In part, analysis of divorce in developing countries has been limited because it is a fairly new phenomenon. Of the few case studies, the primary interest has been on the correlation between divorce and various covariates, such as age at marriage or the difference in age between spouses, (Aghajanian, 1986; Anderson, Hill, & Butler, 1987; Heaton, Cammack & Young, 2001; Trent & South, 1989). Other studies, in particular on Muslim dominant countries, have examined the effect of divorce reform where the direction of legislative changes has been towards making divorce more difficult, (Aghajanian, 1986; Heaton, Cammack & Young, 2001). In the case of Latin America, Mexico has been one of the earlier adopters of divorce law reforms while many of the other Latin American countries are just beginning to make legislative changes, yet there are no studies to our knowledge on the effects of these types of law changes.¹

The advantages of using Mexico as a case study to inform us about the effects of divorce law changes in the developing countries of Latin America are the following. First, divorce laws in Mexico have been determined at the state level, whereas divorce reforms in other Latin American countries have occurred at the national level. Therefore, the variation in timing of law adoption across states allows us to examine the effects of the law changes in a panel framework and thereby eliminating some of the endogeneity issues that arise with using an estimation strategy involving cross-sectional data or a single national time series. Second, in terms of culture, religion, and socio-economic characteristics, Mexico is more representative of other Latin American countries compared to developed countries or even developing societies outside of Latin America and therefore the results in this study maybe applied more broadly. Third, the findings of this analysis are also relevant from a public policy perspective as legislators weigh the costs and benefits of repealing divorce law reforms based on unsubstantiated claims that the

¹ Mexico passed divorce laws in 1917, Uruguay in 1907, Brazil and Colombia in 1977, Argentina in 1954, and Chile in 2004, (Cabella, 2000; Goode, 1993; June, 1982; Plata, 1988; NotiSur, 2004; Wiesner, 1960).

liberalization of divorce has caused marital dissolution to increase.² Opponents of divorce law reforms allege that adopting laws that expedite or facilitate the divorce process increases the number of divorce filings and has negative consequences on family stability³ while others argue that the laws do not facilitate divorce but rather make the process less painful.⁴ Furthermore, this study may shed light on the recent approval of Mexico City's legislature on August 28, 2008 to eliminate all 21 grounds of divorce and institute unilateral divorce.⁵

This paper is organized as follows. First, we provide a background of divorce law changes and the evolution of divorce rates in Mexico, followed by a review of the literature. Then we present the data and estimation methodology in Sections IV and V, respectively. Section VI shows that, using a difference-in-differences approach, changes in divorce laws did not significantly raise divorce rates and that these results are robust to various specifications. Employing an alternative technique, which allows the effects of divorce policy shocks to vary over time, yields consistent findings that divorce law liberalization did not have persistent effects on divorce rates. Section VII discusses the results and conclusion.

² For instance, in Mexico, the states of Jalisco and Coahuila allowed for a type of divorce filing called administrative divorce since the inception of the state's civil code but eliminated it in 1995 and 1977, respectively. The legislators claimed that administrative divorce was raising the number of filings and that Civil Registrars did not have the appropriate training in law to grant divorces. Jalisco and Coahuila reversed the decision in reinstated administrative divorce in 2007 and 2006, respectively.

³ In Peru, the Catholic Church expressed concern that a change in the divorce law towards expediting the process of divorce would lead to the breakdown of the family, <<http://www.aciprensa.com/noticia.php?n=20639>>. After eight years of preparation and with the Chilean Catholic Church as a major opponent of the proposition, the Congress of Chile passed the Law of Civil Matrimony that legalized divorce in May 2004, (Notisur, May 21, 2004).

⁴ El Universal, (June 29, 2007), <www.eluniversal.com.mx>.

⁵ Also known as an "express divorce", this divorce law reform would allow one party to request a divorce after one year of marriage. However, as opponents of the reform argue that this change would potentially have negative effects on women and children, legislators are reviewing it. (El Universal, September 6, 2008). Mexico City is the first entity in Mexico to adopt this law and the second country, after Uruguay, in Latin America. Uruguay passed unilateral divorce laws in 1913, (Cabella, 2000).

II. Background: Divorce Law Reform and Divorce Rates in Mexico

In 1859 Mexico's federal Law of Civil Matrimony followed Church doctrine by allowing only legal separation under grounds that were considered severe, e.g. incurable disease or infidelity. Though legal separation was allowed, the procedure was complex, and establishing a legitimate cause was difficult. In such cases where a legal separation was granted, the parties involved were not allowed to remarry until the death of a spouse.⁶ In 1870, the federal Civil Code permitted legal separation under mutual consent after two years of marriage. However, it established that legal separation did not dissolve the marriage contract and that separation was not allowed after twenty years of marriage or if the woman was 45 years-old or older. It was not until 1917, with the federal Law of Family Relations, that a divorce dissolved the contract of marriage and divorcees were allowed to remarry.

In Mexico, like many Latin American countries, the laws of divorce and family relations are embedded in civil codes. Currently, each of the 31 states and Mexico City has its own laws stipulating the requirements and procedures for obtaining a divorce. The civil code of each state specifies: the entities (Civil Registrar or judicial court) where the divorce should be filed; the types of divorce that may be filed (*administrative* or *judicial*); the causes for divorce effective in each state; and filing requirements. The processing time varies according to the type of divorce. For instance, administrative divorce filings are not permitted in every state, but where allowed, the requirements include mutual consent, not having any children, and proof of mutual agreement on the distribution of assets. An administrative divorce is filed with the Civil Registrar and it is usually granted within 15 to 30 days of filing. On the other hand, a judicial divorce may be *voluntary* (mutual consent) or *necessary* (at-fault) and the outcome of the divorce

⁶ The Civil Code referred to separation of bed and board as "divorce."

must be decided in a judicial court. Costs for divorce filings can also vary across states and municipalities within states. For example, excluding legal fees, the 2008 average cost of filing an administrative divorce was the same as a judicial divorce (1,183 pesos or US\$90) in the state of Baja California, while in the state of Chihuahua it was 3,220 pesos (US\$246) for an administrative divorce and 629 pesos (US\$48) for a judicial divorce filing.⁷ Although filings costs are usually higher for administrative divorces in most states, the total cost of a judicial divorce often exceeds that of an administrative divorce when accounting for legal fees incurred with judicial divorces. For example, in 2006, the cost of an administrative divorce in the state of Nuevo Leon, ranged from US\$400-US\$600 compared to US\$1,200-\$10,000 for a voluntary divorce and US\$3,000-\$30,000 for a necessary divorce.⁸ These costs can become significant when we consider that the 2006 GDP per capita in Mexico was US\$10,000.

While retaining the ‘traditional’ grounds for divorce, many states during the 1990s began adopting additional provisions that liberalized their divorce laws as part of the process to modernize state civil codes.⁹ Reforms include allowing domestic violence or incompatibility of characters as a cause of divorce; relaxing the requirements in the case of separation; and introducing administrative divorce.¹⁰ These provisions are described below.

⁷ “Estadísticas Vitales y Registro Civil en México”, (INEGI, 2008).

⁸ El Norte Newspaper, September 15, 2006.

⁹ Reform of a state’s civil code is initiated by state representatives who present or propose a Hearings Committee to develop, analyze and write the bill. The proposal is then sent to the floor for voting. After approval from the floor, it is sent to the Revisions Committee for review before it becomes law and it is published in the Official Newspaper (Diario Oficial).

¹⁰ For instance, under the old separation laws, only the innocent party could use “abandonment of the home for more than 3 or 6 months without just cause” or “separation for more than 1 year with a just cause” as grounds for divorce. With the new law, either party can now initiate the divorce when the separation lasts at least 2 years—independent of the reason that originated the separation.

