



Trade and Poverty Project
Southern Africa Labour and Development Research Unit
University of Cape Town

Theoretical approaches to the analysis of trade and poverty and a review of related literature on South Africa

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2006



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Funding for this project was provided by the UK Department for International Development (through RTFP and the Trade and Industry Policy Strategies), the Department of Trade and Industry and USAID.

The views expressed in these papers do not necessarily reflect the views of the relevant funding agencies.

THEORETICAL APPROACHES TO THE ANALYSIS OF TRADE AND POVERTY AND A REVIEW OF RELATED LITERATURE ON SOUTH AFRICA

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Executive Summary

Trade reform has important economic and social effects on developing countries, with significant implications for unemployment, poverty and livelihoods. However, countries often neglect to consider the linkages between trade and poverty in national policy formulation. Trade liberalisation impacts on the internal income distribution of a country, and South Africa has recently been engaged in trade liberalisation on several fronts (multilateral, regional and bilateral). It is therefore critical to understand the potential channels through which trade liberalisation may influence poverty, and key possible impacts in the South African context in particular, in the light of both theory and the research on South Africa to date.

The impact of trade on the distribution of income has traditionally been analysed with reference to orthodox trade theory, and in particular the Stolper-Samuelson theorem. Such analysis can provide a starting point for an investigation of the linkages between trade and poverty. Section 2.1 of the paper therefore considers the predictions of the Stolper-Samuelson theorem with respect to the distributional consequences of trade. It is found that the shortcomings of this approach, due to the restrictiveness of the standard neoclassical assumptions underlying the analysis, have led to other theoretical approaches, such as the specific factors model and the new trade theory based on economies of scale and imperfect competition, considered in Sections 2.2 and 2.3. While these approaches offer new perspectives on trade and income distribution, they are still largely based on a conventional theoretical framework.

The particular poverty implications of some of the traditional predictions regarding trade and income distribution are considered in the next section. The conclusion is that, from a theoretical perspective, the poverty implications of trade reform are potentially too complex to be analysed with reference to the Stolper-Samuelson theorem alone. Additional insights of conventional theory, such as specific factors, imperfect markets, increasing returns and the existence of transitional adjustment costs need to be taken into account. A full consideration of the likely effects of trade shocks on poverty thus needs to move beyond the confines imposed by orthodox theoretical assumptions. In addition, alternative theoretical approaches have been developed which need to be integrated into the analysis.

The recent alternative framework for analysing trade and poverty put forward by Winters (2000a,b) and McCulloch *et al.* (2001) is considered in some detail in Section 2.5.1 of the paper. This approach moves beyond the conventional approaches of the previous section by recognising the importance of institutional and social factors. It focuses on the idea that any understanding of the effects of liberalisation requires a detailed appreciation of the various channels through which it can ultimately affect poverty. By focusing on the product market, labour market and government expenditure, three direct channels of influence are put forward: the distribution channel which affects price transmission; the enterprise channel which affects wages and employment; and the government channel which affects taxes and government expenditure (McCulloch *et al.*, 2001:67).

While the McCulloch *et al.* (2001) framework raises a series of considerations which take the analysis well beyond the confines of conventional trade theory, Kanji and Barrientos (2002: 2) argue that this approach is still too 'economic and market based'. They thus consider a sustainable livelihoods approach to analysing trade and poverty, which could be seen as complementary to the McCulloch *et al.* framework. This draws on socio-economic perspectives of poverty which broaden the concept of poverty from one based only on measures of consumption and income to one which more explicitly includes vulnerability, insecurity, isolation and powerlessness. The livelihoods approach, discussed in



Section 2.5.2, specifically considers people's capabilities and social assets, rather than only material assets. Section 2.5.3 then considers the view that a combination of these alternative approaches is needed in order to provide an adequate framework of analysis for exploring the linkages between open trade and the livelihoods of the poor. It explores avenues of research, including global value chain analysis, gender analysis and work on trade and the environment, which may contribute towards closing the gap between existing approaches. The section concludes that further development and integration of these frameworks is important for the evolution of pro-poor trade policy reform.

The second part of the paper attempts to provide a synthesis of some of the work on South Africa to date which is relevant to the analysis of trade and poverty in the country. To organise the discussion, the research is reviewed in the context of the channels of influence of trade on poverty proposed by the McCulloch, Winters and Cirera framework outlined in Section 2.5.1. In terms of price transmission (Section 3.2), it has been found that, for various reasons, price reductions expected on the domestic market following liberalisation, importantly in the food sector, but also elsewhere, have not materialised. Further, the context of liberalisation has increased the speed with which other shocks, such as those associated with exchange rate movements, impact on consumers and producers. These matters have quite significant implications for the country's poor.

From the point of view of wages and employment (Section 3.3), studies to date have been mixed in their findings regarding the impact of trade policy reform in South Africa. It has been argued that globalisation has not succeeded in creating jobs, or that such job growth as there has been is increasingly in "bad" jobs, with greater casualisation and insecurity for workers. Others argue that aggregate employment growth has occurred, although this disguises the sectoral impacts, which have often been negative, and the associated distributional costs and poverty implications of job losses.

Less work has been done in South Africa on the third channel of influence in the McCulloch *et al.* framework, namely that related to taxes and spending (Section 3.4). Research to date suggests, however, that since trade tax revenue makes up only a small part of government revenue, social spending and transfers are unlikely to be affected by such revenue reduction. There is also evidence that trade tax revenue has not been significantly affected by liberalisation thus far. However, tariff revenue reductions could have serious implications for South Africa's smaller SACU partners.

The final section of the paper comments on the appropriate policies that may be inferred from the theoretical discussion and South African research to date that could accompany trade reform to ameliorate potential adverse poverty outcomes, and avenues for future research in this regard.

1 Introduction

South Africa has a unique historical background that has resulted in an economy characterised by high levels of unemployment (ranging between 30% and 40%) and low economic growth. One of the primary concerns is that, due to its apartheid history, extreme inequalities in access to education and assets, almost entirely along racial lines, have yielded an excessively unequal distribution of income within the country, resulting in large numbers of the population living in poverty. South Africa currently has a Gini coefficient of about 0.6 (Bhorat *et al.*, 2001:22), one of the highest in the world, and almost 50% of the South African population live below the poverty line (Motloutng and Mears, 2002:532). Obviously, the eradication of these inequalities and the persistence and pervasiveness of unemployment and poverty within the country are key concerns and challenges facing the post-apartheid state (Bhorat *et al.*, 2002:1).

In recent years, the South African economy has undergone significant trade liberalisation. South Africa initially followed a policy of protection and import substitution and firms existed within a highly regulated economy. The fact that South Africa was also subjected to sanctions in the 1980s made the economy one that was very closed to global markets. In the early 1990s, the apartheid government began a process of liberalisation in an attempt to become more outward-oriented and integrate with the global economy (Bhorat and Poswell, 2003:3). This process was accelerated in 1994, when the post-apartheid government came into power, signed the Marrakech Agreement, formally joined to the World Trade Organisation and began implementing the growth, employment and redistribution (GEAR) strategy in 1996 (Bhorat *et al.*, 2002:1). Tariff rates have declined from a maximum of over



1000% to 55%, the mean tariff fell from 27.5% to 7.1% and the number of tariff rates declined from 200 to 47 over a ten year period (Bhorat and Poswell, 2003:3). As a result, over the past decade the economy has increasingly been exposed to the influences of globalisation.

Trade liberalisation programmes lead to important economic and social changes in countries where they are implemented, affecting not only absolute levels of poverty, but also the chances of households above the poverty line falling below it (PRUS, 2001:1). Countries, especially developing countries, tend to treat trade and poverty as separate issues when formulating national policies (EU-LDC Network, 2001:1). While trade is not the only, or even the most important, determinant of poverty levels, the trade-poverty link is nonetheless an important area for research in order that comprehensive economic development policies are created which serve to benefit all members of society and serve the aims of poverty reduction. Since trade liberalisation impacts on the distribution of income and assets within a country, and since South Africa has recently been engaging in trade liberalisation on several fronts, it is important to understand the potential channels through which liberalisation may influence poverty. Given its position as a middle income country with a unique history, key possible impacts in the South African context are important to investigate, in the light of both theory and the research on South Africa to date.

Conventional trade theory can be used to analyse some of the potential effects of trade liberalisation on poverty. In this regard, the paper will examine what both orthodox and new trade theory have to say about the internal distributional consequences of trade, with reference to the Stolper-Samuelson theorem, the specific factors model and the new trade theory based on economies of scale and imperfect competition. The paper will then specifically consider the poverty implications of these conventional theoretical approaches.

While conventional trade theories provide a useful starting point for any theoretical analysis, it is well known that their assumptions are overly restrictive. As a result, several economists have developed alternative approaches to studying the impact of trade reform on poverty and income distribution. A recent alternative framework has been put forward by Winters (2000a,b) and McCulloch *et al.* (2001). It focuses on the idea that any understanding of the effects of liberalisation requires a detailed understanding of the various channels through which it can ultimately affect poverty. By focusing on the product market, labour market and government expenditure, three direct channels of influence are put forward: the distribution channel which affects price transmission; the enterprise channel which affects wages and employment; and the government channel which affects taxes and government expenditure (McCulloch *et al.*, 2001:67). By analysing these channels of influence and their effect on poverty, a clearer picture of the potential impact of liberalisation can be discerned. The paper will therefore set out and explain the above-mentioned channels of influence, and comment on other alternative theoretical approaches to the analysis of trade and poverty.

The second part of the paper will review existing evidence on the relationship between trade and poverty in South Africa. It will attempt to provide a synthesis of the research conducted to date which is of relevance to a study of trade and poverty in the country. To make the review coherent, the research on South Africa will be considered in the context of the three pathways of influence proposed by Winters (2000a,b) and McCulloch *et al.* (2001), namely price transmission, wages and employment, and taxes and spending.

