The micro-economics of foster care in South Australia

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The South Australian foster care system is plagued by problems of both supply and demand. Decreases in the availability of residential care and suitably trained foster carers has led to a shortage of placements to meet current demand. At the same time, increased selectivity in the intake of children into care has led to an over-concentration of more challenging children who either cannot be placed in foster care, or are being placed with the support of significantly higher loadings or payments. In this paper, it is argued that these problems can be understood conceptually using basic micro-economic principles, namely: demand-supply curve analysis, separation of market segments, and supply elasticity. It is argued that the supply of placements has become increasingly price-inelastic due to the nature of demand (the type of child), and that increasing short-term payment rates only serves to magnify the problem by artificially maintaining unsuitable care arrangements. Alternative solutions, such as the introduction of training and professional foster carers, are discussed.

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RECENT TRENDS: AN OVERVIEW

The South Australian substitute care system shares much in common with others around the world (Bath, 1997). Throughout the last decade, there has been a significant increase in the number of children requiring out-of-home placements. This increase has been attributed to a variety of sociological factors, including: poverty, the increasing number of single parent families with multiple children, higher cost of living, and also increases in the prevalence of reported child abuse (Colton & Williams, 1997). However, as Barber (2001) has recently shown, this increasing demand for foster care has, somewhat paradoxically, not been reflected in any substantial changes in the number of children in care. In 1995, there were approximately 1000 children in substitute care in South Australia (in any given month), and this figure has remained relatively stable until the end of the decade.

Instead, according to Barber (2001), the most dramatic change in the foster care system has been the composition of the substitute care population. As a result of the limited availability of placements, many children who previously might have been placed into care are often no longer given placements, and alternatives are sought with relatives, or other approved carers. Only those children with the most serious needs are given placements, so that the population of children in care has become increasingly comprised of children with more challenging behaviours, and/or physical and mental disabilities.

Compounding this problem of increasing placement demand has been the dramatic decline in the availability of carers. In 1995, the number of carers in South Australia approximately corresponded with the number of children. However, by 1999, approximately the same number of children (n=1000) had to be accommodated by only 700 carers. As with the increase in demand, this decrease in the supply of foster carers has no single cause. Common explanations have included: the greater number of women moving into the workforce, the increasing mean age of the population, longer working hours, and a reduced interest in altruistic and semi-volunteering activities in Australia (Barber, 2001). Another factor identified by Bath (1997) and also Barber is the substantial decrease in the availability of alternative placement options, most notably, group or residential care. Previously, this type of care accommodated approximately 30% of children, but, by 1999, this figure had decreased to less than 5%, thereby further increasing the number of more challenging children having to be accommodated in foster care (Bath, 1997).

The combined result of these trends has been to make foster caring an increasingly difficult and unrewarding occupation. Although it is unclear to what degree the changing composition of the child population has contributed to the loss of foster carers, recent research suggests that child behavioural problems are a significant concern for more than 50% of foster carers (Delfabbro, Bentham & Taplin, in press). It seems reasonable to conclude that this factor would also prove a significant disincentive for future foster carers.

One way in which the system has addressed this problem has been to increase the economic incentives for caring for more challenging children. Carers are paid an additional loading based upon the standard rate (eg, 100%

= twice the normal amount). This issue was examined in a recent study by Delfabbro and Barber (submitted) who found that, of 235 children placed into care over a 12 month period (1998-1999), approximately 35% received special needs loadings at some point in time, with a mean rate of 100%. Delfabbro and Barber (submitted) argued that this strategy created a significant opportunity cost, in that this extra money would potentially reduce the amount available to fund other short-term placements.

All this suggests that foster care in South Australia has become highly segmented. While on the one hand there are children who can be placed into foster care at the normal rates, on the other, approximately 35-40% of children coming into care for new longer-term placements require loadings. It comes as little surprise to observe that this figure corresponds quite closely to aggregate figures obtained for foster care and residential care in 1995. In 1995, approximately 30% of children were in residential care and 70% were in foster care. Thus, it is not inconceivable that the pattern of loadings presently observed for children currently moving through the system, at least in part, represents the additional cost of housing children who previously might have been in residential care.

