Online appendices for
“The effect of child support on labor supply: An estimate of the Frisch elasticity”

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A Institutional details

Four countries are covered in this paper: US, UK, Australia, and Switzerland. In this section, I give relevant details on the child support regimes of the jurisdictions. A summary is provided in Appendix Table A1.

A.1 US

States in the US have the responsibility of setting laws applicable to child support, subject to requirements of Title IV-D of the federal Social Security Act. Consequently, there is variation across states in the implementation of child support laws. I start with a description of the requirements of Title IV-D (which ensures that there are common elements across states), and then describe the different child support regimes of each state.

Title IV-D is also known as the child support program in the US, and was established in January 1975 with an amendment to the Social Security Act (Public Law 93-647). Its original purpose was to reduce public expenditures on welfare—hence its link to the Social Security Act, which created the Aid to Families with Dependent Children (AFDC)—but its purposes have evolved over time to support service delivery to both welfare and non-welfare families [Solomon-Fears, 2016]. Several pieces of legislation are relevant to this paper. The Child Support Enforcement Amendments of 1984 (Public Law No. 98–378) required states to formulate numeric guidelines meant to advise their support-determining authorities (judges or court officials); by the Amendments’ stipulated deadline of October 1987, about half of the states had enacted such advisory guidelines, and the other half had gone further and enacted presumptive guidelines, the latter being guidelines that these authorities had to follow unless they explained in writing or in some other court record proceeding the reason for the deviation. By mid-1990, due to requirements imposed by the Family Support Act of 1988 (Public Law No. 100-485), all states had enacted presumptive guidelines [Venohr and Williams, 1999, p. 9]. The 1988 Act and associated rules also introduced two requirements that are relevant to this paper. First, they clarified that the guidelines had to take into consideration all earnings and income of the noncustodial parent, among other factors. Second, it introduced a requirement to review individual cases [Calistri, 1990, p. 197–198]. By 1993, states had to review cases on request of parents at least once every three years, and furthermore, provide notice to parents of this right at least once every three years. For cases involving AFDC, the requirement was stricter, and the review was made mandatory. States also had the option to implement automatic updating based on cost of living or income tax data in lieu of the above (informing the parents with each update), although it is unclear how many states took that option. Throughout the 1980s and 1990s, laws were also passed

1 45 C.F.R. § 302.56(c)(1)(i). Because the influential child support models (see below) being formulated in the 1980s used noncustodial parent income information, it was likely that states were already incorporating this before the Act. Note also that “all income” would include unemployment compensation, so a parent would still have to pay support out of this even if he were not working.

2 42 U.S.C. § 666(a)(10)(A). In the reference, “part A” refers to Title IV-A, the section of the Code governing the AFDC, and “an assignment under part A” refers to the assignment of an AFDC (later Temporary Assistance for Needy Families) recipient’s rights to collect child support to the state, required under 42 U.S.C. § 608(a)(3).
that made avoidance more difficult: improvements in cross-state location services were made, wage withholding (orders for the parents’ employers to remit the relevant monies to the state authority) became mandatory, and improvements leveraging on automation were made. The elements described above are still in force today.

Within the framework described above, states have flexibility in determining their own child support regimes. The first relevant factor is the age of the child at which support ends. This age varies from state to state, with possible extensions if the child is still in high school, or even in college. I use the first age at which child support can end as the emancipation age, and ignore the possibility of extension past this age for simplicity. This age varies between 18 and 21; the majority of states have it set at 18. Table A2 lists the emancipation age for each state, whether child support can continue past this age through high school and college, and the maximum age that child support can continue until if applicable and if the information is available.

The other relevant factor that states control is how child support should be computed. Venohr and Williams [1999] classify state child support regimes into four types: percentage of obligor income, income shares, Melson formula, and a hybrid of the first two used in Massachusetts and District of Columbia in earlier years. Of the four, the percentage of obligor income model determines the support amount by applying a state-determined percentage to the noncustodial parent’s income, and is thus the ideal model for interpreting the estimated elasticity as a Frisch elasticity. In 2013, 9 states (Alaska, Arkansas, Illinois, Mississippi, Nevada, New York, North Dakota, Texas, Wisconsin) used the percent of obligor income model, down from 13 in 1999 [Venohr and Williams, 1999, Venohr, 2013]. The second model, the income shares model, is used by the majority of states. Here, the noncustodial parent’s share of the combined income of both parents is applied to an estimate of how much it costs to raise children in an intact family. The estimated cost is generally computed for different combined income levels, and for different number of children involved. The third model, the Melson formula, is used by three states (Delaware, Hawaii, and Montana). Similar to the income shares model, it applies the share of the noncustodial parent’s income to a cost-of-child estimate. However, it applies a subsistence disregard to the incomes of both parents before computing the share, and the cost-of-child estimate is a minimum subsistence consumption cost instead of the full cost of raising a child. If there is still post-disregard income left from the noncustodial parent, a percentage is then applied on this income to determine an additional amount of child support, as in the percentage of obligor income model. The last model was only used in the two states before 2007 (District of Columbia) and 2009 (Massachusetts), and applied the income shares model if income was above a threshold, and the percentage of obligor income model otherwise. Note that the last three models take into consideration the custodial parent’s income; as such, interpretation of child support as a rate is only approximate for the majority of states. The type of model used by the states are also listed in Table A2.

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3This information is taken from the National Conference of State Legislatures [National Conference of State Legislatures (NCSL), 2015]. It is used throughout the data-cleaning process; in particular, I match the states to this emancipation age as closely as the data allows.
In the UK, child support is managed by the executive branch of government. The child support regime is split into three periods: before 2003, between 2003 and 2012, and after 2012. Throughout, the definition of a child is a person below age 16, extended to 19 or 20 (depending on year) if the person was still in secondary education.\footnote{\textit{Child Support Act, 1991, c. 48, § 55(1).}}

The first major legislation regarding child support in the UK was the Child Support Act 1991, which introduced a formula for computation of child support awards to be used for all cases, and provided the basis for the establishment of the Child Support Agency (CSA) in 1993. The formula specified by the 1991 Act was complex: it used an estimate of the cost of children, included an income disregard based on housing costs, transport costs, and costs of current children, used the percentage of obligor income model from Section \textsection A.1 if below a certain threshold and the income shares model if above, incorporated a protected disposable income threshold below which the amount was computed differently, and included a minimum amount below which the amount to be paid was a fixed amount.\footnote{\textit{Child Support Act, 1991, c. 48, sch. 1I.}} Either parent could apply to change the amount of support based on grounds of change of circumstances.\footnote{\textit{Child Support Act, 1991, c. 48, § 17.}} The 1991 Act also included a clause for periodic review, although a minimum frequency was not stipulated.\footnote{\textit{Child Support Act, 1991, c. 48, § 16(1).}} Brochures sent to parents contain a warning that they must inform the CSA about any changes of information that was previously provided or face a fine, and that this includes changes in income; however, it is unclear how strictly this was enforced.\footnote{\textit{Child Support Agency, UK (CSA) 2013b.}}

The Child Support, Pensions and Social Security Act 2000 introduced reforms to simplify the formula, effective 2003. The new formula used the percentage of obligor income model for the most part, but had four different cases depending on the income of the noncustodial parent. In the first case (basic rate case), a noncustodial parent with net weekly income more than 200 pounds faced a flat rate applied directly to net weekly income (15\% for one child, 20\% for two, 25\% for three; income disregard was removed).\footnote{\textit{Child Support, Pensions and Soc. Security Act, 2000, c. 19, sch. 1I.}} In the second case (reduced rate case), a noncustodial parent with net weekly income between 100 to 200 pounds paid 5 pounds plus a flat rate applied on income above 100 pounds (25\% for one child, 35\% for two, 45\% for three). In the third and fourth cases (flat or nil rate cases), a noncustodial parent with net weekly income below 100 pounds paid a fixed amount of five pounds per week or nothing.\footnote{\textit{Note that these percentages are applied on past income, at the point of assessment or reassessment.}} The flat rate also applied if the noncustodial parent was getting certain welfare benefits; because of this, I excluded individuals based on their receipt of welfare, matched as closely to this list as possible. The new formula also allowed a reduction in support owed if the noncustodial parent cared for the children for some amount of time in a year.\footnote{\textit{Child Support Agency, UK (CSA) 2012 2013a.}} Finally, note that the transition from the pre-2003 to the post-2003 schemes was not immediate; data published by the Department for Work and Pensions (DWP) indicates that 33\% of cases were still on the 1993 scheme in 2012.\footnote{\textit{Department for Work and Pensions, UK (DWP) 2018b.}}
The last reform was effective December 2012, and appears to be focused on administrative efficiency. It encouraged parents to use voluntary informal arrangements instead of relying on the authorities if possible; certain services now incurred a charge, and applicants to the newly-formed Child Maintenance Service (CMS) had to first review information on such options before proceeding, with 24 percent of such parents choosing the informal arrangement route in 2016 [Department for Work and Pensions, UK (DWP) 2017]. The reform also changed the way amounts were computed. The new formula retained most of the previous formula, except applied to gross income instead of net, with corresponding decreases in the percentages so that the support amounts were approximately the same. A fifth case was also introduced: noncustodial parents with gross weekly income above 800 pounds faced a reduced rate on the portion above 800 pounds [Child Maintenance Service, UK (CMS) 2017]. More relevant to this paper, the 2012 scheme introduced automatic updating of the support amount. Under the new scheme, every year, the CMS would obtain gross annual income information directly from the tax authority, and inform the parents of the updated amount [Child Maintenance Service, UK (CMS) 2013]. As with the previous reform, the transition was gradual; by June 2018, 93 percent of the old cases had closed [Department for Work and Pensions, UK (DWP) 2018a].