The final section of the paper will comment on the appropriate policies that may be inferred from the theoretical discussion and South African research to date that could accompany trade reform to ameliorate potential adverse poverty outcomes, and avenues for future research in this regard.

2 Theoretical Approaches to the Analysis of Trade and Poverty

The link between trade and poverty has typically been analysed with reference to the impact of trade liberalisation on economic growth, on the one hand, and its impact on income distribution, on the other. The nature of the 'growth link' has been controversial, with protagonists arguing that free trade leads to a favourable long-term poverty outcome, with economic growth resulting in a reduction in poverty levels. Others dispute both the link between open trade policies and growth, and that between economic growth and poverty reduction (for a sample of the debate, see Edwards, 1998;



Frankel and Romer, 1999; Rodriguez and Rodrik, 1999; Dollar, 2001; Dollar and Kraay, 2001a,b; Lübker *et al.*, 2000; Dagdeviran *et al.*, 2000; Kiely, 2004). Even more controversial is the 'income distribution' link. Trade liberalisation can lead to a reduction in poverty if it serves to redistribute income and assets away from the more well-off members of society to the poorer members or if it increases income to a greater extent in favour of the poor. Given the focus of concern with patterns of income inequality in South Africa, it is the second link which will be of main concern in the discussion that follows.

2.1 The Stolper-Samuelson Theorem

What may be termed 'conventional' trade theory can essentially be divided into orthodox trade theory and new trade theory, each of which has differing predictions regarding the internal distributional consequences of trade. Even within orthodox trade theory, predictions regarding income distribution differ in accordance with variations in the restrictive set of orthodox assumptions applied in a given case. Basic Ricardian theory, for example, with its labour theory of value in which labour is the only factor of production and all units of labour are homogeneous, abstracts entirely from distributional questions about the opening of trade. By contrast, the neoclassical Heckscher-Ohlin framework addresses the issue of the distributional consequences of trade via the factor price equalisation and Stolper-Samuelson theorems (Stolper and Samuelson, 1941; Samuelson, 1948, 1949).¹

The Heckscher-Ohlin model and its Stolper-Samuelson corollary have long provided a popular framework for analysing trade and income distribution in a neoclassical framework. The basic model asserts that, in a two factor (capital and labour) setting, a country holds a comparative advantage in goods whose production is relatively intensive in the factor with which the country is relatively well-endowed. The Stolper-Samuelson corollary is that the opening of trade will raise the real income of the country's abundant factor and reduce that of the scarce factor.

The Stolper-Samuelson argument is that the opening of trade in a labour abundant country will increase the relative price of (labour-intensive) export goods, expanding export sectors and the demand for factors used intensively in (labour-intensive) export production. Nominal returns to labour increase as a result, while returns to capital (which is used intensively in the contracting import-competing sectors) are lowered. The impact on real returns is then assessed by comparing these nominal income changes to the trade-induced relative product price changes.

Given the restrictive neoclassical assumptions underlying the analysis, perfect competition dictates that the prices of the factors employed in the export sector will increase on average by the same amount as the increase in the price of the export good. Since both capital and labour are employed in export production, it follows that the rise in the nominal relative price of labour must mean that the nominal price of labour increases relative to this average and hence relative to the export good's price. The real return to labour therefore increases in terms of the export good. Given that the relative price of the import-competing good falls with the opening of trade, labour's real income thus improves unambiguously (that is, in terms of either good) in a labour abundant country.²

Designating the two factors of production as skilled and unskilled labour, rather than labour and capital, the Stolper-Samuelson prediction would be that trade liberalisation would increase the real income of unskilled relative to skilled workers in unskilled-labour abundant countries (thereby decreasing skilled-to-unskilled wage inequality in these countries) and *vice versa* in skilled labour abundant countries (resulting in rising wage inequality). Quite apart from the numerous concerns that may be raised about the restrictive assumptions on which the Stolper-Samuelson prediction is based, an immediate problem with this framework of analysis presents itself for a middle income country like South Africa which may be unskilled labour abundant *vis-à-vis* its developed country trading partners yet have a more ambiguous status relative to important developing country partners.

¹ The discussion in Sections 2.1-2.4 draws on Cattaneo and Fryer (2002: 7-11; 15-18).

² The situation whereby the change in the factor price exceeds the change in the price of the good intensive in that factor is termed the magnification effect – see Cline (1997: 37-38); Appleyard and Field (2001: 93; 128-129). It may then similarly be shown that the real return to (the scarce factor) capital falls in terms of both goods with the opening of trade: the scarce factor's nominal price decreases by more than that of the import-competing good (via the magnification effect), and the price of the export good rises.



Dissatisfaction with the Stolper-Samuelson framework has manifested itself, on the one hand, as a search for other explanations of observed trends in wage inequality in developed and developing economies (see Cattaneo and Fryer, 2002: 12-15)³. Key issues in the debate include the relative importance of trade, skill-biased technological change, immigration, and explanations which explore the interplay between trade and technology factors, such as defensive innovation (Wood, 1995; Thoenig and Verdier, 2003) and outsourcing (Feenstra and Hanson, 1996). On the other hand, the shortcomings of Stolper-Samuelson have also, importantly, engendered a broadening and extension of the theoretical basis of analysis regarding trade and income distribution. The remainder of Section 2 considers this extended theoretical basis, although it should be noted that Stolper-Samuelson remains popular in some quarters amongst those who argue, for example, that its basic predictions survive the relaxation of certain restrictive assumptions, and particularly in the context of North-South trade (see, for example, Cline, 1997: 43-44).

2.2 The specific factors model

The specific factors model (Jones, 1971; Samuelson, 1971) adjusted the Stolper-Samuelson theory by relaxing the restrictive assumption of perfect factor mobility across domestic sectors. In its simplest version, this framework designates capital as specific to the sector in which it was first installed, while labour remains mobile between sectors. The opening of trade increases the real income of capital specific to the expanding sector (which would be the labour-intensive export sector in a labour abundant country), while the real income of the specific factor in the contracting (capital-intensive import-competing) sector falls. The nominal income of labour rises, given its mobility and increased demand in the expanding sector, however the real wage falls with respect to the export good and only increases in terms of the import-substitute good. The net effect on the real wage thus depends on the allocation of labour's consumption between the two goods.

These changes may be explained as follows. There is an increase in demand for both factors in the expanding sector. Sector-specific capital is fixed in supply, which raises its nominal return. The utilisation of more labour with a given amount of specific capital increases the marginal physical product of that capital and lowers the marginal physical product of labour in the expanding sector. Given that a factor's real return is its marginal product in this competitive framework, the real income of capital specific to the expanding sector increases in terms of the export good while the real return to labour falls in terms of the export good. The real income of capital specific to the expanding sector therefore rises unambiguously (i.e. in terms of either good), since the price of the import-competing good falls with the opening of trade.

In the contracting import-competing sector, the decrease in demand for capital specific to that sector lowers its nominal return. Since sector-specific capital is in fixed supply, its use with a reduced amount of labour decreases its marginal physical product and hence its real return in terms of the import-competing good. The real return to capital specific to the contracting sector therefore falls unambiguously (in terms of either good), since the price of the export good increases with the opening of trade. The marginal product of the remaining labour in this sector increases, and hence labour's real wage in terms of the import-competing good actually rises. The distributional impact for the mobile factor labour therefore depends on whether primarily export goods or import-competing goods are purchased.

Two important lessons may be drawn from this simple specific factors framework. First, capital or labour as a class may not be united with respect to the liberalisation or restriction of international trade, as they were in the Stolper-Samuelson context. Secondly, factors of production in a given industry may jointly resist liberalisation or lobby for protection once considerations such as industry-specific capital, segmented labour markets and wage inflexibilities enter the equation.⁴ Ultimately, the picture of who gains and loses internally from trade expansion is excessively over-simplified under strict Stolper-Samuelson assumptions.

³ The trend across a broad group of industrial economies has been one of increased skilled-to-unskilled wage inequality, especially apparent in the US and the UK (Cline, 1997). Until recently, far less research had been done on developing economies, although indications were that wage inequality had fallen in some developing countries (especially in East Asia) but risen in others (such as Latin America) (Wood, 1997, 2000; Sen, 2001).

⁴ Williamson and Milner (1991: 109-110), for example, consider the effect of constraints on labour mobility as well as wage inflexibility, in addition to discussing the case of sector-specific capital addressed here.



2.3 New trade theory

New trade theory extends orthodox neoclassical trade theory by incorporating features of imperfect markets, strategic firm behaviour and other aspects of industrial organisation theory, endogenous growth theory and political economy considerations (Deraniyagala and Fine, 2001: 812). The essential distinguishing features of the simplest earlier new trade theory models, such as Krugman (1979), were the presence of economies of scale and monopolistic competition, and hence allowance for product differentiation. The basic idea with respect to trade flows was as follows: the existence of economies of scale means that firms only produce a certain number of all the possible varieties of a product in a particular country. Once trade is opened, foreign varieties become available, and a country's firms will specialise in specific varieties in order to take advantage of economies of scale. Assuming the existence of a demand for variety, this will generate intra-industry trade in different varieties which could raise welfare both by increasing choice and by lowering costs as a result of economies of scale (Cattaneo and Fryer, 2002: 9-10).

It is widely argued that the internal distributional consequences of intra-industry trade expansion are less dramatic than those associated with inter-industry trade expansion, both in the short and long term. However, despite the proliferation of the theoretical literature on intra-industry trade since the late 1970s, the question of its consequences in terms of the distribution of income has not been as systematically modeled as the case of inter-industry trade has in the Heckscher-Ohlin / Stolper-Samuelson context. In terms of long-run distributional consequences (the standard literature typically would not recognise the possibility of short run adjustment costs, although this matter is returned to below), Krugman (1981, 1982) uses a specific-factors model in a monopolistically competitive setting to explore the effects of intra-industry trade.