Such are the trends documented in the existing foster literature. Unfortunately, a limitation of these descriptions is that they are largely atheoretical and do not provide any systematic way of understanding the complex interaction between the factors documented. For these reasons, the aim of this paper is to elucidate these processes more systematically using the principles of elementary micro-economic theory. This form of conceptual analysis has proved a valuable framework for understanding many social processes in Australia (Productivity Commission, 1999). Analyses such as these provide a framework in which to understand the possible nature of future changes in South Australian substitute care, the likely effect of different policy options, and may also form the basis for more systematic quantification of demand and supply inequalities in the future.

THE SUPPLIERS AND CONSUMERS OF FOSTER CARE IN SOUTH AUSTRALIA

As in many other jurisdictions, it is possible to conceptualise these problems in foster care as resulting from inequalities in supply and demand. The suppliers of foster care services are foster carers. Even though foster carers are accessed via a non-government agency (Anglicare) and paid by the Government, the availability of placements and the supply of labour is ultimately determined by the foster carers themselves. They are paid a specific amount to help them defray the cost of providing placements, and it is well documented that this ability to provide placements is enhanced as the payment amount increases (Delfabbro, Bentham & Taplin, in press; Triseliotis, Borland & Hill, 1998). Thus, the provision of placements by foster carers and, in particular, the relationship between placement supply and payment amount are governed by a conventional positively-sloped supply function.

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Conversely, the Government (Family and Youth Services (FAYS)) could be considered the ultimate source of demand for foster care services. The Government division responsible for the provision of placement services (ie, who pays the foster carers) is allocated a specific pool of funds which determines how many placements can be 'demanded' or requested. The lower the payments required (ie, the 'cheaper' the placement cost), the more placements will be demanded. Accordingly, it is possible to conceptualise the demand for foster care placements as being governed by a conventional downward-sloping demand function. If the price of foster care placements increases (eg, if the foster carers were able to make a successful industrial claim), the quantity demanded would have to fall (assuming a fixed pool of funds). Conversely, if the price per placement were to fall, the Government would be able to demand more placements.

ELEMENTARY SUPPLY AND DEMAND ANALYSIS

The interaction between these hypothesised supply and demand functions supplied above is depicted in Figure 1. The supply curve represents the number of placements offered by carers at each level of payment, and is upward-sloping because carers need to be paid more in order to increase their output (ie, the number of children they are willing to accommodate). The demand function represents the number of placements which the Government is able to pay for at each level of price.

Furthermore, as Figure 1 further indicates, it is possible, in this context, to distinguish between two types of demand: nominal and effective. 'Nominal' demand (Dn) refers to the actual number of children who are recommended for placements by families and other parties who approach district centre offices. On the other hand, 'effective' demand (De) refers to the actual number of placements requested by social workers at the offices. Although the actual number of families who approach FAYS for placements is unknown, qualitative interviews with workers clearly indicated that not all children are recommended for placements (Delfabbro, Barber & Cooper, 2000). Thus, it is sufficient for the purposes of this conceptual analysis to assume that De is less than Dn. De is quite clearly the critical demand curve because it is these children for whom the system ultimately has to find placements.

