Trade Liberalisation and Poverty Reduction

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Understandings of the relationships between international trade and poverty reduction have changed considerably over time, and at any given time have been influenced by ideological predispositions and to some extent intellectual discipline.

This first part of this section of the report will attempt to establish some basic conceptual principles for the analysis of trade-poverty links. This involves first reviewing the various definitions of poverty that may be adopted; and then outlining the ways in which the specific links between trade and poverty reduction may be conceived and tested. The second part of this section then explores the likely poverty implications of likely Doha-induced policy changes in selected key aspects (namely agriculture; manufacturing – with an emphasis upon textiles and garments; services – with an emphasis upon Mode 4; and TRIPS – with an emphasis on public health implications).

2.1 Conceptual framework

Defining poverty

In part, the differences between those who are inclined to see trade as good for poverty reduction and those who see it as bad can be attributed to different understandings of what is meant by poverty and how it should be measured. The definition of poverty in academic and policy discourses on international development broadened considerably over the course of the 1990s. In this very brief summary of the debates, we will examine how a 'narrow' definition of poverty (in terms of per capita income or expenditure which falls below a defined poverty line) has progressively been challenged – or expanded – by concepts of poverty defined in other terms. Essentially, there are two distinct, albeit related, strands to this debate. The first strand is fundamentally philosophical and concerns the *meaning* of poverty at a fairly profound level, and in particular the distinction between means (e.g. income) and ends (e.g. life expectancy, substantive freedoms) as the focus for the analysis of wellbeing. Depending on outlook, some components (e.g. expenditure, assets, or literacy) can potentially be classified as either means (instrumental) or ends (intrinsic) in the definition of poverty. The second strand of debate is more prosaically methodological, and revolves around the accuracy of different approaches to the measurement of poverty: even if it is accepted that poverty is defined in material terms as falling below a minimum acceptable level of consumption, there is room for debate as to whether this level can be accurately captured in surveys of p.c. expenditure, or whether analysis also needs to take account of access to common property resources, assets, and so on.

The following pages will provide a brief review of i) approaches based on income or expenditure poverty lines, i) basic needs, capabilities and human development; iii) attention to household welfare dynamics, vulnerability, and the distinction between chronic and transitory poverty; and iv) – and still more marginal to the mainstream understanding of poverty – a cluster of concepts around empowerment, dignity and

social capital. It will conclude with a summary of some of the achievements and tensions in the turn-of-the-century consensus understanding of poverty in broad or multidimensional terms.

'Money-metric' definitions: income and expenditure

At the start of the 1990s, most donor agencies implicitly or explicitly defined poverty in a relatively straightforward and quantitative way, in terms of a low level (imputed or surveyed) of command, through money, over goods or services.[1] The most obvious such measure is as a level of p.c. daily consumption or income that is inadequate to support a decent standard of living. This definition of poverty could be either absolute (defined in essentially biological terms of avoiding protein-energy malnutrition and meeting other fundamental needs) or relative (in terms of having an income or expenditure that was, for example, less than half the national median).[2] While relative poverty lines are often used in rich countries, research and policy in the developing world almost always uses an absolute poverty line.[3] Having defined a poverty line, household sample surveys – now largely standardised along the model of the Bank-supported Living Standard Measurement Surveys (LSMS) - are used to derive a series of indices of poverty (see Box).

Box 1 Foster-Greer-Thorbecke (FGT) measures of poverty

Comparison of sample survey data against an established poverty line allows for the calculation of three measures of poverty known as the Foster-Greer-Thorbecke measures. Of these, the first – the *poverty headcount* – is the simplest and most widely used, and simply states the percentage of the population (or, sometimes, of households) which fall below the poverty line. The second FGT measure – the *poverty gap* – states the average depth of poverty, that is, the extent to which the mean expenditure/income of a poor household falls below the poverty line. The final measure – the *squared poverty gap* – weights individuals or households by the distance by which they fall below the poverty line, reflecting the proportionately greater difficulty faced by the extreme poor.

These 'money-metric' measures of poverty have been in use throughout the twentieth century, and provide an essential basic part of the picture of poverty in any given context. However, they have their limitations, recognition of which has led to various other measures being proposed as alternatives or supplements.

From means to ends: basic needs, capabilities and human development

In the 1970s and 1980s, concepts of 'basic needs' and 'human development' placed the emphasis upon the fundamental outcomes of human well-being (e.g. health,

[1] The crudest implicit measure of poverty is p.c. GNP, used (for example) to define 'low income' and 'medium income' countries (and as one of the criteria for defining 'least developed' countries). Although useful at a broad level, such a simple average measure is clearly extremely limited for understanding actual levels of income or consumption. Household surveys sometimes define poverty in p.c. income instead of p.c. expenditure: this is less accurate, but considerably easier and faster.

[2] Although such poverty lines are almost always calculated in currencies and prices that are nationally (and sometimes sub-nationally) specific, attempts are sometimes made to compare levels of poverty and rates of change against some internationally standardised poverty line. The most well-known example is the attempt by the DAC (later adopted by the UN) to define poverty as less than $1 p.c./day (1995 prices, adjusted for purchasing power parity) under the first MDG.

[3] Developing countries usually calculate the absolute poverty line at two levels. The food poverty line (or extreme poverty line) is calculated in terms of the p.c. expenditure that an individual requires to obtain a food basket which supplies the minimum amount of nutritional energy (typically 2,100 calories/day) necessary for healthy living. However, even the absolute poor will have to make *some* non-food purchases (e.g. of clothing, shelter, and health care). The 'overall poverty line' is thus calculated by adding an increment (typically around 15%) on top of the food poverty line

education, literacy), and emphasised that income or household expenditure was only a means to these ends.[4] This tendency can be seen in the Bank's movement towards a 'basic needs' orientation under McNamara; in Sen's writings on the different forms of entitlement that could lead to the realisation of capabilities; and in the UNDP Human Development Reports (which drew considerably on Sen).

Expanding microeconomic analysis: assets, vulnerability and livelihoods

There are a number of methodological problems inherent in attempts to define and identify poverty through the measurement of p.c. expenditure (or income) during household surveys, given the complexity of inflows, outflows and stores in household economies in the developing world. Very briefly, these problems include:

Firstly, poverty line approaches face difficulties in accounting for un-monetarised inputs to livelihood, which may be extremely important in the developing world. [5] Although most LSMS now attempt to record such flows and assign them a monetary (income or consumption) equivalent, these calculations involve some fairly heroic assumptions (e.g. as to whether to assign a pre- or post-harvest price to the consumption of own-produced food crops; how to account for pronounced geographical variations in prices when markets are poorly integrated; and so on).

Secondly, 'money-metric' approaches often entail questionable assumptions about the intra-household distribution of consumption. FGT analysis typically of necessity assumes a nuclear household and derives p.c. consumption or income as averages of household aggregates (perhaps adjusting for lower consumption needs of children). In practice of course the concept of a bounded household itself may be problematic (as in much of rural sub-Saharan Africa); even within a nuclear household, individuals may enjoy levels of consumption considerably less or more than the simple average, depending on age and sex.[6]

Thirdly, in focusing on flows of expenditure and income, LSMS-type analysis may overlook or underplay the role of 'stocks' (savings and assets) in shaping wellbeing. A poor household spending large amounts on emergency medical treatment in the survey year may be doing so by selling off key assets at distress prices or taking out loans at high interest: if this high level of p.c. expenditure classifies them as richer than a more prosperous but healthy household, then p.c. expenditure is obviously misleading as a measure of wellbeing. Even under normal circumstances, a wealthy household can sustain a good standard of living at a lower level of p.c. expenditure than a poor household, given that it has cash reserves (or access to credit) which enable it to buy in bulk, at lower unit costs, when prices are low, whereas poor households typically buy in small quantities as and when they have money, in the food deficit period prior to the harvest (and thus at higher prices). The rich have often already acquired the assets necessary for a good standard of living and so may register

[4] The point was made that there are means other than private income and expenditure (e.g. state or community provision) to the ends of human development. These are used to explain deviations from the normal regression of p.c. income/expenditure and human development in, for example, China before Deng, or Kerala and West Bengal in India (see Sen 1989 or Drèze and Sen 1989 pp. 204-225).

[5] e.g. subsistence production; exchanges of goods and services not involving cash (i.e. barter, sharecropping and the like); consumption of foods or other materials obtained from common property resources; non-cash state entitlements; transfers (gifts or loans) from kin or neighbours; etc.

[6] See various contributions to the IDS special issue on Researching the household (Vol. 22 No. 1 1991); Harriss 1995; Kabeer 1991.

a lower level of p.c. expenditure in a given year than a poor household which is still investing in (for example) better housing materials or goods such as a bicycle or plough.[7]

Possession of assets is also important in that it allows for lower costs (e.g. owning a plough relieves one of the need to pay for ploughing; owning a bicycle reduces the cost of paying for transportation to a market or clinic); provides collateral which allows access to credit (or access on better terms); and provides a buffer against crises and life cycle events, as assets can be sold off to raise cash and so smooth expenditure/consumption. Once again, surveys can and do attempt to collect information on assets and analysts can and do attempt to assign them an expenditure value to allow for the fact that assets can be converted into income (and expenditure). However, this is likely to involve order-of-magnitude assumptions, as the value of a given asset can vary greatly between regions (especially with regard to productive assets) and can change considerably between high and low season and good and bad years. Assigning a value to the role of assets and savings in consumption smoothing on the basis of 'snapshot' sample survey is extremely hard.

Fourthly, there are more prosaic difficulties regarding the adequacy of sampling frames (e.g. the exclusion of 'illegal' migrants to urban areas); the use of recall periods; and so on. The fact that there are often large discrepancies between reported incomes and reported expenditures in the same LSMS suggests that there is good reason to treat the accuracy of survey data with caution.

Finally, reflecting but independent of the observations above regarding points at which imprecision can creep into income or consumption measurement, it must be remembered that defining a poverty line always and unavoidably involves drawing an approximate and to some extent arbitrary distinction between poverty and non-poverty. When, as in many countries, a very great proportion of the population are clustered around (just above or just below) the poverty line, small adjustments in the definition of the poverty line could dramatically change the perception of the poverty headcount. This has important implications for policy, including trade policy: a change in prices that might be judged to reduce the poverty headcount when the poverty line is set at one level may be found to *increase* the headcount if the poverty line is set lower (see Box 3 below on rice prices in Indonesia). Once again, this can be addressed through improvements internal to the poverty line approach – e.g. through sensitivity tests (i.e. running FGT calculations using a range of alternative poverty lines) and complementing the headcount indicator with poverty depth indicators – but it does provide another convincing argument for 'triangulating' conclusions from FGT analysis with other definitions of poverty.

None of these issues warrants the conclusion that consumption/expenditure poverty lines and FGT analysis are undesirable. They remain indispensable for comparing levels and degrees of poverty between areas or groups and monitoring changes over

[7] Such distortions become even more pronounced if income rather than expenditure is the measure of poverty: a wealthy retiree living in their own home would register lower current income than a poor labourer paying rent. Taking the average of say three years of household income or consumption smoothes out variations in consumption and produces a more accurate picture of wellbeing, but obviously requires a correspondingly large allocation of resources for data collection. Most LSMS, for example, are one-year exercises conducted at intervals of five years or more.

time. However, recognition of these limitations does suggest that poverty line-based analysis needs to be complemented with other definitions and measures of poverty in order to produce fully-informed policies. An important body of micro-level work, deriving from fields such as anthropology or sociology as well as empirical microeconomics, has focussed on household welfare dynamics, the distinction between chronic and transitory poverty, and the importance of vulnerability. Empirical work, much of it in the field of food security studies, revealed that the poor often make trade-offs between poverty and vulnerability. With very little to save them in the event of a shock to the household economy, poor groups will often seek to minimise risk rather than maximise income. Over the long term, minimising their exposure to shock in this way keeps them trapped in low-investment, low-risk, but low return activities, with investment of time and money spread across a number of activities rather than concentrated upon the most promising.