In Krugman (1981), there are two countries, each differently endowed with two types of sector-specific labour. There are two industries in each country which use the industry-specific labour to produce a wide range of differentiated products. While the presence of economies of scale and differentiated products generates intra-industry trade in each sector, a country's relative endowment of a particular type of labour determines whether it has an overall comparative advantage in that industry, along "typical" Heckscher-Ohlin lines (it will, however, still export when it has a comparative disadvantage, and *vice versa*, because of scale economies and product differentiation). The more similar the relative factor endowments of the two countries are, and the greater the extent of product differentiation, the more important intra-industry trade will be relative to (net) comparative advantage trade in a given sector (see Krugman, 1982: 203-204).

Suppose that the home country is relatively abundant in Type 1 labour (i.e. labour specific to Industry 1). It therefore follows that the home country has an overall comparative advantage in Industry 1, although there will be two-way trade between the home and foreign countries in the products of both Industry 1 and Industry 2. To examine the distributional consequences of the opening of trade, it should be noted that an individual's utility function is formulated in such a way that spending is divided equally between the products of the two industries, so that utility depends on the individual's wage, the prices of each industry's products and the number (variety) of products available within each industry (Krugman, 1981: 968). Given the structure of the model, when trade is opened, the real wage remains the same for labour in terms of the products of its own industry (for example, the real wage of Type 1 labour remains the same in terms of the products of Industry 1). However, the real wage will rise in terms of the other industry's products if that labour type is relatively abundant overall (Type 1 labour in the home country), and will fall in terms of the other industry's products if the labour type is scarce overall (Type 2 labour in the home country). As in the Jones (1971) specific factors model considered in Section 2.2, the specific factor in the sector with a (net) comparative advantage gains, while the specific factor in the sector with a (net) comparative disadvantage is harmed by this distributional effect.

However, in the Krugman (1981, 1982) case, there is a second effect, benefiting *both* factors of production, which does not occur in the pure inter-industry framework. Provided that the opening of markets is reciprocal, trade increases the variety of products available, which raises the utility of all individuals. The abundant factor gains unambiguously since both effects work in its favour, while the scarce factor could also gain overall if the increase in utility from greater variety outweighs the conventional adverse distributional effect. Krugman (1981: 969-970) demonstrates that a favourable outcome is likely for the scarce factor when products are strongly differentiated and factor endowments are relatively similar. In such circumstances, both productive factors gain from trade and



it is argued that resistance to liberalisation will be less. Krugman concedes two important points regarding the above analysis. Firstly, although both factors could gain in absolute terms, the relative distribution of income would obviously still change in favour of the abundant factor (Krugman, 1981: 968). Secondly, the results obtained depend on a very specific set of assumptions about utility and production functions which are invoked in order to model the underlying monopolistically competitive market structure. The models have thus been criticised for their lack of generality, although Krugman (1981: 198-199) points to the intuitive appeal of the results, and argues that “[i]n dealing with models of intra-industry trade,...one must always be satisfied with illustrating propositions rather than proving them”.

It is also important to understand that the view that the distributional effects of intra-industry trade expansion are less dramatic than those of inter-industry trade expansion has two distinct aspects to it. The first, articulated in the models of Krugman (1981, 1982), is an argument that the *long-run* distributional consequences of trade are less important, because the real income of all productive factors could increase with trade, in contrast to the Stolper-Samuelson result. The second aspect is that the *transitional* costs of adjustment will be easier with intra-industry resource reallocation, because it will be easier to reallocate factors to different lines of work within an industry, and hence to switch production between different varieties of a product than between completely different products (Caves, 1981: 204; Behar, 1991: 533). The latter element has become known in the literature as the “smooth adjustment hypothesis” (Brühlhart, 1999, 2001). As noted earlier, the strict assumptions of the traditional Heckscher-Ohlin-Samuelson framework would not allow recognition of the short-run adjustment costs of trade liberalisation.

Brühlhart (1999: 37-38) emphasises the distinction between these two elements by stressing that the welfare impact depicted in Krugman (1981) referred not “to transition costs but to end-state utility distributions before and after trade liberalization”. While important on its own, especially in the light of its contrast to the Stolper-Samuelson outcome, this aspect should not be confused with the smooth adjustment hypothesis. Although the smooth adjustment hypothesis has not itself been formalised in a theoretically rigorous model, the basic idea runs as follows. Production factors will tend to be more similar, and hence more mobile, in the production of similar goods *within* an industry than between industries. For example, labour accumulates sector-specific human capital that is readily transferable within but not between industries. The value of workers’ investment in this human capital is lost if they are forced to move to other industries with liberalisation (Lovely and Nelson, 2001: 65). Numerous empirical studies in labour economics offer evidence that relocating workers between rather than within industries is more costly (for the US, see Fallick, 1993; Neal, 1995 and Kletzer, 1996; for the UK, more recently, Greenaway *et al.*, 1999, and Elliot and Lindley, 2001). As Elliot and Lindley (2001: 2) put it: “differences in labour requirements such as sector specific human capital, worker endowments, the cost of relocating resources and the retraining of labour, job related natural abilities and spatial aspects of labour reallocation are likely to be smaller the more similar the firms...in any given grouping”.

The smooth adjustment hypothesis view, while potentially of some interest and possible policy importance for developing countries, is subject to a number of particular qualifications that are likely to be relevant to the context of developing country trade expansion. Firstly, where intra-industry trade expansion is accompanied by specialisation in vertically-differentiated products, adjustment may be as difficult as for the case of inter-industry specialisation (or at least more difficult than in the case of horizontally differentiated products – Williamson and Milner, 1991: 111; Brühlhart and Hine, 1999: 8). With vertical product differentiation, where products are differentiated in terms of quality, it may be that different product varieties within an industry have significantly different factor requirements. Here the varieties traded will tend to reflect the factor endowments of the countries concerned, with, for example, unskilled-labour abundant countries specialising in lower-quality varieties and trading them for higher-quality varieties with greater skill requirements from developed countries (Balassa, 1979: 261). Uneven distributions of income within each country mean that there is both a demand for low-quality varieties by low-income groups in the developed country and a demand for high-quality varieties by higher income groups in the developing country (Tharakan and Kerstens, 1995: 89). The extent to which factor requirements differ between product varieties will then become important in assessing whether transitional adjustment costs and longer-run factor-price consequences of trade expansion may be less than in the inter-industry case.



A second instance in which the expected lower adjustment burden of intra-industry specialisation may not be forthcoming is in the case of increased trade in parts and components or the import of intermediates for processing and re-export (Greenaway and Hine, 1991: 606; Rodas-Martini, 1998: 339). Such activities may also involve considerable differences in factor requirements so that the resulting vertical specialisation may not be characterised by relatively easy adjustment.

Williamson and Milner (1991: 111) argue, however, that even if factor requirement ratios differ markedly between products within an industry, adjustment costs are still likely to be less than with inter-industry specialisation, because “expanding and contracting activities are more likely to be based in a given region or even firm”. If there is less need for geographical relocation, adjustment will be easier, whereas the case of inter-industry specialisation may well necessitate both retraining and geographical mobility.

The impact of trade reform on the geographical location of activity within a country and the associated implications for rural versus urban inequality and poverty has recently been explored by Stevens *et al.* (2005). The work has a Heckscher-Ohlin flavour, drawing on the Wood (1994, 2002) model which examines comparative advantage in relation to a country’s ratio of natural resources relative to its skill (human resource) endowment. However, it extends the analysis to incorporate the new economic geography, which, with its new trade theory “credentials”, allows for differentiated products and increasing returns to scale. Stevens *et al.* (2005: 6-8) consider the implications of the lowering of trade costs on the spatial distribution of economic activity and on factor returns in this context, allowing for different possible assumptions regarding factor mobility. Broadly speaking, lower trade costs are argued to promote the deconcentration of economic activity, while the impact on real wages depends on the assumption made about factor mobility. Lower real returns in the periphery can persist in the case of immobile factors in particular, which may denote land, for example, but may also signify a factor such as uneducated labour.

The discussion in Sections 2.1-2.3 has looked at the predictions of conventional trade theory in terms of the distributional effects of trade. Conventional trade theory largely assumes smooth instantaneous adjustment to trade liberalisation, with full employment of factors before and after the trade reform. It therefore generally contemplates distributional matters in terms of the impact of trade on the returns to different factors of production within a country. Some aspects of the new trade theory framework begin to explore matters relating to the transitional costs of adjustment, and more theoretical developments in this regard in a developing country context would be fruitful. The economic geography perspective could be of specific interest in this context. The particular poverty implications of some of the conventional predictions regarding trade and income distribution are considered in the next section.

2.4 Poverty implications of the conventional theoretical approaches

Winters (2000a: 52) highlights the limitations of the traditional Stolper-Samuelson approach for the analysis of the poverty implications of trade reform. His first set of criticisms relates to the narrow Stolper-Samuelson focus on factor returns in assessing the implications of liberalisation for income distribution. A household’s income is not derived simply from the earnings of a single factor. The impact of trade on household income will be more complicated since households may own several factors of production.⁵ Poverty effects depend on the type of labour for which demand rises with trade (for example, unskilled as opposed to skilled, or unskilled literate as opposed to unskilled illiterate labour), and on how wages move in relation to the poverty line.

The second set of criticisms relates to the restrictive assumptions underlying the Stolper-Samuelson analysis. The discussion in previous sections has already highlighted the restrictive assumptions of internal labour mobility, homogeneous products and constant returns to scale. To this can be added inelastic factor supplies, smooth factor substitution, the existence of non-traded goods and the possibility of missing markets before or after price changes (Winters, 2000a: 52).

