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The Labour Market in Developing Countries

Duncan Campbell[1] and Ishraq Ahmed[2]

The challenge of the present chapter is that it is a difficult task to capture the diversity of the economic activities of those who work in the world, the vast majority of whom are found in developing countries. Certain stylized features will have to suffice. Of these, and as distinct from developed countries, two prominent features are: (1) that developing countries are characterized by a status in employment in which own-account work, rather than paid employment, (wage-earning) is considerably greater ; and, (2) somewhat contrary to a standard textbook in labour economics, much economic activity in developing countries cannot be understood as the "derived demand for labour" – i.e. labour demand derived from product-market demand. Much own-account work is actually an effort at "demand creation."

Much activity is in fact outside of a "market" altogether, e.g. subsistence farming, or endeavoring to "create demand", e.g. street vending, which can be understood as an "employment-led", survivalist strategy, rather than a "growth-led" demand for labour.[3] The distinction here is that between "growth" or "demand" absorbing labour into jobs, as is common in developed countries, versus an abundant, underemployed supply of labour seeking to create its own demand for its services. As anywhere, the two sides of the market meet in the end, of course, but it is a question of whether it is demand or supply that is driving this reunion.

The present chapter passes in review a few of the major features of developing-country labour markets. These include: the magnitude of the informal economy and its persistence (developed in further detail in Chapter 4); the role of agriculture and the rural economy; the structure of developing-country labour markets; structural transformation and development (further elaborated in Chapter 2); human capital development, (the subject of Chapter 7); and challenges to market integration.

Two "umbrella" concepts underlie many of the features above. The first of these is fragmentation – "dualism" [4] (illustrated in the table below) describes the economic structure of developing countries, their economic geography between rural and urban, and the weaker integration of labour markets than is the case in developed countries. The second conceptual distinction between developed and developing countries is that an abundance of labour and a scarcity of capital prevail in the latter, and the reverse in the former. The chapter begins with a general look at the labour market consequences of an

[1] Director for Policy Planning in Employment, ILO, and Fellow, Institute for Labour Studies (IZA), Bonn.
[2] Research Associate, Institute for South Asian Studies, National University of Singapore.
[3] D. Campbell, "Employment-Led Growth and Growth-Led Employment in the Recovery," in *The Global Crisis : Causes, Responses, and Challenges*, (Geneva : ILO, 2011), Chapter 8.
[4] A good discussion of dualism is, A. Ghose, N. Majid, and C. Ernst, *The Global Employment Challenge*, (Geneva: ILO, 2008), P. 57.

abundance of labour and a scarcity of capital. First, however, a brief definitional overview is given in Box 1.

A « Developing Country »? An « Emerging Economy »?

Most simply, and most rigorously, a "developing country" is defined in income terms, more specifically, gross national income per capita. In other words, "development" is conventionally defined as income-dependent, irrespective of other attributes of development, historical or cultural. Such a definitional standard is, of course, both partial, ignoring other features of development, and relative. When, in particular, does GNI per capita attain a level such that the country can then be considered "developed"? The broad-based conventional answer to this question lies in the World Bank's classification of countries, of which there are four groupings: low income, middle-low income, middle high income, and high income. The classification is, once again, by GNI per capita. Revisions to the classification are annual, on July 1st. All countries below the high-income level are, by convention, considered "developing".

There are, of course, ample grounds for debate on the equation of "development" with some, arguably arbitrary, monetary standard. Yet, ignoring history and culture, there are some economic empirical regularities that describe a developing country in addition to some monetary measure of standard of living. Two are predominant: developing countries are – perhaps predominantly – agrarian, and industrial development is low. Whether there is a common trajectory toward (economic) development is addressed later in the chapter.

As for "emerging" economies, these are developing countries with low to middle per capita income. The term was coined in 1981 by Antoine W. Van Agtmael of the International Finance Corporation of the World Bank. The distinction between and "emerging" and "developing" economy has much to do with the character of their reforms, their rate of economic growth, and their engagement in the global economy, as the following definition suggests:

"Although the term "emerging market" is loosely defined, countries that fall into this category, varying from very big to very small, are usually considered emerging because of their developments and reforms. Hence, even though China is deemed one of the world's economic powerhouses, it is lumped into the category alongside much smaller economies with a great deal less resources, like Tunisia. Both China and Tunisia belong to this category because both have embarked on economic development and reform programs, and have begun to open up their markets and "emerge" onto the global scene. EMEs are considered to be fast-growing economies."[1]

[1] http://www.investopedia.com/articles/03/073003.asp#ixzz26GASmySQ

Table 1

The "Dual Economy" is divided into a "traditional" and a "modern" economy	
The "traditional" Economy	**The "Modern" Economy**
is relatively more …	
informal	Formal
Vulnerable in employment status	Likely to have a higher share of wage-earners
Rural	Urban
Likely to be less productive	Likely to more productive
Credit-insufficient	Access to credit
Likely to have a low capital-to-labour ratio	Likely to have a higher capital-to-labour ratio
Oriented to domestic, even local markets	Oriented to domestic and international markets
Sheltered from the impact of macroeconomic policies	Exposed to macroeconomic policies
Deficient in the quality of jobs	Deficient in the quantity of jobs
Likely to be less or un-protected	Likely to have at least de jure protection
Prone to greater earnings instability	Stable and predictable in earnings and income