This has important implications for understanding or predicting the link between trade policy, growth and the welfare of the poor, as it implies that poor producers will often *not* respond to new opportunities created by liberalisation, or will respond only after a considerable lag. In particular, it suggests that many among the poor will prefer to continue with diversified livelihoods, rather than (as pure trade theory suggests) respond to price signals with specialisation in goods and services which offer a higher return.[8]

This concern with the household-level trade-offs between current poverty and vulnerability was seen in the emergence of new analytical frameworks for policy analysis and planning such as the livelihoods framework. The DFID variant of the livelihoods approach – probably the most detailed and widely known – analyses the well-being of households in terms of their control over five different forms of assets (which can regarded as equivalent to forms of 'capital' in other approaches). The framework clearly drew upon various strands of poverty analysis, including Sen's entitlement theory, asset-focussed approaches to vulnerability,[9] and to a certain degree also upon theories of social capital (which emphasised the importance of networks in civil society for household well-being and aggregate economic performance).

Attention to vulnerability was also emphasised in quantitative analysis of household poverty, as repeat surveys made it possible to conduct panel data analysis of household movements in and out of poverty. Analysis of such data from Pakistan, Vietnam and China (amongst others) revealed large variations between countries in the balance between the chronically poor and the temporarily poor within the overall poverty headcount at any given point in time.[10]

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[8] Diversification *per se* is of course a rational response to risk and diversification at all levels of wellbeing. The point is that diversified livelihoods amongst the poor reflects an assessment not only of the probability of an adverse shock but of the magnitude of the possible shock and of the inability of the household to handle that shock. Thus poor households may be inclined to persist with risk-minimising diversified livelihoods which, if there were in place safety nets which could mitigate the consequences of negative shocks, they might reject in favour of an income maximising concentration upon activities with a higher return.

[9] See for example Moser 1998 on vulnerability in Latin American cities.

[10] See for example McCulloch and Baulch 1999; Jalan and Ravallion 2000.

Power and social functioning

During the 1980s and 1990s there emerged calls, particularly from some NGOs and academics, for lack of power to be made not just an explanation of poverty but part of – or central to – its definition. Along a related line, it was suggested that social exclusion or lack of social capital was often at the core of what it meant to be poor. Similar claims, based on increasingly popular participatory research and informed again by Sen's work on capabilities, were made for the importance of dignity, that is, for the ability to live without the shame and stigma attached to poverty. Qualitative or contextual research methods - small scale Rapid or Participatory Rural Appraisals (RRA/PRA) or multi-site national Participatory Poverty Assessments (PPA) – aimed to provide insights into the interaction between these more intangible aspects of poverty (e.g. lack of knowledge, power or 'social capital') and material deprivation (low and variable income, lack of assets).

Summary: a new consensus on poverty?

At the start of the 1990s, differences in the definition of poverty along the lines outlined above to a considerable degree divided the official donors (who continued to rely upon income or expenditure, albeit sometimes also acknowledging the importance of assets) from the UN agencies (who actively promoted the concept of human development as an alternative) and from NGOs and some academics (who emphasised vulnerability and social functioning). Over the course of the decade, however, there was a remarkable convergence.

It is important not to exaggerate the degree of this consensus, as a number of commentators continue to take strong contradictory positions. On the one hand, many hold that the concept of poverty should continue to be reserved for a concept of low income or low consumption, and that to bring other dimensions within the *definition* of poverty then makes it harder to examine causalities, or relationships between these variables: thus, it is argued, incorporating both income and human development within the definition of poverty makes it harder to examine when a given level of p.c. income or consumption does or does not translate into a certain level of human development. At the other end of the spectrum are a number of observers, drawn in particular from NGOs, who see 'money-metric' p.c. income or consumption measures as so deeply flawed as to be effectively useless as measures of wellbeing.

Even if these polarised positions are now relatively marginal to the poverty debate, many actors who accept the principle of multidimensionality commonly revert to using a simple, unidimensional measure of poverty for practical purposes. Thus national poverty monitoring continues to use FGT analysis of p.c. expenditure (albeit often attempting to convert common property use or public entitlement into monetary equivalents); while local governments and NGOs often continue to use rule-of-thumb principles for defining poverty, identifying poor households on the basis of demographic characteristics or non-ownership of key assets.

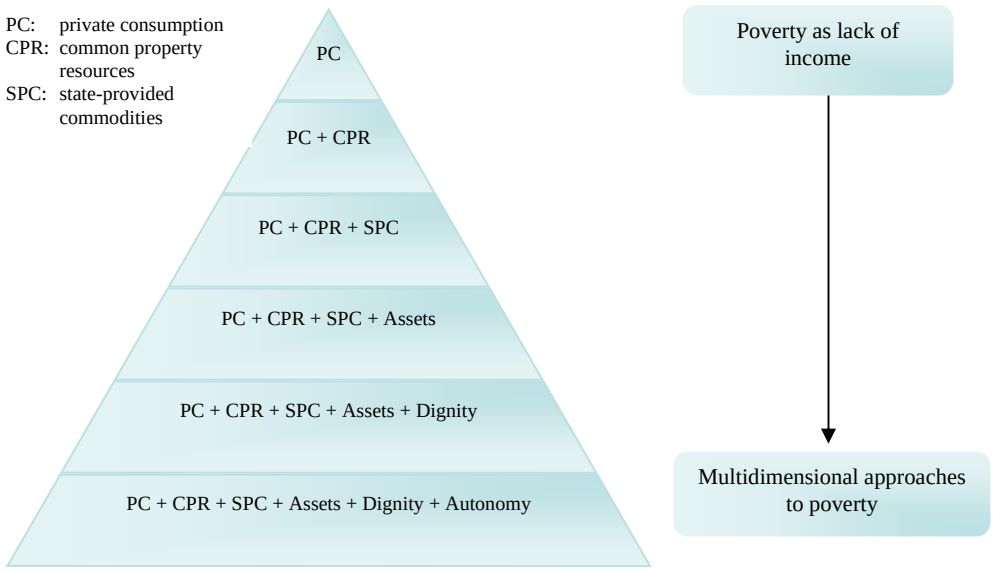
However, while bearing these caveats in mind, it is clear that there has been a significant convergence in thinking. In the first years of the new decade, both the World Bank and the OECD-DAC released influential policy documents which encapsulated the new consensus around a broad, multidimensional definition of poverty. The Bank's *World Development Report 2000/01* was particularly significant, defining poverty as having three broad dimensions: namely, lack of economic

opportunity; insecurity and vulnerability; and powerlessness ((World Bank 2000; DAC 2001).

One way of summarising the debate about defining and measuring poverty is to depict the range of positions as a triangle, with 'narrow' definitions based 'merely' on income or consumption measures at the top, and 'broad', multidimensional definitions at the bottom (see Figure 1). In using a multidimensional definition of poverty, p.c. private income is considered as one among many aspects of poverty, alongside other dimensions of welfare which are *not* captured in a simple accounting of household expenditure (e.g. consumption of foods and other products derived from common property resources).

In the terms of this presentation of alternative definitions, it is understood that when it comes to measuring poverty (in order to compare different countries, groups or points in time), it may be necessary to use a uni-dimensional measure. When a more nuanced understanding of poverty is required (e.g. for estimating how a given policy change will affect different groups amongst the poor), it will be necessary to draw in non-monetary aspects of welfare in order to understand the indirect and second-order effects upon households and individuals with different asset endowments and livelihood strategies.

Figure 1 Narrow c.f. multidimensional definitions of poverty



Source: Baulch 1996 p. 2 (see also OECD 2000 p. 42)

The Millennium Development Goals (MDGs) constitute a well-known example of a multidimensional approach to defining and measuring poverty, combining an income poverty measure (percentage of the world's population living on less than US$ 1/day, defined in 1995 purchasing power parity) with indicators of social or human development (e.g. under-five mortality rate).[11] Originating in a set of targets

[11] It is worth noting that the Goals themsleves contain a mixture of indicators of means and ends.

established by and for OECD-DAC donors (which in turn consolidated headline commitments from a number of UN social development conferences in the early 1990s), the MDGs were adopted by the UN Millennium Summit in 2000. The eight goals are given technical specification through 18 targets and 48 specific indicators (see Table 1 for a summary). The Goals and associated targets provide a set of time-bound, (mainly) quantified development goals which – at least in principle - provide rich and poor countries with a common basis for international cooperation. As such, the MDGs provide a useful point of reference by which to frame discussion of the potential impact of trade liberalisation upon various dimensions of poverty (see below).

A conceptual framework for analysing trade-poverty linkages

Different conceptions of poverty are important to the trade debate because whether liberalisation is seen as good or bad for poverty reduction depends in part on how poverty is measured. To the extent that liberalisation raises private incomes and expenditures for poor groups, it may be judged beneficial: if however these gains are offset by declines in the level or effectiveness of state spending, or by increased insecurity of employment or income, then assessment of the linkages becomes more complex. It is thus conceivable (although certainly not inevitable) that in some circumstances trade liberalisation may contribute towards progress against some of the MDGs (e.g. the dollar/day income poverty headcount), while having a negligible or even potentially negative impact on progress towards other MDGs.

Conventional trade theory, rooted in neoclassical economics, highlights that tariffs and other barriers to trade distort market signals. It is argued that the removal of trade distortions would lead to countries specialising in goods and services in which they enjoy comparative advantage, with mutually beneficial efficiency gains. It was this line of argument that informed the inclusion of trade liberalisation measures in structural adjustment policy packages in the 1980s. In modern form, this understanding of the role of trade is encapsulated in the work of Dollar and Kray (2000), who argue that while there may be winners and losers from trade reform in the short term, the losers are not necessarily the poor and the net effects of liberalisation will be distribution-neutral growth and thus significant poverty reduction.

Critics of pure trade theory argue in part on the basis of theory, and partly on the basis of observation. In terms of theory, Marxist-derived approaches, from dependency theory onwards, have argued that international trade represents exploitation and a net transfer or resources from developing countries to developed countries and/or multinational corporations, resulting in 'immiserating growth'. More recently, critiques have resulted in a more refined economic theory of trade which, drawing upon institutional economics, argues that institutions (both formal and informal) generate market imperfections (e.g. through oligopoly or intra-firm trade) which render the definition of comparative advantage much more problematic and context-specific. Those arguing for a cautious approach to trade liberalisation draw for support upon the experiences of the east/south-east Asian NICs, the majority of which experienced their initial decades of high (and poverty-reducing) growth under trade policy regimes which cannot be described adequately simply as liberalised.[12]

[12] Though see for example Winters 2003 p. 32 for a cautionary against using the Asian NICs as a general case for policy intervention in trade.

Analysis is complicated by the fact that 'trade liberalisation' covers a range of possible policy actions. Most obviously, the poor in a given country may be affected either by liberalisation policies pursued by their own government, or by liberalisation policies adopted by the governments of other countries that are currently or might become trading partners or competitors. This distinction between own liberalisation and others' liberalisation underlies a significant divide *between* the advocates of poverty-oriented liberalisation of the type promised under Doha. On the one side are those (e.g. Dollar and Kray 2000, Winters 2003) who argue that trade liberalisation *per se* almost always has significant net benefits for the poor; and that while the most significant gains would be those which would result from the liberalisation of Northern markets (particularly in agriculture), lack of liberalisation on the part of OECD trading partners should not deter developing countries from initiating the liberalisation of their own trade regimes. On the other side of the debate are those (e.g. Oxfam 2002) who argue that the barriers against pro-poor growth in the South are *overwhelmingly* due to trade distortions created by Northern protectionism and subsidies; and that, given this past record of trade rules weighted against developing countries, it is reasonable to demand that developed countries liberalise earlier and faster, while allowing developing countries to retain protectionist measures for an extended period to safeguard the incomes and food security of the poor against the shocks of rapid market opening.

In practice, the complexity of the global trade regime, in which market access and prices are shaped through overlapping structures of bilateral, regional and global trade agreements, means that neither line of argument holds good for all cases. The gains that a given developing country and poor groups within that country stand to make from own liberalisation, others' liberalisation, or a combination (simultaneous or sequenced) of both, depends on i) the nature of their current insertion into international markets and trade agreements and ii) their capacity to respond to new market opportunities arising from liberalisation and to mitigate the costs of this adjustment. Small LDCs (particularly island or landlocked countries) that currently enjoy preferential access to at least some Northern markets would potentially face very high adjustment costs were full global liberalisation of trade ever to occur. Large countries, particularly those with comparative advantage in agriculture (e.g. Brazil), may have the potential to gain considerably from across-the-board liberalisation, and for these gains to have a significant impact on the level of poverty[13] (although see the paper on Brazil below son some of the factors that might make the connection between liberalisation-induced economic change and poverty reduction).

