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A Conceptual Framework for Community-Based Health Insurance in Low-Income Countries: Social Capital and Economic Development

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Summary. — The international policy model linking community-based health insurance (CBHI) and universal coverage for health care in low-income countries is implicitly determined by the development of mutual health insurance in 19th century Europe and Japan. The economic and health system frameworks employed in CBHI policy have not sufficiently taken into account contextual considerations. Social capital theories could contribute to understanding why generally CBHI does not achieve significant and sustainable levels of population coverage. A framework of social capital and economic development is used to organize and interpret existing evidence on CBHI. This suggests that solidarity, trust, extra-community networks, vertical civil society links, and state–society relations affect the success of CBHI. Aligning schemes to "social determinants" of CBHI could result in structures that differ from those proposed by current analytic frameworks.
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1. INTRODUCTION

Community-based health insurance (CBHI) provides financial protection from the cost of seeking health care. It has three main features: prepayment for health services by community members; community control; and voluntary membership (Hsiao, 2001). [1] Major international development agencies construe CBHI as a transitional mechanism to achieving universal coverage for health care in low-income countries (Arhin-Tenkorang, 2001; Davies & Carrin, 2001; Gottret & Schieber, 2006; World Health Organization, 2000, 2005a, 2005b). The current international policy model linking CBHI and universal coverage is implicitly informed by the history of health service financing in Europe and Japan, where CBHI schemes in the 19th century eventually merged to form various types of national health insurance (Criel & Van Dormael, 1999). However, several studies suggest that while there may be lessons to be learnt, emerging in a different socioeconomic context, under different circumstances, it is not safe to assume that CBHI schemes in their current form will develop into forms of national health financing according to the historical precedent (Barnighausen & Sauerborn, 2002; Carrin & James, 2005; Criel & Van Dormael, 1999; Ogawa, Hasegawa, Carrin, & Kawabata, 2003). Although it is estimated that in West Africa there was more than a twofold increase in the number of CBHI schemes in just three years, from 199 schemes in 2000 to 585 in 2003 (Bennett, Kelley, & Silvers, 2004), this is still a small number of schemes when compared to the situation in Europe. [2] In the 19th century there were 27,000 friendly societies, which operated much like CBHI schemes, in the United Kingdom alone (Bennett *et al.*, 2004). Also,

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rather than being locally initiated by farmers, associations of industry workers or employers as in Europe and Japan, today's CBHI schemes are mostly the result of top-down interventions led by foreign aid agencies or national governments (Criel & Van Dormael, 1999; Meessen, Criel, & Kegels, 2002). Reviews have concluded that the evidence base on CBHI is limited in scope and quality (Ekman, 2004) and that it is unclear whether CBHI schemes are actually sustainable in the long term (Bennett *et al*., 2004).

Constraints to increasing CBHI coverage and sustainability have been identified primarily by a body of literature taking an economic or a health system perspective. In agencies such as the World Bank and WHO, analysis of CBHI policy is underpinned by an economic framework, with discussion focusing on features of market transactions such as willingness to pay, information, price, and quality (Dror, 2001; Pauly, 2004; Preker, 2004; Zweifel, 2004). Another related perspective attempts to set financial transactions into the broader institutional context of the health system, analyzing interactions among insureds, insurance schemes, health service providers, and the state. This is described here as a "health system framework" (see, e.g., Bennett, 2004; Bennett *et al*., 2004; Criel, Atim, Basaza, Blaise, & Waelkens, 2004; ILO, 2002) and it corresponds with the model of health system analysis laid out in the WHO World Health Report 2000 (World Health Organization, 2000). Underpinning both the economic and health system frameworks is the behavioral model of rational utility maximizing *homo economicus*.

This paper argues that the rational individualist model does not permit the systematic incorporation of social context into policy. New, complementary directions in thinking on CBHI policy are needed; particularly an increased focus on values, goals, and power relations, as has been argued in relation to social policy in general (Flyvbjerg, 2001). Specifically, it is proposed that a critical engagement with social capital theories could contribute to our understanding of why most CBHI schemes do not appear on course to develop according to the 19th century precedent, achieving significant levels of population coverage in a sustainable way. It could also help explain the apparently successful implementation of CBHI in certain countries, most notably Rwanda, where coverage of 25.8% of the total population was achieved during 2000–05 (Musango, Butera, Inyarubuga, & Dujardin, 2006).

Social capital has been the subject of spirited academic debate for almost two decades. Since its definition remains under dispute, as a matter of convenience we employ the following as a point of departure for discussion: "the information, trust and norms of reciprocity inhering in one's social network" (Woolcock, 1998, p. 153). Further categories in the social capital taxonomy are considered later in the paper. For at least 10 years empirical studies have suggested that higher levels of social capital are positively correlated with improved development outcomes in areas such as agriculture, water and sanitation, and microcredit in low-income countries (Anderson, Locker, & Nugent, 2002; Brown & Ashman, 1996; Grootaert & Narayan, 2004; Krishna, 2001; Lyon, 2000; Narayan & Pritchett, 1997; Uphoff & Wijayaratna, 2000; van Bastelaer & Leathers, 2006; Weijland, 1999). The World Bank's "Social Capital Initiative" even suggested that social capital could be the "missing link" between natural, physical, and human capital and economic growth and development (Grootaert & van Bastelaer, 2001). Theories of social capital have also been applied widely in public health policy (see Moore, Haines, Hawe, & Shiell, 2006; Shortt, 2004 for a literature review). However, although an important component of social capital, trust, is occasionally discussed in the CBHI literature, CBHI has *not*, for the most part, engaged with social capital theories. In the few cases where social capital theory is considered, it is either mentioned only cursorily or the richness and complexity of the theory is overlooked.

The specific framework of social capital adopted in this paper was developed by Woolcock (Woolcock, 1998, 2001; Woolcock & Narayan, 2006). It brings together several theories of social capital and draws on quantitative and qualitative evidence from field studies. Its particular advantage for our analysis is its focus on community level economic development projects in low-income countries, similar to CBHI. [3] It offers CBHI policy a framework that incorporates both economic and social theory by attempting to reconcile debates over whether humans are rational agents or governed by norms and culture. In doing so, the social capital framework can be viewed as an attempt to pragmatically address the need for an alternative, or complement, to income-based and purely economic approaches to development (Bebbington, 2004). By applying this framework to CBHI analysis, this paper aims

to develop a methodology for grounding CBHI in context-dependent considerations such as values, community goals, and local power relations.

