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The Family Child Care Decision:  
A Transaction Cost Approach

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## INTRODUCTION

In recent decades, women's participation in the formal labor force increased dramatically. In 1960, 37 percent of women participated in the civilian labor force.<sup>1</sup> By 1990, the rate of participation increased to 58 percent. This trend is particularly pronounced for women in their prime child bearing years (ages 25 to 34). Participation for this age group increased from 36 percent in 1960 to 74 percent in 1990. The increased labor force participation of women in their child bearing years results in a concomitant demand for child care services. 1991 statistics indicate that when mothers of young children are employed about one-third are cared for in the home by the father or other adult, one-third are cared for in another home, and the remaining third are in organized child care facilities (Bureau of the Census, 1994). The number of organized child care facilities increased from around 13,000 in 1982 to over 40,000 in 1987 (Census of Service Industries, 1987). As a result of these trends, child care entered the U.S. domestic policy agenda.<sup>2</sup> In fiscal year 1992 and 1993, the federal government funded more than 90 early childhood programs in 11 federal agencies and 20 offices (GAO, 1994a). These programs use diverse policy instruments such as regulation, subsidies, and targeted funding to achieve their goals.

Social science research is beginning to reflect the arrival of child care on the national policy agenda. In policy, research to date can be divided into studies focusing on the supply of child care arrangements and studies focusing on demand. On the supply side, many studies analyze how regulations affect the number of formal child care providers (Gormley, 1991a, 1991b; Zigler, 1994). On the demand side, much less is known. Some studies focus on whether there is

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<sup>1</sup>All statistics cited in the introduction are quoted from the *Statistical Abstract of the United States*, 1994 (114th Ed.).

<sup>2</sup>Child care initially emerged on the national policy agenda during WWII when large numbers of women entered the labor force to support the war effort. However, after the war ended so did federal concerns with child care arrangements (Tuttle, 1995). Child care re-emerged in the late 1960s but when President Nixon vetoed the Child Development Act of 1971, national level debate on this issue virtually ceased until the late 1980s.

unmet demand (Rose-Ackerman, 1988) or the impact of tax subsidies (Becharov and Tramontozzi, 1989). Others examine specific populations such as teenage mothers (Kisker and Silverberg, 1991) or welfare mothers (Sonenstein and Wolf, 1991). While these studies analyze important aspects of child care as a policy issue, a fundamental aspect of demand remains unanswered: How policy changes affect parents' choices over the array of child care arrangements.<sup>3</sup> This paper explores the decision calculus underlying child care decisions within the family as a means for policy analysis.<sup>4</sup>

Insights from the new institutionalism are particularly well-suited to explore this research question. In general, this approach focuses the analysis on the incentive structures created through alternative institutional arrangements. A strain of the new institutionalism, New Institutional Economics (NIE), is concerned with the ways in which uncertainty about qualitative dimensions of goods and, more generally, about the behavior of agents affects the organization of production and exchange (Eggertsson, 1990:26). Through adopting an NIE approach, child care can be viewed as a service provided within a market. Each family makes a decision regarding how much child care to produce themselves and how much to contract with others. An analysis of the transaction costs in the exchange for child care reveals the relative constraints among alternative institutional arrangements.

This paper is divided into six sections. Section I defines the nature of child care services and the attributes of the exchange. Section II conceptualizes three types of endowments affecting the child care decision: family resource, social resource, and community resource. Section III identifies three types of transaction costs incurred in different child care arrangements. The framework developed in Section III is then used to analyze governmental

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<sup>3</sup>For this paper, parent refers to the primary custodial adult(s) responsible for the child (e.g. biological or adoptive mother or father, grandmother, legal guardian). For simplicity, the term parent in the singular will be used but encompasses co-parenting situations in which two adults share child care responsibility.

<sup>4</sup>Family is defined as people sharing a residence who have relationships characterized by mutual interdependencies.

programs (Section IV) and non-governmental organizations (Section V) in terms of effects on endowments and transaction costs. Section VI discusses future research discussion followed by a discussion of the conclusions reached in the forgoing analysis.