- 1) *Domestic violence* (DV): Where applicable, a state's civil code declares that intra-family violence—whether physical or psychological—imposed by a spouse on either the children or the other spouse, with the intent to harm or to humiliate, is grounds for divorce.
- 2) *Incompatibility* (Incomp): Incompatibility of characters may be invoked after a year of marriage by one party.
- 3) *Separation* (Sep): Either spouse may seek divorce if the couple has been separated for more than 2 years, independent of the reason that originated the separation.¹¹
- 4) *Administrative* (Admin): This is a type of divorce filing with a state's Civil Registrar that can expedite the process of divorce within 15 days, in most cases, if the following requirements are satisfied: spouses mutually consent to divorce, there are no children—conceived or dependent—and both parties have agreed on the liquidation of their property.

Divorce law reforms (1)-(3) are additional grounds for divorce that allow one spouse to initiate divorce. If a spouse claims *Domestic Violence* or *Separation* as a cause for divorce, then he or she must go through a judicial process to prove his or her claim. Using *Incompatibility* as justification for divorce, the spouse initiating the divorce unilaterally must also go through the courts. On the other hand, an *Administrative* divorce requires mutual consent and it is filed with the Civil Registrar. In states where both *Incompatibility* and *Administrative* divorce are allowed,

¹¹ In some states, the period of separation begins from the time the law was passed as opposed to the time that the couple has actually been separated, (El Norte Newspaper, 2/5/07).

couples who fulfill the *Administrative* divorce requirements would have an incentive to use *Administrative* divorce because it is fast and relatively inexpensive compared to *Judicial* divorce.

Figure 1 presents divorce rates and adoption of the various reforms since 1993, and suggests a relationship between the increase in divorce rate and divorce law reform. In 1997 less than 10 percent of the states, allowed domestic violence as grounds for divorce, but by 2001 this figure had increased to almost 50 percent. Reform of the separation requirement has followed a similar pattern so that by 2006 over 75 percent of the states had already incorporated this law. Although more than half of the states allowed administrative divorce since the inception of their civil code we do not observe many administrative divorce law reforms until the late 1990s.¹² Coinciding with the passage of divorce legislation, divorce rates have also been increasing. In 1993 there were 0.41 divorces per thousand persons and this figure rose to 0.76 divorces per thousand persons in 2005.¹³

While states were expanding their legal causes for divorce, they also retained their traditional grounds for divorce, such as mutual consent, adultery, mental illness, bigamy, incurable diseases, impotency, illegitimate children, and abandonment or separation of the conjugal home. In 2001-2006, mutual consent accounted for over 70 percent of divorces; while separation or abandonment accounted for 5-10 percent.¹⁴ (See Table 1)

¹² Interestingly, some states eliminated administrative divorce claiming the civil registrar lacked the appropriate training to grant a divorce; meanwhile others eliminated it arguing that it increased the number of divorce filings. (Palabra Newspaper, November 22, 2006) In Jalisco, administrative divorce was in effect since the inception of the civil code. This type of divorce was cancelled in 1995 and reinstated in 2007. In Coahuila, administrative divorce was eliminated in 1977 but approved to be reinstated by the state's congress in 2006.

¹³ The divorce rates in the U.S. between 1993 and 2005 were 4.7 and 3.6 divorces per thousand persons, respectively, Clarke et al. (1993) and Tejada-Vera and Sutton (2008).

¹⁴ The reported causes of the divorce may not necessarily correspond to the underlying reason of a divorce. For instance, there might be situations in which the underlying reason is infidelity and a partner left to go live with another, but the divorcing couples used mutual consent to expedite the process, (Reforma Newspaper, 9/26/04).

Intuitively, even though mutual consent has existed as sufficient justification for divorce beginning in 1917, one might expect these particular divorce law changes to have an affect on divorce rates because they allow divorces to be initiated by one party. Table 1 shows that relative to the other causes for divorce, the proportion of divorce filings listing domestic violence as the cause is slightly over one percent. Domestic abuse, however, is a major public health concern affecting Mexico. Based on household surveys in 2003, approximately 44% percent of women living with a partner reported having been a victim of domestic violence (Angelucci, 2007).¹⁵ When domestic violence is allowed as a reason for divorce, an abused spouse may threaten to use it against the other in order to obtain mutual consent to dissolve the marriage.

In addition, while the majority of divorces are judicial, there has also been a rise in the number of administrative divorce filings over time. This possibly reflects another important trend in Mexico, which is the decline in the national fertility rate from 3.3 to 2.2 live children per woman between 1993 and 2005. A shift in women's fertility decisions may increase the proportion of couples who qualify for an administrative divorce.

III. Divorce Rates, Divorce Law Reform and the Coase Theorem

Assuming perfect information and no bargaining costs, the Coase Theorem (Coase, 1960) predicts that changes in the distribution of property rights should not affect the efficiency of the outcome of bargaining; it will, however, change the distribution of wealth. Becker (1981) and Peters (1986) apply the Coase Theorem to a theoretical model of divorce to examine the relationship between the change in divorce regimes and divorce rates. Their model predicts that a change in divorce regimes in which property rights are redistributed from the spouse who wishes

¹⁵ In the U.S., surveys of households in the 1970s and 1980s indicate approximately 12 percent of wives experienced violence from their husbands, (Stevenson and Wolfers, 2006).

to stay to the spouse who wishes to leave, alter the allocation of property rights and wealth transfers without making spouses more likely to divorce.

Peters (1986) supports her theoretical argument with an empirical analysis using a cross-section of data and finds that divorce rates in the U.S. were not affected by a shift from mutual consent to unilateral divorce. By contrast, Allen (1992) finds that a change in divorce regime increased divorce rates and argues that transaction costs are important for the analysis of divorce.¹⁶ Peters (1992) replies to Allen (1992) with an additional study and concludes that, after controlling for pre-existing differences in state divorce propensities, a shift to unilateral divorce did not affect divorce rates and that Allen's (1992) results suffer from omitted-variable bias.

Later work by Friedberg (1998) improves upon Peters' (1988, 1992) and Allen's (1992) methodology by using a panel of state-level administrative divorce data. Friedberg (1998) controls for state, year and state-specific time trends to address concerns about the endogeneity of divorce reform. Her results suggest that adoption of unilateral divorce laws account for about one-sixth of the increase in the divorce rate since the late 1960s. In recent work, Wolfers (2006) revises Friedberg's (1998) results with a longer panel and a slightly modified methodology. He finds that unilateral divorce laws do not have permanent effects on the divorce rate in the U.S.

Other studies on the relationship between divorce reform and divorce rates in developed countries parallel the U.S. case. Gonzalez and Viitanen (2006) examine a panel of 18 European countries and find that liberalization of divorce laws contributed to the increase in divorce rates across Europe. On the other hand, Coelho and Garoupa (2004) find that changes in divorce regimes that occurred in the 1970s had a minor impact on the divorce rate in Portugal.

¹⁶ Other studies argue that high divorce filing and litigation costs, and informational constraints break the assumptions of the Coase Theorem (Weiss and Willis, 1997; Allen and Brinig, 1998; Smith, 2001). Consequently, changes in divorce regimes do matter for divorce rates.

The work that investigates the changing trends of divorce rates in developing countries has been scant and the few that have been done have focused on finding the correlates of divorce rates using cross-sectional data in most of them. Furthermore, some of these studies examine developing societies characterized by permissive divorce customs in which law reforms subsequently made divorce more difficult (Jones, 1981; Heaton et al. (2001); Aghajania (1986)). These studies also suffer in that they use either small samples or a specific regional area in their country of study and the analyses examine law reforms enacted at the national level. Although there appears to be some state-level variation in divorce law reform in Peninsular Malaysia, Jones (1981) does not analyze the effects of the law changes and instead focuses on a discussion of correlates that may explain the declining divorce rates. Aghajania's (1986) results are limited to discussing a negative association between divorce rates in a Shiraz, an urban city in Iran, and stringent divorce law reform that was passed at the national level. Heaton *et al* (2001) find that changes in divorce legislation at the national level had little impact on divorce rates in Indonesia. Trent and South (1989) investigate the correlates of divorce by combining time series data from 66 developed and developing countries between 1976 and 1982 and estimate the determinants of divorce in a single regression without controlling for cross-country heterogeneity.