The evidence presented by Barber (2001) suggests that the current price for foster carers is insufficient to attract a suitable number of carers to meet the current nominal demand. Such a price is indicated by P_0. At P_0, carers would

Figure 1: Nominal and effective demand for placements

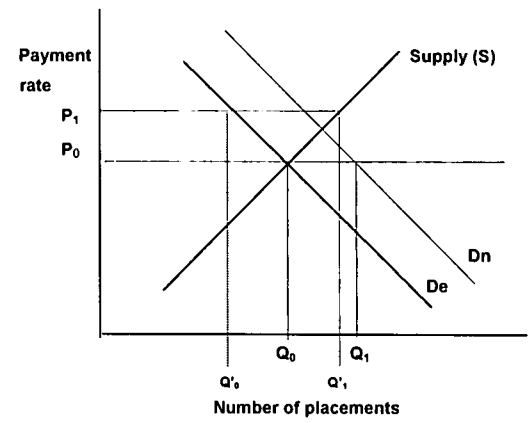
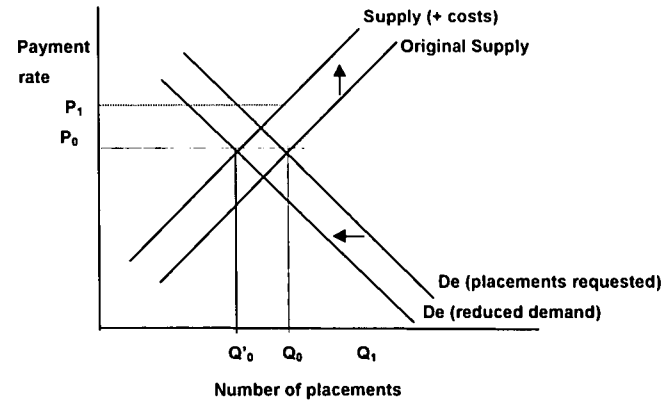


Figure 2: Decrease in supply resulting from increases in the cost of living



be willing to offer a quantity of services (Q_0), whereas the number of children for whom placements are requested equals Q_1 (nominal demand). This means there is a shortage equal to Q_1-Q_0 given the demand function Dn and supply function S. In effect, Q_1-Q_0 represents the number of children diverted from alternative care, eg, kept at home, placed with relatives without payment, and so forth. FAYS is only able to request a total of Q_0 placements, and so the effective demand is given by De. At this level of demand, an equilibrium is reached at P_0, with effective demand kept at a level which can be accommodated by existing carer numbers.[1]

This equilibrium exists only as long as there is no change in effective demand and in supply. Two types of change are recognised in microeconomics: (a) a movement along the supply or demand curve, or (b) a shift in supply or demand. The former occurs when there is a change in price, eg, if P_0 (the amount paid to carers) were to increase to P_1 then the shortage would not be solved. Carers would be able to care for more children (increase in supply) because greater funding would be available to meet the costs of looking after additional children (Q'_1). However, at the same time, assuming that the pool of money allocated to substitute care is fixed, these higher prices would force FAYS to reduce its demand for placements to Q'_0 due to the increased price. Thus, a shortage would still exist in the amount of the difference between Q'_1 and Q'_0.

Changes in supply and demand occur when factors other than the price change. This is represented by a shift in the respective demand and supply curves. An increase in demand would occur if there were, for example, a change in child protection laws and the detection of abuse, leading to a greater number of children having to be placed. Dn would shift to the right, thereby further increasing the discrepancy between nominal demand and actual supply. By contrast, a shift in supply could possibly occur if there was an increase in the cost of living, eg, the introduction of the GST. If this occurred, then S would be expected to shift to the left with carers providing fewer placements at the same payment level. This would further increase the extent of the shortage, as represented by the difference between the number of placements supplied by the carers and the number of placements demanded. Figure 2 illustrates this effect in relation to actual or effective demand. The Government would be faced with two choices in this situation. First, in order to maintain the same number of placements (Q_0), it could request more funding so that it could increase the price (or payment level) to P_1 (the intersection point with the new supply function) corresponding to Q_0 children. If this were not possible, the second choice would be to shift effective demand to the left, thereby yielding a new equilibrium point at Q'_0; a point which might be quite unsatisfactory from the point of view of social policy.