#### **SECTION I: Defining Child Care Services**

An institutional approach to child care seeks to understand the nature of the goods and services involved and how diverse institutions affect the complex incentives and behavior of participants (Ostrom, 1995). Child care is not typically thought of as a good or service in the market sense. But, defining it as one that possesses certain attributes provides a way of understanding the exchange relationships and institutional arrangements that have evolved to provide child care services. For private goods where quality issues are visible (such as a book), the exchange is straight forward. The buyer looks through the book, judges it to be good, and then pays the asking price to the seller. For goods where there is uncertainty (such as the used car market) the exchange is not as simple. The buyer does not know for certain the quality of the good. Therefore, the buyer relies on reputation, word of mouth, or some other type of mechanism that leads the buyer to trust the seller (Akerloff, 1970). When a parent arranges for child care, it is virtually impossible for the parent to know concretely the quality of the services being rendered. As discussed below, this affects the nature of the exchange relationships for child care services.

##### **Nature of the Good**

All goods possess objective characteristics relevant to the choices people make among different collections of goods. Individual choices vary due to differing *reactions* to the characteristics of the goods (Lancaster, 1971). For example, day care centers have objective characteristics including: a many to many relationship between child and caregivers, mixed ages of children, and a relatively large number of children. Day care homes have objective characteristics including: many to one relationship between child and caregiver, mixed ages of children, and a relatively small number of children. These

characteristics of the service are objective. What varies is the extent to which parents react to these characteristics.

Among individuals and families there is variation among expectations and belief patterns in child rearing practices. These variations lead parents and families to prefer certain child care arrangements over others. For many, the preferred option is for a family member to care for the child. According to 1991 statistics, in cases where the mother was employed and the child was cared for in the home, 56 percent of the child care providers were the fathers. The second largest arrangement was for a relative to care for the child either in the home or in another home (Statistical Abstract, 1994:386).

Preferences for child care arrangements change with the age of the child and as family situations change. When families look to the market for child care arrangements, if the child is an infant it is more likely for the family to choose a day care home. Whereas, if the child is 3 to 4 years old a day care center or pre-school is more often the choice (Statistical Abstract, 1994:386). This has much to do with developmental needs of children but it is also a function of the exchange relationship. In day care homes, there are a smaller number of children being cared for and the care is provided in someone's home. As will be discussed below, this may decrease the level of uncertainty associated with the exchange.

##### **Nature of the Exchange for Child Care Services**

Child care is a service for which quality cannot be easily assessed. The difficulty in ascertaining quality of service received stems from three attributes of service (Smith and Friedman, 1994). First, child care services are mentally and physically intangible. They are mentally intangible in the sense that it is not possible to know how another person will react to every child care situation (i.e., how the caregiver will discipline and nurture). Child care services are also physically intangible in the sense that unless the parent observes the caretaker continuously during the delivery of the service, s/he cannot know how the service was delivered.

Second, in child care services, the child is a co-producer which means that

there is an active, ongoing interaction between child and caregiver. From the parent's point of view, there is uncertainty in the exchange due to the parent's inability to attribute causation. If a child is reacting negatively to a child care arrangement, depending on the verbal capacity of the child, it can be difficult for the parent to determine the cause. It could be due to a developmental phase of the child, the quality of the interaction with the caregiver, or a variety of reasons.

Third, because child care is provided by fallible humans there is considerable variation in its delivery. Quality of care will vary from day to day depending on the consistency of the caregiver. And, since every human is different, child care services will vary from caregiver to caregiver. Uncertainty arises, therefore, from the variance of the individual providers and among providers in different institutional arrangements.

These three attributes of the exchange for child care services lead to difficulties in measurement: When a parent arranges for another person to care for her child, she cannot easily evaluate or compare quality of service delivery. One of the major propositions of NIE is that measurement costs systematically influence the structure of contracts (Eggertsson, 1991:27). This difficulty in measurement of child care quality manifests itself in uncertainty in the exchange relationship. In situations of contract uncertainty, the reputation of the trusted party becomes a powerful tool for avoiding the transaction costs of specifying and enforcing the terms of the transaction (Kreps, 1990: 116, Akerloff, 1970). This provides theoretical justification for the empirical observation that the younger the child the more likely it is that s/he will be cared for in the home or by a relative. In the following two sections, the nature of the exchange for child care arrangements is placed in a conceptual framework based upon family choice among alternative child care arrangements.

