

Hiding from regress
Poverty and changing household composition in Congo-Kinshasa

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Abstract

Among the several ways in which households cope with regress, we consider the emergence of hidden households. While hiding your family into your parents' household may be interpreted as a coping strategy from an individual (female) point of view as well as from a household-efficiency point of view, one must also take intra-household distributional concerns into consideration. Combining household budget data with anthropometric data in a commune of Kinshasa, we suggest that the children belonging to such hidden households suffer significantly more from malnourishment than others of the same sex, age and income category.

Introduction

One way in which households may cope with economic regress¹ is by restructuring themselves. Pursuing this line of enquiry in the early eighties, Caroline Moser observed *inter alia* that the economic crisis in various poor urban neighbourhoods forced more and more people to stay with their parents, even after having had children themselves. In many cases, such “hidden families” were also *one-parent families*, lone mothers who live with their children in their parents’ home (Moser 1996, 1998).

This peculiar phenomenon is interesting for a number of reasons, not in the least because it shows the relative arbitrariness in the delimitation of the household, the standard unit of analysis to calculate income-poverty statistics (Collier et. al. 1991; Deaton and Muellbauer 1986; Hentschel and Lanjouw 1996; Drèze and Srinivasan 1997; Iceland 2000). According to Moser, we should interpret the extended household as a strategy to pool resources like space, income and childcare. Lone mothers staying at their parents’ can tap into this pool and e.g. allocate reproductive tasks to other household members while they devote themselves entirely to income-generating work. The relevant point of comparison here is the one-parent nuclear household, where women with very young children are without child support: “They have no alternative to locking their children in the house while they are at work” (Moser 1998, p. 13). This argument rehearses earlier findings (Standing and Sheehan 1978; Wong and Levine 1992). To be sure, an empirical test of this hypothesis produced ambiguous results (Butler and Horowitz 2000).

In this paper, we will concern ourselves with the different but related question about the consequences of this shift in household composition on intra-household distribution of resources. While Moser suggests that the one-parent households would be better-off by hiding in their parent’s household, this may or may not be the case depending on the way in which resources would be allocated within the hosting households. The option not to exit does not necessarily imply more voice.

In what follows, I will first look into the dynamics of cooperative conflict within (extended) households and specify the theoretical foundations of the analysis. I acknowledge household economics’ dominant models depicting people as rational agents threatening each other but I also see people as simply talking to each other, trying to make convincing arguments as concerns reasonable allocation of resources. Then, I bring in qualitative data to specify some hypotheses about how the inhabitants of Kinshasa reason about poverty and strategize on the composition of their households. This prepares the ground to examine the well-being implications of the members of hidden families. I make use here of the results of a small survey we organised in Kisenso, a poor urban suburb of Kinshasa, in 1997. The survey combined socio-economic and anthropometric data on the children living in the sampled households. In this way we were able to measure well-being in terms of the nutritional status of these children. The selection of the zone as well as the sampling procedure and practical difficulties in data-gathering were discussed elsewhere (De Herdt 2000). It suffices to point out here that the circumstances in which the inhabitants of Kisenso are living are more or less representative of the livelihoods of one-third of the *kinois*.

I. Theorising determinants of voice and exit in intra-household resource allocation

In what is at present considered as the first contribution to household economics, Paul A. Samuelson phrases the hypothesis of a consistent family consensus on intra-household resource allocation: each person has his or her own preferences, but “since blood is thicker than water, the preferences of the different members are interrelated by what might be called a ‘consensus’ or ‘social welfare function’ which takes into account the deservingness or ethical worths of the consumption levels of each of the members” (1956, p. 10). The viscosity of blood was the principal reason for Samuelson to override what Bourignon and Chiappori dubbed a ‘basic rule of neo-classical micro-economic analysis, namely individualism’ (1992: 356) and to consider the household as a collective actor. Later contributions to intra-household economics may roughly be classified into the ‘collectivists’ working with unitary household models and the ‘individualists’ analysing household decision-making as the result of an interaction between different individual decision-makers. Gary Becker’s so-called New Home Economics (1996) may be cited as a recent example of a ‘unitary’ approach which considers households as collective actors, whereas both cooperative and non-cooperative game theory has been applied to analyse household decision-making in terms of the strategic behaviour of individual household members (McElroy and Horney 1981; Mansur and Brown 1980).

As pointed out by Katz (1997), however, in their ambition to propose a formal model of decision-making both the unitary and the collective models of household behaviour arguably fall short of giving sufficient *institutional content* to their theories. Neither individualists nor collectivists provide for a satisfactory solution to what is called the actor-structure duality in social theory, i.e. the way in which individuals construe social structures which in turn mould individuals. The big advantage of formal models is argued to be their ability to generate testable hypotheses. Yet, as such models must economize on descriptive accuracy in order to maintain this advantage, they fail to give due account of quite common phenomena like caring for children extended families (Katz 1997: 38). In the unitary approach, for example, children are taken care of to the extent the household head is altruistic, and the degree to which this is the case is exogenous to Becker’s model. In a game context, children are de facto considered as public goods, they don’t have reasonable exit-options themselves and usually depend on more than one adult to achieve their well-being. Accordingly, formal models imply that they not only have to count on (exogenously defined) altruism, they may also be suffering from free-riding behaviour on the part of one of the adult decision-makers (Purkayastha 2003).