⁵ The generalisation by Lloyd (2000) of the Stolper-Samuelson theorem and the specific factors model to allow for households to have diversified ownership of factors of production is an extension which could be considered further in this regard.



With respect to the type of labour for which demand rises with trade, the broad Stolper-Samuelson prediction is that trade liberalisation will raise unskilled wages in developing countries given their relative unskilled labour abundance vis-à-vis developed countries. Winters (2000a: 53), however, points out that, from a poverty perspective, it is not by any means necessarily the case that the type of labour used intensively in the production of tradables in a country is the *least*-skilled labour, i.e. the labour likely to be the most poor. Trade expansion may be accompanied by an increase in the wages of workers who have completed primary education, for example, and a decrease in the wages of illiterate workers. Leamer *et al.*'s (1999) study of the development paths of natural resource-abundant and resource-scarce economies points to Latin America's increasing abundance of primary educated relative to uneducated workers between 1970 and 1990, for instance. Poverty effects are more ambiguous if the dominant form of labour is literate unskilled labour, as those at the very bottom of society could be the worst affected (McKay *et al.*, 1999: 10-11).

Section 2.2 considered the impact on the real returns to factors of production of relaxing the Stolper-Samuelson assumption of perfect factor mobility. Specific labour in the expanding export sector gains from the opening of trade, while specific labour in the contracting import-competing sector loses in real terms. Therefore poor households dependent on the earnings of sector-specific labour in contracting industries suffer. Further, if wages were sticky downwards unemployment would occur in the import-competing sector, with serious implications for households close to the poverty line, as the loss of a wage-earning job could cause a descent into poverty (Cattaneo and Fryer, 2002: 16-17).

For labour that is mobile between sectors in the specific factors model, the overall effect of trade on real income depends on consumption patterns (Section 2.2). If such labour is owned by poorer households (which may be the case for mobile highly unskilled labour), and where food prices have risen with trade, the impact on household poverty could be severe, given the large proportion of income spent on food in such households. In sum, the more realistic specific factors-type scenario seems to suggest a greater potential for adverse poverty outcomes for labour-abundant countries than the Stolper-Samuelson analysis.

The new trade theory considered in Section 2.3 extended the orthodox analysis by allowing for product differentiation and increasing returns to scale. The distributional implications of intra-industry trade expansion were said to be less serious than those associated with inter-industry trade adjustment. Specifically, it was possible for all factors of production to gain from trade. However, this outcome may be of little applicability to the very poor, as it is dependent on a number of special assumptions including the existence of a demand for variety. The latter is generally associated with higher levels of *per capita* income (see, for example, Havrylyshyn and Civan, 1983: 119). It is this demand for diversity that is the source of the "extra" gain from trade in the Krugman (1981) model that offsets the distributional loss for the specific factor in the sector with an overall comparative disadvantage (Section 2.3). If this gain is not forthcoming, or is weak, then poor households dependent on the earnings of sector-specific labour in such industries will lose.

However, the insights of the new trade theory may have more interesting implications with respect to the employment consequences of trade reform. With intra-industry resource reallocation following liberalisation, adjustment to new employment could be easier within an industry than in the case of switching jobs between industries. If such adjustment could be promoted, it could lower the possibility of already poor households falling into poverty as a result of the loss of a wage-earning job (Cattaneo and Fryer, 2002: 17).

The conclusion of this section is that, from a theoretical perspective, the poverty implications of trade reform are potentially too complex to be analysed with reference to the Stolper-Samuelson theorem alone. Additional insights of conventional theory, such as specific factors, imperfect markets, increasing returns and the existence of transitional adjustment costs need to be taken into account. A full consideration of the likely effects of trade shocks on poverty thus needs to move beyond the confines imposed by orthodox theoretical assumptions. In addition, alternative theoretical approaches have been developed which need to be integrated into the analysis; these are considered in Section 2.5 below.



2.5 Further theoretical approaches

Alternative viewpoints on the ways in which trade reform can affect poverty and income distribution include the widely cited contribution of McCulloch, Winters and Cirera (2001), which, with its recognition of the importance of institutional and social factors, moves beyond the conventional approaches of the previous section. In addition, a more recent contribution by Kanji and Barrientos (2002) discusses a wider socio-economic livelihoods perspective on the impact of trade liberalisation on poverty.

2.5.1 The McCulloch, Winters and Cirera framework

The framework put forward by Winters (2000a,b) and McCulloch *et al.* (2001) focuses on the idea that any understanding of the effects of liberalisation requires a detailed appreciation of the various channels through which it can ultimately affect poverty. By focusing on the product market, labour market and government expenditure, three direct channels of influence are put forward: the distribution channel which affects price transmission; the enterprise channel which affects wages and employment; and the government channel which affects taxes and government expenditure (McCulloch *et al.*, 2001:67).

(a) Price transmission

The first way in which poor households are affected by trade liberalisation is through the impact that the opening of trade has on the product market via price transmission (PRUS, 2001:2). Winters (2000b:3) focuses on the idea of a 'farm household' whereby the household is both a producer and a consumer in the economy. While this framework is not relevant for many sectors, it is useful in understanding poor households, and hence in considering poverty effects.

When a previously protected country opens up its trade, the prices of traded goods as well as import-substitutes are altered. The ultimate impact on the poor depends on whether the poor household is a net producer or net consumer of the good whose price has changed. If the price of a good of which the household is a net producer increases or the price of a good of which it is a net consumer decreases, then overall welfare increases as a result of the price change and *vice versa* (Winters, 2000b:3). Generally, it is expected that export prices will rise while import prices should fall. Some empirical studies have suggested that in a number of countries the poor are predominantly net buyers of import goods, leading to the expectation that trade reform will generally benefit the poor (PRUS, 2001: 2).

There are, however, several other factors that need to be taken into account when assessing the ultimate impact of liberalisation on households in relation to these price changes. Factors such as distribution channels, market access, substitutability and ease of adjustment, as well as other issues such as intra-household distribution and the existence of subsistence farming all influence the final effect that these price changes have on households (McCulloch *et al.*, 2001:69-75).

Since price transmission is not straightforward, the way in which distribution channels are set up and function can have a dramatic effect on how much of the price change is transmitted to the poor. In any economy, a good will 'pass through many stages to or from the border' (Winters, 2000b:4), and at each stage additional costs are added. As a result, the percentage of the price change affecting individuals may be substantially less than the price change at the border. Although the price of an export good may increase after trade liberalisation, a net seller of the export good may never see any price (and hence welfare) increase. If intermediaries retain price increases as profits and continue to buy the good from the primary source (i.e. the farmer) at the pre-trade price, the household is likely to be unaffected by the price change. In several studies undertaken by PRUS (2001:2) on the price transmission mechanism, it was found that the price ultimately received by farmers is often substantially lower than the border price, making the impact of trade reform on poor households almost negligible in such cases.

Trade liberalisation can also cause changes in a country's domestic marketing arrangements in such a way that certain market institutions may disappear, creating 'missing markets' (McCulloch *et al.*, 2001:73). If, for example, private agents replace a public body that used to purchase output from small farms in poor areas and the new agents refuse to continue with this, the poor can become completely isolated from markets that were previously available to them. They may also be blocked from new market opportunities that arise after trade reform. Households reliant on these markets can



suffer substantial losses in welfare, as Zambia experienced in the 1990s (McCulloch *et al.*, 2001:73). On the other hand, trade reform may change institutions in such a way that market access for poor/remote farmers is increased and new markets are opened up. McCulloch *et al.* (2001: 74) cite the case of the cotton industry in Zimbabwe in the early 1990s in this regard, when farm incomes rose substantially.

It is also important to take into account how households respond to price changes, in particular whether they are able to shift production to more profitable goods and consumption to cheaper goods. If alternatives exist, an adverse shock will have less of a negative impact on the household, while a positive shock could deliver great benefits. If, however, few alternatives exist or households simply do not have the capacity to adjust, an adverse shock can significantly decrease the welfare of the poor while positive shocks may have only a small impact. Furthermore, adjustments will have spill-over effects into secondary markets, and such effects will have their own distributional implications (Winters, 2000b:5).

Intra-household distribution is another important determinant of how trade shocks translate into welfare effects (Winters, 2000b:4). Changes in a household's welfare do not always affect every member in the same way, either positively or negatively. In this analysis, an important distinction can be made between 'male' and 'female' activities in poor households. If wages increase for female labour, for example, household welfare should improve. Female household members, however, may experience a decrease in their welfare as they could have to increase their hours of labour whilst still attending to in-home activities, for which they receive little help from male household members. As a result, female welfare can decrease even when a positive shock results from trade and overall household welfare increases (Winters 2000b:4). These gender aspects need to be taken into account when assessing trade shocks and their distributional consequences.

Finally, there are several goods that are not directly affected by price changes in the product market, including subsistence goods and services, as no price is attached to them directly. While there is no direct price link they are, however, influenced by spillovers from goods that are affected by price transmission shocks. Goods that were unavailable before trade and become available after liberalisation can also not be analysed in terms of price changes as no price was attached to the good before trade. These goods do, however, represent an important benefit that poor households may experience due to open trade. These aspects all need to be taken into account when looking at the effects on poverty (McCulloch *et al.*, 2001:75).

(b) Wages and Employment

The second channel of influence is the effect that the opening of trade has on the labour market and the resultant changes in wages and/or employment that affect the poor (PRUS, 2001:2). With liberalisation, firms face price changes in the goods that both they and other firms produce, resulting in a change in incentives. How these relate to the labour market depends on the elasticity of labour supply i.e. the flexibility of the labour market (Winters, 2000b:6). If labour supply is perfectly inelastic then any change in prices and incentives relates to a change in wages with no change in employment. The Stolper-Samuelson framework (under strict assumptions) relates to this extreme (see Section 2.1). The suggestion in this case is that a more open trade regime should increase wages in developing countries and help alleviate poverty (Winters, 2000b:6). However, the predictions of the theorem often do not hold in reality and, even if they did, the least-skilled workers in a country would have to be used in tradable goods production for a positive distributional impact to occur. There is little evidence to suggest that this occurs in reality.