This study contributes to the literature by examining panel data in a developing country in which little is known about the role that divorce law liberalization has played in the rising divorce rate. Furthermore, this study exploits variation in the timing of law reforms across states to address the issue of endogeneity that plague some of the previous studies. Similarities in cultural characteristics and demographic trends between Mexico and other countries, particularly those in Latin America, allow us to shed some light on the impact of more liberal divorce laws that are being passed in these countries.

IV. Data

We use state-level panel data drawn from each state's Statistical Yearbook , (*Anuario Estadístico*), which includes all divorces in Mexico from 1993-2005. Ideally, we would like to include more observations before some of the policy changes occurred in order to identify pre-existing state trends. Prior to 1993, a divorce might have been reported to INEGI twice (once by the Civil Registrar and once by the Judicial Court) in the same year or in different years. Since then, Mexico's National Institute of Statistics and Geography (INEGI) has implemented a more consistent data collection methodology.¹⁷ The Statistical Yearbooks also include demographic information on birth rate, mortality, fertility, life expectancy, migration, population growth, and number of marriages. (See Appendix 1 for further description of these variables.)

Information on state divorce laws was collected by examining each state's civil code from its inception to April 2008. We identify when and if a state adopted each of the following divorce law reforms: *Domestic violence* (DV), *Incompatibility* (Incomp), *Separation* (Sep) and *Administrative* (Admin).

V. Estimation Strategy

Our empirical strategy follows the approach taken by Friedberg (1998). Equation (1) models the impact of a divorce law change on divorce rates using a difference-in-difference (DID) technique.

¹⁷ Collection of divorce data began in 1926 and the methodology has changed eight times since then. INEGI reports that this problem was addressed and solved beginning in 1993. For comparison, in 1992, the count of divorces was 51,953 and in 1993 the figure dropped to 32,483. Currently, the Civil Registrar provides a copy of the divorce certificate while the Judicial Courts submit a ledger of divorces that were executed during a given month. Both Civil Registrars and Judicial Courts are now moving to reporting the data electronically.

$$\text{Eq. (1) } DIV_{s,t} = \alpha + \beta LAW_{s,t} + \sum_s \gamma_s S_s + \sum_t \tau_t T_t + \sum_s \phi_s S_s * time_t + \varepsilon_{s,t}$$

$DIV_{s,t}$ is divorce rate for state s in year t , calculated as the number of annual divorces per thousand persons in each state.¹⁸ $LAW_{s,t}$ is an indicator variable equal to one if state s has the particular divorce law of interest in year t and zero otherwise. β is the coefficient that measures the average increase in the divorce rate that is due to the legal change, *ceteris paribus*. Included in the specification are state (S) and year (T) fixed-effects and linear state-specific time trends ($S*time$). State fixed-effects control for state-level time-invariant heterogeneity, while year fixed-effects account for unobserved factors affecting divorce rates that vary over time but affect states homogeneously.

Friedberg (1998) argues that there are unobservable variables changing within a state over time that affect both divorce rates and a state's likelihood to reform divorce laws. Thus, the omission of state-specific trends, which would capture such unobservable determinants, will bias the coefficients. If changes in unobservable factors lead to higher divorce rates and increase the propensity of a state to adopt divorce law reforms, this will bias our results upward. Friedberg's (1998) empirical results indicate that omitting state and time trends creates an upward bias. To allow for unobservable factors influencing divorce rates to vary within a state over time, similar to Friedberg (1998), we include state-specific time trends in our specification.

However, this specification does not control for other demographic characteristics, and it is plausible there are systematic relationships between the trend in divorce rates and the adoption of unilateral divorce laws that are being omitted. For instance, if increases in the female labor

¹⁸ In the literature, there is no consensus on whether to use divorces per 1,000 persons or divorces per 1,000 married persons. Divorces per 1,000 persons is sensitive to age and marital status composition of the population. If the laws are also affecting marriage rates (marriages/1,000 persons) the size of the population seeking divorce will change. Thus, when we use divorces per 1,000 persons our estimates on the impact of divorce law reforms implicitly capture changes in the legal structure and changes in marriage entry or exit.

force participation, not captured by state-specific time trends, lead to increased pressure for reform and raises divorce rates directly then the estimates will be upward bias. Moreover, the problem will be exacerbated if the omitted variable (and hence $\varepsilon_{s,t}$) is serially correlated; if so the standard errors will be inflated.¹⁹ Thus, in our preferred specification, equation (2), we include a matrix, X , of state-level characteristics: real GDP (measured in thousands of pesos with 1993 as the base year), sex-ratio (defined as the population of males divided by the population of females), marriage rate, fertility rate, internal and international migration rates.²⁰ See Appendix 1 for a full description of the demographic controls.

$$\text{Eq. (2) } DIV_{s,t} = \pi + \beta LAW_{s,t} + \sum_s \delta_s S_s + \sum_t \chi_t T_t + \sum_s \lambda_s S_s * time_t + X' \delta + u_{s,t}$$

Real GDP proxies for income level changes, while the fertility rate serves as a proxy for changing attitudes towards marriage and family as well as changing trends in labor force participation or educational attainment. We also include controls for the marriage rate and the sex-ratio to address the possibility that changes in the marriage market affect the likelihood of divorce reform. If marriage rates are correlated with the liberalization of divorce then divorce rates may be affected as well and omitting them would lead to biased estimates. If easier divorce raises the marriage rate, reducing the average quality of marriages because exit costs are lower, our estimates would be biased upward. On the other hand, if liberal divorce laws reduce marriage rates by causing marriages to become less valued, a decline in marriage rates over time would lower the population at risk for divorce. Thus, omitting the marriage rate would lead to a downward bias. In separate analyses we find that the average national marriage rates have been

¹⁹ In our analysis we will use heteroskedastic robust standard errors clustered at the state level.

²⁰ The results are robust to specifications where the control variables include the lagged marriage rate up to 4 years instead of the current marriage rate.

decreasing over time, but the changes in the divorce laws have a positive and insignificant effect on marriage rates.

Controlling for internal and international migration seems important as well since separation of the conjugal home is the second most cited reason for divorce in Mexico, after mutual consent, as described in Table 1. If an increase in migration creates marital instability and influences a state's decision to expand their divorce provisions to include separation as a cause, then omitting migration rates could bias our results upward. Figure 2 illustrates international migration rates measured in per thousands of persons for the selected states between 1990 and 2005. A negative number represents Mexicans migrating to other countries (outflow), whereas positive a numbers indicate migration into Mexico (inflow). This graph demonstrates the dramatic changes in migration that some states in Mexico have experienced relative to others and suggests the importance of controlling for them.

VI. Results

Table 3 shows the DID estimates under different specifications. Our law indicator, $LAW_{s,t}$, is defined to be equal to one if state s at time t has any of the following grounds for divorce: *Domestic Violence*, *Incompatibility*, or *Separation*.²¹ Our estimates suggest that states that expand their grounds for divorce to include *Domestic Violence*, *Incompatibility*, and/or *Separation*, were not more likely to have higher divorce rates compared to states that do not. We find that these results are robust to specifications where we include linear state-trends and

²¹ The variable *Any Law* captures the effect of a state permitting domestic violence, incompatibility, or separation as causes for divorce. Reform of a state's civil code may involve bundling law changes. Table 2 shows the states of Coahuila, Michoacan, and Sinaloa bundled *Domestic Violence* and *Separation* in 1999, 2001 and 1998, respectively. We exclude the provision for administrative divorce because although it expedites the process of divorce, it requires mutual consent while the other law changes do not.

demographic characteristics. In general the coefficients tend to get smaller in magnitude and they remain insignificant when we add linear trends and demographic controls.