A.3 Australia

Like the UK, a government agency—a Child Support Agency initially and then later the Department of Social Services (DSS)—administers the child support scheme in Australia. A child is eligible for support if (in addition to the obvious conditions pertaining to divorce or nonmarital birth) she is younger than 18 and unmarried, with (since December 1998) possible extension of up to a year if still in secondary education. The law governing child support in Australia is the Child Support (Assessment) Act 1989. From the start, the Act specified that child support was to be based on the last available (gross) taxable income figure used by the tax authority at the point of assessment. The Child Support Legislation Amendment Act 1998 then added a requirement to update the child support amount “as soon as practicable after [a] tax assessment is made”, and to inform the parents immediately following the change; hence, updating of child support in Australia during the years covered by the data is effectively annual.

Before 2008, Australia used the percentage of obligor income model from Section A.1 modified to incorporate an income disregard that depended on the average Australian income and increased with the number of current children he had (the percentage is applied on post-disregard income). The formula featured a minimum amount (a fixed amount that prevailed if support was below it), a cap for high income noncustodial parents, and if the custodial parent’s income was high or the noncustodial parent had care of some of the children, the amount was reduced. Effective July 2008, Australia switched to an income shares model.

\[^{10}\] Note that for the 2012 reform, cases might not be moved directly to the new scheme, but might have been converted to voluntary informal arrangements instead.

\[^{11}\] Child Support (Assessment) Act, 1989 (Cth), § 12(1), 151B(1).

\[^{12}\] Child Support (Assessment) Act, 1989 (Cth), § 56.

\[^{13}\] Child Support (Assessment) Act, 1989 (Cth), § 34a, 76.

\[^{14}\] Child Support (Assessment) Act, 1989 (Cth), § 35–39, 42–49, 66; later repealed by Child Support...
As in the US, the costs of children depended on the number and ages of children, and the total combined income (relative to the average Australian income). The income disregard was retained and now applied to both parents, and the reduction due to shared care was refined. A second fixed amount set at a relatively high level was also introduced, with the goal of discouraging parents from misreporting their income—if a low income was reported, and the parent was not on income support, the agency would use this fixed amount [Department of Social Services, Australian Government (DSS), 2018]. The essential parts of this formula are still in force today.

### A.4 Switzerland

Like the US, much of decision-making authority is decentralized to the canton level in Switzerland. The Swiss Civil Code specifies that child support has to be paid until the child reaches 18 years of age, or until the child completes a suitable education, with the wording suggesting that the latter is mandatory (as opposed to occurring only if an application is received)\(^{15}\). The Civil Code also specifies that support should correspond to the child’s needs and to the parents’ financial resources, and that courts will adjust the support amount at the request of any party if circumstances change\(^{16}\). Beyond this, it gives cantons a high degree of autonomy to set the relevant laws. Cantons use one of three models: the percentage of obligor income model from Section A.1, the income shares model from Section A.1, and a third model (developed in Switzerland) that expands on income shares to include factors other than income [Pichonnaz, 2005]. Note that cantons are not required to set guidelines for their judges; hence, there might be heterogeneity coming from different interpretation of the cantonal rules as well.

The Swiss education system is also important for the context of this paper, because it determines the end date of child support. While education systems differ across cantons, this is unlikely to be too large a source of heterogeneity: compulsory education length (including kindergarten) is 11 years in almost all cantons, and post-compulsory education pathways are similar across cantons. Instead, heterogeneity is likely to come mainly from the type of post-compulsory secondary education chosen by individuals, which can range between 2 and 5 years (e.g. apprenticeships can take up to five years; [Swiss Conference of Cantonal Ministers of Education, 2017]). Note that the main effect from this heterogeneity is to weaken the first stage of the IV procedure used in this paper.

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\(^{15}\) Swiss Civil Code, Art. 14, 277.

\(^{16}\) Swiss Civil Code, Art. 285, 286.
### Appendix Table A1: Major features of child support across countries

<table>
<thead>
<tr>
<th>Subdivision at which main laws are set</th>
<th>US</th>
<th>UK</th>
<th>Australia</th>
<th>Switzerland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emancipation age and extension</td>
<td>Varies by state, ranging between 18–21, with possible extension for high school or college.</td>
<td>16, with possible extension to 20 (19 in earlier years) for secondary education.</td>
<td>18, with possible extension for completion of the secondary school year of the 18th birthday.</td>
<td>18, or until completion of a suitable education.</td>
</tr>
<tr>
<td>Guidelines</td>
<td>States set numerical guidelines; courts must justify any deviation from guidelines.</td>
<td>Numerical guidelines exist; agency follows formula unless parents apply to take special expenses into consideration.</td>
<td>Numerical guidelines exist, agency follows formula. Parents may ask the authorities to review the case only if the facts of the case are wrong, or escalate to the courts as a last resort.</td>
<td>Cantons set guidelines. Guidelines may not be complete (e.g. Zurich gives the cost of children but does not specify how to apportion to parents based on income); courts have high degree of flexibility to deviate.</td>
</tr>
<tr>
<td>Updating</td>
<td>For AFDC cases, automatic update at least every three years. For other cases, parents must be notified of their right to review the case at least every three years.</td>
<td>Parents must legally inform agency about changes in income. After 2012, update is automatic and annual (based on tax information).</td>
<td>Automatic and annual based on tax information.</td>
<td>Unclear, beyond a requirement in the Civil Code that courts will update when parents ask it to do so.</td>
</tr>
</tbody>
</table>
## Appendix Table A2: Features of states’ child support guidelines in the US

<table>
<thead>
<tr>
<th>State</th>
<th>Eman. age</th>
<th>Continue in high school</th>
<th>Continue in college</th>
<th>Must end by</th>
<th>Child support model in 1999</th>
<th>Child support model in 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>19</td>
<td>No</td>
<td>No</td>
<td>NA</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
<tr>
<td>Alaska</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>Nil</td>
<td>% obligor income</td>
<td>% obligor income</td>
</tr>
<tr>
<td>Arizona</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>19</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
<tr>
<td>Arkansas</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>19</td>
<td>% obligor income</td>
<td>% obligor income</td>
</tr>
<tr>
<td>California</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>19</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
<tr>
<td>Colorado</td>
<td>19</td>
<td>Yes</td>
<td>No</td>
<td>21</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
<tr>
<td>Connecticut</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>19</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
<tr>
<td>Delaware</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>19</td>
<td>Melson</td>
<td>Melson</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>21</td>
<td>No</td>
<td>No</td>
<td>NA</td>
<td>Hybrid</td>
<td>Income shares</td>
</tr>
<tr>
<td>Florida</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>19</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
<tr>
<td>Georgia</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>20</td>
<td>% obligor income</td>
<td>Income shares</td>
</tr>
<tr>
<td>Hawaii</td>
<td>19</td>
<td>Yes Yes</td>
<td>Nil</td>
<td>Melson</td>
<td>Melson</td>
<td>Melson</td>
</tr>
<tr>
<td>Idaho</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>19</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
<tr>
<td>Illinois</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>19</td>
<td>% obligor income</td>
<td>% obligor income</td>
</tr>
<tr>
<td>Indiana</td>
<td>19</td>
<td>Yes</td>
<td>No</td>
<td>21</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
<tr>
<td>Iowa</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>19</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
<tr>
<td>Kansas</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>19</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
<tr>
<td>Kentucky</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>19</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
<tr>
<td>Louisiana</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>19</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
<tr>
<td>Maine</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>19</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
<tr>
<td>Maryland</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>19</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
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<td>Massachusetts</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>21</td>
<td>Hybrid</td>
<td>Income shares</td>
</tr>
<tr>
<td>Michigan</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>20</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
<tr>
<td>Minnesota</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>20</td>
<td>% obligor income</td>
<td>Income shares</td>
</tr>
<tr>
<td>Mississippi</td>
<td>21</td>
<td>No</td>
<td>No</td>
<td>NA</td>
<td>% obligor income</td>
<td>% obligor income</td>
</tr>
<tr>
<td>Missouri</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>21</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
<tr>
<td>Montana</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>19</td>
<td>Melson</td>
<td>Melson</td>
</tr>
<tr>
<td>Nebraska</td>
<td>19</td>
<td>No</td>
<td>No</td>
<td>NA</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
<tr>
<td>Nevada</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>19</td>
<td>% obligor income</td>
<td>% obligor income</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>Nil</td>
<td>% obligor income</td>
<td>Income shares</td>
</tr>
<tr>
<td>New Jersey</td>
<td>19</td>
<td>Yes Yes</td>
<td>Nil</td>
<td>Income shares</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
<tr>
<td>New Mexico</td>
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<td>Yes</td>
<td>No</td>
<td>19</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
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<td>New York</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>21</td>
<td>% obligor income</td>
<td>% obligor income</td>
</tr>
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<td>North Carolina</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>20</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
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<td>Yes</td>
<td>No</td>
<td>19</td>
<td>% obligor income</td>
<td>% obligor income</td>
</tr>
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<td>Ohio</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>Nil</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
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<td>Oklahoma</td>
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<td>Yes</td>
<td>No</td>
<td>20</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
<tr>
<td>Oregon</td>
<td>18</td>
<td>Yes Yes</td>
<td>Nil</td>
<td>21</td>
<td>Income shares</td>
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</tr>
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<td>Pennsylvania</td>
<td>18</td>
<td>Yes</td>
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<td>Income shares</td>
<td>Income shares</td>
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<td>19</td>
<td>Income shares</td>
<td>Income shares</td>
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<td>South Carolina</td>
<td>18</td>
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<td>Nil</td>
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<td>Income shares</td>
</tr>
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<td>South Dakota</td>
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<td>19</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
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<td>Tennessee</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>Nil</td>
<td>% obligor income</td>
<td>Income shares</td>
</tr>
<tr>
<td>Texas</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>Nil</td>
<td>% obligor income</td>
<td>% obligor income</td>
</tr>
<tr>
<td>Utah</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>Nil</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
<tr>
<td>Vermont</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>Nil</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
<tr>
<td>Virginia</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>19</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
<tr>
<td>Washington</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>Nil</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
<tr>
<td>West Virginia</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>Nil</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>19</td>
<td>% obligor income</td>
<td>% obligor income</td>
</tr>
<tr>
<td>Wyoming</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>20</td>
<td>Income shares</td>
<td>Income shares</td>
</tr>
</tbody>
</table>