At the opposite extreme is a perfectly elastic labour supply. Here, the changes are purely employment adjustments with wages remaining the same as pre-liberalisation wages. In this case, there is an abundant supply of labour at an exogenously fixed wage. People can move in and out of employment easily as enterprises demand more or less labour as a result of price shocks. When increased prices lead to an incentive to increase production, this translates into an increase in employment, with no change in the wages received by labour (Bannister and Thugge, 2001:2). Winters (2000b:7) argues that the distributional impact of the increased employment depends on the reason for the fixity of the wage. If it is due to the existence of infinite amounts of subsistence labour, then the formal wage will be equal to the 'subsistence wage'. Moving workers from the subsistence to the formal sector will only have a positive poverty impact if the workers remaining in the subsistence sector can increase their



welfare as a result of this change, e.g. if workers moving to the formal sector decreases overcrowding in the subsistence sector. If, however, this does not occur, the welfare and wages of the poor will remain unchanged and there will be no poverty impact. On the other hand, if the fixity is a result of a minimum wage above the poverty line at which there is an infinite (or at least excess) supply of labour, the outcome is slightly different. If trade increases the price of exportable goods, more workers will be demanded for the production of the goods and formal sector employment will increase. Since the formal wage is higher than the 'subsistence wage', positive poverty implications are expected (McCulloch *et al.*, 2001:77). At the same time, however, the opposite result would occur in enterprises producing importable goods and employment in these sectors would decrease. The ultimate poverty impact depends on the relative employment changes and whether employment in the formal sector experiences a net increase or decrease as a result of the trade price shocks.

Obviously, neither extreme is ever fully present in reality and changes in output prices due to trade will tend to translate into changes in both employment and wages. How this affects the poor depends on how the wages and employment of those below, or just above, the poverty line are affected by the price shocks. Rural and informal urban sectors tend to conform more closely to the assumption of elastic labour supply. Since these markets are unregulated and highly flexible, a trade shock would generally transmit as changes in employment (Bannister and Thugge, 2001:2). As these sectors represent a large portion of the poor population, such employment swings can have serious implications. Even a short period of unemployment may cause extreme hardship for the poorest in society. As a result, government assistance may be required to lessen the severity of these effects.

Labour market effects may not, however, be as large as has previously been proposed. Despite relative price changes after trade reform, enterprises simply may not respond to the new price incentives. This may occur either because they lack the resources to adjust their business plans or, even if they are willing to, may not have the funds to invest in increased production (McCulloch *et al.*, 2001:80). In such instances, the impact of trade reform via the enterprise channel is lessened.

(c) Taxes and Spending

The final channel of influence is an indirect one whereby household incomes are altered by taxation and government spending on social programmes and transfers. Trade liberalisation may influence government's fiscal position via its impact on trade taxes. This may in turn affect government expenditure. If this expenditure includes spending on the poor, there could be serious negative poverty implications. If other taxes are increased to compensate for the loss in revenue from trade taxes, and if these taxes affect goods used in a large proportion by the poor, there will also be adverse consequences for poverty via this channel (Winters, 2000b). Whether there is ultimately an adverse impact on the poor through this channel in the long run depends on whether a large amount of revenue is originally received from trade-related taxation and also on how the government responds to the revenue changes.

Bannister and Thugge (2001:3) note that, in the early stages of trade reform, non-tariff barriers may be replaced by tariffs and tariff exemptions removed, resulting in an increase, rather than a decrease, in government revenue. Also, lowering tariffs that previously were very high may increase trade flows and consequently increase tariff revenue. There is also evidence to suggest that a more uniform tariff structure comprising only a few tariff rates will have administrative benefits, possibly increasing revenue. Lower tariff rates may also decrease incentives for smuggling. This increases the number of traded goods recorded and, consequently, also increases revenue.

Rodrik (1997) raises a further consideration: opening a country's economy tends to reduce a government's ability to raise funds by taxing mobile factors of production (Winters, 2000b:9). Since capital tends to be mobile internationally the concern is that government may choose to tax the non-mobile factor i.e. labour. McCulloch *et al.* (2001:82) argue, however, that this may not necessarily have a negative impact on the poor. If the taxes are income taxes, for example, the distributional impact may be positive due to the progressive nature of the tax. It is also important to note that cuts in revenue may not necessarily lead to cuts in expenditure, especially pro-poor and redistributive expenditure.

Finally, McCulloch *et al.* (2001:83) raise the further issue of whether opening up the economy 'restricts a government's ability to manage spending and taxation in a way that affects poverty'. There



is much concern about whether participation in WTO agreements, for example, significantly constrains pro-poor policies (such as the use of subsidies) in developing countries.

It is apparent that the framework for analysing the channels of influence of trade on poverty put forward by Winters (2000a,b) and McCulloch *et al.* (2001) raises a series of considerations which take the analysis well beyond the confines of conventional trade theory. Kanji and Barrientos (2002: 2), however, argue that while the importance of institutional and social factors is explicitly identified, the approach is still too 'economic and market based, with poverty analysed in terms of the income/consumption responses to trade shocks by households'. Despite this criticism (considered further below), it must be recognised that the McCulloch *et al.* framework has made a significant contribution to the analysis of trade and poverty, particularly given the cognisance taken of non-market factors and imperfect markets, the importance of institutions and gender aspects, as well as a recognition of the importance of livelihoods and vulnerability in the analysis of poverty (see Kanji and Barrientos, 2002: 12).

2.5.2 A livelihoods approach to the analysis of trade and poverty

Kanji and Barrientos (2002: 2, 13-14) consider a sustainable livelihoods approach to analysing trade and poverty as a complementary approach to the McCulloch *et al.* framework. This draws on socio-economic perspectives of poverty which broaden the concept from one based on measures of consumption and income to one which systematically includes vulnerability, insecurity, isolation and powerlessness. The livelihoods approach specifically considers people's capabilities and social assets, as opposed to only material assets.

In this approach, it is firstly important to assess people's assets (broadly defined) and their vulnerability to poverty in the face of different types of shocks. This would allow consideration of the risks and opportunities presented by, for example, trade liberalisation. In addition, an analysis of institutions and processes conducive to participation in the market can assist with the identification of market and non-market factors which impact on poverty (Kanji and Barrientos, 2002: 14).

The livelihoods framework, importantly, has a broader perspective of what constitutes a positive impact or outcome as a consequence of trade reform, other than simply an increase in income. This perspective would include (non-income) outcomes such as reduced vulnerability, food security and sustainable natural resource use. In essence, securing livelihoods and decreasing vulnerability are seen as being as important as raising incomes. An example of this relates to the emphasis in traditional trade theory on specialisation according to (static) comparative advantage. By contrast, in the livelihoods approach, diversification could be seen as the best response for small farmers in the face of international competition, in order to reduce vulnerability and increase security (Kanji and Barrientos, 2002: 17).

2.5.3 Integrating the alternatives

On the one hand, while the livelihoods approach enriches understanding of the potential poverty impact of trade reform, it is argued that its analysis of markets is insufficient. On the other hand, although the McCulloch *et al.* approach significantly broadens the analysis of trade and poverty beyond that of conventional trade theory, it does not go far enough in integrating the livelihoods perspective into the framework. Kanji and Barrientos (2002: 3) argue that what is ultimately needed is a combination of approaches in order to provide an adequate framework of analysis for exploring the linkages between more open trade and the livelihoods of the poor. They argue that three independent areas of research (considered below) have contributions to make in this regard, specifically in closing the gap between existing approaches.

(a) Global value chain analysis

Both global and domestic value chain analysis can be used to enrich the study of the enterprise channel in the McCulloch *et al.* framework. Kanji and Barrientos (2002: 20) argue that global value chain analysis could be of particular use in considering the links between trade and poverty in countries whose exports are concentrated in a few primary products that are part of such chains. It could also be of particular interest in sectors such as motor vehicles and clothing and textiles which are traditionally considered to be 'sensitive' sectors in the face of trade liberalisation.



(b) *Gender analysis*

Both the literature on gender and poverty and that on gender and trade could be used to augment the analysis of the enterprise and distribution channels in the McCulloch *et al.* framework. It has already been noted in Section 2.5.1(a) that the household is “not an undifferentiated utility optimising unit...[n]or does it have a joint welfare function in which equitable or rational distribution among members is guaranteed...” (Kanji and Barrientos, 2002: 23). Inequalities in the household and enterprise division of labour based on gender are pervasive, with implications for the possibility of a smooth reallocation of labour following trade liberalisation. Furthermore, gender bias constrains the possibility of taking up opportunities arising from trade reform.⁶

(c) *Trade and the environment*

Trade expansion can have both negative and positive impacts on the environment. If poverty is reduced, then poverty-related environmental degradation will be lowered. However, depletion of the natural resource base and increased pollution could be important negative effects (OECD, 1994). Environmental externalities need to be taken into account in assessing the implications of trade policy reform and associated poverty linkages.

In conclusion, both the McCulloch *et al.* (2001) and the livelihoods approaches to the analysis of trade and poverty greatly enrich conventional views of the distributional impact of trade expansion. Further development and integration of these frameworks is important for the evolution of pro-poor trade policy reform.

