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Social and Health Outcomes around Divorce: Evidence from New Zealand

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ABSTRACT

How does family breakdown and divorce affect spouses and their children? We provide new evidence using a matched difference-in-differences design in rich administrative data from New Zealand. While most outcomes remain stable prior to separation, parents' mental health deteriorates in the lead-up. At separation, men's employment falls while women's rises, and women become much more likely to receive government benefits. Men temporarily double their criminal offending; about a third of the increase is domestic disputes. Both parents become more likely to be the victim of non-domestic crime as well. As for mental health, parents become more anxious and depressed at separation, and these remain elevated well after the couple has parted. Their children, too, face increased risks after separation: anxiety, depression, school absenteeism, and crime victimization all rise.

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"*The first bond of society is marriage; the next, our children.*"

—Marcus Tullius Cicero

1 Introduction

Family structure is a strong predictor of economic and social outcomes, for both parents and their children. Married people live longer (Gardner and Oswald, 2004), have better mental health (Kravdal et al., 2023), earn more (Korenman and Neumark, 1991), and are less likely to be arrested (Massenkoff and Rose, 2024). For children, having married parents and living in neighborhoods with higher marriage rates are associated with better educational and behavioral outcomes (Kearney and Levine, 2017; Chetty et al., 2018).

Some argue, based on these findings, that divorce is costly, and several policies have tried to improve social outcomes by promoting marriage or discouraging divorce. In the United States, for instance, the Healthy Marriage and Responsible Fatherhood initiative has given $150 million in grants each year to provide marriage education, relationship skills training, and support services aimed at strengthening families (Office of Family Assistance, 2024). Despite significant funding, however, life outcomes around divorce remain poorly understood. While cross-sectional evidence shows worse outcomes for children of divorcing parents, existing research is limited in terms of the scope and the granularity of the results. It remains unclear, for instance, how much the negative outcomes are concentrated around the time of divorce, how much can be attributed to the divorce itself rather than selection, and whether some family members are left better off by dissolution.

In this paper, we examine how separation and divorce reshape individual outcomes by leveraging wide-ranging administrative records from New Zealand. Our data captures an array of life outcomes for both divorcing and ever-married adults—from employment and earnings to mental health, criminal incidents, hospitalization, and welfare receipt. For their children, we observe crucial developmental measures including mental health, school attendance, markers of abuse, criminal behavior, and victimization.

To approximate a causal design, we construct a comparison group by matching divorcing couples with similar couples who remain married. These matched couples share nearly identical characteris-

tics and pre-separation trends in employment, wages, benefit receipt, and police incidents. The strong similarities and parallel pre-trends suggest these matched couples provide credible counterfactual outcomes for the dynamics of divorcing families in the absence of family breakdown.

While most economic and behavioral outcomes remain stable until separation occurs, mental health indicators begin deteriorating before separation. Both men and women show increasing mental health prescriptions and mental health referrals in the years leading up to separation, indicating psychological distress precedes the decision to separate.

New Zealand's divorce law requires couples to live separately for at least 24 months before receiving a divorce. This key difference from U.S. policy helps disentangle the effects of separation from those of the divorce event itself. Following separation, we find divergent employment patterns between spouses: men's employment steadily declines by 5 percentage points relative to the matched comparison group (from a baseline of 65 percent), while women's rises by 2 percentage points (from a baseline of 55 percent).

Following separation, earnings also diverge by gender: men's earnings fall by 5 percent in the two years after divorce, while women's earnings rise but by a smaller magnitude. The net effect is a decline in the couple's total labor-market earnings after separation and divorce.

Separation increases reliance on government support for both spouses. Unemployment-related benefit receipt rises by 2–5 percentage points for both men and women (from a baseline of 3 percent)—notably, women's increase occurs despite their *rising* employment rates. Receipt of general hardship benefits, which New Zealand provides separately from unemployment-related benefits, also increases: men's receipt rises by 2 percentage points (from a baseline of 1 percent), while women's increases by tenfold at separation and remains elevated thereafter. These results quantify an important fiscal externality of family breakdown: substantially increased public expenditure on social support services.

Pharmacy records suggest substantial mental health impacts associated with family breakdown. Prescriptions for anxiety and depression increase by 12 percentage points for both spouses relative to their matched controls (from baselines of 9 percent for men and 16 percent for women). Notably, this drops rapidly following the separation: 2 years after the divorce, use of depression medication falls by 10 percentage points for both spouses relative to controls.

Both spouses increase testing for sexually transmitted infections following separation, with a notably larger increase among women, potentially indicating asymmetric infidelity concerns. Police incidents also spike at separation, nearly doubling for men (from an annual rate of 2.5 percent) before returning to baseline. Women show a smaller increase. Both men and women are more likely to be victims of non-domestic crime after divorce.

Parental separation also affects children's wellbeing. Girls show rising anxiety and depression medication use, which grows by 3 percentage points (from a baseline of 3 percent); boys show no change in these medications but exhibit increases in other prescriptions. Both boys and girls receive more mental health service referrals following separation. Child protective services record a 3 percentage point increase in abuse or neglect reports (from a baseline of 1 percent) for both boys and girls, alongside increased crime victimization in police reports. School attendance also deteriorates, with absenteeism rising by 7 percentage points for girls and 4 percentage points for boys.

Throughout the results, the emergence of effects at separation helps clarify underlying mechanisms. The immediate decline in men's employment and earnings, coupled with women's increased labor force participation, suggests these changes stem directly from household dissolution rather than legal divorce itself. Similarly, the spike in police incidents at separation points to acute relationship conflict rather than longer-term stress. Other effects appear more gradual: mental health challenges grow over time and persist well after separation, particularly for children. This suggests ongoing strain from family breakdown. These patterns indicate that while some effects reflect the immediate shock of household dissolution, others arise from the chronic stress of maintaining split households and managing fractured relationships.

A few points of context are helpful in understanding the results. First, divorce in our paper is a marker of broader family breakdown which affects many things at the same time. Our estimates capture the effect of all the social, economic, and psychological factors that change around divorce potentially including some local proximate causes of divorce. Importantly, we do not observe what would have happened in the absence of divorce, had the couple stayed in the marriage. Therefore, our estimates do not serve as a direct assessment of rules governing the ease or difficulty of obtaining a divorce. Finally, while we estimate an average treatment effect, it is likely that divorces vary in their

effects on children based on the formative quality of the dissolved marriage as well as the particulars of the divorce arrangement.

A growing body of work has sought to identify the causal effects of divorce. Gruber's (2004) influential study leverages variation in unilateral divorce laws to show that liberalizing divorce rules have long-term, negative consequences for children's educational and adult outcomes. Recent quasi-experimental evidence has reinforced these findings: Holm et al. (2024) use a difference-in-differences design around divorce "events" and find that marital dissolution negatively affects children's test scores, both immediately and in the long run. Similarly, Hertegård (2024) exploits a quasi experiment that makes divorce harder for some couples; the design reveals that reducing divorce improves human capital formation for children. Finally, Frimmel et al. (2024) instrument for divorce using the share of female coworkers in men's workplaces; they find that divorce reduces children's educational attainment and adult labor market success.

Our findings contribute to understanding the effect of family breakdown in several ways. First, by leveraging comprehensive administrative data and a matched comparison design, we trace outcomes with unprecedented detail and precision. Second, our broad coverage of economic, health, and social outcomes reveals how divorce's impacts vary across domains—some effects like police incidents spike but recover, while others like mental health challenges persist and intensify. We also provide new evidence on how parental separation affects children across multiple domains, from mental health to school engagement to victimization. Third, we document stark gender asymmetries, with men showing employment and earnings declines while women increase labor force participation. Finally, New Zealand's mandatory separation period allows us to track how these effects evolve from initial separation through formal divorce, speaking to the long-standing debate about whether family dissolution represents a temporary crisis or chronic strain (Amato, 2000).

2 Contribution to the literature

Family is a fundamental social institution that provides children their basic needs and invests in their human capital formation so that later they may survive independently (Becker and Tomes, 1986; Lundberg and Pollak, 2007). The role of family background in shaping a person's future has been

extensively examined. While many studies from this literature report various associations with family structure,[1] the causal link between parental divorce and child outcomes is quite contested because of selection (Amato, 2000; McLanahan et al., 2013). Our work contributes by marshaling extensive panel data and event study design to render a comprehensive empirical portrait of the effects of marital dissolution.

Our study makes several contributions to the divorce literature.

First, past research has relied heavily on cross-sectional associations that are likely conflate selection and effect.[2] These studies find, for instance, that the children of divorcing couples have greater depression, lower achievement, and more antisocial behavior (Mostafa et al., 2018; Sorek, 2019; Bano et al., 2020). Even studies with longitudinal datasets usually do not have sufficient data for researchers to estimate divorce effects using event-study designs (see, for instance, Størksen et al.,2005). Our work contributes causal evidence by collecting panel data and implementing a design-based method to estimate causal effects rather than relying on cross-sectional associations.

Second, where panel data are available, existing divorce research usually relies on surveys.[3][4] While these surveys have allowed researchers to examine many aspects of family life, two substantive issues arise when attempting to estimate the effects of family breakdown: (1) selective attrition in survey collection likely biases the results, and (2) measurement error in both outcome and divorce

[1]The empirical literature examines an array of outcomes including economic gains from altruism; specialization and division of labor (Becker, 1981, 1985; Sevilla-Sanz, 2010); development or inter-generational transmission of cognitive and non-cognitive skills and personality traits (Grönqvist et al., 2010; Anger and Schnitzlein, 2017); as well as improvements in physical, mental, and psychological wellbeing of children and parents (Amato, 2014; Ribar, 2015).

[2]See, for instance, Pong (1997); Neher and Short (1998); Vandewater and Lansford (1998); Biblarz and Gottainer (2000); Hoffmann (2002); Jeynes (2002); Manning and Lamb (2003); Ham (2004); Størksen et al. (2005); Strohschein (2005); Amato and Afifi (2006); Hurre et al. (2006); Fomby and Cherlin (2007); DeBell (2008); Brown and Rinelli (2010); Uphold-Carrier and Utz (2012); Biehl et al. (2014); Arkes (2015); Golombok et al. (2016); Jackson et al. (2016); Dissing et al. (2017); Perales et al. (2017); Radl et al. (2017); Mostafa et al. (2018); Sorek (2019); Bano et al. (2020).

[3]These surveys include the National Longitudinal Survey of Youth (NLSY), the Panel Study of Income Dynamics, the National Survey of Families and Households (NSFH), the National Survey of Family Growth (NSFG), National Institute of Child Health and Human Development Study of Early Child Care and Youth Development (NIHCH SECCYD), and the Fragile Families and Child Wellbeing Study (FFCWS).