On the positive side, if the Government were successfully able to recruit a greater number of foster carers by some means other than by increasing the financial incentives, there would be a shift in supply to the right. Such an increase might occur, for example, if the Government were able to make foster care more attractive to a different population of carers, or if there was a significant change in society's attitude towards foster caring. If a recruitment campaign was successful in appealing to people's altruistic motives and the personal rewards associated with being a foster carer, then it would be theoretically possible to increase the supply of foster carers without a concomitant increase in the cost or 'price' of foster care. This situation is illustrated in Figure 3. In this situation, assuming that the Government were able to obtain additional funds in the amount of $(Q'_0 - Q_0)*P_0$, it would be able to take advantage of this new supply by shifting its demand to the right and establishing a new equilibrium at Q'_0.

THE ISSUE OF PRICE-ELASTICITY AND MARKET SEGMENTS

From our recent research in South Australia (eg, Barber, Delfabbro & Cooper, 2001; Delfabbro, Barber & Cooper, in press), it is clear that characteristics of children entering foster care vary considerably. Nevertheless, it is possible to identify

1 The supply of placements provided does not necessarily mean an equivalence of carer and child numbers. Current figures suggest that there are 30% more children in care than carers because carers often take more than one child into the same home.

Figure 3: Increase in supply resulting from making foster care more attractive

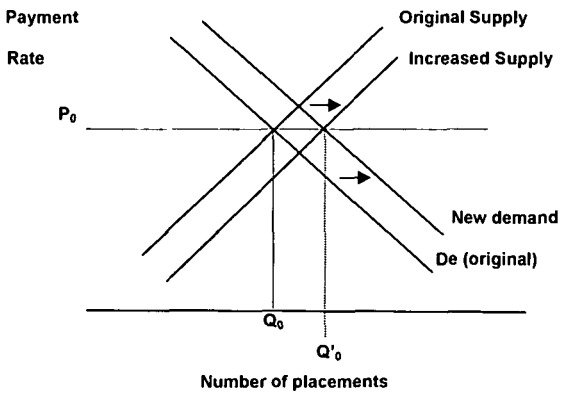
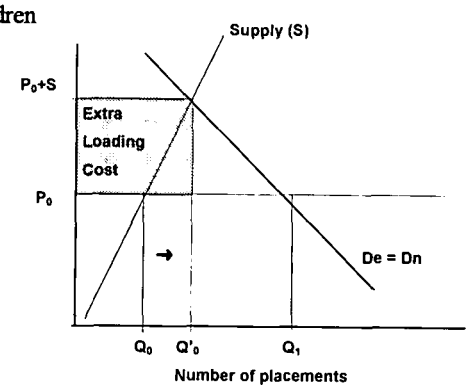


Figure 4: Demand and supply of placements for challenging children



NB In this analysis, it is assumed that the demand function for both market segments (types of children) is similar. A change in the cost or price of foster care would lead to similar increases in the quantity of placements demanded by the Government.

two clear clusters of children: protected and disaffected. Most children in foster care fall into the former category; they are in care because of parental problems, because they have been abused, and/or as a result of not having a stable home or guardian. Many of these children appear to achieve some degree of success in foster care. They experience improvements in psycho-social functioning, eventually find stable placements and are generally satisfied with their placements. On the other hand, a smaller proportion of children (usually adolescents) appear to gain little from foster care. This second group of children is on the whole disaffected with life; has moderate to severe levels of behavioural disturbance and psychological ill-health; and generally experiences ongoing placement disruption and instability. As Delfabbro and Barber (submitted) have observed, foster carers are generally unwilling to accept these children unless they are paid an additional amount, a loading, which is often twice the standard payment rate.