In column (1) from Table 3 we find that the estimated coefficient for *Any Law* is positive and statistically significant. The estimates indicate there is a 0.134 increase in divorces per thousand persons for states adopting any of the causes for divorce. Consistent with the literature, our results indicate that omitting state and year fixed-effects results in an upward bias (see column (2)). Comparing the estimates of column (2) to column (3) we find that adding our set of demographic control variables did not affect the results significantly, albeit our estimate for *Any Law* is less precisely estimated. However, given that our estimates do not vary significantly when we add demographic controls provides some evidence in favor of the exogeneity of the laws.

Our preferred specification, equation (2), is shown in column (4) of Table 3. When we add state-specific linear trends our estimate is 0.011 and it is not statistically significant. Moreover, except for the sex-ratio, the demographic controls are not individually statistically significant and all are jointly statistically significant in column (3) but not in column (4). Consistent with other studies, the coefficient on fertility indicates that higher fertility levels are negatively associated with divorce rates while international migration and divorce rates are positively related. Based on our estimate of *Any Law*, we can be 95 percent confident that changes in divorce laws account for no more than 19 percent of the doubling in Mexico's divorce rate that occurred between 1993 and 2005.

A. Robustness

Dynamic Effects

Wolfers (2006) argues that the coefficient on the divorce law obtained in Friedberg's model does not adequately capture the full adjustment process of a policy change. He asserts that adding state-specific time trends will not only pick up the effects of pre-existing state trends but they will also include some of the dynamic effects of the policy reform. In order to analyze the path of adjustment that occurs after a change in legal regime he suggests modifying equation (1) to include dummy variables indicating the number of years that the law has been in effect, as shown in equation (3).

$$\text{Eq. (3)} \quad DIV_{s,t} = \theta + \sum_{k \geq 1} \beta_k LAW_{k,s,t} + \sum_s \eta_s S_s + \sum_t \rho_t T_t + \sum_s \mu_s S_s * Time_t + e_{s,t}$$

In equation (3), LAW_k is a categorical variable equal to one if the law has been in effect for k periods. For example, suppose the law has been in effect for 10 years and we choose to divide this period into five periods, $k = \{1, 2, 3, 4, 5\}$. Thus, LAW_1 is equal one if the new regime has been in effect for 1 or 2 years in state s at time t and zero otherwise. LAW_2 is equal to one if the law has been in effect for 3 or 4 years in state s at time t , and so on. The estimated coefficient on LAW_k identifies the response function of a law change. The advantage of the dynamic effects model is that it will allow us to examine both short-term and long-term effects of broadening allowable grounds for divorce rather than just the average difference before and after the law changes.

Table 4 displays the results for the model in equation (3) which traces the dynamic effects for *Any Law*. In columns (1) to (3) the coefficient for the law change indicator *Any Law* is positive and significant for the first two years that *Domestic Violence*, *Incompatibility*, and/or *Separation* have been in effect. Afterwards it becomes positive and insignificant for 3 to 6 years that the provisions have been implemented. When we add state-specific linear trends our

estimates are not statistically significant and are negative for years 3-10, however the estimate for 1-2 years are very similar to the results in Table 3.

Other Measures of Law Change Indicators

In the first row of Table 5 we obtain the estimated coefficient by substituting the variable $LAW_{s,t}$ in equation (2) with an index, called *Number of Laws*, measuring the permissiveness of each state's divorce laws based on the number of provisions for divorce that it has in year t .²² Therefore this variable can take on values 0 to 3. Again, our estimates are positive and insignificant for the preferred specification, similar to the results in Table 3.

In rows (2) to (5) of Table 5 we show results that capture the effect of a law change for each type of divorce provision run in separate regressions. Though not statistically different from zero, the estimated coefficient on *Domestic Violence* and *Separation* were 0.008 and 0.021, respectively. The results for *Administrative* become negative but insignificant when we include state-specific trends, indicating possible omitted variable bias when they are excluded.

Surprisingly, we find that the coefficient for *Incompatibility* was negative and significant in the specifications of columns (2) to (4) of Table 5. The result was unanticipated because we would expect that adopting incompatibility as grounds for divorce, which allows divorce to be initiated unilaterally, would have a larger impact in liberalizing a state's divorce laws compared to the other types of divorce provisions in our analysis. One explanation is that there are currently only five states that have incompatibility grounds for divorce and that four of these states had adopted this cause before the period of our analysis. If these states had experienced an initial spike in their divorce rates shortly after the divorce reform occurred and subsequently

²²Stetson and Wright (1975).

returned to their steady state level of divorce it may appear that the addition of the incompatibility law caused a decline in the divorce rates.

In analysis not reported in this paper, we run specifications that include a law change indicator for each of type of divorce provision in a single regression. In this model we can examine the effect of adopting a particular divorce law while holding constant the effect of all other types of divorce provision.²³ We find that the results are similar to those found in rows (2) to (5) of Table 5 except in some cases the magnitude of the coefficients became smaller. In Appendix 2 we estimate the models in rows (2) to (5) under the dynamic effects model. The results are consistent with the results in Table 5.

B. Pre-existing Trends

To examine whether there are pre-existing differences we present descriptive statistics of states that had adopted any law reform by 1993 and 2005 and compare them to control states—states that had not adopted any law reform in the given period. Appendix 1 shows that, except for population, the difference between reform and control states with respect to divorce rates, marriage rates, fertility, real GDP, and other demographic characteristics were not statistically significant in 1993. By 2005, reform states differed from control states in having higher divorce rates, but they were similar in the other demographic characteristics.

One might be concerned that rising divorce rates led states to reform the law as this may invalidate our identification strategy. Table 2 shows the average divorce rates by states overtime

²³ For example, in the specification in Table 3 we would not be able to compare the effect of states that adopt the *Domestic Violence* grounds for divorce but already have *Separation* and *Incompatibility* causes to other states that did not adopt the *Domestic Violence* law and also had *Separation* and *Incompatibility*. In a situation where a state has multiple provisions for divorce, a spouse may invoke the domestic violence cause for divorce as a threat against the other spouse to come to an agreement. Perhaps, there is also switching from one cause of divorce to another as states permit additional grounds for divorce. Therefore the coefficient on the law may be different than when we are not able to keep constant all other divorce laws a state may have.

and the year in which states enacted the new laws. In this table we also observe increasing divorce rates, but there is not a clear relationship between high divorce rates and divorce reform. For instance, Chiapas, Guerrero, Oaxaca, Puebla, Tlaxcala, and Veracruz have had below average divorce rates but these states have also been active with respect to divorce reform. By contrast, Baja California, Colima, and Quintana Roo have adopted new grounds for divorce while their divorce rates have been higher than the national average.

Panel A of Figure 3 suggests there are regional differences with respect to divorce rates in 1993, with the states in the north and Yucatan area having higher divorce rates while the southern and central states have low to moderate levels of divorce. However, we do not see any systematic relationship between high levels of divorce in 1993 and the total number of laws adopted by 2005 (see Panel B). We also find that a state's 1993 divorce rate is not correlated with whether a state ever adopts any of the provisions for divorce. The correlation coefficients with significance level in parentheses are: -0.02 (0.90), 0.10 (0.57), -0.17 (0.34), and 0.06 (0.74) for *Separation*, *Administrative*, *Domestic Violence* and *Incompatibility*, respectively. Furthermore, the 1993 divorce rate is not correlated with a state's adoption of the law after 1993. The correlation coefficients and significance level in parentheses for *Separation*, *Administrative*, *Domestic Violence* and *Incompatibility*, respectively, are: 0.20 (0.27), -0.07 (0.69), -0.17 (0.34) and -0.04(0.81).

VII. Discussion and Conclusion

One reason, which may explain why certain types of divorce provisions analyzed in this study may not be drastic enough to have an impact on divorce, is because these types of law reforms have not sufficiently reduced the barriers to divorce. For instance, some states that have

allowed domestic violence to be considered as grounds for divorce have subsequently amended this policy to require evidence of abuse. Aside from the possible reluctance some may feel in claiming domestic violence due to the associated stigmas, in effect, such a policy of requiring proof would make it very difficult to use *Domestic Violence* as a cause for divorce. In the case of *Administrative* divorce, the cost of filing this type of divorce, which varies by state and municipality, may be prohibitive. From Table 1, we can see that there are relatively few divorces which cite domestic violence as the main cause compared to mutual consent and that the majority of divorces are judicial rather than administrative.