[4]Work relying on these surveys include Cherlin et al. (1991); McLanahan and Sandefur (1994); Thomson et al. (1994); Amato and Booth (1996); Cooksey (1997); Lang and Zagorsky (2001); Teachman (2002); McLanahan (2004); Page and Stevens (2004); Sigle-Rushton et al. (2005); Carlson and McLanahan (2006); Fomby and Cherlin (2007); Heard (2007); Osborne and McLanahan (2007); Cavanagh (2008); Sun and Li (2009, 2011); Fomby and Sennott (2013); Amato and Anthony (2014); Goldberg and Carlson (2014); Lopoo and DeLeire (2014); Aughinbaugh et al. (2015); Grätz (2015); Kalmijn (2015); Lee and McLanahan (2015); Ryan et al. (2015); Leopold and Kalmijn (2016); Amato and Patterson (2017); Bernardi and Boertien (2017); Bloome (2017); Bzostek and Berger (2017); Härkönen et al. (2017); Brand et al. (2019); Warner and Carlson (2023).

measures introduces bias of unpredictable direction and magnitude. In particular, some surveys, like the National Survey of Families and Households (NSFH) and the National Survey of Family Growth (NSFG), rely on *retrospective* measures of family structure, where retrospective surveys are especially likely to suffer from recall and reporting bias. Past work has found retrospective surveys often generate (negative) statistical associations where none exist in reality, as respondents are more likely to falsely report negative experiences, including divorce, when outcomes are worse (Werler et al., 1989; Widom, 1989; Widom et al., 2015).[5]

This paper advances existing work through several methodological and data improvements. Instead of relying on survey data with inherent measurement limitations, we utilize comprehensive administrative records that effectively mitigate recall bias, reporting errors, and selective attrition concerns. Rather than employing cross-sectional comparisons, we leverage our rich administrative dataset to implement an exact matching strategy—pairing each divorcing couple with a similarly situated married couple—allowing us to use family fixed effects and the comparison groups to identify the causal impact of family breakup on each outcome. Our extensive administrative records, moreover, provide seven years of pre-divorce data, enabling robust testing and observation of pre-trends across all outcome measures.[6] Finally, while prior research has typically focused on isolated outcomes (such as employment), our comprehensive data allows us to render a holistic portrait of divorce's effects across multiple dimensions of family function simultaneously (employment, earnings, criminal offenses, victimization, STI testing, mental health, and educational outcomes).

[5]For instance, mothers who had babies with congenital malformations were more likely to report being subject to various negative exposures while pregnant than women with normal births. These associations appear spurious, however, since their medical records indicated no difference in exposure Werler et al. (1989).

[6]Previous studies typically provide no pre-divorce data, and those that do often present just a single year, precluding any examination of differential pre-trends (See, for instance, Bonnet et al., 2021).

3 Institutional Background

3.1 Institutional Context in New Zealand

New Zealand extends rights to couples across various legal partnerships—whether married, in civil unions[7], or in *de facto* relationships (Atkin, 2008).[8] These legal protections include rights related to immigration, next-of-kin status, welfare benefits, and property division (Atkin, 2008; Creedy et al., 2018).

New Zealand's institutional framework provides a valuable research setting that helps isolate the effects of marital dissolution from changes in access to social services. Unlike the United States, New Zealand offers universal public healthcare that covers medical treatment, prescriptions, and maternity care, regardless of marital status. While the health system is technically mixed (having private and public providers), it remains predominantly public, with government agencies funding 83% of total healthcare expenditure during our sample period (New Zealand Treasury, 2012; Blakely et al., 2015). Additionally, New Zealand applies progressive tax rates based on individual rather than household income, ensuring that a person's tax liability remains unaffected by their partner's earnings or absence. These institutional characteristics help us disentangle the direct effects of household dissolution from potentially confounding changes in healthcare access and tax status.

3.2 Marriage and Divorce Law

The Marriage Act of 1955 establishes the legal framework governing marriage formation and obligations in New Zealand (Grainer, 2002). Legal distinctions between marriage and other relationship forms in New Zealand are minimal, with de facto couples enjoying essentially identical legal status, including property rights and access to social welfare benefits (Atkin, 2008; Creedy et al., 2018). While married spouses possess stronger inheritance rights in cases of intestacy and exclusive rights to jointly adopt children, they receive no tax advantages. The primary legal benefit of marriage pertains to property division rights during separation or divorce.

[7] Civil unions have been legal in New Zealand since April 26, 2005, and the 2013 Marriage Amendment Act enabled couples to marry regardless of their gender or sexual orientation.

[8] Typically, only individuals who have cohabited in a *de facto* relationship for at least three years receive these protections, unless the relationship involves a child or one partner has made significant contributions to the partnership (see Ministry of Justice, 2025b).

New Zealand's divorce law requires couples to demonstrate "irreconcilable breakdown" by living separately for a minimum of two years before filing for dissolution (Brown, 2011). During this mandatory separation period, couples may attempt reconciliation by cohabiting for up to three months without resetting the two-year requirement. The process is streamlined and no-fault: couples can file jointly or individually for divorce with the Family Court, with dissolution taking effect one month after an uncontested order (Grainer, 2002). When children under 16 are involved, parents must establish care arrangements (Fletcher et al., 2020). When going to the Family Court, a parent can represent oneself without a lawyer and the Ministry of Justice provides detailed information on their webpage on how to navigate the process without legal representation (Ministry of Justice, 2025a).

3.3 Child and Spousal Support after Divorce

New Zealand law provides for 'spousal maintenance' when one party cannot meet a recommended standard of living after separation (Fletcher et al., 2020). Courts consider several qualifying circumstances when determining maintenance: the recipient's potential for self-sufficiency, their childcare responsibilities, the relationship's prior living standard, and any wanted education or training for the labor market (Grainer, 2002).

Courts expect recipients of spousal maintenance to become self-supporting within a reasonable timeframe, as these arrangements are usually short-term and relatively uncommon (Fletcher et al., 2020). This approach aligns with the underlying objective of New Zealand family law to recognize divorce as a 'clean break' between parents (Grainer, 2002). The spousal support system operates independently from child support, which is administered separately and focuses specifically on children's needs.

New Zealand modernized its child support system through the Child Support Act 1991, which is administered by the national tax agency called "Inland Revenue" (Chapple and Cronin, 2007). Parents can choose from three types of child support arrangements: (1) a formula assessment calculated by the Inland Revenue using factors such as parents' taxable incomes, living costs, care time, and cost of raising children; (2) a voluntary agreement registered with the Inland Revenue; or (3) a private agreement managed entirely between parents (Chapple and Cronin, 2007; Fletcher et al., 2020).[9]

[9] In 2011, the Child Support Amendment Bill substantially reformed New Zealand's child support system by introducing

The payment and collection process varies by arrangement. Under formula assessment, Inland Revenue manages the collection and payments of child support (Chapple and Cronin, 2007). For voluntary agreements registered with the Inland Revenue, the agency provides similar collection and enforcement services. Private agreements place the responsibility for payment tracking and enforcement entirely on parents.

3.4 Government Supports for Single Parents

New Zealand provides comprehensive support for single parents. The primary benefit, established as the Domestic Purpose Benefit in 1973 and renamed "Sole Parent Support" in 2013 (Goodger, 1998), offers up to NZ$495 weekly after tax for parents with children under 14 (Fletcher et al., 2020). Housing assistance is available through the Accommodation Supplement, which helps with rent or mortgage payments. To facilitate employment, the system provides childcare subsidies and an In-Work Tax Credit of $60 weekly for those working at least 20 hours. Additional support includes "Working for Families Tax Credits" for families with dependent children under 18, and the "Unsupported Child's Benefit" for caregivers of children from families experiencing breakdown (Creedy et al., 2018).

4 Data and Sample Construction

4.1 The Integrated Data Infrastructure

Our analysis leverages New Zealand's Integrated Data Infrastructure (IDI), a comprehensive database maintained by Statistics New Zealand (StatsNZ) that links individual-level administrative data across various government agencies. The IDI is well positioned for studying divorce as it enables the construction of comprehensive family histories that incorporate divorce events alongside employment trajectories, social service utilization, health indicators, and educational outcomes—both before and after marital dissolution. The data linkage quality is robust: according to the March 2024 statistical report, most datasets achieve match rates exceeding 90% (e.g., 2013/2018 Census at 94.7%, Ministry of Health at 86.8%) with false positive rates remaining below 2%. StatsNZ further enhances data

a more equitable formula. Key changes included considering both parents' incomes rather than just the liable parent's, expanding shared care recognition to begin at 28% of daily care (down from 40%), and incorporating estimates of average child-rearing costs in New Zealand.

usability by consolidating information across datasets into standardized individual-level tables.

4.2 Sample Construction

We construct our sample from the universe of married couples, beginning with the Department of Internal Affairs (DIA) marriage register, including all those who were married prior to March 2018. For the "treatment" group, we include couples who divorced between 2019 and 2021, while the pool for a matched "control" group consists of those with no divorce record through March 2024. We link these records to the 2018 Census, which provides information on relationship status between the adults in each household. We restrict our sample to couples cohabiting at the same address where both adults confirm being in a relationship with the other. We link these couples to the DIA birth register and limit the sample to couples with at least one child born before the divorce date, where both adults are listed as parents.[10]

Table A.1 documents the sample size reduction for treated parents and couples through each filtering step. Of the 17,964 couples who divorced between 2019 and 2021, only 3,687 were cohabiting in the same household in 2018. This substantial reduction suggests that many couples separate well before their divorce is finalized. Nevertheless, we impose the co-residence restriction to establish a more precise separation date, which proves valuable for our analysis by examining divorce events with similar separation timing. After applying all sample restrictions, our final analytical sample consists of 2,583 divorced couples and 4,632 children in the treatment group.

4.3 Key Variables and Measures

We construct our outcome variables from multiple administrative datasets:

1. **Inland Revenue Department (IRD) tax records**: These include monthly employment and earnings data from all employers. We aggregate earnings to the monthly level, deflate to 2017 NZ$ dollars, and top-code at NZ$20,000 per month.[11] From these records, we derive two primary measures: the share of months employed each year and mean monthly earnings.

[10] When we study the outcomes of children, we exclude those born within 24 months prior to the divorce date, due to insufficient pre-divorce observational data.

[11] For context, the median annual personal income in New Zealand in 2017 was NZ$34,917 (Statistics New Zealand, 2024).

2. **Ministry of Social Development (MSD)**: Spell-level data on means-tested social welfare benefits, including start and end dates and benefit type. We categorize benefits into two groups: unemployment benefits and hardship benefits. For each category, we create annual indicators for any benefit receipt.

3. **Pharmaceutical dataset (Pharmac)**: Records of subsidized prescription medications from both specialists and general practitioners. Each prescription includes a chemical identifier, enabling classification of medications by their intended use following Bowden et al. (2020).

4. **Police records**: Administrative data containing detailed records of both offenders (since July 2009) and victims (since July 2014). These records include offense dates, times, locations, offense classifications, investigation outcomes, and demographic characteristics of both offenders and victims. The data also captures information about relationships between offenders and victims.

5. **Ministry of Education school attendance data**: Student-level attendance records collected since January 2011, providing per-class-hour attendance information for primary and secondary students. While collection is voluntary, coverage has expanded to include 99 percent of state and state-integrated schools as of 2023. Prior to 2019, data was collected only during Term 2, but since then has expanded to all four terms.

6. **Child, Youth and Family (CYF) abuse data**: Administrative records from the Ministry for Children (Oranga Tamariki) dating back to 1991. The dataset documents assessments of reported child abuse (sexual, physical, or emotional), neglect, self-harm, and behavioral difficulties. Records include social worker assessments of incidents reported to Child, Youth and Family services, Police, Youth Court, or Family Court.

7. **Programme for Integration of Mental Health Data (PRIMHD)**: Individual-level records of all publicly funded mental health and addiction services since July 2008. The data includes diagnoses, treatment types, and service provider details for both inpatient and community-based services, including NGO mental health services. From these records, we observe all

interactions with mental health services, including the timing, type, and intensity of treatment.[12]

8. **Public hospital discharge data**: Individual-level records on publicly funded hospital events. The dataset holds detailed information on diagnosis and admission reason. From these records, we can identify individuals who were hospitalized because of an accident.[13]

5 Methods

5.1 Matched difference-in-difference

Our objective is to identify the causal effects of divorce on key economic and health outcomes for parents and children. This poses an empirical challenge since divorcing parents systematically differ from those who remain married. Previous research, for example by (Massenkoff and Rose, 2024, Table A.3), documents that divorcing parents with children tend to be younger at childbirth, have higher arrest rates, and more frequently receive government benefits.