For these reasons, it is reasonable to propose that the market for foster care services is, in fact, made up of two segments. One segment could be described in terms of the analysis and diagrammatic analysis depicted so far. On the other hand, the second segment needs to be viewed in the context of a supply function whose slope probably significantly differs from that in the first segment. Such a supply curve is depicted in Figure 4. The supply curve which has a much steeper slope, indicates greater price inelasticity. Carers are less willing to take on additional children of this type unless they are more highly compensated for doing so. The term 'price elasticity' refers to the percentage change in quantity supplied associated with each unit increase in price (ie, payment rate), $E=\Delta Q/Q / \Delta P/P = \Delta Q/\Delta P \times P/Q$, where P = payment rate, and Q = no. of placements offered by carers. As indicated by Figure 4, payments will have to increase considerably before there is a significant effect upon the number of placements available. Evidence that this is indeed the case is derived from the fact that challenging children can often only be placed by paying foster carers an additional loading, which is, on average, twice the standard rate (Delfabbro & Barber, submitted). In other words, the slope of the supply function in Figure 4 (challenging children) is probably anything up to twice that in Figures 1-3.

The cost of this extra loading is indicated by the area $(P_0+S - P_0) * Q'_0$. This represents the fact that the Government must pay an additional amount above what it otherwise would have to pay in order to place the same number (Q'_0) of less challenging children.

In addition, it is possible to speculate about possible differences in the constant term in the functions for challenging and less challenging children. It is reasonable to assume that the supply curve in Figure 1 cuts the x-axis somewhere to the right of 0, ie, if $P=\Delta Q/\Delta P * P + c$, then $c < 0$. This is based upon the assumption that some altruistically minded carers would accept foster children irrespective of compensatory payments from the government, eg, as might be so for those who go on to adopt the children as their own. By contrast, in Figure 5, the constant is likely to be closer to 0 because carers would be less likely to provide care for challenging children at all unless they were financially compensated. Consequently the area below the x-axis (labelled A) could be considered a saving to the Government, resulting from carer's altruism, ie, desire to care for children without financial compensation.

Figure 5: Comparison of hypothesised supply functions for challenging children (Sa) and other children (Sb)

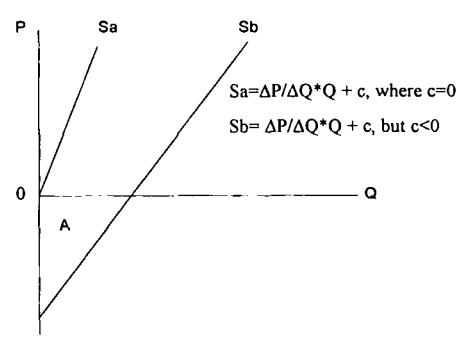
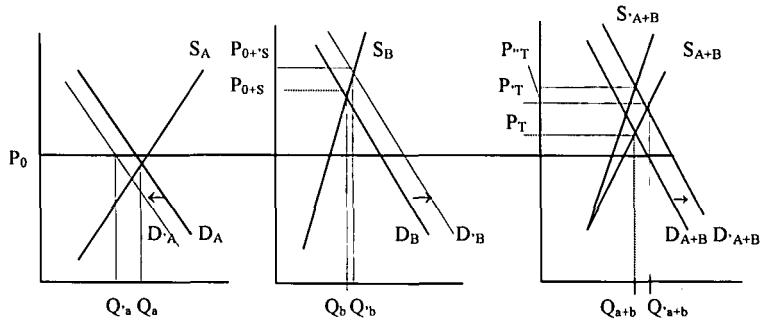


Figure 6: Hypothesised relationship between supply and demand for foster placements