**Notes:** Eman. age is the first age at which child support can end. Continue in high school/college indicates if support is allowed to continue past the emancipation age; in such cases, must end by gives the maximum age if one is stipulated. The last two columns give the child support models used by states in 1999 and 2013.

**Sources:** National Conference of State Legislatures (NCSL) [2015], Venohr and Williams [1999], Venohr [2013].
B Data appendix

B.1 Details of the cleaning process that are common to all datasets used for fathers

I use five panel datasets covering 4 countries when analyzing fathers: the Panel Study of Income Dynamics (PSID) in the US; the National Longitudinal Survey of Youth 1979 (NLSY) in the US; the British Household Panel Survey combined with its successor the UK Household Longitudinal Study (BHPS+); the Household, Income and Labour Dynamics in Australia (HILDA) dataset; and the Swiss Household Panel (SHP). All datasets contain repeat observations of the same individuals over time; interviews are either annual or biennial. I use all waves of all datasets, subject to the restrictions described below.

For consistency in treatment, cleaning of each dataset follows the same general procedure. Here, I describe the overall cleaning process, and give details of the steps that are fully consistent across datasets. Thereafter, I describe the details of each dataset. In Table B1, I provide a summary of the differences across datasets.

B.1.1 Step 1: Preprocessing.

In the first step, I generate any important variables that are required for the next few steps. This is a dataset-specific step.

B.1.2 Step 2: Processing of marital and fertility histories, and generation of provisional eligibility status.

Processing of marital and fertility histories is again mostly dataset-specific, because different datasets present the information in different ways. Detailed steps taken are given in the section for the dataset. The output of this step gives one record for each individual for which we have marital and fertility data.

The resulting marital data consists of the start month, end month, and end status (widowed, divorced, or separated) of every marriage we have knowledge of for the individual. In general, marital questionnaires have missing dates; ignoring these missing dates is not likely to be optimal, since there is additional information like the ordering of the marriages that can be used to estimate when child support is supposed to start. I follow a consistent set of imputation rules for all datasets, performed in the order described. If the calendar month is missing or not available in the dataset, I impute using the best guess in the data (for example, if seasons are available), or using the month of June. Second, I impute missing divorce months with the separation month if the latter is available. Third, I impute missing end months of marriages with the start months of the next marriages, and missing start months of marriages with the end months of the previous marriages; if both are unavailable, no imputation is done. If the end month of the last marriage is not available, no imputation is done.

17 Treatment of the Survey of Income and Program Participation (SIPP) dataset used for analyzing mothers is slightly different, and is described in Section B.7.

18 Note that this imputation is relatively innocuous since either would be considered the next best guess of when child support is supposed to start if the actual event month is not known.
is done.

Similarly, the resulting fertility data consists of the birth month, identity (if known), and death month (if information is available) of every child we have knowledge of for the individual. Cleaning of the data generally consists of aggregating information in the panel and in fertility questionnaires. If the calendar month of birth is missing, I impute with the best guess in the data (e.g. if seasons are available) or June; aside from this, no additional imputation is done since the above aggregation already makes use of as much information as possible. Death month information is based on reports within the panel (e.g. exit surveys), and supplemented with death reports in the fertility questionnaires if available.

After preparing the marital and fertility histories for all individuals, I construct a provisional child support eligibility status and related start month for each child the individual has ever had. The provisional eligibility status variable does not depend on child age. If a child was born after a marriage ended and before the next marriage began (or if the next marriage never began), she is eligible for child support starting from her birth month. If the child was born in a marriage that ends either in divorce or separation, she is eligible starting one month after the end month of the marriage. If the child was born before any marriage began, she is eligible starting from her birth month. In cases of multiple marriages, the earliest month from the above procedure is used. Note that the above construction does not utilize information from mother- and spouse-linkages; this is done mainly for simplicity, and because this information is not available for all datasets.

B.1.3 Step 3: Preparation of longitudinal variables.

The third step consists of extracting and homogenizing variables in the panel. Key variables generated in this step are the child support amount paid, total income, annual hours worked, hourly wage, education level, and whether each child is living with the individual. Details of each variable are given in the section for the dataset.

B.1.4 Step 4: Generation of key variables.

In this step, I combine the cross-sectional variables (mainly the marital and fertility history variables) with the longitudinal variables, and generate the final variables used in this study. This step is consistent across datasets. All monetary variables are deflated to 2016 dollars in this study and converted to US dollars based on the exchange rate of that year. The key variables are as follows.

Annual hours worked, earnings, components of earnings, and food consumption (main outcomes). These are taken directly from Step 3. All variables are winsorized at the 1st and 99th percentiles before use.

Child support rate (main regressor). This is computed as the child support amount paid divided by the total individual income. I then winsorize the rate at the 1st and 99th percentiles, and perform the following imputation procedure when the rate is missing—in principle, a child support rate exists even if the father is not earning income. For each individual, I impute using the previous observed value for observations before emancipation.
of the youngest eligible child, half of the previous observed value in the year of emancipation, and the median for observations after emancipation. Note that I do not extrapolate beyond the first and last observed child support rate of the father; this avoids periods of education and retirement.

**Hourly wage (control variable).** This is taken directly from Step 3. The log of the hourly wage is winsorized at the 1st and 99th percentiles before use.

**Education (control variable, heterogeneity variable).** The education variable constructed in Step 3 is longitudinal. Based on this variable, I construct a variable representing the individual’s education as at age 30 by using the highest level observed before age 30 (inclusive) if available, or the first observed level if not. If the variable is missing, I impute using the modal education level of the individual’s cohort.

**Race (heterogeneity variable).** This is taken directly from Step 3.

**Final eligibility status of each child (used in construction of instrument and restriction).** I modify the provisional child support eligibility status constructed in Step 2 using the child residency information in Step 3. If a child lives with her father for more than 50% of the waves for which she is provisionally eligible (this rules out, for example, periods before divorce) and for which she is younger than emancipation age (she is likely to be living away after emancipation age in any case), she becomes ineligible for child support. Note that the final eligibility status thus defined is not dependent on age; the child will be eligible if she is alive, satisfies the criterion based on marital and fertility information, and satisfies the above residency criterion.

**Number of eligible children below emancipation age (used in restriction).** The number of eligible children below emancipation age for each wave is computed based on the final eligibility status of each child. Note that this takes into account possible deaths of children (if the child dies, the number drops), as well as possible further nonmarital births and divorces (if the individual divorces again, his child from the current marriage is added to the count).

**Age of youngest eligible child (control variable, and used in construction of instrument).** The age of the youngest eligible child in every wave is also computed based on the final eligibility status of each child. Similar to the number of eligible children, the youngest eligible child could be different in different waves, and does not necessarily increase with time due to possible child death, nonmarital births, and further divorces.

**Whether the youngest child is emancipated or not (instrument).** This is an indicator variable that takes a value of one if the individual’s youngest eligible child is older than or at the emancipation age of his jurisdiction, half in the year before emancipation, and zero if she is younger.
B.1.5 Step 5: Data restrictions.