Of all the provisions for divorce, *Separation* appears to have a consistently positive effect on divorce rates, although usually statistically insignificant. Within our period of analysis, we observe that compared to the other provisions for divorce *Separation* has the most variation in the timing of law adoption, which may yield a positive correlation with divorce. The effectiveness of the *Separation* law may be dampened in some states that require couples to be separated for at least two years starting when the provision was adopted. Therefore couples who have been separated for two years or more prior to the implementation of the law would have to wait at least an additional two years to begin the divorce process using that particular cause.

The second explanation of what could be driving our results is that our period of analysis does not span far enough into the past to adequately control for trends in the divorce rates before some of the law changes occurred. As was previously discussed concerning the adoption of *Incompatibility* as grounds for divorce, we observe a similar trend for states that have added *Administrative*. More than half of the states that eventually adopt *Administrative* divorce already had it before 1993, so the difference in the average divorce rate between the “reform” and “control” states are close to zero or negative from 1993 to 2005. The divorce rates in the

“control” states tend to be higher than those in the “reform” states during this period which may be due to differences in their divorce rate trajectories. The states in the “reform” group may have experienced an unobserved rise in divorce following the adoption of *Administrative* divorce and have returned to a steady-state level of divorce during our period of analysis, while the “control” states are beginning to experience a relative rise in their divorce rates. We are unable to identify the exact dates in which the *Administrative* law was adopted for most of the states that have had it since the inception of their civil code. Consequently we cannot differentiate among those that have had it longer than others.

Concerning the possible endogeneity of marriage rates, we find that the liberalization of divorce laws (*Any Law*) is positively correlated but statistically insignificant with the marriage rate, even though marriage rates have been declining over this time period.²⁴ This may suggest that if marriage rates are endogenous, the likely bias is that easier divorce raises marriage rates through lowering the average quality of marriages. The composition effect should therefore accentuate any positive effect of the divorce law changes on the probability of divorce given marriage. In a sense, this would strengthen our finding that the law changes had no statistically significant effect on divorce.

Over the past two decades, Mexico has experienced an increase in its divorce rates. Some state legislators have been concerned that broadening allowable grounds for divorce may have contributed to the rise in divorce and have considered repealing some of these laws. More recently, the adoption of unilateral divorce in Mexico City in October of 2008 has raised similar concerns. In this paper we do not find any evidence to support the claim that liberalizing divorce laws caused divorce rates to increase. In some cases we actually find that adoption of certain

²⁴Using marriage rates as the dependent variable in the preferred specification of equation (2) yielded a point estimate of 0.089 with a heteroskedastic robust standard error of 0.14 on the law coefficient.

causes for divorce is correlated with a decrease in divorce rates. The results of this study may be more applicable than those found in the context of developed countries in predicting the magnitude and direction of the effects that divorce law reforms have in other Latin American countries as their laws continue to evolve.

In future research, we will be analyzing individual divorce certificate data that will allow us to include various demographic controls (educational level, age, occupation, number of children, length of marriage, type of divorce filed, who initiated divorce) and examine other outcomes (labor force participation, who gets child custody and/or child support) that are also of interest in further understanding the impact of divorce law reforms in Mexico.

References

- Aghajanian, Akbar, (1986). "Some Notes on Divorce in Iran," *Journal of Marriage and the Family*, 48(4):749-756.
- Allen, D.W., (1992). "Marriage and Divorce: Comment," *American Economic Review*, 82(3): 679-695.
- Allen, D. W. and M. Brining, (1998). "Sex, Property Rights and Divorce," *European Journal of Law Economics*, 5: 211-233.
- Anderson, K., M.A. Hill, and J.S. Butler, (1987). "Age at Marriage in Malaysia," *Journal of Development Economics*, 26: 223-234.
- Angelucci, Manuela, (2007). "Love on the Rocks: Alcohol Abuse and Domestic Violence in Rural Mexico," IZA DP No. 2706.
- Arrom, Silvia M., (1985). "Changes in Mexican Family Law in the Nineteenth Century: The Civil Codes of 1870 and 1884," *Journal of Family History*, 10: 305-317.
- Becker, G. (1981). *A Treatise on the Family*. Harvard University Press: Cambridge.
- Cabella, W. (2000) "La Evolución del Divorcio en Uruguay (1950-1995)", *Notas de Población*, N° 67/68, CEPAL/CELADE, Santiago, Chile.
- Chase-Lansdale, P. L., A.J. Cherlin and K.E. Kiernan, (1995). "The Long-Term Effects of Parental Divorce on the Mental Health of Young Adults: A Development Perspective," *Child Development*, 66(5):1614-1634.
- Clarke, Sally et al., (1993). "Births, Marriages, Divorces, and Deaths for September 1993." *Monthly Vital Statistics Report*; 42(9). Hyattsville, Maryland: National Center for Health Statistics.
- Coase, Ronald H. (1960). "The Problem of Social Cost," *Journal of Law and Economics*, 3: 1-44.
- Coelho, C., and N. Garoupa, "Do Divorce Law Reforms Matter for Divorce Rates? Evidence from Portugal," mimeo, August, 2004.
- Drewianka, Scott, (2008). "Divorce Law and Family Formation," *Journal of Population Economics*, 21:485-503.
- Ellman, I.M. and S.L. Lohr, (1998). "Dissolving the Relationship Between Divorce Laws and Divorce Rates," *International Review of Law and Economics*, 18:341-359.

- Friedberg, L. (1998). "Did Unilateral Divorce Raise Divorce Rates?" *American Economic Review*, 88(3): 608-627.
- Gardner, J. and A. J. Oswald, (2006). "Do Divorcing Couples Become Happier by Breaking Up?" *Journal of The Royal Statistical Society Series A*, 169 (2): 319-336.
- Goode, Williams J., (1993). *World Changes in Divorce Patterns*. New Haven and London: Yale University Press.
- Gonzalez, L., and T. K. Viitanen, "The Effect of Divorce Laws on Divorce Rates in Europe," mimeo, October 2006.
- Gruber, J., (2004). "Is Making Divorce Easier Bad for Children?" The Long-Run Implication of Unilateral Divorce," *Journal of Labor Economics*, 22 (4): 799-833.
- Gruber, J., and M. Hanratty, (1995). "The Labor Market Effects of Introducing National Health Insurance: Evidence from Canada," *Journal of Business Economic Studies*, 13(2): 163-173.
- Guzmán, J. M., Singh, S., Rodriguez, G., & Pantelides, E. P. (Eds.), (1996). *The Fertility Transition in Latin America*. Oxford, UK: Oxford University Press.
- Heaton, T. B., M. Cammack and Larry Young, (2001). "Why is the Divorce Rate Declining in Indonesia?" *Journal of Marriage and the Family*, 63(2): 480-490.
- INEGI, "Marco Metodológico para la Generación de las Estadísticas Vitales: Divorcios," <www.inegi.gob.mx>, 2004.
- Jones, G.W., (1981). "Malay Marriage and Divorce in Peninsular Malaysia: Three Decades of Change" *Population and Development Review*, 7(2): 255-278.
- June E., (1982). "'Women's Place' in Politics and Economics in Brazil since 1964," *Luso-Brazilian Review*, 19(1): 83-91.
- NotiSur, (2004). "Chile: Divorce Legal After Eight Years of Debate," 5/21/2004.
- Orden Jurídico Nacional. "Diarios, Periodicos y Gacetas Oficiales." Sept. 2008. <<http://www.ordenjuridico.gob.mx/>>.
- Palmer, M., (2007). "Transforming Family Law in Post-Deng China: Marriage, Divorce and Reproduction," *The China Quarterly*, 191: 675-695.
- Parrado, E.A., R.M. Zenteno, (2002). "Gender Differences in Union Formation in Mexico: Evidence From Marital Search Models," *Journal of Marriage and Family*, 64:756-773.
- Peters, H. Elizabeth, (1986). "Marriage and Divorce: Informational Constraints and Private Contracting," *American Economic Review*, 76(3): 437-454.