In the absence of a natural experiment that exogenously affects divorce likelihood, we implement a matched dynamic difference-in-differences approach to estimate the differential outcome trajectories between divorcing and non-divorcing couples.[14] This methodology leverages the longitudinal structure of our administrative data, providing more transparent estimates of divorce effects compared to models that simply adjust for covariates or include person fixed effects, while avoiding complications inherent to standard event study designs. Although this approach does not perfectly replicate a randomized experiment, examining pre-divorce trends allows us to assess the suitability of our matched control group as a counterfactual. Moreover, the granularity of our data enables identification of sharp changes around the time of divorce, strengthening causal interpretations.

Our analysis pairs each divorcing couple with non-divorcing couples (sample construction detailed in Section 4.2) based on characteristics predictive of both divorce and outcomes of interest. We create separate matching weights for mothers, fathers, and children using the following criteria:

[12] Note that PRIMHD has a delay in reporting and therefore we only can observe records until one year after the divorce date.

[13] Public hospitals are universally accessible and serve as the primary providers of emergency and trauma care and are designed to "treat people who have a serious illness or injury that needs urgent care" (see Ministry of Health, 2025)

[14] We follow the matching procedure of several recent papers that examine other difficult-to-randomize interventions Fenizia and Saggio (2024), Jäger and Heining (2022), and Goldschmidt and Schmieder (2017).

- *Mothers*: For each divorcing mother, we identify an always-married mother with the same birth year, birth year of last child born before divorce, mental health prescription status for anxiety/depression/emotional problems (2012–14, binary), mental health referral status (2012–14, binary), STI testing history (2012–14, binary), Ministry of Social Development (MSD) hardship assistance receipt (2012–14, binary), and income classification (whether mean wages and salaries in 2012–14 falls in the bottom quartile).

- *Fathers*: For each divorcing father, we identify an always-married father with the same birth year, mental health prescription status for anxiety/depression/emotional problems (2012–14, binary), mental health referral status (2012–14, binary), MSD hardship assistance receipt (2012–14, binary), and income classification (whether mean wages and salaries in 2012–14 falls in the bottom half).

- *Children*: For each child of divorcing parents, we identify a child of always-married parents with the same birth year, mother's birth year, biological sex, parental socioeconomic status[15], parental mental health prescription status (2012–14, binary), child's mental health prescription status (2012–14, binary), child's mental health referral status (2012–14, binary), and Oranga Tamariki child abuse record status (2012–14, binary).

Using these criteria, we successfully match nearly all parents in the divorce sample. Table A.1 shows that only 15 divorcing couples total (less than 1 percent of the divorcing sample) were excluded when implementing the matching procedure because a suitable matched pair was not available. Control couples are assigned placebo divorce dates identical to their matched treatment couples' actual divorce dates. Control couples may appear multiple times with different placebo divorce dates. In all analyses, we apply weights to ensure each matched unit contributes equally to estimation and cluster standard errors at the household level.

In the appendix, Table A.2 and Table A.3 present variable means for our matched samples (with weights applied) eight years before divorce. These tables demonstrate that the matching procedure successfully balances differences between treatment and control groups, resulting in nearly identical

[15]Defined as whether joint parental income in 2012–2014 falls in the bottom quartile.

average age, labor market outcomes, health outcomes, and crime outcomes. In all cases, *t*-tests fail to reject equality of means across the two groups.

Our primary specification is:

$$Y_{imt} = \Omega_m + \eta D_i + \sum_{k \in S} \delta_k \mathbb{1}(t = t_m^* + k) + \sum_{k \in S} \beta_k \mathbb{1}(t = t_m^* + k) \times D_i + \zeta_t + e_{imt}. \quad (1)$$

In this setup, Y_{imt} represents an outcome (e.g., log employment income) in period t for individual i in match group m; Ω_m denotes fixed effects for each match unit; D_i indicates whether person i belongs to the divorced group; k indexes event time relative to divorce (e.g., $k = -2$ represents 2 periods before divorce); t_m^* indicates the (placebo) divorce date for match group m; S is the set of event times, ranging from 7 years pre-divorce to 2 years post-divorce, with 8 years pre-divorce as the omitted reference period (for police outcomes, S begins at –6 due to data limitations); δ_k coefficients track outcome evolution for the control group around their placebo divorce date; β_k, our coefficients of interest, measure the differential changes for the treatment group relative to matched controls; and ζ_t represents year fixed effects.

6 Results

6.1 Descriptives comparing divorced and married couples

We begin by examining the raw differences between parents in our divorced and married groups, before introducing our matching approach. Table 1 presents these comparisons, with means reported for 2014 and weighted to adjust for age distribution differences between the two samples.

The descriptive statistics reveal substantial differences between divorcing and continuously married parents across multiple dimensions. Divorcing mothers are 7.2 percentage points more likely to have mental health prescriptions for anxiety or depression (19.3% versus 12.1%) and nearly twice as likely to have mental health referrals (3.6% versus 1.8%) compared to their continuously married counterparts. They also experience higher rates of police offenses, with divorcing mothers being approximately twice as likely to have any police offense recorded. Similarly, divorcing fathers exhibit

Table 1: Descriptive statistics of parents for 2014 (matched on age)

	Mothers			Fathers		
	Divorced	Married	$p-$values	Divorced	Married	$p-$values
Age	35.20	35.23	0.938	35.02	35.00	0.929
Labor market markers						
Employed for 12 months	0.464	0.457	0.423	0.637	0.657	0.038
Wages & Salaries (monthly, in NZ$)	2384	2504	0.020	4474	4838	0.000
MSD (hardship)	0.045	0.026	0.000	0.012	0.007	0.041
MSD (unemployment)	0.038	0.032	0.096	0.036	0.028	0.040
Health markers						
Mental health prescriptions (anxiety/depression)	0.193	0.121	0.000	0.104	0.060	0.000
Mental health referral	0.036	0.018	0.000	0.030	0.011	0.000
STI test	0.214	0.207	0.367	0.044	0.039	0.164
Hospitalized for accident	0.014	0.011	0.141	0.030	0.023	0.040
Crime markers						
Police offense (any)	0.010	0.004	0.002	0.028	0.015	0.000
Police offense (family violence)	0.001	0.000	0.262	0.006	0.001	0.001
Police victim (any)	0.016	0.012	0.123	0.022	0.016	0.042
Police victim (family violence)	0.003	0.031	0.150	0.002	0.000	0.155
Unique individuals	2 598	198 537		2 598	191 202	

Note: This table shows descriptive statistics for divorced compared to married mothers and fathers. Each variable is measured in 2014, with weights to match the two groups on age. The reported p-values are from weighted regression with a constant and a treatment-group dummy. Overall, these raw means suggest worse outcomes for divorcing parents. The divorced group has lower employment and wages, higher benefit receipt, higher use of mental health services, and a higher share of criminal offending and victimization. The full variable definitions are given in Appendix B. Source is IDI and authors' calculations.

comparably elevated rates in health and crime indicators, while also showing slightly lower employment stability (63.7% versus 65.7% employed for 12 months) and significantly lower monthly wages and salaries (NZ$4,474 versus NZ$4,838). These patterns align with findings by Massenkoff and Rose (2024) documenting generally worse socioeconomic outcomes among divorcing parents.

Table 2 extends this comparison to children of divorced versus continuously married parents, again reporting age-adjusted means for 2014. Children in the divorce group, with an average age of approximately 10 years, also demonstrate less favorable outcomes across several measures. Sons of divorcing parents show a 47.6% higher rate of mental health referrals compared to sons of married parents (3.1% versus 2.1%), along with elevated rates of mental health prescriptions for both anxiety/depression and other conditions. Daughters in the divorce group exhibit a 68.2% higher likelihood of anxiety or depression prescriptions (3.7% versus 2.2%) and a 63.2% higher rate of mental health referrals (3.1% versus 1.9%) than their counterparts with continuously married parents. Additionally, both sons and daughters in the divorce group show substantially higher rates of child abuse reports

through Oranga Tamariki.

These raw comparisons in Tables 1 and 2 consistently indicate that divorcing parents and their children experience worse outcomes across health, socioeconomic, and behavioral domains. However, these cross-sectional differences alone cannot establish whether these disparities are causally related to divorce itself or reflect pre-existing characteristics of divorcing families. In the following sections, we employ our matched difference-in-differences framework to disentangle these relationships and identify the temporal patterns of outcomes relative to divorce events.

Table 2: Descriptive statistics of children for 2014 (matched on age)

	Sons			Daughters		
	Divorced	Married	$p-$values	Divorced	Married	$p-$values
Age	9.87	9.87	0.975	9.59	9.60	0.979
Mental health prescriptions (anxiety/depression)	0.017	0.012	0.047	0.037	0.022	0.001
Mental health prescriptions (other)	0.035	0.024	0.005	0.029	0.020	0.029
Mental health referral	0.031	0.021	0.005	0.031	0.019	0.002
Police victim (any)	0.003	0.006	0.007	0.009	0.006	0.134
OT child abuse report (aged 0-17)	0.013	0.004	0.022	0.018	0.006	0.007
School absenteeism (yes/no) (aged 6-15)	0.245	0.233	0.448	0.253	0.240	0.428
Unique individuals	2 295	86 112		2 037	81 417	

Notes: This table shows raw means for sons and daughters of divorced compared to married parents. Indicators are measured in 2014, with weights to match the two groups on age. The reported p-values are from weighted regression with a constant and a treatment-group dummy. These results suggest worse outcomes for children of divorcing parents, with higher rates of mental healthcare usage and child abuse, although school absenteeism rates are similar. Full variable definitions are given in Appendix B. Source is IDI and authors' calculations.

7 Parents

7.1 Economic Outcomes

We begin by examining raw yearly means for employment, one of our primary outcomes, to illustrate the variation underlying our event study coefficients. These raw means provide a transparent view of the identifying variation, while regression estimates (presented in Appendix figures) yield similar conclusions.

Figure 1(a) (left panel) reveals that employment trends for divorcing fathers and their matched controls follow the same pattern before separation. This parallel trend confirms that our matching procedure successfully identifies comparable fathers with indistinguishable employment trajectories.

A notable divergence emerges two years before divorce, the implied timing of separation, when

employment among divorcing fathers begins to decline sharply. By the year of divorce, these fathers are approximately 5 percentage points less likely to be employed than their continuously married counterparts.

The remaining panels in Figure 1 for fathers corroborate this employment decline. Panel (b) documents that income for divorcing fathers falls at separation, with a 11.7 percent reduction relative to the comparison group two years post-divorce. Panel (c) shows that unemployment benefit receipt nearly quadruples around the divorce period, rising from approximately 2 percent to 8 percent of divorcing men. Similarly, panel (d) demonstrates increased hardship benefit receipt among divorcing fathers.

Mothers display strikingly different patterns. Figure 1(a) shows that both groups of mothers start with employment rates around 45 percent and maintain similar trajectories until the first year after divorce. At this point, divorcing mothers experience a slight increase in employment while continuously married mothers show a decrease. Panel (b) confirms this divergence with modest wage increases for divorcing mothers. Panels (c) and (d) reveal that divorcing mothers, like divorcing fathers, experience increases in unemployment benefits, but with a substantially larger spike in Ministry of Social Development (MSD) hardship assistance compared to fathers.

To quantify these raw differences systematically, we estimate Equation 1 and plot the coefficients β_k in Figure A.1. The regression results mirror the patterns observed in the raw data: relatively flat employment differences for divorcing men throughout the period, and for divorcing women, a substantial increase in employment ranging from 5 to 10 percentage points depending on the time period.

