



Social Risk Management: A New Conceptual Framework for Social Protection, and Beyond

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Abstract

This paper proposes a new definition and conceptual framework for Social Protection grounded in Social Risk Management. The concept repositions the traditional areas of Social Protection (labor market intervention, social insurance and social safety nets) in a framework that includes three strategies to deal with risk (prevention, mitigation and coping), three levels of formality of risk management (informal, market-based, public) and many actors (individuals, households, communities, NGOs, governments at various levels and international organizations) against the background of asymmetric information and different types of risk. This expanded view of Social Protection emphasizes the double role of risk management instruments—protecting basic livelihood as well as promoting risk taking. It focuses specifically on the poor since they are the most vulnerable to risk and typically lack appropriate risk management instruments, which constrains them from engaging in riskier but also higher return activities and hence gradually moving out of chronic poverty.

Keywords: social protection, social risk management, poverty, vulnerability

JEL Code: G32, H20, H32

The revolutionary idea that defines the boundary between modern times and the past is the mastery of risk: the notion that the future is more than a whim of gods and that men and women are not passive before nature.

Peter L. Bernstein (1996): Against the Gods—The Remarkable Story of Risk.

1. Introduction and Overview

Social Protection (SP), generally defined as public measures to provide income security for individuals, is back on the international agenda. The experience of East Asia has demonstrated that high economic growth rates over many decades can impressively reduce poverty. The recent financial crisis, however, also showed that if appropriate income protection measures and safety net programs are not in place, individuals are very vulnerable when GDP falls dramatically, wages decrease and/or unemployment rises. In OECD-type economies, where SP programs such as active labor market policy, social insurance and social assistance do exist, the high and often rising public expenditure levels generate concern,

particularly in view of an aging population and rising international competition. In contrast, developing economies have few public resources and can spend little for the income security of their populations despite the high levels of poverty and income insecurity of individuals.

This tension between the need for income security and the apparent non-affordability of providing it, while relevant, provides little comfort for the more than 1 billion individuals in the world living on less than a dollar a day, the unemployed as a result of structural adjustment or globalization, and the rising number of needy elderly. The traditional definition of SP—labor market interventions, social insurance, and social safety nets—may be partly responsible for the tension. First, the traditional definition over-emphasizes the role of the public sector. Second, the common conceptualization of SP tends to emphasize net costs and expenditures while overlooking potential positive effects on sustainable economic development. Third, categorizing SP interventions into sectoral programs obscures what they have in common and how they can support each other. Fourth, but most importantly, the traditional thinking provides limited guidance for a strategic outlook on effective poverty reduction beyond the general exhortations not to forget the poor who cannot participate in a labor intensive growth process.

This paper develops a new definition and conceptual framework named “Social Risk Management” which should allow for better design of SP programs as one component of a revised poverty reduction strategy. While the focus of the paper is on developing countries and poverty reduction, it is our view that the proposed framework can also be productively applied in developed economies to guide a needed restructuring of their SP programs.

The proposed definition sees “*SP as public interventions to (i) assist individuals, households, and communities better manage risk, and (ii) provide support to the critically poor.*” This definition and the underlying framework of Social Risk Management:

- Present SP as a safety net as well as a spring-board for the poor. While a safety net for all should exist, the programs should also provide the poor with the capacity to bounce out of poverty or at least resume gainful work.
- View SP not as a cost, but rather, as one type of investment. A key element of this concept involves helping the poor keep access to basic social services, avoid social exclusion, and resist coping strategies with irreversible negative effects during adverse shocks.
- Focus less on the symptoms and more on the causes of poverty by providing the poor with the opportunity to adopt higher risk-return activities and avoiding inefficient and inequitable informal risk sharing mechanisms.
- Take account of reality. Among the world population of 6 billion, less than a quarter have access to formal SP programs, and less than 5 percent can rely on their own assets to successfully manage risk. Meanwhile, eliminating the poverty gap through public transfers is beyond the fiscal capacity of most developing countries.

The basic thrust of the SRM framework is supported by two established facts: (i) The poor are typically most exposed to diverse risks, whether they are natural (such as earthquakes,

flooding or illness) or man-made (such as unemployment, environmental degradation or war), and (ii) the poor have the fewest instruments to deal with these risks (such as access to government provided income support and market-based instruments like insurance). These facts have important consequences, most importantly: (i) the poor are the most vulnerable in society as shocks are likely to have the strongest welfare consequences for them. For welfare reasons, therefore, they should have increased access to SRM instruments; and (ii) the high vulnerability makes them risk averse and thus unable or unwilling to engage in higher risk/higher return activities. Hence, access to SRM instruments would tend to make the poor more risk-taking and thus provide the opportunity to gradually move out of poverty.¹

The main elements of the new framework are derived from introducing the notion of asymmetric information in a world of diverse risks in a more explicit way than has been done generally. Compared to an Arrow-Debreu world, this has several consequences for managing risks, most importantly: (i) The sources and the forms of risk matter, e.g. whether a particular risk is idiosyncratic or covariant. For the former, more reliance can be given to informal or market-based risk management instruments; for the latter, more government involvement tends to be required. (ii) Since risk is not necessarily exogenous, there are many more strategies to deal with risks than simple insurance, including risk reduction, risk mitigation and risk coping strategies. (iii) As private insurance markets tend not to emerge or break down in view of asymmetric information, there are three main institutional arrangements for dealing with risk: informal, market-based and publicly-provided mechanisms. And (iv) there are multiple suppliers of RM instruments (including individuals, households, communities, NGOs, market institutions, government, international organizations and the world community at large) and distinct demanders (such as the formal urban, the informal urban, the formal rural and the informal rural worker).

The application of the risk management framework goes well beyond Social Protection since many public interventions such as sound macroeconomic policy, good governance and access to basic education and health care all help to reduce or mitigate risk, and hence vulnerability. It also extends Social Protection as traditionally defined since it goes beyond public provision of risk management instruments and draws attention to informal and market-based arrangements, and their effectiveness and impact on development and growth.

The structure of the paper serves to highlight the rationale, main ideas and open questions of the new framework with a view to stimulate further discussions. Section II presents the background and motivation for the conceptual framework, which is grounded in the needs, challenges and opportunities of risk management. Section III outlines the principal dimensions of the conceptual framework, including sources and forms of risks, three strategies of dealing with risk, three main levels of formality of risk management, and the many relevant actors. Section IV identifies the implications of the framework and unresolved questions, including boundaries and overlaps among risk management approaches, SP beyond public provision, and new guiding principles. Section V concludes.

2. Background: Purpose, Challenges and Opportunities

Dealing with risk,² and income risk in particular, is not a new challenge for mankind. But new challenges are emerging, for instance, from globalization, which raises the need

for managing risk in a pro-active manner to be able to grasp opportunities for economic development and poverty reduction. This section provides the background and rationale for the new conceptual framework.

2.1. Risk Management: Old and New Issues

Natural disasters (e.g., earthquakes and volcano eruptions), bad weather (e.g., floods and droughts), and health-related problems (e.g., individual or epidemic illness, disability, old age and death) have always been a concern to individuals and society. Risks associated with these sources gave rise to individual precautionary strategies (e.g., crop diversification and building-up of stocks) and, perhaps more importantly, the creation of informal exchange-based risk sharing mechanisms, through extended families, mutual gift giving, egalitarian tribal systems, crop-sharing arrangements with landlords, etc. Much of the population in developing countries still relies largely or exclusively on these informal arrangements to deal with risk.