3 A Review of Related Literature on South Africa

The present section attempts to synthesise some of the work on South Africa to date which is relevant to the analysis of trade and poverty in the country. To organise the discussion, research will be reviewed in the context of the channels of influence of trade on poverty proposed by the McCulloch, Winters and Cirera framework outlined in Section 2.5.1. While the analysis is difficult in that it is not possible to isolate the effects of globalisation from other processes taking place at the same time (Hayter *et al.*, 2001:37), the predominance and importance of the social problems facing South Africa make it important to try and ascertain the potential effects that trade reform has had in order to negate any adverse impacts and take advantage of opportunities that liberalisation presents.

3.1 Comparative advantage in South Africa

As a country with high unemployment and an abundance of unskilled workers, basic Heckscher-Ohlin trade theory would suggest that South Africa would have a comparative advantage in unskilled-labour-intensive goods. The opening of trade would then be expected to result in an expansion in the demand for unskilled-labour-intensive products, resulting in an increase in the wages and/or employment of unskilled labour (Wood, 1994:13). Consequently, favourable distributional impacts should follow, decreasing income inequality and poverty.

The experience in South Africa has, however, been somewhat different. While an open trade regime has expanded trade significantly in the country, with both exports and imports increasing as a percentage of GDP (Pretorius, 2002:1), the expansion effects have been the opposite of those expected by the Heckscher-Ohlin model. Rather than the expansion of labour-intensive sectors there has been an increase in capital-intensive sectors and a contraction in ultra-labour intensive sectors (Natrass, 1998:20). ‘Manufacturing export growth has been strong, but has become more capital- and skill-intensive... at the same time, import penetration has risen, particularly in labour-intensive sectors such as leather products, footwear and wearing apparel’ (Edwards, 2003a:1). Even more worrying is the extent to which the shift has been ‘away from relatively black labour-intensive industries, and towards relatively white labour-intensive industries’ (Bell and Cattaneo, 1997:14).

As noted in Section 2.1, the fact that South Africa is a middle-income country (Natrass, 1998:18), as opposed to a low-income one, means that it is faced with competition from high-income developed countries (likely to have an advantage in skill- and capital-intensive production) as well as competition

⁶ See Kanji and Barrientos (2002:23-25) for references to the literature.



from low-income developing countries (that generally have an advantage in unskilled-labour-intensive production) (Fedderke *et al.*, 2000: 2). A large percentage of South Africa's trade is with other (developing) African countries and much of the increase in trade flows can be attributed to increased trade with the rest of the continent (Roberts, 1998:27). Trade with other low wage countries such as China and India has also increased (Edwards, 2001a: 4). As a result, the country has experienced an increase in competition from countries with a greater comparative advantage in unskilled-labour-intensive production and increased import penetration from these countries. The share of ultra-labour intensive exports in trade fell from 11.8% in 1984 to 6.8% in 1997, and further decreases are expected in the future (Edwards, 2001b: 473). The nature of South Africa's trade provides a partial explanation for the 'paradoxical' structural trade shift.

It can also be argued that it is natural resources, rather than unskilled labour, that tend to be more abundant in the country (Hayter *et al.*, 2001:56). Generally, extracting these natural resources (which tend to be minerals) involves capital-intensive techniques and processing industries. As a result, the country ends up with a comparative advantage in capital-intensive production as a result of the wealth of mineral resources in the country. 'Most of the export-oriented manufacturing sectors are natural resource based' (Hayter *et al.*, 2001:49).

Further, it has been argued that capital-intensive industries in South Africa received a large amount of assistance and subsidies from the government when the economy was relatively closed (Hayter *et al.*, 2001:1). As a result, capital-intensive sectors were favoured in domestic policy and were able to expand and develop. While several initiatives have been implemented by the post-apartheid government, such as the Regional Industrial Development Programme (RIDP) and the Simplified RIDP, in an attempt to provide support for labour-intensive sectors, a large amount of investment from the government still flows into large scale capital intensive projects (Edwards, 2000:4). As a result, previous and current domestic policies have played an important role in building a 'created comparative advantage' in capital-intensive sectors that have benefited from years of protection and support and, as a result of an accumulation of capital assets and technical knowledge, have become more competitive than labour-intensive sectors, which have not had the same advantages.

Lastly, even though the country has experienced high and rising unemployment, wages for all categories of labour have continued to rise (Hayter *et al.*, 2001:27), at least according to 'official' establishment level data. If this picture were accurate, it might be interpreted as indicating that labour markets in South Africa are inflexible, and competitiveness is hampered by high wages of unskilled workers. This would create a bias against unskilled-labour intensive production (Tsikata, 1998:25). Capital may in fact be relatively cheaper (in terms of productivity) than labour, which induces activity in capital-intensive sectors and creates incentives for moving towards more capital-intensive production (Kaplinsky, 1995:182). The evidence, however, is mixed. On the one hand, there is some evidence that unit labour costs are high in labour intensive industries relative to "several other African countries and ... potential Asian competitors in unskilled labour-intensive products" (Hayter *et al.*, 2001:58; see Edwards, 2003b). Similarly, it has been argued that increasing unionisation has coincided with the era of rapid trade liberalisation (Abdi and Edwards, 2002:15). On the other hand there is virtually no evidence of a causal link between institutional factors, high wages, and unemployment. Furthermore, the evidence presented by Edwards (2003b) on unit labour costs suggests that wage increases have been offset by productivity growth. As Bhorat *et al.* (2002:30) put it 'the overarching evidence is of nominal wage demands that (are) fairly congruent with inflation and labour productivity growth rates'. Finally, the official wage and employment statistics have been heavily criticised, and a distinctly different (albeit no more conclusive) pattern emerges from household survey data (see for example, Casale *et al.* 2004). The notion that labour market "inflexibilities" significantly distort trade and labour market outcomes is therefore far less established than is sometimes assumed.

In sum, however, it appears that, due to South Africa's unique circumstances, there has been a structural shift in production techniques to more capital- and skill-intensive production and away from labour-intensive (especially ultra-labour-intensive) production. Further detail on intra- and inter-sectoral shifts and their impact on employment and wages will be considered in Section 3.3.

3.2 Price transmission

Winters (2000b:2) explains that one of the primary ways in which the poor are affected by trade liberalisation is via the effect on the product market through the distribution channel's impact on price



transmission. If the prices of goods that a household is a net buyer of increase or goods that a household is a net seller of decrease then negative welfare impacts occur and the household can slip further below the poverty line. Evidence suggests that 'trade-induced changes in commodity prices (can) be fairly substantial' (Mukhopadhyay, 2002:1) and that these effects are particularly strong for standard goods that make up the consumption patterns of the majority of the poor. While Winters' (2000b:2) analysis focuses on households as both producers and consumers, it has been found that, unlike most other African countries, the poor in South Africa are net buyers of food rather than net producers (Mukhopadhyay, 2002:2). This is most likely due to the segregation efforts during the years of apartheid that placed African's in crowded areas with poor-quality land. As a result, the focus will be on the change in prices of consumption goods of the poor.

Obviously, price shifts of staples can have devastating impacts on the very poor. Looking at the consumption patterns in South Africa it is obvious that as one moves down the income ladder, a larger percentage of overall income is spent on food. At the lowest decile in the economy, 46% of the budget is spent on food purchases (Bhorat and Poswell, 2003:32; see also Case, 1998: 6). Dramatic increases in food prices can decrease the real income of the poor by a substantial amount. The fact that food prices have a greater probability of rising faster than other prices and that food prices are especially volatile (increasingly so after trade is opened up) means that the poor are particularly vulnerable to food shocks (Bhorat and Poswell, 2003:33). It has been found that the highest proportion of poor households' income is spent on maize meal (6.6%) and sugar (3.9%) and the analysis will therefore focus on work which has considered the price changes of these two products since trade liberalisation began.

3.2.1 Maize

The agricultural sector in South Africa was highly regulated and as a result food prices in the country were artificially high (Bhorat and Poswell, 2003:35). Since 1994, the sector has undergone massive restructuring in an effort to move towards an unregulated and internationally competitive market (Chant *et al.*, 2001:1). It is argued that maize prices are now set according to domestic and international market conditions and since South Africa is a price taker, the final maize price lies between import and export parity pricing (Bhorat and Poswell, 2002: 17). While the world Dollar price of maize has been dropping consistently since 1995, due to the depreciation of the Rand there has been a sharp increase in the domestic price of maize since 2000. While opening trade should have yielded lower maize prices, the exchange rate fluctuations have created the opposite result. Also, increased demand from the SADC region has pushed South African maize prices upwards (Bhorat and Poswell, 2003:37; Vink and Kirsten, 2002: 58). Since it is assumed that maize is price inelastic, the poor have no choice but to substitute spending away from other goods such as clothing and health care.

3.2.2 Sugar

As with maize, the Dollar-price of sugar has been dropping since 1995 (Bhorat and Poswell, 2003: 48). However, South Africa has not experienced a corresponding decline in its domestic sugar price. Much of this can be attributed to the exchange rate depreciation that the country experienced in the early 2000s. The fact that other countries are granted large subsidies for sugar production and tariff barriers exist in other countries for sugar imports adds to this effect. Also, the South African sugar industry is anything but competitive which places upward pressure on sugar prices (Bhorat and Poswell, 2003:48).

The two main consumption goods of the poor have both experienced a rise in prices since trade liberalisation began, mostly as a result of exchange rate depreciation. As a result, the very poorest in the country have experienced a dramatic fall in their real income, which is likely to aggravate income inequality and may increase poverty levels. These results are, however, more likely to exist only in the short run as the Rand adjusts in the international market and in the long run it can be expected that liberalisation will ultimately result in a decrease in the domestic prices of these goods (as a result of the falling world price).⁷ Ssekabira Ntege and Harmse (2003:759) have, however, found that domestic prices tend to be sticky downwards as a result of imperfect markets and market failure and one cannot unequivocally assume that prices will eventually fall (see also Rangasamy, 2003:136-140).

⁷ An earlier study by Case (1998), for example, argued on the basis of an estimated linear expenditure system, using the SALDRU database, that one would expect large gains from tariff reductions to South African households as consumers, due particularly to anticipated decreases in the prices of food and clothing.