Woolcock's social capital framework is briefly outlined below. Next, the social capital framework is used to organize and interpret evidence and information on CBHI. Since an empirical study identifying the causal links between social capital and CBHI is beyond the scope of this paper, we draw on existing studies of CBHI. Finally, there is a discussion on the possible importance of social capital to the implementation of CBHI and gaps in current knowledge on this subject.

2. SOCIAL CAPITAL: A POLICY FRAMEWORK

The concept of social capital was popularized in social science by Putnam (Putnam, 1995, 2000; Putnam, Leonardi, & Nanetti, 1993). He conceives of social capital as a "stock" that is the property of a group or community, district, or even nation and constitutes features of social organization—"networks, norms, and social ties that facilitate coordination and cooperation for mutual benefit" (Putnam, 1995, p. 67). He argues that informal networks of civic engagement build social capital which in turn facilitates improved governance (Putnam *et al*., 1993). By conceiving of social capital as a "stock" Putnam made a theoretical diversion from the principal preceding theories of social capital (Bourdieu, 1986; Coleman, 1988, 1990) attracting criticism for over-simplification (Fine, 2001; Fischer, 2005; Harriss, 2002; Portes, 2000). Previous social capital theorists (Bourdieu, 1986; Coleman, 1988, 1990) had conceptualized social capital as a resource for individuals which is socially structured—see, for example, Coleman's definition: "social capital inheres in the structure of relations between actors and among actors" (Coleman, 1988, p. S98). It is this earlier version of social capital that is employed in Woolcock's policy framework (Woolcock, 1998, 2001; Woolcock & Narayan, 2006). The framework constitutes four types of social capital: (i) bonding social capital inhering in micro-level intra-community ties; (ii) bridging social capital inhering in micro-level extra-community networks; (iii) bridging social capital inhering in relations between communities and macro-level state institutions; and (iv) bonding social capital inhering in macro-level social relations within public institutions. A synthesized (and simplified) version of the framework is presented below.

(a) *Bonding social capital at the micro-level: relations within communities*

"Bonding social capital," the first category in Woolcock's framework, inheres in dense networks within communities. It constitutes expectations between individuals, the trustworthiness of structures, information channels, norms, and effective sanctions that can prevent unproductive behavior in individuals (Coleman, 1988). As such, social capital "is productive, making possible the achievement of certain ends that in its absence would not be possible" (Coleman, 1988, p. S98) (e.g., doing well at school). The concept of bonding social capital has been employed in the studies to understand why some immigrant groups in the United States fared better than others in economic development (e.g., setting up small businesses and enterprises) (Portes, 1998; Portes & Sensenbrenner, 1993). It was found that in some contexts, groups characterized by high levels of bonding social capital could provide enterprising individuals with psychological support and high levels of trust, lowering the transaction costs in enterprise. This is an example of how social capital has been understood as a response to market imperfections [4] (Fine, 2001).

However, as well as identifying the merits of bonding social capital, research into US immigrant groups also revealed that the same attributes of the normative structure (trust, social support, sanctions, etc.) that made the accumulation of human and economic capital possible were in some settings unproductive, for example, by permitting free-riding on communal resources by less diligent members of the group, deriding efforts to study and work hard, or cutting off sources of information (Portes & Sensenbrenner, 1993). In this paper, this is characterized as the "negative" effect of social capital. The role of negative social capital forms an important part of Woolcock's framework (Woolcock, 2001).

(b) *Bridging social capital at the micro-level: relations across communities*

Research in the United States found that successful (productive) immigrant groups were characterized by individuals who were able to draw on bridging relations outside the network

as well as bonding relations. This was thought to be because extra-community business relations were free from the potentially overwhelming demands family and friends place on successful members of the group for support (the negative effect of social capital), permitting exchange to take place on the basis of formal rules or fair market competition. This led to the idea that there must be two basic dimensions of social capital at the community level: intra-group ties and extra-group networks. The conclusion was that individuals need to be able to draw on strong intra-community bonding ties *and* extra-community bridging contacts to balance them out, to counter the negative effects of social capital (Portes & Sensenbrenner, 1993).

Bourdieu's theory of social capital (Bourdieu, 1986), which is employed in the American research on immigrants, elucidates why some groups are unable to accumulate and employ bridging networks. He argued that individuals and families who already hold forms of capital (of which according to Bourdieu there are four types—economic, social, cultural, and symbolic) are strategically adept at accumulating and transforming it (he argues the types of capital are fungible) and may consciously and unconsciously do so. Bourdieu sees economic accumulation as part of a general process of accumulating social connections, education, titles or names, or even dispositions of the mind or body which all reinforce each other. Individuals and families that do not have access to the various types of capital are from the outset in a disadvantaged position to accumulate it.

Woolcock and other social capital theorists have been criticized for overlooking Bourdieu, thereby ignoring the effect of class and other structural social inequalities on economic action and reinforcing a conservative, neo-liberal development agenda (Fine, 2001; Harriss, 2002; Harriss & De Renzio, 1997; Navarro, 2002). While in some instances this is a pertinent critique of social capital theory, a careful interpretation of Woolcock's framework suggests that Bourdieu's ideas do have a significant (albeit indirect) influence on it by way of the central position given to the negative effect of social capital. This differentiates the framework from the theory of social capital as solely productive and a rational response to market imperfections and engenders an alternative definition of social capital: "those expectations for action within a collectivity that affect the economic goals and goal-seeking behavior of its members, even if these expectations are not oriented toward the economic sphere" (Portes & Sensenbrenner, 1993, p. 1323). Put this way, social capital theory can be employed to understand how social structures such as class or ethnicity promote *or constrain* economic action. It is this definition that underpins Woolcock's model.

(c) *Bridging social capital at the macro-level: relations between communities and state institutions*

Research into the relationship between social capital, government structures, and development outcomes in low-income countries found that "Norms of cooperation and networks of civic engagement among ordinary citizens can be promoted by public agencies and used for developmental ends" (Evans, 1996, p. 1119). This takes up Putnam's theory that social capital is instrumental in promoting effective government (Putnam *et al*., 1993) but reverses it. Rather than focusing on the idea that links between groups and public institutions ensure that public policy is a collective good that benefits all, the research underlines the importance of direct involvement of public officials in getting citizen efforts organized and sustaining citizen involvement. Here, the role of the state is therefore more than providing public goods and an enabling rule of law. There are, however, difficulties with this idea, addressed in the next subsection.