## SECTION II: Endowments Affecting Child Care Arrangements

Family child care decisions are influenced by three endowments: family resource, social resource, and community resource. The relationships between the

endowments leads to a decision within the family on the mix of child care provided by the family in relation to child care provided by others. The family resource endowment sets the preferences for child care arrangements subject to financial constraints. The family then draws upon the social and community resource endowments to create a choice set. Figure 1 presents the three endowments in relation to child care ratio decision.

### Family Resource Endowment

There are two aspects of the family child care decision related to the family resource endowment. First, family preferences for child care arrangements are determined through a bargaining process among family members based upon belief and sociological factors. These factors determine role expectations for male and female parenting and formal labor force participation. Within the family, there is bargaining among adults and older children. The cultural embeddedness of the family combined with sociological factors determine the bargaining arrangement. The family bargaining results in a preference ordering for different mixes of child care arrangements.<sup>5</sup>

Second, economic factors determine the level of financial constraints on the family child care preferences. The array of child care options is largely determined by the financial capacity of the family. Wealthier families have the option to contract for their most preferred option. If the preferred option is that a parent primarily cares for the child, then the family forgoes her/his potential earnings in the formal labor force. Or, if the preferred option is to hire a live-in nanny, a wealthier family can afford to purchase the services. In lower income and single parent households, child care options are significantly constrained. Typically, for single parents, forgoing formal labor force wages is not an option unless it is possible for the parent to rely on the

<sup>5</sup>Pollak (1985) presents a bargaining framework for the distribution within the family. He relies on the marriage as the primary institution structuring the bargaining. In this paper, the focus is different. The definition of family in this paper does not assume that the bargaining is between two married spouses but rather among family members. This bargaining determines the preferences for child care arrangements. For this paper, the family bargaining process is left unspecified and will be the subject of future research.

social welfare system or enlist child care services of relatives and friends. In sum, the family resource endowment consists of the preferences for different mixes of child care arrangements determined through bargaining based upon cultural and sociological factors. These preferences are then subject to financial constraints which yields a choice set of alternative mixes of institutional arrangements.

#### **Social Resource Endowment**

The social resource endowment consists of kinship ties and social networks. Kinship ties are extended family relations by blood or marriage living in residences separate from the family.<sup>6</sup> Social networks are non-familial bonds of friendship characterized by an intensity of connection which results in sharing of child rearing experiences, child care services or general parenting support.<sup>7</sup>

In highly mobile areas, kinship ties as a source of child care services may be less likely than in areas with less mobile populations. In general, the more mobile a family the less likely extended family will be geographically near enough to provide child care. The development of social networks is a means of coping with decreased availability of kinship child care arrangements. As will be discussed in the following section, arrangements with kin and social networks are theoretically characterized by lower information and strategic costs. If parents are risk averse, as parents usually are when it comes to child care, then they will prefer arrangements with the least uncertainty. For these reasons, the extent of social resources factors prominently in the family child care decision ratio.

#### **Community Resource Endowment**

The community resource endowment consists of the number, types and location

<sup>6</sup>The distinction between family living in the same dwelling from family living elsewhere is based upon different coordination costs which will be discussed in Section III.

<sup>7</sup>The term, social network, is adopted to differentiate between communities of friends characterized by interdependencies from informal child care arrangements where the primary reason for the relationship is the child care service contract.

of child care providers in a community. Child care producers such as day care homes, day care centers, and preschools vary by organization type (private, public, nonprofit), level of caregiver training, number of children per caregiver, ages served, level of curriculum development, licensing, accreditation, etc. (Section V discusses this variation in greater detail). Profit producers range from day care homes in which typically there is one provider and fewer than 10 children to mass produced child care by Kinder-Care, the only national chain in the child care market. Nonprofit producers are a diverse group. Many churches and synagogues offer child care services primarily to members but not exclusively. Secular nonprofit producers range from day care cooperatives in which parents are required to work in the cooperative in exchange for child care (fees may be charged as well) to day care centers with a professional head teacher and a number of teacher aides. Increasingly public schools are providing services for pre-school age children. Early 4s or pre-kindergarten classes are provided to school district residents primarily on a fee basis.