Industrialization and urbanization brought two important changes: a break-down of traditional and informal risk-sharing mechanisms and the introduction of new risks, most importantly work-related accidents and unemployment. The resulting "social question" haunted governments and society in the newly industrialized nations in the second half of the 19th century and gave rise to the introduction of "social insurance" programs around the notion of social risks (see Hesse, 1997). Starting with mandated work-injury, health and old-age social insurance in some developed countries in the end of the 19th century, some 100 years later, most industrialized countries have public provisions to deal with the "social risks" (such as work injury, sickness, disability, death and unemployment) for a major share of their populations.

The evolution of the modern state in the North and emergence of new states in the decolonized South brought to the forefront other types of risk arising from economic policy and the developmental process. Such risks include economic policy-induced inflation and devaluation, technology- or trade-induced changes in relative prices, default on social programs and changes in taxation. They all have an important bearing on the welfare position of individuals, households and communities. Also, the development process itself, which can include resettlement and environmental degradation, can and does increase risks, as witnessed by the rising number of natural catastrophes and the more severe consequences for the population, which is often poor (IFRC&RCS, 1999).

Recent trends in the evolution of trade, technology, and political systems have generated great potential for improvements in welfare around the world. Globalization of trade in goods, services, and factors of production has the world community poised to reap the fruits of global comparative advantages. Technology is helping to speed innovation and holds the potential to remove the major constraints to development for many people. Political systems are increasingly open, setting the stage for improved governance by holding those in power accountable to larger segments of the population. Combined, these trends create a unique opportunity for unprecedented social and economic development, poverty reduction and growth.

The other side of the coin, however, reveals that the exact same processes that allow for welfare improvements also heighten the variability of the outcome for society as a whole and even more so for specific groups. The global financial crisis of 1998 demonstrated this on a worldwide scale. There is no certainty that improvements will be widely shared among individuals, households, ethnic groups, communities, and countries. Expanded trade or better technology can sharpen the differences between the “haves” and “have-nots” just as it can increase the opportunity for all, depending on the prevailing social context and policy measures. Globalization-induced income variability combined with marginalization and social exclusion can, in fact, increase the vulnerability of major groups in the population. In other words, the risks are as large as the potential rewards. To further complicate matters, the trend towards globalization and the higher mobility of production factors reduces the ability of governments to raise revenues and pursue independent economic policies and, thus, to have national policies to help the poor when they are needed most (Tanzi, 2000).

2.2. Why Good Social Risk Management Is Important

The existence and use of appropriate Social Risk Management (SRM) instruments to effectively and efficiently handle risk in its various forms³ is important because they (i) enhance individual and social welfare in a static setting; (ii) contribute to economic development and growth from a dynamic perspective; and (iii) serve as crucial ingredients for effective and lasting poverty reduction. All three dimensions are interrelated but will be discussed separately and briefly in turn.

(i) Static Welfare Enhancing Aspects There are three main welfare enhancing results of good SRM even in a static setting: reduced vulnerability, enhanced consumption smoothing and improved equity⁴.

Reduced Vulnerability. Vulnerability can be defined as the likelihood of being harmed by unforeseen events or as susceptibility to exogenous shocks, and it extends the traditional view on poverty (Lipton and Ravallion, 1995). The likelihood of being harmed by a shock depends on (i) a person’s resilience to a given shock—the higher the resilience, i.e., the capacity to deal with a shock, the lower the vulnerability—and (ii) the severity of the impact—the more severe the impact, if risks cannot be reduced, the higher the vulnerability. The susceptibility to a shock depends on the capacity of avoidance, another aspect of risk management. The poor and the very poor, in particular, are especially vulnerable since they are typically more exposed to shocks and have less instruments to manage risk, and even a small drop in welfare can be disastrous. Enhancing the risk management capacities of the poor and non-poor reduces their vulnerability and increases their welfare and should thereby contribute to a decline in transitory poverty as well as provide a way out of chronic poverty (Morduch, 1994).

Enhanced Consumption Smoothing. Economic considerations and empirical evidence suggest that economic units have a preference for smooth consumption, spreading the

consumptive use of expected income over a long period, even a lifetime (Alderman and Paxson, 1992; Besley, 1995; Deaton, 1997; Gerowitz, 1988). Because income realization is mostly stochastic and during periods of negative shocks income can be very low or even negative, or because future events are relatively certain (such as seasonal drought) but appropriate instruments do not exist to store and transfer income to the future, the access to risk management instruments, such as saving and dis-saving possibilities is crucial in order to achieve a welfare-enhancing smooth consumption path.

Improved Equity is also a result of good SRM. If society values a more equal welfare distribution across individuals, better risk management can enhance the welfare distribution and societal welfare without actually re-distributing income among individuals. Under the likely scenario that the lower income strata are more constrained in their ability to smooth consumption, improved risk management arrangements eases this constraint and thus helps improve welfare more for the lower income segments leading to a more equal distribution of individual welfare (Holzmann, 1990).

(ii) *Dynamic Economic Development and Growth Aspects* Lacking or inappropriate SRM instruments will negatively impact economic development and growth and can perpetuate or even deepen poverty, as illustrated in the following three examples. The availability of the full range of SRM instruments should do the reverse.

Income and Consumption Smoothing. Household welfare smoothing can take two forms: (i) households can smooth income—this is often achieved by making conservative production and employment choices and diversifying economic activities, or (ii) households can smooth consumption by borrowing and saving, accumulating and depleting assets, adjusting labor supply (including that of their children), and employing formal and informal risk-sharing arrangements (Morduch, 1995). The absence of efficient market-based or government-provided consumption-smoothing instruments often results in the use of costly informal coping mechanisms once the adverse income shock hits, such as pulling children out of school, reducing nutritional intake, selling productive assets, or neglecting human capital accumulation. Very poor people are so close to a “survival line” that they become extremely risk adverse, and may exhibit non-linearities in behavior and outcome (Ravallion, 1997). An awareness of insufficient consumption smoothing instruments and risk aversion will lead households to engage in low-risk and low-yield activities. Estimates for the agricultural sector in India indicate that income smoothing can reduce farm profits by 35 percent for the bottom wealth quartile (Binswanger and Rosenzweig, 1993).

The Effectiveness and Costs of Informal Provisions. Informal risk sharing arrangements are often associated with high transaction and hidden opportunity costs. These arrangements are essentially a form of mutual insurance that provides for those in need, are guided by a principle of balanced reciprocity, and are not insurance in the conventional sense.⁵ These arrangements are informal because there are no legal means within traditional agrarian societies to make binding commitments or enforce promises of reciprocity, which bears

several implications:

- the very poor are usually often excluded since no counter-gift can be expected;
- they tend to break down or become ineffective in case of large and covariate shocks;
- strong social pressure is exerted to enforce commitment, and this is often linked with growth-inhibiting social structures (Platteau, 1999); and
- a “commitment technology” of often ceremonial and expensive gift exchanges is used, which can amount to major share of income (Walker and Ryan, 1990).