(d) *Bonding social capital at the macro-level: organizational integrity within corporate sector institutions*

Powerful institutions which transcend the public–private divide, such as governments, can potentially be vehicles for corruption and nepotism. The key to preventing this is a competent, engaged set of public institutions (Evans, 1996). Here, social capital is a professional ethos committed to pursuing collective goals, fostered by social relations between individual representatives of institutions; it is a form of bonding social capital at the macro-level and facilitates positive state/society bridging relations. It has been pointed out that since coherent robust bureaucracies rarely exist in developing countries, the advocacy for state/society bridging social capital is misguided (Harriss, 2002), although this is probably an overly pessimistic view.

Regarding the four types of social capital in the framework, Woolcock (1998, p. 186) argues

that "All four dimensions must be present for optimal developmental outcomes. This successful interaction within and between bottom-up and top-down initiatives is the cumulative product of an ongoing process that entails 'getting the social relations right'." The following section explores to what extent CBHI policy has been "getting social relations right" by analyzing CBHI through the lens of each of the four types of social capital in Woolcock's framework.

3. UNDERSTANDING THE FEASIBILITY OF CBHI THROUGH THE LENS OF THE SOCIAL CAPITAL FRAMEWORK

By reviewing the CBHI literature, we identified a core set of studies that consider the social context of CBHI schemes (Atim, 1999; Bloom & Shenglan, 1999; Criel & Waelkens, 2003; Dror & Preker, 2002; Franco, Mbengue, & Atim, 2004; Hsiao, 2001; Jowett, 2003; Kiwanuka-Mukiibi, Derriennic, & Karungi, 2005; Meessen *et al*., 2002; Ron, 1999; Schneider, 2004; Zhang, Wang, Wang, & Hsiao, 2006). In the remainder of the paper, the simplified version of Woolcock's framework is populated with these studies. The framework is used to organize the CBHI studies and extrapolate from them. We also draw on other literature on CBHI, the literature on other types of health insurance, and the social capital literature outside the health field to develop the analysis. From this, it is tentatively assessed whether there is a value in applying social capital theories to the formation and evaluation of CBHI policies.

(a) *Micro-level bonding social capital within communities: positive and negative effects on CBHI*

(i) *Positive bonding social capital: constraining adverse selection and moral hazard and increasing willingness to pay?*

The growth in the interest in CBHI is linked to the failure of governments in low-income countries to implement compulsory health insurance for all or most of the population. The voluntary nature of CBHI gives rise to serious obstacles, particularly adverse selection. Other obstacles, such as moral hazard, are common to all forms of health insurance. In CBHI, in particular, low demand and willingness to pay also pose a problem (Bennett, Creese, & Monasch, 1998; Meessen *et al*., 2002). To counteract adverse selection, it is suggested in the economic literature on CBHI that contracts are designed to ensure: a minimum enrollment rate in the target population; waiting periods so as to prevent people from joining a scheme only when they are ill; and enrollment not on an individual basis but rather on a family basis (Carrin, 2003). *Ex-ante* moral hazard may be uncommon in low-income countries since the costs associated with accessing health services are sufficient to determine increased "frivolous" utilization (World Health Organization, 2000). However, *ex-post* moral hazard is likely where CBHI schemes cover minor conditions and decisions to utilize services are driven by the client rather than the provider (Bennett *et al*., 1998). [5] Following the economic framework, this can be addressed by introducing deductibles, copayments, and/or gatekeepers as part of the contract (Hsiao, 1995). However, although they increase a scheme's sustainability by limiting claims, charges can harm vertical equity, since they disproportionately affect the poor (Ranson, 2002).

It has been suggested that informal mechanisms depending on social norms at the local level may be more equitable and efficient than the formal, contract-based ways of combating such problems. This is recognized in the economic literature on CBHI when it is suggested that trust mitigates against adverse selection and moral hazard in CBHI (Pauly, 2004; Pauly, Zweifel, Scheffler, Preker, & Bassett, 2006) and that CBHI covering small pools provides informal safeguards, such as full information and social sanctions (Davies & Carrin, 2001; Zweifel, 2004). However, in these papers, although the importance of trust is highlighted, it is unsupported by any kind of evidence or example from CBHI experience and it receives no analytical development since there is no economic theory of trust (a limitation recognized by Pauly) (Pauly, 2004). Therefore, while the economic analysis of adverse selection in CBHI is useful, it has some important weaknesses.

Other studies of CBHI taking a "health system" perspective also propose that trust decreases the likelihood of adverse selection and moral hazard and increases willingness to pay, but these do provide examples from the field and propose strategies to increase the levels of trust. These include improving behavior of medical staff to patients, such as increased levels of politeness (Criel & Waelkens, 2003); improving quality of care (through strategic

purchasing) (Schneider, 2005); transparency and accountability among those managing the scheme (Schneider, 2005); recourse to justice to punish fraud (Meessen *et al*., 2002; Schneider, 2004); subsidies for the poor (Schneider, 2005); increased community participation in the scheme management (Atim, 1999; Hsiao, 2001; Schneider, Diop, Maceira, & Butera, 2001); scheme meetings; and a significant proportion of staff working voluntarily (Atim, 1999; Schneider *et al*., 2001). However, the analysis is confined to investigating how trust could be produced and employed at various points in the consumer–provider–insurance triangle. These discussions of trust do not take into account the broader social context and how this may affect CBHI. For example, in a study of the role of trust in CBHI in Rwanda (Schneider, 2005), the effect of solidarity among scheme members on willingness to pay is discussed without any mention of the specific nature and possible root of this solidarity. The socially determined values and norms that form the context of the CBHI and may influence it in practice are left largely unexamined. For example, no mention is made of the effect on trust of the civil war and genocide that occurred less than a decade before the study took place. Ethnic fragmentation has been associated with decreased local public good provision in Kenya (Miguel & Gugerty, 2005), decreased levels of group participation in the United States (Alesina & Ferrara, 2000), and increased informal sector activity and decreased tax compliance in 52 countries (Lassen, 2003) to name but a few studies of the effect of ethnic diversity on trust. Experience from these studies suggests that CBHI may be hampered by ethnic fragmentation, but almost no studies of CBHI, even in contexts of great ethnic diversity, have investigated the effect of ethnicity on trust among potential scheme members.