The following restrictions are applied for all datasets after Steps 1 to 4. On top of these, most datasets require additional restrictions to handle dataset- or institution-specific details (e.g., certain groups may have less reliable data or should not be treating child support as a rate). Details of these restrictions and the justification are given in the section for the dataset.

- Only male observations are used.
- Only ages between 26 and 59 are retained.
- Individuals with any unknown start or end marriage dates (even after imputation) are excluded.
- Individuals with no eligible children below emancipation age in all waves are dropped.
- Individuals who have ever had to pay child support for more than 4 children in one wave are excluded.
- Years before the first observation of an eligible child are excluded.
- Years before and including the last observed positive change in the number of eligible children are excluded.
- Observations for which the youngest eligible child is younger than 5 are excluded.

B.2 Panel Study of Income Dynamics (PSID)

The PSID is a longitudinal survey that covers the US from 1968 to 2017, with annual surveys until 1996 and biennial surveys since 1997. Most questions in the survey are targeted at the household level rather than the individual.

B.2.1 Generation of birth month variable

The PSID does not provide a birth date variable that is consistent across waves; hence, the first step I take in cleaning this dataset is to construct the birth month of every individual based on information on birth year, calendar birth month, and age information. This variable represents the best guess of when each individual was born, and is used at various points in subsequent steps. Information on the birth year and calendar birth month is recorded in every wave since 1983; age in years is always available unless the respondent refuses the question. To generate the birth year, I use the modal observed birth year if it is unique. In all other cases (more than one mode exists, or the individual is only observed before 1983), I use the median of three guesses: the smallest modal year, the largest modal year, and the year computed from the age of the individual. Next, I generate the calendar birth month by taking the modal value if it is unique, or taking the average of the smallest and largest mode if not. If the birth month is missing (before 1983, and if the person refuses this question), June is imputed for the birth month. This ensures that there is a birth month for every individual in the dataset, unless the age data is missing.
B.2.2 Marital and fertility histories

Marriage and fertility histories are based on the PSID’s marriage history file and childbirth and adoption history file. The 1985 to 2017 marriage history file is a compilation based on the PSID’s questions on marriage details, included in the survey since 1985. It is based on a complete retrospective marital history questionnaire of household heads and spouses in 1985, and details for the first and last (or current) marriage for other family members of marriageable age or individuals who became heads or spouses after 1985 (for example, in booster samples). The records are then updated based on current marital information for subsequent interviews. Records in the dataset are at the marriage level (one record for each person-marriage), and details are at the month level, although either the year or the calendar month (or both) could be missing. I do not supplement this dataset in any way, except to perform the imputation described in Step 2 of Section B.1, and to make manual edits to four records; these records conflict with the constructed birth month, or are logically inconsistent in their order of marriages.

Analogous to the above, the 1985 to 2017 childbirth and adoption history file is based on the PSID’s questions on fertility and adoption that are included in the survey since 1985. Only the childbirth portion of the data is used in this study. The information is based on a complete retrospective fertility history asked of heads and spouses as well as any family member of fertile ages since 1985. Like in the marriage history file, this information is collected once, and then updated for changes thereafter. Records in the dataset are at the child level (one record for each person-child), and details of childbirth are at the month level, with possibly missing years or calendar months. This file also contains reported death months of children who died. I use the birth month in the childbirth file if available, and supplement this with the constructed birth month if it is not available and the child is known. Similarly, I use the death year on the main PSID file for children who were ever observed once, and the death month on the childbirth history file for children who were never observed.

B.2.3 Details of longitudinal variables

Details of the longitudinal variables from the PSID are given below. Note that all key variables have reference period of the past year; ages are hence computed with respect to this reference period.

Child support amount paid (used in construction of main regressor). For years before 1985, I use the amount of contributions made by household heads to outside dependents in the previous year. The associated question for this variable in a typical year is “Did you give anyone who was not living with you at the time any money in [the previous year] toward their support? How much money was that altogether?” Since 1985, the PSID asks the follow-up question: “Was any of that child support? How much did that child support amount to in [the previous year]?” This variable is used from the 1985 wave and onwards; implicitly, I depend on fixed effects to handle differences in question wording.

Heads and spouses are also asked more detailed questions about marriages since the last wave (e.g. a person might have married multiple times).
**Total individual income (used in construction of main regressor).** This is computed as the sum of income from individual labor earnings, business labor earnings, income from business assets, income from other assets, farm income, and income from unemployment insurance. The reference period for all variables are for the previous year. Labor earnings and unemployment insurance income are for the head of household, while income from assets and farm income are total amounts for the head and spouse.

**Annual hours worked (dependent variable).** This a derived variable provided by the PSID for the household head in all years. The reference period is for the previous year. Specific definitions vary slightly across survey years (in particular, on whether to compute hours for each job before aggregating). In general, this is the number of weeks worked multiplied by weekly work hours, plus annual overtime hours.

**Annual earnings (dependent variable).** This is computed as the sum of employee earnings and self-employment earnings described below.

**Annual employee earnings (dependent variable).** I use the head labor income, available as a derived variable for all years. This variable excludes farm income and the labor portion of business income.

**Annual self-employment earnings (dependent variable).** This is computed as the sum of head labor income from business and head and spouse farm income, available as derived variables for all years.

**Hourly wage (control variable).** This is a derived variable that is available for the household head in all years of the PSID. The reference period is for the previous year.

**Education (control variable, heterogeneity variable).** The PSID provides a variable representing the highest grade or year of school completed as of every wave. This is mapped into three categories: no high school, if the highest grade completed was 11; high school, if the highest grade completed was 12; and greater than high school, if the highest grade completed was more than 12.

**Race (heterogeneity variable).** Race and ethnicity is recorded in every wave of the PSID. I homogenize the codes across years based on 5 categories (White, Black, American Indian, Asian or Pacific Islander, Other), and use the modal category for each individual.

**In-family status of each child (used in further steps).** For every wave, a child is living with the father if her wave-specific household identification number is the same as the father’s.

**Ages (control variable, and used in further steps).** Ages of individuals and their children are computed as the reference year less the birth year.
State and age of emancipation (used in further steps). The state of residence in each wave is available in the PSID. If it is missing, I impute using the previous observed state. If it is still missing, I impute using the next observed state. The individual’s state as of age 25 is then used in conjunction with state-specific emancipation ages (see Table A2) to determine the age of emancipation for his children. If it is still missing, I use the default age of 18, which is the modal emancipation age for non-missing observations.

B.2.4 Data restrictions

On top of the data restrictions described in Step 5 of Section B.1, I impose the following restrictions for the PSID. First, I drop father-years in which more than one father needs to pay child support in his household, since the child support amount in the data is the total for the entire household. Second, I retain only household heads, since we only have economic variables for the heads or their spouses. Third, I drop years before 1975, because Title IV-D of the Social Security Act commenced that year and because business income data is given as a range in the PSID before that year. Fourth, I exclude individuals from the 1990 Latino sample; this sample was only interviewed through 1995, and income variables are not as detailed for this sample. Fifth, I exclude observations for which the emancipation of the youngest eligible child occurs before 1990, the year that presumptive guidelines were implemented in all states (see Section A.1).

B.3 National Longitudinal Survey of Youth 1979 (NLSY)

The NLSY is different from the other panel datasets used in this paper in that it tracks individuals in a cohort rather than follow all descendents of a household. Specifically, it starts with a sample of individuals aged 14 to 22 in 1979, and follows them until the latest wave in 2016. The survey was annual before 1994, at which point it became a biennial survey. A National Longitudinal Survey of Youth 1997 exists as well; I do not use this since most respondents in this survey would not have had children who attained emancipation age yet.

B.3.1 Marital and fertility histories

Derived marital and fertility histories are available in the NLSY. The variables have undergone consistency checks, and are likely to be more accurate than those in other datasets because individuals are tracked since young, which should reduce recall problems that might be present in retrospective surveys. Marital history information includes the start and end month of up to seven marriages of the individuals. The derived data does not include information on how the marriage ended; since widowhood is much less likely in the age range of individuals in this sample, I assume that all marriages ended in divorce. I make two manual consistency edits—the order of marriages suggests that the event dates are wrong—and force marriage ending months to be after start months. I then perform the imputation described in Step 2 of Section B.1.

Fertility history information includes the birth and death months, identifier, and sex of each child the individual has ever had. Other than imputing the calendar month of birth
B.3.2 Details of longitudinal variables

Details of the longitudinal variables from the NLSY are given below. Note that all key variables have reference period of the past year; ages are hence computed with respect to this reference period.

Child support amount paid (used in construction of main regressor). The NLSY asks for the amount of child support paid by the individual or his or her spouse starting from the 1994 wave. The associated question for this variable in a typical year is “How much did you (or [spouse/partner’s name]) pay in child support during [the previous calendar year]?” The variable is censored above in some years. Starting in 2002, when a respondent refuses to answer a financial question, the NLSY asks for approximate values or ranges. I incorporate these approximate values or the midpoint of ranges into the variable. I do not separate the spouses’ child support payments from the individuals’.