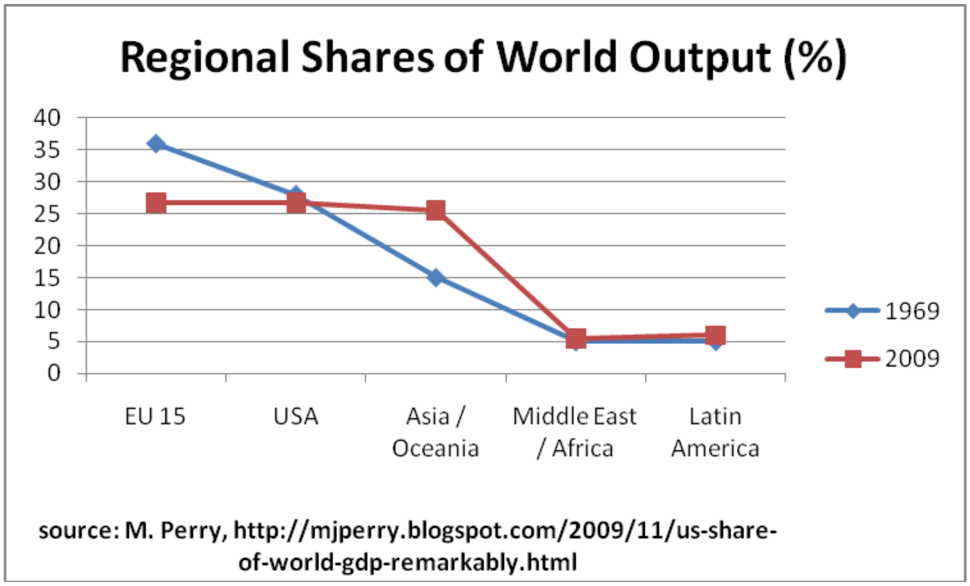
Source: Adapted from D. Campbell, "Employment-Led Growth and Growth-Led Employment in the Recovery," in *The Global Crisis : Causes, Responses, and Challenges*, (Geneva : ILO, 2011), Chapter 8.

The Employment Consequences of Abundant Labour and Scarce Capital

One of the most fundamental distinctions between developing and developed countries is the abundance of labour and the scarcity of capital in the former. The combination results in inadequate investment and capital accumulation combined with greater labour supply pressures than prevail in developed countries, leading to a scarcity of productive employment. Once again, this is a secular and stylized observation that may no longer be true for many, otherwise "developing" countries. Indeed, in the aftermath of the Great Recession, where interest rates have been pushed to zero in the afflicted, wealthy countries, high and even excessive capital inflows to some developing countries are of macroeconomic concern.

It is also true that change is altering the balance of labour and capital supplies in many parts of the developing world, most notably, the "emerging" economies. In fact, growth rates in developing countries began to diverge and pull ahead from those in developed economies around about 1990, spearheaded by the emerging economies, China and elsewhere in Asia, in particular, but not just these. Growth in Sub-Saharan Africa in the first decade of the new millennium, for example, was at a rate not seen in decades, fuelled in particular by rising commodity prices. The rise of developing Asia is reflected in Figure 1 below.

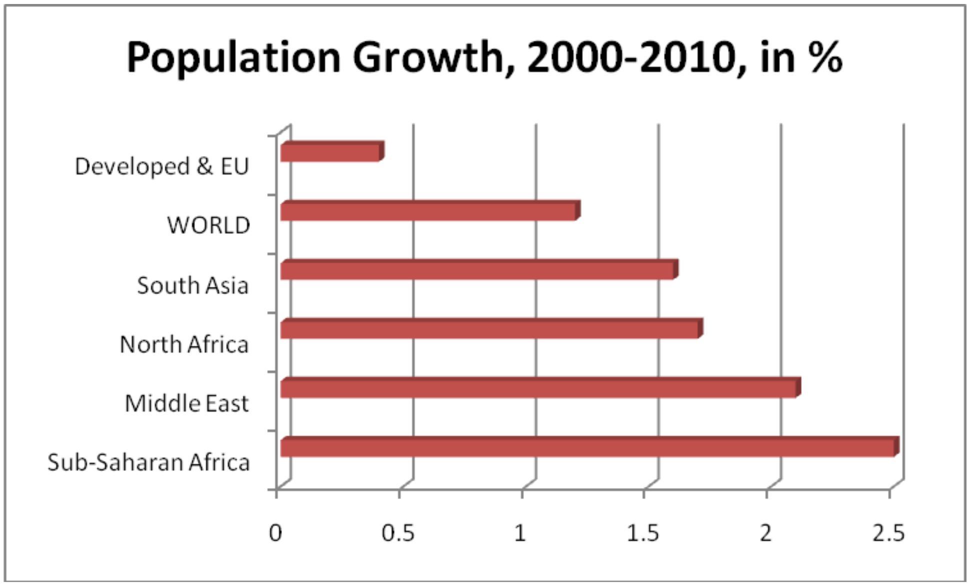
Figure 1



That said, It remains the case that the abundance of labour in a context of inadequate growth to absorb that labour into productive employment results in a situation of extensive underutilization of labour. There are two causes of this. The first lies in the divergence of demographic trends leading to greater labour-supply pressures in developing countries: in fact, often but not always, the poorer the country, the higher the rate of population growth – in economies least likely to be able to absorb a burgeoning young labour force into productive jobs. This is suggested in Figure 1. The implication is that the employment challenge in developing countries is predominantly a youth employment challenge. This is the same as saying that, the higher the population growth rate, the younger the age structure of the population. Thus, while an aging population is a concern for many developed countries, (and some developing ones, such as China), providing jobs for a young workforce is the challenge for much of the developing world.[5]

[5] There are, of course, exceptions. China's one-child policy has had the consequence of resulting in an aging population. Moreover, infant mortality rates and disease-related mortality generally (e.g. HIV/AIDs, Malaria) are substantially higher in developing countries, particularly the poorest ones.