These complex linkages have been examined using a variety of approaches in recent years. McCulloch *et al* (2001) made a useful contribution to the literature with a *Handbook* on trade liberalisation and poverty, which synthesised much of the existing analysis on the linkages between trade and poverty and attempted to draw this material together under a broad conceptual framework. This identifies three channels by which trade policy change might affect poor individuals and households, namely those of *enterprise* (in which trade policy change affects households through profits, wages and employment), *distribution* (via the transmission of changes in border prices

[13] Although see the paper on Brazil below on some of the factors that might make the connection between liberalisation-induced economic change and poverty reduction.

to consumers), and *government* (in which trade reform affects government revenues and thus the scope for pro-poor expenditures).

Kanji *et al* (2002) review a number of additional approaches to the analysis of trade-poverty linkages. These include global value chain (GVC) analysis; gendered analysis of socio-economic processes; and analysis of the environmental sustainability of trade policies. While none provides a holistic theory of trade-(growth)-poverty linkages, they can be regarded individually as complements to modelling approaches, and together provide a useful toolkit of analytical approaches. Bird (2003) similarly uses a household-focussed, livelihoods analysis-inspired approach to draw out the micro-level determinants of whether or not a given trade reform benefits different groups amongst the poor.

Static and dynamic effects

In theoretical terms, it is possible to distinguish both static and dynamic components to the linkage between changes in border prices (through trade liberalisation and effects) on an economy (and on the wellbeing of the poor within that economy). *Static effects* are in essence due to the reallocation of resources and profits within an economic system at any given point in time: it is assumed that trade liberalisation will result in a reallocation of resources away from previously protected, import-competing sectors and towards sectors in which the country in question enjoys comparative advantage. *Dynamic effects* are those achieved through economic growth (liberalisation in theory results in a more efficient allocation of resources, which increases growth, which – usually, in complex ways, and to varying degrees – reduces poverty); and through short- to medium-term adjustment costs (as, for example, jobs are lost in industries rendered uncompetitive by reform). A more open economy can be expected to allocate investments more efficiently, create opportunities to realise economies of scale, increase entreprises' exposure to technological improvements in productivity, and intensify competition. The result of these forces should be to engender growth (McCulloch *et al* 2001; Jenkins and Thorburn 2003).

McCulloch *et al* (2001) argue that it is important to separate the static and dynamic components of liberalisation-poverty linkages, on the grounds that the conflation of liberalisation with either growth gains or adjustment costs has obscured the equally important but more subtle issues to do with how liberalisation reallocates resources within a static economy. The result has been that the debate on liberalisation has been (mis)directed into a discussion about whether growth (which may be promoted or retarded by many other factors besides trade liberalisation) results in poverty reduction, ignoring the other means by which liberalisation may affect poverty.

While this is an important point, to deal with liberalisation-poverty linkages under two separate headings in this way risks making the debate somewhat abstract for those concerned with the practical task of tracing the consequences of trade reform for poverty in any given context. This is especially true as the most significant impact of liberalisation is likely to be through its positive effect on the rate of economic growth (as emphasised by McCulloch *et al*). In the discussion below, static and dynamic effects will therefore be discussed together under alternative headings.

Channels by which trade liberalisation may affect poverty

For the purposes of this research, it seems useful to address linkages between likely or possible Doha round reforms and poverty outcomes under four broad headings. The first three sets of linkages listed below are broadly the same as the three channels of distribution, profitability/enterprises and government revenues used by McCulloch *et al* 2001, but recast somewhat in terms that make explicit the perspective of the individual or household unit (that is, in terms that more closely resemble those used in a livelihoods framework or a microeconomic analysis of welfare).[14]

The fourth channel listed below – that of security – is partially subsumed in the first three channels, in that the concept of security is largely about variability in prices, incomes, and government spending, and the ability of the poor to manage that variability (ex ante and ex post) at an acceptable cost. However, the importance of variability and uncertainty in each of these three realms is such that it seems to merit distinct treatment. The costs of vulnerability for poor households (in terms of the costs involved in adopting strategies to protect against risk, costs which often keep households trapped in poverty) are such that they need to be addressed separately from the issue of *average* levels of consumer prices, incomes and public expenditures (World Bank 2000; Conway and Norton 2002; Christian Aid 2003 pp. 13-16).

Consumption: prices faced by poor households for the goods they purchase. Even in 'subsistence' rural economies, certain goods (notably food, but also manufactures such as clothing, kerosene, tools, or bicycles) must be bought. Changes in the prices of these goods will obviously affect the living standards that the poor can enjoy for a given level of available expenditure. Broadly speaking, own liberalisation is likely to exert downward pressure on the prices of basic consumption goods, as barriers to cheaper imports are removed and competition is increased. The liberalisation of other countries' trade regimes may increase prices, as domestic producers find it possible to obtain higher prices through exporting to newly-opened markets. Food is obviously pre-eminent amongst the consumption bundle of the poor, although the degrees to which it dominates total household spending varies somewhat: it is highest for those in extreme poverty (who spend next to nothing on anything else); for the food-purchasing rural poor (who do not have to pay housing and services costs faced by the urban poor); and for the poor in hot climates (as the poor in cold climates must also pay additional costs for shelter, heating and clothing). When considering the impact of trade liberalisation on the consumption bundle of the poor, it is important to include the inputs into household-level economic activities: for example, seed, fertiliser or pesticides (not to mention irrigation or extension services) for poor agricultural producers.

Income: returns to the labour, assets and/or products of the poor. The primary asset of the poor is in most cases their own labour (World Bank 1990): given the low education levels of the poor, this labour is typically best regarded as unskilled or semi-skilled labour. Thus, trade reform which increases the demand for unskilled labour is likely to have a positive effect on poverty reduction, through either increased employment, or increased wages, or both. Often however the poorest segments of the population are not employed by others but are self-employed in household-based own production, most notably in agriculture, but also in petty processing, manufacturing or

[14] For similar typologies – on which this has also drawn – see IDS 2003; Winters 2003 29-30.

trade.[15] Trade reform which results in increased access to overseas markets and increases the prices paid for agricultural products, traditional handicraft products, or labour-intensive manufactures can all be expected to be good for global poverty reduction.

Liberalisation by poor country governments themselves may have very different effects upon the incomes of different social groups. Sectors which had previously been protected (typically manufacturing) are exposed to competition from imports and may experience job losses and/or falling incomes. Economic activities in which the country has comparative advantage and which had been constrained under previous trade regimes may however expand as investment is diverted into them from previously protected sectors which are rendered uncompetitive by liberalisation. The positive effects of own-liberalisation will be boosted in circumstances in which the pre-liberalisation trade policy regime actively *suppressed* incomes in sectors in which the poor are active (as when export controls on agriculture or barriers to the import of essential inputs such as fertiliser are lifted during liberalisation).

The provision of public goods: government expenditures on health, education, sanitation, and social protection, accessible to the poor. As publicly-provided goods and services provide a component of the total consumption of the poor, any change which affects government revenue available to supply these goods and services will have an impact upon the wellbeing of the poor and the level of poverty. In countries in which government revenue is heavily dependent upon tariffs (which are much easier and cheaper to collect than tax), trade liberalisation may result in a significant reduction in total revenue. In most cases, political realities suggest that the poor rather than the rich will suffer most from reductions in public spending. In extreme cases, public spending may become (more) regressive, as budget items of concern to the rich are protected while those important to the poor are cut. More commonly, cuts in revenue are not targeted in this way, but may still be highly regressive in their impact: cutting public spending on health and education has a much greater effect on the poor than on the rich, who can afford alternative private care and teaching.

In principle expanding volumes of trade at lower tariff levels may offset this fall (as seen for example in India), but this is far from guaranteed. Linking reduction in tariffs with the removal of tariff exemptions may help to offset a fall in tariff revenue. Developing countries vary considerably in the extent to which they are dependent upon tariffs: broadly speaking, however, it is least developed states with low levels of average p.c. income and limited administrative capacity which are most heavily dependent on tariffs rather than taxes. In middle-income countries, indeed, one of the indirect benefits of tariff reductions is that it can act as the catalyst for the development of a thought-through tax regime. This can have significant benefits for the poor, especially in countries (such as Brazil) in which the tax system is remarkably regressive.

[15] This distinction between employment by others and self-employment is often taken as part of the distinction between 'formal' and 'informal' sectors of the economy. See Adam and Harriss-White 2004 for a discussion of some of the difficulties in using the concepts of formal and informal in analysis of economic change (and, in particular, analysis of the concequences of liberalisation).

With or without liberalising their own trade policies, developing country governments may experience a net gain in tariff revenue if liberalisation in other countries leads to expanding export volumes, rising producer incomes, and thus increases in takings from income or consumption taxes. In part, the issue is one of timing: it takes longer to set up effective systems of tax collection than it does to reduce tariff levels. In the interim period, government revenues and the capacity for pro-poor spending may both decline.

The links between trade liberalisation, government revenue, total expenditure, and expenditure relevant to the poor are obviously indirect and complex. Gains in revenue through liberalisation may well not feed through into increased spending on the poor: certainly this cannot be assumed to occur automatically. Similarly, there is often considerable scope to improve the pro-poor orientation of public expenditure (e.g. by reallocating resources by removing free tertiary education in order to expand the provision of primary education, as recommended in Brazil), even in the absence of any change in trade or net revenues.

Security: improved capacity to sustain long-term welfare through reduction and mitigation of risk, and increased capability to cope with the consequences of a shock. To a considerable extent, all of these are a function of changes in average values of the three variables already mentioned (that is, consumer prices, incomes, and pro-poor government expenditures). Thus lower consumer prices and higher incomes allow for savings and insurance-type investments; and higher public expenditures on basic health, education and sanitation allows for the progressive improvement in the wellbeing of the poor both directly (e.g. better health) and indirectly (through improving the human capital of the poor, and thus the returns to their labour and their ability to participate in markets).

However, average values and variability around these averages are at least partly separable. Consider the hypothetical case of two economies. Each provides (poor) households with the same level of average income and average consumer prices, but income and prices in the first are much more variable than it in the second. In the first, more unstable economy, poor households have to adopt a variety of risk-management strategies (continuing to invest in food crops with low but dependable yields; unproductive stock-piling of essential inputs or consumer goods as protection against future price rises; allocating household labour across a range of economic activities not because this will raise incomes but because it protects against a fall in any one of them; accepting routine exploitation in labour relations with patrons in return for the assurance that the patron will help smooth consumption if the household faces a crisis; and so on). By comparison with the more stable economy, these household-level strategies for reducing and mitigating risk result in sub-optimal deployment of household assets, and slower accumulation.

The consequences of risk are particularly serious when they are covariant in nature. Idiosyncratic risk is that which tends to strike individuals or households in a given population *as* individuals or households: for example, the risk of an accident, or a house fire. Covariant risk, by contrast, tends to strike large numbers of individuals or households simultaneously on the basis of some common characteristic (e.g. geographical location, as in the case of crop failure due to widespread flooding or drought; or engagement in certain markets, as in the case of reduced employment and

incomes in a sector affected by the collapse in price of a given commodity, manufacture or service). The poor can sometimes deal with an idiosyncratic shock by drawing on loans or gifts from kin, friends or neighbours: a region- or industry-wide covariant shock can overwhelm these social coping mechanisms.

Reduction in the instability of prices (of consumer goods, of agricultural inputs, of investments in productive assets, and of labour and thus incomes) is thus a gain in and of itself. If greater trade integration reduces vulnerability to local-level misalignment of supply and demand, it may help to smooth income and consumption, and encourage investment in productive assets. When integration also brings with it a degree of exposure to complex price movements in international markets (as in the case of investments in coffee production in Vietnam), it is important that poor producers – and indeed developing world governments - have access to the information they need to make informed choices, and that there are social protection systems in place to mitigate the risk incurred. Diversification – both within the household economy and between households within a community – can help to reduce the probability and magnitude of a covariant shock to production, income and/or employment.

Behind-the-border issues and complementary policies

A key conclusion in contemporary research into linkages between trade liberalisation (by developing country governments and/or their trading partners) and the welfare of the poor is that trade reform alone is in most circumstances best seen as a necessary but not sufficient condition for poverty reduction. The way in which a change in border price arising from liberalisation is transmitted to different groups of producers and consumers within the country in question is determined by a number of intermediary factors and institutions, including the level of education and skills amongst the poor; their ability to obtain access to credit (in order to finance investment in new export market opportunities) or to communications and transport (in order to know about and reach export markets); the existence of affordable mechanisms to allay production or consumption risk; and so on.[16] The degree to which developing countries and poor groups within them gain or lose from liberalisation thus depends crucially upon a range of policies with regard to service delivery, infrastructure provision, the regulation of financial markets, and so on. A number of implications can be drawn out from this.