Total individual income (used in construction of main regressor). I compute this as the sum of incomes from wages and salary, farm or business, military service, unemployment compensation, and other sources. The last is aggregated for both respondent and spouse; I do not separate the two when computing the sum. As discussed, the NLSY started probing for more information in non-response cases starting in 2002; I handle them in the same way as for the child support amount variable. The reference period is for the past calendar year.

Annual hours worked (dependent variable). I use the derived variable, the number of hours worked in the previous calendar year, available for all waves. The NLSY computes this based on week-by-week records asked at each interview. I set this variable to missing if 100% of the weeks in the previous calendar year is unaccounted for, as recommended by the NLSY.

Annual earnings (dependent variable). I compute this as the sum of employee and self-employment earnings, described below.

Annual employee earnings (dependent variable). I compute this as the sum of total income from wages and salary, and total military income, both derived variables available for all waves.

Annual self-employment earnings (dependent variable). I use the total income from farm or business, a derived variable available for all waves.

Hourly wage (control variable). The NLSY asks for the hours worked per week for each of five jobs in each wave, and provides the corresponding hourly wage of each job (derived variables). I compute the individual’s hourly wage as the average wage of all jobs with positive hours, weighted by job hours.
Education (control variable, heterogeneity variable). The NLSY provides a variable representing the highest grade completed as of every wave. This is mapped into three categories: no high school, if the highest grade completed was 11; high school, if the highest grade completed was 12; and greater than high school, if the highest grade completed was more than 12.

Race (heterogeneity variable). A three category race and ethnicity variable (Hispanic, Black, Other) is available for all individuals based on initial screener interviews. I supplement this with the modal race observed by the interviewers (White, Black, Other) between 1979 and 1998. I categorize the individual as majority race if he is Other in the screener and interviewers categorize him as White.

In-family status of each child (used in further steps). The NLSY provides a derived variable with information on the usual place of residence (ranging from in the respondent’s household to living part time with respondent and other person) of each child in the fertility history records. This is available in every wave. Based on this, I code the child as living with the father if and only if she lives in his household.

Ages (control variable, and used in further steps). Ages of individuals and their children are computed as the reference year less the birth year.

State and age of emancipation (used in further steps). The state of residence in each wave is available in restricted-use NLSY data. If it is missing, I impute using the previous observed state. If it is still missing, I impute using the next observed state. The individual’s state as of age 25 is then used in conjunction with state-specific emancipation ages (see Table A2) to determine the age of emancipation for his children. If it is still missing, I use the default age of 18, which is the modal emancipation age for non-missing observations.

B.3.3 Data restrictions

On top of the data restrictions described in Step 5 of Section B.1, I impose the following restrictions for the NLSY. First, I exclude years before 1994, the first year that the question on child support payments was fielded. Second, I exclude observations for which the emancipation of the youngest eligible child occurs before 1990, the year that presumptive guidelines were implemented in all states (see Section A.1).

B.4 British Household Panel Survey and UK Household Longitudinal Study (BHPS+)

The British Household Panel Survey (BHPS) is a longitudinal survey covering the UK that started in 1991. In 2009, collection of data under the BHPS study title stopped, and data collection was transferred to its successor, the UK Household Longitudinal Study (UKHLS). Many design features, instruments, and questions are similar in the two studies; in addition, the BHPS sample became a subsample of the larger UKHLS study. For purposes of this
study, I treat the two as one long panel covering 1991 to 2016 (the BHPS+), with a large addition to the sample in 2009. The main differences between the BHPS and the UKHLS are in the income variable definitions and survey design: some variables, including child support payments, are only asked in topical modules that occur less frequently. I use the harmonized BHPS project dataset provided by the Institute for Social and Economic Research at the University of Essex through the UK Data Service for this study.

B.4.1 Cleaning of master file

The harmonized BHPS project provides a master file containing the birth year and sex of the individuals. However, these variables are sometimes missing, and I do not have information on the procedures used in cleaning them. As such, I generate the birth year and sex variables based on in-panel information, and then supplement it using the master file’s value. If the modal birth year for all waves is unique, I use that as the birth year of the individual; otherwise, I use the median for the individual. Similarly, if the modal sex for all waves is unique, I use that as the sex of the individual; otherwise, I use the last observed sex. Next, for both the birth year and sex, I use the generated variable if the person was observed for more than two waves; otherwise, I use master file’s value.

B.4.2 Marital and fertility histories

I construct the marital histories of individuals based on four sources. The first source is the British Household Panel Survey Consolidated Marital, Cohabitation and Fertility Histories, 1991-2009 file compiled by the Institute for Social and Economic Research and provided through the UK Data Service. This compilation is based on retrospective and in-panel information in the BHPS, but does not cover the UKHLS. For the latter, I compile the marital histories based on a comprehensive retrospective marital history survey asked in waves 1 and 6 of the UKHLS (the second source), short marital history questions asked from wave 2 onwards (the third source), and questions about updates to marital status asked from wave 2 onwards (the fourth source). To reduce the number of transitions possible, I treat civil partnerships as equivalent to marriages when cleaning the UKHLS data.

The marital and cohabitation information in the BHPS consolidated histories data consists of a series of spells for each individual, with each spell being either no union, marriage, or cohabitation. Each spell contains information on the partner (if applicable), the start month, the end month, and the end result of the spell (for example, cohabitation can lead to splitting up, marriage, or currently together), and the separation month in the case of a divorce. I combine cohabitations with subsequent spells based on the partner identity and spell end type: if the partners are the same persons or partner information is missing but the transition is from a cohabitation to a marriage, it is likely that the cohabitation transitioned into marriage with the same person. All other cohabitation spells are treated the same as unmarried status and discarded. I also perform a few consistency edits to the data: two spell entries are manually edited, and reports of currently being together are sometimes followed by a new spell, in which case I assume the report of “currently together” is a mistake. I then perform the imputation described in Step 2 of Section B.1.

In the UKHLS, a complete marital history questionnaire is fielded to new entrants when
new subsamples are added (wave 1 for the main sample, and wave 6 for a booster sample); this implies that we have a complete marital history for most people in the survey. I make few consistency imputations for this; the main imputations done are those described in Step 2 of Section [B.1](#). The data includes cohabitation information; I do not use this except in one instance: when imputing the end month of a marriage with the start month of the next, I use the earlier of the next cohabitation period or the next marriage period as the imputed end month.

To ensure coverage of respondents is complete, in every wave, the UKHLS also asks new entrants (e.g. by marriage) a shorter version of the questionnaire, with only details of their first marriage and current marriage (if applicable). I combine this information with the first two sources. In principle, this should yield exactly one marital history per respondent (either the BHPS version, the UKHLS complete version, or the short version). In practice, there are a few respondents (less than 1% of the sample) who answered the short version and were either in the BHPS consolidated histories or answered the UKHLS complete version. In the latter case, I use the information from the complete version. In the former case, since there could be a longer gap between when the BHPS collected the information and the short questionnaire in the UKHLS, I treat the difference as due to a reporting problem. If the first marriage in the UKHLS is more than two years after the first marriage reported in the BHPS, I assume that a change in marital status had occurred. If they occur within two years of each other, I assume that they are the same marriage, and take the earlier month as the start month. If the first marriage in the UKHLS is more than two years earlier, I assume that there was a marriage prior to the one reported in the BHPS.

The final step in cleaning the BHPS+ marital history data is to update observations based on the UKHLS’s questions on changes in marital status. In each wave, the UKHLS asks if a person’s legal marital status has changed since the last interview, as well as the change month. This is repeated for up to four changes since the previous interview. I supplement the change month with the interview month if it is missing, and update individuals based on this information.

To construct the fertility histories in the BHPS+, I use the retrospective fertility questionnaires of both the BHPS and the UKHLS directly, and supplement with in-panel information on relationships between household members. Like the complete marital history questionnaires, each respondent answers up to one fertility questionnaire, generally timed to match booster samples (occurring in BHPS waves 2, 11 and 12, and UKHLS waves 2 and 6). The BHPS questionnaires contain, for each child, information on the birth month, sex, death year, whether the child is still in the household, and the age at which the child left the respondent’s household. I retain only the first three pieces of information, make one logical consistency edit (the child cannot be born before the parent’s constructed birth year), and impute missing calendar months. The UKHLS fertility data is similar, except it contains the identifier for resident children in wave 1, and does not contain the calendar month of birth. I use the constructed birth year and sex from the master file for resident children, and impute June for the calendar month for all children.

To supplement the fertility questionnaire, I use the relationship information that is avail-
able in every wave. If a person identifies an individual as a natural parent, the person is added to the list of the individual’s children (the identifier of the child is used to prevent double-counting). This yields a second fertility dataset for each person. Note that the children in this dataset are always resident children, which means that I can match them to the master file for information like the their year of death (if applicable).