The Costs of Public Provisions. The provision of public risk management instruments, such as pay-as-you-go pension systems, unemployment insurance or social assistance, can importantly enhance the welfare of individuals and the development path of countries. However, poorly designed and/or implemented systems, governance problems, or exaggerated generosity and the budgetary costs this entails, are likely to lead to significant welfare costs for the individual and the society at large. Examples include the functioning of the labor market in OECD countries (OECD, 1994 and 1999), the impact of an overly generous pension system on public finance and macroeconomic stability in Brazil, and the potential implication of high social expenditure for competitiveness and economic growth while significant pockets of poverty continue to exist. These examples indicate that industrialized countries also need to review their current SRM instruments for the benefit of the population at large and especially for the poor.

(iii) Poverty Reduction Aspects It should have become clear by now why SRM is of particular importance for poverty reduction, and the main elements are threefold: It reduces transitory poverty, it prevents the poor from falling deeper into poverty, and it provides an avenue out of poverty.

Most panel data, including Table 1, suggest that between one-fifth and three-fifth the people below a “poverty line” at the time of a survey are not permanently poor but have been pushed into consumption poverty by life-cycle events (such as family formation) or more often by income losses (such as unemployment and sickness), special need (such as medical treatment) or the lack of income transfer over time (Sinha and Lipton, 1999). Access to appropriate SRM instruments could importantly reduce transitory poverty since fewer individuals with a lifetime income above the poverty would become consumption poor at a moment in time.

The poor are typically the most vulnerable in a society because they are often the most exposed to the whole range of risks and at the same time they have the least access to appropriate risk management instruments. Risk reduction through preventive measures is largely impossible because this goes beyond the capacity of a single person, household and (in many cases) community. Personal and informal risk management instruments are effective only in face of smaller and household-specific risks but tend to break down once a large adverse shock hits the whole community. Then the poor have only recourse to coping mechanism, such as pulling children out of school, “fire sales” of their assets at very low price, and the reduction of food intake, all of which endanger their future earning capacities leading to even deeper poverty and perhaps destitution.

Table 1. Mobility into and out of poverty for selected countries.

		Percentage of Households Who Are:		
		Always Poor	Sometimes Poor	Never Poor
China	1985–1990	6.2	47.8	46.0
Côte d'Ivoire	1987–1988	25.0	22.0	53.0
Ethiopia	1994–1997	24.8	30.1	45.1
India	1976/76–83/84	21.9	65.9	12.4
Indonesia	1997–98	8.6	19.8	71.6
Pakistan	1986–1991	3.0	55.3	41.7
Russia	1992–1993	12.6	30.2	57.2
South Africa	1993–1998	22.7	31.5	45.8
Vietnam	1992/93–97/98	28.7	32.1	39.2
Zimbabwe	1992/93–1995/96	10.6	59.6	29.8

Source: Baulch and Hoddinott, 2000 and Vietnam Draft Poverty Report, 1999.

This threat of destitution and non-survival renders the poor very risk adverse and as a result makes them very reluctant to engage in higher risk / higher return activities. As a consequence, the poor are not only incapable of seizing opportunities, which emerge in a globalizing world, but they are even more exposed to the increased risks, which the process is likely to entail. Without the opportunity of risk taking and engagement in more profitable production, poverty is likely to be perpetuated for them and their children. Improving the risk management capacities of the poor becomes thus an important policy for lasting poverty reduction, not only for dealing with transitory poverty (see World Bank, 2000, Baulch and Hoddinott, 2000).

3. Main Elements of the New Conceptual Framework

3.1. Definition and Key Concepts

A new *broad definition* of SP centers on the concept of social risk management:

SP consists of public interventions

(i) to assist individuals, households, and communities better manage risk, and

(ii) to provide support to the critically poor

This definition combines the traditional SP tools, including labor market interventions, social insurance programs and social safety nets, under a unifying theme. It extends beyond the public provision of risk management instruments and covers public actions to improve market-based and non-market-based (informal) instruments of risk management. The concept of SRM exceeds the new definition of SP and comprises risk management (RM) policies such as agricultural projects, which reduce the effects of drought, and economic policy, which reduces macroeconomic shocks. On the other hand, the definition of SP goes beyond SRM and includes measures to support the critically poor.⁶

The main elements of the social risk management framework consist of:

- Risk management strategies (risk reduction, mitigation and coping);

- Risk management arrangements by level of formality (informal, market-based, and publicly provided or mandated), and
- Actors in risk management (from individuals, households, communities, NGOs, market institutions, government, to international organizations and the world community at large).

These are set against the background of (i) different levels of asymmetric information and (ii) different forms of risk.

The next subsections will present each element in turn, starting out with the issue of asymmetric information and main forms of risk since both are fundamental for the other elements of the framework.

3.2. The Importance of (A-)Symmetric Information for Risk Management

Asymmetric information among market partners, individuals, groups and government has an important bearing on the form and effectiveness of risk management instruments and on governments' capacity to achieve more equality in income and assets distribution.

Under symmetric information among all economic actors and complete markets the sources and characteristics of risks have no bearing for risk management: Full insurance/state contingent contracts emerge as first-best and only instrument to deal with any kind of risk (Box 1). Yet, once this theoretically important but unrealistic counterfactual is abandoned, risk management becomes complex. When individuals, households or communities hold private information some risk markets may not be established, tend to break down or function poorly. Insurance becomes only one and often not even the best choice to address risks, and for many risks insurance markets do not even exist. Debt and labor contracts emerge as a device to circumvent costly state verifications. Informal risk sharing mechanism substitute for market-based instruments, in particular at the beginning of economic development since the financial systems are very vulnerable to private information. In principal, there is an important role for government in helping to establish, regulate and supervise risk markets and to provide risk instruments where markets are bound to fail. Yet asymmetric information applies also to the relation between the citizen and the government leading to government failure and political risk. As a result, a variety of RM instruments do exist in reality, provided by a multitude of actors of which all hold different advantages which change over time and differ among countries.

3.3. Forms and Measurement of Risk and their Importance for Risk Management

As indicated on next page, in a world of asymmetric information the sources of risks and their characteristics have a bearing on the selection of risk management instruments, and, furthermore, the measurement of risk is not restricted to mere variance/standard deviation.

Box 1: Implications of (A-)Symmetric Information for Risk Management.

In an ideal world à la Arrow-Debreu with *symmetric information and complete markets*, which assumes that all decision makers in an economy can specify, agree and eventually verify states of the world in which they know each other's preferences and beliefs, all risks can be addressed with market-based solutions, and government may intervene for distributive purposes in a non-distortionary manner:

- Since each risk is fully known, an actuarially fair price can be established, and able-bodied individuals can and will fully insure themselves. Insurance (state contingent claims) under such a setting is the only and first-best instrument for dealing with all risks (including natural disasters).
- All non-able-bodied individuals would rely on public or private transfers (provided for altruistic or other reasons).
- A more equal distribution of income or assets can be achieved through lump-sum taxes and transfers in a non-distortionary manner but requires an inter-personal redistribution of income or wealth.
- In this framework, where any Pareto-efficient outcome can be described as an equilibrium of perfectly competitive markets, efficiency and equality are separable.