When parents turn to community producers for child care services, geographic proximity is a primary factor in the choice among alternative producers. Child care arrangements are highly related to geographic proximity to the family home and/or parents' place of work. The number of producers a family has to choose from determines the size of the community resource endowment for that family. For this reason, families living in the same urban area but in opposite sides, can have different community endowments.

As can be expected, the size of the community resource endowment varies substantially between rural and urban areas. In rural areas there will be fewer community providers than in more populated areas due to lower populations of children.

A family's reliance on the community resource endowment for child care services is a function of family preferences subject to financial constraints and its reliance on kinship ties and social networks. The following section defines the costs associated with family choice of child care arrangements. Through an

analysis of the transaction costs associated with alternative institutional arrangements among the three endowments, it then becomes possible to assess current policy actions and determine areas in need of greater attention.

### **SECTION III: Transactions Costs in Family Child Care Decisions**

For the family, the mix of child care arrangements is the the ratio of child care provided by the family itself in relation to child care provided by others. The family child care ratio decision involves the consideration of transaction costs in relation to different institutional arrangements. Three sets of transaction costs affect the decision: coordination, information, and strategic (Ostrom, Schroeder, Wynne, 1994). Table 1 summarizes the relative level of coordination, information and strategic costs associated with different institutional arrangements and the effects on the family decision ratio.

#### **Coordination costs**

Coordination costs refer to expenditures of time and money to reach and maintain agreements (Williamson, 1985). Williamson labels the expenditures necessary for reaching an agreement as "ex ante" costs. "Ex post" refers to those costs due to monitoring, sanctioning and renegotiating the agreement. For each family, coordination costs are a function of the number of care arrangements to be coordinated and the ratio of family members needing care to members supplying care. Each time another person is enlisted to care for a child, a coordination cost is incurred. For a two career household this could amount to coordination with a week day caregiver and evening/weekend baby sitters, coordination with a spouse, and coordinating older children to care for younger siblings.

Because the contract with formal child care producers is more explicit (a parent purchases a certain number of hours of child care at a set price), the coordination costs may be less than those arrangements with kin or social networks. Once the time has been purchased from a formal producer, the schedule (or total amount) can be considered fixed whereas in less formal arrangements the exchange may be characterized by more give and take in scheduling. The more the

uncertain the schedule, the greater the coordination costs.

#### **Information Costs**

There are two types of information costs. One is time and place information (Hayek, 1945) and the other is scientific. In the initial search for a child care arrangement, there are time and place information costs concerning the number and types of providers in a given geographic area at a given time, waiting lists, locational factors, etc. This type of information determines the number of options available (subject to family preferences and financial constraints). Scientific information reflects costs associated with gathering child care knowledge. In the decisions over child care arrangements, scientific information costs relate directly to assessments of the quality of child care. For many goods, there is a direct, measurable relationship between inputs and outputs. But as discussed in Section I, the nature of child care services is such that information asymmetries exist between the parent and caregiver that make quality difficult to assess.

When a parent searches for a child care arrangement, s\he has knowledge of the family resource endowment and the social resource endowment. If s\he decides to search for child care within the social network, information costs are quite low. S\he has an idea of the other person's child rearing practices and, because of established communication lines, can easily find out whether the person would be able or willing to care for the child(ren).

Information costs regarding community supplied child care can be significantly higher than family or social resources supply the child care. Search costs in this case include referral services (which may charge nominal fees), calls, site visits, interviews, etc. These costs vary depending on the situational constraints (time and money) of the parent as well as on family beliefs about the quality of different institutional arrangements. Each family repeats the search process to varying degrees. While knowledge of one family's search process may decrease the search time for another, the use of information

by one family does not reduce the information available to others.<sup>8</sup> Given varying situational constraints of parents which limit the time available for searching, information costs can be an important factor in child care selection.

#### **Strategic Costs**

Strategic costs arise when individuals try to improve their own outcomes by consciously or unconsciously misleading others (Ostrom, Schroeder, Wynne, 1994:48). In child care, strategic costs are incurred primarily due to principal agent situations in which the parent contracts (formally or informally) with another person for child care services. An agency relationship is a contract under which one or more persons (principal) engage another person (agent) to perform some service on their behalf which involves delegating some decision making authority to the agent (Jensen and Meckling, 1986:212).