One of the ways forward from here, promoted by Amartya Sen (1991) and pursued by Katz (1997) and Agarwal (1997, 2001), consists in ‘thickening’ the formal bargaining models of intra-household resource allocation by depicting the household rather vaguely as a site of cooperative conflict embedded into a broader institutional environment. Yet this vagueness may still be sufficiently specific to generate some non-trivial testable hypotheses. One of the ways suggested by this approach is to reconsider Samuelson’s initial claims² about the role of “deservingness or ethical worths of the consumption levels of each of the members” in intra-household resource allocation. Thus, Amartya Sen proposed to enrich the information base on which typical cooperative-game models were based. More in particular, he proposed that the negotiated arrangement in such situations of cooperative conflict would not only be function of each party’s relative bargaining position, but also, among other things, vary in response to convincing arguments about

‘deservingness’. More specifically, Sen formulated the following hypothesis, called the *perceived contribution response*:

Given other things, if in the accounting of respective outcomes, a person was perceived as making a larger contribution to the overall opulence of the group, then the collusive solution, if different, would be more favorable to that person (Sen 1990, p. 136).

This would be so because the perception of who contributes what and how much does add to “the ‘legitimacy’ of enjoying a correspondingly larger share of the fruits of cooperation” (Sen 1990, p. 136) – ‘larger’ in comparison to a collusive solution solely based on relative bargaining position, that is.

Note that Sen does *not* imply here that intra-household resource allocation follows a logic of desert, only a logic of *perceived* desert. There is nothing morally superior to a particular allocation perceived as fair by all the parties involved. The precise meaning of deservingness may be accepted as natural and self-evident in some contexts, but such an acceptation does not in any way detract from the fact that “what is socially passed off as natural and indisputable... may be the outcome of past ideological struggles” (Agarwal 1997, p. 19). Following this line of argument, Agarwal warns observers not to confuse absence of overt contestation of some ‘doxa’ as absence of any questioning of them. Thus, ultimately is it not ‘deservingness’ which co-determines allocation but rather the way in which the debate over deservingness has been structured and dominated by some voices and in turn suffocated others³.

Further, arguments about the role of deservingness in resource allocation also complicate the connection between what happens within the household itself and its larger environment. In Sen’s mind, deservingness has to do with each member’s involvement in the labour market, but this need not be the only relevant reference. Precisely *what* is contributed is not really important; the point is rather that the argument of deservingness must be externally validated. The claim that someone really ‘deserves’ something -and, conversely, that another person doesn’t- becomes per definition more convincing if it can be shared by a broader public. This idea goes back at least to Adam Smith ([1790] 1973), but finds a contemporary reflection in various recent institutional accounts (Scott 1990, p. 56; Douglas 1987, p. 50). In the same vein, “Virtually by definition”, says Agarwal in relation to the households, “the arena of bargaining over norms has to extend beyond the household, since for ideas and practices to become ‘norms’ requires their acceptance beyond the household” (Agarwal 1997: 19). Though I concur with Agarwal on this point, I think it is not really necessary to locate bargaining over norms in one big arena, as if there would only be one winning definition of deservingness in society at large. Instead, we can also conceive society at large as a fragmented landscape of different arena’s where social interaction and bargaining takes place, unevenly connected by networks of persons circulating between them. Consistent with this view, people can import and export determinate allocation criteria from one specific arena to another, a process called *emulation* by Charles Tilly (1998). As some criteria are applied more often in several and sometimes quite different contexts, they almost automatically acquire a ‘naturalness’ or self-evident character:

“The shared analogy is a device for legitimizing a set of fragile institutions... To learn how this happens we have to watch private conflicts being resolved in a public forum. Then we see how each contestant musters public opinion to justify his or her actions against the other, and we observe the onlookers, who have no special interest in the case, listening to hear a general principle

in which they can sympathize. The favorite analogy generalizes everyone's preferred convention" (Douglas 1987, pp. 49-50).

Thus, following this view, the non-household institutions in which individuals are involved not only determine exit options. Different household members do not only bring resources constituting their 'fall-back position' in a bargaining game, they also bring arguments about deservingness, and thereby determine the capability to use voice⁴.

II. Deservingness, households and lineages in Kinshasa.

Applying this reasoning to our subject, one of the relevant non-household institutions possibly influencing the way in which people think about fair allocation within the household is the *lineage*. Most household members are indeed also tied by family ties, though in differing degrees. In fact, in the African context many anthropologists would indeed focus on the *lineage* as the *first* socio-economic unit of decision-making (MacGaffey 1983; Collier and Gunning 1999), and, accordingly, as the principal source of social status (La Fontaine 1973; Mianda 1996). On this account, the lineage logic would 'steer' the allocation of its members to different 'households', inter alia in function of each household's carrying capacity. Consequently, many households are indeed hosts to a significant amount of 'extended family members', whether as passers-by or as more permanent members. On the other hand, if we would conceive the predicament of 'hidden family'-members in terms of considerations of appropriateness and shame derived from the lineage logic, the picture becomes less rosy: customarily, an unmarried girl-mother loses her quality as *mushika nkunde* (chiluba), literally the thread which weaves together the "tissues" representing the two lineages (Devisch 1993). Her child is called *cibalabala* (chiluba), literally a maize stalk or "(s)he who lacks profound roots" (Biaya 1994). Unmarried mothers eventually escaped social death in the countryside by becoming a "free woman" in the city (Biaya 1994; La Fontaine 1973; De Herdt 2002).

Though we don't want to imply that these considerations are predominant, especially not in contemporary urban settings where the institutional picture has become more complicated, these elements may in any case be used as arguments by dominant household members, causing members of hidden families -the 'residue' of a failed marriage- to end up at the losing end of the intra-household bargaining space, whatever the efficiency-gains they may have brought to the household.

Some additional evidence comes from a set of qualitative interviews we organised among household heads of households we had qualified as 'poor' on the basis of a quantitative household survey in 1996 (Luzolele and De Herdt 1999). Our findings point to what we then called the "centrifugal force of poverty", i.e. the tension poverty created on taken-for-granted social practices we can interpret as expressions of intra-household solidarity.