The above world is an important but only theoretical counter-factual, while *asymmetric information in the real world*, inter alia, gives rise to:

- Moral hazard, adverse selection, and insufficient property rights, which lead to poor functioning or the breakdown of risk markets (and the need for public provisions and regulations);
- Transaction costs and the development of specific institutions, such as debt and labor market contracts to circumvent costly state verification, or informal risk sharing arrangements;
- Non-exogenous risk, which can be controlled or influenced by economic actors;
- Situations in which full insurance/state contingent contracts are no longer the first- or even second-best instrument to manage risk;
- The relevance of the sources and forms of risk to the design and selection of the most appropriate risk management instrument(s);
- Entanglement of efficiency and redistributive considerations—public interventions to increase efficiency now have distributive effects; redistributive actions have efficiency effects; and, as a result, a more equal welfare distribution can be achieved without inter-personal income redistribution;
- Unequal distribution of asymmetric information, in which there are many actors with different advantages in risk management, and, as an implication, the emergence of information as a commodity and an instrument of power; and,
- Market and government failures in the provision of risk management instruments, which lead to specific market and political risks that need to be taken into account when designing programs.

Source: Authors and Stiglitz (1975 and 1988), Eichberger and Harper (1997), Kanbur and Lustig (1999)

Box 3: Risk Management Objectives and Risk Measurement

RM Objective I: Minimize the size of the maximum possible welfare loss. Such an objective function is particularly relevant for the very poor and vulnerable since their maximum loss is likely to be destitution or death. The decision rule is the “min-max principle” which is to avoid actions with a maximum possible loss of welfare. This decision rule does not require information on probabilities, just on the universe of loss functions, and the measured risk is a quantity—the loss.

[min max (loss)]: *quantity*

RM Objective II: Minimize the probability of a loss in consumption below a given threshold. Such an objective function is particularly relevant for individuals around the poverty line. The decision rule is “safety-first,” which means avoiding actions that generate an expected consumption level below a predetermined threshold. The decision maker needs information on expected income from alternative activities and threshold consumption, and the measured risk is a probability.

[min Pr{ $c_t \leq c_{\min}$ }]: *probability*

RM Objective III: Maximize the expected rate of return given a level of variability of returns. Such an objective function is particularly relevant for individuals with higher income levels for which the downside risk is not related to poverty or destitution. The decision rule is to maximize the expected utility function, constrained by levels of income variability associated with the activities of the decisions. The decision maker needs information on risk preferences, expected returns generated by the asset portfolio and the distribution of returns from different asset allocations. In the special case of a utility function $V(\mu, \sigma)$ which depends only on the first two moments of a probability distribution of an asset allocation, the objective function can be easily written and the standard deviation σ becomes an easy measure for risk.

[max $V(\mu, \sigma)$]: *standard deviation (σ)*

Source: Authors, based on Siegel and Alwang, 1999

Risk and its measurement is traditionally related to variability of income or consumption, typically measured by its variance or standard deviation. Yet, if one wants to measure the welfare implication of risk, in particular for the poor, such a measure may prove inappropriate in many circumstances. Three measures of risk can be derived from three broad classes of household risk management objectives that have different information requirements and implications for household and social risk management strategies (Box 3). Since for the very poor the relevant risk measure is the maximum possible welfare loss, the most appropriate RM instruments are those which minimize that loss, for example, through the provision of basic health care or emergency food. Since for individuals around the poverty line the relevant risk measure is to minimize the probability to fall below a set consumption level, the most appropriate RM instruments are likely to be those which allow consumption smoothing through saving-/dis-saving instruments. Since for the higher income groups the relevant risk measure is the standard deviation of income, the most appropriate RM instrument are likely to be portfolio diversification and insurance.

3.4. Main Categories of Risk Management Strategies and Levels of Formality

Given the existence of asymmetric information in the real world and the importance of the form of risks for the selection of risk management instruments, there are different risk strategies and levels of formality among which one can usefully differentiate. The following proposed three by three differentiation has already been extended to fit regional (for Africa, see World Bank, 2000b) and analytical purposes (Siegel and Alwang, 1999).

(i) Risk Management Strategies Fall in Three Broad Categories:

- a. **Prevention strategies—to reduce the probability of a down-side risk.** These are introduced before a risk occurs. Reducing the probability of an adverse risk increases people's expected income and reduces income variance (both increase welfare). Strategies to prevent or reduce the occurrence of income risks have a very broad range that surpasses the traditional scope of SP. These include policies regarding sound macroeconomics, public health, the environment, and education and training. Preventive SP interventions are typically linked to measures to reduce the risks in the labor market, notably the risk of un- or under-employment or low wages due to inappropriate skills or poorly functioning labor markets. They are concerned with labor standards and the (mal-) functioning of the labor market, resulting from skill-mismatch, bad labor market regulations, or other distortions.
- b. **Mitigation strategies—to decrease the potential impact of a future down-side risk.** As with reduction strategies, mitigation strategies are also employed before the risk occurs. Whereas preventive strategies reduce the probability of the risk occurring, mitigation strategies reduce the potential impact if the risk were to occur. Risk mitigation can take several forms:
 - *Portfolio diversification* reduces the variability of income by relying on a variety of assets from which returns are not perfectly correlated. This requires the acquisition and management of different assets such as physical, financial, human and social capital in their different forms. For example, if individuals can only invest in human capital, they can still diversify in different occupations but perhaps to the detriment of the return. If women cannot own or inherit land and have no access to safe financial instruments, they may acquire gold and jewels. Since these assets often generate a low rate of return and insufficient risk protection, access to a broad range of assets is vital for risk management, especially for the poor.
 - *Informal and formal insurance mechanisms* are characterized by risk sharing (i.e., risk pooling) through a number of participants whose risks are not (very) correlated. While formal insurance benefits from a large pool of participants, which results in less correlated risks, informal insurance has the advantage of low information asymmetry. The characteristics of formal or market-based insurance—the payment of a risk-based insurance premium gives rise to future state-contingent payments—are straightforward. Informal insurance arrangements are more difficult to describe as they come in different and often disguised forms because one “institution” serves insurance and non-insurance type functions (such as the family and the community).

- *Hedging* has an increased importance for financial markets (e.g., forward exchange rate contracts) and is based on risk exchange or payment of a risk price to somebody for assuming that risk. Yet these arrangements do not appear to work in a labor-income related and formal provision environment—the effects of asymmetric information are too strong. However, elements can be found in informal arrangements. For example, various family arrangements (marriage) and some labor contracts are more akin to hedging than insurance.
- c. ***Coping strategies—to relieve the impact of the risk once it has occurred.*** The main forms of coping consist of individual/households dis-saving/borrowing, migration, enhancing labor supply (including that of children), reduction of food intake, or the reliance on public or private transfers. The government has an important role in assisting people in coping, for example, in the case where individual households have not saved enough to handle repeated or catastrophic risks. Individuals may have been poor for their entire lifetime with little or no possibility to accumulate assets, being rendered destitute by the smallest income loss and running the risk of being faced with irreversible damages.