Agency costs include: monitoring expenditures by the principal, bonding expenditures by the agent, and residual loss due to a reduction in welfare experienced by the principal because of the divergence between the agent's decisions and those decisions which would maximize the welfare of the principal (Jensen and Meckling, 1986). Monitoring of the agent is difficult in child care services. For this reason, agents (especially formal child care providers) expend efforts to establish good reputations (form of bonding) through accreditation programs, licensing, public relations, etc. These actions are intended to reduce uncertainty in the exchange by increasing the level of trust between the principal and the agent.

Residual loss is a very difficult issue to detect but it has major ramifications. When a child receives substandard care, it is the child who primarily suffers. But the parent suffers a residual loss to the extent that the substandard care negatively impacts the child's development. The extent of residual loss depends on the divergence between caregiver and agent child rearing decisions. There is also the possibility of residual gain in child care

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<sup>8</sup>Child care information is a toll good in that it is excludable and nonrivalrous. Excludability is due to varying constraints on families' search time. Nonrivalrous refers to consumption: one family's use of the information does not decrease the amount of information available to another family.

arrangements. Research in psychology and education indicates that in situations where there is significant stress levels in the family, high quality child care outside the home can decrease the stress level of the child. Early childhood development programs such as Head Start are specifically designed to create residual gains for children in at-risk family situations.

The information asymmetries between the parent and caregiver due to the principal agent relationship lead to the potential for moral hazard. Moral hazard arises from "the unobservability of actual behavior in the ex post contracting situation" (Moe, 1984:755). A type of moral hazard, shirking, occurs when individuals do not produce the degree and/or quality of child care services that they have been contracted to supply. This constitutes a break in the trust relationship underlying child care contracts. The greater the difficulty in monitoring, the larger the risk of exploitation of strategic costs.

In the case of child care within the family, the principal-agent problem exists between spouses and also between parents and older children. If a parent arranges with a spouse or older child to care for a younger child, problems of monitoring arise. Unless the child being cared for is able to articulate his/her displeasure with the care received, it is difficult for the parent to know whether the caregiver has been attentive or has shirked in her/his responsibilities.

The same relationship exists in kinship and social network arrangements and in formal arrangements in the community. However, because arrangements in the social resource endowment are characterized by mutual obligations, there is reason to expect that strategic costs should be lower than in formal arrangements. This is due to increased information between the principal and agent. Information disparities between individuals and their families are generally smaller than those between individuals and non-family insurers because proximity yields substantial monitoring advantages (Pollak, 1985:590). However, this is highly situationally specific. Child abuse at the hands of family and friends is a serious problem in the United States and therefore this theoretical tendency for mutual obligations to lower strategic costs must be carefully

empirically examined prior to informing policy design.

In formal child care arrangements the primary motive for contact between family and caregiver is a monetary exchange for delivery of child care services. This is a fundamentally different contracting arrangement than with family, kin and social networks. In day care home arrangements, the parent contracts directly with the caregiver for delivery of services. There may be reason to hypothesize that the personal connection between the caregiver and parent might decrease uncertainty due to the trust relationship. If the trust relationship is not broken, strategic costs decrease. In the day care center, a nested principal-agent problem exists: when a parent contracts with a day care center, the center in turn contracts with caregivers to supply the services. The organizational structure of day care centers is typically one head teacher and many aides. The monitoring efforts by parents are much more complex depending on the number of day care workers. The difficulty in monitoring for the parent leads to reliance on alternative means such as regulations and accreditation programs. These types of monitoring mechanisms will be discussed in Section IV.

The preceding discussion of transaction costs provides a framework for defining costs associated with alternative child care arrangements. Based on the analysis, there are three general tendencies for transaction costs in child care services. First, the potential for exploitation of strategic costs increases as the mutual obligations and trust relationships decrease and monitoring costs increase. Second, information costs are higher when families search for information in the community as compared to within the family and social resource endowments. Third, coordination costs increase with the number of care arrangements and the degree of uncertainty associated with those arrangements.