Firstly, it is worth remembering that in some circumstances, trade barriers may *not* be the most important constraint upon the livelihoods of the poor. By extension, trade liberalisation (by the country in question or others) may not be a policy priority from the perspective of national strategies to help the poor.

Secondly, complementary policies to do with aspects other than trade (e.g. transport infrastructure, education or safety nets) may be critical in maximising the benefits and minimising the losses that the poor experience from trade liberalisation. In some circumstances, the adequacy or inadequacy of these complementary policy measures may determine not only the size but even the direction of the effect of trade liberalisation on poverty: that is, the quality of complementary policies can determine

[16] See Elliss 1993; Harriss-White 1995.

whether the net effect of a given change in border price is negative or positive for the poor.

Thirdly, the pace and sequencing of moves towards liberalisation may have a critical role to play in determining how well complimentary policies can harness the effects of liberalisation for poverty reduction. Thus, an explicit emphasis upon the objective of poverty reduction in the design of a national trade reform policy may have implications for the timing, order and speed with which trade barriers are reduced (McCulloch 2001 *et al* 137-143):

- There are arguments for and against introducing trade liberalisation and macroeconomic stabilisation measures at the same time, as opposed to in sequence. The issues relate in particular to whether the government has the administrative capacity and political strength to manage both processes simultaneously; the possibility that the control of inflation will contradict the depreciation that is often required to effect a reallocation of resources into competitive sectors during trade reform; and the question of whether combining stabilisation and trade liberalisation results in adjustment costs that are higher or lower than would be the case if the two processes were adopted sequentially.
- On balance, the technical arguments (and the experience of the Asian crisis of 1997) would favour liberalising the current account before, cautiously, liberalising the capital account, rather than attempting to liberalise both simultaneously.
- Under the same theme of timing and sequencing, safety nets should be strengthened (or, if not already in existence, created) in advance of any reform which is likely to have significant adjustment costs with regard to loss of employment or incomes in sectors of importance to the poor. Ideally but less critically, production-focussed poverty reduction policies and programmes (i.e. those which aim to enhance the ability of poor regions and households to respond to economic opportunities) should also be operational before any major move to liberalisation.

Government policies to compensate those who lose from trade liberalisation constitute a particular sub-set of complimentary policies designed to deal specifically with the short- to medium-term dynamic costs of adjustment. Generally, policies designed specifically to recompense those disadvantaged by liberalisation are to be avoided: these groups are not always the poor, or poorest, and compensating groups on the basis that they have been affected by government policy change can create a cumbersome long-term budget commitment (and create an awkward precedent to boot). Governments are better advised to make use of general-purpose social protection (or safety net) schemes which are provided on the basis of need (i.e. are targeted at the poor, including those made poor by the trade shock) rather than on the basis of being disadvantaged by policy (Winters 2003 pp. 33-4; McCulloch *et al* 2001 pp. 150-152: see Conway and Norton 2002 for a review of social protection measures and their fit with other aspects of development or poverty-reduction policy).

All of these conclusions imply that at the country level, if trade policy is to be reviewed and refined in light of its potential to contribute to poverty reduction, this

exercise is best framed in the context of a broad review of state policies with regard to an overarching national strategy for poverty reduction. In recent years, such strategies have multiplied as the IFIs have required the production of a Poverty Reduction Strategy Paper (PRSP) as the key condition for low income countries to obtain access to debt relief under enhanced Highly Indebted Poor Countries (or HIPC II) arrangements and/or new rounds of concessional loans. In practice, however, the vast majority of PRSPs have provided little if any analysis of the linkages between poverty reduction and alternative international trade scenarios, or taken the opportunity of a PRSP to address what complementary policies might be required in order to maximise the gains from international trade (Hewitt and Gillson 2003; McCulloch *et al* 2001 pp. 153-6).

Identifying winners and losers amongst the poor: alternative meanings of poverty-reducing trade liberalisation

All policy changes generate both winners and losers. Different aspects of trade liberalisation are likely to have very different effects on different groups amongst the poor. The MDGs can provide a useful framework by which to structure discussion of the potential impact of trade liberalisation upon various dimensions of poverty.

To the extent that trade negotiations to date have incorporated poverty reduction in the developing world as a policy objective, this has been pursued through a patchwork of special agreements allowing selected countries – by and large least developed countries - preferential access to developed markets.[17] However, 70% of those currently living on less than $1/day are not located in the 49 Least Developed Countries (most of which are to be found in sub-Saharan Africa and have relatively small populations): large low income countries (India, Pakistan and Nigeria) and a number of middle-income countries (China and highly unequal Brazil) account for much of the world's poor (World Bank 2003, GEP: xxvi). In 1999, India and China alone accounted for almost 50% of the world's dollar/day poor (see Table 2).

The Doha agenda favours a move towards a more comprehensive approach through the addition of MFN cuts on top of the existing complex of preferential arrangements, which would serve in general to reduce the value of those preferences. It is thus likely that some Doha reforms may contribute to poverty reduction in, for example, China or India, but severely disadvantage (at least in the short- to medium- term) the poor in small, least developed, largely sub-Saharan African countries. In terms of the aggregate global targets that are at the heart of the MDG framework, multilateral liberalisation will contribute to poverty reduction (reduction in the level of total poor in the world): but they may at the same time result in a further concentration of extreme poverty in certain world regions. Given that such concentrations of intense poverty may generate their own non-linear responses and costs (e.g. regional poverty traps, political instability that destabilises neighbours), this may have second-round effects that need to be taken into consideration.

[17] These include the Generalized System of Preferences (GSP) established under GATT in 1971; and, beyond this, additional 'deep preference' programmes such as the EU's Lomé/Cotonou agreement with ACP countries, the more recent EU 'Everything but Arms' (EBA) agreement and the US African Growth and Opportunity Ac (AGOA).

Table 1 Location of the world's poor: regional headcounts and share of world poverty

Region/country	Population below $1/day poverty line (1999 unless otherwise stated)		
	millions	as % of total world poor (<$1/day), 1999	as % of region/country population
South Asia	488	42%	37%
▪ *India*	*346*	*30%*	*35%*
▪ *Pakistan**	*18*	-	*13%*
Sub-Saharan Africa	315	27%	49%
▪ *Nigeria**	*83*	-	*70%*
East Asia and the Pacific	279	24%	16%
▪ *China*	*222*	*19%*	*18%*
Latin America and the Caribbean	57	5%	11%
▪ *Brazil**	*16*	-	*10%*
Central and Eastern Europe and CIS	24	2%	5%
Middle East and North Africa	6	1%	2%
Total	**1,169**	**100%**	

Source: adapted from WB 2003, World Development Indicators, pp5, 58-60; China and India population from WB 2000 p.274; Nigeria population data from WB 1999 p.195.

Notes:* latest available $1/day poverty data for Nigeria is for 1997; for Brazil and Pakistan is for 1998.

Developing-country trade liberalisation and poverty reduction: arguments for and against

As mentioned above, those who are broadly of the opinion that liberal international trade rules are, all other things being equal, conducive to poverty reduction, often disagree on how to reach this end state when it comes to the liberalisation of the trade (and specifically import) regimes of Southern countries. (Parties who disagree on this point almost always agree that liberalisation of Northern markets, particularly but not only in agriculture, would be unambiguously good for global poverty reduction.)

Those NGOs who are reasonably receptive to the argument that trade liberalisation has potential benefits for the poor generally argue for a phased and asymmetric reduction in trade barriers, with developing countries allowed to liberalise more slowly and to protect for longer vulnerable (uncompetitive) sectors of importance to the poor (i.e. 'special and differential treatment'). Others are more sceptical of the potential for fine-tuning developing country trade policy in an attempt to achieve poverty reduction objectives. Winters, for example, argues:

> Trade liberalisation aids growth, which in turn aids poverty alleviation…a widespread reform will contain enough positive elements that, in general, only a few people will end up as net losers. Trade policy should not therefore be closely manipulated with an eye to direct poverty consequences. It should, rather, be set on a sound basis overall…The primary way to deal with poverty is through general antipoverty policies. (Winters 2002 p. 28.)

This leads several analysts to conclude that while poverty reduction should be considered in planning trade reform (and conversely national poverty reduction strategies cannot afford to ignore trade issues), it may be misguided to attempt to recast trade policy solely from the perspective of (direct) effects on poverty. The difficulties, it is argued, include the following:

- Assuming that trade liberalisation *is* conducted with an eye to poverty reduction,[18] it is important to decide which aspect or aspects of poverty are being targeted with trade policy, as addressing poverty in one dimension may not always contribute to improvement in other dimensions. Even working within the 'money-metric' definitions of poverty and a focus on income or consumption, there are choices to be made between (for example) reducing the poverty headcount (which may entail policies whose primary beneficiaries are those just below the poverty line) or reducing the depth and severity of poverty (by prioritising the needs of the extreme poor).
- There will almost inevitably be trade-offs between targeting poverty in different regions or environments (e.g. urban c.f. rural poor); and between reducing poverty in the short term (e.g. through higher levels of direct redistribution) as opposed to reducing it in the long term. Given that it is very unlikely that trade reform alone will benefit all poor groups and a government will not be able to avoid the need to complement poverty-focused trade reform with other measures, it may be simpler to conduct trade liberalisation on straightforward principles that liberalisation is good for average incomes, and then address the remaining poverty issues through specific poverty reduction programmes (state transfers, opportunity-enhancing investments in infrastructure and credit targeted to poor areas or households, etc.).
- If there is a case for retaining protections for clearly defined goods or services in the interests of poverty reduction, there are also serious problems arising from i) the difficulty in identifying unambiguously clear cases that warrant intervention, ii) preventing the capture of these policy-induced advantages by non-poor groups, and iii) the risk that such exceptions sends a systematic signal that lobbying pays off in terms of state intervention to protect special interests. The conclusion is that it is not desirable to enter a process of trade liberalisation expecting or recommending widespread exemptions and delays: in arguing that special treatment is merited, the burden of proof should be high. Excessive use of such provisions risks damaging the credibility of the liberalisation process, with the risk that the process – and the net gains for poverty reduction arising from that process – will be stalled (Winters 2002 p. 31-3).

The counter-argument, deployed in particular against a generalised case for *rapid* across-the-board liberalisation of Southern markets, is that the evidence for an unambiguously positive correlation between open-ness and poverty reduction hinges very much on choosing particular definitions and measures of 'open-ness' (Oxfam 2003 pp. 128-133; Rodriguez and Rodrik 2001). Alternative measures can be shown to provide a much more ambiguous relationship between the open-ness of a given country and the rate at which it has reduced poverty, and imply a much more conditional advocacy of liberalisation of Southern trade regimes. It is argued that using these alternative (and by implication superior) measures, the case for generic net

[18] Although poverty reduction may be an important goal for all parties, international donors are in danger of assuming that national governments place as much importance on poverty reduction, or frame it in the same terms, as they themselves do. Even if poverty reduction is seen as an important objective, governments (and indeed donors, to varying degrees) inevitably have other objectives – average incomes, political stability, foreign policy and security – which will influence how they approach trade policy.

benefits from liberalisation is weaker, and the justification for more micro-management of the liberalisation process by extension becomes stronger.

Summary

The way in which any given trade reform plays out in a particular context will depend upon the interplay between the different channels outlined above, resulting in different groups amongst the poor experiencing differing patterns of gains or losses over the short, medium and long term. The key conclusions can be summarised as follows:

- The effects of a given trade reform will be complex and cannot be accurately estimated from first principles. This complexity is in part a function of the fact that global trade is at present structured according to a patchwork of numerous bilateral, regional and global trade agreements, each involving barriers and measures to offset or counter barriers, resulting in an arrangement in which to change one arrangement changes many others.
- The complexity of the links between trade and poverty arise also because a variety of intermediary institutions and processes, both external and internal to any given country, will determine firstly how the price signal resulting from a trade policy change is transmitted to different groups amongst the poor in different countries, and secondly how well they are able to respond to these signals.
- Conventional trade theory tends to emphasise the linkage between liberalisation and returns to economic activity: removal of tariffs and other barriers allows for economic specialisation in areas of comparative advantage, with gains in welfare (average incomes) for all parties. This is indeed a major part of the promise of trade reform, particularly in the area of agriculture. However, the linkages between trade policy and consumption may be equally important for the poor if trade changes the prices that the poor must pay for essential goods and services such as food, health care or transportation. It is also important to capture the general equilibrium effects: a rise in the price of a food staple may result in increased incomes even for food-purchasing poor households, if increased agricultural incomes result in increased demand for agricultural labour or other goods and services (see e.g. Gulati and Narayan 2002 p. 5240).
- This implies the need for a broader remit to the analysis of trade-poverty linkages. A number of non-trade policies will influence the ability of the poor to benefit, directly and indirectly, from trade reforms. Attempting to predict the range of possible effects that trade reform might have on poverty, and identifying reforms that have a pro-poor effect, will entail addressing complementary policies in such diverse aspects as macroeconomic stabilisation, transportation, justice and microfinance.

