Child Support Guidelines: The Good, the Bad, and the Ugly

Margaret F. Brinig  
*Notre Dame Law School, mbrinig@nd.edu*

Douglas W. Allen

Follow this and additional works at: [http://scholarship.law.nd.edu/law_faculty_scholarship](http://scholarship.law.nd.edu/law_faculty_scholarship)

Part of the [Family Law Commons](http://scholarship.law.nd.edu/law_faculty_scholarship)

**Recommended Citation**


---

This Article is brought to you for free and open access by the Publications at NDLScholarship. It has been accepted for inclusion in Journal Articles by an authorized administrator of NDLScholarship. For more information, please contact lawdr@nd.edu.
Child Support Guidelines: The Good, the Bad, and the Ugly

DOUGLAS W. ALLEN* & MARGARET F. BRINIG**

Abstract

Child support guideline systems do more than simply determine the amount of income to be transferred from the noncustodial to the custodial household. They create incentives, one way or another, for spouses to divorce and seek custody and support payments. We examine three cases found in North America, and find that the common method of income shares provides a decent guideline that does not create any perverse incentives for divorce. Percentage-of-obligor-income methods do worse than other systems, and can cause increases in divorce rates for families in which one spouse earns a high income. Finally, the Canadian system, which is designed to transfer large amounts of net wealth, creates very large negative incentives for marriage stability.

I. Introduction

As two students and supporters of the family and family law, we recognize that the legal apparatus regulating family life is often designed to handle social problems arising from family breakdown. We applaud public policy actions when they result in good intimate and parent-child relationships. However, every action that is taken to resolve a family issue—whether single-parent poverty, loss of custody and contact, or loveless marriages, to name a few—creates with it a set of incentives for the decision makers of the household. These incentives can support the general institutional structure of the family and encourage existing families to remain successful, or assist troubled and failed families to transition to a

* Burnaby Mountain Professor of Economics, Simon Fraser University. Thanks to Michael Wilde for assistance.

** Fritz Duda Family Professor of Law, University of Notre Dame.
workable second-best solution for their personal relationships. However, family regulations can also work the other way. They can create incentives that lead to bad behaviors, attempts to capture family wealth, and ultimately family breakdown. Often, the laws that work this way are created with good intentions, but with little concern given to individual incentives.

The experience with Child Support Guidelines (CSGs) over the past thirty years in North America provides a nice example of how different variations on the same theme can lead to significant differences in behavior within the family. In many U.S. cases, CSGs were designed in such a way that they provided support for children within the custodial home, while leaving the wealth of the noncustodial home relatively intact. On the other hand, CSGs concerned mostly with maximizing the transfer of wealth to the custodial home created net wealth transfers that amounted to unintended spousal support. In the effort to generate more generous child support and fight poverty through guidelines, an unfortunate, but predictable, incentive resulted: individuals married to high-income spouses within marginal marriages were encouraged to divorce. Subsequently, noncustodial parents and their supporters began to retaliate in courts and the media.

These incentives stem from (usually) well-intentioned desires to provide adequate support for children of broken families, coupled with failures to appreciate some features of families. We show here that, in fact, couples’ divorce patterns follow the incentives we think are being created by states with faulty guidelines. We begin with a brief description of guidelines and the problems faced by policy makers drafting or updating them. We follow this discussion with three examples of ways two of the problems have been resolved and finally present our predictions and supporting evidence gleaned from large, national, longitudinal surveys in both the United States and Canada. We show that a few simple differences can lead to good, bad, and really ugly guidelines.

II. What Is a Guideline?

On the surface, a guideline is very simple: a mere table of numbers. For example, Table 1 shows the first four rows of the Virginia guidelines. Down the left-most column run the combined monthly earnings of the couple. Along the top row are listed the number of children up to six. Every guideline table has this basic format, although the actual details vary from one jurisdiction to another. Some states use gross income; oth-

---

1. Some might quibble with the word “unintended.” In some jurisdictions, child support is considered “family support,” and the spousal support is, therefore, intended.
Child Support Guidelines: The Good, the Bad, and the Ugly

...ers adjust income in various ways to account for fixed mandatory expenses in a month, and there may or may not be a cap on income or the number of children. The bottom line, however, is that guidelines amount to a simple table from which any family can determine the amount of child support.