Imperfections in contracting arrangements provides an opportunity for counter-acting institutional arrangements to emerge in order to help those involved cope more effectively. Government actions create incentives through altering institutional arrangements which in turn affects the behavior of individuals. In the following section, several government programs are evaluated in terms of their impact on the endowments, transaction costs and the relation

to the family child care decision ratio.

#### **SECTION IV: Governmental Actions Affecting Child Care**

A 1991 special issue of the *Journal of Social Issues* devoted to child care policy began with the observation that the child care debate has shifted from the question of *whether* the federal government should become a larger player in the child care field to *what shape* that role should be and *how much* it will cost (Hofferth and Phillips, 1991:1-2). Other studies find that there is not sufficient justification for a larger governmental role (Rose-Ackerman, 1988; Gormley, 1991a). Regardless of these debates, there currently exists a large governmental presence in the child care industry. This section examines the effects of some of the existing governmental programs and policies on the child care decision ratio.

##### **Funding for Child Care Programs**

The diversity of funding programs provided at the federal level defies brief description. As Table 2 indicates, of the largest seven programs most are related to funding child care programs. In general, federal funding programs target enlarging the community resource endowment through increasing the supply of child care services and increasing the family resource endowments through child care subsidies.

##### **Regulation**

Child care-related regulations are primarily facility-oriented rather than people-oriented with emphasis on child health and safety (Gormley, 1991b). To the extent that they increase the quality of the child care supplied, they decrease the monitoring costs incurred by the parent. However, there is a secondary effect on the size of the community resource endowment to the extent that regulations decrease the number of child care providers.

The federal government regulates child care only when federal funds are used in its production. For example, in 1990 Congress began requiring that all providers receiving federal funds through the Child Care Development Block Grant meet health and safety requirements. These requirements include the prevention



and control of infectious diseases, building and site safety, and health and safety training for providers. Each state's lead agency must provide assurances to Congress that grant recipients are complying with the regulations and that parents have unlimited access to funded facilities.

Primary regulatory responsibility lies at the state level. States vary widely in both the extent and types of regulations. Every state regulates day care centers and every state except Louisiana regulates day care homes (Gormley, 1991b). Depending on the state, inspections may be conducted either by state or local officials. In a study of the effects of regulation on regulated child care facilities, Gormley (1991b) separately regressed group day care centers, Kinder-Care, and day care homes on a number of regulations and found variation in impact among the producers. Supply of day care centers and Kinder-Care was adversely affected by lower child-staff ratios.<sup>9</sup> Especially for toddlers and infants, states requiring fewer children per worker are less likely to have higher populations of day care centers and Kinder-Care establishments. For day care homes, Gormley found that requirements for general liability insurance and elaborate home inspection systems discourages (licensed) day care home arrangements.<sup>10</sup> In general, however, he concluded that, with the exceptions noted above, most state regulations have no impact on the number regulated child-care facilities. Local governments affect child care delivery primarily through zoning restrictions and inspections. There is little research on the local level providing data for analysis.

#### **Tax Policy**

Tax policy affects the family resource endowment through a decrease in financial constraint. Tax deductions for child care services subsidize child care expenses incurred by the family. Theoretically, the decrease in financial

<sup>9</sup>Gormley also found that requiring parental visits had a negative impact on supply. However, he notes that there may be some confounding effects. Therefore, it has been omitted.

<sup>10</sup>There is an unlicensed population of day care homes but data does not exist on the extent of these operations. It is unknown at this point whether regulations that decrease licensed day care homes result in increased unlicensed day care homes.

constraint will increase the choice set. However, the beneficiaries of tax deductions are restricted to those with incomes high enough to be able to claim the deduction. Besharov and Tratonozzi (1989) argue that the families benefitting from the tax deduction are those who need it the least. To the extent that this is indeed the case, the effect on family resource endowment and choice set decreases.

Tax policy geared towards providing incentives for employer-provided child care affect the community resource endowment as well as decreasing information costs for the parent. The employer-provided Child or Dependent Care Services Tax Credit of 1981 created a tax shelter up to \$5,000 in child care expenses if the employer, rather than the parent, pays for or provides the child care (Besharov and Tramonozzi, 1989). On-site child care may reduce coordination costs for the parent to the extent that it makes the daily transitions from home to work less complicated. It may decrease information costs in terms of the initial search for child care arrangements (ex-ante) as well as monitoring (ex-post). To the extent that the increased monitoring ability of the parent impacts trust levels in the child care agreement, the potential for strategic costs decreases.