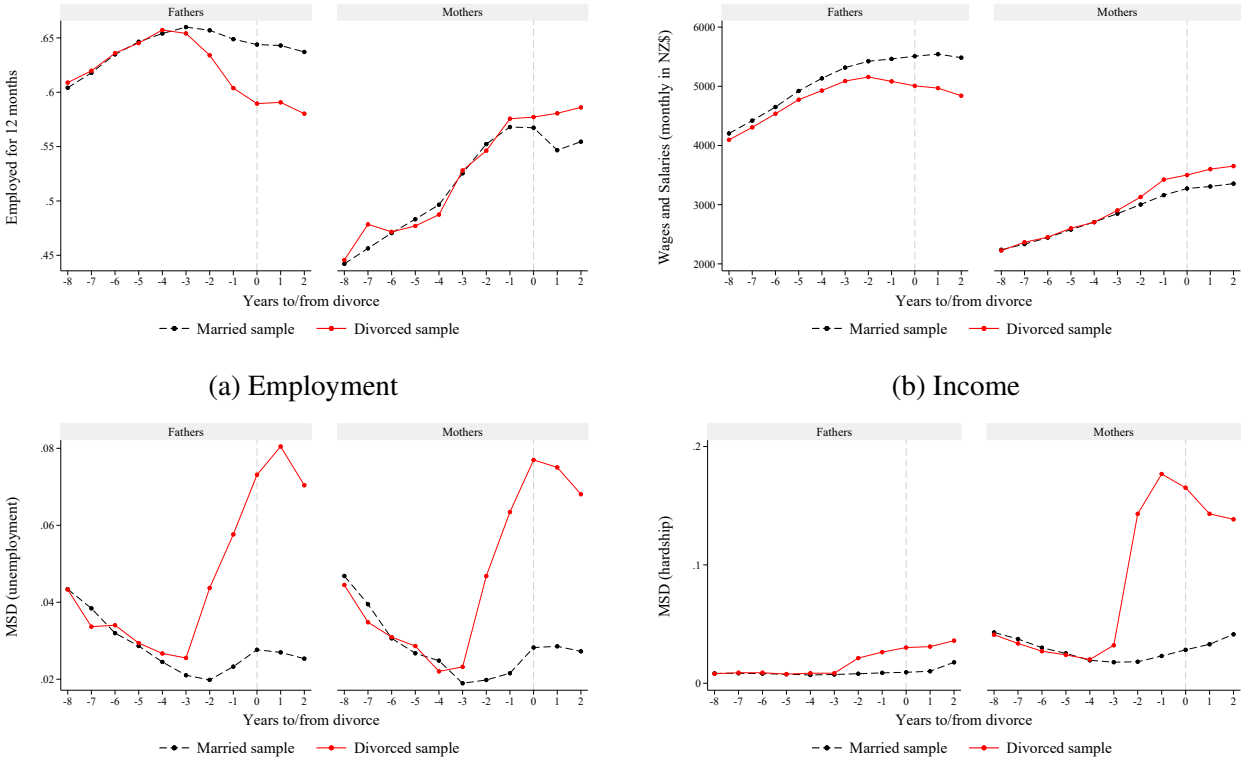
7.1.1 Interpreting increased benefit receipt

Increased benefit receipt partly reflects the mechanical consequences of household separation. Means-tested benefits, including Jobseeker Support, consider partner income when determining eligibility, so household dissolution, which automatically reduces household income, can automatically increase benefit qualification rates.[16]

[16] See also Community Law (2025a).

To unpack this, Figure A.2 further splits out the primary benefit categories. It shows that the increase in benefit receipt is largest for Sole Parent Support (panel c), where the receipt rate increases by over 10 percentage points for mothers. The other two benefits with increased receipt—Job Seeker Benefit in panel (b) and Supported Living Payment in panel (d)—both depend on household income. Thus, the increase in benefits largely reflects the new eligibility that comes from single parenthood and decreased household income.

Figure 1: Economic outcomes for parents, raw averages



(a) Employment

(b) Income

(c) Unemployment

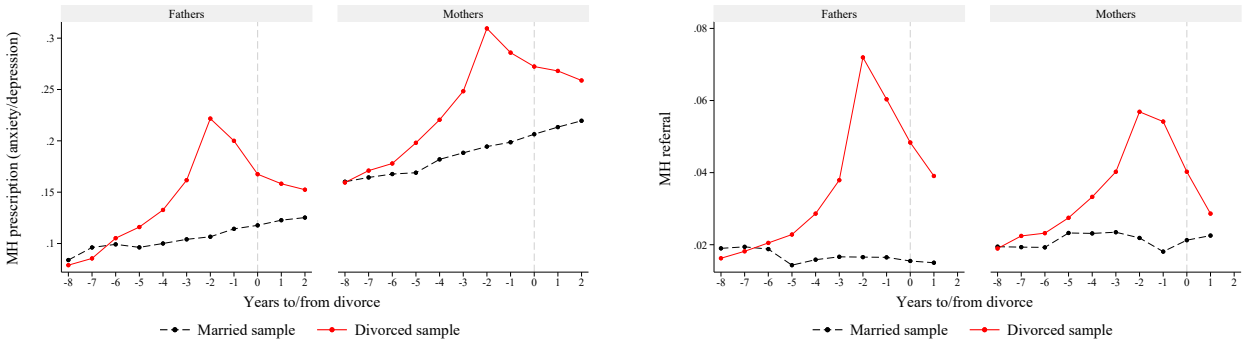
(d) Hardship

Notes: These figures show economic outcomes for divorcee parents (solid red line) and their matched controls (dashed black line). The vertical dotted line marks the year that the divorce was granted for the treatment group. By law, couples must separate two years before the divorce can be finalized, which corresponds to -2 in the x-axis. Source: IDI and authors calculations.

7.2 Health Outcomes

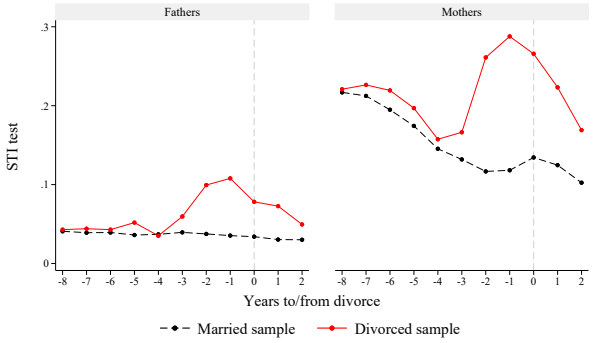
Figure 2 presents health outcomes for parents in event studies around divorce. Panel (a) illustrates mental health prescription rates for divorcing fathers and mothers compared to their matched coun-

Figure 2: Health outcomes for parents, raw averages

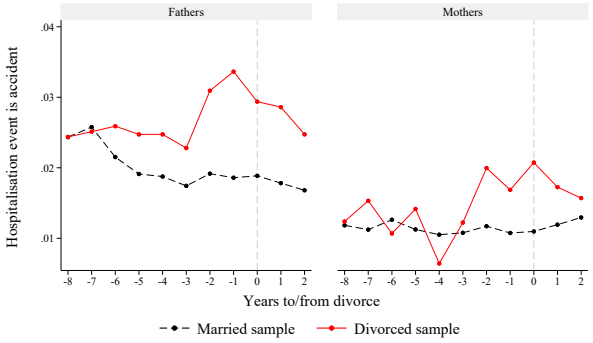


(a) Mental health prescriptions (anxiety/depression)

(b) Mental health referral



(c) STI test



(d) Hospitalized for accident

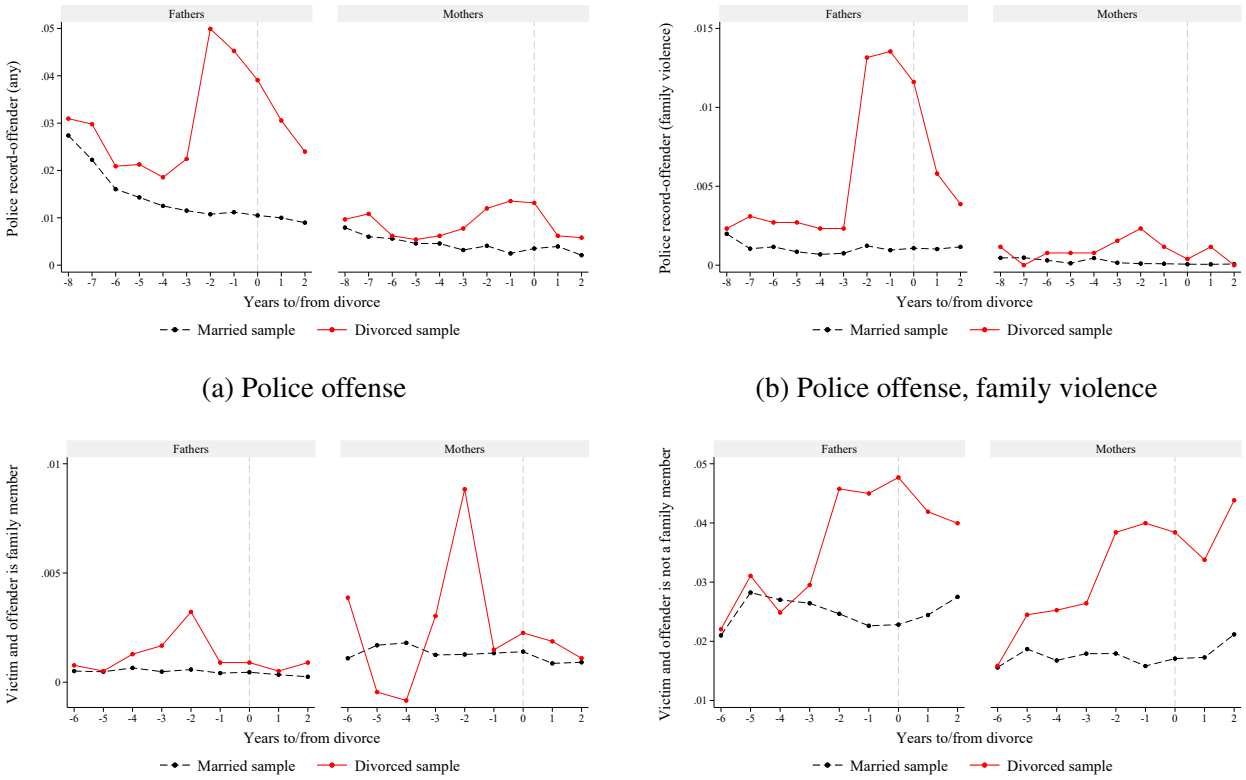
Notes: Figures show health-related outcomes for divorcee parents (red solid line) and their matched controls (dashed black line). The vertical dotted line marks the year that the divorce was granted for the treatment group. Panel (b) does not have an observation at 2 years after the divorce because mental health referral data availability. Source: IDI and authors calculations.

terparts. Unlike economic outcomes, mental health challenges manifest earlier in the divorce process. Mental health prescriptions and referrals begin increasing from the earliest observable period in our panel. Figure A.3 presents the corresponding regression coefficients, with panel (a) revealing that both divorcing fathers and mothers exhibit significantly elevated rates of mental health prescriptions as early as five years before divorce.

Mental health erodes as divorce approaches, reaching its nadir approximately two years before the formal divorce date. This timing closely lines up with the implied timing of separation required for divorce as discussed in Section 3.2.

Panel (c) of Figure 2 presents sexually transmitted infection (STI) testing rates, revealing pro-

Figure 3: Police records for parents, raw averages



(a) Police offense

(b) Police offense, family violence

(c) Victimized by family & ex-spouses

(d) Victimized by non-family

Notes: Figures show police record outcomes for divorcee parents (red solid line) and their matched controls (black dashed line). The vertical dotted line marks the year that the divorce was granted for the treatment group. Source: IDI and authors calculations.

nounced increases around the implied separation date. For fathers, STI testing more than doubles between four to two years before divorce. Mothers exhibit a comparable proportional increase during the same timeframe. The regression estimates given in panel (c) of Figure A.3 confirm the statistical significance of these increases.