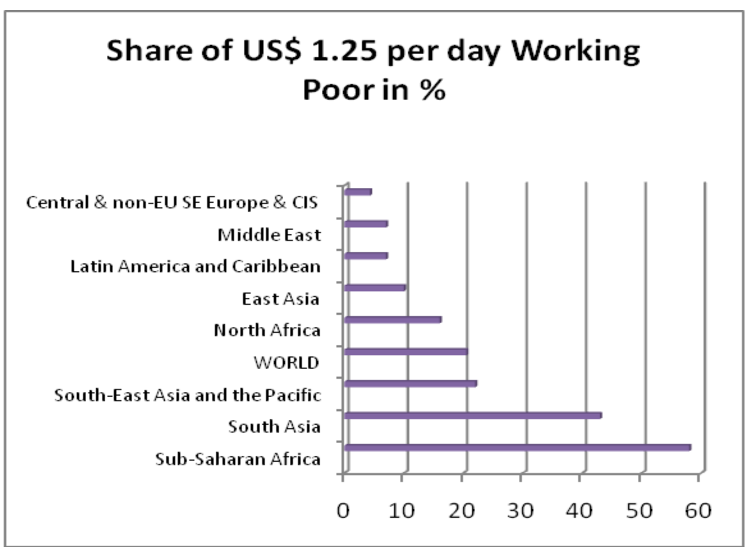
Figure 2



Source: ILO Trends econometric models, 2011

The second indicator of labour underutilization is the share of working poor[6] in the labour market, which can be taken as a proxy for income-related underemployment. The share of youth in a population and relative poverty are, of course, likely to go hand-in-hand.

Figure 3



Source: ILO Trends Econometric Models, 2011

6 « extreme » working poverty is defined as those earning $1.25 or less in purchasing power parity terms for themselves and their families.

Thus, while open unemployment is a considerable problem in some developing regions, e.g. North Africa, it is overwhelmed in magnitude by underemployment. In the absence of social production systems, (the case for 80 per cent of the world's population), unemployment is quite simply not an option. It is not unusual for open unemployment in developing countries to be concentrated among educated youths, whose families can afford them a longer period of job search. Unemployment is quite simply an inadequate indicator of labour market conditions in developing countries. That the official unemployment rate in Nepal was 2.1 per cent in 2011 tells us very little indeed about the level of labour underutilization – i.e. underemployment – in that country. With an inadequate number of jobs in the formal economy, and as unemployment is not affordable in the absence of a social protection system, work in the informal economy is the option for the majority of workers in the developing world.

The Persistence of Informality

The informal economy is such a predominant feature of labour markets in developing countries that an entire chapter (Chapter 4) is devoted to it in this volume. The discussion here, therefore, is of a brief and stylized nature.

The ILO (2002) definition of the informal economy in developing countries underscores the critical role it plays in providing livelihood opportunities in both rural and urban economies, albeit temporarily. The definition delineates informal employment as: self-employment in informal enterprises such as unregistered enterprises, employers and unpaid family workers; and paid employment from informal jobs such as casual or day labour and unregistered help for informal and formal enterprises, households or temporary employers.

The "informal" economy tends to be mostly small, family-owned enterprises that are more labour-intensive, have low earnings, and are either not subjected to or do not comply with the existing labour market regulations. In essence, this dualistic labour market structure consists of one economy (the "formal" one) offering better incomes and other favorable terms and conditions of employment, and another economy (the "informal" one), which offers less favorable wages and conditions. The formal economy is more likely to offer some protection in the form of labour market regulations, as well as some access to formal systems of social protection, both, virtually non-existent in the informal economy.

The important point is that the majority of workers in the world today are in the informal economy, and the majority of new entrants to the global labour market enter the informal economy. For example, around 34% of Tanzanian households engage in some form of non-agricultural informal activity at any given point. The proportion is higher in urban areas – 55% engage in informal work in the capital Dar es Salam. Around 22% of the total labour force is involved in the non-agricultural informal economy to some degree, while 75% of the informal economy workforce consists of the self-employed and contributing family members. The highest proportion of the non-agricultural and urban informal labour force works in restaurants, hotels or trade. Overall, Africa has been estimated to have 80% of its non-agricultural employment accounted for by informal work, over 60% of its urban employment and a remarkable 90% of its new jobs over the past decade. In Asia, the share of informal workers ranges from 45 % to 85% of non-agricultural work and from 40% to 60% of urban employment.[7]

In seven of the most populous developing countries the informal share of employment increased in the 2000s. Even in Korea, which was one of the success stories of the 70s and 80s, the informal economy still accounts for a large share of the workforce. Furthermore, not only does the informal economy account for a major source of employment in developing countries, it is also assumed to contribute a significant share to a country's gross domestic product – an estimated 8% to 12% of the GDP in South Africa, for example,[8] and considerably higher in many other developing countries.