One exception is a study comparing a hospital-based scheme in Ghana with a scheme based in a city in Cameroon where membership was based on ethnic affiliation (Atim, 1999). It attempts to test the theory that solidarity and the smallness of CBHI schemes can account for successful CBHI. It found that in Cameroon, the bonds of ethnic urban solidarity networks represented an effort to re-create or utilize rural solidarity mechanisms as an insurance against the risks of modern urban life, creating a "social movement dynamic." The paper concludes that while this in part explained the success of the Cameroonian scheme, a scheme without ethnic bonds could also incorporate elements of a social movement through greater community participation, accountability, and autonomy in the course of time. Echoing this, studies outside the CBHI literature have suggested that the negative effects of ethnic fragmentation on trust could be mitigated through improved institution building (Easterly, 2001; Miguel, 2004).

Ideas that trust and solidarity bonds in the community improve the likelihood of success in CBHI have parallels with the theory in Woolcock's framework (Woolcock, 1998, 2001; Woolcock & Narayan, 2006) that bonding social capital decreases fraud and increases economic development. However, research in China (Hsiao, 2001; Zhang *et al*., 2006) is one of only two explicit attempts to measure the effect of social capital on CBHI (the other is a study in Vietnam (Jowett, 2003) (see below)). In the Chinese research, social capital is employed only in the Putnamian sense to mean a stock of "social cohesion and solidarity." It was found that social capital facilitated collective action, which in turn facilitated willingness to pay. A statistically significant association between indicators of social capital (degrees of trust and reciprocity) and farmers' willingness to join community financing was demonstrated, controlling for other socio-demographic characteristics (Zhang *et al*., 2006). The suggested pathway linking levels of trust and reciprocity to willingness to pay in Chinese CBHI schemes is that members with higher levels of solidarity are more ready to accept the cross-subsidization which is implicit in the insurance mechanism (Hsiao, 2001). CBHI is therefore viewed as a form of collective action. A study in Guinea-Conakry, which demonstrates that scheme members understand and approve of the re-distributive effects of CBHI (Criel & Waelkens, 2003), supports this view. Other studies have recognized this effect and suggested emphasizing the solidarity benefits of health insurance in information disseminated to communities (Desmet, Chowdhury, & Islam, 1999; Schneider, 2005).

There is limited evidence then that in at least in some CBHI schemes, willingness to pay is increased by solidarity bonds and cannot be understood in neoclassical economic terms, where willingness to pay is based on individual expected utility. Instead, a complex interplay between rational utility maximizing and sociocultural norms (such as solidarity and collective action) probably impacts on individuals'

decisions to join a scheme (Schneider, 2004). This is because eventually benefiting from the scheme (by drawing on the insurance in times of illness) depends on need rather than the amount contributed. This is true in all types of insurance, but in a community setting the redistributive effect may be more apparent to scheme members. This may particularly be the case in sub-Saharan Africa, where CBHI appears to have a different logic to endogenous community-based forms of risk management and income smoothing such as rotating credit associations, which are based on a notion of reciprocity (you get out what you put in) (Criel & Van Dormael, 1999; Criel & Waelkens, 2003) (see Sorensen, 2000 for a discussion of risk management in rural communities in developing countries). Unfortunately, it is difficult to further comment on the possible links between CBHI and endogenous forms of risk management since these have hardly been studied (Criel & Van Dormael, 1999).

(ii) *Negative role of bonding social capital*

The hypothesis that strong intra-group ties mitigate against adverse selection and moral hazard echoes Putnam and Coleman by assuming that social capital has only a positive, normative effect on social relations. However, there is a second argument in the CBHI literature that turns this hypothesis on its head and holds that strong intra-group bonds actually *prevent* the emergence of successful CBHI (Atim, 1999; Jowett, 2003; Meessen *et al.*, 2002). An example of this comes from Ghana where, in face of conflicting loyalties between a CBHI scheme and their community, field assistants apparently connived with community members in the practice of evading the stipulation of family membership, a mechanism designed to prevent adverse selection (Atim, 1999).

Also supporting the negative view of social capital, Jowett (2003), using data from voluntary health insurance (which operates much like CBHI) in Vietnamese provinces, takes issue with the argument that social capital facilitates collective action and willingness to pay as described above (Hsiao, 2001). The results from Jowett's study, which controls for a range of health and socio-economic variables, showed that high levels of two proxies of social capital—perceptions of social cohesion and informal financial networks—were correlated with lower, not higher, rates of take-up of community-based voluntary health insurance, suggesting that intra-community bonding social capital "crowds out" voluntary health insurance. In this instance strong intra-community ties apparently favored informal financial networks such as borrowing money that *prevented* more formal and institutionalized types of mechanisms such as CBHI from emerging. The Ghanaian and Vietnamese studies, then, fit into the section of the social capital framework that suggests that high levels of bonding social capital permit free-riding and prevent formal rules for market transactions from being enforced.

There are therefore two countervailing (positive and negative) views of the effect of bonding social capital on CBHI in the literature. As we have seen, this is consistent with the social capital framework, which provides the basis for an alternative, third hypothesis: communities with both strong intra-community ties (promoting solidarity) *and* extra-community networks (promoting a willingness to invest in and draw on a larger, more generalized and formal pool of resources) are probably more likely to experience greater success with CBHI than communities with one or neither types of social capital. [6] Individuals in communities characterized by only strong intra-community ties may actually be disadvantaged and may benefit from investing in mechanisms to strengthen the other type.

(b) *Micro-level bridging social capital: the effect of vertical and horizontal civil society links on CBHI*

An important issue for policy makers is whether it would be possible to aid communities in constructing social capital to create better conditions for CBHI, without embarking on some form of social engineering. Affective and emotional relations between family and neighbors are probably not the types of social relations that can or should be developed through policy. However, bridging ties are "constructible" since they constitute social links that are facilitated by institutional arrangements (Bebbington & Carroll, 2000; Evans, 1996; Fox, 1996; Krishna, 2004; Putzel, 1997).

(i) *Horizontal civil society links: facilitating the enlargement of the risk pool*

In the CBHI literature, enlarging the risk pool has already been interpreted as a case of constructing bridging social capital (Preker *et al.*, 2002). Establishing and strengthening links with formal financing networks is cited

as an example. In Rwanda, federations of small CBHI schemes pool part of their funds at the district level to cover care in district hospitals (Schneider *et al*., 2001). Creating horizontal links through scheme mergers in this way allows schemes to expand the risk pool while continuing to capitalize on the positive social bonds fostered by small risk groups [7] (Davies & Carrin, 2001). Larger pools are required to spread risk; actuarially correctly assess the probability of the loss occurring and therefore maintain solvency; cross-subsidize (Schieber & Maeda, 1997) and lower transaction costs (Ron, 1999).