<table>
<thead>
<tr>
<th>Combined Monthly Gross Income</th>
<th>NUMBER OF CHILDREN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>One</td>
</tr>
<tr>
<td>0–599</td>
<td>65</td>
</tr>
<tr>
<td>600</td>
<td>110</td>
</tr>
<tr>
<td>650</td>
<td>138</td>
</tr>
<tr>
<td>700</td>
<td>153</td>
</tr>
</tbody>
</table>

Table 1 points to the great appeal of a guideline system: it is so simple. A CSG means that judges, attorneys, the couple, and others do not have to research and debate payment levels. Given that guidelines are almost always couched in scientific rhetoric, the tables are not only simple, but also they come with authority.2 The rules, however, hide all the assumptions that lie behind them. These assumptions determine the entire set of guideline values, and these create incentives between the husband and wife over decisions to divorce and seek custody. Understanding these assumptions is necessary to understand the incentives.3

III. Three Analytic Issues in Creating Guidelines

Once a legal jurisdiction decides to proceed with the creation or reformulation of a CSG, the committee put in charge immediately runs into several logistical problems. To create any table of guidelines, the group, and later the legislature or other rule-making body, needs to make three

---

2. For example, the Indiana Rules of Court for Child Support Rules and Guidelines states, in part: “In developing these Guidelines, a great deal of reliance was placed on the research of Thomas J. Espenshade, (Investing in Children, Urban Institute Press, 1984) generally considered the most authoritative study of household expenditure patterns,” available at http://www.in.gov/judiciary/rules/child_support/ (last visited Nov. 15, 2010).

3. In reality, guideline tables are only one part of a set of regulations that define child support. These regulations can be quite complicated and may include add-ons to the tables that can change the values.
critical decisions with respect to the costs of children, a sharing rule, and
the value of children. These decisions get built into the table numbers and
systematically determine the income transferred between the noncustodi-
al and custodial household—whether or not they reflect the reality of child
support in general or in the specific case. Depending on how the three crit-
ical issues are handled, the guideline transfers can vary from reasonably
handling child costs to becoming a form of spousal support. When guide-
lines end up transferring excessive amounts of wealth, they can even cre-
ate incentives to divorce. This section considers each of these issues.

A. Issue I: Estimating The Costs of Children

Often the simplest concepts are the most difficult to measure. Every
parent casually refers to the “cost of raising children,” and the concept
has become part of our everyday speech. However, there is no unique
“cost of a child,” either in a financial or broader sense. This problem
stems from two major sources. First, there is no unique or obvious way
to allocate “joint,” or shared, costs within a household. Children typically
share the same roof, get food from the same refrigerator, and watch the
same television(s) as their parents. It would be an error to assign the costs
of shelter, food, and entertainment either all to the child or all to the par-
ent. Unfortunately, there’s no theory to tell us how these costs should be
split either. The ultimate decision must be based on some noneconomic
criteria.

Second, and just as fundamental, the actual amount spent on raising a
child in an intact family is determined by joint decisions within the house-
hold. These decisions are not exogenous (given from outside) and are
often not observable. Rather, they depend on household wealth, social
mores, neighborhood effects, the preferences of the parents, and, at some
point, the preferences of the child. As a result, it is more correct to speak
of the “expenditures” made on children within a household, rather than
their costs. Once the notion of expenditures is introduced, however, the
question of “what expenditures are appropriate” must be answered using
noneconomic criteria.

Still, determining expenditures on children presents at least a tractable
economic problem. Economists have a concept called an “expenditure
function,” which, in theory, provides the dollars required for achieving
some outcome (like the raising of a child), conditional on the characteris-
tics of the household. In theory, an expenditure function is well-defined.
In practice, most of the parameters of the function are unobservable (like
the utility, or satisfaction, of individual household members). Still, econ-
omists estimate these functions based on a barrage of (often unrealistic)
assumptions. Although the use of a general household expenditure function based on simplifying assumptions is the theoretically proper method for estimating the expenditures on children, no guidelines are based on anything so sophisticated. These things are often considered by the committees and experts designing the laws, but are often rejected for being too complicated.\textsuperscript{4}

In practice, especially during the early years of guideline development, the solution was to empirically estimate “reduced forms” of an expenditure equivalence scale.\textsuperscript{5} Often these estimates were crude in terms of the margins over which equivalence was measured. In addition, when actual functions were estimated, they tended to be simple linear ones; that is, as household income increased, it was assumed the expenditures on children increased by a constant amount.

Early empirical estimates of expenditures on children mostly relied on the work of Thomas Espenshade.\textsuperscript{6} Espenshade assumed that differences in food consumption across households were reasonably constant and therefore fell as a fraction of income when income increased. When households spent a small fraction of income on food, he reasoned, they had a higher standard of living. When households of different types spent the same fraction of income on food, they had the same standard of living. In this way, the incremental expenditures on children can be estimated by comparing households with and without children, and finding the income difference that is necessary to hold food expenditures at a constant fraction. More specifically, Espenshade estimated the fraction, based on data from the 1972–73 Consumer Expenditure Surveys, to generate a series of “Engel equations” to determine the amount of food consumed as a function of family characteristics. Using these estimates, he determined the minimum number of dollars a married couple with one child, for example, required to have an equal standard of living to that of a childless couple. This determined the marginal cost of one child. This exercise was repeated for different numbers of children and different family formations.\textsuperscript{7}

\textsuperscript{4} So right off the bat we see the normative judgments required to arrive at a guideline: you cannot define costs exactly, so use expenditures; you cannot estimate true expenditure functions, so simplify; you cannot use the simplified functions in practice, so use reduced linear forms.

