

Vulnerability to Poverty: A Framework for Policy Analysis

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This note is a summary of arguments developed in Stefan Dercon, *Assessing Vulnerability to Poverty*, paper for DfID, August 2001.

The full document and more papers on these issues can be found at:

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1. Introduction

Risk and vulnerability to poverty has received renewed attention in recent years. This note presents a framework for discussing risk and vulnerability, and its links with poverty. Another note will focus on measurement issues.

Vulnerability to poverty is an important dimension of poverty and deprivation, but it is also a cause of deprivation. There is evidence on the permanent effects of shocks on human capital formation, nutrition and incomes. Risk-reducing actions to avoid risk are also causing permanently higher poverty. There is evidence on the permanent effects of shocks on human capital formation, nutrition and incomes. Risk-reducing actions to avoid risk are also causing permanently higher poverty. The presence of poverty traps and other forms of persistence means that reducing vulnerability will have an important impact on poverty reduction.

It is this mounting evidence that has encouraged economists to give renewed attention to the issues of risk and vulnerability: it may be a cause of persistent low incomes and low growth, affecting the extent to which developing countries can benefit from a growing world economy but also impairing the scope for global economic growth and integration.

2. Developing a framework

The proposed framework borrows from development microeconomics, but parallels with other approaches, such as livelihood analysis, should be obvious. The main purpose is to give a simple framework that can illuminate the link between risk and poverty and attach more exact meaning to the idea of vulnerability in this context. The result is a simple understanding of how risk may translate in vulnerability and in poverty, and checklist of sources of risk that should be incorporated in thinking about vulnerability.

Defining poverty, risk and vulnerability

Poverty is increasingly acknowledged to be multidimensional. There is no reason to limit a concept and even measurement of vulnerability to income, consumption or other money-metric dimensions only, even when using quantitative means. In our framework, I explicitly allow for other dimensions of poverty, such as related to educational opportunities, mortality, nutrition and health. Broader dimensions, such as exclusion and the experience of poverty are valid dimensions to consider as well.

Risk relates to events possibly occurring, beyond the direct control of individuals and households. The focus in work on vulnerability should be on downside risk.

In this note, I distinguish explicitly vulnerability from poverty – below I give more details. At this stage, it suffices to note that I will always use the notion of vulnerability relative to some benchmark. In poverty policy contexts, vulnerability to poverty, in its various dimensions, is the appropriate concept. Vulnerability is not just a function of the environment a person lives in: it is the product of risk, of person's conditions but also of his/her actions.

A framework for analysing risk and poverty

I borrow from economics to describe a framework for analysing first poverty and then the links with risk and vulnerability. Table 1 summarises the framework. The framework focuses on households; but they consist of individuals and are part of groups and communities. Households and communities are units of conflict and co-operation, a dimension that may get lost in the vocabulary of this note, but is important in applying the analysis. The framework distinguishes three levels, from assets, over incomes generated from these assets to outcomes and capabilities. Each transformation from one level to the next involves active decisions. Each level and the transformation considered involve risk.

Households and individuals have assets, such as labour, human capital, physical capital, social capital, commons and public goods at their disposal to make a living. Assets are used to generate income in various forms, including earnings and returns to assets, sale of assets, transfers and remittances. Households actively build up assets, not just physical capital but also social or human capital, as an alternative to spending.

Incomes provide access to dimensions of well-being: consumption, nutrition, health, etc., mediated by information, markets, public services and non-market institutions. Generating incomes from assets is also constrained by information, the functioning of markets and access to them, the functioning of non-market institutions, public service provision and public policy.

Poor households are seen in this framework as weighing current survival and well-being, with decisions affecting their future possibilities. They are typically severely constrained in their options by their assets and the conditions they face.

The role and nature of risk

Risks are faced at various levels in this framework. They do not just relate to environmental or epidemiological factors. Risks involve also markets, public policy and social capital. Assets, their transformation into incomes and in turn their transformation into dimensions of well-being are all subject to risk.

Assets are subject to risk themselves. Examples include destruction due to environmental factors or conflict, the erosion of human capital due to health or unemployment, the collapse of asset markets and values, problems with property rights and their enforcement, risks in social capital and access risk to public goods and commons.

The transformation of assets into income is also subject to risk. Beyond obvious but important factors such as climate or health, one should focus on (inter alia) price risk, the covariances between different income risks, risks to access of rationed inputs, risks of exclusion from informal or formal safety nets, problems related to contract enforcement and risks to changes in policy. Entitlements from incomes are also mediated by risk, including price risk but also and importantly, risks related to imperfect information and to the provision of public goods and services, especially since they often are rationed.

Risks related to policy, public services, access to commons and public goods, risks to access and the functioning of social capital and risks of exclusion from formal and informal safety nets are largely ignored in standard approaches, such as in WDR 2000/01.

Different risks are quite different in size, likelihood and frequency over time. Different characteristics of risk have different implications for the ability to cope with them, as well as for policy. Characteristics include the extent of state dependence or correlation over time, whether the shocks are rare but very large, whether the shocks are occurring at the same time across individuals, rather than individual-specific.

Most households and individuals are aware of the existence of these different sources of risk and households actively try to cope with this risk in a variety way, using well-documented strategies.

Defining vulnerability and its causes in this framework

Well-being and poverty are the ex-post outcome of a complicated decision process of individuals and households over assets and incomes, faced with risk. Vulnerability to poverty is the ex-ante situation, i.e. before one has knowledge of the actual shocks that will occur. Vulnerability is determined by the options available to households and individuals to make a living, the risks they face and their ability to handle this risk.