(ii) The Level of Formality can Distinguish the Arrangements used under each of these Three Risk Management Strategies. Three Distinctions are Proposed:

- a. ***Informal arrangements*** (such as marriage, mutual community support, and savings in real assets such as cattle, real estate and gold). With the lack of market institutions and public provisions, the response by individual households is self-protection through informal/personal arrangements (Alderman and Paxon, 1994; Besley 1995; Ellis, 1998). These sidestep most information and coordination problems that cause market failure but may be limited in their effectiveness and expensive in terms of direct and opportunity costs (Coate and Ravallion, 1993; Morduch, 1999a). Examples include the buying and selling of real assets, informal borrowing and lending, crop and field diversification, the use of safer production technologies (such as growing less risky crops), and the storing of goods for future consumption.
- b. ***Market-based arrangements*** (such as financial assets—cash, bank deposits, bonds and shares—and insurance contracts). The supply of money in a low-inflation environment, financial assets with market-determined and positive rates of return, and actuarially fair insurance contracts dramatically increases the capacity of households (including the poor) to manage risk. Their supply, however, requires diverse well-functioning financial market institutions (including a central bank, banking system, securities markets and insurance companies), and experience indicates that their development takes time and involves overcoming many obstacles. Also, some degree of financial literacy is necessary for individuals to use these instruments in a welfare-enhancing manner. Since the development of good financial market institutions is time consuming and even good banks have little inclination to lend money to individuals without collateral, well-functioning microfinance institutions in various forms have an important role in the development process.
- c. ***Publicly mandated or provided arrangements*** (such as social insurance, transfers, subsidies, and public works). When informal or market-based RM arrangements do

not exist, break down or are dysfunctional, the government can provide or mandate (social) insurance programs (such as for unemployment, old-age, work injury, disability, survivorship and sickness). The mandatory participation in a risk pool can circumvent issues of adverse selection and create beneficial welfare effects. Since these programs are typically linked to formal employment, the coverage in developing countries is generally low. On the other hand, governments have an array of instruments to cope with the consumption effect of lost income after a shock hits, such as social assistance (i.e., providing means-tested transfers in cash and in kind), subvention of basic goods and services, and public works programs. It can also provide basic income in a universal manner to the total population or a subgroup (such as the elderly). The choice will depend on distributive concerns, available fiscal resources, administrative capacities, and the type of risk.

(iii) *Examples of Social Risk Management*, broken down according to type of strategy and level of formality are shown in **Table 2**.

3.5. *Main Actors and Their Role in SRM*

Because the issue of social risk management emerges as a result of private (asymmetric) information, the role of the actors/institutions need to be considered in their capacity to best deal with this situation. Since information asymmetry also gives rise to imperfect market institutions (market failure) as well as non-benevolent government behavior (policy failures), the relative roles have to be viewed in perspective.

Because *individuals/households* hold essentially all private information, much of the risk management can take place at the household level. Risk-mitigation (through the acquisition of different assets and insurance contracts) and risk-coping (through dis-saving/borrowing decisions) optimize the consumption path for a large range of risks. The better the market-based instruments, the more RM can take at this level (Hoogeveen, 2000). Correspondingly, the absence of appropriate market instruments leads to a strengthening of informal RM arrangements at the household level, which are often less effective and dynamically inefficient and can have undesirable social consequences (such as child labor).

Next to households, *communities* have a large stock of private information. Hence, lacking the appropriate market institutions, communities have developed various informal mechanisms of risk-sharing in developing countries. These mechanisms provide diverse instruments for risk mitigation and coping, deliver protection and services that market-based instruments cannot provide, and are part of "social capital." Examples include "susu" schemes in West Africa, mutual support arrangements reinforced through celebration and rituals in South Asian countries, and burial societies in Andean countries. Despite their risk sharing function, some of them may be socially undesirable because they perpetuate dependency structures or impede on economic development (Platteau, 1999).

NGOs may, or may not, have as much private information as tightly-knit communities, but their local and informal character allows them to monitor individual behavior better than formal market institutions. This explains the existence and importance of NGO-sponsored savings and micro-credit schemes in many developing countries around the world.

Table 2. Strategies and arrangements of social risk management—Examples.

Arrangement Strategies	Informal	Market-based	Public
<i>Risk Reduction</i>	<ul style="list-style-type: none"> • Less risky production • Migration • Proper feeding and weaning practices • Engaging in hygiene and other disease preventing activities 	<ul style="list-style-type: none"> • In-service training • Financial market literacy • Company-based and market-driven labor standards 	<ul style="list-style-type: none"> • Good macroeconomic policies • Pre-service training • Labor market policies • Labor standards • Child labor reduction interventions • Disability policies • AIDS and other disease prevention
<i>Risk Mitigation Portfolio</i>	<ul style="list-style-type: none"> • Multiple jobs • Investment in human, physical and real assets • Investment in social capital (rituals, reciprocal gift-giving) 	<ul style="list-style-type: none"> • Investment in multiple financial assets • Microfinance 	<ul style="list-style-type: none"> • Pension systems • Asset transfers • Protection of property rights (especially for women) • Support for extending financial markets to the poor
<i>Insurance</i>	<ul style="list-style-type: none"> • Marriage/family • Community arrangements • Share tenancy • Tied Labor 	<ul style="list-style-type: none"> • Old-age annuities • Disability, accident and other insurance (e.g. crop insurance) 	<ul style="list-style-type: none"> • Mandated/provided insurance for unemployment, old age, disability, survivorship, sickness, etc.
<i>Hedging</i>	<ul style="list-style-type: none"> • Extended family • Labor contracts 		
<i>Risk Coping</i>	<ul style="list-style-type: none"> • Selling of real assets • Borrowing from neighbors • Intra-community transfers/charity • Sending children to work • Dis-saving of human capital • Seasonal/temporary migration 	<ul style="list-style-type: none"> • Selling of financial assets • Borrowing from banks 	<ul style="list-style-type: none"> • Disaster relief • Transfers/Social assistance • Subsidies • Public works

Source: Authors, based on Holzmann and Jorgensen (1999)

Market institutions such as banks and insurance companies have to rely on public information and, as a result, are confronted by issues of moral hazard and adverse selection. On the other hand, if they are well-regulated and supervised, the shareholder value concept leads them to transparency and high efficiency, providing individuals nationwide with a broad variety of risk management instruments. Market institutions in a competitive environment

can also be efficient instruments to deliver services financed by the public sector (such as job placement, social assistance payments, etc.). The main challenge in coping with the new principal-agent problem in this context is to draft contracts that circumvent the private information problem as much as possible.

The *government* has many important roles in the area of social risk management. The most important of these roles are: (i) implementing policy actions for risk prevention; (ii) facilitating the set-up of market-based financial institutions, providing the enabling legal environment, ensuring their regulation and supervision, and helping facilitate the flow of information; (iii) providing risk management instruments where the private sector fails (e.g., unemployment insurance) or individuals lack the information for self-provisions (myopia); (iv) providing social safety nets for risk coping; and (v) enacting income redistribution if market outcomes are considered unacceptable from a societal welfare point of view.

International institutions such as the IMF, World Bank, ILO and UN organizations, bi-lateral donors, and the world community at large are pivotal actors in social risk management although their roles are sometimes controversial (see Deacon et al., 1997). The Bretton Woods institutions are important in the provision of adjustment and emergency funds during economic and financial crises, and UN organizations and bi-lateral donors engage in relief efforts after natural catastrophes. But beside this support for coping with adverse risks, international institutions and many international NGOs are also involved in areas of risk reduction (e.g., environment and labor standards) and risk mitigation (e.g., improvement in the functioning of financial markets).