\textsuperscript{5} An equivalence scale is a ratio of two expenditure functions. It provides a number that gives the fraction of income necessary for one household type to have the same standard of living as another. For example, if an equivalence scale for a household of two people is 1.4, then a two-member household requires 40% more income than a single household to maintain the same standard of living.


\textsuperscript{7} Note that this procedure estimates the “marginal” or “change” in expenditures that are brought about by children. This importantly imputes all of the fixed costs of the household (such
Early estimates of child-related expenditures thus usually amounted to a series of percentages. For example, household expenses might increase by 20%, 25%, or 35% if there are one, two, or three children. Later, actual equivalence functions were estimated. In practice, given the limited computer power of the time, jurisdictions simply estimated ad hoc linear equivalence scales. That is, most guidelines use what are called “reduced form” linear scales that do not rely on estimating an expenditure function directly. These scales usually take the form: \( a + b(n-2) \), where “\( n \)” is the total number of persons in the household, “\( a \)” is the number necessary to make a two-member household equivalent in terms of goods and services to a single member household, and “\( b \)” is the “marginal cost” of extra members in the household. Although an equivalence scale could depend on many things, usually only a small number of factors are considered. For example, in most states, these scales depend on just two parameters: the number of children and income.\(^8\)

**B. Issue II: The Choice of Apportions**

Once the “costs of children” are “determined,” the question arises: in what way should these costs be shared? Several methods have been suggested, and the justifications for each range from ease of use, transparency, equity, concern for child welfare, and marginal tax rates of noncustodial parents.\(^9\) No single method addresses each issue, and, in fact, they are often in conflict with each other. Within the United States the two most common forms of splitting costs are the Income Shares (IS) model, and the Percentage of Obligor Income (PO or Wisconsin) model. Less often used models include the Melson (Delaware) model and several hybrid methods.

Depending on the sharing rule chosen, the table reflecting the values may generate inequitable awards that transfer too much or too little to the

---

8. One very obvious factor and one that is considered by attorneys in settlement for amounts above the guideline levels or in setting in advance how the amounts will vary in succeeding years is the age of the child. Once cribs and high chairs are purchased (fixed expenses), children become progressively more expensive as they become older. They are both larger (requiring more fabric in their clothes and sneakers) and demand more expensive things (compare the cost of plastic blocks to stuff in toy bottles with TI-90 calculators).

custodial household. Sharing rules naturally have a number of assumptions built into them. These include assumptions regarding the relative incomes of the custodial and noncustodial parents; the role of taxes; child tax credits; the costs borne by custodial versus noncustodial households.

C. Issue III: The Value of Children

The third major assumption implicitly dealt with in all guidelines relates to the treatment of utility parents experience by living with their children. The theoretically correct way to account for the cost of children is to begin by recognizing that children enter the utility function of their parents (they have value), and then construct an expenditure function. In practice, however, this requires the comparison of unobservable utilities across individuals—an intractable task.10

The alternative used by those designing guidelines is to exclude children as a valuable marital good (i.e., they assume children are of no value to their parents).11 When children are assumed to be a cost only, the transfers to the custodial household are increased relative to a more accurate measure.12

10. Just because this is difficult does not mean that it is not real. Parents behave as if children are valuable: they protect them, enjoy them, and mourn when they are lost. Parents claim children are valuable: many parents say that the value of their children is infinite, that they would not trade being a parent of their particular son(s) and daughter(s) for any amount of money. This value could be approximated by looking at the difference in happiness, or psychological health, experienced by parents who live with and away from their children. Some effort to measure the very considerable reduction in men’s happiness from loss of custody is found in Margaret F. Brinig & Steven L. Nock, “I Only Want Trust”: Norms, Trust and Autonomy, 32 J. SOCIO-ECONOMICS 471 (2003) (increase of half a standard deviation in father’s depression, considering all other likely factors when a custody order or agreement gives the child’s mothers custody). Other possible indications of the seriousness in which loss is felt include the amounts spent on litigating custody decisions, on advocating joint custody, and so forth (though part of these expenses no doubt also reflect animosity toward the custodial parents).

11. This is not to say that children are not costly. Custodial parents trying to date or form new families, pursue full-time employment or higher education, and so forth, are hindered because of the presence of children. Children lead to both costs and benefits, however. Our point is that the guidelines recognize the costs (and try to estimate them), but they assume there are no benefits.