Whatever the result in the long term, it is clear that 'those in poor households undoubtedly bear the brunt of any adjustment costs associated with greater openness' (Bhorat and Poswell, 2003:51) and policies should be put into effect to protect the poor.

The comprehensive study by Vink and Kirsten (2002) on pricing behaviour in the South African food and agricultural sector concludes that higher prices for basic foodstuffs have resulted from rising world prices, lack of competition further down the supply chain, a significant exchange rate impact, and demand from the rest of SADC. They argue that in a liberalised environment, higher international prices tend to be transferred rapidly into the home market, providing some justification for intervention (Vink and Kirsten, 2002: vii, 58).

3.3 Wages and employment

The second channel of influence whereby trade liberalisation affects the poor is the influence that an open trade regime has on employment and wages (McCulloch *et al.*, 2001:72). As has already been mentioned, an overwhelming amount of evidence has pointed towards the increasing capital- and skill-intensive nature of production in South Africa. Obviously, this has a large impact on wages and employment within the country as the demand for skilled and unskilled labour and capital changes.

While an increasingly open trade regime has created some GDP growth in the country, this increase remains small and the economic performance and growth in the country has not been very strong (Pretorius, 2002:2). Pretorius (2002:2) has concluded that globalisation has not succeeded in creating jobs in the country and that currently we are plagued by the 'jobless growth' phenomenon. However, Bhorat and Poswell (2003:5) have argued that from 1995-1999 there has actually been growth in employment within the country with aggregate employment increasing by about 10%. The underlying reason for the increase in the unemployment rate over the same period (from 29.24% to 35.85%) can be attributed to the fact that the economically active population has increased by a far greater number than the number of new jobs created over the period. Therefore, while economic growth due to liberalisation has created more jobs in the economy, the job creation has been far from adequate in a country with such a rapidly increasing workforce, growth of the supply of labour force far outstrips growth of demand for labour in the country. It is important, however, to recognise that the methodology used in the study was inconsistent and that the results should be interpreted with caution. It has also been argued that job growth has been in "bad" jobs, with increased casualisation and insecurity for workers.

Regardless of whether the 'jobless growth' phenomenon has occurred or not, it is clear that unemployment as a whole has increased over the past decade and that while unemployment has increased for all race groups, for Africans the unemployment rate has been the highest and has continued to increase at the fastest rate (Bhorat *et al.*, 2002:8). Therefore, it is important to look at the various sectors of the economy to ascertain how they have been affected as a result of liberalization, what within- and between-sector shifts have occurred and how a skills-biased shift has occurred.

3.3.1 Manufacturing

Much research of employment shifts in South Africa has focused on the manufacturing sector. This sector plays an important role in the economy as it provides about a fourth of non-governmental formal sector employment (Tsikata, 1999:69) and there has been rapid growth in manufacturing trade in recent years, making the sector a useful and important one in assessing employment changes in the country (Abdi and Edwards, 2002:14). Prior to 1994, manufactured goods were only exported once domestic demand ran out i.e. the international market was merely a 'vent-for-surplus' (Edwards, 2001b:480). However, since 1994 the manufacturing sector has become increasingly outward-oriented and export growth in the sector has been strong with a corresponding increase in production and output (Roberts, 1998:2). The main concern has been that while output and exports have both expanded, job creation has remained stagnant and in some cases has even decreased (Roberts, 2000:626). 'The growth in manufactured exports has been due to a few main sub-sectors... which are based on large-scale capital-intensive production' (Roberts, 1998:13) and as a result labour demand has not increased significantly. Where labour demand has increased, it has been for highly skilled labour that has the expertise to operate within capital-intensive sectors. Even in the more labour-intensive sectors of manufacturing there has been a decrease in employment levels even when production has increased (Hayter *et al.*, 2001:49).



Before trade liberalization, the manufacturing sector was very isolated from international markets and as a result, not very competitive. After 1994, the sector was increasingly faced with foreign competition and, due to the rapid nature of trade reform in the country, was forced to become competitive rather quickly. In response to the enormous global competition firms were faced with, many decided to decrease their semi-skilled and unskilled workforce in an attempt to increase productivity (Bhorat and Poswell, 2002:13). This has had devastating effects for those facing retrenchment as it has been found that retrenched workers have had difficulty finding alternative sources of employment within the country, even in the informal sector (Thoburn, 2003:2). Another response to competition has been the increased use of improved technology. Edwards (2001a:7) argues that the dominant force behind changing employment patterns and skill structure of the workforce can be attributed to this. The adoption of new technology often replaces some unskilled jobs and requires more highly skilled personnel to operate the new technology. As a result, those with few skills lose their jobs while those that are highly skilled find more and more job opportunities available to them. In manufacturing, therefore, only highly skilled workers have gained in terms of employment while unskilled and semi-skilled labourers have experienced a sharp decrease in employment levels.

3.3.2 Primary Sectors

Since 1994, there has been a decline in production and employment in both agriculture and mining (Hayter *et al.*, 2001:46). Between 1994 and 1999, agricultural employment decreased by 4.6% and mining employment by about 27% (Bhorat *et al.*, 2002:10). Wheat production in particular has experienced a massive decline of 85% (Van Zyl *et al.*, 1997:467). It is clear that both primary sectors are in decline and are decreasing in their significance in the South African economy. Despite the overall decline in the agricultural sector and the dropping employment levels, the two highest skilled occupations, professionals and managers, experienced a massive increase in employment of over 250% in the period and elementary workers disproportionately bore the brunt of employment losses (Bhorat and Poswell, 2003:12). Much of this can be attributed to the increased competition faced by agricultural producers in the country (Chant *et al.*, 2001b:4). In response to liberalization the agricultural sector has been forced to increase productivity, and employment levels have decreased for most labour categories resulting in 'an increase in the degree of inequality across racial groups' (Chant *et al.*, 2001a: 581).

Another response to globalization in the agricultural sector has been the increased use of irregular, flexible workers as opposed to full-time regular workers (Dolan, 2003:1). This 'informal' work increases the vulnerability of these workers who are already at the bottom of the income ladder and has negative distributional impacts in the country.

3.3.3 Services sector

'The largest increase in employment was reported for the financial and business services sector, where employment grew by 61%' (Bhorat and Poswell, 2003:10) and there has been a significant expansion in the services sector in general. It appears that there has been significant job reallocation from the primary sector to the services sector since trade liberalization began, resulting in significant between-sector shifts (Bhorat and Poswell, 2003:11). As a whole, the services sector tends to be much more skill-intensive than the primary sectors and as a result, growth in the services sector 'result(s) in a skewed preference for those individuals with a greater quantum of human capital' (Bhorat, 2000b:443). Also, the capital-labour ratios in the sector have increased by about 117% since 1994 (Bhorat, 2000b:443) resulting in a within-sector shift towards more highly skilled labour usage.

3.3.4 Overall employment shifts

Considering the impact of trade overall, Edwards (2003a: 2) has argued that "while trade liberalization has negatively affected employment in large import-competing firms, the impact is too small to account for the full decline in employment". Instead, other factors have played a more significant role in the poor employment performance of the economy.

It appears that there has been a between-sector shift away from primary sectors towards growth in the manufacturing and services sectors. However, at the same time, the manufacturing and services sectors have both experienced within-sector shifts towards more skill- and capital-intensive production methods in response to increased competition and the increasingly widespread adoption of technology. This, combined with the contraction in ultra-labour intensive sectors and expansion of capital-intensive exports, has led to an increasing skills-bias in the domestic labour market. While



those at the top end of the spectrum have experienced an increase in employment opportunities and increased wages, those at the bottom end have generally lost their jobs or at least some of their job security. It has thus been argued that the potential adjustment costs of trade liberalization are therefore very high in terms of income distribution and increasing poverty levels (Hayter *et al.*, 2001:50).

Another contributing factor, it is argued, rests on the view that wages have not adjusted to increasing levels of unemployment (Tsikata, 1999:72). It has been estimated that the long run wage-employment elasticity in the country is about 0.071, meaning that a 10% increase in the wage rate leads to a 7.1% decrease in employment levels (Bhorat *et al.*, 2002:23). Employment levels are therefore sensitive to wages and the failure of wages to adjust downwards can potentially be contributing to the poor employment performance of the economy. The reliability of the data on which such estimates are based have been questioned, however (see also Section 3.1).

Openness has resulted in an increasingly unequal distribution of job opportunities within the country. What is not obvious, however, is whether these patterns will continue into the long run with permanent job losses or if this is simply the adjustment period as the economy undergoes structural change (Roberts, 1998:7). Either way, it is clear that unskilled labourers and elementary workers are the ones bearing the costs of adjustment with devastating consequences for South Africa's already high unskilled unemployment figures.

It should be noted, however, that while a large amount of research has been done on wages and employment in the formal sector, very little research has focused on the informal sector. While figures for the informal sector would add a great wealth of knowledge to understanding the effects of trade liberalization on employment in South Africa, this information is difficult to collect as 'very poor data exist on this part of the labour market' (Bhorat, 1999:325) and sampling in the informal sector is both difficult and poor in existing surveys. This is clearly an area that could benefit from further research and it should be kept in mind that the employment picture presented above is by no means complete or uncontroversial.

