Globalisation and the Labour Market in Kenya

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Abstract

This paper analyses the effect of globalisation on the labour market outcomes in Kenya using micro datasets complemented with secondary data. The analysis shows that during the economic reform period (1970s to 1990s), employment creation dramatically increased in the informal sector but most of the jobs created are more insecure. The jobs created also pay less compared with jobs lost in the formal sector. Labour force participation in urban areas increased for both men and women but declined in rural areas especially for women. Unemployment also increased both in rural and urban areas and especially for women in urban areas. The increase in unemployment and the expansion in informal sector employment is partly due to retrenchment in the civil service, increased school dropout, collapse of some private firms, and retrenchment in other private firms due to stiff competition from imports following trade liberalization. The reform period also experienced a shift in labour demand in favour of highly skilled labour, a decline in permanent full-time workers, and an increase in part-time workers and casual workers. This signals a cost-cutting strategy where firms replace permanent employees with part-time and casual workers to make savings in terms of paying less benefits. Real earnings for all workers declined during the reform period until the mid-1990s when they started increasing again. Less skilled workers experienced loss in earnings compared with highly skilled workers as shown by increasing private returns to university education and declining returns to primary and secondary school education. More people are likely to become poor during the globalisation period due to increased unemployment, (especially of women), insecure jobs in the informal sector, and decreasing earnings for the mainly less-skilled labour. Globalisation is therefore likely to be associated with the worsening poverty in Kenya.

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1.   Introduction

Globalisation is often equated with growing integration of national economies. In the sphere of economics, globalisation is reflected in increasing acceptance of free markets and private enterprise as the principal mechanism of promoting economic activities. Therefore, globalisation is generally seen as the process of broadening and deepening inter-relationships in international trade, foreign investment and portfolio flows (Wignaraja, 2001). Its growing importance is captured in such indices as trade in goods and services, private capital flows in different forms, foreign investment, technology transfer, operations of transnational enterprises, business travel and communications, migration and remittances. The social sphere of globalisation comprises social relations and customs, consumption patterns and lifestyles while the cultural dimension includes the important domain values, religion and identity. At the political level, globalisation is reflected in the spread of pluralist systems, multi-party democracies, free elections, independent judiciaries and enhanced human rights. This study focuses mainly on the impact of economic aspects of globalisation on the labour market in Kenya.

Previous episodes of globalisation (1960s and 1970s) took place in an environment where many barriers to full integration were in place. The 1980s and 1990s have witnessed rapid integration of the global economy through reduction in trade barriers. Increasing globalisation has come about due to the easing of policy barriers to trade and factor flows and from technical change, which have lowered the costs of trade and factor flows. Recent episodes of globalisation have, thus, been characterized by unprecedented fall in production costs, reduced trade barriers, increased trade, access to new sources of supply, mobile labour and capital, increased competition and stringent quality requirements, and rapid transmission of technology across borders.

The accelerating pace of economic integration among nations is expected to fuel future growth in incomes and jobs and to stimulate new patterns of production and exchange. It is also expected to create unprecedented opportunities for communicating, learning and sharing knowledge with others. Globalisation, therefore, holds greater promise for empowering people and for promoting greater international understanding, linkages and partnerships. It also threatens to widen the gap between the rich and the poor, leaving some poor countries and regions behind. Globalisation will deliver its potential benefits if it works for all.

For globalisation to be successful, international trade should improve the welfare of the people in all participating countries. For instance, it should offer opportunities for increased supply of goods from developing countries to the world market, improve performances in production of goods and services, and improved labour market outcomes in the long run in these countries. It should also help improve welfare in developed countries. However, globalisation has come with the concern that not everyone is benefiting from the increasing international integration of markets of goods and services. The pattern of global economic integration displays some sharp inequalities in trade, capital flows, foreign investment, technology transfers or activities of transnational enterprises, with most transactions taking place among developed countries. Most of the poor and least developed countries are largely bypassed by the intensified circuits of trade, capital and investment flows (Ghai,1997).

Popular perceptions in developed countries blame trade with developing countries as the main cause for not only increased inequality and wage dispersion, but also for high unemployment, which has afflicted industrialized countries (Wood, 1994).[1] Globalisation has also

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[1]Wood (1994), for instance, estimates competition from developing countries to have resulted in a net reduction of 12 percent in manufacturing employment in developed countries.

coincided with adverse labour market outcomes in most developing countries as reflected by increased unemployment, falling real wages, and worsening poverty. The poor performance of economies of developing countries, particularly in Africa, has fuelled concerns about the use of liberalization policies as a panacea for industrial development. There seems to be lack of consensus on whether free trade through liberalization and deregulation can foster growth and development and alleviate unemployment and poverty problems in these countries. It is important also to mention that Kenya's efforts to develop and participate in free trade like in other developing countries faces a number of problems including limited range and low quality of products for exports, limited knowledge of markets and requirements of the market, high cost of production of exports and export management, and weak negotiation position in the World Trade Organization (WTO).

Globalisation is therefore likely to impact differently on different types of labour. The pressure that global interdependence has placed on nations to compete for their own markets is enormous and is growing everyday. However, a combination of factors constrain the extent to which developing countries like Kenya can benefit from trade liberalization and the extent to which trade activities can benefit the poor. There is also limited analysis of impact of trade on the labour market and the poor in developing countries, especially in sub-Saharan Africa.

In general, empirical evidence from developed countries shows a modest impact of international trade on the labour market (Dawkins and Kenyon, 2000). This is partly explained by the small proportion of products imported from developing countries (Krueger, 1998; Desjonqueres *et al,* 1999). In the United States, for example, about 30 percent of total imports come from developing countries while most of the trade flow of OECD countries is limited to trade among themselves.

Imports from developing countries are therefore unlikely to affect their markets. Other studies find that there was an increase in relative prices of products intensive in skilled labour and a fall in relative prices of sectors intensive in unskilled labour (textile, clothes and footwear) for the United States of America. Also, international trade had a significant effect on inter-industry structure of employment in the United States of America, but only a small impact on wages (Freeman and Kartz, 1991; Gaston and Tefler, 1993). Studies using more appropriate estimation techniques and industry level data find that trade has only a small impact on relative supply of unskilled workers in the US (Feenstra and Hanson, 1994).

Most empirical studies on the effects of trade liberalization on the labour market for developing countries focus on East Asia and Latin America with very few studies done in Africa. Developing countries, including Africa, have however opened up relatively more than advanced countries in the last thirty years. While Latin America and other countries have experienced increases in wage dispersion after trade liberalization, East Asian countries had an improvement in income inequality indicators after openness with strong orientation for exports. Woods (1994) found rising demand for unskilled labour and a decline in wage inequality in South Korea, Taiwan and Singapore following trade liberalization. Robbins and Gindling (1999) found that the skill premium rose after liberalization as a result of the changes in the structure of labour demand in Costa Rica. Robbins (1994) examines the changes in wage structure after trade liberalization in Chile and finds that although the content of skilled labour in imports exceeds the content in exports, the returns to skilled labour grew following liberalization. He concludes that the most plausible explanation of the result is the increasing imports of capital goods that are complementary to skilled labour.

A study by Hanson and Harrison (1999) shows that there was little variation in employment levels of skilled and unskilled workers, but a significant increase in skilled workers' relative wages in Mexico after trade liberalization. Green *et al* (2000) find a substantial rise in the returns to college education in Brazil following trade liberalization, but no change in overall inequality. However, Barros *et al* (2001) using a computable general equilibrium analysis to assess the effects of trade liberalization on Brazilian labour market find no significant impact of openness on income inequality (see Arbache, 2001). Marquez and Pages (1997) using panel data for 18 Latin America countries to estimate labour demand models find that trade reforms had a negative impact on employment growth.

What emerges from the literature is that the effect of globalisation on the labour market is diverse and is different across countries. However, such studies are very rare in Africa. In this study, we focus on the impact of economic aspects of globalisation on the labour market in Kenya and the implication on poverty. We address the following questions: What effect has the enormous increase in globalisation had on earnings and employment in the Kenyan labour market?; How has globalisation affected employment and earnings for certain groups of workers?; Has this impact improved or disintegrated the welfare of workers?; What implication does this have on poverty in Kenya?

2.   Economic Reforms in Kenya

During the 1970s, economic management in Kenya centred on controls. Controls were put on foreign exchange transactions, imports and exports, domestic retail and producer prices, and wages. Ceilings were put on domestic interest rates and there were selective restrictions on borrowing. These measures were aimed at controlling inflationary pressure emanating from the goods market or the labour market, conserve and allocate foreign exchange to priority sectors and direct credit allocation to preferred sectors (Ndung'u, 1997). However, by the early 1980s, it was clear that macroeconomic policies pursued were not sustainable and needed to be drastically changed.