#### **Low Income Programs**

Child care arrangements for low income families is a complex issue and far beyond the scope of this paper. This section discusses a few federal programs and the potential effects on the child care ratio decision. There are many federally sponsored programs geared to assist low income families in meeting their child care needs (See Table 2). The largest program directly affecting the community resource endowment is Head Start which provides for local preschool programs for low-income children. Other programs such as the Child Care Food Program and Special Milk Program provide milk, food, and money to day care providers serving low-income children. These three programs attempt to improve child care outcomes directly. Other programs such as the Work Incentive Program (WIN) indirectly affect the family resource endowment through requirements for child care assistance. The WIN program seeks to reduce welfare dependency by providing money to states to help Aid to Families with Dependent Children

recipients find and retain jobs. States are required to provide child care services to WIN participants. To the extent that states provide child care services for WIN participants, it affects the family resource endowment. Coordination costs may be reduced if child care is provided rather than taking the form of a subsidy.

#### **SECTION V: Nongovernmental Actions Affecting Child Care**

Many churches and secular non-profits supply child care services. These types of organizations are multifaceted in their effects on endowments and transaction costs in the child care decision ratio. Churches<sup>11</sup> as producers of child care primarily serve members but not necessarily. To the extent that they supply child care services, the community resource endowment increases. For members, transaction costs may decrease due to decreased search costs (ex ante information costs) and strategic costs (ex post monitoring costs). In addition, churches facilitate social gatherings which provide the potential for a family to expand its social network. To the extent that relationships with fellow church members result in child care arrangements, monitoring costs may be reduced due to shared belief structures which decrease uncertainty.

Secular non-profits are a diverse group of organizations. Theoretically because non-profits are not able to redistribute profits to members of the organization there is less potential for exploitation in the information asymmetry associated with child care arrangements (Hansmann, 1980). To the extent this is indeed the case, strategic costs are reduced. However, research to date does not provide evidence that there is measurable quality differences between private and non-profits providers of child care services (Kagan, 1991). Private providers of child care affect the family child care decision through enlarging the community resource endowment.

<sup>11</sup>This is being used as an umbrella term representing all types of organizations whose primary purpose centers around religion.

#### **SECTION VI: Future Directions**

In general, the institutional arrangements for provision of goods and services are characterized by imperfection. This leads to the emergence of counter-acting institutions that may help those involved cope more effectively. A counter-acting institution emerging in the child care arena is referral agencies. The basic purpose of these organizations is to link families to the community through referral efforts. A critical link in the child care decision ratio is the availability of information about child care options. These agencies decrease information costs to families as they search for child care arrangements.

While these organizations exist in most communities, in large urban areas innovative programs such as Bananas in the San Francisco Bay Area are going beyond referral services to providing services that affect endowment levels and other transaction costs. For the family, Bananas offers parenting and first aid courses. There are also support groups for single parents, social gatherings and other types of social activities. These types of social interactions expand the social endowment to the extent that they lead to the development of social networks. These social gatherings also facilitate the sharing of child rearing information which can increase the family endowment. Some of these organizations offer accreditation programs for day care homes and day care centers. They inspect producers and recommend accordingly. In this way, the contract uncertainty and principal-agent problems can potentially be reduced as well as increasing the community resource endowment.

To date, little research has been directed towards identifying the nature and effect of referral agencies as a type of counter-acting institutional arrangement. Further research is needed to more clearly understand how these organizations emerge, sustain operations and choose an array of services and how these services affect the child care decision ratios of families.

### Conclusion

The decision of families about whether and to what extent to place the child with other caregivers is an inherently personal choice dependent upon the interaction of belief and socio-economic factors of the family with social networks and the community. By understanding the decision calculus for child care choices it becomes possible to not only assess existing policies and programs but to reveal areas in need of policy attention. Given that women's labor force is expected to continue to rise, child care services will increasingly generate debate and calls for policy action. Policies that reflect an understanding of the constraints involved in child care decisions and target decreasing transaction costs or increasing endowment levels have the potential to facilitate family child care decisions.