As a general rule for instance, it was, and still is, un-thinkable to refuse hosting extended family members. This norm is also consistent with what we know about the connection between the institutional spheres of the household and the lineage. However, recently it has been complemented by other, secondary norms, defining exceptions to the general rule. For instance, it is by now well-established that a visit should be limited in time. The kikongo proverb that *nsudi nwa kutisana* (in order not to smell the other's bad breath, one has to maintain some distance) is often used in this respect. Another compromise-norm is that guests are expected to bring their food ration with them: hospitality is de facto limited

to providing a bed and a roof. Household-level solidarity is hereby *de facto* restricted to the nuclear family members. But the pressure of poverty might even induce people to go beyond that level. This is what a household head argued:

“There is not enough food for all of you, you the girls, you have grown-up now, don’t the men you meet give you any money?” (cited in Luzolele and De Herdt 1999, p. 53)

The situation is reminiscent of the classical “lifeboat”-problem, where two men must make a tragic decision about the use of an amount of food which is enough for only one of them (Dasgupta 1993). Note however, that from the point of view of established role-expectations, the father’s decision is quite revolutionary: a girl’s (and women’s) place is in the house, not in the streets. Simply wandering around and “meeting men” is “not done”, it is equivalent to prostitution. In any case, the decision to urge the girls to let the men they meet pay for them, is thought to carry the risks of unwanted pregnancies:

“I have noticed that many families prefer to host the boys, not the girls of other households. They prefer the boys even if they can be wild. But when they make pregnant a girl, it’s not the life of the girl of their own family which is wasted (*mwana a bebi*, lit. the girl loses value); The boy isn’t wasted, it’s the girl. If a girl, hosted by another household, is made pregnant (“wasted”), this creates some problems within the family” (cited in Luzolele and De Herdt 1999, p. 57).

The way in which the interviewee expresses herself here suggests to what extent a discourse consonant with so-called family-values reflects a bias against the allocation of household resources to the girl-mother. Particularly the choice of the word “wasted” is revealing as it expresses a clear moral stance: First, the girl’s life is said to be wasted as she cannot proceed with her studies and will probably not attract a husband to care for her. Second, the girl is wasted for the family as she cannot marry and bring bride-wealth into the family. Note that the bride-wealth-argument is not to be underestimated: casewise evidence suggests that bride-wealth easily amounts to an equivalent of 500\$ (approximately half the price of the total marriage, to be paid by the groom (’s family) as well) and that this price increases in real terms: 500\$ is more than average per adult equivalent yearly income! Biaya writes that by migrating to the city and earning a living for herself as a *free woman*, the unmarried rural mother was able to constitute her own bride-wealth, and in this way she could fulfil her dues to her family (Biaya 1994, p. 94). Similarly, the urban girl-mother is expected to take care of herself and her children, even if she continues to sleep at her parents’. This results in the disappearance of one of the most crucial constituents of a household, at least as the girl-mother is concerned: eating from a common pot.

To conclude, this qualitative evidence suggests that the contemporary living circumstances of the people of Kinshasa seem to have influenced the articulation between institutional spheres of the lineage and the household in several ways. We specify two specific hypotheses:

- (i) As the norm that “girls shouldn’t walk freely in the streets” (*kotambola mpamba mpamba*, lit. to wander for nothing for nothing) is rephrased by emphasising the duties of the men the girls meet, one can expect that the presence of girl-mothers –and accordingly, the presence of hidden households- increases with impoverishment.
- (ii) As the age-old concept of a “wasted girl” is revived, this results in a further downgrading of the social status of the girl, certainly when she becomes

pregnant. It is highly probable that the hosting household will redistribute resources *away* from the hidden household members. In any case, the girl-mothers hosting these households have a difficulty in drawing on their family status to make claims for redistribution⁵.

While hypothesis (i) is rather similar to Moser's, it does not draw on an efficiency-argument to explain the relationship between impoverishment and hidden households. Hypothesis (ii) indicates moreover that Moser's explanation wouldn't be complete without an examination of the allocation rules used within the household: what would be the point of realising efficiency gains if one cannot make a significant claim to the surplus?

II. Extended families and hidden households: the case of Kisenso.

To document the phenomenon of hidden households for Kinshasa is no easy task. Very few representative city-wide household surveys have been conducted over the last years, and the ones available do not provide for sufficient detail especially as concerns intra-household relationships. However, some indications may be cited in order to give a rough idea of the importance of the phenomenon. A representative household survey was conducted in Kinshasa in 2004, within the framework of the preparation process of a Poverty Reduction Strategy Paper for the DRC. On the basis of this survey, we calculate the percentage of children up to 6 who are *not* child of the Household Head as 26%. This percentage increases to 37% in the poorest quartile of the population, in the richest quartile it is reduced to only 19% (Table 1). These data are broadly consistent with our hypothesis (i), above, that impoverishment leads to bigger households and hidden households. The problem is, however, that they do only provide for a sketch of the importance of the problem. At this level of generality, we cannot so easily disentangle the causal connections between poverty and household size (Ram and Wong 1994). More in particular, if the size of the household would be related to the presence of hidden families, we should see increased household size in the first instance as an *effect* of poverty. Whether it is also *a way to cope* with poverty, and *for whom*, does depend on the logic of intra-household distribution (see our hypothesis (iii), above). And as already mentioned above, these household-level budget data cannot provide for any indication of intra-household inequality.