During the 1980s, attempts were made to eliminate some of the controls. The exchange rate regime was changed from fixed to crawling peg, meaning that a more flexible real exchange rate rule was in effect, but the capital account remained closed. Major reforms that followed after 1983 included the interest rate adjustment, and reduction of fiscal deficit. These measures helped to stabilize the balance of payment, reduce excess liquidity generated by the coffee boom of 1976/77, and reduce the explosive fiscal deficit. Government sustained effort to tighten fiscal and monetary policies since the 1990s has been effective in stabilizing the economy. Tight budgetary controls were accompanied by tax reforms aimed at reducing tax rates and broadening the tax base.

edWith respect to structural reforms, the government has since 1993 made significant pace in eliminating exchange controls, including restrictions on inward portfolio investments, and removed all trade restrictions except for a short list of a few products controlled for health, security and environmental reasons. Liberalization of the maize market in December 1993 and the petroleum market in the last quarter of 1994 concluded the exercises of abolishing all price controls (Government of Kenya, 1996). A brief discussion of the various reforms undertaken in

Kenya, focusing mainly on trade reforms and reforms in the labour market, is provided in the next subsections.

2.1   Trade Reforms

As stated earlier, globalisation can be looked as the creation of a market system in which national economies are integrated with each other through international markets. For a country like Kenya, where various controls had been put on trade, prices and the labour market, reforms had to be carried out to liberalize trade and reduce controls on prices and the labour market.

The first structural adjustment loan that Kenya signed with the World Bank in March 1980 and the first standby agreement signed with the IMF in October of the same year marked the beginning of Structural Adjustment Programmes (SAPs) and trade liberalization era in the country. The government stated its intention to remove quantitative restrictions, reduce tariffs and establish flexible exchange rate regime. In 1982, Kenya signed the second structural adjustment loan and standby agreement subject to similar conditions of fiscal discipline, trade liberalization, further devaluation of the shilling, interest rate reforms and sectoral reforms. Improved price and marketing incentives and increased export promotion were other added conditions in the standby 1985 facility.[2]

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[2]In the mid-1980s, Kenya experienced a "mini" coffee boom. The country was at the same time trying to initiate long-term growth policies. This was being done at a time when prospects for international trade were showing sharp decline, and the major economic sectors were recording poor growth rates. The coffee boom of 1986 was a short-term shock and no long-term investment benefits accrued. As a result, the government came up with more far reaching reforms as outlined in Sessional Paper No. 10 of 1986 on *Economic Management for Renewed Growth*. The intention was to move towards a more flexible trade system. Tariff and exchange rate policies were important in the new system. A three-stage approach was adopted: first, quotas were to be replaced by their tariff-equivalents. Second, duties on industrial inputs were to be lowered, and thirdly, duties on final products were to be lowered, therefore exposing the domestic industry to competition from imports. Though implementation was initially delayed, some progress was made as foreign exchange allocation was improved, licensing for capital and intermediate goods relaxed, and tariff system reformed (Reinika, 1993).

Export promotion measures adopted by the Kenyan government in the 1980s include manufacturing under-bond (MUB) in which import duty and other taxes on imports used for production of exports goods were waived. This scheme was introduced in 1988 and is still in place, albeit with progressive adjustments. Other measures include general import duty and VAT exemption scheme; regulatory reforms; reforms in prices and wages; green channels system to hasten administrative approvals; improvement and simplification of investment procedures; and introduction of export processing zones (EPZs) in 1990 under which exporting firms were offered 10 years of tax holiday, unrestricted foreign ownership and employment, and freedom to repatriate any amount of earnings (Ng'eno *et al*, 2003).

Lack of seriousness in implementation of these policies and lack of fiscal discipline led to macroeconomic imbalances during the period. However, there was an increase in non-traditional exports and a small overall export supply response between 1985 and 1990 (Swamy, 1994). The reforms were therefore not accompanied by huge gains as expected.[3] According to Gerdin (1997) the state of the country's infrastructure continued to deteriorate, and the usefulness of the facilities from the EPZ and MUB programs diminished.

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[3]Of the earlier reforms, that is manufacturing under-bond (MUB), the green channel scheme, and a revived export compensation scheme, the latter two were phased out shortly afterwards in early 1980s. Export processing zones (EPZs) are earmarked areas near either an airport or a seaport that are provided with various physical, communication and service facilities and custom offices. The entire production is strictly for the export market. Incentives include a ten-year tax holiday followed by a 25% tax for the next ten years, exemption from withholding taxes on dividends and payments of non-residents for the first ten years and, originally, no foreign exchange control. Manufacture-under bond (MUB) is a programme that offers exporters potential for simplifying the steps that must be followed to obtain imported inputs and to move products to export markets. The scheme also allowed for duty free importation and local purchases free of sales taxes. The green channel scheme was set up in the late 1980s to avoid unnecessary delays in obtaining foreign exchange for the purchase of necessary inputs by exporters. The name referred to the use of green forms and folders, which were easily distinguishable and would be handled with expedience. This scheme became redundant with the foreign exchange market liberalization.

In spite of reluctance, reform reversals, poor relationship between the Kenyan government and the Bretton Woods institutions, the 1990s marked the period of sustained economic and political reforms (Ng'eno *et al*, 2003). As a result of more donor pressure, the government abolished the foreign exchange committee, the import management committee and the foreign exchange allocation license. Instead, foreign exchange bearer certificates were introduced. In early 1993, the shilling was allowed to float, foreign exchange retention accounts for exporters of traditional exports and services reintroduced, inter-bank market expanded, and the coffee and tea markets liberalized.

By the end of 1993, all administrative controls hampering international trade had been abolished, tariff rates gradually reduced and tariff bands removed. By the beginning of 1995, domestic price decontrols that had been started in 1983 had eventually been completed. Also, by the end of 1995, the government had virtually removed all price and foreign exchange controls, liberalized domestic trade as well as imports and exchange rate market, reviewed the Foreign Exchange Act, and legalized foreign exchange bureaus. Furthermore, export promotion incentives were put in place in the 1990s. These centred mainly on creation of an enabling environment for export growth through institutional reforms, reduction and restructuring of tariffs on raw materials and capital goods, abolition of export duties, improvement of capital allowances, introduction of export earning retention schemes, provision of short-term export finance, and improvement of foreign exchange and insurance regulations including establishment of private sector national export credit corporation and stationing of commercial attaches in trading partner countries and organizing trade missions to emerging markets. Despite these reforms, export performance was still dismal and more trade reforms were put in place in 1996 to make the domestic economy more competitive with regard to international trade and export promotion.

With removal of all controls on trade, exchange rate and liberalization of the current account, the terms of trade increased to 100 percent in 1994. This was a marked improvement from the previous downward trend. Import tariffs were further realigned with the aim of achieving a free market economy. By July 1997, a lower trade weighted average tariff was attained. Other related reforms included elimination of the discriminatory elements of supplementary levy on sugar, and abolishment of specific duties on cereal imports by end of 1996. Further, an implementation strategy to develop and diversify Kenya's industrial exports was also put in place. The strategy focused on creating better conditions for private investment in activities in which Kenya would be competitive. Also, the government gradually reduced the role of the public sector in the economy through rationalization of public sector firms and an accelerated programme for privatization. There has been major rationalization and divestiture programmess for key parastatal bodies.

2.2   Tariff Reforms

The main thrust of tariff reforms was to effect a shift from a highly protective import substitution strategy to industrial policies, which would lead to increased use of local resources, greater employment creation and encourage exports. The prevalence of quantitative restrictions meant that there was very little competition from imports. The total number of *ad valorem* tariff rates was reduced. In the financial year 1996/97, the top tariff rate was reduced to 35 percent from 170 percent at the beginning of the reform period. However, trade reform was not smooth and predictable because there were many policy reversals (Bigsten and Kimuyu (*eds)* 2002). However, even with these reforms, most firms still considered the policy environment as highly unstable and this reduced the possible positive impact of reforms. Still,

trade reforms, had a significant effect on relative prices in the economy with relative price falling in the manufacturing sector, a previously highly protected sector (Bigsten and Kimuyu, 2002).

2.3   Labour Market Reforms

Labour market reforms were aimed at eliminating distortions in the market to allow for efficient resource allocation. Efficient operation of the labour market in developing countries is important because the market has a major role to play in their economies. First, the labour market is an important channel for transmission of both external disturbances and adjustment policies.[4] For instance, labour market flexibility is important in reducing unemployment encountered in the adjustment process.[5] Secondly, labour markets in developing countries play an important role in determining the level and distribution of income. Individuals with regular wage employment are likely to be in the middle and upper income groups, while those without employment are among the poor. In developed countries such as Britain and the United States, labour market deregulation and declining union membership are widely seen to have played a role in widening dispersion in earnings (Machin, 1997; DiNardo and Lemieux, 1997).