2.2 Potential Doha reforms and poverty reduction effects

Agriculture

Agricultural prices and the livelihoods of the poor: first principles

Agriculture is at a global level and in the majority of developing countries the most important of economic sectors with regard to the livelihoods of the poor. Changes in the prices of agricultural products affect the wellbeing of the poor directly through both income and consumption channels, and indirectly through effects on the variability of income and the level of government revenues. Given that the bulk of global protection (in the form of both trade barriers and producer subsidies) occurs in respect to agriculture, the price movements that might occur through trade liberalisation, and the implications for the livelihoods of the poor, are particularly significant in this sector.

Income effects. Although urbanisation is changing the balance, the majority of the world's poor are still to be found in rural areas. The majority of these are either directly engaged in agriculture (as owner-cultivators, tenants, sharecroppers, agricultural labourers or a combination of these) or are engaged in activities (e.g. processing and trading agricultural products) that are dependent upon the prices that can be obtained from the sale of crops and the predictability of these prices. In low income countries, 68% of the labour force worked in agriculture in 1998 (DFID 2003, Agricultural and Fisheries, p. 1).

The centrality of agricultural income for poverty reduction is due not only to the proportion of the population engaged in agriculture, but also to the disproportionate concentration of poverty in this sector. In national poverty profiles, those living in rural areas and employed in agriculture almost always experience more prevalent and more severe poverty than urban and non-agricultural groups: that is, agricultural producers and rural populations suffer higher poverty headcounts, more extreme poverty gaps, and worse social development indicators.

Any increase in the prices that farmers in the developing world can obtain for their agricultural products thus raises the p.c. incomes of farming households and can be expected to benefit these groups. Although the links are complex (see below), increased returns to agriculture may well benefit not only farmers but also agricultural labourers and those involved in processing and marketing agricultural produce.

Consumption effects. The second primary reason why agriculture is crucial to Doha debates (and indeed any other attempts to link trade policy change and poverty reduction objectives) is that food is, naturally, the largest component in the consumption basket of the poor. For those amongst the poor who must buy their food, the price of food crops is thus critical to their wellbeing. This includes most obviously the urban poor, but also sections of the agricultural population, including landless agricultural labourers, cash crop farmers and food crop producers who are unable to produce enough to last them from one harvest to the next and must therefore buy food during the pre-harvest season.

Production and consumption: estimating the distribution of benefits. Agriculture is thus somewhat special in that, in the case of food crops in particular, a given price

change can affect the wellbeing of poor households in different directions simultaneously, through both income and consumption channels.[19] To understand the impact of a change in the price of a food crop upon the living standards of a given household, it is necessary to know firstly whether the household is a net producer or a net consumer of the food in question. To model the effect of a price change upon aggregate poverty levels, it is necessary to know both the ratio of net consumers (who, all things being equal, can be expected to lose out) to net producers (who, all things being equal, will gain) amongst the poor and near-poor.

Box 2 Rice prices and poverty in Indonesia: effects on the poor and very poor

In Indonesia, conclusions regarding the effect of liberalisation in the rice trade on the welfare of the poor depend critically upon where the poverty line is drawn. Reform in the early 1980s resulted in an increase in the price of rice by approximately 10%. When the poverty line was set relatively high, the price increase would be judged to have reduced the poverty headcount, as a significant number of households under this line were net producers of rice. If however the poverty line was set lower, the price increase was seen to result in a *rise* in the headcount, as the majority of very poor households (including farming households) were net buyers of rice, for whom a higher cost of rice resulted in deepening poverty. This finding reinforces two obvious, and complementary, points: firstly, that the conclusions that are drawn regarding the effect of trade liberalisation on poverty are generally shaped in important ways by the measures chosen to record change in poverty; and, secondly, that there is a need to disaggregate the effects of price changes on different groups amongst the poor, distinguishing between net producer and net consumer, and between the 'normal' and extreme poor.

Source: Ravallion and de Walle 1991, cited in McCulloch et al 2001 p. 187.

However, the determinants of the effects that changes in agricultural prices will have on wellbeing are also more complex than merely household status as net consumers or producers of the (generally food) commodity in question. If a change in the price of an agricultural good results in 'second-round' general equilibrium changes in demand for agricultural labour or other goods and services provided by households that are net consumers, the effect may be offset (see next section). In most cases, the second-round effects will not be sufficient to offset the primary effect through consumption prices: in some, however, they will.[20]

Public revenue and spending effects. For the great majority of developing countries, the net effect on government revenue arising from removing barriers on agricultural exports or imports would be clearly positive. Given that most developing countries have a comparative advantage in agriculture, supply response to lower barriers to trade is likely to result in an expansion in export volume which more than compensates for the reduction in tariff rates. Increased revenue take from higher domestic taxes on income and consumption arising from increased returns to agriculture are also likely to occur, but to be less significant, at least in the short- to medium-term, and particularly in least developed and other low-income countries, where tax revenue is relatively minor compared to tariff revenue.

[19] Of course, other (non-food) agricultural products and indeed some non-agricultural products may be important to the poor as both goods they sell and goods they consume. Food staples, as indispensible items in the consumption bundle of the poor, nonetheless remain a special case.

[20] See for example Gulati 2002 p. 5240 on the effect of rice prices in Thailand, where the poverty-reducing consumption effect of an export tax was found to be outweighed by a negative income effect, as the tax drove down wages for unskilled labour. Removal of the export tariff would in this case help reduce poverty. Similarly in Vietnam, it is estimated that even amongst those who were originally net purchasers, the vast majority of the poor would have benefited from increased rice prices that would have resulted if export quotas had been removed.

Trade reforms and poverty reduction

To summarise and extend the discussion above, it can be concluded that liberalisation of trade in agricultural goods (in particular the removal of protectionist border measures and subsidies in Northern markets) might be expected to affect the livelihoods of the poor as follows:

- By changing (in most cases increasing) the incomes that poor households receive from agricultural production as world prices rise. Increasing demand in previously protected markets would result in higher outcomes for the poor in a variety of ways. Those who own or rent land gain greater income from the sale of their own produce; the landless poor may encounter increased demand for agricultural labour, which should increase the price of labour and labourers' incomes.
- By changing (in most cases increasing) the prices paid by poor households for agricultural goods, most notably food.
- Possibly, by changing the degree of variability and uncertainty in agricultural income and consumer prices for agricultural products by increasing the diversity of international markets to which poor producers have access, reducing dependence upon select markets (often those created by time-bound preference agreements, with the vulnerabilities that this entails).[21] Whether in fact integration of local production into world markets does result in reduced variability (and hence less vulnerability) or increased variability (and vulnerability) is likely to be highly context specific (see Box 3).
- A similar reduction in instability, and thus vulnerability, might be achieved by the specific device of removing developed-country policies designed to stabilise prices in their own economies. These policies – most notably variable levies – remove the need for Northern farmers and consumers to respond to price information, putting more of the burden of adjusting to shocks onto other market participants. The result is increased fluctuations in world market prices, to the detriment of developing country producers (McCulloch et al 2002: 175).

[21] The EU's former banana regime is a case in point; reliance upon time-bound US agreements on preferential access for Cambodian garment exporters is another. McCulloch et al 2002 make the point that 'in the long run…relying on the rents from preferences is unlikely to be sustainable and the development that such incentives provide is not necessarily pro-poor. Preferential access is insecure and can disappear very suddenly, with very high, poverty-creating adjustment costs' (p. 185).

Box 3 Integration into global markets and price variability

When trade in agricultural goods is undifferentiated and localised (due to domestic policy barriers against exports, other countries' barriers to imports, or an unrelated factor such as lack of transport infrastructure), markets are small and prices may vary dramatically due to local changes in supply and demand. If most households are engaged in production of the same staple, a good harvest may result in a fall in prices, whereas a collapse in food production can result in a rapid rise in price, as formerly food-surplus households move into food deficit. Optimistically, liberalisation in international trade in agriculture may thus reduce variability in local prices by expanding the size of the market for local products and the purchase of food staples, and thus the consistency of demand and supply. More pessimistically, integration with international markets may have no, or negative, effect upon the variability of farmgate prices for primary agricultural commodities: in cases such as coffee in recent years, the market institutions that mediate between producers and consumers may result in a falling farmgate price even in conditions of rising prices to consumers. In many cases, it is perhaps best to see globalisation in agricultural markets as changing the *causes* of income volatility (away from production risk and towards market risk) more than the level of variability *per se*.

Higher and more dependable agricultural incomes in developing countries would create a series of beneficial second-order changes in the consumption, expenditure and investment decisions of poor households, including:

- Increased ability to purchase inputs such as fertiliser or irrigation which generally i) increase average yields and/or ii) decrease production variability.
- Associated increases in demand for other goods and services, with positive effects on the employment and incomes of the poor. In the long term, there are strong linkages between the farm and non-farm sectors. It is estimated that in Asia a $1 increase in agricultural income resulted in an increase of $0.80 in non-agricultural incomes in local enterprises; in sub-Saharan Africa, the rise in non-agricultural incomes was estimated to be more than $2 (Delgado *et al* 1998).
- Increased household investment in human capital development – education and health care – which broadens opportunities, increases the returns to household labour and – under the right institutional conditions - reduces the exposure of poor households to the potentially pauperising costs (both direct and indirect) of a serious illness.
- Ability to diversify by investing income in alternative crops and/or off-farm activities. Diversified rural household economies help to reduce the vulnerability of not only the households concerned but also communities and the country as a whole, by reducing the extent of covariant risk: that is, the exposure of large numbers of individuals and households who share a dependency on (in this case) one product. When shocks do occur, a more diversified economy (household, community or national) is better placed to absorb and recover from them.
- A shift in flows of investment from non-agricultural sectors into agriculture as changes in relative prices following liberalisation bring out the competitive advantage of the sector.

International trade in agriculture and reforms possible under Doha

Protectionism in Northern agricultural markets. From the perspective of poverty reduction, the single most important set of trade reforms that might result from the Doha round would be those which would raise the prices commanded for agricultural products of the developing world. The key reform in this respect would involve the liberalisation of Northern markets for agricultural products, which are at present highly protected through a range of tariff and non-tariff measures. Tariffs in the EC and north America (and to a lesser extent also Japan and a few other countries), combined with large and extensive subsidies to high-cost domestic producers in Northern markets, have depressed world prices of many goods. Finally, variable levies (in effect, price floor support policies) in OECD countries have forced Southern producers to absorb the costs of adjusting to exacerbated variability in the world prices of agricultural commodities.

The challenges to reform in international trade in agricultural products are widely recognised as essentially those of special interest politics in developed countries, rather than national economic interest: farmers in OECD economies, although accounting for a very small proportion of the electorate, yield significant political influence. The resulting distortions to international trade are particularly pronounced with regard to certain key commodities in which support to inefficient producers in Northern (and some middle-income) countries clearly constrains incomes to efficient producers in a number of developing countries (see Box 4).

Box 4 World markets and prices in cotton and sugar

Cotton

World trade in cotton is severely distorted, primarily by policies of support to developed-world producers (particularly in the USA) rather than border measures. While a number of Southern producers have undertaken policy reforms which have increased the efficiency of their cotton production, Northern subsidies – c. $3bn p.a. in the USA and c. $0.6bn p.a. in the EU – prop up prices that are in the order of 90-200% higher than world prices. The prices and export volumes of developing-country producers – particularly in sub-Saharan Africa – would be greatly improved if support in Europe and north America were reduced. The World Bank cites economic simulations which suggest that, relative to what would occur under current conditions, full liberalisation would result in an increase of 13% in cotton prices (and a 6% increase in the volume traded) over ten years. Africa's cotton exports, notably, would increase by 13% (World Bank 2003 p. 129). A review of other existing estimates (Gillson and Page 2004 pp. 62-3) finds estimates of price increases following liberalisation ranging from 10.7% to 71%, depending on selection of reference years, set of countries, and methodology (e.g. assumptions about supply response and liberalisation of other markets). ODI's own model estimates that the effect of removing producer subsidies currently operating in China, the US, Greece and Spain would be an increase in cotton export earnings in west and central Africa (+ 10%), Pakistan (+ 3%) and India (+ 5%: ibid pp. 67-8).