12. This is likely the full intention of the assumption. Use of expenditure models based on intact families does not count the losses due to the simple fact that there are now two households, rather than one, living on the same set of incomes. Our point is that when just considering the “adequacy” of the award, incentives are often ignored. By assuming the utility of children is zero, incentives are created.
IV. Three Examples: The Good, The Bad, and The Ugly\textsuperscript{13}

A. Indiana: The Good

Indiana began developing child support guidelines in 1985 in response to the 1984 Child Support Enforcement Amendments that required all states to create advisory guidelines for judges.\textsuperscript{14} However, the state guidelines\textsuperscript{15} did not take effect until October 1989,\textsuperscript{16} and became a rebuttable presumption of the amount due pursuant to the 1988 Family Support Act.\textsuperscript{17}

Indiana is typical of the model child-support state. It uses the Espenshade estimates of household standards-of-living. Hence, at the very lowest income level of the table, child support payments are 12\%, 18\%, 22\%, for one, two, and three children. Indiana continues to use the Espenshade estimates, but reviews have shown they match with more updated ones.\textsuperscript{18} Most importantly, the shares allocated to costs of children are assumed to fall as household income rises. This is an example of something called “Engel’s law,” an empirical observation from the nineteenth century that the share-of-food expenditures to total income declines as income increases. The effect of this can be seen in Figure 1.

\begin{center}
\textbf{Figure 1: Indiana Weekly Child Support Payments—One Child}
\end{center}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{indiana-weekly-child-support-payments-one-child.png}
\end{figure}

\textsuperscript{13} The subtitle comes from a Sergio Leone Western film of the same name (1966).


\textsuperscript{16} For a complete set of the guidelines, with history and links, see \textit{id}.


\textsuperscript{18} See http://www.in.gov/judiciary/rules/proposed/2009/csg-july.html. As part of the 1988
From Table I we can see that if income is $3,000, child support will be around $300, or around 10% of income. At $8,000, child support will be about $575, or only 7%. Like most states, Indiana uses the Income Shares (IS) rule. Indiana reviewed several approaches before settling on the income shares rule, which is generally perceived by the public as being fair to all parties involved. As we will show below, it also provides the least harm in terms of divorce incentives. The IS model is based on the intuitive idea that the child support obligation (the estimated cost of raising the additional child) should be shared between the parents in terms of their relative incomes. The income of both parents is added together (making various adjustments) and taken to the support tables to determine the "costs of supporting" the child(ren). This payment is then prorated between the parents based on their relative share of the adjusted income.

Deviations are allowed for such things as union dues, elderly support, extraordinary expenses, noncustodial medical expenses, prior support payments, and the like.

Fair as it is considered to be, Indiana's income share model is not perfect. As with all states that use child support guidelines, no consideration is given for the value of physical custody. As we have noted already, children are considered only a cost. Taken together, income share states like Indiana have a number of incentive effects that tend to offset each other. Child support awards based on Espenshade expenditure estimates tend to be considerably higher than those allocated under the previous "needs of the child" standard. Higher support awards tend to reduce the incentive of potential noncustodial parents to initiate a divorce in order to capture marital wealth. This is particularly true in the case of the small number of what we call "deadbeat dads," those parents who gain satisfaction from merely knowing they have children, rather than spending time with them.

On the other hand, given that the Indiana support awards are reasonably

---

19. At the moment, there are thirty-nine states with income shares systems.
20. Work-related child care expenses and the weekly costs of health insurance premiums for the child(ren) are then added to the basic child support obligation.
designed around the expenditures spent on children, that these estimates have generally stood the test of time, and that the support awards fall as a fraction of total income with increases in total income, an income share state like Indiana does not transfer excessive amounts of wealth to custodial parents. Thus, although custodial parents gain significant utility from physical custody, they do not receive any additional benefit through net wealth transfers. In our opinion, these characteristics of income share states make them a good example of a workable child-support guideline.

B. Alaska: The Bad

Prior to the federal government mandating support guidelines, several states—Wisconsin, in particular—had been experimenting with guidelines within the context of Aid to Families with Dependent Children (AFDC) cases. In these situations, it was often the case that the custodial parent had no private income at all, the noncustodial parent had no contact with the children, and everyone involved was at or below the poverty line. Under these circumstances, a simple guideline rule was easy to implement and was completely appropriate. The rule thus developed in Wisconsin became known as the percentage-of-obligor-income model (or the Wisconsin model). Once again, standards of living were based on Espenshade measures, but the actual support payments were calculated by simply multiplying the noncustodial parent’s income (again, the only non-AFDC income in these families) by some fraction based on the number of children. Given that these early cases were dealing with small ranges of income, these fractions were held constant as incomes rose.