The labour market in Kenya has undergone considerable liberalization in the last few years. By mid-1994, the government had allowed trade unions to seek full compensation for price increases without hindrance through wage guidelines (Government of Kenya, 1995). Relaxation of wage guidelines made it possible for employees and firms to negotiate

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[4]This is important for developing countries like Kenya that are striving to correct macroeconomic imbalances and respond better to external shocks by implementing structural adjustment programmes (SAPs).

[5]Also, structural adjustment is essentially about human resource mobility. Therefore, non-participation of certain kinds of labour in the labour market can be an impediment to reallocation of their labour. Appleton *et al* (1999) discuss this issue in detail.

and change the level of wages on the basis of productivity and performance rather than on the basis of cost of living indices as was hitherto the case (Ikiara and Ndung'u, 1997). Following the relaxation of wage guidelines, there was an increase in real wages due to an upward adjustment in wages in both the public and private sector with growth in real wages in the sector remaining positive after 1994. Firms were also allowed to appeal against wages awarded to workers by the industrial court if they felt that such wage awards affect their survival.

After the implementation of trade reforms in the first half of the 1990s, it became evident that local firms, especially textile firms and agriculture-based processing firms faced stiff competition from imports. It became clear that most firms could not sustain their high levels of employment and needed to be more flexible in adjusting their employment level. As a result, redundancy laws were amended in 1994 to allow firms to more easily discharge redundant workers when necessary. This measure was taken as a result of the argument that it was necessary to enable firms to restructure their operations in response to economic adjustments taking place in the country (Ikiara and Ndung'u 1997). Firms now can declare workers redundant without having to seek the approval of the Minister for Labour. Firms are only required to notify the regional or district labour office of their intention to declare workers redundant.

The government has not changed the minimum wage laws, but it now considers several factors when awarding minimum wage increases. The main consideration is the need to increase employment opportunities by keeping wage rates in line with productivity of workers and ability of employers to pay the wages. Another reform that has been undertaken that has a direct effect on earnings level concerns the level of taxation on earnings. Income tax brackets were expanded and the highest tax rate on income reduced from 32 to 30 percent. Also, there has been an

upward adjustment of the lowest level of income that can be taxed with the most recent change in year 2000 when it was increased from Ksh 9,400 to Ksh 10,000 per month.

Furthermore, the Kenyan labour market is undergoing structural changes characterized by the on-going public sector reforms and retrenchment of workers in the public and private sectors. The effect of these changes has been a significant shift of surplus labour to the informal sector. Growth in formal sector employment has been very low while employment in the informal sector has increased dramatically. For instance, informal sector employment accounted for 70.4 percent of total employees outside small-scale agriculture in 2000 compared to 63.6 percent in 1997. Employment in the formal manufacturing sector has not been very stable due to reduced performance in the sector, occasioned mainly by weak demand for manufactured goods, stiff competition from imported consumer goods, and high cost of investment caused by poor infrastructure. For instance, due to these factors, employment in the manufacturing sector declined by 0.6 percent in 2000 (Government of Kenya, 2001).

3. Impact of Trade Liberalization on Kenya's Labour Market

Labour market is one of the main channels through which globalisation can affect developing countries. Increased import penetration, export sales, competition in services, foreign direct investment and exchange rate fluctuation prompted by capital movement could all have an impact on employment and earnings (Rama, 2001). To become more competitive, countries may need to dismantle their trade barriers, abolish their legal monopolies, privatise their enterprises and reduce overstaffing in their bloated bureaucracies. These reforms may lead to massive loss of jobs and therefore increased unemployment. Also, the macroeconomic instability resulting from short-term capital movement could increase job insecurity. However, delocalisation of production to developing countries could lead to expanded job opportunities and raise workers' earnings. The problem is that the new jobs may not be as good as those lost in protected sectors. Kenya has been undertaking economic reforms since the 1980s and is likely to have experienced some of these outcomes following trade liberalization in the 1990s. In this section, we consider the effect of globalisation on employment and earnings, starting with theoretical explanations followed by evidence from the Kenyan economy. In a later sub-section we use firm level data on the manufacturing sector to assess the effect of globalisation on the manufacturing sector.

3.1 Theoretical Explanation of the Impact of Globalisation on the Labour Market

According to the standard model of international trade**,** Heckscher-Ohlin (H-O) trade theory, increased trade for any country increases overall economic welfare of the country (measured as increased

consumption possibilities) by increasing specialisation in the production of those goods and services that use relatively abundant factors more intensively**.** By exporting goods, which use relatively abundant factors and importing those goods that use relatively scarce factors intensively, an economy will push its consumption possibilities outside its production possibilities. It follows that increased trade is good for a country's welfare and policy ought to be designed to assist in increasing trade.

These benefits to a country are, however, not automatic. For instance, international trade increases welfare provided that part of the gains from trade are distributed to the country's relatively scarce factors and also, that factors which are displaced by competition from imports are immediately deployed into sectors that expand as a result of increased trade (Dawkins and Kenyon, 2000). In the real world, structural adjustments may not be as smooth and immediate as in the world of H-O model. Increased exposure to trade may well result in falling living standards for some workers, due to either falling factor incomes or unemployment and increased gap in income distribution between and within countries. It is important to also note that factor intensity in all industries would move in favour of the relatively scarce factor for given factor quantities in order to enable industries intensive in the relatively abundant factors expand (Dawkins and Kenyon, 2000).

The possibility that globalisation has affected labour market outcomes in various countries (mostly developed countries) has been studied mostly in the context of wages for skilled and unskilled workers. This was based on the observation that growing inequality in income in developed countries was partly due to widening skill differentials in these countries. A survey of empirical evidence by Dawkins and Kenyon (2000) suggests that increasing globalisation and international competitiveness explains only a very small amount of increased

inequality between skilled and unskilled labour. An alternative explanation for this development in the labour market of these countries is that technological progress, which is biased against unskilled workers, has increased in the last few decades. They find evidence that suggests that technical change is capable of explaining a large proportion of widening wage distribution in these countries. Increased international trade may motivate firms to seek productivity improvements by introducing technological improvement, which may be biased in favour of skilled worker and thereby increasing their demand and earnings.

According to the international trade theory discussed above, globalisation should reduce the wage premium to highly skilled labour and increase wage premium to unskilled labour in developing countries. In one of its simplest versions, this model considers two regions of the world (industrial and developing countries) and two factors of production (skilled and unskilled labour). The two regions differ in their endowments. Skilled labour is abundant in industrial countries and scarce in developing countries. Globalisation is interpreted as leading to a dramatic reduction in trade barriers and transportation costs. As a result of this reduction, the two regions of the world face an incentive to shift their product mix in favour of the sector in which they do have a comparative advantage. Therefore, there is an increase in the demand for skilled labour in industrial countries, and an increase in the demand for unskilled labour in developing countries, Kenya included. The increased demand for unskilled labour in developing countries implies that the earnings for unskilled labour in these countries are likely to increase.

Apart from trade, globalisation impinges on development through capital flows and diffusion of technology (Yusuf, 2001). Globalisation has been associated with vast increase in capital flows and their diverse composition, although the bulk of foreign direct investments (FDI)

circulates within OECD countries and a handful of the emerging economies in East Asia and Latin America. These flows form a source of investment and technology transfer. FDI is thought to play an important role in economic development of the host country through increased economic growth and creation of wealth by direct and indirect effects (Blomstrom *et al* 2000). FDI directly influences capital formation, employment and trade. It also influences the structure, conduct and performance of firms and preserves rents on workers' skills in sectors where domestic firms have lost their firm-specific advantages. The long run impact of FDI, however, is in the form of technology and productivity spillovers.

Whereas it is widely accepted that FDI brings capital, technology, management skills and access to foreign markets to host countries and improves resource use efficiency, it is also associated with a wide range of negative effects. These include importation of capital intensive and outdated technology, exploitation of local labour, increase in local wage cost through payment of high wages, pollution of environment and weakening safety, preference of imported inputs to local inputs, among others (for example Ikiara, 2002). The net impact of FDI to a host country is therefore an empirical issue. Empirical evidence on the impact of FDI on economies of developing countries is mixed, but it tilts in favour of net positive benefits, which increases with liberalisation (see Kumar,1996; Ikiara, 2002). The net benefits largely depend on the policies of host countries, some of which can ameliorate the costs associated with FDI. However, the FDI incentives tend to reduce the net benefits of FDI (Kumar, 1996).