Peters, H. Elizabeth, (1992). "Marriage and Divorce: Reply," *American Economic Review*, 82(3):686-692.

Plata, Maria I., (1988). "Family Law and Family Planning in Colombia," *International Family Planning Perspectives*, Vol. 14(3): 109-111.

Stetson, Dorothy M. and Gerald C. Wright, Jr. (1975). "The Effects of Laws on Divorce in American States," *Journal of Marriage and the Family*, Vol. 37, No.3 (Aug. 1975), pp.537-547.

Stevenson, Betsey, (2008). "Divorce Law and Women's Labor Supply," NBER Working Paper, No. 14346.

Stevenson, Betsey and Justin Wolfers, (2006). "Bargaining in the Shadow of the Law: Divorce Laws and Family Distress," *Quarterly Journal of Economics*, 121(1).

Subsecretaría de Asuntos Jurídicos y Derechos Humanos. "Registro Nacional de Avisos de Testamento: Códigos Civiles." Sept. 2008. <<http://www.testamentos.gob.mx>>.

Summers, Lionel M., (1935). "The Divorce Laws of Mexico," *Law and Contemporary Problems*, 2(3): 310-321.

Suprema Corte de Justicia de la Nación. "Legislación Estatal." Sept. 2008. <<http://www2.scjn.gob.mx/legislacionestatal>>.

Tejada-Vera B, Sutton PD., "Births, marriages, divorces, and deaths: Provisional data for January 2008. National vital statistics reports; 57(3). Hyattsville, MD: National Center for Health Statistics. 2008.

Trent, K., and S. J. South, (1989). "Structural Determinants of the Divorce Rate: A Cross-Sectional Analysis," *Journal of Marriage and the Family*, 51(2): 391-404.

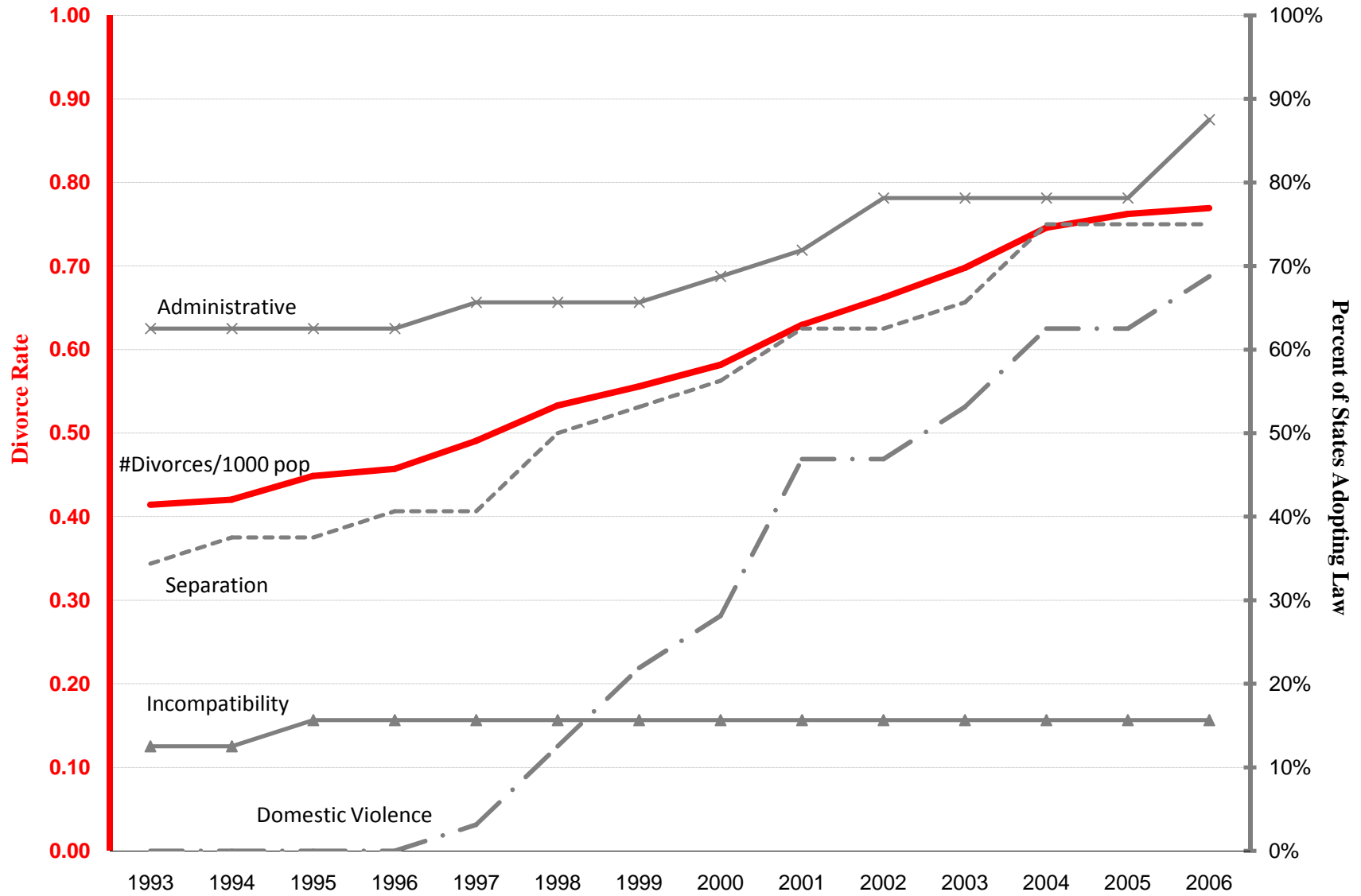
Villarreal, Andres, (2007). "Women's Employment Status, Coercive Control and Intimate Partner Violence in Mexico," *Journal of Marriage and Family*, 69:418-434.

Weiss, Y., and R. Willis, (1997). "Match Quality, New Information, and Marital Dissolution," *Journal of Labor Economics*, 15: S293-S329.

Wiesner, Donald A., (1960). "Enactment and Suspension of Absolute Divorce in Argentina," *The American Journal of Comparative Law*, 9(1): 94-104.

Wolfers, Justin, (2006). "Did Unilateral Divorce Laws Raise Divorce Rates? A Reconciliation and New Results," *American Economic Review*, 96(5):1802-1820.