In the survey we organised in Kisenso in 1997, we have tried to overcome both problems: On the one hand, we have tried to map the structure of relationships between household members in much more detail. We also asked our interviewers to write a genealogical tree for each family they visited. This served as a useful check on the reported data, both for the interviewers themselves and during the phase of analysis. On the other, we looked at the effects of intra-household resource allocation by incorporating a module on children's nutritional status.

Table 2 presents a first perspective on the family-structure of households in the urban zone of Kisenso. The table also allows us to examine the broad relation between family structure and wealth, as we differentiated household composition according to different terciles.

<< insert tables 2 and 3 about here >>

A detailed discussion on the construction of a good wealth-indicator is presented elsewhere (De Herdt 2000). Suffice it to note, here that (i) we chose to work with expenses rather than income and (ii) we included an imputed rent for house-owners in order to obtain “total household expenses”. Further, (iii) we neutralised the effects of varying membership and household scale by transforming total household expenses into wealth as follows:

$$W(\alpha, \theta)_h = \frac{Y_h}{(A_h + \alpha C_h)^\theta},$$

with

Y_h = total household outlays of household h

A_h = adult members of household h, and

C_h = children (up to 6 years old) belonging to household h,

$0 < \alpha < 1$ the equivalence factor to express children’s consumption in terms of adults’ consumption, and

$0 < \theta < 1$ the factor accounting for economies of scale.

In view of the literature, the most reasonable “default” values of α and θ are .7 and .85 respectively (Drèze and Srinivasan 1997). The final results of our analysis will be tested on their sensitivity to changes in α and θ .

In table 2, we observe that a household in Kisenso is composed of 7,8 members. One fifth of all household members does not belong to the core family which makes up the “centre” of each household. We defined this core family as the family composed of the household head, his or her spouse (if there is one) and their children. Whenever the household centre is constituted by a bi-parental nuclear family, the household head is commonly male. This is the case in approx. 90% of all households. As is commonly known as well, the “typical” African household comprises more than merely the members of a nuclear family. In our sample, almost 1/5th of all household members cannot be categorised as members of the core family under-girding a household.

There is a close correspondence between the average number of household members and the level of wealth: poorer households are bigger. There is also an association between the percentage of non-nuclear-family-members and the level of wealth. The ratio of non-core to all household members increases to 1/4th for the poorest tercile and decreases to 1/7th for the richest. Looking at the details of the category of non-core household members, one can observe there is never a significant difference in the average amount of extended-family members, except in the case of grandchildren. The amount of sons/daughters-in-law, parents, or brother/sisters-in-law, is not only marginal in absolute terms, but also unrelated to wealth –implying that their *relative* weight in the total household population *decreases* in poorer households. In sharp contrast, the average amount of grandchildren (variable 9) *increases* significantly with *decreasing* wealth. In other words, the category of “extended family” hides many subcategories, not all of them corresponding in the same way to a decline in household wealth.

Table 3 details the category of household members ≤ 14 year. On average about 40% of all household members belong to this category, reflecting the broad basis of the demographic pyramid in Congo D.R.. Of this group, only 2/3rd of them are biological children of the

household head. The average amount of children belonging to the core household (about 2,20) does not significantly vary with wealth. But there is a strong association between wealth tercile and the average amount of grandchildren per household: poorer households host more grandchildren.

These data would suggest in any case that the specific definition of “solidarity” sustaining a household varies according to the economic constraints. In the richer layers, extended-family members rather conform to the “conventional” idea we have of them: The head’s brothers and sisters, his parents, and related in-laws are still relatively important (1/3rd of all extended-family members). Though even if in these layers, grandchildren already make up the biggest part of non-nuclear-family members. It can be supposed that to the degree a household impoverishes, the head’s children have difficulty starting their own household once grown up, though at the same time this does not rule out the possibility of having children. As a result, the nuclear family to which the children belong is “hidden” in the household of one of its parent’s parents, and three generations come to live under the same roof. Concomitantly, with impoverishment the probability also increases that children are part of a hidden *one-parent* family. The data available thus confirm our hypothesis (i) of an association between poverty and hidden households.

Table 4 looks at the households from the perspective of the children about whom we also have anthropometric data. This reduces the dataset to the children up to 6 years old. The table categorises them along some characteristics of their mother and father. It allows us to discuss the family ties on which the household is constructed in more detail.

<< insert table 4 here >>

To begin with, it appears that scarcely 56% of all children are born in families where the mother is married to the household head. This percentage increases to two thirds if we add the children belonging to two-parent but hidden households: most often, this group consists of the head’s grand-children. Note that in most of these cases (12 against 5), women live in the family of the father of their child: the “old” principle of viri-locality is still at work. This is so however *only* in the case of two-parent hidden families: of the (65) women living *de facto* separated from their children’s father, the majority live at *their* parents’; only 1 has moved in with her brother, only 2 have become household head themselves. Only a minority of women do not live in the same household as their child. Though we lack information about them, on the basis of other variables it could be verified that (1) in 7/11 of cases, their father is also absent, and that (2) in 9/11 cases the children are grandchildren of the household head (in 2 cases they live with their widowed father who is household head).

These data generate insight into the ways in which “African solidarity” works at the household-level: in principle and to the outside world, all members of the same lineage are brothers and sisters. Yet, this principle is nuanced in practice. To begin with, though the nuclear-family type of household is still far from replacing the extended family, contemporary consumption units are built on *vertical* (parent-child-grandchild) rather than *horizontal* family ties. Second, the principle of viri-locality is disregarded in all cases where the mother and the father of the child are *de facto* living separated: children will live at their mother’s family as if the father’s lineage was not involved. In terms of

traditional concepts, approximately one third of all children can be qualified as *uprooted*, as their mothers cease to be *mushika nkunde*.