3.4 Taxes and spending

The third channel of influence proposed by Winters (2000b:8) is an indirect one whereby household incomes are altered by taxation and government spending on social programmes and transfers. 'Trade revenue is affected by the removal of trade barriers, (however) the direction of change is ambiguous' (Matlanyane and Harmse, 2002:334). Removing trade barriers generally increases the amount of imports that enter a country which can potentially increase tariff revenue, however, a lower amount of tariff revenue is received per unit of imports. In South Africa, tariff revenue only accounts for a small percentage of overall government revenue. In 1994, the tax revenue accruing from trade was a mere 5.3% of overall revenue. Since trade liberalization has taken place, imports have increased from 19.49% of GDP in 1994 to 24.02% in 1998 (Matlanyane and Harmse, 2002:343). However, at the same time, the government received less revenue from every percentage of imports. The ultimate result has been a reduction in revenue received by the government from trade down to about 3.2% (Matlanyane and Harmse, 2002:334). Since South Africa has very high income tax, it is unlikely that this revenue may be replaced through increasing income taxes and there is some concern that consumption tax may be increasingly used to replace the lost revenue (Calitz, 2002:598). This could have very negative consequences for the poor, eroding their real income due to the regressive nature of consumption taxes. However, the fact that trade revenue has always made up only a small part of government revenue means that it is unlikely that government will resort to this.

A concern that is often raised is that as an economy becomes more open, the government loses control over the tax base as assets become increasingly internationally mobile and that government may choose to tax the less mobile assets i.e. labour (Calitz, 2000:595). Unfortunately, little research has been done on this area in South Africa.

The evidence in South Africa does seem to suggest that 'trade liberalization has not reduced trade tax revenue significantly' (Matlanyane and Harmse, 2002:344) and that social expenditure and transfers should not experience any decline as a result of trade liberalization. The government channel therefore appears to be a relatively unimportant one in our analysis, however, the fact that very little research has been done on the area indicates that this conclusion should be interpreted with caution.



4 Appropriate Accompanying Policies

Overwhelming evidence has shown that 'indiscriminate liberalization without adequate national policies and proper safeguards, can spell disaster for poor communities in developing countries across the world' (Mukhopadhyay, 2002:1). This is especially true in South Africa where a period of trade liberalization has corresponded with rising levels of unemployment, increasing prices of staple goods bought by the poor and an increasingly skills- and capital-biased labour demand with expansion in capital-intensive sectors and contraction in ultra-labour intensive sectors. The adjustment costs of opening trade are disproportionately borne by the poorest in the country and this can have significant welfare effects. The evidence points to the fact that the poor need to be protected from these forces, not just in the adjustment period, but also potentially in the long run as well.

South Africa's development in a liberalized era has shown an increasing demand for a skilled and educated workforce. Much of the problem of unemployment is created by an inability of those at the bottom end (i.e. uneducated and unskilled) to adjust to these new labour requirements of the economy (Edwards, 2001a:18) and many are unable to gain access to skills development training or adult education. As a result, 'providing equal access to education and training and developing a better-educated, better-trained labour force is, therefore, one of the country's priorities' (Hayter *et al.*, 2001:76) in order to create a match between labour demand and labour supply. The educational quality in the country, especially for the previously disadvantaged, needs to be improved. An improved curriculum that includes good quality education in mathematics and sciences is especially important. Equally important is training for those already in the workforce, or with the potential to enter the workforce. Providing the necessary skills can do much to improve the chances of finding a job. Also, adult basic education needs to become more accessible for those living below the poverty line. While several initiatives have been put into place such as the Skills Development Act and various learnership programmes, these measures have not had much of an impact and further measures should be taken in future.

While improving education and skills training should have a positive impact in the long run, they are unlikely to solve the short-term problems of unemployment and poverty. Improving the educational qualifications and skills of the unemployed and low-income earners is probably the most important measure needed in the country, however, various other aspects of the economy need to be addressed too.

In the area of labour market flexibility, it has been argued that 'increased labour market rigidities have exacerbated the losses in manufacturing employment arising through trade liberalization' (Edwards, 2001a:20). Containing wage increases or raising productivity of unskilled labour would assist in the removal of factor price distortions in the economy, creating an incentive to increase unskilled-labour intensive production and ultimately increase employment of unskilled labour. The South African literature is far from settled on the matter of the impact of labour market inflexibilities, however. In addition, it is important to ensure that workers are protected from too much insecurity while at the same time ensuring that the labour market is adaptable (Hayter *et al.*, 2001:70).

Increasing competition in the country is also important as monopoly powers are often able to ensure that prices remain high even after trade liberalization and its price reducing effects occur. 'Liberalization without market perfection can easily sustain the grave income distribution disparity' (Ssekabira Ntege and Harmse, 2003:756) within the country. Some sectors of the South African economy exist within highly concentrated industries (Hayter *et al.*, 2001:69) and this can place upward pressure on prices, making them sticky downwards. Domestic market intervention, such as competition policy, can do much to increase the competition in various industries in the country and negate some of the adverse impacts of openness on the poor.

While equality of access to education and skills training is important, equal access to credit is just as imperative in the country. Small, medium and micro enterprises (SMMEs) need to receive an increasing share of credit facilities and easier access to these facilities (Hayter *et al.*, 2001:74). Also, black economic empowerment measures can do much to increase access of low earners to productive assets and economic opportunities.



Incentives for labour-intensive production should be put into place with less public investment flowing into capital-intensive sectors as has historically been the case, and more flowing into labour-intensive sectors (Edwards, 2001b:488). While upgrading skills in the economy is important, the vast number of unskilled workers and unemployed in the country makes it unlikely that the majority of them will be able to upgrade their skills substantially and as a result 'industrial growth must be more labour demanding' (Tsikata, 1999:1) in the country if employment and inequality levels are to decrease. The problem faced by the country is that of improving the skills base of the country to meet the labour demand requirements for highly-skilled workers, whilst at the same time expanding employment opportunities for those that remain unskilled.

Equally important in the adjustment period is to provide a social safety net for those that lose their jobs, directly or indirectly, as a result of liberalization. Providing counselling, training and financial support during the unemployment period can do much to ease the strain of the adjustment period for those, generally poor and unskilled, workers affected (Hayter *et al.*, 2001:70). Adequate welfare systems that assist the most vulnerable in society are important in a period of transition, especially in South Africa, where the adverse impacts of liberalization are falling disproportionately on the poor.

5 Conclusion

South Africa's experience with trade liberalization has been one in which an open trade regime has resulted in an increase in the already high unemployment and inequality figures of the country. Due to the fact that South Africa is a middle-income country, with a large natural resource base and a history of capital-intensive industry subsidization, trade reform has resulted in increasingly capital- and skill-intensive production in most sectors of the economy. There has been a structural shift away from primary sectors towards services and manufacturing sectors, which tend to be more capital-intensive in nature than the primary sectors. However, at the same time, within-sector shifts towards capital-intensive production have occurred in most industries as a result of the increased use of technology. Therefore, as a result of both within- and between-sector shifts in the domestic economy, production in South Africa has become more capital- and skill-intensive and consequently, less labour- (and especially unskilled-labour) intensive, resulting in a decline in employment for those that are uneducated and unskilled. Coupled with the increased employment levels of those that are the most highly-skilled in the economy, it is clear that these trends have led to a large increase in inequality of access to assets and income in the country, mostly along racial lines.

The instability of the Rand has further exacerbated the negative poverty impacts of liberalization and has resulted in an increase in the prices of the goods consumed in large quantities by the poor, eroding their real income by a substantial amount. This effect is, however, only expected in the short run as the dropping world price and increasing stability of the Rand should ultimately contribute to a fall in their prices if competition in the domestic market is increased. The poor should, however, be protected from these short run adjustment costs.

What is clear is that the South African experience of liberalization, however short, has had significant adverse impacts on the poor. The combination of the short-run price increases and the longer-term production and employment changes in the country has resulted in a further worsening of an already wide-spread and persistent problem. While it is difficult to ascertain whether some of the employment impacts are merely the short-term adjustment costs or whether they will continue into the long term, there is clearly a need for accompanying policies to help negate some of these effects. It is imperative to improve the education and skills base of the workforce while at the same time creating employment for those that remain unskilled through improving incentives for labour-intensive production via public investment. At the same time, it is important to increase competition in domestic industries in order for the poor to gain from the price decreases that are likely to result. In the short run, it is important for social safety nets to be put into place for those that lose their jobs during the adjustment period with adequate counselling, training and financial support provided. Such measures may allow South Africa to begin to take advantage of some of the opportunities that liberalization presents without sacrificing the well-being of the poorest in society.

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# The Southern Africa Labour and Development Research Unit

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The Southern Africa Labour and Development Research Unit (SALDRU) was established in 1975 as part of the School of Economics. SALDRU conducted the first national household survey in 1993 (the Project for Statistics on Living Standards and Development). More recently, SALDRU ran the Langeberg Integrated Family survey (1999) and the Khayelitsha/Mitchell's Plain Survey (2000). Current projects include research on public works programmes, poverty and inequality.

## The Trade and Poverty Project

South Africa is currently engaged in various trade negotiations at the multilateral, regional and bilateral level. The net impact of the resulting trade reforms should be to contribute to growth, employment and raising average incomes. But this net impact conceals a range of differential effects: the benefits of reform do not accrue automatically and equally to all households or communities, and in some cases poverty and unemployment may rise. Policy makers need to be aware of these different effects and implement trade reforms in a way that maximizes the benefits for the poor.

The objective of the South Africa Trade and Poverty Research Project is to analyse the impact of specific trade reforms on poverty in South Africa. The project includes a number of studies that explore various linkages through which trade reform affects prices, consumption, production, and employment. These studies fall under 5 broad sections:

1. Review of trade and poverty in South Africa
2. Industry level analysis of trade, enterprise production and employment
3. Household level analysis of trade and poverty
4. Sector specific analysis and case studies
5. Policy simulations

The project is funded by the Department for International Development (through the Trade and Industrial Policy Strategies and the RTFP), USAID and the Department of Trade and Industry. All papers can be accessed via the project home page:

[http://www.saldru.uct.ac.za/saldru\\_trade&poverty.html](http://www.saldru.uct.ac.za/saldru_trade&poverty.html).

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