The final step in the construction of fertility histories is to deconflict the information from the retrospective questionnaire and the in-panel information, since there is generally a high degree of overlap between the two. This is done based on child identifier, birth month, and sex. If a child from either dataset has birth month within 36 months of each other, is of the same sex, and the identifiers do not conflict (in most cases it is a match between a nonresident child without an identifier and a resident child), I assume that they are the same child. This removes all the obvious matches from the list. I then relax the sex criterion, and search for matches again. Finally, all unmatched children are assumed to be unique children not accounted for in the other dataset, and are retained.

B.4.3 Details of longitudinal variables

Details of the longitudinal variables from the BHPS+ are given below. Note that almost all variables have a point-in-time reference period; ages are hence computed with respect to the interview year.

Child support amount paid (used in construction of main regressor). Child support amount is available from wave 2 onwards of the BHPS, and in every odd wave of the UKHLS. The question in a typical wave of the BHPS is “Do you send or give money to any person who does not live here for any of the purposes listed on this card? Do not include pocket money for children or payments to charity.” This is followed by a question on the relationship to the recipient, the purpose of the transfer (ranging from “maintenance/alimony/child support” to “repay loan from person”), the amount, and the frequency of transfer. The respondent can provide information for transfers towards a maximum of three persons. I exclude transfers towards parents or parents-in-law, and transfers for the repayment of a loan; in particular, this retains transfers towards ex-spouses, since it might be unclear if these are child support or spousal maintenance payments. In the UKHLS, the following question is asked once: “About how much did you send or give for child support last time you gave money?” along with an accompanying frequency question. This question is asked of persons with children under 16 who live outside the household. Note that this attenuates the estimated Frisch elasticity (since the first stage response is larger in the data than in reality), but the problem is less severe when we use long-term variation (since the child support rate drops to essentially zero after three years).

Total individual income (used in construction of main regressor). I use the total monthly personal gross income variable provided in the harmonized dataset, available in all

\[21\text{An implication of this is that BHPS wave 1 is dropped in estimation. UKHLS waves are not dropped completely due to the imputation procedure.}\]
waves. This is a derived variable that has a consistent definition in both the BHPS and the UKHLS.

**Annual hours worked (dependent variable).** I compute annual hours worked as the product of number of weeks employed and work hours per week. Work hours per week is computed as the sum of employee hours normally worked per week, self-employment hours normally worked per week, employee overtime hours in a normal week, and one-fourth of hours worked per month in a second job; these variables are all available and consistent in definition in both the BHPS and UKHLS. In the BHPS, the number of weeks employed is a derived variable, based on detailed job history records (respondents are asked details about each job spell). The UKHLS does not provide the equivalent derived variable; I hence construct this based on retrospective employment surveys (available for subpopulations of waves 1 and 5) and detailed questions on job changes since the last interview (available from wave 2 onwards for every returning respondent). I only use the employment status for the 365 days leading up to the interview date; if the period between interviews is shorter than a year, I compute based on the shorter period and rescale to a year.

**Annual earnings (dependent variable).** Gross monthly labour income is a derived variable available in the harmonized dataset, with a consistent definition in both the BHPS and the UKHLS; I annualize by multiplying by 12.

**Annual employee earnings (dependent variable).** I use the usual gross pay per month in the current job, available as a derived variable with a consistent definition in both the BHPS and the UKHLS. To this variable, I add the gross earnings from a second job in the previous month, another derived variable with a consistent definition in the two datasets, if the individual is an employee in the second job. I annualize by multiplying by 12.

**Annual self-employment earnings (dependent variable).** For the BHPS, I use the sum of self-employment profits less losses (a derived variable) and self-employment pay (another derived variable). The two variables that go into the sum are mutually exclusive. For the UKHLS, I use the gross self-employment earnings, a derived variable. To the above two, I add the gross earnings from a second job in the previous month (described above) if the individual is self-employed in the second job. I annualize by multiplying by 12.

**Hourly wage (control variable).** I compute the hourly wage as annual earnings divided by annual hours worked.

**Education (control variable, heterogeneity variable).** The harmonized dataset provides a derived variable representing the highest qualification of the individual as of every wave. This variable is consistent in definition in both the BHPS and the UKHLS. I map this into three categories: no high school, if no qualifications are reported; high school, if the individual has the GCSEs, A Levels, or other qualifications; and greater than high school, if individual has a degree or other higher degree.
Race (heterogeneity variable). The harmonized dataset provides a derived ethnicity variable. The majority of individuals are in the category “British/English/Scottish/Welsh/Northern Irish (White)”.

In-family status of each child (used in further steps). For every wave, a child is living with the father if her wave-specific household identification number is the same as the father’s.

Ages (control variable, and used in further steps). Ages of individuals and their children are computed as the constructed birth year less the interview year.

B.4.4 Data restrictions

On top of the data restrictions described in Step 5 of Section B.1, and the implicit data restriction implied by missing child support data described in Section B.4.3 I impose one additional restriction for the BHPS+. Because fathers with certain benefits face a fixed child support amount in the 2003 and 2012 schemes (see Section A.2), I exclude fathers who have ever received certain income transfers. In the BHPS, the excluding transfers are pension credit, any disablement or disability or mobility allowance or pension, attendance allowance, carer’s allowance, unemployment benefit, income support, and jobseeker’s allowance. In the UKHLS, the excluding transfers are the above, plus employment and support allowance, and universal credit.

B.5 Household, Income and Labour Dynamics in Australia (HILDA)

The HILDA survey is an annual longitudinal survey that covers Australia between 2001 and 2016. Preprocessing (step 1 of Section B.1) is not needed for this dataset. No additional restrictions are imposed for this dataset.

B.5.1 Marital and fertility histories

The HILDA provides the marital histories of all individuals in the dataset. These compilations are first generated based on a retrospective survey fielded to new entrants that asks individuals details about their current marriage as well as their first four marriages. This information is then updated every wave based on questions about marital changes since the previous interview. The marital histories include information on the years of marriage, divorce, separation, and widowhood, and the number of months in cohabitation before marriage. The start month of the current marriage is also available; however, in public-use data, all other event months are suppressed.

Each wave contains the individuals’ histories up to that wave. I start by cleaning the wave-specific information and performing the imputation described in Step 2 of Section B.1. Similar to my treatment of the UKHLS described in Section B.4.2 I add the cohabitation months to the start of the next marriage when imputing missing marriage end months. This yields up to sixteen histories per individual. Because the data suppression implies that earlier
waves have slightly better information on the month of marriage, I use the first non-missing observed event month for each individual.\footnote{In addition, the HILDA user guide notes that the marriage start date in the first wave could have been interpreted as the cohabitation start date instead. Hence, I use the first wave’s observation only if the event month for all other waves are missing.}

Among the datasets that I use, the fertility histories constructed in the HILDA are likely to be one of the more reliable ones. Every wave, a questionnaire on children are fielded to both new entrants and returning respondents. The questionnaire includes questions on the age and sex of all children who live elsewhere more than 50% of the time, and the age of all children who live with the respondent more than 50% of the time. I combine the former with household relationship pointer variables—this identifies own children (including adopted children)—in each wave to construct the fertility histories.\footnote{For simplicity, I do not use the information on resident children from the questionnaire.}

The above yields up to 16 histories per individual. Like in the BHPS+ (see Section \textbf{B.4.2}), I deconflict the information from the 16 histories based on child identifier, birth year, and sex. I do this in several steps that successively relaxes the criteria of the match. For example, in the first step, all children of an individual must have the same identifier across waves (unless it is a nonresident child), the same sex across waves, and birth years within two years of one another across waves. In this case, I use the modal birth year as the child’s birth year if it is unique, and the median birth year if it is not. I then try variations of dropping outlier birth years, ignoring sex, and expanding the threshold of closeness for the birth year, until I obtain one fertility history per individual.

Death years of children who have died are based on two sources: HILDA’s master file, which provides the death year if the child was ever resident in the individual’s household, and a child death module in waves 5, 8, 11, and 15, which asks for the death years of nonresident children who died before age 15. The latter does not link the death years to any particular child. As such, I match this information to the children based on birth year and sex.

\textbf{B.5.2 Details of longitudinal variables}

Details of the longitudinal variables from the HILDA are given below.

\textbf{Child support amount paid (used in construction of main regressor).} I use a derived variable that represents the annual amount of child support paid towards all nonresident children, available in all waves. This variable is computed based on the questions “In total, how much regular financial support do you pay/receive for the everyday expenses of this child/these children? How often is this amount paid/received?”, and then a question on whether the respondent pays or receives the amount. The amount is only asked if there are any children below the age of 25. In wave 1, the question is slightly different, but the interpretation is the same.

\textbf{Total individual income (used in construction of main regressor).} I use the individuals’ financial year gross regular income variable provided, available in all waves. This is
a derived variable computed based on a wide range of income sources asked in the survey, and includes imputation by the HILDA.

**Annual hours worked (dependent variable).** I use the individuals’ annual work hours variable provided by the Cross-National Equivalent File (CNEF), and included with the HILDA dataset. The variable is available for all waves, and is calculated from usual hours worked and the percent of the financial year in work. Usual hours are taken from the previous wave if the individual is unemployed.