Sugar

Support to OECD sugar producers (through a combination of border measures and producer subsidies) keep prices in these markets roughly twice those in world markets, at a cost ($6.4 bn p.a.) that is approximately equal to total developing-country exports. The link between liberalisation and global poverty reduction with regard to sugar is complicated firstly by the fact that a number of middle-income and transition economies containing a significant number of poor people (e.g. Mexico, Turkey and Poland) also provide support to their domestic producers; and secondly by the fact that a number of developing countries enjoy limited preferential access to developed world markets, allowing them to sell at higher-than-world-market prices. It is estimated that the removal of protection and support in the trade in sugar would result in imports in the most protected economies (the EU, Indonesia, Japan and the USA) rising by 15m tonnes p.a.; and global gains to welfare in the order of $4.7bn p.a. Brazilian farmers would be the major beneficiaries – by about $2.6bn p.a. – while those countries currently enjoying preferential access to European and north American markets would lose some $450m p.a. (World Bank 2003 pp. 126-128).

Developing country liberalisation Developing country trade policies are less of an issue in agriculture (relative to both developed world agricultural policies and to developing-country policies in other sectors, such as manufacturing). In the early decades of post-war development, developing countries made extensive use of trade and domestic policies[22] to extract value from the 'traditional' agricultural sector in order to subsidise 'modern' urban and industrial development. These policies have been dramatically scaled back over the last two decades, often as a part of structural adjustment policies.

Nonetheless, some developing countries still operate trade or other policies which in effect impose constraints on the expansion of agricultural exports, sometimes in the name of food security. There are legitimate claims in regard to food security: in Madagascar, it is argued that reform increased agricultural prices and raised the *average* real incomes of the poor, but still appeared to harm their welfare, through an even greater increase in the *variance* of prices, which they were ill-equipped to manage with the assets and savings available to them (McCulloch *et al* 2001 p.p. 195-6).

In many cases, the priority actions required from developing country governments (in order to ensure that the poor in the agricultural sector can benefit from international trade) relate to policies regarding the protection of an inefficient industrial sector and the associated over-valuation of the exchange rate. Both of these raise the price of manufactures relative to agricultural goods, drawing investment away from agriculture.

Further liberalisation of agriculture would necessitate a complex set of reforms in a wide range of countries. It would however result in significant gains for the developing world and for poor groups within developing countries. The following section sketches out the possible implications both within and among developing countries.

Distribution of effects

Agricultural liberalisation and rural socio-economic change: the effect of price changes on productivity, employment, wages and income distribution. It is important to recognise that while the aggregate effect of agricultural liberalisation would be a significant reduction in world poverty, the linkages between agricultural trade reform and improved livelihoods for the poor in any given country are often complex and imperfectly predictable. Agricultural change in the developing world over the second half of the twentieth century has been shown to involve a complicated interaction of economic, demographic, environmental and political transformations: the same price change or agricultural technology has resulted in different outcomes in different circumstances. For any given poor agricultural household, net gain or loss in welfare will be determined by the relative movements of prices for food crops, other (non-staple) crops, land (rental and sale), labour, inputs and – critically – credit (McCulloch et al pp. 186-7; Ellis 1993). They will also be influenced by the differential ability of

[22] Developing country policies which penalised agriculture and resulted in 'urban bias' included high export taxes on agriculture, overvalued exchange rates, and protection to ineffient industry, which resulted in distortions in relative prices. Policies of state procurement and grain resrves, designed to ensure food security in the event of harvest failure, have also had mixed effects: in India, for example, there is a debate about their continued value.

poor and rich households to respond to liberalisation-induced price signals (see Box 5).

The technology-induced productivity shocks of the Green Revolution can be used as a convenient analogy for predicting the diversity of possible outcomes that might arise from a trade-induced price shock. Firstly, the changes observed during the Green Revolution illustrate how the ways in which the returns from higher agricultural incomes are distributed across rural society depend on the particular agro-economic and socio-economic characteristics of a crop or region (see Box 5).

Box 5 Regional differences in the poverty-reducing impact of the Green Revolution
In India, maximising the returns from the cultivation of high-yielding variety (HYV) wheat in the Punjab relied on 'lumpy' investments (mechanisation and tube wells). While HYV wheat could be adopted relatively easily by large farmers, poor farmers could not afford these complementary investments, either literally (they lacked savings or access to credit) or in terms of the exposure to risk involved with a new crop (especially initially, when it's potential benefits were yet to be proved). As a result, much of the productivity gains accrued firstly and primarily to large commercial farmers, exacerbating existing inequalities in rural society. In West Bengal, by contrast, the cultivation of paddy rice in small flooded fields was less amenable to mechanisation: in this case, the key complementary technologies required to make the most of the HYV seeds (namely fertiliser and pesticide) were highly divisible, so equally accessible to poor smallholders as they were to larger farmers. (Singh 1990; Ellis 1993 pp. 240-43.)

One of the first and most important considerations will be how many of the poor are in net food surplus rather than in net food deficit. If trade reform results in higher prices for food staples *within* producer developing nations, then poor households which do not produce enough for their own consumption needs – notably the urban poor and landless agricultural labourers, but also small-scale farmers (owner-cultivators or tenants) who harvest their own food but must buy it for a number of months each year - will face higher food costs.

From this starting point, however, several possible outcomes are possible, some positive and some negative, depending on local conditions. Amongst food-deficit farmers, some – possibly many - may be able to adapt by switching production from food staples to a more remunerative crop (possibly one that only becomes profitable following liberalisation), and to then use the income gained to purchase food for the household, with a net improvement in food security and standard of living. Labourers may benefit if the increased returns to agriculture result in intensification of cultivation and increased demand for labour.

Under different circumstances however, rising agricultural prices may result in *anti*-poor outcomes. Increased prices may encourage landowners to increase rents or to take land back into own-production, displacing poor tenant farmers. Similarly, higher returns may create both incentive and ability for rich farmers to invest in labour-displacing agricultural machinery, to the detriment of landless or land-poor agricultural labourers (as observed in Malaysia during the Green Revolution in the 1980s: Scott 1986).

The second lesson to be drawn from the experience(s) of the Green Revolution is that the effects of a shock are dynamic and hard to judge at an early stage. Richer farmers were the first to experiment with the new technologies, because they could better placed to absorb any production losses, by contrast to the poor, who could not easily

manage the risk exposure involved with these as-yet-unproven innovations. As such, the rich captured much of the initial benefits of increased production in the early years, initially widening inequalities in incomes and living standards.[23] However, once poor farmers had observed the success of the new technologies, they also invested, and began to share in the increased incomes.

There are two policy messages to take from this discussion. The first is that while agricultural trade reform can be expected to have extremely large net beneficial effects in reducing global poverty, the cause-effect chain linking trade reform with the livelihoods of the agricultural poor in any given situation may be quite complex and some groups will, inevitably, lose out. The second and more important message is that there are a range of complementary policy measures – agricultural extension services, investments in rural infrastructure, publication of market price data, credit extension, or (more radically) land redistribution or protection of tenants' or labourers' rights – which developing world governments can take to minimise any anti-poor effects and maximise the pro-poor effects.

The distribution of benefits internationally. Internationally too, the distribution of poverty-reducing gains from agricultural liberalisation would be uneven. All things being equal, the impact of agricultural growth in terms of reducing poverty increases with lower national income levels: in other words, the effect is greatest in LDCs and progressively less in low income and then middle income countries. This is firstly because a greater percentage of the population are engaged in agriculture in countries at lower levels of income. Secondly, the agricultural poor in least developed countries have fewer alternatives to agriculture in the form of sources of off-farm income – that is, the fortunes of rural households are more clearly dependent upon agriculture than in countries with higher levels of per capita GNI. As both household and national economies are less diversified, improved access to OECD markets and/or improved world prices can be expected to have a more direct and dramatic effect on poverty levels in the least developed countries (World Bank 2003a).

However, against this must be balanced the fact that the majority of countries currently enjoying preferences are to be found in the LDC category. For those Southern farmers currently dependent on preferences for favourable access to Northern markets, the price effects described above would be largely reversed as multilateral reform of international trade in agriculture eroded the relative value of preferences, exposing them to increased competition from other developing countries. For this group amongst the world's poor, multilateral reform that erodes these preferences may result in perverse effects, reducing incomes and exacerbating poverty.

Another group of countries in which the poor might lose out from agricultural reforms are those that are net importers of agricultural goods, which might experience balance of payments problems should world prices rise. Amongst the 58 low-income countries, 29 were classified as net agricultural importers in 2000/01; amongst the 89

[23] The observation of rising inequalities and in some cases worsening living standards for the poor in the early stages famously led some social observers to characterise the introduction of HYV and associated technologies as a watermelon revolution, 'green on the outside and red inside'. The fact that this seemed a credible concern at the time, and the fact that it was later proved broadly unfounded, should give both 'globophiles' and 'globophones' cause for thought.

middle-income countries, 51 were net agricultural importers. The most significant of these (in terms of the numbers affected) are Bangladesh, Pakistan and North Korea (World Bank 2003: 133-5). The problems faced by these countries were recognised in the Uruguay Round, and a provision for these Net Food-Importing Developing Countries (NFIDCs) included in WTO rules, but with limited effect.

Summary

With these important caveats in mind, it remains the case that the multilateral liberalisation of agricultural trade – first and foremost through the removal of highly distorting Northern barriers and subsidies - would have the single greatest impact in the incidence and depth of global poverty. Although it is hard to model the effects of liberalisation, attempts to do so suggest that developing countries stand to gain $20bn p.a. from full agricultural liberalisation, or $15bn p.a. from a 40% liberalisation (Binswanger and Lutz 2000 and Anderson *et al* 1999, cited in McCulloch *et al* 2001 p. 181). Although imprecise, such figures convey the order of magnitude of the potential for achieving poverty reduction through agricultural trade liberalisation. The impact (in terms of reducing the global $/day headcount) would be greatest in the large developing countries, notably in Asia, which contain the vast majority of the world's poor and which are not reached by the existing patchwork of preferences.

Manufactured goods

Industrial production, employment and the livelihoods of the poor

Compared to the potential gains from reform of trade in agriculture, liberalisation of trade in manufactured goods is likely to have significant pro-poor effects in fewer countries (albeit including some with very large poor populations, such as India), and more likely to have poverty-increasing effects. The relatively minor potential for a large impact, either positive or negative, reflects the fact that:

- In most developing countries far fewer are employed in manufacturing than in agriculture;
- Wages in manufacturing are generally higher than in agriculture (so, if liberalisation does result in increased wages for industrial workers, these are not *necessarily* the poor; whereas if it results in unemployment and/or falling wages in the industrial sector this loss of income may not be such as to take significant numbers below the poverty line); and
- Manufactures account for a much smaller proportion of the total household expenditure of poor households than does food. Of these, the most important are probably clothes and agricultural inputs.

Changes in the prices of manufactures faced by consumers, or changes in the size and salaries of the manufacturing labour force arising from increased competition, are thus likely to have a smaller impact and one which within any given country is more likely to affect the relatively better off rather than the most poor. There are nonetheless some development gains, at least in theory, to be achieved from liberalisation in manufactures. Apart from direct effects on consumer prices and industrial employment, there is significant potential for pro-poor effects as i) efficient and competitive sectors other than manufacturing benefit from changes in relative prices and reallocation of resources; and ii) access through trade to productivity-enhancing technology. Finally, in some countries the political economy benefits may be

significant: import liberalisation increases the pressure for a more transparent and rules-based business policy environment and an end to discretionary state interference that is open to patronage and abuse.

At first sight, it would seems likely that reducing tariffs on manufactures would have significant negative consequences for government revenue and thus spending, given that tariffs on manufactures are in many developing countries the major source of revenue.[24] However, evidence from countries which have undergone such liberalisation suggests that this is often not the case (see UNCTAD India 2004 for trends in revenues since the introduction of liberalisation from 1991). The way in which the liberalisation agenda is designed and implemented will have important consequences. There are a number of cases (e.g. when liberalisation involves replacing quantitative restrictions with tariffs at equivalent or lower value; when it is accompanied by measures to reduce exemptions and increase compliance in tariff collection; when it takes place in a stable macroeconomic environment; and when the sector was previously highly restricted) in which it is likely that total revenue will remain equal or increase.