These STI testing patterns are consistent with survey research identifying infidelity as one of the most frequently cited causes of divorce (Amato and Previti, 2003), and with evidence that new or unprotected sexual encounters typically motivate individuals to seek STI screening (Denison et al., 2018).[17] However, healthcare-seeking behavior prompted by a *partner's* sexual activity remains rel-

[17] Additionally, Frimmel et al. (2024) demonstrate a substantial impact of workplace gender ratios on divorce probability, further suggesting that infidelity plays a significant causal role.

atively understudied, and we cannot definitively determine whether testing increases are driven by an individual's own infidelity or by discovery of a spouse's.

Notably, the parallel trends observed during the early pre-divorce period indicate that divorced couples in our sample do not exhibit consistently elevated STI screening rates relative to controls, conditional on similar healthcare-seeking behavior at the start of the sample frame. This pattern suggests that infidelity may not represent a chronic feature of these relationships; rather, the precipitating causes of divorce appear to emerge relatively suddenly, triggering both marital separation and increased STI testing.

Finally, Panel (d) of Figure 2 shows that there is also a distinct increase in hospitalization for accidents around the time of separation. This finding aligns with previous evidence reported by Waite and Gallagher (2001), who documented that married individuals are more likely to maintain regular sleep schedules and engage in lower levels of drug and alcohol consumption compared to their unmarried counterparts. These changes appear causal: when single people marry, they have healthier sleep and consumption habits; and when marriage dissolves by death or divorce, sleep and consumption deteriorates.

7.3 Crime and Victimization Outcomes

Figure 3 displays the raw means of crime outcomes over the divorce timeline, with corresponding regression coefficient estimates presented in Figure A.4. The analysis examines four distinct measures: any police offense (panel a), family violence offenses specifically (panel b), any victimization (panel c), and non-family violent victimization (panel d).

These data reveal pronounced spikes in police interactions for both divorcing fathers and mothers during the period surrounding divorce. For divorcing fathers, criminal offending rates increase dramatically from 1.9% four years before divorce to 5.0% in the year of implied separation (two years before formal divorce)—representing a 169% increase in offending.

Not only are divorcing men more likely to perpetrate crime, but they also experience heightened victimization rates starting at separation. This dual increase suggests that marital dissolution may coincide with broader lifestyle changes and social disruptions that expose men to higher-risk environments. Factors such as residential changes, altered social circles, increased substance use, or

emotional distress may contribute to both offending and victimization vulnerability during this period of significant life transition.

Women display smaller, more transitory increases in crime perpetration, and their rates of reported family violence remain consistently low. However, divorcing women become substantially more likely to be victims of crime, with only a fraction of this increase attributable to domestic disputes. This pattern may reflect women's increased probability of living alone, their exposure to new social settings following separation, or potentially reduced protective factors previously associated with marriage (Waite and Gallagher, 2001; Brown and Wright, 2017; Frydl and Skogan, 2004; Morgan and Thompson, 2021; Johnston et al., 2025).

The regression coefficients presented in Figure A.4 confirm the statistical significance of these temporal patterns across nearly all crime measures. The only exception is family violence offending among mothers (panel b), where increases do not reach statistical significance. These findings demonstrate that periods of marital dissolution are associated with substantially elevated risks of both criminal behavior and victimization, particularly for offenses involving family violence.

7.4 Child Outcomes in Each Domain

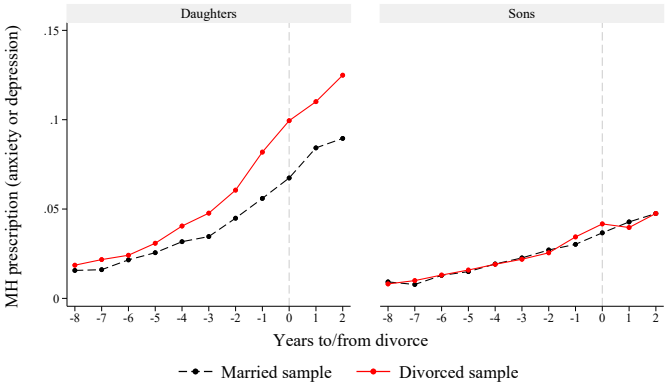
Figure 4 presents raw means for child outcomes in event time around divorce, with corresponding regression estimates displayed in Figure A.5. Panels (a), (b), and (c) illustrate mental health outcomes, revealing that children of divorcing parents have increased utilization of healthcare services, despite exhibiting similar baseline levels and trends at the beginning of the pre-treatment period.

The mental health referral data for daughters provides a particularly illustrative example of this pattern. As shown in Figure 4 (panel c, left side), daughters from both divorcing and continuously married families exhibit nearly identical referral rates between 8 and 6 years before divorce, with both groups increasing in parallel from approximately 1.1 percent to 1.6 percent during this period. However, the trajectories diverge noticeably around 5 years before divorce, with statistically significant differences emerging approximately 3 years pre-divorce (Figure A.5, panel c). By the year following formal divorce, daughters of divorcing parents are approximately 78% more likely to have received a mental health referral compared to their counterparts with continuously married parents (4.9% versus 2.7%).

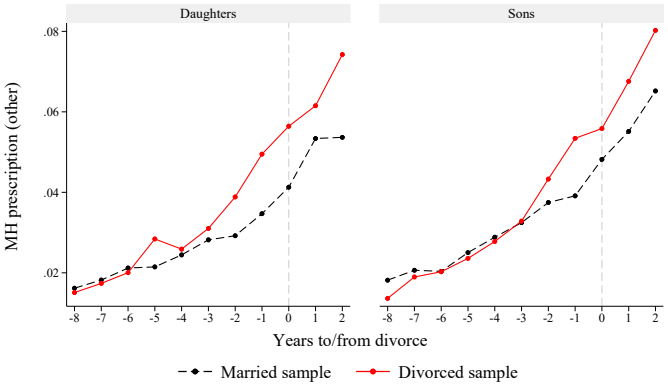
Child abuse reports demonstrate similarly concerning patterns (panel d). While children in continuously married families maintain a relatively stable 1 percent annual risk throughout the observation period, both sons and daughters of divorcing parents experience a dramatic increase to over 3 percent during the years surrounding divorce. Figure A.5 (panel d) confirms that these increases are highly statistically significant. Police victimization records (panel e) show similar patterns of divergence. School absenteeism shows modest increases among children of divorcing parents; however, many of these estimates fail to reach statistical significance and, particularly for sons, show inconsistent differentiation from the control group during the early pre-treatment period.

Most health services are either free or are subsidized for children aged below 18 (Community Law, 2025b), which might impact the parental decision to seek treatment. Additional regression estimates focusing specifically on younger children are presented in Figure A.6.

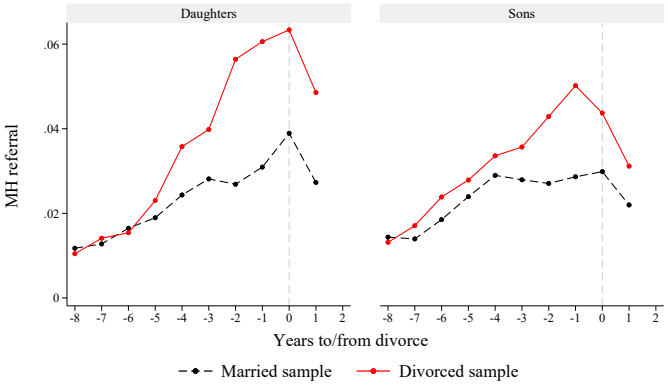
Figure 4: Child outcomes, raw means



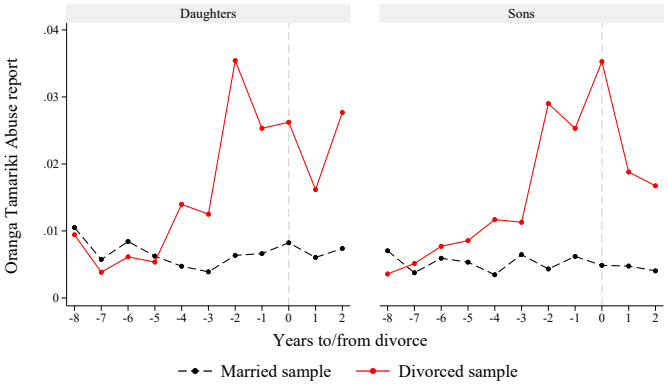
(a) MH prescription (anxiety/depression)



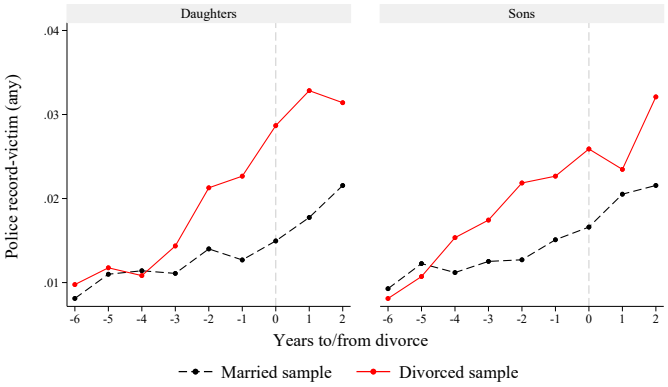
(b) MH prescription (other)



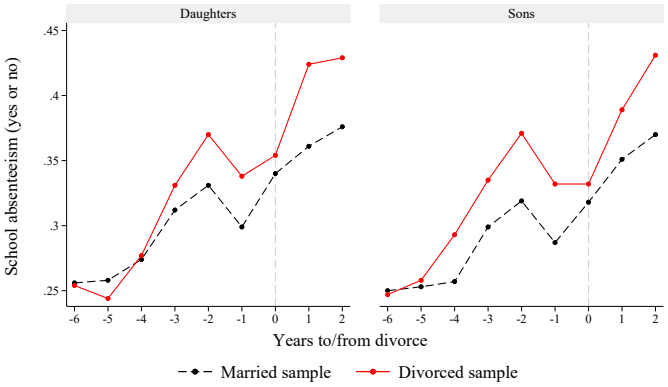
(c) MH referral



(d) Abuse report



(e) Police record - victim (any)



(f) School absenteeism

Notes: These figures show raw outcomes for children of divorcing parents (red solid line) and their matched controls (black dashed line). MH standard for mental health. Panel (c) does not have an observation at 2 years after the divorce because mental health referral data availability. Source is IDI and authors calculations.

8 Conclusion

Our analysis of administrative data from New Zealand reveals several important patterns in how separation and divorce reshape family outcomes. Mental health deterioration precedes formal separation for both men and women, suggesting relationship stress contributes to family dissolution rather than merely resulting from it. Following separation, clear gender asymmetries emerge in economic outcomes: men experience employment and earnings declines while women increase labor force participation, with overall household resources diminishing. Government support increases for both spouses, particularly women, whose hardship benefit receipt increases tenfold and persists long after separation.

The temporal dynamics of these effects provide insights into underlying mechanisms. Some impacts, like police incidents, spike sharply at separation but recover quickly, consistent with a "temporary crisis" model of divorce rather than a chronic strain. In contrast, mental health challenges grow over time before separation, and remain elevated years after, especially for women and children. This pattern aligns with the "chronic strain" model of divorce, where certain consequences of dissolution persist rather than dissipate over time (Amato, 2000).

Children's outcomes reveal similar persistence, with increased anxiety, depression, absenteeism, and victimization following parental separation. These findings contribute to the literature on intergenerational effects of family structure, supporting previous evidence that family dissolution negatively affects children's human capital formation and wellbeing. By documenting effects across multiple domains simultaneously, our research demonstrates that separation's impacts extend beyond traditional economic measures to encompass broader indicators of wellbeing.

These results advance the economics-of-family literature by providing detailed evidence on both the timing and persistence of divorce's effects, revealing substantial heterogeneity across outcome domains and family members. The findings reinforce that family structure represents an important mechanism through which economic advantages and disadvantages are transmitted and maintained across generations.