It would appear to be an unfortunate twist of history that when the federal government mandated guidelines to be in place by 1989, several states looked around, found the Wisconsin model, and decided to apply those straightforward guidelines to their states for all income levels. What may have been appropriate for families close to the poverty line, however, is likely inappropriate for families with higher incomes. Such


23. It should be pointed out that Wisconsin today uses a model much different from the model with its name.

24. It might not be a complete coincidence, for by then feminist scholar Martha Fineman, who taught at the University of Wisconsin, had published several influential pieces concerning the poverty and inequality problems facing divorced women. By 1991, her The Illusion of Equality 51–63 discussed the Wisconsin reforms in the 1970s and 1980s as having sought rule equality rather than actual equality. But Fineman’s Implementing Equality: Ideology, Contradiction and Social Change, Wis. L. REV. 789 (1983) mostly noted the hardship divorce caused for women and the inability of original reformers to predict it.
was the case with the guidelines adopted in Alaska. Hence, in Alaska, a wealthy family pays the same fraction of income toward child support that a poor family does, even though Engel’s law shows that these expenditure shares should fall. In the case of Alaska, the difference between their payment schedule and Indiana’s is apparent from Figure 2.

![Figure 2: Child Support Payments for Alaska and Indiana](image)

The horizontal axis measures weekly adjusted earnings. Note that until $1,000/week, the two states have comparable levels of support. However, as income continues to increase, a deviation begins. To the extent that the Indiana payments are a better reflection of the true costs of children (what we call “good”), the difference amounts to spousal support. When combined with the utility generated from custody that all the guidelines ignore, a strong divorce incentive (or a “potential custodial parent surplus”) is created for a particular type of family, one with a high-earning spouse.

Under the percentage-of-obligor-income system, a potential noncustodial parent with a high income has little incentive to divorce. Through divorce, this parent loses contact with the children and makes a significant net wealth transfer to the custodial parent. The opposite is true for potential custodial parents. As the potential noncustodial parent’s income increases, there is an increasing incentive to divorce in order to capture both the benefits of custody and the transfer of wealth. This negative feature of Percentage of Obligor Income guidelines has been mentioned throughout the periodic reviews, and, as a result, several of these states,

---

25. It has been a frequent subject of discussion on noncustodial parents’ Internet websites.
like Georgia, have changed either to income shares models or altered the linear payment structure.

C. Canada: The Ugly

Canada provides an extreme example of how a child support system can get off track and create truly counterproductive incentives when incentives are not considered. Canada came late to the guideline game. Discussions at the federal Department of Justice (DOJ) did not begin in earnest until Kim Campbell became finance minister in 1990. Campbell lost little time and organized the National Symposium of Women, the Law and the Administration of Justice conference in 1991. No ordinary conference, the participant list included the attorneys general of each province, judges from every court level, deans from most Canadian law schools, and leaders of most feminist organizations in the country. The symposium dealt explicitly with the concept of guidelines and claimed that in such developments "Women needed to be formally consulted regarding the adequacy of any guidelines before they are distributed or implemented." But, most significantly, at the end of the conference a resolution was passed and accepted by the DOJ that the:

Department of Justice would henceforth represent only feminist legal arguments in any future constitutional cases and would consult with feminists on any future appointments to the Judiciary, Administrative Tribunals, etc.

By 1997, almost a decade after guidelines were introduced within the United States, Canada produced a set of guideline tables, with extensive add-ons, and very limited discretion to deviate. The feminist motivation to transfer as much possible income to the custodial family drove the design process. In terms of cost functions, sharing rules, and modifica-

---

26. Canada's by then twice-divorced and to date only female prime minister (for four months in 1993).
28. The DOJ produced three volumes of materials based on this conference that heavily influenced the formal work done on the guidelines. Department of Justice, Proceedings of the Symposium (Ottawa: Minister of Supply and Services Canada, 1992a); Recommendations from the Symposium (Ottawa: Minister of Supply and Services Canada, 1992b).
29. See Allen, supra note 27 for a full history.
30. Department of Justice, The Survey of Child Support Awards: Final Analysis of Pilot Data and Recommendations for Continued Data Collection, CSR 1999 2e, p.54, Fig. 17.
31. See generally Allen, supra note 27.
The Family Law Committee (FLC) of the DOJ considered several expenditure approaches, but settled on a linear equivalence scale used by Statistics Canada to assist in poverty measures (again, correct for these income levels as they were in Wisconsin).\textsuperscript{33} Known as the 40/30 rule, the equivalence formula is $1.4 + .3(n-2)$.\textsuperscript{34} This function provided the largest levels of child expenditures of any at the committee's disposal.\textsuperscript{35} Using the linear 40/30 rule in the neighborhood of poverty incomes leads to small errors, but as one moves away from the level of income used to arrive at them, the magnitude of the errors increase if the 40/30 rule is inappropriate. By its construction, the 40/30 is likely to over-estimate costs for large families where the income is high.\textsuperscript{36}

In addition, Canada chose a form of the Percentage of Obligor Income model called the Revised Fixed Percentage. The general idea of the rule was to share the post-separation costs of the child when the parents' incomes are equal, and use this as the basis of a fixed percentage approach. It is useful to examine the actual formula, which is:

\[
\text{Disposable Income of NCP} = \frac{\text{Disposable Income of CP}}{1.4 + .3(n-2)}
\]

The formula assumes the noncustodial parent's disposable income is deflated by 1, meaning a single parent has expenses identical to a single individual who is not a parent.\textsuperscript{37} Taken together, this formula can amount to relatively large transfers. This can be seen in Figure 3.