All these actors not only offer risk management arrangements but can also be important generators of risk themselves, e.g., through the support of development programs that increase some risks for some people, the impact of aid in kind on domestic producers' risk, or by the fact that some of the service providers are in a monopolistic situation and extract rent, thereby increasing risk. This requires one to place SRM in a political context and ask under what types of conditions the actors are more or less likely to generate risk or offer good risk management arrangements. The answer to these questions will depend crucially on the power relationships and the degree of asymmetry of information.

4. Main Implications of the New Conceptual Framework and Questions about It

The SRM framework holds many implications for areas ranging from the conceptualization of SP to program design and implementation. This section reviews three main areas of interest: extending the traditional boundaries of SP, SP beyond public provision, and new guiding principles for SP.

4.1. Extending the Boundaries of SP

A first question relates to the overlap between SRM and a traditional view of SP. This has three main dimensions:

- Many areas of risk prevention and mitigation, such as economic and other governmental policy, reduce vulnerability and income variability and thereby support SP objectives,

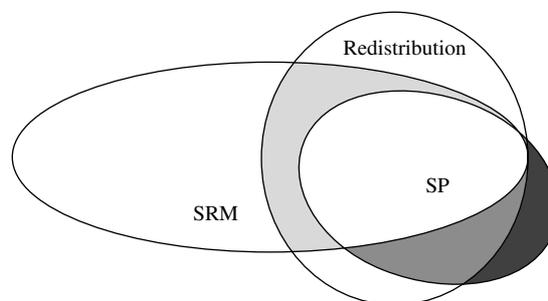


Figure 1. Overlaps and Boundaries of SRM, SP and Redistribution.

but they are well outside SP. What is the appropriate delineation among these activities and what is the role of SP?

- Public income redistribution goes well beyond transfers to the critically poor. Where are the boundaries with SP?
- An extensive version of SP stresses problems associated with exclusion and the need for inclusive public policies. Do they fall within the limits of SRM? Figure 1 presents the set of the three policy areas and their overlaps and likely boundaries.

In Figure 1, the dark shaded area of the SP set constitutes issues beyond redistribution and SRM, such as social exclusion, the gray-shaded area the intersection of redistribution outside SRM, such as income support for the critically poor, and the un-shaded area SP as part of SRM, as discussed above. The light-grey-light-gray-shaded area represents issues of income redistribution as part of SRM but outside SP, such as infrastructure investments in poor areas to prevent or mitigate risk especially for poorer people. The un-shaded areas of the redistribution set represents public measures to achieve a more equal income distribution outside RM considerations, such as progressive income taxation. Finally, the un-shaded area of the SRM set presents risk management outside SP, discussed next.

(i) Risk Management Outside SP, and the Role of SP There are many areas of public policy that impact vulnerability and income variability that are clearly outside SP, such as macro-economic stability, preventive measures against natural catastrophes, and infrastructure investment (e.g., roads and water supply). Against the background of the SRM objectives, this suggests an advocacy and analytical role for SP, a role that assesses the risk reducing/mitigating as well as coping-avoiding effects of these policies.

Advocating and building greater awareness about the importance of broad policies to create a less risky environment for households and communities is important. There is still an insufficient understanding among some academics in the developed world and policy makers in developing countries that sound macroeconomic policy, sound financial markets, enforcement of property rights, respect of basic labor rights, and growth-oriented policies are the best ingredients for dealing with risk and enhancing welfare.⁷ If these policies are in place, households are less susceptible to risk and thereby less vulnerable and should

be able to achieve most of their consumption smoothing with informal and market-based instruments. This calls for measures to build greater awareness within developing countries and among donors.

There may be a specific role for SP practices in alerting others to the fact that *preventive measures* are required and are cost efficient in present value calculation. Recent examples are the effects of “El Niño” and the welfare implications of this catastrophic shock for the worldwide population. Ex-post measures of governments’ ability to cope with the negative income effects may prove to be more expensive in present value terms than ex-ante measures such as investments in public infrastructure (Vos and de Labadista 1998).

The concept of SRM can be a powerful *analytic instrument* to assess many policy or project measures (such as road construction or irrigation schemes) on one aspect of their potential poverty reduction impact, namely their risk management effects. The construction of a road between an isolated village and a market town reduces the vulnerability of the community as it enhances the use of trade for risk sharing purposes (Collier and Gunning, 1999). Similarly, irrigation projects are a central instrument to reduce the risk in agriculture when rainfall is unpredictable.⁸

(ii) Income Redistribution Inside and Outside SP Income redistribution features importantly in SRM and SP activities, but compared to a more traditional view for SP or the welfare state (see Barr, 1998), it is not necessarily the primary or only goal. For some academics and politicians, the main objective of SP is income redistribution, and the correction of the primary and market-determined income distribution toward a more egalitarian final and government-corrected income distribution. In the SRM framework income redistribution enters as an equality objective linked with negative shocks and emerges as an important outcome of good SP programs at different levels:

- The support of the *critically poor* is a main objective of SP. Since the financing of the needed transfers in cash or in kind requires taxes on workers or non-working wealthy, it leads to an income redistribution as a result, but not as a primary objective.
- The objective of SP to *enhance equity* offers a second chance for redistributive actions. At a minimum, it enters at the level of equality of opportunity, and at the maximum it corrects the outcome as a result of negative shocks.
- Enhancing risk management capacity has high redistributive effects for individual welfare positions, yet it does not require direct inter-personal income redistribution to achieve a more equal welfare distribution (Holzmann, 1990).
- However, many redistributive efforts by the government that emerge through a tax-transfer mechanism with a clear income redistributive objective or through the distributive effects of public goods provision are largely outside SRM and SP.

(iii) Social Protection and Social Inclusion Advocates of policies to combat social exclusion argue that modern social protection should not be limited to traditional forms of income support but should include measures to promote social cohesion, solidarity and inclusion (Silver, 1995). This raises the question of whether social inclusion is legitimately part of the remit of social protection.

At one end, social inclusion, cohesion, solidarity and stability are the desired outcomes of SRM, which is merely directed toward income aspects of risk, however widely defined. All the above social policy objectives can be defined as positive externalities resulting from well designed and implemented SRM. For example, a well designed income support system for the unemployed will not only enhance individual welfare through lower vulnerability and better consumption smoothing but will also help achieve qualitative objectives such as social stability. Providing income support for the elderly not only enhances their consumption possibilities but also allows them to better participate in social life (including cultural activities and travel). Social assistance measures and access to basic health and education for the poor provide better chances for the parents and their children to integrate into the society.

On the other end, Social Protection measures would go well beyond mere financial and income-oriented considerations to include a more holistic, pro-active policy to influence the social structure of an economy. This approach would include investments in the socio-cultural infrastructure by supporting informal arrangements and upgrading the non-profit sector. It would quite likely include a strengthening of the “social rights approach” of social policy. Finally, it would include an extended view of instruments and institutions to be used under Social Protection, including the concept of “social capital” (Badel, 1999).

4.2. *SP beyond Public Provision*

One main implication of the framework is that Social Protection is often or predominantly provided outside the public sector through the informal and private sector, and involves many actors, ranging from individuals, communities and NGOs to governments and international institutions. This raises three important questions: What are the possibilities of the public interventions to facilitate risk management in the other sectors? What is the trade-off in developmental terms to support or restrict SRM in different sectors? And since all of the actors operate in their own interest and under asymmetric information constraints, what are the implications for design and sustainability?