Our findings suggest several promising avenues for future research on family dissolution. For one, exploring heterogeneity in separation effects based on marriage quality, separation causes, and

family characteristics would provide nuanced understanding of which families face the greatest risks.

For another, future research investigating the effect of various interventions may be valuable. Given the economic and social costs we document—including reduced school attendance and increased reliance on government benefits–it would be valuable to explore educational programs that can help individuals develop and maintain healthy marriages. Similarly, it may pay dividends to experiment with school-based interventions designed to support children experiencing parental separation.

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A Additional Tables and Figures

Table A.1: Sample Size Reduction at Each Step

Step	**Couples**	**Children born before divorce date**
All couples who got divorced between 2019 and 2021	17 964	31 689
...and living together in the same household in 2018	3 687	6 339
...and stated being in a relationship	3 471	5 946
...and had at least one child born before the divorce date	2 598	5 814
...and matches found	2 583	4 632 (2 472 sons & 2 160 daughters)

Notes: This table shows the sample size reduction for couples and children with every inclusion criterion. While 17,964 couples in New Zealand got divorced between 2019 and 2021, most of these happened several years after separation. So our first criterion that couples live together in 2018 results in the largest sample reduction. The final set of 2,583 couples is used for the primary analysis.

Table A.2: Descriptive statistics of parents 8 years before divorce

	Mothers			Fathers		
	Divorced	Married	$p-$values	Divorced	Married	$p-$values
Age	33.94	33.95	0.979	35.73	35.73	1.000
Labor market markers						
Employed for 12 months	0.446	0.442	0.732	0.609	0.604	0.630
Wages & Salaries (monthly, in NZ$)	2225	2237	0.815	4095	4204	0.215
MSD (hardship)	0.041	0.043	0.689	0.008	0.008	0.925
MSD (unemployment)	0.044	0.047	0.611	0.043	0.043	0.987
Health markers						
Mental health prescriptions (anxiety/depression)	0.159	0.160	0.924	0.079	0.084	0.382
Mental health referral	0.019	0.019	0.880	0.016	0.019	0.364
STI test	0.221	0.217	0.643	0.043	0.041	0.611
Hospitalized for accident	0.012	0.012	0.821	0.024	0.024	0.995
Crime markers						
Police offense (any)	0.010	0.008	0.444	0.031	0.027	0.337
Police offense (family violence)	0.001	0.000	0.304	0.002	0.002	0.756
Police victim (any)	0.020	0.017	0.333	0.026	0.022	0.290
Police victim (family violence)	0.002	0.000	0.150	0.002	0.001	0.185
Child post divorce (dummy)	0.103	0.119	0.012	0.128	0.106	0.001
Unique individuals	2 583	106 059		2 583	160 683	

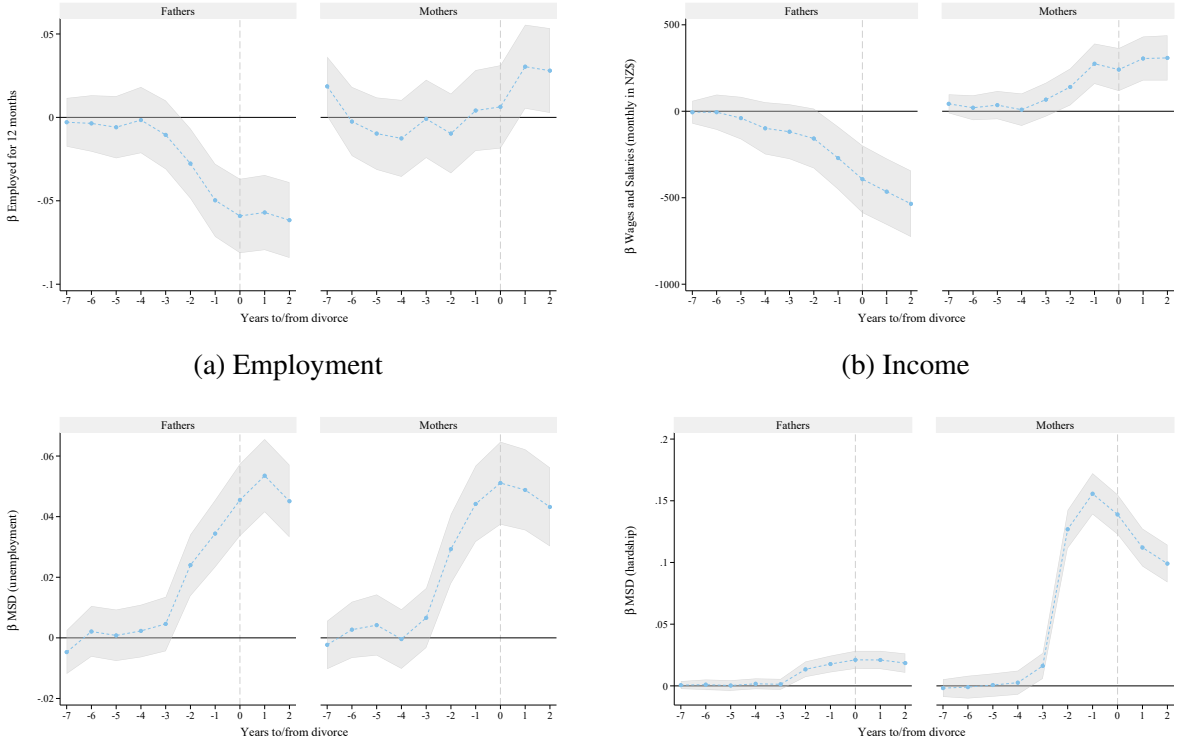
Notes: This table presents variable means for our matched parents (with weights applied) eight years before divorce.Indicators are measured 8 years before the actual/assigned divorce date, specifically from 8 years 11 months before the divorce until 8 years and 0 months before the divorce. It demonstrates that the matching procedure successfully balances differences between treatment and control groups, resulting in nearly identical average age, labor market outcomes, health outcomes, and crime outcomes. In all cases, t-tests fail to reject equality of means across the two groups. The reported p-values are from weighted regression with a constant and a treatment-group dummy. Variable definitions are given in Appendix B. Source is IDI and authors' calculations.

Table A.3: Descriptive statistics of children 8 years before divorce

	Sons			Daughters		
	Divorced	Married	$p-$values	Divorced	Married	$p-$values
Age	9.51	9.49	0.934	9.19	9.19	0.978
Mental health prescriptions (anxiety/depression)	0.008	0.009	0.658	0.019	0.016	0.457
Mental health prescriptions (other)	0.014	0.018	0.185	0.015	0.016	0.782
Mental health referral	0.013	0.014	0.729	0.010	0.012	0.690
Police victim (any)	0.008	0.009	0.598	0.010	0.008	0.505
OT child abuse report (aged 0-17)	0.004	0.007	0.194	0.009	0.010	0.805
School absenteeism (yes/no) (aged 6-15)	0.250	0.247	0.871	0.256	0.254	0.929
Unique individuals already born	1 980	57 975		1 722	54 996	

Note: This table presents variable means for our matched children (with weights applied) eight years before divorce. Indicators are measured 8 years before the actual/assigned divorce date, specifically from 8 years 11 months before the divorce until 8 years and 0 months before the divorce. The reported p-values are from weighted regression with a constant and a treatment-group dummy. The results show that the matching procedure successfully elimiates differences between children across these measures. Variable definitions are given in Appendix B. Source is IDI and authors' calculations.

Figure A.1: Regression results for parents, Economic outcomes



(a) Employment

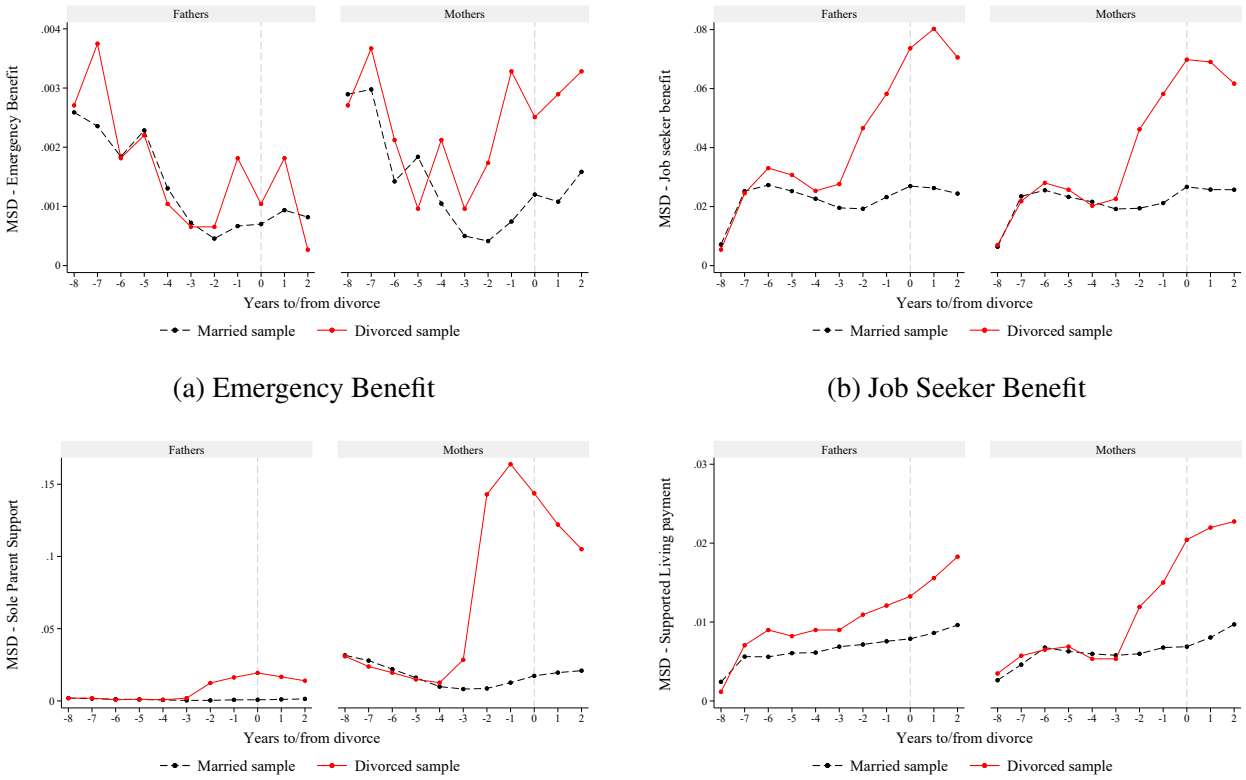
(b) Income

(c) Unemployment

(d) Hardship

Notes: This shows regression estimates of the coefficients β_k from Equation 1, measuring the differential evolution of divorcing parents' outcomes relative to their matched controls for the parent's economic outcomes. The dots show point estimates and the shaded areas give 95% confidence intervals. The dashed vertical line indicates the year of the divorce. Standard errors are clustered at the household level. Source is IDI and authors calculations.