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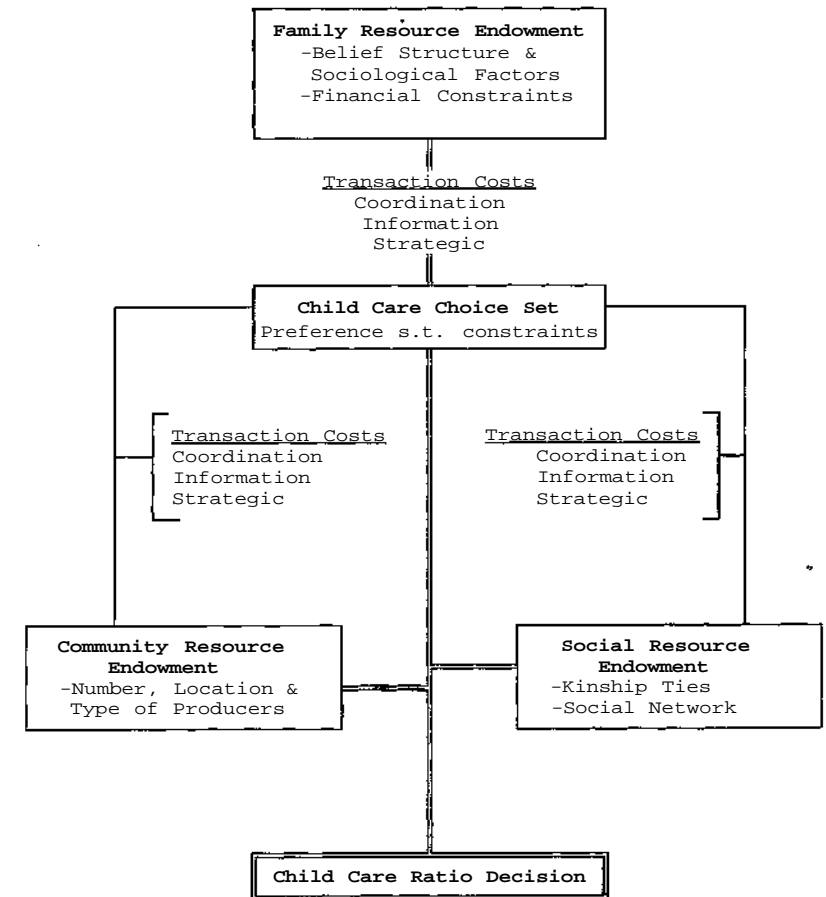
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Figure 1  
The Family Child Care Decision Ratio



\* S.T. = subject to

Table 1  
Transaction Costs for the Family in the Child Care Ratio Decision

	Coordination	Information	Strategic
<b>Family Resource</b>	Low	Low	Low
<b>Social Resource</b>			
Kinship Ties	Medium	Low	Low
Social Network	Medium	Low	Low
<b>Community Resource</b>			
Day Care Home	Low	Medium to High	Medium
Day Care Center	Low	Medium to High	High

Table 2  
Major Federal Funding Sources  
for All child Care Settings for FY 1993

Funding Source	Purpose	Agency
Dependent Care Tax Credit	To provide child care subsidies in the form of a limited tax credit	Treasury
Social Services Block Grant	To provide funding for state social service activities, including child care subsidies	Health and Human Services
Child and Adult Care Food Program	To provide federal subsidies for meals served in child and adult care facilities	U.S. Dept. of Agriculture
Child Care and Development block Grant	To provide child care subsidies for low-income families and to improve the overall quality of child care for families in general	Health and Human Services
AFDC Child Care	To provide child care subsidies to AFDC recipients who are in training or working	Health and Human Services
At-Risk Child Care	To provide child care subsidies to families at risk of going on welfare	Health and Human Services
Transitional Child Care	To provide child care subsidies for up to a year to families who have left AFDC	Health and Human Services

Source: *Child Care: Promoting Quality in Family Child Care*. Report to the Chairman, Subcommittee on Regulation, Business Opportunities, and Technology, Committee of Small Business, House of Representatives. Washington, DC: United States General Accounting Office, 1994 (December), p. 13, Table 2.