Another mechanism for facilitating the enlargement of the risk pool without increasing the risk of fraud is "the establishment of supervisory and audit bodies, and support for an independent press and for the professional groups involved" (Meessen *et al*., 2002, pp. 90–91). Such interventions are proposed as a method of fostering an enhanced "generalized morality" across CBHI schemes, or identity or loyalty within a large reference group that encompasses all relevant market transactions (Meessen *et al*., 2002)—in short, the development of bridging social capital. An example of this comes from a region of Senegal. The GRAIM (*Groupe de Recherche et d'Appui aux Initiatives Mutualistes*) coordinates 21 schemes, supporting development and building capacity and seems to have led to more interest in scheme membership (Bennett *et al*., 2004). Such interventions are confined to building links between CBHI schemes and other formal institutions in the health system. However, some studies have suggested that horizontal linkages between small scale community projects can be even more effective when they connect heterogeneous organizations, building bridges across different sectors.

From the social capital literature, federations of coffee producers and other rural development projects in the Andes (Bebbington & Carroll, 2000) may provide a useful model for CBHI. Federations are characterized by Bebbington and Carroll (2000) as supra-communal organizations of the poor constituting a special manifestation of social capital. Federations were found to have the potential to foster regional and more strategic forms of collective action and engagement with government, civil society, and markets, and to build sustainable bridges between different types of organizations. Links between political and economic organizations were particularly important. The former type of organization was often more adept at lobbying and mobilization to protect and promote particular concerns of its members, while the latter type (which would include CBHI schemes) was concerned with social enterprise and facilitating service delivery and was more pragmatic, but less inclusive in its stance. Successful federations were able to develop bridges between different types of organizations, so that they were able to benefit from each others strengths.

An overview of 10 schemes in India has found that a crucial element of the development of CBHI is the "nesting" of schemes in a broader development agenda, generating trust among scheme members (Devadasan, Ranson, Van Damme, Acharya, & Criel, 2006). All the schemes studied were initiated by local NGOs. In this, the authors argue that Indian schemes differ from African schemes, the latter being largely initiated by external development agencies. In light of the likely importance of horizontal bridging social capital, forming strategic linkages with other grassroot organizations could be important for African schemes. This may particularly be the case in contexts where membership is drawn from poorer sections of society with a weak capacity for mobilization. How far it would be possible to build such relationships would depend greatly on the political and leadership dynamics at work in the region. This conceptualization of CBHI entails a broader and deeper consideration of communities' needs, goals, and power relations than is currently evident in most of the CBHI literature.

(ii) *Vertical bridging relations: the role of NGOs and faith based organizations in capacity building*

Vertical linkages are employed by CBHI schemes to build capacity in technical areas such as financial and general management and in administration, since the requisite skills for implementing CBHI are often not available locally (Bennett *et al*., 1998). In an exploratory study, comparing a successful CBHI scheme in the Philippines and a less successful one in Guatemala (Ron, 1999), one of the major success factors in the Philippines (where the scheme grew steadily over three years) may have been the support of bridging social capital constructed through several types of vertical links. A very effective administrative structure was provided by the international NGO, Organization for Education Resources and Training

(ORT). The structure was developed through the built-in members' participation mechanisms of a cooperative, combined with the financial and moral support given by the ORT country office and ultimately the World ORT Union. The Guatemalan scheme, which failed to progress after initial registration despite receiving superior technical assistance from the WHO, did not develop supportive links with local social and political structures. In particular, the scheme lacked the support of the local Catholic Church. It could be argued then, that the scheme did not develop sufficient bridging social capital. Perhaps supporting the case for the importance of bridging capital is the fact that following the publication of the study the Guatemalan scheme was successfully relaunched, this time with the support of Catholic Church (Ron, 2006, personal communication). However, further research would be needed to understand whether bridging social capital actually affected the outcome of the schemes in the longer term.

While the potential of NGOs to assist CBHI may be great, in some cases the provision of assistance to community development projects may actually prevent the accumulation of social and other forms of capital at the grassroots. This occurs when vertical bridging relations cause dependency through top-down, non-participatory interventions (Abom, 2004; Fox, 1996). Studies have indeed found that community participation in CBHI is essential to scheme sustainability (Franco *et al.*, 2004; Kiwanuka-Mukiibi *et al.*, 2005). One in-depth study, focusing on Senegal, found that participation has a tendency to wane over time, jeopardizing the sustainability of schemes. Increased decentralization and training are suggested as potential solutions (Franco *et al.*, 2004).

The example of a South African HIV/AIDS prevention project which had exceptionally strong technical and financial external support but failed due to poor community participation might be instructive for addressing waning community participation in CBHI (Campbell, 2003). In this project, participatory management by a multi-stakeholder committee aimed to empower key marginalized groups (notably sex workers) and to facilitate collective action. However, it failed to take into account the impact of broader social forces on the community (e.g., poverty) and social hierarchies (e.g., gender relations) and therefore did not create appropriate incentives for participation. Efforts to support community participation were undermined by experts possessing technical and scientific know-how (epidemiology and biomedicine). Their knowledge was given symbolic and real precedence in the program, so objectives articulated by them displaced the objectives of the intended "beneficiaries." Drawing on Bourdieu, the analysis attributes this failure to unequal distributions of economic, cultural, symbolic, and social capital in the project which favored the technical project staff and not the local community. Where participation has been studied in CBHI, there has been no significant analysis of power relations between technical experts and the community in defining appropriate incentives. Broad lessons for CBHI could be drawn from the South African project and other cases documented in the large literature on participatory development. Indeed, a recent study of CBHI found that incentives that are socially and politically relevant may be at variance with incentives designed using technical and scientific expertise (such as economic theory) (De Allegri, Sanon, Bridges, & Sauerborn, 2006). Defining incentives in a participatory, "bottom-up" fashion may result in scheme structures and activities that fall outside the classic insurance model. For example, in Uganda, low ability to pay premiums led to interest among members in pursuing income generation activities to supplement premium payments, and the CBHI scheme becoming an income generating business, as well as an insurance house (Derriennic, Wolf, & Kiwanuka-Mukiibi, 2005). [8]

(c) *Bridging social capital at the macro-level: relations between communities and state institutions*

There are several views on the appropriate role of the state in CBHI. Pauly (Pauly *et al.*, 2006) has recently advocated minimal government regulation of CBHI, arguing that government subsidy causes cream skimming and adverse selection. The health system framework suggests that although CBHI is a private sector method of financing health care, the government can play a vital role in schemes' success, should it decide that CBHI is a good strategy to further its objectives. Bennett *et al.* (1998) argue that if there is a government failure or no clear government policy, schemes are likely to play an important role in the delivery of health care, but issues relating to their role in the broader health system are unlikely to be relevant. If the government is strong, it is argued

that CBHI relations with the government are likely to be very important. The following three government mechanisms for supporting community health financing have been identified: stewardship (e.g., regulation and monitoring); creating an enabling environment (e.g., the rule of law); and resource transfer (e.g., subsidies) (Ranson & Bennett, 2002). The social capital literature complicates this picture. Evans (1996) argues that state agencies can aid civil society organizations to consolidate themselves through the construction of state–society "synergy" and that the state plays two different roles in this: complementarity and embeddedness.