A starting point to understand vulnerability to realise that they consist of four, possibly quite different groups: the permanently poor, those becoming permanently poor in the future due to some trend evolution, those that are likely to become poor due to predictable events (such as seasonality) and those likely to become poor due to risk and shocks. While the focus in much current work may be on the last group, the other groups, including those facing seasonality, should not be excluded.

3. Vulnerability and policy

Policies for reducing vulnerability and the risks of policy change: a comment

Any policy to try to reduce vulnerability must start from understanding the nature of the vulnerability faced by individuals, households and communities. The framework may then provide a checklist. This will require an understanding of how observed outcomes are linked to incomes and assets. Furthermore, one must develop an understanding of the different sources of risks faced by household and their relative importance. Finally, one needs to study how risk affects assets, incomes and entitlements, ex-ante and ex-post, requiring a study of ways individuals, households and communities cope with risk.

Policies to reduce vulnerability will include standard poverty reduction policies, aimed at improving levels and trends in well-being, but will need to be supplemented with policies focusing on risk and on fluctuations in well-being, such as related to seasonality.

The World Development Report 2000/01 acknowledges that vulnerability reducing policies should be more than safety net policies, but convincingly argue to start from the observed strategies used by individuals, households and communities. Optimal policy design should aim to strengthen, complement and replace existing strategies to obtain maximal reduction in vulnerability. Replacement of traditional mechanisms is not necessarily problematic, although more needs to be known about the extent to which, how these changes are occurring and their net impact.

Markets and vulnerability

Markets are means of linking people both spatially and over time. Shocks that otherwise would have afflicted only 'island' economies are now transmitted across a larger group of people. Markets replace some 'natural' shocks by seemingly 'man-made' shocks. Trading risk via markets is profitable to all. Vulnerability should not increase, but shocks will now impact in different ways and on different people. Man-made shocks generally tend to be considered less acceptable by people, even if their impact is similar or smaller.

Large economic shocks and vulnerability

The transmission process in integrated economies would mean that large economic shocks are passed on relatively fast, via relative price changes. The financial crisis in the late 1990s in East Asia and other parts of the developing world may suggest that vulnerability to such shocks had increased due to fast liberalisation, in the context of (too) weak financial institutions.

Ex-post, it can be stated that despite high growth and poverty reduction in East Asian countries such as Indonesia, vulnerability to poverty following large shocks had remained relatively high. The main effects appear to have been the long term reduction in health and education investments by parents in their children, in order to cope in the short run.

Economic reform as a cause of vulnerability?

It tends to be ignored that economic reform often starts in the midst of deep economic crisis, when households and individuals have stretched resources in order to cope with this crisis. Economic reform is experienced by the vulnerable as a large unexpected shock or a predictable one they cannot easily respond to. This should be considered in policy design. Some relatively standard economic reform measures for pro-poor growth may be contributing to substantial vulnerability reduction as well. But some may be conflicting. Examples are weighing the protection of past health and education investments of some with expanding health and education to those previously excluded; or limiting seasonal price fluctuations by public intervention versus affecting agricultural markets and pro-poor growth in the long run.




Public safety nets, informal insurance and changes in vulnerability

Traditional coping mechanisms, such as via mutual insurance, is likely to come further under pressure with economic mobility, wealth differentiation, changing age profiles and the AIDS crisis in the developing world. The security of access to land and commons is also coming under further pressure.

Another source of increased vulnerability could be safety net policies themselves, however well-intentioned. For example, with imperfect coverage by or limited scope of the safety net, support to some individuals may result in negative externalities on others, via the breakdown of reciprocal arrangements. Rationing of transfers in safety nets or unpredictable coverage and scope, as in food aid programmes, implies that very little security is offered. In fact, it is possible that it even results in some households being more vulnerable than without due to the uncertainties of the formal safety net.

Any policy to reduce vulnerability requires clear commitment and credibility. In the first place, it must be predictable.

Table 1 **A framework for analysis**

<u>Assets</u>	<u>Incomes</u>	<u>Well-being - 'Capabilities'</u>
<ul style="list-style-type: none"> • Human capital, labour • Physical/financial capital • Commons and Public goods • Social Capital 	<ul style="list-style-type: none"> • Returns to activities and assets • Returns from asset disposal • Savings, credit and investment • Transfers and remittances 	<p>ability to obtain (<i>inter alia</i>)</p> <ul style="list-style-type: none"> • Consumption • Nutrition • Health • Education 
<p><i>Examples of Risk (a)</i></p> <ul style="list-style-type: none"> • loss of skills due to health or unemployment • land tenure insecurity, uncertain titles to other assets • asset damage due to climate, war or disaster • access to commons and unclear commitments regarding public goods • violations of commitment and trust • loss in value of financial assets or pension funds linked to inflation, stock market or exchange rate collapses. 	<p><i>Examples of Risk (b)</i></p> <ul style="list-style-type: none"> • output risk due to climatic shocks, disease, conflict • output price risk • covariance in incomes and asset prices • risk in asset returns from savings and investment (including inflation) • uncertain access to inputs or cash flow support during production • imperfect enforcement of contracts, such as payment for goods or services rendered • uncertainty about enforcement of informal arrangements, including informal protection – for example, transfers and remittances may not materialise • uncertainty regarding rationing in public support, for example, risk of exclusion from safety net • imperfect information and knowledge about opportunities • risks in policy environment – credibility and commitment to continue policies 	<p><i>Examples of Risk (c)</i></p> <ul style="list-style-type: none"> • price risk in food markets • food availability and rationing risk • uncertain quality of public provision in health and education • uncertainty about rationing scheme employed in health or education • imperfect knowledge about health and nutrition ‘production’ (uncertainty about right answer)