**Annual earnings (dependent variable).** I compute this as the sum of financial year wages and salary and financial year business income (positive less negative values). Both are available as derived variables, and includes imputation by the HILDA.

**Annual employee earnings (dependent variable).** I compute this as financial year wages and salary less incorporated business wages and salary.

**Annual self-employment earnings (dependent variable).** I compute this as financial year business income plus incorporated business wages and salary. Note that the former is a derived variable based only on unincorporated business income.

**Hourly wage (control variable).** I compute the hourly wage as the current weekly gross income from wages and salary in all jobs (a derived variable) divided by the hours per week usually worked in all jobs (also a derived variable). Gross income from wages and salary includes imputation by the HILDA.

**Education (control variable, heterogeneity variable).** The HILDA provides a derived variable representing the individuals’ highest education level achieved as of every wave. I map this into three categories: no high school, if the individual did not complete Year 12; high school, if the individual completed Year 12, has a Australian Qualifications Framework Certificate III or IV, or a diploma; and greater than high school, if individual has a bachelor or other higher degree.

**Race (heterogeneity variable).** Individuals are asked if they are of Aboriginal or Torres Strait Islander origin in their first interview; I categorize them as being in the minority race if so.

**In-family status of each child (used in further steps).** For every wave, a child is living with the father if her wave-specific household identification number is the same as the father’s.

**Ages (control variable, and used in further steps).** Ages of individuals and their children are computed as the birth year on the master file less the interview year. The interview year is used because the child support amount paid is a point-in-time variable.
B.6 Swiss Household Panel (SHP)

The SHP is an annual longitudinal survey that covers Switzerland from 1999 to 2016. It consists of a total of three subsamples: the first subsample started in wave 1 (1999), a booster subsample was added in wave 6 (2004), and a second booster subsample was added in wave 15 (2013). Preprocessing (step 1 of Section B.1) is not needed for this dataset.

B.6.1 Marital and fertility histories

I compile marital histories of individuals based on three sources: in-panel marital status (called civil status in the SHP) information reported by individuals each wave and two retrospective surveys (biographical surveys) conducted once each for the first and third subsamples. In-panel marital status information includes the current marital status, spouse identifier, and the month that the current marital status began. Based on this, I identify the end year of marriages based on the wave of status change (June is imputed for the month).

The SHP fielded retrospective surveys containing marriage history questions twice, once in waves 3 and 4 (2001 and 2002) to the first subsample, and once in wave 15 (2013) to the new (third) subsample. No retrospective surveys were fielded to the second subsample. Both retrospective surveys contain information on the years of marriage, separation, divorce, and widowhood; the first survey asks these for the first five marriages, and the second for all marriages until the interview. I perform a few consistency edits, including four manual edits. The second retrospective survey also contains information on the identity of the spouse; I combine successive periods of marriages if it involves the same spouse. For divorce cases with missing years, I impute the missing years with separation years if available.

After preparation of the in-panel marital status information and the retrospective survey information, I deconflict them in a manner similar to my treatment of fertility history in the BHPS+ (see Section B.4.2). If the sum of the differences in the start and end months between the two records is smaller than 18 months, and the ending type matches, I assume that they are the same marriages; if a marriage in either the in-panel or the retrospective data does not have a corresponding match, I assume that it is a unique marriage not recorded in the other. In the case of a match, I use the in-panel data if available, since it has the correct month information. I allow marriages with a missing start month to match with one with a missing end month on the other record, except in cases where the end month occurs 18 months before the start; if such matches occur, I force the marriage end months to be equal to the start month. After deconflicting the information, I perform the last part of the imputation described in Step 2 of Section B.1.

I compile the fertility history of each individual based on three sources. The first source is a question on the year of birth (with some processing by the SHP) of every nonresident child, asked up to the 14th wave. I combine the information on these nonresident children based on the birth year; children reported in different waves with birth years within 2 years (inclusive) of one another are assumed to be the same child. No questions on nonresidential children were asked from wave 15 onwards; I ignore this issue since only four waves are affected. The second source is a retrospective survey on family events fielded to the third...
subsample on their introduction to the survey in wave 15. This survey provides information on the years of births of all children the individual has had. Note that individuals in the first and second sources do not overlap; together, they provide information on all nonresident children of all individuals as of the 14th/15th wave. The third source is the master file, which includes pointer variables indicating the parents of every person. This gives information on the identity, birth year, sex and possibly death year of every ever-resident child of the individual. I then combine the three based on the birth year again, with a threshold of two years.

B.6.2 Details of longitudinal variables

Details of the longitudinal variables from the SHP are given below. The reference period for all key variables is since the previous interview; ages are hence computed with respect to the year before the interview year.

Child support amount paid (used in construction of main regressor). I use a derived variable constructed based on questions on payments to people outside the household. The relevant question, asked of one adult in the household, is (in the English version of the questionnaire): “Since [previous interview], have you or a member of your current household paid money to persons who are not, or no longer, part of your household (child not living with you any more, relative in care, former partner retired)? How much money was paid out? You may indicate a monthly or yearly amount.” The former includes an information pop-up (all interviews are computer assisted) specifying “Compulsory payments - for example maintenance allowance - or freely agreed payments.” The latter question on the amount comes with a question on the period of reference (monthly, annual, or once-off), and then is followed by the question “And for how long did you pay this amount since [previous interview]?” The derived variable is then constructed based on this, with an annual reference period, and is available for all waves.

Total individual income (used in construction of main regressor). I use the individuals’ gross annual total personal income provided, available in all waves. This is derived based on various income questionnaires, and include plausibility checks by the SHP. The reference period is for the months since the previous interview.

Annual hours worked (dependent variable). I use the individuals’ annual work hours variable provided by the CNEF, and included with the SHP dataset. The variable is available for all waves, and is calculated by multiplying the usual number of working hours per week by 52. If the variable is missing due to non-response, the CNEF imputes a value based on the employment status (full, part, marginal, none) reported in the activity calendar for the interview month.

Annual earnings (dependent variable). Annual gross income from employment or self-employment is available as a derived variable that includes plausibility checks for all waves.
Annual employee earnings (dependent variable). Annual gross income from employment is available as a derived variable that includes plausibility checks since wave 4.

Annual self-employment earnings (dependent variable). Annual gross income from self-employment is available as a derived variable that includes plausibility checks since wave 4.

Hourly wage (control variable). I compute the hourly wage as annual earnings divided by the annual hours worked.

Education (control variable, heterogeneity variable). The SHP provides a derived variable representing the individuals’ highest International Standard Classification of Education (ISCED) classification achieved as of every wave. I map this into three categories: no high school, if the individual has at least an ISCED level 2 classification (lower secondary or second stage of basic education); high school, if the individual has an ISCED level 3 classification (upper secondary education); and greater than high school, if individual has an ISCED level 4 classification and above (post-secondary non-tertiary education and above).

In-family status of each child (used in further steps). For every wave, a child is living with the father if her wave-specific household identification number is the same as the father’s.

Ages (control variable, and used in further steps). Ages of individuals and their children are computed as the birth year on the master file less the reference year.

B.6.3 Data restrictions
On top of the data restrictions described in Step 5 of Section B.1, I impose the following two restrictions for the SHP. First, I drop father-years in which more than one father needs to pay child support in his household, since the child support amount in the data is the total for the entire household. Second, I exclude the first wave of the third subsample (wave 15 in year 2013) because no individual-level data is collected for this group.

B.7 Survey of Income and Program Participation (SIPP)
I use the public-use SIPP panels when analyzing mothers. The SIPP differs from the other datasets used in this paper in that it is a series of short panel datasets rather than a panel survey that follows individuals over a lifetime. Each panel’s interviews are conducted every four months for between two to five years, with questions on income and public transfers for each of the past four months. Each panel also includes a set of topical modules that are asked only in specific interviews; in particular, the second wave of all panels include a marital history module and a fertility history module. SIPP panels are indexed by their start year, and the time frames may overlap. In total, there are 14 completed SIPP panels (viz. 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1996, 2001, 2004, 2008); I
use the panels since 1990 because the first stage is weak in panels before 1990. All variables used include imputation and consistency checks by the Census Bureau.

The 1992 and 1993 panels, which ended by January 1996, included a follow-up panel on the same individuals known as the Survey of Program Dynamics (SPD). This survey was conducted annually, and covered 1997 to 2002, with each wave asking questions on every month of the reference year. I include the waves covering 1998 to 2002 in the sample; the 1997 wave was preliminary had lacked most of the variables that I use in this study.

### B.7.1 Marital and fertility histories, and generation of eligibility status

Because of the short panel nature of the SIPP, in-panel fertility information is irrelevant for the purposes of this study, and in-panel marital status changes should have little impact on the results. As such, marital and fertility information comes directly from the marital and fertility history modules of the second wave.