Table 5 relates the different household configurations in terms of a child's well-being. We use the child's nutritional status, in terms of z-scores as a basis for estimating its well-being, but the approach chosen here differs from the "usual" accounts which either posit child well-being as $B_i = z_i$ (its z-score) or define malnutrition in an all-or-nothing way by specifying a threshold value (usually $-2z$ -scores). Both alternatives do not give due account, if at all, to the non-linear character of the indicator, nor to the fact that there is an optimal nutritional state in-between the extremes of either under- or overnutrition (De Herdt 2000). So we opted for the following transformation:

$$B_i(\gamma) = 1 - \left| \frac{(z_i - 1)}{5} \right|^\gamma$$

with

z_i = weight (in the case of *underweight*) or height (in the case of *stunting*) of a child in comparison with the average child of the same sex and age, in terms of z-scores,
 i = type of indicator (weight-to-age or height-to-age)

With this formulation, well-being B_i varies between 0-1. We consider $\gamma=2$ as a reasonable default value. As in the case of the wealth-indicator, we will test the sensitivity of our results to changes in this parameter as well.

In the table, a distinction is made between those children whose mother is absent and those whose mother is present. Within the latter group, a distinction is made between those whose father is either living elsewhere or deceased, and those who are living in a two-parent family (the father is present). Finally, within the latter group, a distinction is made between the children of the household head and those pertaining to "hidden families". The indicator of child well-being is derived from its nutritional status in terms of height-to-age.

<< insert table 5 here >>

On the basis of the table, we can conclude that the first and most important determinant of malnutrition is the presence of the child's mother in the same household. Her absence implies a decrease with almost one half in terms of the height-to-age indicator. Further, the decrease in well-being as a result of the father's presence is statistically significant as well, as it causes the indicator of well-being to decrease by .07 points. Finally, there is no significant relationship between the level of well-being of the children and whether or not the father is also household head, when both parents are present in the household.

The table identifies the *de facto* orphans or so-called 'trusted children' as the prime victims of the actual economic crisis. If under-nourishment in general has been fairly low in Kinshasa (UNICEF 1996), children growing up with only one or even none of their biological parents appear to constitute an exceptional category. However, it cannot as yet be concluded from the above table that this is so *because* they are *de facto* orphans. Two alternative causal paths should be considered.

To begin with, we know that higher-aged under-fives are more under-nourished than e.g. the under-one-year-olds, which has clear identifiable causes: breastfed children (usually up to their first birthday) are much less vulnerable to malnutrition (UNICEF 1996).

Therefore, if we acknowledge that older children run a higher risk to grow up in a household without either mother or father, the observed differences in nutritional status as presented in Table 5 could at least be partly due to differences in the proportion of breastfed children between each of the categories.

<< insert Table 6 here >

Table 6 shows that indeed in general the percentage of children with both parents *decreases* as the children grow older. The details reveal some complexities, however. First, most children growing up without their mother are in fact concentrated in the 4-5 age-category. On the basis of what we know about the different variables, we would consequently hypothesise that the relatively high rate of under-nourishment in the category of 4-5 year olds is rather *caused* by the high concentration of mothers in this category than by any other external variable. On the other hand, it appears that the percentage of children growing up without a father is in fact lower in the group of children younger than 1 year, if compared to the other age groups. Given that there are independent causes to explain the relatively high well-being of children below 1, part of the effect of “father absent” as observed in table 4. can thus have been explained by breastfeeding rather than by the absence of the father.

Furthermore, on the basis of tables 2-3 we also deduced that the family configuration can be related to economic wealth: Therefore, *wealth* rather than the child’s family status itself would be the ‘real’ cause of malnutrition.

These questions can only be answered by some type of multivariate statistical analysis. In Tables 7 and 8, we summarised the outcomes of several multivariate linear regression models, with respectively well-being based on weight-to-age and height-to-age.

In each case, we reduced the age-factor to a dummy which distinguishes the new-borns ≤ 14 months from other under-fives. The cut-off point of 14 months seemed appropriate given what we know about breastfeeding practices in Zaire-Kinshasa (UNICEF 1996).

The first regression model simply introduces the age-dummy. As was to be expected on the basis of what we know about the influence of breast-feeding practices on children’s nutritional state, new-borns are significantly better-off than older-aged, simply because almost all of them are breastfed. Their well-being is quoted app. .18 points higher than an average child (.71 points), which is not an insignificant result.

<< insert table 7 here >>

Secondly, we introduce wealth. Wealth is significantly related to child well-being, though its direct effect is rather small: an increase in per adult equivalent household income with 100\$ increases a child’s well-being with only .03 points⁶.

In a third step, we introduce two variables which account for the effect of an absent father. The first of them simply presents the effect as an absolute decrease in well-being, the second tests the hypothesis of a “higher-than-normal” effect of wealth on children with an absent father. As a consequence, the significance of the wealth-variable slightly declines, but both newly introduced variables are highly significant as well. The model is capable of explaining 26.3% of the original variation, which is rather much, given the

relatively small sample. The problem of multi-collinearity is under control, as judged by the maximum value of the condition index, which stays below 10. As concerns the coefficients, the negative effect of an absent father (-.24) is higher than the positive effect of breastfeeding (+.17). In addition, the effect of poverty on a child's well-being is significantly higher in the case a child's father is absent: if a decrease in wealth with 100\$ implies a decrease in well-being with .02 for "normal" children, it implies a decrease with .08 for children whose father is absent.

Note that we did not introduce variables measuring the effect of a mother's absence: by introducing them, the model was plagued by multi-collinearity, and none of them proved to be significant.