(i) *Complementarity*

The first is akin to the health system approach described above, namely to provide public goods and an enabling rule of law, while private organizations and institutions produce goods and services. This is termed "complementarity" by Evans.

Complementarity is important in CBHI. For example, a major obstacle to CBHI is the poor quality of health services (Criel & Waelkens, 2003). CBHI can potentially contribute to improving quality, efficiency, and sustainability of health services through strategic purchasing (Hsiao, 2001; World Health Organization, 2000). In health care markets, CBHI can be a means of facilitating improved vertical integration and determining the nature and scope of the products supplied by health care providers (Zweifel, 2004). If the provider is separate from the purchaser, an insurance body can improve efficiency and curb provider moral hazard (Atim, Grey, Apoya, Anie, & Aikins, 2001) if it pursues a policy of strategic purchasing (World Health Organization, 2000). However, for strategic purchasing there must be an enabling environment: information about the quality and quantity of services must be provided; there needs to be investment in new skills in contracting on the part of both the purchaser and provider (Bennett, McPake, & Mills, 1997); and a revision of the balance of power between purchaser and provider must be accepted (Carrin *et al*., 2005; Criel, Diallo, Van der Vennet, Waelkens, & Wiegandt, 2005; Desmet *et al*., 1999; Meessen *et al*., 2002). In light of these numerous preconditions, it is not surprising then that in a study of 258 CBHI schemes in low-income countries only 16% conducted strategic purchasing (ILO, 2002). One method of creating these conditions is for the government to provide the function of monitoring, regulating and/or accrediting providers, so that schemes do not need to develop the technical skills to conduct these activities themselves. China's rural cooperative medical system (RCMS) provides an example of complementarity. [9] Since China's health services have become decentralized, local government has less financial leverage to control the running of hospitals and other facilities. The role of government is increasingly to monitor and regulate services. RCMS schemes, on the other hand, channel financial resources to hospitals and local government, but do not have the technical skills to assess quality and cost-effectiveness. Local government and RCMS schemes therefore need to cooperate to influence providers through strategic purchasing (Bloom & Shenglan, 1999).

(ii) *Constructing social capital through embeddedness*

The second role of the government is "embeddedness," a political process facilitating the construction of social capital at the local level (Evans, 1996). [10] Central to this is the idea that in some contexts there is an informal permeability of boundaries between civil society and private sector organizations and the government that can facilitate development. It is often assumed that such permeability should be avoided as it can foster corruption, but Evans argues that embeddedness can significantly enhance development. An engagement with civil society or the private sector in the form of day-to-day interactions of government officials can build its own positive norms and loyalties (Evans, 1996). An example comes from the Taiwanese irrigation system where the water requirement per crop in Taiwan is around 50% lower than in other South East Asian countries. This efficiency is attributed to the embeddedness of the state in social structures at the local level (Lam, 1996). Local public officials belonging to Irrigation Associations officially manage the irrigation system but are embedded in the day-to-day operations of the farming groups. Officials depend on voluntary labor and donations by farmers to carry out maintenance and operations, while farmers depend on officials to integrate local needs into the overall plan. Officials gauge these needs not through the formal mechanism of farmers' representatives, but through informal conversations held while collecting water fees. Although these mechanisms are informal, Lam argues that they have not evolved by chance. Rather, they are fostered by the

institutional design of the irrigation system. Autonomy of the various units within the irrigation bureaucracy coupled with back-up from higher levels of authority allows individual officials to develop informal rules to cope with various problems they might face, without this informality becoming unmanageable or corrupt. Further support for synergy comes from the egalitarian nature of farming in Taiwan, which has one of the lowest Gini indexes in the developing world. Wealthy local elites do not derive their power as land owners or employers, but as heads of political factions which compete to win votes (Lam, 1996). From this and several other case studies, Evans concludes that embeddedness is likely to emerge in egalitarian societies where institutional structures are designed to encourage a certain set of norms and loyalties at the intersection between civil society and government involvement in development projects (Evans, 1996).

Research into state–society synergy would be particularly important in countries intending to follow the 19th century precedent and scale-up coverage by integrating CBHI into government-led national social health insurance schemes, such as Ghana (Government of Ghana, 2003), since in these contexts issues of power between regulatory state officials and CBHI schemes will come to the fore. Synergy may also be important in contexts where ability to pay is very low. One critical weakness of CBHI is that it has not experienced significant and sustained success to improve access and financial protection among indigents (World Health Organization, 2000) because (a) the poor are excluded from CBHI schemes because they cannot pay the premium or (b) the poor under-utilize services even if they have coverage (Atim *et al.*, 2001; Ranson, 2002). This suggests that if CBHI is the only form of social protection for health expenditure, it is unlikely to be sufficient. For CBHI to promote equitable access to health care, it is likely that indigents would need to be subsidized by the state, while the rural non-poor and informal workers are targeted to make contributions to CBHI (Bennett *et al.*, 2004). In such scenarios, following the social capital framework, public subsidies may work best when administrative structures in CBHI intersect with local political structures to facilitate bureaucrats' loyalty and enthusiasm to become "embedded" in schemes and put their energy into making them work.

A possible example of embeddedness comes from a Senegalese scheme which developed a successful collaboration in which rural councilors are members of the scheme and they support its functioning by letting the manager make presentations at their meetings, and by raising awareness and asking people to join the scheme while they are making their own visits to local communities (Franco *et al.*, 2004). In Rwanda, the eventual success of a mutual health insurance pilot with declining membership was in part due to the intervention of the District Mayor who facilitated links with a micro-finance scheme and offered to personally ensure monitoring of the project. The organization of the now extensive network of CBHI schemes in Rwanda is adapted to the decentralized government framework, with Mayors sitting on mutual health insurance committees at the district level (Ministry of Health Republic of Rwanda, 2004). However, if governments are to have a role in facilitating CBHI through state–society "synergy," public institutions need to be competent and engaged. This is the subject in the next subsection.