An increase in the speed and volume of resource flows, expansion of trade and internationalisation of production can also have considerable effects on income distribution. Countries that are successful in attracting foreign funds, investment and technology and in enhancing expansion

output and exports, are likely to experience rising employment and wages and possibly reduction in inequality. At the other extreme less competitive and more unstable countries may suffer from outflows of capital, investment, skills and entrepreneurship. They are likely to get caught in a downwards spiral of production, employment and wages, exacerbating both poverty and inequalities.

The overall impact of all these changes is likely to be negative on workers in most countries. In industrialised countries, employment and wages are under pressure from increased competition internally and from abroad, technological progress and internalisation of production. The fate of the working class in these countries would be worse if there were no restrictions on labour migration. Owners of small and medium sized enterprises are also likely to suffer from increased national and international competition. The major beneficiaries from globalisation are likely to be large corporations, owners of mobile capital and professional, technical and managerial personnel (Ghai, 1997)

In the short run, most of the changes associated with globalisation are likely to deepen income inequalities. The greater role of market forces in the labour market and capital markets can be expected, in most cases, to raise interest rate and lower wages, especially those of unskilled labour (Ghai, 1997). This is due to the fact that government regulation of these markets was designed to control interest rates and ensure minimum wages. The effect is likely to be reinforced by changes in taxes and public expenditures, such as moves towards indirect taxes, lower marginal rates of individual and corporate taxes and reduction of subsidies, social security and welfare expenditure. The deflationary pressure on economic activities may put further pressure on employment and wages, which may be reinforced by labour-saving technological progress.

In the next sub-sections, we analyse the impact of globalisation on employment and earnings in Kenya. This is done mainly by examining trends in employment and earnings during the economic reform period. Our analysis is only indicative and may not give the actual impact of globalisation on labour market outcomes.

3.2   Impact of Globalisation on Employment

Small scale agriculture provides the main source of employment for most of the population living in the rural areas in Kenya. Although employment participation for both male and female has been on the increase, the share for wage employment and self-employment has been declining since the 1980s, the economic reform period. During this period, however, the share of informal sector employment has been increasing (Table 1).

Table 1: Employment outside smallscale agriculture (1988-2000)

Year	Total '000'	Wage employment (%)	Self-employed & unpaid workers (%)	Informal sector (%)
1988	1736.3	77.5	2.5	20.0
1989	1796.2	76.2	2.5	21.3
1990	2395.0	58.8	2.0	39.2
1991	2557.1	56.4	2.0	41.6
1992	2753.2	53.1	2.0	44.9
1993	2997.5	49.2	1.9	48.9
1994	3355.1	44.8	1.7	53.8
1995	3855.1	40.4	1.6	58.0
1996	4325.8	37.4	1.5	61.1
1997	4698.4	35.1	1.4	63.5
1998	5083.2	32.7	1.4	65.9
1999	5477.5	30.5	1.2	68.2
2000	5893.0	28.4	1.1	70.4

Source: Government of Kenya, Economic Survey (various issues)

The share of wage employment as a percentage of total employment outside smallholder agriculture has been declining from 78 percent in 1988 to 28 percent in the year 2000. The share of self-employment and the unpaid family workers has also been declining. However, the share of informal sector employment in total employment outside smallholder agriculture has increased dramatically from 20 percent in 1988 to 70 percent in the year 2000. The jump in the share of employment in the informal sector between 1989 and 1990 from 21 percent to 39 percent, respectively, may partly be due to improved statistical coverage of the informal sector in the 1990s. This shows that there has been a shift in employment generation from the formal sector to the informal sector during the period of structural adjust programmes.

As indicated in Table 1, the share of employment in the formal sector has declined over time and at the same time there has been a rapid increase in the share of employment in the informal sector during the economic reform period especially in the 1990s (the time of rapid liberalization in Kenya). The shift in the share of employment from the formal to the informal sector is due to a number of factors. These include civil service reforms such as retrenchment of civil service employees who eventually find refuge in the informal sector, retrenchment in the private formal sector as previously protected firms collapse due to competition emanating from increased imports due to free trade following trade liberalization, and increased unemployment due to increased school dropout especially after primary school level (standard 8) examination.

The number of jobs created in the informal sector are not, however, as good as those lost in the formal sector. First, due to high competition in the informal sector, the survival rate of firms in the sector is very low, making jobs in this sector very insecure. Also earnings in the informal sector are lower than in the formal sector, making workers in the sector vulnerable to poverty.

Job creation and job destruction are important in determining whether churning occurs against globalisation by potential losers. Also, the nature of the continuing jobs may change so that a worker, for instance, may cease to be covered by collective bargaining agreement. Also, a permanent worker who used to enjoy all benefits extended by formal labour regulations may loose the benefits or be replaced by a temporary worker with limited rights. One source of job destruction has been the downsizing of state-owned enterprises and government agencies. In some cases, up to a half of the workforce in state-owned enterprises needs to be considered redundant, if those enterprises are to be run as private firms (Belser and Rama, 2001). A number of people in Kenya have lost their jobs through state-owned enterprise downsizing and more are likely to be retrenched as the exercise is still going on. For instance, the government in 2002 announced that about 4000 employees of the Kenya Power and Lighting Company–a government parastatal–will be retrenched in the next two years. It could be argued that public sector downsizing is not directly connected to globalisation, but the two are not independent either since countries that remain isolated from the outside world can keep their state sectors untouched for much longer (Rama, 2001).

Studies following public sector workers after retrenchment, or comparing their earnings and benefits to those of similar private sector workers, reveal a consistent pattern of losses from job separation (Rama, 1999). Studies focused on welfare, rather than just earnings and benefits, also show larger losses for workers with more dependants. Women also tend to lose more than men. Women are not necessarily more likely to be targeted by downsizing programs, but they are more likely to experience a large drop in earnings. The gender gap in earnings tends to be smaller in the public sector than out of it, implying a bigger loss, in relative terms, for separated women. Moreover, the public sector usually offers benefits that are highly valued by women, such as

maternity leave, flexibility of hours and day-care facilities. These benefits are more rare in the private sector, and generally unavailable in the informal sector where most of the new jobs are taken by retrenched workers from the formal sector. Not surprisingly, women are more likely than men to withdraw from the labour force after downsizing (Rama and MacIsaac, 1999).

Another source of job loss after implementation of trade reforms in Kenya especially in the 1990s was evident in the local manufacturing firms, especially textile firms, and agriculture-based processing firms, which were facing stiff competition from imports. Textile firms faced stiff competition especially from trade in used clothes leading to closure of most of the textile firms in Kenya with many former employees of these firms becoming unemployed. Cheap sugar imports have also led to a number of sugar firms in Kenya closing down and therefore loss of thousands of jobs in the sugar sector.

Employees who lose their jobs in developing countries suffer a great loss in welfare than those in developed countries. This is because employees in developed countries have unemployment insurances, which provide workers with benefits during spells of involuntary unemployment (Kimenyi, 1995). Unemployment benefits, in addition to aiding the unemployed, help to stabilise the economy during recession and also form an income floor for the unemployed.

Globalisation may also lead to substantial job creation. This is mainly associated with foreign direct investment and, particularly, with export processing zones. The latter are often defined as fenced-in industrial estates specializing in manufacturing for exports that offer free-trade conditions and a liberal regulatory environment. Due to lack of investor confidence in the Kenyan economy following refusal of IMF to lend to Kenya, foreign direct investment may not have had an impact on employment in Kenya. However, some employment has been created

through export processing zones. In theory, export processing zones represent a sub-optimal mechanism to integrate a country with world markets, the optimum being to offer free-trade conditions and a liberal regulatory environment across the board.

There is no doubt that export-processing zones have been useful in employment generation in Kenya and other developing countries.[6] In some countries like Mauritius, the share of employment in export processing zones is quite substantial but considerably less in several other countries like Kenya, especially when taking into account that agricultural activities and the informal sector still employ a considerable fraction of the labour force. By 1995, export processing zones in Kenya had created 5,000 new jobs since their inception in 1990 (Ikiara and Ndung'u, 1997). However, jobs in the export processing zones are not as good as the "privileged" jobs in protected activities or in the public sector. In Kenya, one of the features of these zones is their flexibility with labour laws. For instance, law does not impose the minimum wage on export processing zones. Lax governmental supervision and opposition to labour unionisation and union activities are also common. As a result, jobs in export processing zones are less secure than formal sector jobs. As regards wages and working conditions, they vary substantially depending on the size, nationality and corporate policy of the firm, the type of industrial production, labour market conditions and the country's institutions and regulations. Due to this the trade union movement has been critical of export processing zones arguing that they have not created significant employment opportunities and that they have relatively poor working conditions as a result of being exempted from labour regulations (ICFTU/COTU, 1995). Also, the

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[6]Another sector where jobs have been created in Kenya partly due to globalisation is in the horticultural sector, which is now one of the leading foreign exchange earners. However, the high initial capital required to start horticultural farming limits the employment potential of this sector.

incentive given to firms in export processing zones in Kenya are likely to diminish the impact of the zones on the economy.