(i) Public Intervention and SRM in the Non-Government Sector The core institution for managing idiosyncratic risks was, and quite likely still is, the *family*. Since information asymmetries are small, interaction takes place on a daily basis, and commitments can be easily verified (and perhaps enforced), most risk management takes place in this unit. While the break-down of the extended family in some parts of the world has required the introduction of alternative measures, such as public or privately provided pensions, even the core family or single parent family of today’s industrialized countries employs many of the risk management strategies. But the power within families is not equally distributed, the effectiveness and the efficiency of SRM may not be gender neutral, and the legal or informal position of women and children may not be secured. This raises the issue of the possibility of government to positively influence informal SRM through legislation, monetary and non-monetary incentives, the provision of information, etc. While there is selective evidence on the effects of some interventions, our general knowledge in this area is thin.

Similar uncertainties exist with regard to *communities and NGOs*. Both are important actors in the provision of risk management instruments, and many have developed without

government intervention. Informal risk sharing mechanisms at the community level are a result of repeated interactions and a commitment technology developed over time. Can this be encouraged or strengthened by public interventions, and how? Or is it easier to influence the creation and functioning of NGOs to provide SRM instruments? Furthermore, how can this be done on a sustainable basis?

In these areas of informal SRM just discussed, we know more about what governments have done to crowd out desirable risk management activities, something on what governments can do to crowd out undesirable coping mechanisms (e.g., child labor), and little about what governments can do to “crowd in” desirable risk management interventions.

In contrast to informal provisions, the potential of government in helping to establish and influence *market-based risk management instruments* seems to be better understood. There is a growing knowledge of the role of government in sound regulation and supervision of financial market institutions, ironically helped by recent worldwide financial crises. But regarding the most vulnerable and marginalized, formal sector institutions serve them little or not at all. Here, a lot of hope has been placed on the development of microfinance institutions, but as some authors suggest, the promise of microfinance may have pushed far ahead of the evidence (Morduch, 1999b). What both developing and developed economies have in common is the need for “financial market literacy,” i.e., an understanding of the role and functioning of financial institutions and the instruments provided.

(ii) *SRM and Economic Development* SRM is not neutral to economic development (Ahmad, Dreze, and Sen, 1991): it may support it through the encouragement of risk taking, the choice of more productive technologies and the way in which it deals with gender, but it may also hamper it through the elimination of risk and introduction of incentives to change individual behavior. This renders the support of risk management instruments by the government an important tool for economic development and may give rise to a trade-off between short-term effectiveness and long-term dynamic efficiency.

As discussed in Section 2 (ii), there are many arguments for the view that *insufficient risk management instruments impede efficient decisions and economic growth*. The most important channels are likely to be too little risk taking, inefficient informal risk sharing mechanism and sub-optimal choice of production technology by the poor and near poor, all which contribute to too low growth and perpetuation of poverty. In turn, appropriate risk management instruments provided by markets or government compared to self insurance allow for higher risk taking by individuals. Risk taking is productive and risk can be seen as a factor for production with the same status as the better-known factor like capital and labor (Sinn, 1998, quoting Pigou 1932). Furthermore, lacking appropriate risk management instruments make countries also more vulnerable to external shocks which can lead to breaks in the growth path of countries. Recent empirical evidence suggest that latent social conflicts and weak institutions of social conflict management (including low level of social safety nets) may explain why so many countries have experienced a growth collapse since the mid-1970s (Rodrik, 1999).

On the other hand, however, the provision of RM instrument may also modify individual behavior in ways that have *detrimental effects on economic development*. The public provision of insurance against income risk may improve the outcome in the face of a wide range of risks but may also reduce individual efforts (such as job search) or lead to taking too

much or too little risk. This may be compounded by pervasive income redistribution that is often part of public welfare systems, and there is empirical evidence from OECD countries that an increase in social risk insurance in the welfare state reduces entrepreneurship (Ilmakunnas et al., 1999). In addition, welfare state interventions may imply a redistribution paradox where more redistribution results in more inequality of the pre- and/or post-tax income distribution (Sinn, 1995 and 1998). This calls for a careful analytic and empirical assessment of publicly provided and managed risk management instruments.

Starting with informal SRM instruments in less developed economies, one can also be confronted with a trade-off between (*short-term*) *distributive effectiveness* versus (*long-term*) *dynamic efficiency*. A wide variety of informal arrangements may be effective in providing risk mitigation for the covered group, but it may come at high costs for current and future income, particularly for the poor. On the other hand, many publicly provided alternatives appear costly in the short run because additional budgetary resources have to be raised but may imply long-term efficiency gains if, for example, repressive informal institutional structures and low-level production technologies are removed. Therefore, there can be a trade-off between long-term economic gains and improvement in the inter-temporal budget constraint of government and the short-term cost of the new RM arrangement, which is likely to hit the short-term budget constraint in countries with low tax capacities especially hard.

(iii) Political Sustainability Issues Discussions about the SP programs (or more generally about the welfare state) have long been seen in terms of a simple trade-off between equality and efficiency once the social welfare function over individual income positions is defined. Yet the experience with public interventions and attempted reforms has shown that the best technical solution may not be politically sustainable.⁹ As a result, the original, first-best design is blurred or totally reversed, while changes toward a potentially sustainable second-best solution prove politically difficult or even impossible. This suggests that considerations of political economy have to be part of system design and reform. And the simple trade-off has to be extended to a “*menage-à-trois*”: equality, efficiency, and political sustainability. The deterioration in system design and implementation of public SP programs is the result of changes in voter coalitions as well as personal interests of politicians and bureaucrats. One method of protecting the original design consists of establishing an appropriate *self-binding mechanism, enhanced transparency, and stricter accountability*. Relatively successful examples of *self-binding mechanisms* include the long-term fiscal projections under the US pension system, present value budgeting in New Zealand, and periodic evaluations of all existing programs and of proposed changes in many industrialized countries.

Once political sustainability becomes a criterion for program design, the resiliency toward *political risk* becomes *an important element for program selection*. The conjectured trade-off between equality, efficiency, and sustainability suggests that an explicit second-best solution from an efficiency or equality point of view may be selected if it is considered more resilient to political risk. Examples include individual savings accounts to cope with income risk due to unemployment or health compared to un-funded and publicly managed provisions.

Reforming public programs of risk management such as pensions, unemployment or sickness benefits, proves very difficult politically. Entrenched interests, acquired rights or a

lack of credibility of the proposed alternatives are among the most common obstacles. While resistance to reform is not specific to SP programs, the problem is particularly prevalent and difficult to overcome. This suggests that, in order to be able to introduce new and better instruments of SRM, *a better understanding of the political economy of reform is required.*

4.3. New Guiding Principles for SP

For a conceptual framework to be operationally useful it must help in the derivation of policy recommendations. This section outlines some of the guiding principles suggested by the SRM framework, tempered by the experience with SP programs.

(i) *Espousing a Holistic View* The complexity of the SRM framework demands a holistic view of the issues, options, and players:

- a. At the level of issues and options SRM requires moving away from strict categorization of traditional programs in cylinders (i.e., public pensions, labor market interventions and social safety nets) and seeing their interrelation, interaction with informal and market-based arrangements, and the (partial) substitutability or complementarity of the main strategies;
- b. At the level of players, it calls for close interaction between the main stakeholders (the people), those who govern them, and those from institutions who want to be helpful;
- c. At the level of information, the new approach needs a new, or least different, data set for benchmarking and evaluation and improved analytical techniques. Data to measure and assess the effectiveness of alternative SRM instruments does not yet exist, and its future availability is likely to require a cooperative effort among countries, international institutions and other national and international players.