(d) *Bonding social capital at the macro-level: relations within institutions*

Woolcock (1998) defines organizational integrity as a type of social capital. He draws on neo-Weberian theory in perceiving institutional coherence, competence, and capacity as deriving from an organizational form that socializes bureaucrats. This allows Woolcock to view the effectiveness of organizations, particularly government, as a product of social relations which foster a certain set of norms.

The corporately coherent robust Weberian bureaucracy in the Taiwanese irrigation system (Lam, 1996) ensured that embeddedness did not degenerate into clientalism, while at the local level the bureaucracy was open to inputs from farmers and local officials (Evans, 1996). Evans (1996) argues that without a coherent Weberian bureaucracy (characterized by meritocratic recruitment, good salaries, sharp sanctions against violations of organizational norms, and solid rewards for career-long performance) state–society synergy is possible but it will not be a force for good and will foster corruption instead. On the other hand, if a Weberian bureaucracy exists without synergy, inflexible rules and uniform structures (a Weberian "iron cage") will prevent synergy and limit the possibilities for development. In other words, both synergy and coherent robust bureaucracy are needed for optimal developmental results. To support his argu-

ment Evans points to the studies demonstrating that "synergy" contributed to the success of East Asian countries that experienced rapid development in the late 20th century. Thus Evans diverges from Putnam's view that a lack of prior endowments of micro-level bonding social capital is the key constraint to effective local government (Putnam *et al.*, 1993), arguing rather that limits in government structures cause the inability to scale-up (through state–society synergy) micro-levels of social capital to generate action on a scale that is politically and economically efficacious.

The argument that the implementation of successful market-oriented initiatives requires the engagement of competent government has already been compellingly made in regard to health sector reforms such as contracting out (Bennett *et al.*, 1997). Specifically, this research found that in order to ensure private sector initiatives were efficient and equitable as compared to direct government provision, government would need to develop a broad array of new skills and capacities. The requirements for this capacity building were so demanding on government that in principle it put into question the supposed advantage of the reforms over direct provision. In relation to CBHI, a market-oriented initiative, it is also likely that regulating, expanding, and promoting equity and efficiency in schemes would require government to develop new skills and capacities (as discussed above). Whether in the long run this process would be preferable to public sector health care financing is a question that falls beyond the scope of this article. [11] What is apparent, from the research on health sector reforms (Bennett *et al.*, 1997), and from Woolcock's framework, is that this process would require the government to be competent and engaged. In other words, bonding social capital at the macro-level would arguably be an important factor influencing the government's ability to develop the new skills and capacities required to support CBHI to develop equitably, on a scale that is politically and economically efficacious.

4. CONCLUSIONS

CBHI has been proposed by international development agencies as a transitional mechanism to achieving universal coverage for health care in low-income countries (Arhin-Tenkorang, 2001; Davies & Carrin, 2001; Gottret & Schieber, 2006; World Health Organization, 2000, 2005a, 2005b). This policy model linking CBHI and universal coverage is implicitly informed by the historical experience of mutual health insurance in countries such as Germany and Japan in the 19th century, where the social context was dramatically different to that of today's schemes (Criel & Van Dormael, 1999). This paper argues that the analysis of CBHI in agencies such as the World Bank and WHO, broadly based on economic theory, has taken insufficient account of context-dependent policy considerations. These include values of scheme members and people in their communities, community goals, and local and regional power relations. There is a need to develop an alternative framework to complement the economic and health system approaches to analyzing CBHI.

An analysis of the CBHI literature suggests that a critical engagement with social capital theories could enhance our understanding of CBHI and help explain why in most low-income countries (with notable exceptions such as Rwanda) schemes do not appear on course to develop according to the 19th century precedent, achieving significant levels of population coverage in a sustainable way. Features of social capital such as solidarity, trust, extra-community networks, vertical civil society links, and state–society relations at the local level appear to affect outcomes in CBHI. To this extent, it may be possible to talk of "social determinants of CBHI." However, these social determinants have been insufficiently considered in CBHI policy analysis and development, possibly limiting understandings of failures and successes of CBHI. Our conclusions are not based on the findings of primary research, which was beyond the scope of this paper. The limitation of this is that many of the studies employed do not necessarily aim to identify the importance of social capital. We have therefore been compelled to draw additional conclusions beyond the objectives of the researchers, by linking their work to a new framework.

With this caveat in place, possible social determinants of CBHI and their impact on CBHI are tentatively proposed here. We firstly argue that applying Woolcock's social capital framework (Woolcock, 1998, 2001; Woolcock & Narayan, 2006) to the CBHI data puts into question the idea, proposed in the CBHI literature, that schemes characterized by strong intra-community ties are more likely to experience success in CBHI than those without these ties, because of increased solidarity which may reduce adverse selection and moral

hazard. The framework complicates the picture by proposing that communities characterized by only strong intra-community ties may actually be disadvantaged in CBHI development due to increased levels of corruption and clientism, or a preference for more informal financial networks. A broader understanding of the factors determining the effect of bonding social capital on CBHI is therefore needed. Bridging social capital in the form of more extensive professional links with NGOs, umbrella organizations, or local government (within and beyond the health sector) is likely to be important.

Such links can foster more professional relations, strategic alliances, administrative capacity, and enlarged risk pools in CBHI schemes. However, vertical links with NGOs, while bringing many benefits, may also foster dependency and may reinforce social structures that endorse and privilege the work of technical experts. This does little to augment the accumulation of capital (social, economic, human, or otherwise) of intended beneficiaries of technical assistance—the scheme staff and scheme members. The role of bridging social capital in CBHI therefore ought to be explored. A related question is whether and how the advantages of bonding social capital could be sustained alongside increased horizontal and vertical bridging links.

Alongside links with NGOs and civil society, the concept of "embeddedness," also constituent of bridging social capital, suggests that local government structures can foster productive informal social relations between communities and local government officials (Evans, 1996). In CBHI, structures that facilitate the personal engagement of local bureaucrats may also increase the possibility of corruption. The effect of embeddedness also needs to be weighed up against more conventional "complementarity" (public/private division of labor) and laissez faire approaches, although it is worth noting that the latter may not be viable in cases where CBHI is to be scaled up and integrated into a government program for universal coverage (such as social health insurance) as proposed by World Health Organization (2000, 2005b).