Women hold most of the jobs in export processing zones. In the Caribbean export processing zones, for instance, approximately 80 percent of the workforce is female, and the percentage is almost as high in the Philippines. In Kenya, although estimates are not available, women form the majority of employees in export processing zones. This female bias is especially strong in garment production. The reasons for these are that women are said to be more diligent and have more dexterity than men. Also, women marry and leave after a few years, and most tend not to get involved with trade unions. Last but not least, women tend to be paid less than men. However, despite their lower pay, women might be the unintended beneficiaries from the formation of export processing zones. Many would have remained fully or partially employed in the informal sector, or stayed at home, were it not for them. Evidence from Ghana and Uganda reveals that women had substantial economic mobility in response to economic reforms. In these two countries, rural women became increasingly engaged in non-farm employment activities, moving into the non-farm sector at faster rates than men (World Bank, 2001).

To the extent that globalisation does translate into substantial job creation in developing countries, Kenya included, the potential impact on poverty can be dramatic. But this impact depends significantly on the nature of jobs and where the job creation occurs. In Kenya, most of the employment is created in the informal sector where earnings are lower than in formal employment. Still, informal activities have a significant impact in improving the welfare of the rural population in Kenya (Kimalu, 2001). This strong negative relationship between poverty and the non-farm sector has also been observed in other developing countries. Even where non-farm employment opportunities

accrue primarily to the relatively educated and skilled (and therefore non-poor), benefits to the poor are often still discernible. This is due to the relationship between the wage rates earned by agricultural labourers in rural areas, who are generally highly represented among the poor, and the tightening of rural labour markets, which generally accompanies an expanding non-farm sector (Lanjouw and Lanjouw, 2000).

In addition, there is a legitimate concern that participation in world markets may be associated with an increase in child labour. In Kenya, increase in child labour may be due to cost sharing activities in the education sector and diminished association of education and formal employment, both associated with economic reforms. Increase in child labour could have a detrimental effect on child welfare, both in the short term and in the longer term, through reduced schooling. Policy reforms that promote labour-intensive production could therefore have a mixed blessing for the poor. An important issue is whether sectors exposed to international competition tend to be more intensive in child labour. Evidence in Kenya shows that about 15 percent of the children in the age bracket 6 to 14 years are involved in child labour and that some of the worst forms of child labour are confined in tea and coffee plantations especially in peak periods. Also, it is through the tourism industry that globalisation could have its most adverse impact on the children of developing countries. Lower travel costs associated with globalisation and better information networks may be associated with a growth in sexual tourism, including paedophilia. In Kenya, the children affected by sexual tourism represent a tiny fraction of all the children who work, but the implications for their well-being could be dramatic.

3.3   Labour Force Participation and Unemployment

Labour force consists of employed and unemployed economically active persons in the working age, which is taken to be 15-64 years. In Kenya,

labour force has increased rapidly due to the rapid increase in population and the high number of school dropouts. For instance, it is estimated that about 500,000 people join the labour force annually. Traditional agriculture and rural non-farm sectors are expected to create about 60 percent of the required new jobs. Traditional agriculture alone is expected to account for 46 percent while urban informal sector will account for 24 percent of this projected increase.

In Kenya, there are indications that unemployment increased in the urban areas during the economic reform period of the 1980s and 1990s. Unemployment estimates based on the rural labour force survey1988/89 shows that male rural unemployment in Kenya was 0.4 percent, which was very low compared with urban unemployment estimates but it increased to about 10 percent in the late 1990s (Table 2). Unemployment was high for women compared with that for men. For the urban areas, the estimated unemployment was 16 percent in 1986, which was about the same as in 1978. However, estimates for late 1990s show that urban unemployment was about 25 percent with female unemployment being 38 percent.

Table 2: Participation and unemployment rates for rural and urban areas (%)

	Urban male		Urban female		Rural male		Rural female	
Participation rates	1977/79	83.9	1977/79	38.8	1977/79	83.4	1977/79	86.9
	1986	82.2	1986	55.8	1988/89	87.2	1988/89	91.0
	1998/99	92.6	1998/99	88.7	1998/99	74.8	1998/99	51.9
Unemployment rates	1977/79	-	1977/79	-	1977/79	-	1977/79	-
	1986	11.6	1986	24.1	1988/89	0.4	1988/89	0.1
	1998/99	12.5	1998/99	38.1	1998/99	8.3	1998/99	10.4

Source: Government of Kenya (1988); Labour Force Survey Report 1986; Manda (1997), Table 2.2; and Integrated Labour Force Survey data 1998

Female participation was high in the rural areas than in the urban areas in the 1970s and 1980s. As expected, female participation in the rural areas remained higher than that for men over the same period. Recent estimates show that both male and female participation in the rural areas has declined with female participation declining to about 52 percent (Table 2). However, there was a high increase in female participation in the urban areas from 30 percent in the late 1970s to 56 percent in the 1980s and then to 89 percent in the 1990s, probably in response to the economic difficulties in Kenya in the 1980s and 1990s. Despite this increase, the female urban participation rate was still lower than the male participation in urban areas.

According to Government of Kenya (2000), female participation in wage employment in the modern sector remained low at about 29 percent in the 1990s. Majority of the women employed in the modern sector (57.9 percent) were working in the service industry. However, women employment in Kenya is still characterized by low productivity, low pay and long hours of work. Also, rural women still spend a disproportionate high amount of their time on unpaid work, limiting their access to income earning opportunities. However, women form a majority of the informal sector participants. This evidence shows that women employment status worsened rather improve during the reform period.

3.4   Earnings

Various studies (e.g Ikiara and Ndung'u 1997; Revenga, 1997; Currie and Harrison, 1997) show that the short-term impact of trade liberalization on wages may be negative. However, the short-term impact of foreign direct investment on earnings is positive. Microeconomic studies dealing with foreign direct investment systematically report a positive impact on wages. For instance, in Kenya,

there is evidence that foreign-owned firms pay higher wages than locally owned firms in the manufacturing sector (also see next section). In Indonesia, foreign-owned firms pay more than locally-owned ones, after controlling for plant characteristics. In addition, higher foreign presence leads to higher wages in locally-owned firms (Lipsey and Sjoholm, 2001). In Latin America (Mexico and Venezuela), there is no evidence of a spillover on wages from locally-owned firms from foreign-owned firms, but wages are nevertheless higher in foreign-owned plants (Aitken *et al*, 1996).

This highlights the importance of the investment climate, which in most cases is not conducive in most developing countries especially in Africa. If opening up of the economy fails to attract foreign capital, wage losses could be sizeable (Rama, 2001). However, in some countries such as Uruguay, evidence shows that trade liberalization did not reduce wages measured at the sector level, but it did not raise them either (Rama, 1994). While the impact of foreign direct investment on wages fades over time, the impact of openness to trade becomes significantly positive (Rama, 2001).

Figure 1: Real average earnings per employee: 1978-1998
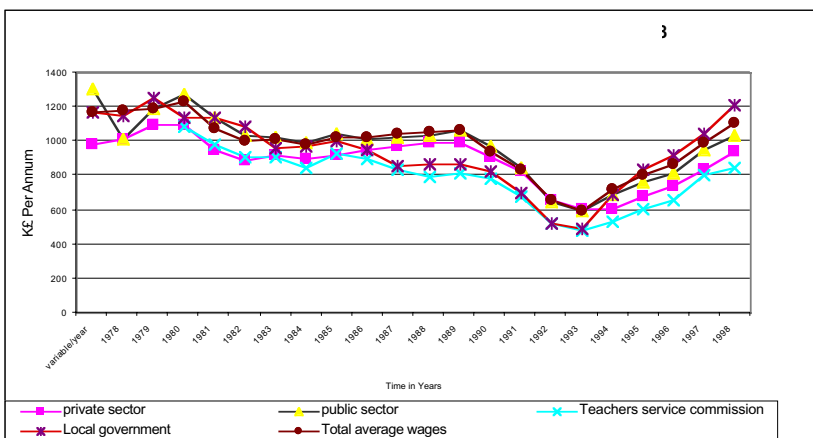
Source: Central Bureau of Statistics

A close look at real wages since the late 1970s in Kenya shows that real wages have been declining over time until the mid-1990s when they started increasing again (Figure 1). After mid-1990s, real wages have continuously increased over time. This could be an indication that real earnings partly increased immediately after the country had undertaken rapid trade reforms in the first half of the 1990s. However, the increase may not be solely due to trade reforms but can also be attributed to other reforms that took place in the labour market, such as liberalization of wage guidelines, which allowed workers to seek compensation on the basis of productivity increase in addition to cost of living. Therefore, the trend in earnings show that real wages have been flexible in the reform period, first declining up to mid-1990s and thereafter increasing.