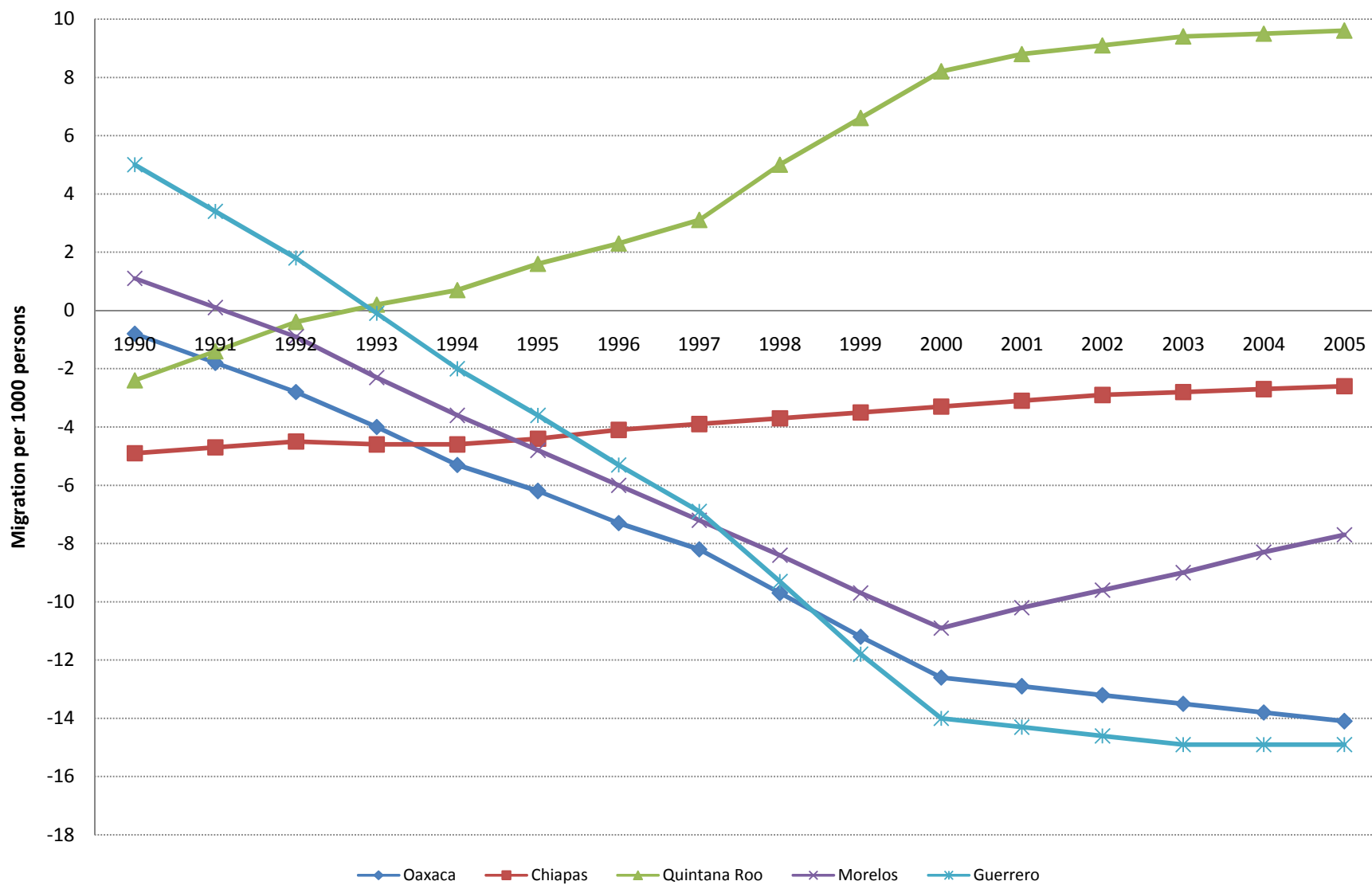
Figure 1. Divorce Rates and Divorce Law Reform: 1993-2006



Note: INEGI changed the divorce data collection methodology in 1993.

Sources: Statistical Yearbooks (INEGI) and Mexico's State Civil Code Legislature.

Figure 2. International Migration for Selected States



Source: Various state's Statistical Yearbooks (INEGI).

Figure 3. Divorce Rates and Total Number of Divorce Laws



Panel A. 1993 Divorce Rates



Panel B. Total Number of Divorce Laws in 2005

Table 1. National Causes for Divorces and Divorce Types in 2001-2006

CAUSES	2001	2002	2003	2004	2005	2006
Mutual consent	40,796 (71.1%)	43,351 (71.5%)	46,285 (72.0%)	49,046 (72.6%)	51,091 (72.8%)	52,712 (72.8%)
Separation for more than 2 years independent of the motive	3,454 (6.0%)	3,344 (5.5%)	5,783 (9.0%)	6,497 (9.6%)	6,787 (9.7%)	7,250 (10.0%)
Separation for more than 1 year with just cause	4,309 (7.5%)	5,403 (8.9%)	3,752 (5.8%)	3,558 (5.3%)	3,880 (5.5%)	4,078 (5.6%)
Abandonment of the home for more than 3 or 6 months without cause	5,111 (8.9%)	4,744 (7.8%)	4,802 (7.5%)	4,932 (7.3%)	4,944 (7.0%)	4,886 (6.7%)
Threats, domestic violence	985 (1.7%)	1,091 (1.8%)	1,068 (1.7%)	1,077 (1.6%)	974 (1.4%)	949 (1.3%)
Incompatibility of characters	660 (1.2%)	658 (1.1%)	427 (0.7%)	361 (0.5%)	315 (0.4%)	280 (0.4%)
Other	2,055 (3.6%)	2,050 (3.4%)	2,131 (3.3%)	2,104 (3.1%)	2,193 (3.1%)	2,241 (3.1%)
Total	57,370	60,641	64,248	67,575	70,184	72,396
DIVORCE TYPE	2001	2002	2003	2004	2005	2006
Administrative	9,431 (16.4%)	10,290 (17.0%)	11,395 (17.7%)	11,686 (17.3%)	11,850 (16.9%)	12,163 (16.8%)
Judicial	47,939 (83.6%)	50,351 (83.0%)	52,853 (82.3%)	55,889 (82.7%)	58,334 (83.1%)	60,233 (83.2%)

Note: Percent of total in parentheses.

Source: Statistics of Marriages and Divorces (INEGI).

Table 2. Divorce/1,000 persons (1993-2006) and Divorce Law Reform Years

State	1993	2000	2006	Admin ¹	Sep	DV	Incomp
North							
Baja California	0.96	0.78	1.43	Yes	2000	2004	
Baja California Sur	0.70	0.97	1.08	Yes	1996		
Coahuila ²	0.52	0.83	1.16	2006	1999	1999	
Chihuahua	0.87	1.22	1.17	2002		2001	1974
Nuevo Leon	0.46	0.68	1.08	Yes	2004	2000	
Sinaloa	0.41	0.61	1.00		1998	1998	
Sonora	0.60	0.85	1.01			2001	
Tamaulipas	0.41	0.54	0.61		1987	1999	
	0.62	0.81	1.07				
West-Central							
Aguascalientes	0.48	0.81	1.12	Yes	2001	2001	
Colima	0.60	0.94	1.24	Yes	2003	2000	
Durango ²	0.44	0.72	0.87	1997	2004	2001	
Guanajuato	0.18	0.44	0.71		1989	2008	
Jalisco	0.36	0.40	0.54			2007	1995
Michoacan	0.24	0.39	0.66	Yes	2001	2001	
Nayarit	0.37	0.59	1.05	Yes	1990	2007	
San Luis Potosí	0.16	0.32	0.50	2000	1990	1998	
Zacatecas	0.30	0.59	0.84		2007	2003	
	0.35	0.58	0.84				
South-East							
Campeche	0.53	0.79	1.05	Yes	1994		
Chiapas	0.21	0.30	0.33	Yes	1998	2004	
Guerrero	0.17	0.29	0.36	Yes	1990	1999	1990
Oaxaca	0.15	0.14	0.12	2002	2008	2001	
Quintana Roo	0.67	0.88	1.05	Yes	2004	2004	1980
Tabasco	0.42	0.52	0.71	Yes		2003	
Veracruz	0.25	0.43	0.47	Yes	1992	1998	
Yucatan	0.67	0.78	1.11	Yes	1993		
	0.38	0.52	0.65				
Central							
Distrito Federal	0.68	0.84	0.79	1973	1983	1997	
Hidalgo	0.14	0.20	0.31				
México	0.19	0.47	0.52	Yes	1990	2007	
Morelos	0.30	0.39	0.42		1993	2006	
Puebla	0.23	0.33	0.35	Yes	1998	2007	
Querétaro	0.42	0.45	0.82	Yes	1990	2008	
Tlaxcala	0.15	0.15	0.16	2006		2006	1976
	0.30	0.40	0.48				
Average³	0.41	0.58	0.77				

Note:

1. States that allowed for administrative divorce since the inception of divorce law in a state's civil code are noted as "Yes".
2. Coahuila and Durango adopted Admin reform in 12/15/2006 and 12/21/1997, respectively. In the analysis, these states were coded as having the reform in 2007 and 1998.
3. INEGI changed its divorce data collection methodology to address previous double-reporting in 1993.