There is evidence from some of the transitional economies that shows that the large declines in their GDP were alleviated to some extent through the rapid growth of the informal economy.[9] Indeed, there is sometimes a tendency to view the informal economy almost as if it were an "automatic stabilizer" when there is a shock to the formal economy: being self-employed is a much easier proposition than seeking a formal job, since it involves low capital requirements and entry barriers.

The weak capacity of institutions to provide education, poor training and poor infrastructure contribute to the growth of the informal economy. Large scale redundancies in the public sector from the structural adjustment policies of the eighties and nineties resulted in the unemployed workers resorting to the informal economy. Again, these issues are revisited in depth in Chapter 4.

Agriculture and the rural economy

Rural economic activities are usually divided into farm (agriculture) and non-farm activities, with agriculture as the predominant sector. The share of agriculture in GDP has been declining over the years, and rural non-farm employment has become more widespread. However, subsistence food production, i.e., food production for own consumption is still prevalent. Moreover, agriculture still accounts for a substantial share of the labour market – a majority share in many developing countries – and the world's poor are predominantly found in the agricultural sector of developing countries. That agriculture's share in GDP has declined on the whole more rapidly than employment implies that productivity in agriculture has declined. Productivity is in particular apt to be low in subsistence agriculture, seasonal agricultural wage labour and in forms of non-farm self-employment. The incomes generated are consequently not very high, often just enough to ensure basic food security and to serve as coping mechanisms to alleviate poverty or escape outright destitution.

The FAO's Rural Income Generating Activities (RIGA) dataset finds that the majority of rural households in developing countries are involved in farming activities. The share ranges from 54% to 99% by country with an average participation rate of 86.2%. Participation rates in non-farm activities are higher in Latin America and Asia relative to other regions.

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7 Becker 2004

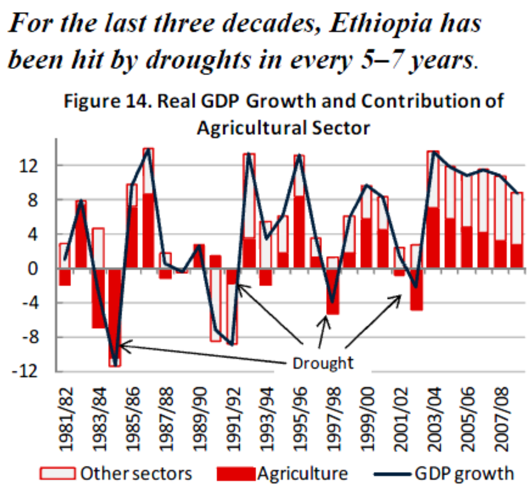
8 Budlender, Buwembo and Shabalala (2001)

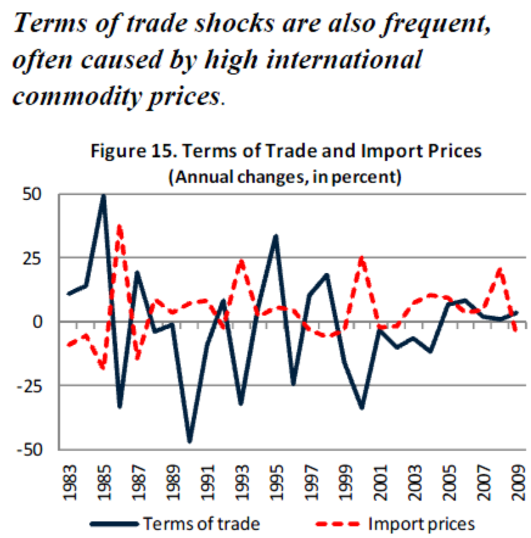
9 Gerxhani 2001

The Weather, International Commodity Prices, and Growth

One of the more fundamental observations to make about agriculturally based developing economies is that they show a fairly high degree of systemic volatility – not only arising from the volatility of international commodity prices that induce terms of trade shocks. Indeed, as the figure below suggests, Ethiopian GDP is, in fact, hostage to rainfall – its excess or its absence.

Figure 4





Source: International Monetary Fund, Article IV report on Ethiopia, 2010

There is much discussion today of the growth of "extreme" weather events associated with climate change. This is quite likely to add to the volatility of both product yields and price movements.

Traditional crops still serve as a major source of livelihood for the rural economies in developing countries. Despite a changing structure in agricultural trade, where there has been an increase in the share of high-value products such as fisheries, fruits and vegetables, traditional commodities such as coffee, cocoa and tea are just as important for sustaining livelihood opportunities and subsistence farming.

Urbanization can have positive effects on that portion of the agricultural sector that is commercial. It can increase economies of scale in food marketing and distribution, resulting in an increase in the volume of food marketed.[10] That said, while small farms can increase the well-being of the rural poor, they may be left behind during rapid economic growth and globalization. Such poor farms may be "locked out" of markets for, among other reasons, inadequate transport or storage infrastructure. They do not in consequence benefit from the growth of commercial opportunities in expanding urban markets. In Nepal, for example, 75 per cent of the labour force is in agriculture – but 90 per cent of

[10] Meijerink and Roza (2007)

these remain subsistence farmers. And, beyond having access to a good road, the barriers to commercialization may be hard to overcome: lacking the skills needed, rural farmers may often not be able to adopt new technologies. They are also exposed to the vicissitudes of the weather, may not have access to irrigation or fertilizer, or access to credit.