---

\textsuperscript{32} For example, the noncustodial parent is assumed to have zero child-related costs until custody is at 40% of the time.

\textsuperscript{33} The Finnie et al., report recognizes the scale used was intended for low incomes only:

\[\text{.... most of the established scales apply—strictly speaking—only to incomes at the poverty (or “low income”) line. This is because most of the scales have been constructed to derive poverty lines, and are not necessarily intended for making comparisons of well-being at other income levels.}\]

\textsuperscript{34} It is important to realize that this function was never designed to work for all households and was not recommended by the economists working on the guidelines. Rather, their opinions were overturned by the bureaucrats in the DOJ.

\textsuperscript{35} The Australian government, over the past several years, has conducted extensive research into their own expenditure functions and estimations elsewhere. Among the many equivalence scales estimated in Australia, most are close to $1.2 + .15(n-2)$, exactly half of that used in the Canadian system. In the UK, their guidelines are based on an equivalence scale of $1.15 + .05(n-2)$. M. Gray, \textit{Costs of Children and Equivalence Scales: A Review of Methodological Issues and Australian Estimates}, \textit{13(1) Austr. J. of Labour Economics} 99–115 (2010).

\textsuperscript{36} Added to this is the "extra-expense" clause in the Canadian guidelines. Extra-expenses are shared between the parents in proportion to their relative incomes. What constitutes an extra-expense has become a major source of litigation. The extra-expense provision amounts to double-counting since the guidelines were created based on all expenses.

\textsuperscript{37} While this might be true in the case where the noncustodial parent did not spend time
V. Divorce Incentive Effects

As mentioned, a common assumption within the guideline policy literature is that expenditures on children are linear with respect to income. Under this assumption, IS and PO models are equivalent. For example, consider the example in Table 2. Here two households experience a divorce, and the only difference between them is the custodial parent's income. In one case, the noncustodial parent earns $60,000 per year and the custodial parent earns nothing. In the other case, each earns $60,000, and in both cases child costs are assumed to be 25% of income. In the first case, the noncustodial parent pays $15,000 in child support, regardless of whether residence is in a PO or IS state since the child support is .25 x $60,000. In the second case, the total child costs are $30,000 and split 50/50, and so the noncustodial child support amount in the IS state is also $15,000. In this second case, had the couple lived in a PO state, the child support payment would still have been $15,000. Hence, the noncustodial parent theoretically pays the same support in all cases. The higher incomes in the second household imply an off-setting higher cost of children, resulting in the same payment.

As discussed, however, in practice, IS and PO states generally make different assumptions regarding the relationship between child expenditures and income. As family income increases, expenditures on children with the child or have the child visit, it of course ignores car seats, extra beds, extra food for the weekend, and so forth.

38. The assumption made within IS states reflects the empirical reality. See David Donaldson
do increase, but the fraction of expenditures to total income is falling, and only the IS states consider this. Let’s consider altering the example above to the numbers shown in Table 3. Suppose that when each parent earns $60,000 the child costs are only 20% of total income, rather than 25%, or $24,000. Now the noncustodial share would be $12,000 in the income-sharing state, but remains at $15,000 in an obligor state. The custodial parent would end up assuming $9,000 in actual child support, rather than $12,000 received.

In effect, if the percentages are set to mimic child-related expenses at low incomes, the obligor law subsidizes more and more nonchild-related expenses in the custodial household as the average cost of children falls with income. If the fraction of total income allocated to child costs falls with increases in income, then it is necessary to use the total family income to calculate child costs, and not just the noncustodial income. Of course, the PO guidelines do not do this.

Until very recently, all but one PO state had linear cost functions for

& Krishna Pendakur, Equivalent-Expenditure Functions and Expenditure-Dependent Equivalent Scales, 88 J. OF PUB. Econ. 175–288 (2004).
children. In Alaska, for example, the child support award is 20% of the noncustodial income for one child, 27% for two children, 33% for three children, etc. There is no cap on child support awards, and the percentage of income is constant across low- and high-income levels. On the other hand, thirty of the IS states have realized this problem and have cost functions where average child costs fall with increases in income. Thus, PO states end up penalizing households where one member earns a significant amount of income. This transfer amounts to a form of hidden spousal support.