(ii) *Balancing Coping, Mitigation and Risk Reduction Strategies* On face value, the best social risk management is to make sure that the (downside) risk does not even occur. Risk mitigation comes next since the effects of risks are decreased ex-ante. Risk coping is essentially the residual strategy if everything else has failed. However, since each of these strategies have direct and opportunity costs, full reliance on risk reduction or mitigation may not be efficient or feasible. The experience of the formerly centrally planned economies has demonstrated that trying to eliminate all risks ex-ante through quantity planning, official price setting and public ownership of productive means has serious costs in terms of slower economic development. Still, too much of current government intervention, particularly for the poor, is concentrating on risk coping. To increase effectiveness, more attention must be paid to risk mitigation and reduction. Promising areas where some experience and expertise exists include: improved labor markets, skill enhancement of the labor force, participatory community projects, access to safe financial assets, and appropriate unemployment benefits.

(iii) *Building on Comparative Advantage of Actors* Social risk management has many actors, from individuals, households, communities, and NGOs to the government at various

levels, bi- and multilateral donors, international organizations, and the world community as a whole. They are characterized by different degrees of asymmetric information and instruments to overcome its effects. All have different advantages but none can provide perfect social risk management instruments. Comparative advantages change over time as efficiency of information and markets develops. This suggests that no single actor or arrangement should dominate but that social risk management should build on the comparative advantage of each with flexibility to allow for changes over time. Specifically, the new role of governments and international institutions in social risk management could be to:

- a. Strengthen their direct involvement in risk reduction, in particular in areas of disaster prevention and building the human capital base, including through the fight against child labor and provision of equitable and inclusive labor markets, early childhood development and youth development services, etc.;
- b. Reduce their direct involvement in risk mitigation while enhancing their role as regulator and supervisor of instruments provided by the private-sector (e.g., health insurance, pensions, etc.);
- c. Focus their involvement in coping on the incapacitated, very vulnerable, and crisis situations.

(iv) Matching Interventions and Risks There are certain types of risks that individuals, households or communities are poorly equipped to handle, including natural disasters, epidemics, and financial meltdowns. These risks call for government interventions and support from international institutions and the world community. Less catastrophic risks allow for informal and market-based social risk management but in many instances require public interventions in the form of regulation, mandating or provision. In order to be effective and dynamically efficient, however, the intervention must specifically address the type of risk and its environment. For example, unemployment insurance may not always be the best RM instrument when confronting repeated and large covariate unemployment risks in an economy with low administrative capacity and large informal sector. The experience with the difficult transition from plan to market in the 1990s and the most recent financial shock in East Asia have emphasized the need for tailored solutions profiting from world-wide experience.

5. Conclusions

The proposed new conceptual framework of SRM is intellectually appealing and may be productively applied in the developing and developed economies. The true value of any new concept, however, lies in its ability to help better understand and map reality and propose and implement better policies. Here the verdict is still out, but there is cause for optimism.

The response of policy makers and designers so far has been very encouraging.¹⁰ For ministers of finance, the concept gives SP a role, indicates a need for instruments that goes well beyond the demand for more fiscal resources, and provides a language with which

they are familiar. The concept offers policy designers an integrated approach and suggests a broad range of risk management mechanisms: It gives a strong role to well developed financial markets to supply risk management instruments and to price risks. It stresses the importance of functioning informal risk management arrangements, most importantly the family and community. It provides a framework to rethink traditional social protection programs such as labor market interventions, pensions and unemployment insurance, and social safety nets. And draws to the attention of policy makers and policy analysts the importance of prevention and mitigation beside the mere copying strategies.

In terms of further development of the framework and research, much more needs to be done, and the tasks include developing a better understanding of several topics: an analytical sound but operational definition of vulnerability; how government interventions can and should facilitate informal risk management arrangements; theoretical and empirical guidelines for the balance between risk prevention, mitigation and coping; and the circumstances under which the various actors best perform their roles as providers of risk management and, conversely, serve as the source of risk.

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Notes

1. The recognition of the importance of risk management for the poor, together with the need for the creation capacities and opportunities, and for voice and empowerment, form also the center piece of the World Development Report 2000/01 (World Bank, 2000).
2. The notion of risk typically refers to uncertainty or unpredictability that result in welfare losses. For convenience we use the word risk in its broadest sense to include both predictable and unpredictable elements. For individuals lacking risk management tools, predictable events (such as seasonal drought) will also have negative welfare effects, thereby creating welfare risks. Yet a more precise notion such as "undesirable fluctuations" (Sinha and Lipton, 1999) is somewhat cumbersome.
3. The SRM framework deals with risk in a generic sense but can be best understood in the form of income risk, encompassing market income, imputed income, income in-kind, etc. This broad definition of income also takes care of concerns about social services that cannot be readily bought on the market. Hence, SRM is not restricted to the monetary aspect of income/consumption of individuals or households, but merely emphasizes the income equivalent for analytical reasons. The notion "social" refers to the form of risk management which is largely based on interpersonal exchanges and not to the form of risk. That is, we discuss the social management of risks and not the management of social risks.

4. The term equity can be given many interpretations. In its most prominent use it is linked with equality of outcomes (such as income, consumption or wealth) and a sense of fairness. Yet there are diverse variables that enter into an assessment of equity, and the lack of adequate valuation functions over all variables means they cannot be aggregated into a single scalar measure. This has led Sen to argue for some time that we should think of equity in terms of a check list and use the results for “the identification of patent injustice” (see Sen, 1998). Our use of equity is more germane to the traditional term “equality.”
5. Balanced reciprocity means that for any “gift” there is a strong assumption that at some, as yet unknown, time in the future there will be a counter gift. In this sense, informal insurance arrangements may be similar to a loan where the repayment loan is state-contingent (e.g., see Plateau 1996, Ligon et al. 1997). Evidence for the latter is provided by Udry (1990; 1994) for Nigeria. On average a borrower with good realization repays 20.4% more than he has borrowed while a borrower with bad realization repays 0.6% less than he borrowed. Moreover, repayment is contingent on the lender’s realization. A lender with a good realization receives on average 5% less than he lent, but a lender with a bad realization receives 11.8% more than he lent.
6. The critically poor are the poor, who could not provide for themselves even if employment opportunities did exist.
7. More recently, the ILO, international trade union organizations (such as ICFTU) and international NGOs have become aware of and more vocal about the positive welfare consequences of macroeconomic stability and have enhanced their interaction with the Bretton Woods Institutions in this regard.
8. In the past these investments have largely been evaluated by their estimated rate of return. In the future, a further estimate may be added: how the investment affects vulnerability. This will require new data and analytical techniques.
9. For example, the reserve funds in pay-as-you-go pension systems in developing countries have typically been depleted through increased benefits or outright theft. These funds should have allowed for a lower steady-state contribution rate. For a discussion, see Holzmann and Stiglitz, 2001.
10. See Holzmann (2001) and visit the World Bank web-page for progress in the application and implementation of the SRM framework: <http://www.worldbank.org/sp>

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