Staying Rural, but Moving Off the Farm

The rural non-farm sector (RNF) is growing. Estimates of RNF income shares vary across countries, ranging from 30% to 45% of rural incomes.[11] In the rural sectors RNF employment comprises about a quarter of the jobs in Asia, West Asia and North Africa, about one in three jobs in Latin America, and around 10% in Africa.[12] An increasing share of RNF employment would thus seem to be correlated with economic development – less developed regions have significantly lower RNF shares compared to more developed regions. In terms of income, however, RNF shares represent 42% of the rural income in Africa, 32% in Asia, 40% in Latin America and 44% in Eastern Europe and the CIS countries**.** Africa's higher share might mean simply a lower "denominator" of total income: non-income-generating subsistence farming might represent a higher share of all farming and thus a lower denominator. The FAO's RIGA dataset shows that services accounted for an important share of the RNF economy – over one-third of the share of the rural non-farm income is generated by services – trading farmed goods, for example.

Multiple Job-Holding

While difficult to quantify, a major distinguishing feature of many developing countries, relative to developed countries, is that work in developing countries is often characterized by multiple job-holding. Workers engage in different economic activities to supplement the inadequate earnings accruing from just one.

Even though RNF activities might not generate high incomes, during periods of seasonal or permanent underemployment, any such utilization of labour can raise incomes. RNF sectors can also provide a source of income to the landless poor and those who are unable to participate in agricultural activities. RNF activities enable people to supplement their incomes when there is no agricultural employment and provide them with a risk-reducing, coping mechanism in the process. In fact, much non-farm activity is secondary, providing a good means of smoothing out the flow of income in slack farming seasons and stabilizing total earnings by diversifying the sources of income. However, RNF employment could result in increasing rural inequality, as a body of evidence suggests that the highest non-farm earnings accrue to the better off farmers. [13]

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11 (FAO, 1998; Reardon et al., 2001)

12 (Haggblade et al., 2005)

13 Burgess (1997) White (1991) Evans and Ngau (1991)

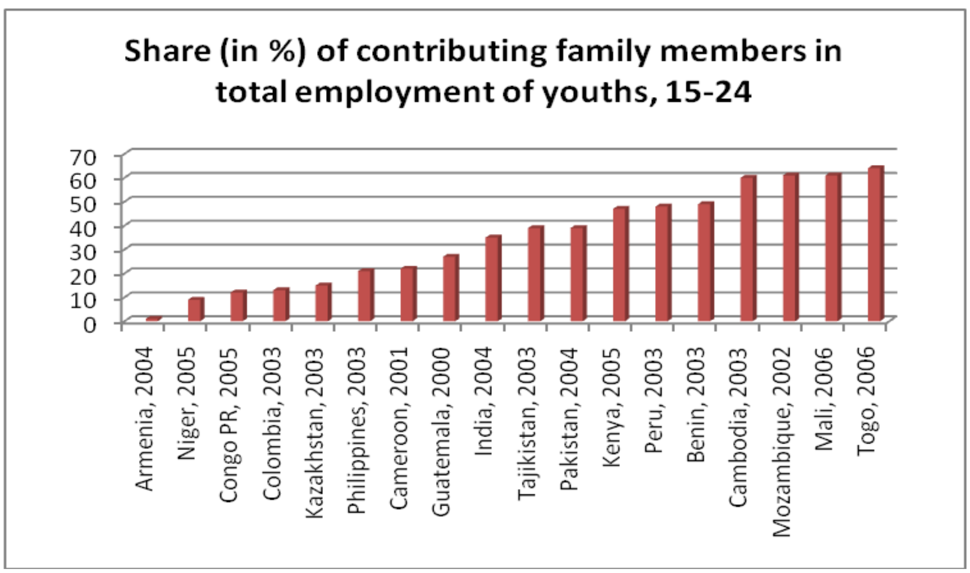
Labour Market Structure and Status in Employment

The foregoing discussion has already implied some stark differences in the structure of labour markets in developed and developing countries. Another four among these differences are: (1) the characteristics of non-market work; (2) the labour force participation of women; (3) status in employment, and (4) the dispersion of occupational productivity.

Non-Market Work: Work outside the scope of market transactions

In developed countries, the most common form of non-market work is the management of the household, usually by a housewife – cooking, cleaning, child-rearing, etc. Such work is both excluded from the system of national accounts, and not included in labour force statistics. In developing countries, particularly in the poorest ones, non-market work is often a direct contribution to livelihoods – water or wood-fetching, for example, or planting, harvesting, and livestock feeding in subsistence farming. Such work – non-market and unpaid – is nevertheless included within labour force statistics as employment. As in developed countries, valuation of such non-market work is difficult for the purposes of GDP accounting, but is nonetheless an important contribution to the maintenance of living standards and a buffer against extreme poverty. Women are disproportionately represented in contributing family-member work, but so are young people, as shown in the figure below.