Regression estimates # 4-13 test the sensitivity of model 3's coefficients whenever we change one of the parameters we used to operationalise the wealth and well-being variables. Changes in these parameters do not affect the general result of a significant, independent effect of the father's absence. Only in the case we counted a child as an adult ($\alpha=1$), the direct effect of wealth was eliminated. In other words, in this case we would have to conclude that a household's wealth has no *direct* effect on the children's well-being, *unless* the effect of household wealth on the absence or presence of a child's father is incorporated. Further, a change in γ has mainly implications on the coefficients of the constant term and of the age-dummy. The other variables of the original model are only marginally affected.

Table 8 repeats the exercise by opting for height-for-age as the basis to proxy child well-being. Again, we begin by introducing the age-dummy and the numeric wealth variable. Together, they are able to explain ca. 16% of the original variance. Then, we introduced the variables reflecting the mother's absence. Eventually, we only retained a simple dummy, as the composite dummy \times wealth was not significant. We also introduced the "father-absent" variables, which resulted in rendering the wealth-variable insignificant: apparently, wealth influences child well-being only in the indirect way (causing the head's daughters to stay at home and have children themselves without being married ceremonially or not). In the final regression model, we eliminated the wealth-variable again. The model is now capable of explaining 24% of the original variance. Wealth seems to be significant only when the child grows up without his or her father. Note also that the coefficients relating the "absent-father"-variables to child well-being are more or less comparable with those of table 6. Note also that the father's presence is more important than the mother's, and both are more important than breastfeeding as determinants of well-being.

<< insert Table 8 here >>

Regression estimates 6-15 examine, again, the sensitivity of the results to changes in either α and θ or γ . In general, the results are fairly robust vis-à-vis changes in these parameters. A lower weight for children results in a slightly smaller coefficient of the "father-absent"-dummy. A decreasing importance of scale results in a higher importance of the *wealth \times father absent* variable. Changes in γ are reflected most of all in the constant term.

I think it is safe to conclude that a child's state of well-being is affected mostly and independently of other possible interfering variables, by the absence or presence of (one or both) of its parents. Thus, it may be true that this absence or presence is the consequence of poverty. But this poverty does not in itself suffice to explain whether and to what degree a child is malnourished: child malnutrition depends directly on the child's family status rather than on anything else.

V. Conclusion

Since the mid-seventies, postcolonial Kinshasa did not only witness a general collapse of the economic apparatus it inherited from the colonial period (De Herdt and Marysse 1997), this economic evolution was accompanied by several demographic trends as well. Conspicuously among them is the increase in household size and the increase in the number of children pertaining to what Moser called "hidden families". The empirical material we gathered in Kisenso provides more insight into the links between these phenomena.

First of all, the combined effects of a decreasing percentage of married/united adult women and an increase in fertility are reflected in an important category of "natural" children in our survey samples. Approximately 1/3rd of children living in Kisenso are growing up in the absence of a father.

Furthermore, these children grow up in mono-parental households hidden in the household of the parents of the mother. Usually, the family nucleus of unmarried daughters and their children is "hidden" inside the household headed by the daughter's father. Thus, though the frontiers of *kinois* households typically extend beyond the mere nuclear family, in the contemporary households at Kinshasa the non-nuclear family members are predominantly grand-children. Family-solidarity as observed in the Kisenso survey follows vertical rather than horizontal lines.

In addition, the profile of households hiding the daughter's mono-parental family is more prevalent in poorer households. If we assume that cross-sectional wealth-differences shed some light on inter-temporal wealth differences, we can argue that impoverishment has caused marriages to be postponed or cancelled, with a resulting increase in "hidden" families. On a higher level, this is reflected by increasing household size.

Finally, children belonging to such mono-parental hidden families are affected twice by adverse economic circumstances. First, most of them grow up in a relatively poor household –which is the most important reason why they grow up in a mono-parental family. Second, they grow up outside a celebrated marriage, which seems to make them even more vulnerable irrespective of the wealth of the household they live in.

It is the interplay between economic constraints and the set of expected practices which determines the profile of the victims of the contemporary socio-economic turmoil in Kinshasa. *In casu*, in poor families young girls seem to be squeezed between the necessity to look for male benefactors and the general public's opinion that unmarried mothers are "wasted". Ultimately, we identified the children living in (at best) mono-

parental families hidden in the household of their (maternal) grand-father as one of the most conspicuous *victims* of the contemporary turmoil.

Thus, the Zairian evidence we presented here confirms Moser's hypothesis that economic crisis is translated into, among other things, increasing household size, which is in an important way the reflection an increasing number of hidden, mono-parental families. But while hiding your family into your parents' household may be interpreted as a coping strategy from an individual (female) point of view as well as from a household-efficiency point of view, further analysis of intra-household distribution patterns suggests a more complicated story. The children of hidden households seem to be suffering more than other children, controlling for the income effect.

Finally, looking at the phenomenon of hidden families from a dynamic perspective, we may observe that the problem of poverty is transferred not only to the girl-mother, but also to a next generation, through the mechanism of under-nourishment. Here, it is important to stress, again, that the low levels of child malnutrition suggest that, in general, the next generation does seem to be remarkably spared by the current economic circumstances. This general observation does not hold, however, whenever current poverty results in hidden families: the mother's current social status provided by the lineage logic seems to be a crucial predictor of the next generation's ill-being.