Figure A.2: Benefits from the Ministry of Social Development



(a) Emergency Benefit

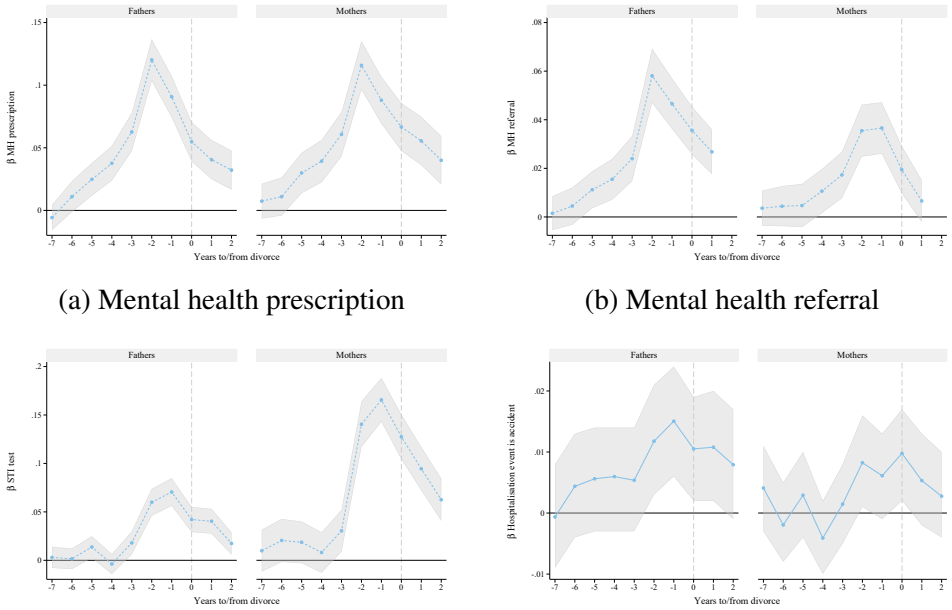
(b) Job Seeker Benefit

(c) Sole Parent Support

(d) Supported Living Payment

Notes: These figures show Ministry of Social Development benefit receipt for divorcee parents (red solid line) and their matched controls (dashed black line). The vertical dotted line marks the year that the divorce was granted for the treatment group. Source: New Zealand administrative records (IDI) and authors' calculations.

Figure A.3: Regression results for parents, Health outcomes



(a) Mental health prescription

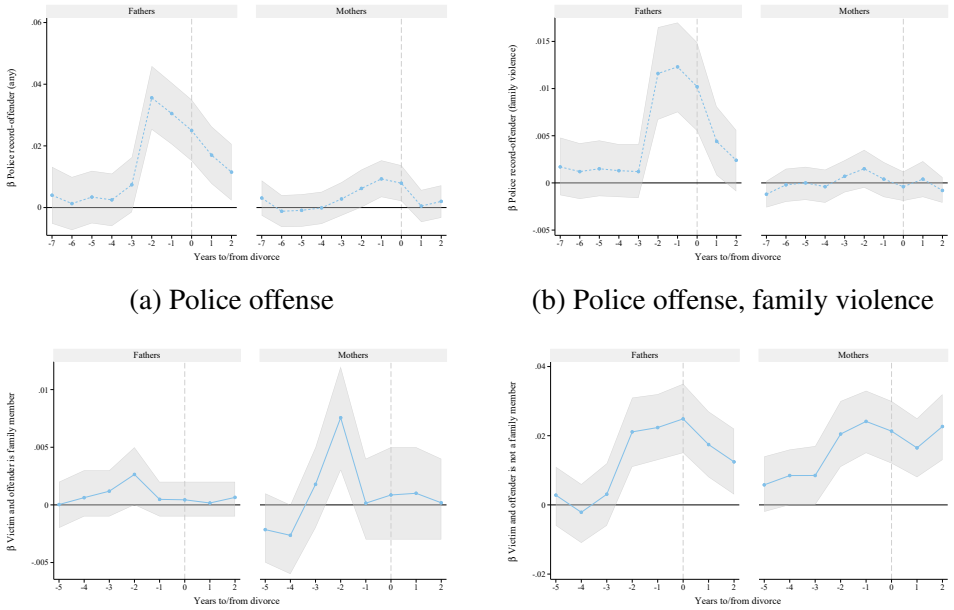
(b) Mental health referral

(c) STI test

(d) Hospitalized for accident

Notes: This shows regression estimates of the coefficients β_k from Equation 1, measuring the differential evolution of divorcing parents' outcomes relative to their matched controls for the parent's health outcomes. The dots show point estimates and the shaded areas give 95% confidence intervals. The dashed vertical line indicates the year of the divorce. Panel (b) does not have an observation at 2 years after the divorce because mental health referral data availability. Standard errors are clustered at the household level. Source is IDI and authors calculations.

Figure A.4: Regression results for parents, Police outcomes



(a) Police offense

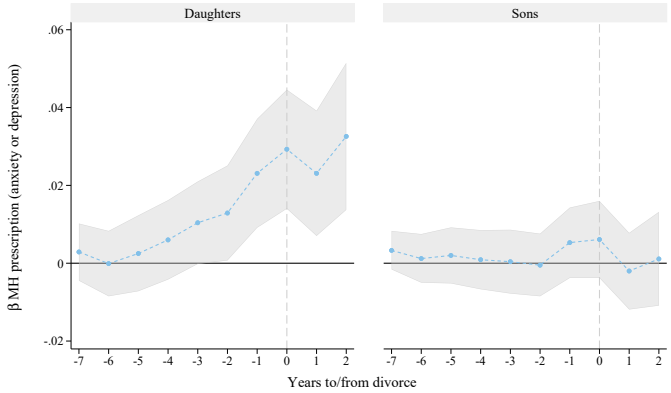
(b) Police offense, family violence

(c) Victimized by family and ex-spouses

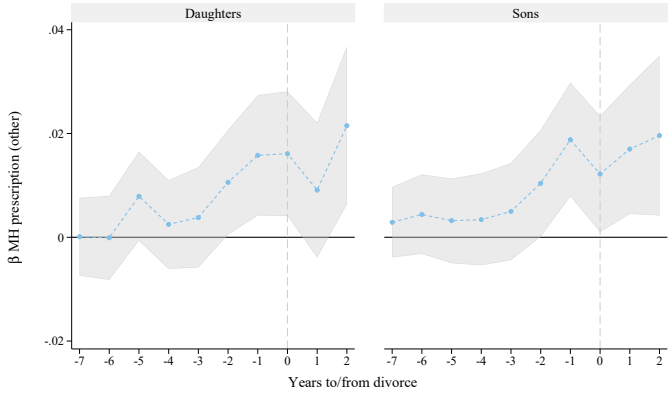
(d) Victimized by non-family

Notes: This shows regression estimates of the coefficients β_k from Equation 1, measuring the differential evolution of divorcing parents' outcomes relative to their matched controls for the parent's police outcomes. The dots show point estimates and the shaded areas give 95% confidence intervals. The dashed vertical line indicates the year of the divorce. Standard errors are clustered at the household level. Source is IDI and authors calculations.

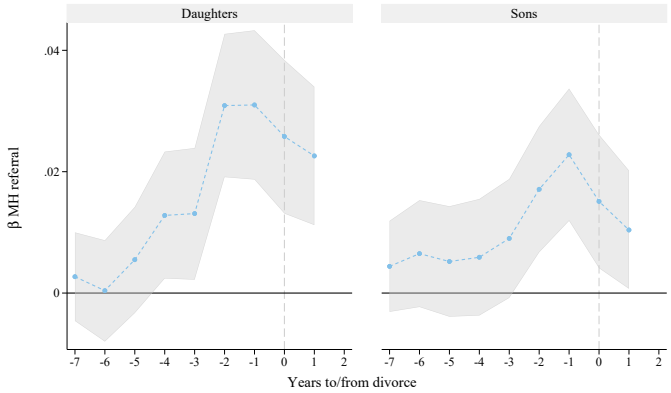
Figure A.5: Regression results for children (all ages)



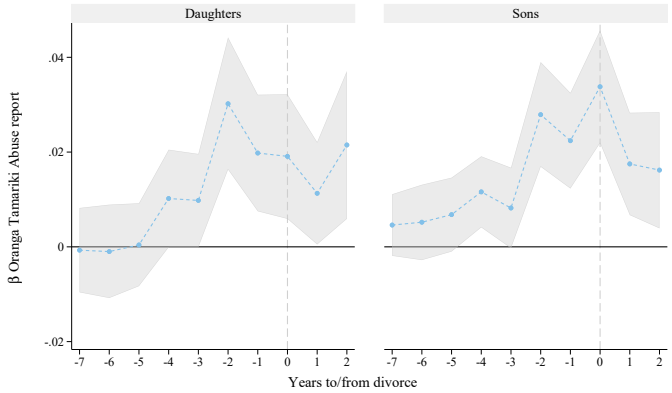
(a) MH prescription (anxiety/depression)



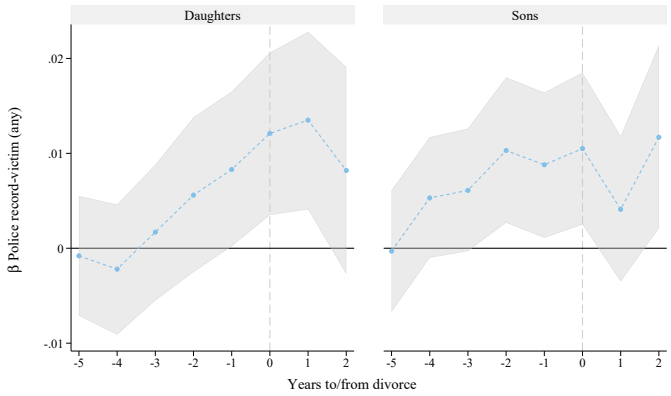
(b) MH prescription (other)



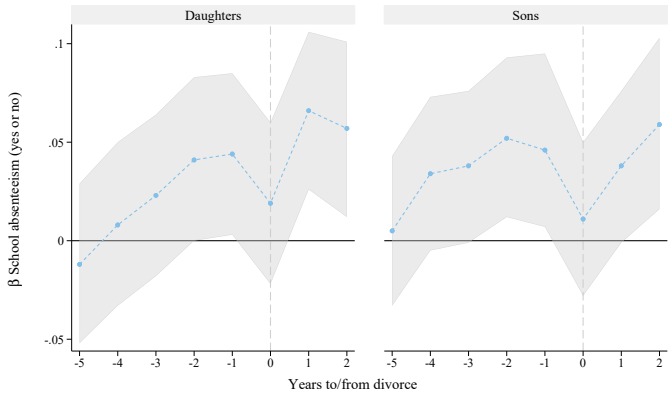
(c) MH referral



(d) Oranga Tamariki Abuse report



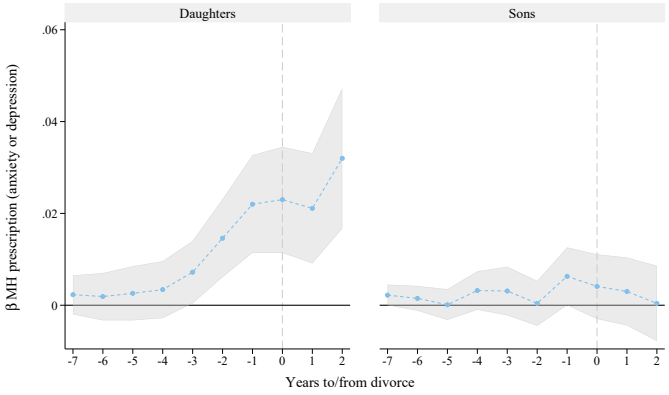
(e) Police record - victim (any)



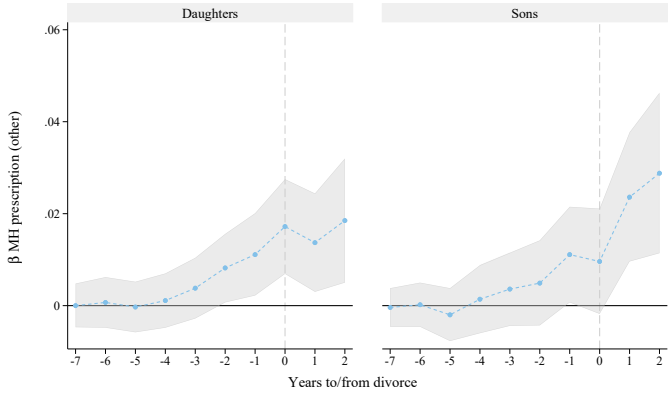
(f) School absenteeism

Notes: This shows regression estimates of the coefficients β_k from Equation 1, measuring the differential evolution of child outcomes relative to their matched controls. The dots show point estimates and the shaded areas give 95% confidence intervals. The dashed vertical line indicates the year of the divorce. MH stands for mental health. Panel (c) does not have an observation at 2 years after the divorce because mental health referral data availability. Standard errors are clustered at the household level. Source is IDI and authors calculations.