The precise ways in which changes in the border prices of manufactures are transmitted through the economy to poor households with different employment and consumption characteristics are complex and context-specific. In predicting whether liberalisation-induced change will be good or bad for the poor, much will depend on the existing structure of enterprises and employment in the sector, which are in turn framed by an institutional environment of laws and regulations. One effect may be a switching of employment from the formal sector (registered, regulated and protected) to the informal sector (with much fewer labour rights) as companies seek to lower their costs and improve their flexibility in response to competitive pressure from imports. The result may be an increase in the level of employment, but at lower wages, less security of employment, and less protection.

Much thus depends on the composition of existing (pre-liberalisation) labour markets and specifically the degree of flexibility in these markets. If liberalisation is likely to create other employment opportunities and if the workforce in the protected sub-sectors are able (through skills and location) to respond to these opportunities, then transitional unemployment may be relatively short-lived. If however the protected industry accounts for the great bulk of non-agricultural employment and few alternatives exist, the negative effects may be large and persistent (see below on Cambodia). The social implications of this may be particularly pronounced in circumstances when the existing workforce shares a particular demographic profile, as for example is often the case in textiles and clothing, in which the workforce may be overwhelmingly young, female, and recent migrants from the countryside. In this case, although the employees are not necessarily below the dollar-a-day poverty line, they are not far from it. In the absence of alternative manufacturing or service sector jobs, the effects of liberalisation-induced manufacturing in small uncompetitive and undiversified economies are thus likely to include increases in rural poverty rates through loss of remittances and return migration to rural areas, with increased pressure on household and common property resources. Changes in low-wage, low

[24] In 1995 some 79% of developing country tariff revenue take was derived from tariffs on manufactures (McCulloch *et al* 2001 p. 269).

skill manufacturing sectors, in other words, may be transmitted onwards to result in a rise in rural poverty.

Thus complementary policies with regard to compensation packages, safety nets, retraining, assistance with the search for new employment and (with caution) compensation packages are all essential components of the liberalisation process.

Trade reform and poverty reduction

Manufacturing industry is currently heavily protected in many developing countries: meanwhile, barriers in developed countries are much lower than those applied against agricultural imports, but are significant in a number of sectors (notably clothing and footwear) of importance to poor countries low-income groups within those countries. Tariff peaks are important in a number of sub-sectors, including clothing. The barriers to trade in manufactured goods include not just tariffs but a range of non-tariff barriers (NTBs). Of these, the developed world quotas on the importation of textiles and clothing under the Multi-Fibre Arrangement (MFA) are the most important from a developing-world perspective (see Box).

Box 6 Textiles and clothing: the MFA and ACT

Until the passage of the Agreement on Textiles and Clothing (ACT), international trade in textiles and clothing was regulated by the Multi-Fibre Arrangement (MFA), which provided a multilateral framework for discriminatory quantitative restrictions against imports from 35 developing and transition economies. In economic terms, the resulting pattern of trade incorporates pronounced inefficiencies in the allocation of resources, both between producers and between consumers. These serve to constrain exports and output by efficient developing world producers, reducing the potential for employment and wages in the manufacture of clothing and textiles in a number of countries. However, by constraining these efficient producers, the MFA has increased the competitiveness of a number of other developing countries. The result is that 'the MFA creates jobs in some places, although almost certainly fewer jobs than it destroys elsewhere. Overall, it imposes losses of billions of dollars worth of welfare in developing countries' (McCulloch *et al* 2001). Under the Uruguay Round, countries agreed to phase out the MFA in four phases under the Agreement on Textiles and Clothing (ACT), to be completed by 1st January 2005. However, this schedule of reductions is heavily back-loaded, so most of the effects will come in 2005.

However, a number of developing countries (including large countries such as India) also employ significant policy barriers of their own. These barriers, implemented by both developed and developing countries, impose costs on consumers in the protected country and result in an inefficient allocation of resources. Most importantly, tariffs that protect inefficient manufacturing tends to result in a preference for capital-intensive rather than labour-intensive activities – although this bias may be partially offset if the tariffs increase the price industry must pay for imports of capital goods and inputs.

The levying of trade barriers on the import of manufactures also retards the development of South-South trade, which in 1995 accounted for 40% of developing country exports of manufactures, but which could potentially become much more significant following trade liberalisation. Thirdly, the liberalisation of trade in manufactures is likely to improve the prospects in agriculture. The use of non-tariff instruments of protection such as overvalued exchange rates (used to prioritise the import of capital good for industry) draw resources out of agriculture (in which the incidence and depth of poverty is usually greatest) and into an inefficient manufacturing sector. Finally of course, liberalisation that also allowed developing

countries to obtain access to the markets of the developed world would allow them opportunities in manufacturing sub-sectors (usually the labour-intensive) in which they have comparative advantage.

Part of the difficulty with managing liberalisation in manufacturing is that the effects on employment are more fast-acting than the effects on productivity. When the employment effects are negative, the period of transition to a more liberalised manufacturing sector will tend to see the costs outweigh the benefits for some time.

Distribution of effects

Although liberalisation will have benefits to developing countries, it is likely that during adjustment liberalisation will have a negative effect on the level of wages and/or employment in manufacturing in a number of countries, as competition with imports drives a reduction in costs and results in the closure of uncompetitive enterprises. Developing-country governments will need to introduce – or drastically improve – social protection measures to mitigate the costs of adjustment to a more liberal trade regime. Once again, however, much depends on the details of markets and institutions.

Countries with comparative advantage in natural resources or with less well-educated labour are likely to obtain fewer benefits, and may suffer, from liberalisation of trade in manufactured goods. This group would include many countries in sub-Saharan Africa and a number in Latin America. Countries whose manufactures currently enjoy preferential access to developed-world markets will suffer if, as is likely, the value of these preferences are eroded under Doha round negotiations.

In particular, the progressive elimination of the MFA will have complex effects, given the ways in which it currently confers competitiveness on some countries while denying it to others. A number of countries (e.g. Bangladesh and Cambodia) would lose out: the loss would be felt more acutely given the way in which textiles and clothing has come to dominate manufactures in these small and relatively undiversified economies.[25] Several large countries – for example, China and India[26] – look set to gain significantly from the end of the MFA, with significant benefits (direct and through multipliers) for the poor.

A final aspect of MFA reform that is likely to be negative for the poor stems from the obligation, during the period until MFA ends, on some exporters to dispose of textiles surplus to quota at low prices in other developing countries. This has resulted in poor consumers in some poor countries enjoying lower prices for clothing. Elimination of these, when quotas cease to be a constraint, would increase the prices faced by the poor in the countries that had previously benefited from cheap access to clothes under this provision.

[25] In Cambodia, for example, the sector grew rapidly following the US decisions to grant Most Favoured Nation (MFN) status in 1996 and now accounts for 78.5% of total manufacturing output., employiong 160,000 low-skilled workers (mainly female) in 2002 The granting of US MFN status to Vietnam and the upcoming phase-out of quotas under the ACT pose a severe threat to employment and wages in the sector (Royal Government of Cambodia 2002 pp. 43-4; Hughes 2003 185-6.)

[26] see Cline 2003, cited in UNCTAD India 2004.

Summary

In a number of countries such as India, the largest effects would occur through the removal of developing country tariffs. The next most significant effect would be through the removal of developed country tariffs: in particular, though the reduction of tariff peaks (which are set primarily in those industries in which developing countries enjoy comparative advantage) and tariff escalation (which penalises developing countries which invest in increased processing of exports, wiping out the gains they should make by capturing a larger part of the value-added).

Services

To date, analysis of the pro-poor potential of trade liberalisation has focussed primarily upon trade in goods, particularly agricultural goods. Trade in services is, on the face of it, less immediately relevant for poverty reduction than trade in goods, given that developing countries account for only 20-25% of world service exports, and that only 26% of low-income country GDP derives from services (compared to 70% in developed nations: McCulloch et al 2002: 230; DFID 2003, Services and Developing Countries). Trade negotiations with regard to services also take a somewhat different form from the forms of negotiations with regard to trade in goods, making it hard to generalise about likely dimensions or effects of change.

However, the fact that developing countries have not yet captured a significant share of international trade in services does not establish the case that they should not do so, or that trade in services is irrelevant for poverty reduction. Services now account for the bulk of world economic output and, while accounting for only 20% of world trade in 1995, constitute the fastest growing sector of international trade.

Some developing countries have comparative advantages in the provision of certain services.[27] A notable example is tourism, which may create significant demand for unskilled and semi-skilled labour (although the number and type of jobs created, and their impact on the wellbeing of poor groups, may vary greatly depending upon the model of tourism development that is adopted: Roe *et al* 2002). The employment and spillover effects from these specialised services constitute an attractive opportunity to diversify national economies away from a precarious dependence upon a small number of primary commodities and the vulnerability to world price shocks that is entailed in that dependence.

Competition in service provision induced through trade liberalisation might also reduce the prices the poor must pay for health and education services that directly enhance welfare (and, via human capital formation, indirectly affect incomes). Liberalising markets in some services currently provided in inefficient ways in developing countries may however result in the elimination of unskilled jobs, for which compensatory government policies will need to be devised. More efficient 'backbone' services – in finance, telecoms, domestic transportation, retail and wholesale distribution, and business services – have the potential to improve the

[27] Services are classified for the purposes of trade negations into four groups or 'modes of supply'. Mode 1 is 'cross-border supply of services' and accounts for 28% of international trade in services by value. Mode 2 (14%) covers 'consumption abroad' such as tourism. Mode 3 (56%) encompasses 'commercial presence' e.g. through foreign direct investment in services. The last group – Mode 4 – involves the temporary movement of labour to provide services in other countries, and accounts for only 1.4% of total international trade in services.

performance of the economy as a whole (Matoo *et al* 2001). These services are at present highly protected (and thus not very efficient) in most developing countries: Latin America provides something of an exception. Landlocked countries facing barriers to both domestic trade and exports may have a particular interest in the potential gains from fewer restrictions and greater efficiency in transport and communications sectors.

A number of countries have succeeded in creating service sector jobs serving developed world markets. Examples include software in India and China; back-office business services and call centre operations in India; or construction services. These may come under threat from protectionist moves in developed countries.[28] With active participation in negotiations and offers to bind unilateral reforms, developing countries have the opportunity to use the Doha Round to lock in gains in market access for service exports (World Bank 2003: xxi). As many developing countries currently have trade regimes in services which are more liberal than have been declared, there is potential for them to negotiate formal positions (make offers or accept requests) without substantially changing existing practices.

Migration, remittances and poverty reduction: the significance of Mode 4

Other developing countries have specialised in the provision of temporary migration to provide services in higher-income countries. While much of this movement is of non-poor professionals, in some countries (e.g. the Philippines, Sri Lanka or Pakistan) large numbers of unskilled and semi-skilled workers are involved in migration for temporary employment, and state policies and institutions have been developed to facilitate this movement. Earnings brought back from a period of work abroad, or sent back as remittances, may provide a significant injection of capital into poor, often rural communities (see Box). Labour out-migration in low-wage fields in a labour-abundant economy may also have an indirect positive effect by reducing labour supply relative to demand, exerting an upward pressure on the wages of those remaining. Finally, returning labour migrants may bring back with them newly-acquired skills.

Box 6 Remittances and livelihoods of the poor

On average, worker remittances amount to only 1% of total income in developing countries (World Bank 2003: 149). In some countries, however, the figure is much higher. In a village study in the Philippines, Banzon-Bautista (1989: 154-5) found that having a relative working in the Gulf rather than factors internal to the agricultural economy (e.g. land ownership, ability to purchase inputs, labour) was the primary explanation for the improvement of the socio-economic status of households. In Pakistan, remittances from workers in the Gulf are credited with the relatively good achievements in poverty reduction in the late 1980s (Rimmer 2000). In India, Kerala displays a peculiar combination of high unemployment and low poverty headcount, a situation attributed to the fact that it receives a significant amount of resources (20% of both income and State Domestic Product) in the form of remittances from state residents working abroad, largely in unskilled or semi-skilled sectors (UNCTAD India 2004).