The two separate market segments are brought together in Figure 6. As indicated, the total effective demand for placements Q_{a+b} is the sum of the demand for less challenging children (Q_a) and challenging children (Q_b). Foster carers are willing to take on less challenging children for a payment of P_0, whereas more challenging children require a payment of P_{0+S}. The price P_T represents the average price for the whole system, where $P_T = (Q_a * P_0 + Q_b * P_{0+S}) / (Q_a + Q_b)$. At this point, the Government provides a mean payment amount which is just sufficient to create a sufficient supply of foster placements. However, as a result of limited funds (due to the payment of special loadings for challenging children), any additional placement demand will be filled by only the most needy children. D_B will shift to D'_B and payments will have to be increased to provide a sufficient supply of foster carers (holding the number of foster carers constant) and the total quantity of placements demanded will increase to Q'_{a+b} (Figure 6(c)). On the other hand, given this extra cost, there will likely be a decrease in the effective demand for less challenging children (D_A to D'_A). Thus, although the overall demand for placements will increase, this demand will be increasingly made up of challenging children. The overall increase of providing foster care will increase to P'_T. Furthermore, if S_B comes to contribute an increasing proportion of total supply, then the total supply curve would become increasingly influenced by S_B, and therefore more price inelastic. Foster carers would find their job increasingly difficult and unrewarding, and would be less inclined to provide their services for altruistic reasons, such as because they enjoy looking after children or want to help the community. The overall slope of the total supply curve would decrease and the curve would gradually rotate upwards. As can be observed from Figure 6(c), this would further increase the overall average payment beyond P'_T, eg, to P''_T.

A vicious cycle would thus be brought into being. Fewer affordable placements would give rise to a lower effective demand for 'easier placements', leading to a greater proportion of more challenging children, greater price inelasticity of supply, and so a greater need to apply special loadings to encourage people to become carers.

CONCLUSIONS AND IMPLICATIONS

The conclusion of this conceptual analysis is that the present reliance upon special loadings for more challenging children is unlikely to be sustainable. Such short-term methods for maintaining difficult placements are likely to be self-defeating because there is dynamic relationship between the demand and supply for placements. The more the system tries to accommodate these sorts of children in family care, the greater the burden which these children place upon the system as a whole, and the less appealing foster caring becomes. Although our conclusions are based largely upon anecdotal reports from social workers and what limited system data exists concerning the nature and extent of special needs loadings, we believe that the analysis raises a number of interesting hypotheses and issues requiring future empirical investigation.

1. The extent of the disparity between normal and effective demand: to what extent do social workers act as 'gate-keepers' in alternative care? What factors govern the decision to place a child into care?
2. The elasticity of supply for foster care services: how much would payments have to be raised before carers are willing to accept additional children?
3. The elasticity of supply for challenging compared with less challenging children.
4. The relationship between the motivations for providing foster care and the types of children who are retained in each foster care placement: how have changes in the characteristics of foster children influenced people's motivations for providing care?

We believe that answers to these questions could provide a significant contribution to understanding the current difficulties experienced by foster care systems across Australia.

Finally, this paper also raises important issues concerning the potential role of motivational factors in the supply of foster placements. As indicated, if the foster care system becomes increasingly filled with children with greater behavioural demands, it is unlikely that appealing to people's good nature or altruism will be sufficient to recruit additional foster carers. Instead, as recently outlined by Triseliotis, Borland and Hill (1998), policy makers will need to reconsider the role of foster caring itself and recognise that many children (Figure 6(c)) probably cannot be accommodated in traditional family-based care, and that the needs of these children are probably better served by other care arrangements.

One such option is to develop so-called professional or treatment foster care programmes. These programmes usually involve intensive training of foster carers to deal with challenging

behaviours (Chamberlain & Reid, 1991; Galaway, Nutter & Hudson, 1995; Reddy & Pfeiffer, 1997). In such arrangements, foster carers are usually paid more, given additional support, and are usually allocated only one child. In this form of foster care, carers are, in effect, paid an income, and there is no assumption that service is provided merely through goodwill or altruism. If successful, this form of intervention could serve to alleviate the prevalence of challenging children in the mainstream foster care system, thereby enhancing the appeal of regular care to prospective foster parents. The disadvantage of this scheme is that the Government would have to allocate further funding to foster care, and this might not be possible in many jurisdictions. Nevertheless, in the absence of any analyses that compare the financial benefits of professional foster care with its costs, it remains unclear whether professional care would necessarily prove to be a more expensive option in the medium to longer term. Indeed, it is possible that additional outlays to professional foster carers could be more than matched by the savings resulting from greater placement stability and increased foster carer retention rates. So far, there has been little, if any, research that has undertaken this comparison. ♦

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