The SIPP marital history module contains the months of marriage, separation, divorce, and widowhood of up to three marriages, including the last one. Because of the short panel nature of the SIPP, only the last marriage is relevant; children made eligible due to earlier divorces would have been eligible at some time in the past, but these periods are not observed in the panel.

The SIPP fertility history module is more limited than the other panel datasets used in this study; questions on birth months of children were posed only to women, and only for the first and last child in the panels I use. Since 2001, the children’s calendar month of birth are suppressed in public-use data; I impute these with the month of June whenever missing.

I generate the eligibility status based on the above information. A child (either the youngest or the oldest) is eligible for child support if he was born before the divorce or separation month of any of up to three marriages on record, or if the mother was never married. I do not use residency information in identifying these children since I lack information on their residency statuses pre-panel. The above misses mothers with intact last marriages and with children born in between marriages; empirically, I find that inclusion of these observations reduces the amount of child support received before emancipation, which suggests that a large proportion of these mothers have eligibility status misassigned.

### B.7.2 Details of longitudinal variables

Longitudinal variables in the SIPP are asked every interview (occurring every four months), for each of the preceding four months. All variables used are annualized wherever possible, for ease of interpretation.

**Child support amount received (used in construction of main regressor).** The SIPP collects detailed information on the income from transfers, broken down by categories, and provide this information as topcoded derived variables. I compute child support amount

\[ \text{Child support amount received} \]

25The 1986 to 1988 panels included an additional question on birth months of second children. Panels since 2014 pose these questions to men as well, and ask about all children. These panels are not used in this study.
received as the sum of incoming transfers in two categories: child support payments and pass-through child support payments.

**Total individual income (used in construction of main regressor).** The SIPP provides the total individual income for the month as a derived variable.

**Child support rate (main regressor).** This is computed in the same way as in Section B.1.4 except with support amount paid substituted with support amount received.

**Hours worked (dependent variable).** I compute weekly hours worked as the sum of hours worked per week in four jobs: two employee jobs and two self-employment jobs. The number of hours worked for the reference month is then this number multiplied by the number of weeks worked in a month, topcoded at four weeks. The variable is winsorized at the 1st and 99th percentiles before use.

**Earnings (dependent variable).** The SIPP provides the total earned income for the month as a derived variable. The variable is winsorized at the 1st and 99th percentiles before use.

**Hourly wage (control variable).** I compute the hourly wage as earnings divided by hours worked for the reference month. The variable is winsorized at the 1st and 99th percentiles before use.

**Education (control variable).** The SIPP provides the highest degree received or grade completed each wave. This is mapped into three categories: no high school, if the highest grade completed was 11 or grade 12 without a diploma; high school, if a diploma or equivalent was received; and greater than high school, if the individual had some college experience, possibly without a degree. Unlike for the other panels, I use this variable directly instead of the education as at age 30, because of the short panel nature of the SIPP.

**Age of individual (control variable, and used in further steps, and used in restriction).** Ages of individuals are computed as the birth month less the reference month. In analysis, I round off the ages to the nearest year.

**Age of youngest eligible child, and whether the youngest child is emancipated (regression discontinuity running variable and instrument).** The age of the youngest eligible child is easily computed as his birth month less the reference month. The instrument is then an indicator variable that takes a value of one if the individual’s youngest eligible child is older than or at the emancipation age of his jurisdiction, half in the year before emancipation, and zero if she is younger.
Whether the youngest eligible child lives with mother (potential confounder). Unlike the other variables in this list, this is not a longitudinal variable. Along with the birth month of each child, the fertility module also asks for his location as of the second wave. I use this variable when assessing the possibility of potential confounding.

Earnings of eligible child living with mother (potential confounder). We observe all members of the mother’s family in each wave. I identify the eligible children still living with the mother based on the birth months of all family members, matching them to the birth month from the fertility history. The match is imperfect; a large proportion (around 60%) of eligible children appear to be still living with the mothers ten years after emancipation. The monthly earnings of eligible children in the reference month is then copied over from the child record.

Amount of child-related public transfers (potential confounder). This comprises the Aid to Families with Dependent Children before 1997 and the Temporary Assistance for Needy Families after 1997 (the amount is recorded on the same variable in the SIPP), the Special Supplemental Nutrition Program for Women, Infants, and Children, the Supplemental Nutrition Assistance Program, and the Earned Income Tax Credit. The first three transfer categories are available for each reference month in the panel. The last transfer category is available only in the taxation topical module asked in certain waves, and is provided for the entire tax year. I distribute the tax credits equally through the months of the year.  

B.7.3 Survey of Panel Dynamics (SPD)

The SPD waves are slightly different from the main SIPP panels in that interviews are annual (with reference months covering every month of the year as in the main panels), and that it contains fewer variables. The SPD did not field its own marital and fertility history modules; we thus do not have information on individuals who cannot be matched to the second wave of the 1992 and 1993 SIPP panels. In addition, the following variables are affected.

Child support amount received. Total annual income from child support is available for the previous calendar year in all waves of the SPD. The months in which the individual received child support is also available (an indicator variable that takes on a value of one if she received it that month). I apportion the income variable to each month of the year based on the latter.

Outcome variables. The SPD contains data on usual hours per week (one variable for the whole year), total earnings for the year, and an indicator for whether a person worked in each of the 52 weeks in the previous calendar year. I compute the monthly hours and earnings for every month based on this.

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26Earned income tax credits are included because they depend on child presence in principle. However, note that tax credits are received only once a year, and in a month that is unlikely to be correlated with the calendar month of the child age. Hence, this should not confound in the regression discontinuity design used in this paper.
B.7.4 Data restrictions

I apply the following data restrictions, all other restrictions described in Section [B.1.5] are irrelevant or not possible due to the limited fertility information and the short panel nature of the SIPP.

- Only female observations are used.
- Only ages between 26 and 59 are retained.
- Individuals with no eligible children are dropped.
- Observations for which the youngest eligible child is younger than 5 are excluded.
## Appendix Table B1: Important features of each panel dataset

<table>
<thead>
<tr>
<th></th>
<th>PSID (USA)</th>
<th>NLSY (USA)</th>
<th>BHPS+ (GBR)</th>
<th>HILDA (AUS)</th>
<th>SHP (CHE)</th>
<th>SIPP (USA)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frequency of data collection</strong></td>
<td>Annual until 1996, biennial starting 1997.</td>
<td>Annual until 1993, biennial starting 1994.</td>
<td>Annual; child support only asked in UKHLS odd waves.</td>
<td>Annual.</td>
<td>Annual.</td>
<td>Every 4 months (main panel); annual (SPD); reference period is at the month level.</td>
</tr>
<tr>
<td><strong>Source of marriage history</strong></td>
<td>Derived variables, constructed based on retrospective questionnaire and in-panel relationship.</td>
<td>Derived variables, constructed based on questions in each survey.</td>
<td>Constructed using derived variables in BHPS (themselves based on retrospective questionnaires and in-panel relationship), retrospective questionnaires in UKHLS, and in-panel marital status.</td>
<td>Derived variables, constructed based on retrospective questionnaire and in-panel marital status.</td>
<td>Constructed based on retrospective questionnaire and in-panel marital status.</td>
<td>Retrospective questionnaire.</td>
</tr>
<tr>
<td><strong>Source of fertility history</strong></td>
<td>Derived variables, constructed based on retrospective questionnaire and in-panel relationship.</td>
<td>Derived variables, constructed based on questions in each survey.</td>
<td>Constructed using retrospective questionnaires and in-panel relationship.</td>
<td>Constructed using questions on all resident and nonresident children fielded every wave.</td>
<td>Constructed based on in-panel questions on nonresident children (first and second subsample), retrospective questionnaire (third subsample), and in-panel relationship.</td>
<td>Retrospective questionnaire.</td>
</tr>
</tbody>
</table>
Table B1 continued: Important features of each panel dataset

<table>
<thead>
<tr>
<th>Additional restrictions</th>
<th>BHPS</th>
<th>UKHLS</th>
<th>None, but most of the main restrictions applied on the panel of fathers do not apply in the SIPP.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drop if more than one father pays support in family.</td>
<td>• Drop years before 1994.</td>
<td>• Implicitly drop BHPS wave 1 (no child support data); implicitly drop tail waves of UKHLS if no imputation done.</td>
<td>• None, but most of the main restrictions applied on the panel of fathers do not apply in the SIPP.</td>
</tr>
<tr>
<td>Keep only heads.</td>
<td>• Drop if emancipation occurs before 1990.</td>
<td>• Exclude fathers who have ever received certain income transfers.</td>
<td>• None, but most of the main restrictions applied on the panel of fathers do not apply in the SIPP.</td>
</tr>
<tr>
<td>Keep 1975 onwards.</td>
<td>• Drop if more than one father pays support in family.</td>
<td></td>
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<tr>
<td>Drop Latino sample.</td>
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<tr>
<td>Drop if emancipation occurs before 1990.</td>
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<tr>
<td>Drop if more than one father pays support in family.</td>
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<tr>
<td>Exclude first wave of third subsample (no individual-level data).</td>
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</tbody>
</table>
References