Table 3 shows real monthly earnings for urban areas in Kenya in the years 1978, 1986 and 1994. The structure of earnings by education level has not changed as those with no education earn less than those with formal education and the earnings increase with the level of education. Generally, the average real monthly earnings have been declining over time. However, this varies across groups depending on the different levels of education.

Table 3: Mean real monthly earnings in urban areas: survey datasets (1990=100)

Variables	LFS 1978*	LFS 1986	WMS II–1994**
All	3366	2801	2389
Uneducated	1816	1662	845
Standard 1-4	2242	1916	1639
Standard 5-8	2359	1992	1612
Form 1-2	3088	2070	2231
Form 3-4	5172	2937	2898
Form 5-6	6371	4347	-
College	-	4256	2463
University	10299	9284	10602
No. of observations	1331	2494	2545

Source: Manda et al, 2002; Appleton et al, 1999
**LFS–Labour Force Survey; ** WMS–Welfare Monitoring Survey*

Between 1978 and 1986, the real earnings for all levels of education declined, but between 1986 and 1994 it increased for some levels of education and declined for others. The real earnings for individuals with less than secondary education declined over the later period while the earnings for individuals with secondary level education remained about the same, but dramatically increased for individuals with university education, exceeding the 1978 level.

Table 4: Mincerian returns to education over time

Survey	Cohort	Primary S8	Secondary F4	University
LFS 1978	All cohorts	8	42	15
LFS 1986	All cohorts	9	26	30
WMS II 1994	All cohorts	8	24	49

Source: Appleton et al, 1999, Table 4 and estimates based on WMS II, 1994 (see appendix I for a description of WMS II 1994)

Table 4 shows that private returns to education for those with university education have been increasing over time while private returns to secondary education have been declining over time but still higher than private returns to primary education (Table 1A in Appendix II). The returns to secondary education in 1994 are, for instance, about half the returns in 1978 while returns to primary education remain fairly unchanged. However, the returns to university education tripled between 1978 and 1994 and were also higher than the returns to primary and secondary education in 1986 and 1994. Therefore, it is obvious from the foregoing analysis that some groups have gained while others have lost in terms of earnings during the economic reform period. If we take individuals with university education as highly skilled employees, individuals with secondary education as semi-skilled those with primary education and without education as being unskilled, then we

can conclude that highly skilled employees gained more than the less skilled and unskilled workers during the reform period contrary to theoretical expectations. This shows that the earnings gap between the skilled and less skilled widened during the reform period.

According to the trade theory outlined earlier, one would expect the earnings gap to narrow down between skilled and less skilled as demand for labour shifts towards the more abundant factor of production (unskilled labour). With such a shift, the demand for unskilled labour would increase and this would lead to an increase in the relative earnings for unskilled labour and a decline in the relative earnings for the scarce factor (skilled labour). However, the decline in real earnings for unskilled labour could be due to increased supply of unskilled labour in Kenya while the increase in earnings for skilled labour could be due to increased demand for skilled labour. It is important to note, however, that the impact of globalisation on the wage premium to education is likely to be temporary. Over time, it should be offset by an increase in the relative supply of educated workers. The high wage premium for university-educated workers provides an incentive to seek additional education. As a result, the relationship between globalisation and increased returns to skill should become weaker, or even vanish, in the longer run. In the next section we consider the impact of globalisation on employment and wages in the manufacturing sector.

4.   Trade Liberalization, Employment and Earnings in the Manufacturing Sector

In this section we use survey data on the manufacturing sector in Kenya to investigate trends and changes in employment and earnings in the sector during the economic reform period. We use data from the Regional Programme on Enterprise Development (RPED) survey for 1993-1995 and the Kenyan Manufacturing Enterprise Survey (KMES) carried out in 2000 on the manufacturing sector in Kenya. We complement our results with those estimated in Appleton *et al* (1999) for the years 1978 and 1986 and evidence from other studies.[7]

4.1   Data and Model

The RPED data set is a three-year panel survey of manufacturing sector firms carried out between 1993 and 1995 by a team of researchers from the Departments of Economics at the University of Gothenburg and the University of Nairobi in collaboration with the Kenya Association of Manufacturers in the years. Whereas the data on firms is panel, data on individuals is not a panel. Some of the firms surveyed in the 1993–1995 RPED data may have also been surveyed in KMES in 2000. KMES was carried out by a team of researchers from University of Oxford, Gothenburg University, University of Nairobi in conjunction with Kenya Association of Manufacturers in the year 2000. Much of the data gathered refer to the most recent financial year of the firm, which means that such data refer to the period 1992 and 1994 for RPED and 1999 for KMES. When firms are asked about their current situation, their reply refers to the actual time of the interview. Also most of the data on workers refer to the current period.

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[7]Appleton *et al* (1999) extracts information on manufacturing sector from the labour force surveys 1978 and urban labour force survey 1986. For comparison purpose, we estimate earnings equations similar to those estimated in his study.

The RPED and KMES surveys covered firms in four manufacturing sub-sectors (food, textile, wood and metal) in four major urban centres in Kenya (Nairobi, Mombasa, Nakuru and Eldoret). The sample is predominantly made of formal sector firms (comprising of about 75 percent of the firms) located in Nairobi. The firms were selected at random from a sample frame made from different lists of firms. The formal firms were chosen at random from the Central Bureau of Statistics (CBS) master file of registered firms. The sample frame for informal firms was constructed by undertaking a primary listing of firms in the four sectors and then selecting the firms at random from the lists. The four sub-sectors comprise about 73 percent of the manufacturing sector and, therefore, the data can provide a comprehensive picture of the manufacturing sector in Kenya. The firms surveyed in 1994 and 1995 included replacements for firms surveyed in 1993 because some had closed down or changed location. The 1994 and 1995 RPED waves included some important information that was not included in the 1993 RPED wave. In this study we make use of wave II and wave III of the survey.

The RPED and KMES surveys seek identical information from the manufacturing sector firms and workers. Using the surveys is important because it makes it possible to compare the labour market outcome over a period of about five years. The RPED data was collected at a time when some reforms were being carried out in the labour market while the KMES data was carried out five years after implementation of the reforms. The 1978 survey used by Appleton (1999) was carried out just before introduction of economic reforms. It would, therefore, be important to compare the results from the surveys to see whether there is any change in the labour market outcome due to the reforms.

The labour market sections of the surveys provide information on both firm and individual characteristics. The information on firms was

elicited from representatives of each firm. It includes information on total number of firm employees, total wage bills, profits, firm ownership, proportion of firm employees in trade unions, proportion of the workers that are permanent (regular) workers, casual employees, number of workers who quit the firm, the value of plant and equipment, value added, among others. This provides more accurate information on, for instance, firm size than would be the case when individuals provide such information. The information on individuals was obtained by interviewing at most ten employees randomly chosen from a list of workers of each firm, among those present on the premises on the day of the interview. This could be a potential source of endogenous stratification. About 100 percent of employees in small firms were interviewed, while the sampling decreases with the size of the firm. The data on individual workers provides data on education level, previous experience, tenure, age, sex, marital status, hours of work, earnings, employment status, among others. In addition to these, KMES provides information on family background of the worker and the type of school attended.

We estimated, following Mincer (1974), an earnings semi-logarithmic model shown in the equation below:

$$\ln(W_i) = \alpha + \sum \beta_k S_{ik} + \lambda A_i + \delta Z_i + U_i \qquad (1)$$

where W is monthly earnings for worker i; S_k is a dummy variable for being educated at least up to level k; A is potential experience; Z is a vector of control variables such as sex and region and U is an error term. It would have been useful to use hourly earnings, but information on hours of work was not available in some of the data sets. We estimate a regression equation in which the logarithm of monthly earnings is used as the dependent variable. This is done to enable us compare the estimated results with those in Appleton *et al*(1999). The independent variables used include education dummy variables, age, sex dummy

and location dummies. While this specification of the earnings equation is used widely in analysis of this sort, there is no agreement on what dependent variables to include. For this reason, it would have been better to estimate a range of specifications and present the result of each, such as done in Barrett *et al* (2002). However, for comparison purpose with the earlier study by Appleton (1999), we include only the independent variables outlined above.

Our main interest in estimating equation (1) is to calculate the private rates of return to education. Estimates of returns to education conventionally measure the benefits of education in the form of higher wages. From equation (1), if the level of education k comprise E_K years of education, the rate of return to education is derived as shown in equation (2).

$$\text{Rate of return to a year of education} = [\exp(\beta_k)\text{-}1]/E_k \qquad (2)$$

In the next section, we start by analysing trends in employment in the manufacturing sector firms followed by an analysis of earnings. The analysis on employment is mainly based on descriptive statistics.