The phenomenon discussed here can be related in several ways to the debate over development policy. To begin with, it suggests that growth policies based on trickle-down mechanisms will have a very limited effect on this subgroup of girl-mothers, even if the general situation of poverty may be the most important explanation for their appearance. Also, classical public works programs, who are generally thought to 'bring money to the poor', will fail on the same account: if already these programs succeed in targeting the poorest households, the nature of the public works included in them favours male income earners and therefore it is unlikely that the results of those programs will ultimately advantage the girl-mothers and/or their children. Recent evidence on the experience of a public works programme in Kinshasa testifies to this (Tshimanga et al. 2006). The fundamental problem of the members of hidden families is that their entitlement set is almost exclusively based on their fellow household members. This suggests that other institutions should step in. In this context, it is worth remembering that almost all social security systems in developed countries provide for special arrangements precisely for (1) children and for (2) single-parent households. One doable and pragmatic way to apply this lesson to the context of Congo-Kinshasa is to explore the possibility to condition cash transfers to schooling. This would evade the problem of reproducing the stigma tied to this group but at the same time create entitlements to the particular group of children at school-age, whether or not members of hidden families.

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Endnotes

¹ Fortunately, the literature on economic regress is not very developed. The theme was debated at the World Bank Annual Conference on Development Economics in 1993 (Barro & Jong-Wha Lee 1994, Amartya Sen 1994) and further analysed in UNCTAD's "Least Developed Countries Report 1997", where it was defined as "a marked deterioration in one or more major indicators of economic or social welfare, such as per capita income, infant mortality, educational enrolment, and deaths due to internal conflict, over a given medium- to long-term period such as the last decade" (UNCTAD 1997: 21).

² As a consequence, a sharp difference should also be maintained between an essentially local "consensus" about fair allocation and optimal "social welfare" more broadly conceived. In the limiting case, and as we will document for our case, the negotiated consensus on appropriateness may not be more than a thin veil to mask a tragic choice in favour of one and against another household member.

³ Agarwal therefore concludes that "compliance need not imply complicity" (1997: 25), in direct response to Sen's conclusion that "There is much evidence in history that acute inequalities often survive precisely by making allies out of the deprived. The underdog comes to accept the legitimacy of the unequal order and becomes an implicit accomplice" (1990, p. 126).

⁴ Notice here that Sen's (1990) original argument explained the causal relationship between unequal participation in the labour market and unequal resource allocation within the household by the rather high visibility of the income earned in comparison to unpaid homework (the income earner's contribution is indeed clearly visible). The emulation argument may be seen as a generalization of it: unequal status in the labour market legitimates unequal status at the homestead.

⁵ Note that there is not necessarily an inconsistency, here, between 'voice' and 'exit': while we suggest their ability to use voice is curbed in the above sense, one could also turn around Moser's reasoning and claim that, because of there being no reasonable exit option, girl-mothers have to consent to a disadvantaged position.

⁶ In order to interpret this result, it may be interesting to repeat that well-being is measured on a scale from 0 to 1, and that average well-being in the zone surveyed is 0,74.

Table 1.
Household structure and well-being, Kinshasa 2004

Quartile	Weighted N	% of up to 6 year olds who are not a child of the Household Head	Average number of household members	Average per adult equivalent household outlays (US\$/day)
Poorest	98 907	36,9%	8,4	0,59
II	89 922	26,9%	7,5	1,02
III	79 449	26,8%	7,6	1,51
Richest	70 001	18,9%	7,1	3,29
Total	338 278	28,2%	7,7	1,48

Source: own calculations, Enquête 1-2-3

Table 2. Variation in family composition and Household Wealth

Variable	Wealth Tercile			Total	F-value
	Poorest	Middle	Richest		
1 Number of cases	60	60	60	180	
2 Av. number of household members	9.29	7.58	6.64	7.82	10.8***
3 Core family members	6.64	5.85	5.63	6.04	2.7
4 Head and spouse	1.88	1.80	1.88	1.85	0.9
5 Head's child	4.76	4.05	3.75	4.18	2.8
6 Extended-family members	2.61	1.75	1.00	1.78	7.2**
5 Head's son/daughter in law	.17	.08	.13	.13	0.6
6 Head's parent(s)	.07	.02	.03	.04	1.1
7 Head's brother/sister	.24	.10	.10	.14	1.2
8 Head's brother/sister in law	.02	.10	.07	.06	1.3
9 Head's grandchildren	1.73	1.07	.40	1.06	7.8***

* p<.05 ** p<.01 *** p<.001
Source: own survey results.

Table 3. Variation in family ties of children (up to 14years) and household wealth

Variable	Wealth Tercile			Total	F-value
	Poorest	Middle	Richest		
1 Number of cases	59	61	60	180	
2 Av. number of household members	9.3	7.6	6.6	7.8	10.9***
3 Household members > 14 years	5.15	4.12	3.92	4.39	5.07**
4 Children ≤ 14 years	4.14	3.47	2.70	3.43	8.0***
4 Children of Head	2.34	2.28	2.20	2.27	0.1
5 Grandchildren	1.64	0.97	0.35	0.98	8.5***
6 Other children	0.15	0.21	0.15	0.17	0.2

* p<.05 ** p<.01 *** p<.001
Source: own survey results.

Table 4. Some characteristics of a child's parents, Kisenso 1997

Relationship of mother with Household-head	#	%	Civil State of mother			
			Married, Father present	Married, Father absent	Divorced	Widow Single Mother
Wife	109	56%	109			
Daughter	56	29%	5	21	13	3
Daughter-in-law	12	6%	12			
Sister	1	0%		1		
Sister-in-law	2	1%	2			
Head	2	1%			2	
Mother absent	11	6%	4	7		
TOTAL	193	100%	132	29	13	5

Source: own survey results.

Table 5. Differences in child's well-being related to household configuration

	# cases	Child's Well-being ^o	Mean Difference (t-test)
With mother present	178	.68	
With father present	126	.71	
Father HH head	106	.70	
Father No HH head	20	.74	-.04 (-.63)
With father absent	52	.64	.07 (1.63*)
With mother absent	11	.36	.32 (3.88***)

^o expressed in percentage points, based on height-for-age indicator (see annex).