In as far as it is possible to estimate trade in services, this temporary movement of natural persons (TMNP) – classified in GATS as Mode 4 of international service delivery – currently accounts for just 1.4% of total world trade in services (Karsenty 2000). Nonetheless, the sums involved may still be significant: total remittances to developing countries (including those from permanent as well as temporary, Mode 4

[28] for example, the bill introduced in New Jersey in December 2002 which seeks to prevent awarding work to companies that would use off-shore outsourcing to complete contracts: UNCTAD India 2004.

migrants) were estimated at $71bn in 2001 (or 40% more than total ODA). If temporary movement of labour was liberalised to the point at which temporary migrant labour accounted for just 3% of the total labour force in the developed world, developing countries might gain as much as $160 bn p.a. (Walmsley and Winters 2003).

However, as with internal migration, international migration results in a complex set of effects, some positive and some negative. Higher salaries available in richer economies may draw out skilled workers from lower-income countries, depleting both the public and private sectors. While these skilled professionals are unlikely to be poor themselves, their loss potentially undermines the capacity of states in poor countries to provide basic services which enhance welfare and contribute to economic growth.[29] The loss of high-earning professionals also depletes the tax base. One study, for example, estimates that foregone income tax revenue associated with the Indian-born residents of the USA would comprise a third of India's current individual income tax receipts.[30]

Mode 4 is attractive in part precisely because it is concerned specifically with *temporary* migration, and so allows for some control over the degree to which professionals (often trained with government subsidies) are permanently lost to the national economy. At a certain level, however, even temporary migration may constitute a significant depletion of the human resource base, particularly in a society with a relatively small population of professionals. It is also important to acknowledge that, at the household level, temporary migration involves costs as well as benefits: there are transaction costs (international travel, visas, housing and living costs in the destination country) involved in entering these labour markets. These may constitute a major outlay and one which constitutes both a barrier to migration (preventing the very poorest from making use of this channel) and a source of added vulnerability for poor households if, with imperfect information available to them, the returns from labour migration do not as expected equal and exceed the costs of market entry (e.g. if the overseas job turns not to be as well paid, or as long, as was expected).

Reflecting the analysis of the potential for labour movement, one of the demands of developing countries in the Doha Round negotiations is for a 'GATS visa' or 'WTO visa' which would allow for developing-country workers to obtain streamlined and low-cost access to temporary employment opportunities in other countries. The major difficulties to be faced centre on the domestic political sensitivity of immigration in developed countries. Although explicit rules relating to the temporary nature of the proposed work-related stay and provisions for rapid repatriation of workers who stay beyond the period of their temporary work visa (World Bank 2003a p. 160) are intended to allay these concerns, proposals for a GATS visa are still likely to encounter considerable opposition. Heightened concern with national security since September 2001 has created further impediments to the free movement of temporary labour.

[29] A number of sub-Saharan African nations have recently appealed to the British NHS not to draw off health professionals such as nurses.

[30] Desai *et al* 2002 cited in Winters and Mehta (eds.) 2003 p. 123.

Complementary measures

As in other aspects of linkage between trade reform and poverty, realising the full potential for pro-poor gains from liberalisation of services depends heavily upon the adoption by developing countries of complementary non-trade policies. Successful liberalisation of services requires that an appropriate regulatory framework is in place. What constitutes 'appropriate' regulation obviously varies between countries and sectors: in sectors such as retail or wholesale services, competition can usually be relied upon to prevent the emergence of significant distortions, whereas financial services or utilities such as water or telecommunications are likely to require a more extensive regulatory framework and a more incremental approach to liberalisation in order to ensure that the poor are not priced out (see Arashiro and Waldenberg 2004 on the learning curve faced by regulatory agencies created in Brazil in recent years).

Summary

The pro-poor gains from liberalisation of services are likely to involve a mixture of direct and indirect channels. Amongst those who benefit directly from the creation of jobs in internationally-traded services, many will *not* be poor. The beneficiaries of software or call-centre jobs, for example, are likely to be educated and English-speaking. However, the expansion of disposable incomes amongst these groups can be expected to have some spillover in terms of increased demand for the goods and services of poor groups. Some countries would also be well-placed to benefit from Mode 4 liberalisation, creating opportunities for temporary employment migration which could be a source for incomes (remitted or carried back) and the acquisition of new skills. While much of the demand for these temporary migrant jobs is likely to be for non-poor professionals, commitments to the liberalisation of Mode 4 and the adoption go a GATS visa system has the potential to create employment for large numbers of unskilled or semi-skilled workers. Finally, liberalisation-induced competition in core services (e.g. transportation, finance or telecoms) is likely to reduce costs for goods and services across the economy, including those consumed by the poor; and to promote economic growth, form which the poor can be expected to gain.

Against this must be balanced the possibility of job losses as inefficient domestic services are forced to compete under liberalisation; the danger that privatisation of services in the absence of effective institutions, competition and regulation will result in private monopolies which are no better, and possibly worse, than the public monopolies they replace; and that out-migration of semi-skilled or skilled workers, even if only temporary, undermines domestic economic growth and/or public service provision.

Trade-related intellectual property rights and public health

The topic of trade-related intellectual property rights (TRIPS) has become one of the more high-profile issues in the Doha round. Attention has focussed in particular on the implications of TRIPS for poor country access to affordable pharmaceuticals, and the public health consequences of this, especially with regard to the problem of HIV/AIDS (see Box).[31] The protection of pharmaceutical patents, it is argued, will

[31] There are other aspects of TRIPS relevant to the Doha Development agenda, such as that of geographical indications and the patenting of traditional knowledge and genetic material. In the space available, however, we will focus upon the public health debates, on the grounds that i) these seem to be the most important for global poverty reduction; ii) they provide an interesting contrast to discussion

prevent the under-resourced health services of developing countries badly affected by HIV/AIDS (particularly in sub-Saharan Africa) from obtaining access to cheaper generic versions of key anti-retroviral drugs; and, more generally, will increase the prices that health services must pay for other drugs relevant to other diseases which constitute major threats to public health (and as such mitigate against the achievement of the 6th MDG). The countervailing argument, put forward primarily but not only by the pharmaceutical industry, is that providing exemptions from intellectual property protection for drugs of relevance to the world's poor reduces the profitability of such drugs and thus the incentives for research into cures for these diseases (research which is already markedly skewed towards the health problems of the developed world).[32]

Box 7 The scale of the HIV/AIDS crisis: headline figures

There are estimated to be some 40m people worldwide living with HIV/AIDS; 28m of these (70%) are living in sub-Saharan Africa. AIDS killed 2.8m people in 2001; over 12m children in Africa are thought to have lost both parents or their mother to AIDS as of the end of 2000. These figures are forecast to double within ten years. In a number of countries in sub-Saharan Africa the death rate amongst adults is producing major demographic imbalances (with a missing middle in the economically- and sexually-active age ranges) with significant social implications (as grandparents attempt to raise grandchildren after their parents have died). In the worst-affected countries the scale of the crisis is such that the economy (and thus the revenue base) is shrinking and public services are severely under-staffed due to widespread deaths of teachers and other public servants.

Significant progress was achieved on the issue of TRIPS and public health prior to Cancún, with a declaration agreed on 30th August. This clarifies the interpretation of TRIPS provisions on compulsory licensing to confirm that developing countries with a pharmaceutical industry are allowed to sell generic drugs cheaply not only in their own countries but also in Least Developed Countries and other developing countries which face a 'public health emergency' and demonstrably lack the capacity to produce themselves.

Although the gains of this declaration are significant, it is important to place them in context. The majority of drugs on the WHO Essential Drugs List (EDL) are already out of patent and therefore not affected by TRIPS but often nonetheless remain beyond the reach of the poor for other reasons. Pharmaceuticals may account for a large *proportion* of public health spending (e.g. around 20% in Mali, Tanzania, Vietnam and Colombia), but this often amounts to a microscopic level of p.c. spending on drugs (e.g. 13-14 cents in Mali: McCulloch *et al* 2001 p. 222): at these levels of spending, even drastic reductions in the price of pharmaceuticals will leave them beyond the reach of the poor in many countries. In most countries the health sector faces a number of other fundamental problems with resourcing and institutional capacity which cheaper drugs will not solve.

There remains the possibility that TRIPS will impede public health gains by preventing access to new and better (patented) medicines which would substitute for those on the current EDL. There is also some evidence of specific cases in which patent protection would appear to affect the price of basic medicines, with implications for the reach of public health spending (Box).

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in previous sections, in that they relate primarily to how trade rules affect government actions and budgets and human functionings rather than private incomes and consumption; and iii) they were one of the few areas in which progress in negotiation was achieved prior to the setback at Cancún.

[32] DFID 2003,TRIPS and Development p. 6.

Box 9 Patent protection and drug prices: some examples
Some insights into the effects of patent protection can be obtained from comparisons of prices in Pakistan (which has strong patent protection) and India (which has one of the world's strongest generic drugs industries). To take one example, Ciprofloxacin (an anti-infective drug used in treating resistant bloody diarrhoea in children) costs up to eight times as much in Pakistan. In Thailand, the introduction of competition from generics greatly reduced the cost of drugs to treat meningitis. *Source:* Oxfam UK 2000.

Nonetheless, with regard to many of the most serious illnesses of concern to the developing world it remains true that long-established, out-of-patent medicines remain effective, but are not sufficiently utilised because of a variety of demand- and supply-side constraints, and are not on their own enough. What is needed to achieve the health MDGs in respect to malnutrition, child survival and maternal mortality is relatively well known and uncontroversial and involves medical technologies (immunization, insecticide-treated bednets, oral rehydration therapy, etc.), household practices (e.g. exclusive breastfeeding for six months, handwashing before food preparation and eating) and complementary policies outside the health sector (water supply and sanitation, transport to encourage health-seeking and reduce the time taken to receive treatment) that are all relatively well known and do not involve expensive patented medicines (Wagstaff 2002).

With regard to the specific case of HIV/AIDS, there is clearly a case to be made that reducing the cost of patented medicines will improve financial access. Nonetheless, it needs to be remembered that drug treatment remains a palliative rather than curative component of the overall public health strategy that is needed to deal with the pandemic: brutally, access to antiretrovirals would keep those with the virus alive for longer, but not ultimately save lives directly, and would still leave families, communities and the state with the burden of providing long-term care. This might however still have important benefits, in that HIV-positive individuals remain economically active for longer, cultivating farms or earning wages which support their dependents and providing the public services (such as health care and teaching) which are currently in many countries being decimated by AIDS-related deaths. Maybe the strongest case for the application of limited public funds to purchase these drugs is with regard to pregnant or breastfeeding women who are HIV-positive, as this can actually prevent transmission to children.

Overall however, there remains the problem that even with cheaper drugs, low income countries with high levels of HIV incidence will be hard pressed to provide drugs to all who need them. Although Oxfam estimates that the withdrawal of Pfizer's patent on fluconazole (used to treat cryptococcal meningitis, one of the opportunistic infections associated with HIV) would lower the costs of treatment per patient from $3,000 to $104 p.a., this would have limited impact in countries in which p.c. health spending is less than $15 p.c. p.a.

In any objective analysis of health economics, it makes sense for developing countries to continue to devote efforts to preventing further spread of the virus (with some relatively replicable lessons to be learnt from success stories such as Uganda or Thailand) as well as caring for those already infected. Finally, it is important to note that most developing country governments have not made full use of the provisions that already exist (due mainly to capacity constraints and lack of familiarity with

international patent laws), raising the issue of the magnitude of the likely impact of the August agreement and the timeframe on which it is reasonable to expect that these benefits might be realised.

In summary, the impact of TRIPs is likely to be negative; but in the absence of significant increases in the levels of public health expenditure (which will require either economic growth and/or vastly increased ODA flows) which would make the cheaper drugs affordable, TRIPs is unlikely to be the primary impediment to improving health and reducing the impoverishing cost of health care. The potential effect of weaker patent protection on poverty reduction is likely to be greatest in large middle income countries in which the size of the public health budget is such that patent-affected drugs do constitute a significant proportion of total spending, and do become affordable at lower prices. In low income counties, however, levels of p.c. spending (both public and private) are such that even cheap generics will remain expensive and probably hard to justify relative to other potential uses of public funds. Cheaper pharmaceuticals alone will not revolutionise health status in the developing world. Despite these caveats, the DDA-related debate about TRIPS and public health has had a beneficial effect, often through inducing policy changes (public and corporate) in response to the WTO process and the wider public debate which has surrounded it.[33]

[33] A number of companies, for example, have offered drugs to developing countries at reduced rates (differential pricing) in an effort to avoid compulsory licensing.