4.2   Employment in Kenya's Manufacturing Sector

Kenya has experienced a rapid expansion in its education system as reflected in changes in the composition of employment in the manufacturing sector. As Table 5 shows, there has been a rise in the level of education of the work force in the manufacturing sector. In particular, there has been a general decline of individuals without education in the manufacturing workforce. Between 1994 and the year 2000, there was a decline in the proportion of the manufacturing workforce with primary education accompanied with an equivalent increase in the workforce with secondary and higher level of education. This shows that during the period the tendency has been a shift towards more skilled labour force.

Table 5: Proportion employed in manufacturing sector by education level (%)

Variables	LFS 1978	LFS 1986	RPED 1995	KMES 2000
Uneducated	15	7	3	2
Primary	46	41	46	33
Secondary	36	50	48	61
University	3	2	3	4
No. of observations	186	312	1123	1016

*LFS–Labour Force Survey; **WMS-Welfare Monitoring Survey; ***RPED–Regional Programme on Enterprise Development

As mentioned earlier, according to international trade theory, globalisation should increase the incentive for developing countries to shift their product mix in favour of the sector that uses the most abundant resource (i.e. unskilled labour) leading to an increase in the demand for unskilled labour in these countries. However, as shown in Table 5, there has been an increase in the demand for skilled labour as shown by a shift in the share of the manufacturing sector employment towards highly skill manpower. This is an indication that globalisation may not have led to Kenya making more use of its abundant resources (less skilled manpower). Part of the explanation for the shift in demand in favour of skilled labour could be due to competition resulting in demand for high quality products, which require the use of skilled manpower and use of technology that favour unskilled workers.

Apart from the shift in demand in favour of skilled labour, loss of jobs in the manufacturing sector has resulted from some of the economic reforms, especially trade liberalisation. For instance, from 64 enterprises surveyed by the Federation of Kenya Employers (FKE) in 1995, total employment had fallen from 42,965 to 40,968 between 1992 and 1994 and it was projected to fall further. An increasing number of firms over the period reported declining levels of employment according to the survey (FKE, 1995). Most firms attributed the fall in their employment

levels to competition from cheap imports. Reduced protection of some inefficient import-substitution industries was also expected to impact negatively on employment through increased labour redundancies. Indeed in Kenya, the textile, leather, and sugar industries have been negatively affected by importation of cheap products leading to serious job losses.

Table 6: Means of firm employees by type (1993-2000)

Variable	RPED 1993	RPED 1995	KMES 2000
Part-time workers	0	8	9
Casual workers	24	25	39
Permanent workers	94	62	56
Av. No. of workers per frim	118	95	104

Notes: RPED–Regional Programme on Enterprise Development; KMES-Kenya Manufacturing Enterprise Survey

Table 6 shows a break-down of employees per firm by employment status–permamnent, casual and part-time. The average number of workers per firm declined between 1993 and 1995, and increased slightly in 2000. There was increased use of part-time workers and casual workers, but a decline in use of permanent workers. This implies that there was general tendency by firms to replace permanent employees with part-time and casual workers, possibly as a cost-reduction measure in terms of minimizing the benefits paid to permanent workers.

Table 7 further disaggregates the number of employees per firm by type in terms of non-exporting and exporting firms. Non-exporting firms are significantly larger in number than exporting firms. However, in terms of contribution to employment, exporting firms account for a larger proportion of the employment in the manufacturing sector as they are larger in size than non-exporting firms (as indicated by the average number of employees per firm). It is striking that while average permanent employees (and total employees) per firm for non-exporting

firms has been relatively stable in the 1990s, there has been a sharp decline in the average number of permanent employees (and total employees) per firm in exporting firms during the same period. Therefore, even with an increase in the number of exporting firms from 1995 to 2000, the contribution of exporting firms to total employment in the manufacturing sector has remained stagnant at around 65 percent in this period.

Table 7: Number of employees per exporting and non-exporting firms

Variable	RPED 1993	RPED 1995	KMES 2000
Non-exporting fiems			
Part-time workers	0	1	5
Casual workers	10	11	25
Permanent workers	33	25	31
Av. No. of workers per firm	43	37	61
Total No. of firms	173	181	153
Exporting firms			
Part-time workers	1	30	17
Casual workers	71	60	71
Permanent workers	308	177	109
Av. No. of workers per firm	380	267	197
Total No. of firms	49	37	71

Notes: RPED–Regional Programme on Enterprise Development; KMES-Kenya Manufacturing Enterprise Survey

Table 8 shows firm employment level for foreign-owned firms and locally-owned firms. Foreign-owned firms are those firms with 50 percent or more foreign ownership and those with less than 50 percent foreign ownership are locally-owned firms. As shown in the table, there is little change in the number of firms by ownership status between 1992 and 1999.

For both locally and foreign-owned firms, the total number of permanent workers in a firm was higher than that for part-time and casual workers combined in 1992. However, in 1999, the number of part-time and casual

Table 8: Means of employees in foreign and locally-owned firms (1992-1999)

Locally-owned firms	1992		1999	
	N	Mean	N	Mean
Share of exports	200	5.3	202	8.5
Part-time workers	200	1	202	14
Casual workers	200	14	202	50
Permanent workers	200	62	202	51
Total number of workers	200	77	202	97
Foreign owned firms				
Share of exports	27	15.2	22	21
Part-time workers	27	1	22	25
Casual workers	27	86	22	34
Permanent workers	27	311	22	121
Total number of workers	27	408	22	168

workers had increased for locally-owned firms constituting more than half the total number of employees. For foreign-owned firms, the number of part-time workers increased while the number of casual workers declined between 1992 and 1999 and the two combined constituted less than 50 percent of employees in the firms. In general the total number of permanent workers declined, but more dramatically in foreign-owned firms than in locally-owned firms. It is also important to note that locally-owned firms are small in size compared with foreign-owned firms. Also, it seems that there has been greater loss in job opportunities in foreign-owned firms declining from 408 employees per firm in 1992 to 168 employees per firm in 1999.

Table 9 presents the proportion of employees by level of education for foreign and locally-owned firms using the Kenya Manufacturing Enterprise Survey (KMES) 2000 data. As shown in the table, foreign-owned firms employ more highly-skilled employees than locally-owned firms. This is shown by the relatively higher proportion of workers with secondary, college and university education in foreign-owned firms than

in locally-owned firms. The technology used by foreign-owned firms is probably such that it favours the use of skilled labour.

Table 9: Proportion of workers in foreign and local-owned firms by level of education in 2000 (%)

Education	Foreign-owned	Locally-owned
No education	6	6
Primary education	15	33
Secondary education	40	35
College graduates	30	23
University education	9	3
Total	100	100

4.3   Earnings in the Manufacturing Sector in Kenya

As mentioned earlier, real wages in Kenya have declined since the late 1970s up to the mid-1990s when they started to increase again. Table 10 shows trends in earnings for all workers in the manufacturing sector. As shown in the first row, real earnings of the manufacturing sector have been declining over time until the mid-1990s when they started to increase again. In the year 2000, real wages were lower than the levels for 1986, but higher than for 1995. The trend in real earnings by school level is similar to that described earlier for the entire urban sector. Real wages for individuals with no education continued to decline after 1986.

Table 10: Real earnings in the manufacturing sector (1990 = 100)

Variables	LFS 1978*	LFS 1986*	RPED 1995*	KMES 2000
All	3,453	3,021	2,027	2,802
Uneducated	1,602	1,987	1,418	1,205
Standard 1-4	2,041	2,300	1,576	1,618
Standard 5-8	2,275	2,048	1,456	1,639
Form 1-2	3,194	2,658	2,038	1,973
Form 3-4	5,260	3,133	2,038	2,533
Form 5-6	7,694	7,012	2,061	4,699
University	15,722	14,965	8,279	13,880
No. of observations	186	312	1,123	1,016

*Source: *Appleton et al 1999; the last column was calculated from KMES 2000 data*

The returns to education for employees in the manufacturing sector are provided in Table 11 (Mincerian regressions results are provided in Appendix II, Table 1B). As shown in Table 11, returns to university education have been increasing over time while returns to primary and secondary education have been declining over time. The returns to primary education have declined from 10 percent in 1978 to about zero in 2000, while the returns to university education increased by about seven times from 13 percent in 1978 to about 76 percent in the year 2000.