Figure 5



Source: ILO Trends econometric models, 2011

The Labour Force Participation of Women and the level of economic development

The labour force participation of women, LFPRw, including those engaged in non-market work, varies with the level of economic development. In the poorest countries, which also tend to be agriculturally based countries, the LFPRw is particularly high, reflecting women's contribution to farming activities, and a reflection also of the absence of income protection, such as unemployment insurance. With economic development, participation rates of women tend to decline as a result of greater household income and the affordability of the withdrawal of labour supply for child-rearing purposes or household work. At developed country levels of economic development, LFPRw tends to increase once again, to levels nearly matching those of males in some countries. The latter phenomenon is a reflection, not always of necessity, but of desire for labour force participation, and fewer barriers to doing so.[14] Reasons for increased participation include the decline in gender-based occupational segregation and discrimination, lower fertility rates, widespread time-and labour-saving technical change in the house, and the growth of services, such as childcare. The LFPRw curve is thus parabolic, or U-shaped, when drawn against the level of economic development.

Status in Employment

There is a strong relationship between the level of economic development and the share of wage employment in the labour market – a poorer country having a lower share of wage employment. the definitions of status in employment are shown in Table 2 below. The ILO defines as "vulnerable employment" the sum of the shares of "own-account workers" and "contributing family members" in the labour market.[15]

Table 2

Status in Employment: Definitions
Employees are all those workers who hold the type of jobs defined as "paid employment jobs", where the incumbents hold explicit (written or oral) or implicit employment contracts that give them a basic remuneration that is not directly dependent upon the revenue of the unit for which they work.
Employers are those workers who, working on their own account or with one or a few partners, hold the type of jobs defined as a "self-employment jobs" (i.e. jobs where the remuneration is directly dependent upon the profits derived from the goods and services produced), and, in this capacity, have engaged, on a continuous basis, one or more persons to work for them as employee(s).
Own-account workers are those workers who, working on their own account or with one or more partners, hold the type of jobs defined as a "self-employment jobs" [see ii above], and have not engaged on a continuous basis any employees to work for them.
Members of producers' cooperatives are workers who hold "self-employment jobs" in a cooperative producing goods and services.

14 Barriers to labour force participation decline with education, with anti-discrimination legislation, or with technological change reducing the time needed for non-market work, as well as institutions reducing the need for non-market work, e.g. childcare centres.

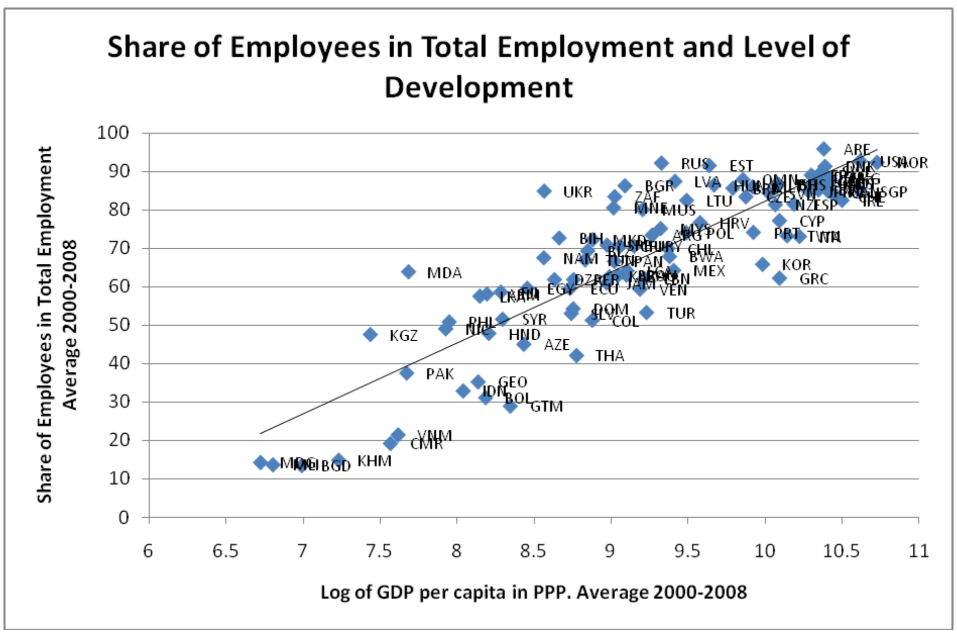
15 These workers are « vulnerable » to the extent that they are more likely than (most) paid employee to face greater income insecurity and not to have access to formal systems of social protection.

Contributing family workers are those workers who hold "self-employment jobs" as own-account workers [see iii above] in a market-oriented establishment operated by a related person living in the same household.
Workers not classifiable by status include those for whom insufficient relevant information is available, and/or who cannot be included in any of the preceding categories.

Source: ILO Key Indicators of the Labour Market

Existing research usually focuses on the dichotomy between self-employment (or own-account work) and wage employment, where self-employment involves the returns received for own inputs like labour, physical capital and entrepreneurial skills, while wage employment only includes returns to labour and human capital.[16] Self-employment amounts to 70% of informal employment in Sub-Saharan Africa, 62% in North Africa, 60% in Latin America and 59% in Asia.[17] The relationship between paid employment and economic development is shown in the figure below.