The second critical feature of guidelines in terms of divorce incentives stems from their (ubiquitous) failure to account for the utility generated by custody of children. When designing the various types of guidelines, children are assumed to be a cost to the custodial household—a drain on welfare because children impede remarriage and participation in the labor force. Under such an assumption, it makes sense for the noncustodial household to compensate for this extra burden. However, this fails to recognize that children are often the most valuable family asset, and that much of the utility that arises over children does not come from simple procreation, but rather from contact and involvement with one’s own children on a day-to-day basis. It is the relationship between parent and child that is often the most valuable attribute of parenthood. The relationship is not a public good in the dissolving marriage, as it may be when the couple is together and both parents are sharing in the joys and tribulations of child rearing. Not counting custody as a gain in the calculation of child support means that guidelines will tend to “double count” the award for custody. Within a PO state, the custodial parent of a wealthy noncustodial parent gets the utility from custody, plus a high cash transfer to fund the child expenses. As some see it, it is similar to one side retaining own-

39. Andrea H. Beller & John W. Graham, Small Change: The Economics of Child Support 200 (1993). For example, in Arizona, child costs are assumed to be 23.8% if monthly joint income is $700 month, but this falls to 20.2% if monthly income is $2,500 per month.

40. Under U.S. tax law, there are often considerable advantages to custodial households in obligor states as well, because the custodial parent is the head of a household and able to claim a larger standardized deductions. The custodial parent is likely the only one who can claim the dependent exemptions, and custodial parents are the only ones eligible for child tax credits, such as children’s tax exemptions, earned income tax credits, and dependent care tax credits. This was a considerable issue early on in the development of guidelines, but most states now make adjustments for this. Under the period we examine, PO states systematically transfer more income to the custodial home, especially for high-income levels. R. Mark Rogers & Donald J. Bieniewicz, Child Support Guidelines: Underlying Methodologies, Assumptions, and the Impact on Standards of Living in Law & Economics of Child Support Payments (W. Comanor ed., 2004).

41. “Double counting” is a phrase often used by noncustodial parent rights groups to get at what they believe is an over-payment. Namely, they argue that they both lose custody and have to pay support.
ership over the family car, while the other side continues paying for the fuel and maintenance without hope of recouping on resale.

Prior to the introduction of support guidelines, child support awards were considered inappropriately low in many policy circles. However, the lower amounts may well have reflected the courts' awareness that the custodial parent obtained custody over one of the most valuable assets of the marriage: the children. Perhaps the main complaint of noncustodial parents under the guideline system is the lack of contact they have with their children. The various effects of wealth transfer caused by guidelines can be summarized in Table 3. When child support awards are given under the "needs of child" doctrine, the custodial parent has a reduced incentive to leave because of the low child support award. Although the custodial parent gained the utility of keeping custody, this came at a cost since the courts implicitly recognized the utility gain and the child support awards were small. For the average, "involved," noncustodial parent, the incentives to divorce under "needs of child" were also probably small. Payments would be low, but the large loss of utility over custody remains. Interestingly, for those noncustodial parents not interested in parenthood (e.g., the dead-beat dad), such "needs of child" awards would have encouraged abandonment of the family, since such parents would only be concerned with the (relatively lower) payments.

<table>
<thead>
<tr>
<th>Table 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Custodial Parent</strong></td>
</tr>
<tr>
<td>Needs of Child</td>
</tr>
<tr>
<td>Income Shares</td>
</tr>
<tr>
<td>Percent-of-Obligor Income</td>
</tr>
</tbody>
</table>

Income share awards create minimal incentives for either party to leave. Given their design, the custodial parent does not receive a significant net transfer of wealth because (i) their income is included in the calculation of the award, and (ii) most IS states assume that child costs decline with total family income. Hence the custodial parent may gain custody, but the cash award likely just covers the cost of the child. On the other hand, the noncustodial parent loses any utility from custody. The

dead-beat dad, as well as the involved parent, must pay a relatively larger child support award. As a result, the noncustodial parent in an IS state also has no strong incentive to divorce.

With the Percent of Income (PO) model, however, the divorce incentives are the opposite of the “needs of child” case. Now the custodial parent has a strong incentive to divorce since all factors included in the guidelines create a transfer of wealth: the custodial parent obtains custody and a cash award that overcompensates for costs, especially for high incomes. The noncustodial parent in this case is less interested in divorce since the payments are high and the utility over custody is lost.43

VI. The Proof Is in the Pudding

We have conducted formal empirical work elsewhere investigating the size of these incentive effects on divorce in the United States. In particular we have exploited the following empirical propositions.

1. Switching from “Needs of Child” to PO awards should increase divorce rates.
   a. Divorce rates should be higher when noncustodial parent pre-divorce income is higher.
   b. Divorce rates should be unaffected by the custodial parent’s predivorce income.
2. Switching from “Needs of Child” to IS awards should decrease divorce rates.
   a. Income levels of both the noncustodial and custodial parents should not impact divorce rates.
3. Divorce rates should be independent of child support system for couples without children.