Table 3. Regression Results of Divorce Rates on Law Reform

	(1)	(2)	(3)	(4)
Any Law (DV, Incomp, Separation)	0.134** (0.062)	0.074** (0.035)	0.053 (0.033)	0.011 (0.028)
Observations	416	416	416	416
Adjusted R-squared	0.044	0.908	0.92	0.957
State FE	N	Y	Y	Y
Year FE	N	Y	Y	Y
State Trend, Linear	N	N	N	Y
Demographic Controls				
Fertility Rate			Y	Y
GDP			Y	Y
Internal & International Migration			Y	Y
Male-to-Female Ratio			Y	Y
Marriage Rate			Y	Y

Robust standard errors, clustered at the state level are reported in parentheses.

+ significant at 10%; ** significant at 5%; * significant at 1%

Table 4. Dynamic Effects of Law Reform on Divorce Rates

	Dependent Variable: Annual Divorces per 1,000 persons			
	(1)	(2)	(3)	(4)
Any Law (DV, Incomp, Sep):				
1-2 years	0.159** (0.059)	0.047+ (0.027)	0.038+ (0.022)	0.013 (0.021)
3-4 years	0.095 (0.065)	0.03 (0.035)	0.016 (0.034)	-0.006 (0.030)
5-6 years	0.027 (0.077)	0.016 (0.045)	0.006 (0.042)	-0.007 (0.046)
7-8 years	-0.014 (0.081)	-0.01 (0.044)	-0.011 (0.045)	-0.029 (0.047)
9-10 years	0.018 (0.084)	0.025 (0.044)	0.022 (0.045)	-0.006 (0.044)
11-12 years	0.104 (0.095)	0.085 (0.051)	0.099** (0.044)	0.051 (0.031)
13-14 years	0.089 (0.072)	0.02 (0.039)	0.038 (0.033)	0.002 (0.025)
15 or more years	0.305* (0.097)	-0.046 (0.050)	0.036 (0.051)	-0.001 (0.041)
Adjusted R-squared	0.049	0.907	0.922	0.958
Observations	416	416	416	416
State FE	N	Y	Y	Y
Year FE	N	Y	Y	Y
State Trend, Linear	N	N	N	Y
Demographic Controls				
Fertility Rate			Y	Y
GDP			Y	Y
Internal & International Migration			Y	Y
Male-to-Female Ratio			Y	Y
Marriage Rate			Y	Y

Robust standard errors, clustered at the state level are reported in parentheses.

+ significant at 10%; ** significant at 5%; * significant at 1%

Table 5. Regression Results of Divorce Rates on Law Reform

	(1)	(2)	(3)	(4)
(1) Number of Laws (DV, Incomp, Sep)	0.094+ (0.052)	0.035 (0.024)	0.024 (0.022)	0.008 (0.020)
(2) Domestic Violence	0.214* (0.064)	0.025 (0.031)	0.023 (0.031)	0.008 (0.020)
(3) Incompatibility	-0.011 (0.185)	-0.143* (0.021)	-0.227* (0.049)	-0.079* (0.020)
(4) Separation	0.054 (0.084)	0.073 (0.043)	0.054 (0.037)	0.021 (0.033)
(5) Administrative	0.126 (0.079)	0.017 (0.054)	0.013 (0.035)	-0.001 (0.034)
State FE	N	Y	Y	Y
Year FE	N	Y	Y	Y
State Trend, Linear	N	N	N	Y
Demographic Controls			Y	Y

Notes:

Each row represents a regression.

Demographic controls include fertility, GDP, internal & international migration, male-female ratio and marriage rate.

Robust standard errors, clustered at the state level are reported in parentheses.

+ significant at 10%; ** significant at 5%; * significant at 1%

Appendix 1. Variable Definitions

Variable	Description	1993			2005		
		All	Any Law ¹	No Reform	All	Any Law ¹	No Reform
Divorce Rate	Divorces per 1000 population	0.41	0.35	0.45	0.76	0.81	0.30 **
Population Growth	Total population growth (percentage)	2.00	2.03	1.98	1.02	1.04	0.83
Life Expectancy	Years	72.09	72.06	72.11	74.60	74.62	74.43
Birth Rate	Births per 1000 population	27.60	27.22	27.81	19.54	19.49	20.00
Mortality	Population as of July 1	5.07	5.15	5.02	4.74	4.72	4.97
Fertility	Live children per woman	3.26	3.19	3.30	2.22	2.22	2.23
Marriage Rate	Marriages per 1000 population	7.68	7.58	7.74	6.06	6.13	5.40
National Migration	National migrants per 1000 population	3.06	2.02	3.60	1.90	1.88	2.17
International Migration	International migrants per 1000 population	-4.41	-3.94	-4.66	-5.36	-5.13	-7.57
GDP	GDP per capita in 1993 pesos (in thousands)	12.70	12.28	12.93	15.14	15.59	10.79
Male-Female Ratio	Male/Female Ratio	1.00	0.99	1.01 +	0.98	0.98	0.96
Population	Population as of July 1 (in thousands)	2,774	3,909	2,179 **	3,248	3,232	3,409
Undergraduate	Undergraduate Enrollment	40,962	58,804	31,617	71,446	71,478	71,133
Graduate	Graduate Enrollment	1,723	3,161	969	4,810	4,904	3,901
	Number of States	32	11	21	32	29	3

Notes:

1. Any Law includes states that have adopted domestic violence, incompatibility or separation as of the given period.

2. Any Law and No Reform means are not equal at: + significant at 10%; ** significant at 5%; * significant at 1%

Appendix 2. Dynamic Effects of Law Reform on Divorce Rates

	Dependent Variable: Annual Divorces per 1,000 persons							
	(1) DV	(2) Incomp	(3) Sep	(4) Admin	(5) DV	(6) Incomp	(7) Sep	(8) Admin
1-2 years	0.028 (0.027)	-0.161* (0.027)	0.052+ (0.029)	0.023 (0.016)	-0.01 (0.020)	-0.080* (0.023)	0.032 (0.033)	0.009 (0.020)
3-4 years	0.005 (0.044)	-0.224* (0.063)	0.059 (0.045)	-0.002 (0.024)	-0.057 (0.044)	-0.013 (0.039)	0.055 (0.056)	-0.013 (0.027)
5-6 years	-0.008 (0.071)	-0.231* (0.060)	0.062 (0.059)	-0.034 (0.034)	-0.069 (0.072)	0.029 (0.041)	0.088 (0.078)	-0.024 (0.041)
7-8 years	-0.09 (0.115)	-0.275* (0.067)	0.049 (0.060)	-0.065** (0.030)	-0.155 (0.099)	0.025 (0.043)	0.098 (0.082)	-0.057 (0.040)
9-10 years	- (0.000)	-0.310* (0.084)	0.085 (0.066)	-0.04 (0.031)	- (0.000)	0.045 (0.067)	0.161 (0.100)	-0.046 (0.038)
11-12 years	- (0.000)	-0.256* (0.087)	0.148+ (0.078)	0.012 (0.029)	- (0.000)	0.059 (0.073)	0.251** (0.123)	-0.011 (0.026)
13-14 years	- (0.000)	-0.312* (0.112)	0.092 (0.082)	-0.015 (0.025)	- (0.000)	-0.013 (0.075)	0.236 (0.141)	-0.031 (0.025)
15 or more years	-0.476* (0.165)	-0.310* (0.111)	0.023 (0.105)	-0.034 (0.039)	36.962+ (21.063)	-0.024 (0.100)	0.268 (0.161)	-0.034 (0.048)
Adjusted R-squared	0.919	0.92	0.923	0.923	0.958	0.957	0.959	0.959
Observations	416	416	416	416	416	416	416	416
State Trend, Linear	N	N	N	N	Y	Y	Y	Y

Robust standard errors, clustered at the state level are reported in parentheses.

+ significant at 10%; ** significant at 5%; * significant at 1%

All regressions include state and fixed effects as well as demographic controls: fertility, internal and international migration rates, GDP, male/female ratio and marriage rate.