Figure 6



Source:

16 Yamada (1996)

17 Becker (2004)

Among developing and transition regions, rates of self-employment are the lowest in Eastern Europe, with a relatively low share of informal employment, but highest in other developing regions. [18] With higher levels of economic development, the number of self-employed workers has been falling in both manufacturing and commerce, with a concomitant rise in wage employment.

Wage employment is still not a negligible component in agriculture, with more than 20% of households (excluding Africa) involved in such activities.[19] Moreover, the importance of agricultural wage employment to the poorest (and often landless) rural households cannot be underestimated: among the rural population, the majority of the poorest quintile in each country participates in agricultural wage employment, with rates of 30% to 50% in Asia and Latin America.[20] Casual, daily wage labour is paid employment – but not of the sort that we usually associate with the advantages of economic development , as shown in the figure above.

Productivity variance within – ostensibly – the same product markets

Intra-sectoral differences in productivity tend to be far greater in developing than in developed countries. In the latter, more integrated product markets, better infrastructure (and thus fewer external constraints to productivity), and less information asymmetry in product markets make it such that competition reduces the variance in productivity levels. In a developing country, whether one is making soap at a subsidiary of a multinational company, or doing the same in a micro-enterprise results in a very great difference in productivity. That both production units coexist, with the more productive not driving the less productive out of business, has a straightforward explanation: the same product – soap, in this instance – competes in different product markets, the latter being more segmented in developing countries.

Structural Transformation or the Evolution of economic structure

In the classic view of development outlined by Arthur Lewis in the 1950s, development occurs when surplus labour in agriculture becomes a labour pool for the development of light manufacturing, with its higher value addition and greater economies of scale. With increasing incomes, a service sector then develops catering to the growing manufacturing sector, as well as to the rising purchasing power of consumers. As an empirical observation, this view of development describes fairly well the change in the economic structure of what are now the developed economies. The model also fits well with the transformation of several countries in East and South-East Asia. Whereas, for example, there was once a thriving garment industry in Hong Kong, China, the province’s economy is now 97 per cent services.

New patterns of employment correspond to the changing patterns of economic activity in developing nations. On the whole, sectoral employment shares in developing countries do indicate the expected pattern of declining employment in agriculture and increasing shares in the manufacturing and service

[18] Carletto et al. (2007)
[19] Ibid.
[20] Winters (2008)

sectors.[21] And with these changes, again, a change in the status in employment – greater wage employment – ensues.

The changing pattern of the sectoral shares is also determined by the changing pattern of demand. Some studies find that income elasticities determine the sectoral composition of production and employment shares.[22] With rising income levels, the demand for agricultural goods declines relative to that for manufactured goods, and ultimately, the demand for services increases after a much higher level of income has been attained. This "demand side" argument contributes to the explanation for this shifting pattern of employment. Regarding the increasing share of the workforce in the services sector, the industrial sector uses the service sector as "intermediate inputs" along with activities that were previously carried out by the manufacturing firms. In case of India, such erstwhile manufacturing services are "outsourced" to the firms in the service sector and attempts have been made to estimate the portion of this employment in services that could be attributed to manufacturing.[23] In the 1980s, various authors have found out that this "outsourcing" of manufacturing activities have contributed to an increasing share of service sector jobs.

As a small aside, it should be noted that the foregoing is a statistical artifact characteristic of labour-market data whether in developing or developed countries. A kitchen helper in a manufacturing plant was once counted as a job in "manufacturing", whereas it is now most likely to be reclassified as job in the service sector.

The Indian economy in the 1950s was similar to that of present-day developed countries' about to undertake industrialization. With around two-thirds of GDP in agriculture, the Indian economy was similar to the British economy in the late eighteenth century and to Japan in the early twentieth century. The Indian labour force was also similar in the sense that agriculture accounted for about three-fourths of the workforce in the 1950s; the United States had 72 percent of its labour force in agriculture in 1841 and Japan had two-thirds employed in 1880.

A Brief Word on Trade and Employment Changes

The structure of international trade reflects to some extent the factor content of trade – developing country exports rely more on unskilled labour while developed country exports usually tend to embody high skill. Developing countries tend to be more abundant in unskilled labour, whereas developed nations have ample skilled labour and this dictates the pattern of trade to some extent. One study shows that, for twenty-one developing countries trading in manufactured goods with developed countries in the years 1965, 1973 and 1983, the developing countries' exports were much less skill-intensive than its imports.[24]

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21 Majid 2005-

22 Papola 2005 ; Fischer and Clark

23 Papola 2005

24 Fischer and Spinanger (1986)

This pattern has been changing rapidly, however, as a result both of rapid technological change and greater economic interdependence. Globalization reduces technological choice for firms competing in global markets, and as most technological innovation occurs in the wealthier countries where labour costs are high, there is a bias for labour-saving technological change, ultimately adopted by countries where "labour" is the abundant factor.