*p<.05 *** p<.001

Source: own survey results, Kisenso 1997

Table 6. Relation between age of child and absence/presence of parents

	≤1 year	2-4 years	4-5 years
Mother present			
Father present	74%	68%	61%
Father absent	23%	28%	27%
Mother absent	3%	4%	11%
TOTAL	100%	100%	100%

Source: own survey results, Kisenso 1997

Table 7. Regression results: determinants of underweight children

#	Parameters of Wealth and well-being indicators			Coefficients of ... (standard error)					Max. C.I.	R ² _{adj.}
	γ	α	θ	1	Children $\leq 14m$ (dummy yes=1)	Wealth (numeric)	Child without father (dummy yes=1)	Child without father x wealth (dummy yes=wealth)		
1	2	.7	.85	.71***(.01)	.18***(.03)					14.0%
2	2	.7	.85	.59***(.03)	.19***(.03)	.0003***(.0000)				23.1%
3	2	.7	.85	.64***(.04)	.17***(.03)	.0002** (.0000)	-.24** (.08)	.0006**(.0000)	8.9	26.3%
Sensitivity-tests of γ , α and θ										
4	2	.5	.85	.65***(.04)	.17***(.03)	.0002** (.0000)	-.25** (.08)	.0006**(.0000)	8.9	26.4%
5	2	1	.85	.70***(.04)	.17***(.03)	.0001 (.0001)	-.29***(.08)	.0007**(.0000)	8.2	23.1%
6	2	.7	.75	.64***(.04)	.17***(.03)	.0002** (.0000)	-.24** (.08)	.0004* (.0000)	9.2	26.1%
7	2	.5	.75	.64***(.04)	.17***(.03)	.0002** (.0000)	-.25** (.08)	.0004* (.0000)	9.2	26.2%
8	2	1	.75	.69***(.03)	.17***(.03)	.0001 (.0001)	-.28***(.08)	.0006**(.0000)	8.4	23.1%
9	2	.7	100	.65***(.03)	.17***(.03)	.0003** (.0000)	-.25** (.08)	.0008**(.0000)	8.4	26.4%
10	2	.5	100	.65***(.03)	.17***(.03)	.0002** (.0000)	-.26** (.08)	.0008**(.0000)	8.4	26.4%
11	2	1	100	.71***(.03)	.17***(.03)	.0001 (.0001)	-.30***(.07)	.001** (.0003)	7.5	22.8%
12	3	.7	.85	.77***(.03)	.13***(.03)	.0002** (.0001)	-.22** (.07)	.0005**(.0003)	8.9	23.9%
13	1	.7	.85	.42***(.04)	.21***(.03)	.0003** (.0001)	-.21* (.09)	.0005* (.0002)	8.9	25.9%

*p<.05 **p<.01 ***p<.001

Source: own survey results.

Table 8. Regression results: determinants well-being based on height-to-age

#	Parameters of Wealth and well-being			Coefficients of ...						Max. Cond. Index	R ² _{adj.}
	γ	α	θ	1	Children $\leq 14m$ (dummy yes=1)	Wealth (numeric)	Child without mother (dummy yes=1)	Child without father (dummy yes=1)	Child without father x wealth (dummy yes=wealth)		
1	2	.7	.85	.63***(.02)	.20***(.04)						11.0%
2	2	.7	.85	.51***(.04)	.21***(.04)	.0003**(.0001)					5.0 15.9%
3	2	.7	.85	.54***(.04)	.20***(.04)	.0003**(.0001)	-.298***(.072)				5.1 23.1%
4	2	.7	.85	.60***(.05)	.19***(.04)	.0002 (.0001)	-.282***(.072)	-.248* (.101)	.0006* (.0003)		9.2 25.0%
5	2	.7	.85	.67***(.02)	.18***(.04)		-.291***(.073)	-.316** (.092)	.0007**(.0000)		7.0 24.0%
Sensitivity-tests of γ , α and θ											
6	2	.5	.85	.67***(.02)	.18***(.04)		-.287***(.073)	-.326***(.093)	.0007**(.0003)		8.9 26.4%
7	2	1	.85	.67***(.02)	.18***(.04)		-.297***(.072)	-.318***(.092)	.0008**(.0003)		8.2 23.1%
8	2	.7	.75	.67***(.02)	.18***(.04)		-.293***(.073)	-.318***(.094)	.0006**(.0003)		9.2 26.1%
9	2	.5	.75	.67***(.02)	.18***(.04)		-.289***(.073)	-.327***(.095)	.0006**(.0003)		9.2 26.2%
10	2	1	.75	.67***(.02)	.18***(.04)		-.298***(.073)	-.319***(.094)	.0007**(.0003)		8.4 23.1%
11	2	.7	100	.67***(.02)	.18***(.04)		-.289***(.073)	-.308***(.088)	.0010**(.0003)		8.4 26.4%
12	2	.5	100	.67***(.02)	.18***(.04)		-.285***(.073)	-.317***(.089)	.0010**(.0003)		8.4 26.4%
13	2	1	100	.67***(.02)	.18***(.04)		-.295***(.072)	-.312***(.089)	.0010** (.0003)		7.5 22.8%
14	1	.7	.85	.47***(.02)	.18***(.04)		-.242***(.071)	-.278** (.090)	.0007**(.0003)		8.9 23.9%
15	3	.7	.85	.78***(.02)	.16***(.04)		-.293***(.068)	-.314***(.086)	.0007** (.0002)		8.9 25.9%

*p<.05 **p<.01 ***p<.001

Source: own survey results.