The process of working through the social capital framework has led us to the conclusion that certain types of social capital are probably a determinant of successful CBHI, but it has also led us to think beyond this. It may become apparent that numbers of CBHI schemes need to *actively develop* bridging relations to foster the types of social capital required to ensure that the schemes are aligned to local communities' goals, power relations, and values. Bridging ties are "constructible" since they constitute social relations that are facilitated by institutional arrangements rather than affective bonds (Bebbington & Carroll, 2000; Evans, 1996; Fox, 1996; Krishna, 2004; Putzel, 1997). For example, CBHI schemes could link into federations of community-based organizations with diverse political and economic interests, situating themselves in the broader regional or even national development agenda and increasing their inclusiveness locally. Or schemes may find that they need to pursue diverse activities to complement insurance, such as income generation. In egalitarian societies, if institutional structures that foster norms and loyalties at the intersection between civil society and government are in place, CBHI schemes could systematically forge links with decentralized government structures (such as District Health Management Teams) or develop into quasi-non-governmental organizations.

Social capital theory has been critiqued as a rationale for social engineering by development agencies. It is accused of broadening the scope of justifiable intervention from the economic to the social, to rectify market imperfections in order, in turn, to ensure that market-oriented policies are successful, while obscuring a critique of those policies (Fine, 2001). CBHI, as a form of private, voluntary health insurance, is a market-oriented policy, but this paper does not aim to build a case for, or against, social interventions to ensure it is successful. Rather, we hope to demonstrate the potential utility of social capital research in unpacking complex social relationships in CBHI and making their importance to policy and programming intelligible. Evidence from future studies may support social interventions to develop CBHI. Or, echoing critical analyses of other market-oriented health sector reforms (Bennett *et al.*, 1997), future evidence may indicate that social interventions require local institutions to develop new capacities such that the market-oriented reforms become more demanding on these local institutions than alternative, public sector policies.

So far, this discussion has not considered methodologies for primary research into the effects of social capital on CBHI. Indicators of social capital have already been developed and these could be adapted for quantitative studies investigating the relationship between social capital and CBHI. Such a task would

be no small undertaking. An in-depth literature review of research on social capital suggests that a number of serious conceptual and statistical problems exist with the current use of social capital by social scientists, particularly in attributing causality to social capital in empirical studies (Durlauf & Fafchamps, 2004).

We suggest that while applying the social capital framework to CBHI could indeed entail statistically testing a theory of the social conditions under which CBHI is successful, this is not the only possible research methodology. An alternative approach would be to employ the framework qualitatively, for example, by using it to guide semi-structured interviews and anthropological fieldwork to advance CBHI policy analysis and to understand its social context. This would involve situating technical analyses (which have already been undertaken within existing economic and health system frameworks for CBHI) in praxis and taking account of context-dependent considerations, such as values, goals, and power relations (Flyvbjerg, 2001). Such a process could result in the evolution of schemes that are structured and operate quite differently than those proposed under the economic and health system frameworks and that have quite different long term trajectories than the schemes emerging in the 19th century.

NOTES

1. Following the consensus that the optimal design for CBHI is schemes that are managed separately from the health care provider (Bennett, 2004) the discussion in this paper excludes studies of provider-based CBHI schemes.

2. In general, national data on population coverage of CHBI are scarce, although a USAID presentation suggests that coverage is no more than 1% in most low-income countries. http://www.usaid.gov/policy/cdie/8-24final.pdf, accessed 07.08.06. For example, in Ghana, the number of CBHI schemes rose rapidly from 47 in 2001 to 168 by 2003, but less than 40% of schemes were functional at that time, and the combined total coverage they extended to the population was just 1% (Sulzbach, Garshong, & Banahene, 2005).

3. While from a policy perspective the primary purpose of CBHI is not economic development—rather it is to improve access to health care services—CBHI is a financial mechanism, and as such it is compared and contrasted within the framework with other forms economic development.

4. This idea also corresponds with the theory in new institutional economics that in contexts where there is no formal third-party such as government or the judiciary to enforce constraints on human interaction, there is a need for informal constraints, such as common values, repeat dealing, cultural homogeneity, and kinship, to prevent corruption and inefficiency (North, 1990).

5. Depending on the provider remuneration mechanism, provider moral hazard may also potentially be a problem for CBHI. Linking demand-side financing to provider outputs may be technically and socially challenging due to the renegotiation of power relations between providers and clients (Carrin, Waelkens, & Criel, 2005).

6. An interesting related question is whether the creation and functioning of CBHI has an impact on the development of social capital. However, a discussion of this is beyond the scope of this paper.

7. The other main method of enlarging risk pools is (social) reinsurance. This is seen as an alternative to external subsidization or contingency reserves as a means of protecting the scheme from financial instability from catastrophic events (Dror, 2001; Fairbank, 2003). However, others have argued that although self-financing may be attractive, because the membership of schemes is usually limited to poor groups, it may be wiser to view CBHI as a supporting strategy to government financing rather than as an exclusive financing alternative (Bennett *et al*., 1998).

8. Another point related to the potentially negative impact of external support is that as with other types of local development, technical agencies and NGOs may harm the development of CBHI through unharmonized efforts. There are now at least four international technical and/or financial support mechanisms for CBHI projects: "Partners for Health Reform*plus*," funded by the US Agency for International Development; the "Health Insurance Fund" funded by the Dutch Ministry of Development Coordination; the "Centre of Health Insurance Competence" of the German development agency GTZ; and the "Health Micro-Insurance Schemes Feasibility Study Guide" of the International Labour Organization. Where these agencies are working in the same country, they will need to ensure their policies are coordinated.

9. Although previously RCMS schemes were government owned, schemes are now voluntary and are managed by a village or township committee. Schemes

are separate from providers. Because of these features (privately owned, purchaser/provider split) RCMS is considered in this discussion of CBHI schemes.

10. Embeddedness is a qualitatively different concept to the processes that constitute decentralization since it focuses on informal social relations which do not feature in decentralization models.

11. A direct comparison between CBHI and public sector health financing is not expounded in this article, since the relative merits of private health insurance as compared to tax and social health insurance based systems have been discussed extensively elsewhere (see, e.g., Maynard & Dixon, 2002; van Doorslaer *et al*., 1999; Wagstaff *et al*., 1999).

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