Table 11: Mincerian returns to education over time

Survey	Cohort	Primary S8	Secondary F4	University
LFS 1978	All cohorts	10	34	13
LFS 1986	All cohorts	5	16	20
RPED 1995	All cohorts	2	12	69
KMES 2000	All cohorts	0.04	9	76

Source: Appleton et al, 1999; and estimates based on KMES 2000

Although the structure of returns to education is similar to that for the entire urban sample in the previous section, in that returns to education increase with the level of education, there are some differences worth mentioning. First, the increase in returns to university education in the manufacturing sector seems to be higher than for the entire urban areas while the fall in returns to primary and secondary education seems to be severe for the manufacturing sector than for entire urban areas. It means the highly skilled labour gains much more while the loss for less skilled labour is more severe in the manufacturing sector than in the entire urban areas.

As mentioned earlier, foreign direct investment is associated with high pay for workers. To investigate this, we analyse earnings in foreign and locally-owned firms. First, we consider the mean earnings in foreign and locally-owned firms for the early and late 1990s. This is shown in

Table 12. As shown in the table, foreign-owned firms pay higher earnings to employees than locally-owned firms. However, the gap in earnings has been narrowing down over time as shown by the difference between earnings in the two types of firms in 1992 and 1999. The differences in earnings could be due to the fact that foreign-owned firms employ highly skilled labour and therefore pay more compared with locally-owned firms. If this is the case, then it means that controlling for these variables can eliminate this gap.

Table 12: Mean monthly real earnings for workers in foreign and local owned firms (1990=100)

Firm type	RPED 1993	KMES 2000
Locally-owned	1,706	2,386
Foreign-owned	1,957	2,875

Further evidence, however, shows that even for the same level of education, foreign-owned firms pay higher earnings than locally owned firms as shown in Table 13.

Table 13: Mean monthly earnings for workers in foreign and locally-owned firms by level of education 2000 (1990=100)

Education	Foreign-owned	Locally-owned
Primary education	2,860	1,505
Secondary education	2,453	2,324
College graduates	4,964	3,086
University education	17,198	11,585

Source: KMES (2000)

As shown in the table, earnings for employees at each level of education are higher in foreign-owned than in locally-owned firms. This shows that the high pay in foreign-owned firms cannot be explained mainly by employment of highly skilled labour in these firms. Probably, workers in foreign-owned firms are in a position to extract rents, which are shared by all employees, or the firms have the ability to pay higher wages. Another explanation could be associated with the large size of firms. Previous studies (see Manda, 2002) find evidence that large firms pay higher earnings than small firms partly to reduced turnover.

5.   Conclusion

This paper analyses the effect of globalisation on the labour market in Kenya and in particular on employment and earnings outcomes. During the reform period, there has been an increase in employment opportunities in the informal sector as compared to the formal sector. There was also increased employment in the horticultural sector and EPZs, but most of the job opportunities in the informal sector are insecure due to low survival rate of firms in this sector. Also, earnings in the informal sector are low compared to those in the formal sector. Women participation in the urban labour force has increased over time although it is still very low compared to male participation. In addition unemployment rate increased especially for women in urban areas. The increase in unemployment and the expansion in the informal sector employment can be attributed to civil service reforms, downsizing of employment in parastatals, collapse of some private sector firms, and retrenchment especially in previous highly protected private sector firms following stiff competition from imports after trade liberalization.

In general there has been a shift towards employing highly skilled manpower especially in the manufacturing sector. There was also a decline in permanent full-time workers and an increase in part-time and full-time casual workers probably an indication of cost-cutting strategy by firms. By increasing the number of part-time and full-time casual workers, firms are likely to make savings in terms of paying less benefits.

The real earnings for all workers declined during the reform period until the mid-1990s when they started increasing again. However, the less-skilled experienced losses during the period compared to the highly-skilled. In particular, returns to university education increased compared to returns to primary and secondary education, which declined over the period. Since the less educated are more likely to be

poor than the highly educated, more of the less educated are likely to be poor. Therefore, globalisation in Kenya is likely to be associated with worsening poverty.

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Appendices

Appendix I

The Welfare Monitoring Survey (WMS) II, 1994, was undertaken by the Government of Kenya (Central Bureau of Statistics, Ministry of Finance and Planning). The survey aimed at collecting data, which would assist the government to assess the status of the welfare of the population. The survey covered all the eight provinces in Kenya and gathered information from each district on employment status, health, fertility, household size, crops and livestock, household incomes and expenditure on various items, children's nutrition, and social amenities. The data set also has information on individual characteristics such as education level, age and marital status. The WMS of 1994 provides information on individual earnings, education and age, which is useful in the estimation of returns to education and analysis of earnings. The sample used in our study includes only individuals in the working age group 15 to 65 years and who are not attending school. The sample size used consists of about 2,894 individuals in urban areas.

Appendix II

Table 1A: Earnings functions for wage employees (log monthly earnings 1990 prices)

Variables	LFS 1978 (Urban data)	Urban LFS 1986	WMS II 1994 (urban)*
Constant	5.941	5.880	4.911
	(52.57)	975.75)	(44.81)
Standard 1-4	0.199	0.235	-
	(3.05)	(4.31)	-
Standard 5-8	0.242	0.249	0.497
	(4.25)	(5.55)	(9.40)
Form 1-2	0.441	0.224	1.027
	(8.24)	(5.77)	(9.85)
Form3-4	0.550	0.516	1.413
	(9.76)	(13.13)	(13.43)
Form 5-6	0.445	0.469	-
	(4.48)	(8.49)	-
Vocational school	-	-	1.392
			(6.19)
Polytechnic	-	-	-
			-
College	-	0.087	2.026
		(1.23)	(13.75)
University	0.465	0.783	2.527
	(3.60)	(10.94)	(13.87)
Experience	0.0951	0.0649	0.101
	(7.09)	(7.62)	(12.76)
Experience squared	-000236	-0.00113	-0.001
	(-3.38)	(-2.39)	(-8.50)
Experience cubed	0.0000189	0.000005265	-
	(1.69)	(0.703)	-
Nairobi	0.319	0.080	0.656
	(4.50)	(1.57)	(8.39)
Mombassa	0.370	0.152	0.051
	(4.84)	(2.66)	(0.79)
Eldoret	0.006	-0.013	0.022
	(0.06)	(-0.18)	(0.33)
Other town (not Nakuru)	0.141	-0.170	-
	(1.90)	(-3.29)	
Male	0.057	0.122	0.769
	(1.25)	(4.67)	(14.19)
No. of observations	1331	2494	2894
Adjusted R^2	0.474	0.533	0.300
Mean lnw	7.870	7.508	6.137

*Source: Appleton et al, 2000, Table 4; * Estimated using WMS II, 1994 data*

Table 1B: Earnings functions for manufacturing sector wage employees

Variables	LFS 1978	LFS 1986	RPED 1995	KMES 2000
Constant	5.346	6.473	5.85	6.447
	(15.95)	(24.88)	(42.68)	(24.38)
Standard 1-4	0.270	0.208	0.076	-
	(1.31)	(1.30)	(0.67)	
Standard 5-8	0.246	0.073	0.069	0.003
	(1.42)	(0.56)	(0.98)	(0.02)
Form 1-2	0.431	0.314	0.208	-
	(2.71)	(3.24)	(3.61)	
Form 3-4	0.423	0.229	0.182	0.317
	(2.58)	(2.30)	(3.04)	(2.24)
Form 5-6	0.214	1.041	0.170	-
	(0.59)	(7.06)	(2.02)	
Vocational school	-	-	0.507	-
			(4.01)	
Polytechnic	-	-	0.507	-
			(4.01)	
College	-	-0.319	-	0.707
		(1.32)		(4.87)
Professional	-	-	0.754	-
			(4.17)	
University	1.233	0.587	1.327	1.887
	(2.76)	(2.46)	(10.03)	(10.83)
Experience	0.146	0.0424	0.0813	0.046
	(3.84)	(1.38)	(5.63)	(3.77)
Experience squared	-0.00526	-0.000183	-0.00266	-0.0003
	(-2.52)	(-0.10)	(-3.36)	(-1.86)
Experience cubed	0.0000675	-0.0000122	0.0000317	-
	(2.03)	(-0.42)	(2.51)	
Nairobi	0.394	0.094	0.427	0.448
	(2.11)	(0.73)	(7.81)	(7.63)
Mombassa	0.278	0.042	0.196	0.409
	(1.22)	(0.28)	(2.97)	(6.17)
Eldoret	-0.213	-0.169	0.133	-0.120
	(-0.93)	(-1.13)	(1.78)	(-1.29)
Other town (not Nakuru)	0.101	-0.226	-	-
	(0.50)	(-1.62)		
Male	0.366	-0.036	0.102	0.080
	(2.51)	(-0.38)	(2.19)	(1.59)
No. of observations	186	312	1123	999
Adjusted R^2	0.491	0.479	0.350	0.396
Mean lnw	7.816	7.519	7.331	6.920

Source: Appleton et al, 1999, Table 4 and estimates based on KMES 2000

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