We find strong evidence for these predictions. Allen and Brinig test these predictions for the United States using data from (National Longitudinal Survey) (1979) (NLSY). Individuals are followed from the time they first marry, until they either divorce or the year 2002 is reached.44 The NLSY data set follows individuals, and so individual characteristics, such as age, level of education, income and religion, can

---

43. If there were no costs to negotiate different splits within an efficient marriage, then none of these different guidelines would have made any difference. PO states would just mean an increase in wealth within the marriage to the potential custodial parent. However, transaction costs are positive in marriage and divorce, and as a result the rules matter.

44. We followed individuals until 2002 in order to provide a sufficiently long sample, but to avoid the changes in guidelines that took place over the past eight years. See Douglas W. Allen & Margaret F. Brinig, Child Support Guidelines and Divorce Incentives (working paper, 2010).
be controlled. As is often the case, we find that divorce probabilities rise and then fall with the length of marriage and the age of the individual; education levels and income have strong negative effects on divorce probabilities for both spouses; and some type of religious affiliation has a small but negative effect on divorce probabilities. Figure 4 presents our key finding for income share states—what we have called the “good” guideline system.

Figure 4: Income Shares States

In this stylized graph (based on regression results), increases in the potential noncustodial spousal income lowers the probability of divorce—more income is stabilizing. After 1988, when the IS guidelines were introduced, this income effect was marginally reinforced. The size of the effect is very small, and it is not statistically significant. In other words, with the income shares system, changes to noncustodial income (and to custodial income) essentially have no bearing on divorce probabilities.

Contrast this with Figure 5, which shows what actually happened in PO states. These states had a smaller income effect to begin with, but now the effect of changes to noncustodial income has a destabilizing effect. Indeed, for a $100,000 change in income to the potential noncustodial parent’s income, there was an increase in just over 1% in the divorce rate. This effect was large enough to offset the generally stabilizing effect of income on divorce.

That is the effect of the good and the bad. Figure 6 shows the amazing
In Canada, the effect of the large transfers of wealth to custodial parents is quite dramatic. Unlike the case in the United States, in Canada the effect of child support guidelines had a nonlinear impact on the income effect. The larger the change in income to the potential non-custodial parent, the larger was the impact on divorce probabilities. Amazingly, a $100,000 change in income led to the divorce rate increasing by 10%. This size is comparable to the entire effect of no-fault divorce on divorce rates. The income effect is very strong in Canada, and so over the range of income estimated, even with the guidelines, more income remained a stabilizing feature of the marriage.

VII. Conclusion

Family law reformers over the last forty years have been enormously successful in some ways, and have fallen short in others. One important insight that economics can lend to any discussion is that incentives matter. While the divorce rate in the United States has fallen over the past twenty years, only a very few unscrupulous attorneys would object to that. Other things being equal, a lower divorce rate improves welfare

45. These results were based on the Statistics Canada SLID data set. This panel followed individuals through the 1997 transition, in an experiment structured the same way as Allen and Brinig. Douglas W. Allen, The Effect on Divorce of Legislated Net-Wealth Transfers: The Case of Canada's Child Support Guidelines, 23(3) J. L. ECON. & ORGANIZATION 580–97 (2007).

46. Meaning those who object to the loss in their potential fees for handling divorces.
since children tend to be disadvantaged by divorce. Further, perhaps the decreasing rates of divorce mean that married families are happier. On the other hand, very few would suggest distorting the incentives toward divorce in otherwise stable marriages is a good idea. We suggest, based upon twenty years of data from the United States and Canada, that some well-intentioned child-support-guideline measures have actually encouraged divorce by compensating custodial parents beyond the amounts actually needed for their children’s support. The tremendous injustice felt by noncustodial parents has translated into attempts to mandate joint custody,47 as well as, at least in part, contributing to the problems of enforcing delinquent child support from what most dub “deadbeat dads.”48

At a minimum, since it is clear that no state wants to take on the formidable problems of valuing time with children, let alone subtracting for emotional losses and gains of parents from money needed to purchase adequate support, we propose that states and other governments working on these problems consider that proportionate shares of household income allocated to children decline after income reaches approximately $5,000 a month and that both parents’ incomes should factor into calculations of

---


basic obligations. For the many states that do have such regimes in place (income shares plus schedules reflecting Engel’s law), we encourage staying on course and applaud frequent reference to the latest government economic calculations on household expenditures.

49. We do understand as well that many parents exceed guideline amounts, sometimes as the result of state-mandated contribution for child health care and health insurance costs as well as such things as agreed-upon payment for college beyond the age of majority. On the other hand, they also negotiate for tax advantages, such as personal exemptions that may go to the noncustodial parent. In other words, guidelines provide the minimum payments, and couples negotiate beyond them.