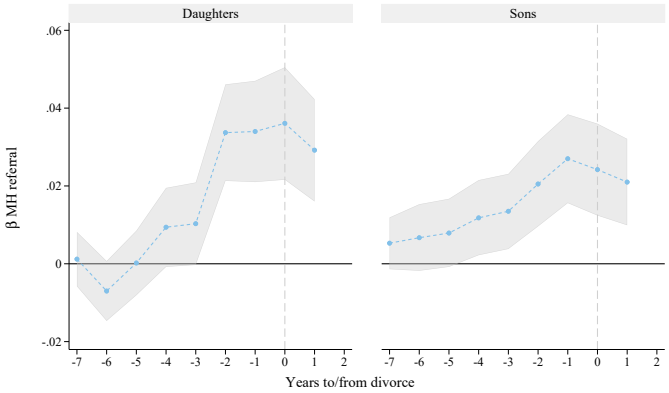
Figure A.6: Regression results for children (below 18)



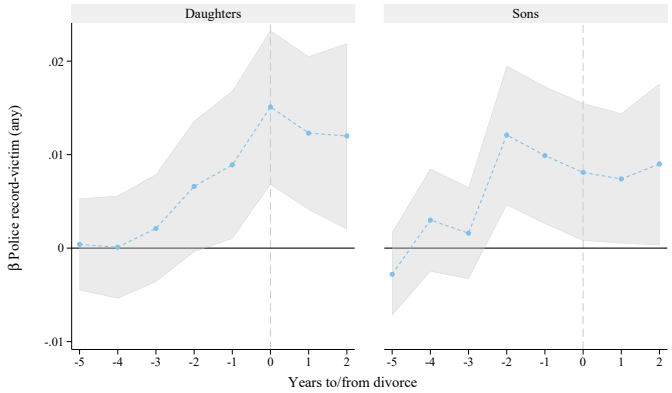
(a) MH prescription (anxiety/depression)



(b) MH prescription (other)



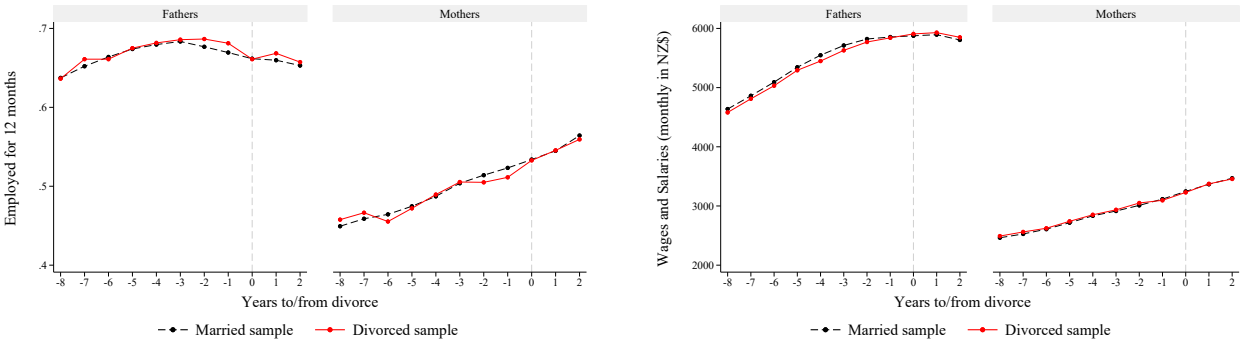
(c) MH referral



(d) Police record - victim (any)

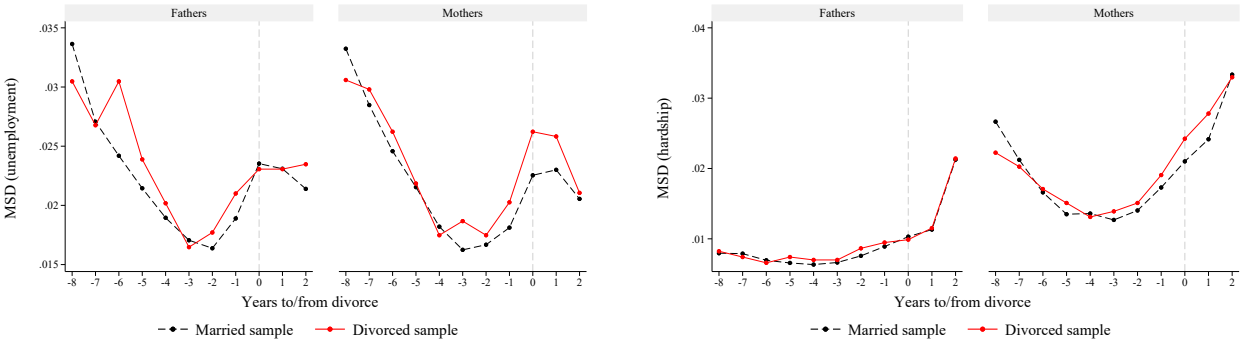
Notes: This shows regression estimates of the coefficients β_k from Equation 1, measuring the differential evolution of child outcomes relative to their matched controls and restricting to children below 18 years of age. The dots show point estimates and the shaded areas give 95% confidence intervals. The dashed vertical line indicates the year of the divorce. Standard errors are clustered at the household level. Source is IDI and authors calculations.

Figure A.7: Outcomes for parents, raw averages - placebo test



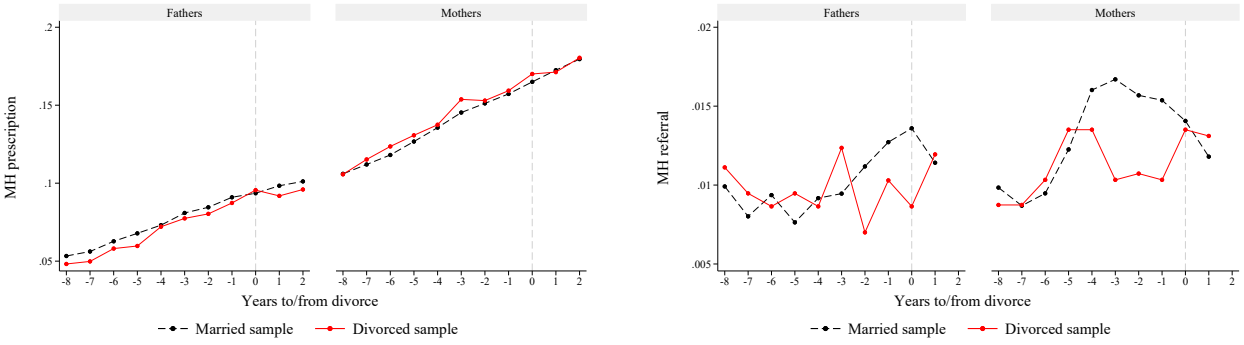
(a) Employment

(b) Income



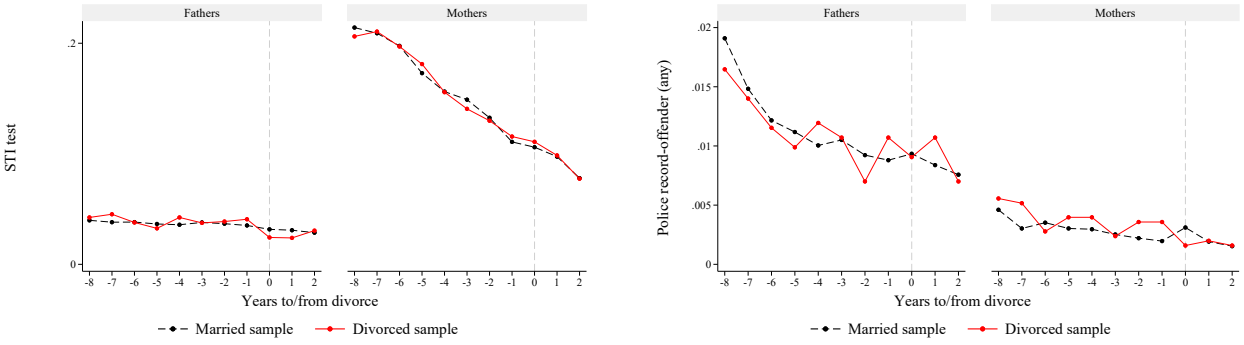
(c) MSD - Unemployment

(d) MSD - Hardship



(e) Mental health prescription

(f) Mental health referral



(g) STI test

(h) Police offense

X

Notes: Figures show economic outcomes for divorcee parents (solid red line) and their matched controls (dashed black line). The vertical dashed line marks the year that the divorce was granted for the treatment group. Source: IDI and authors calculations.

B Variable definitions

Parent outcomes

- *Employed for 12 months* is equal to one for individuals who received income from wages & salaries in all 12 months.
- *Wages & Salaries (monthly, in NZ$)* refers to the mean monthly income from wages & salaries (including 0), deflated in 2017 NZ$.
- *MSD (unemployment)* is equal to one for individuals who have received at least once unemployment or sickness-related benefits from the Ministry of Social Development in that year. This includes unemployment benefit hardship, sickness benefit, sickness benefit hardship, job seeker student hardship, unemployment benefit training, unemployment benefit, and job seeker benefit.
- *MSD (hardship)* is equal to one for individuals who have received at least once hardship-related benefits (e.g., Sole Parenting Benefits, Supported Living Payment, Emergency Benefit, Emergency Maintenance Allowance and Accommodation Supplement) from the Ministry of Social Development.
- *MH prescription-anxiety or depression* is equal to one for individuals with at least one drug prescription where the most likely use for a medication is the treatment of anxiety, depression or emotional problems (where anxiety and/or depression could not be reliably distinguished) (see Bowden et al., 2020).
- *Mental health referral* is equal to one for individuals who had at least one mental-health or addiction treatment referral.
- *STI test* is equal to one for individuals with a laboratory test that includes a test for (at least one of them): chlamydia, syphilis, hepatitis B or C, herpes, HIV, rectal swab for sexually transmitted diseases.

- *Hospitalized for accident* is equal to one for individuals when receiving care or treatment as the result of an accident.

- *Police offense record* is equal to one for individuals who were proceeded against by police, whether by court or non-court action. Family violence indicator follows the definition provided in the Family Violence Act 2018.

- *Police victim record* is equal to one for individuals who are recorded by the New Zealand Police as a victim of a crime.

Child outcomes

- *MH prescription (anxiety/depression)* is equal to one for children with at least one drug prescription where the most likely use for a medication is the treatment of anxiety, depression, emotional problems (where anxiety and/or depression could not be reliably distinguished) (see Bowden et al., 2020).

- *MH prescription (other)* is equal to one for children with at least one drug prescription where the most likely use for a medication is the treatment of disruptive behaviours, substance problems, psychosis, personality disorders, dementia or sleep problems (see Bowden et al., 2020).

- *PRIMHD* is equal to one for children with at least one mental-health or addiction treatment referral.

- *Child abuse* is equal to one for children below 18 where there was at least one child abuse event recorded by Oranga Tamariki (Ministry for Children).

- *Police victim record* is equal to one for children who are recorded by the New Zealand Police as a victim of a crime.

- *School absenteeism (in days)* is equal to one for children where the student aged between 6 and 17 reported one of the following (only considering months May and June): "Removed (temporarily) from regular class (internal school student isolation)", "Student is absent with an

Explained, but Unjustified reason", "Student is stood down or suspended" and "No information provided - truant (or throw-away explanation".