Trade reforms can clearly have an impact on employment and earnings.[25] Research on Morocco found that exporting firms and those that were previously protected to some extent saw a reduction in employment.[26] Another study examined the impact of the Mexican trade reform on wages and employment and found that firms adjusted to the trade reforms through wage reductions. Prior to these trade reforms, workers enjoyed rent-sharing arrangements which allowed them to earn higher wages whereas afterwards, average real wages declined by 3 to 4%. The reduction of import quotas had significant negative impacts on employment while there were no significant impacts of tariff reductions.[27] While the literature consistently shows clear economic, employment, and earnings advantages of trade, the foregoing downside effects are nonetheless also present.[28]

Structural transformation in other countries could impact nations not undergoing any significant changes themselves. For instance, the World Bank forecasts that China's move from the low-skilled, export sectors to the intermediate and high-skilled sectors in the next decade will generate enormous employment opportunities for low income countries.[29] The reallocation of Chinese workers to higher value added products should result in the labour-abundant, low-income countries to take up China's place and produce the manufacturing goods. A reallocation of a small share of China's 85 million labor-intensive jobs could greatly benefit African manufacturing activities, which currently are estimated to employ at most 10 million workers. Thus, when economies are linked globally, structural changes can have positive trickle-down effects for economies that have not yet taken off.

But there are Concerns over the Course of Structural Transformation

At least two concerns make this optimistic view appear more fragile, however. First, for the Least Developed Countries (LDCs) most of all, getting a foothold on the development ladder through exports of manufactures might be a slippery one. Efforts to ignite structural change in LDCs and to catch up to the rest of the developing world through exports of manufactures pose arduous challenges, often as political as they are economic. Thus, the optimistic view above has its pessimistic counterpart:

"there was a moment – roughly the decade of the 1980s – when the wage gap was sufficiently wide that any low wage developing country could break into global markets as long as it was not stuck in one of the traps.[30] During the 1990s, this opportunity receded because Asia was building agglomerations of

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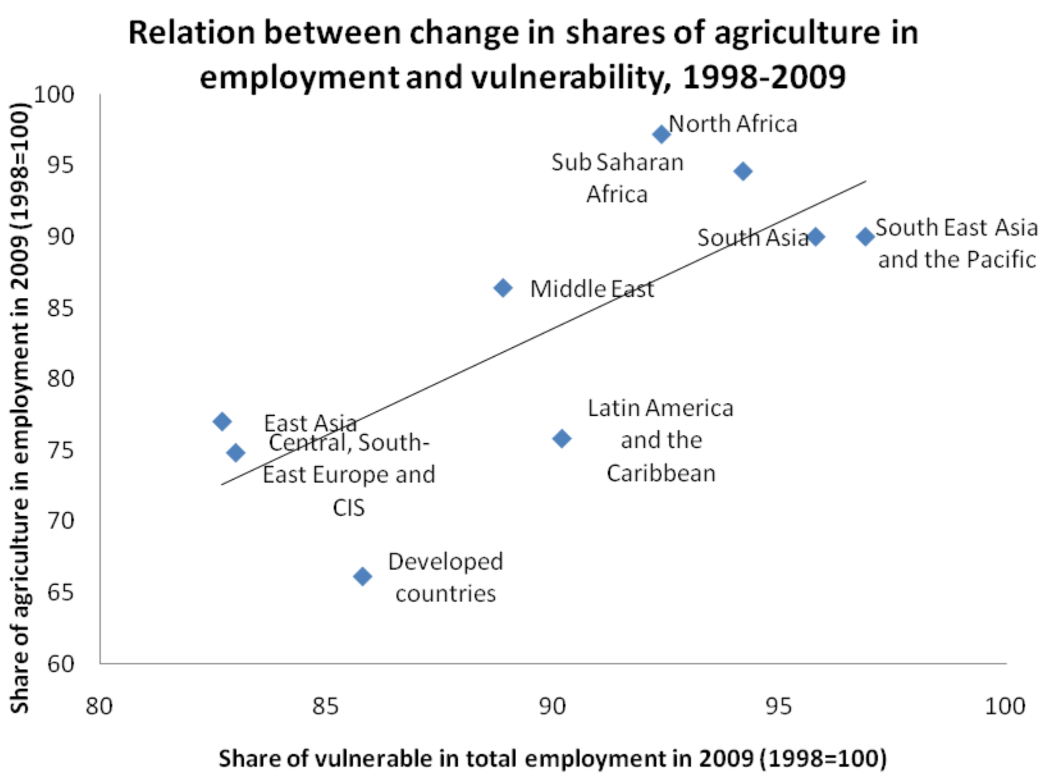
25 WTO/ILO study
26 Currie and Harrison (1997)
27 Revenga 1997
28 ILO WTO Trade and Employment
29 Lin 2011
30 Collier, 2007 . The « traps » are civil conflict, poor governance, natural resources, and poor location.

manufactures and services. These agglomerations became fabulously competitive: low wages combined with scale economies. Neither the rich countries nor the bottom billion could compete. The rich countries did not have low wages, and the bottom billion, which certainly had low wages, did not have the agglomerations. They had missed the boat…[T]he process of breaking in is now harder than before Asia managed to establish itself on the scene."[31]

There is some empirical support for this view: the pace of structural transformation varies substantially across regions, and some of these appear to be mired in the relative absence of structural transformation. This is shown in the figure below where the declining share of agriculture is taken as a proxy for structural transformation as occurring. Where it has occurred, there has been a concomitant rise in wage employment, and where transformation has changed little, vulnerability remains high.[32]

Figure 7



Source: Global Employment Trends 2011, ILO

The second concern questions whether the classic progression of structural change is everywhere apparent in the world today. Two doubts support this concern. One of these is that, instead of the

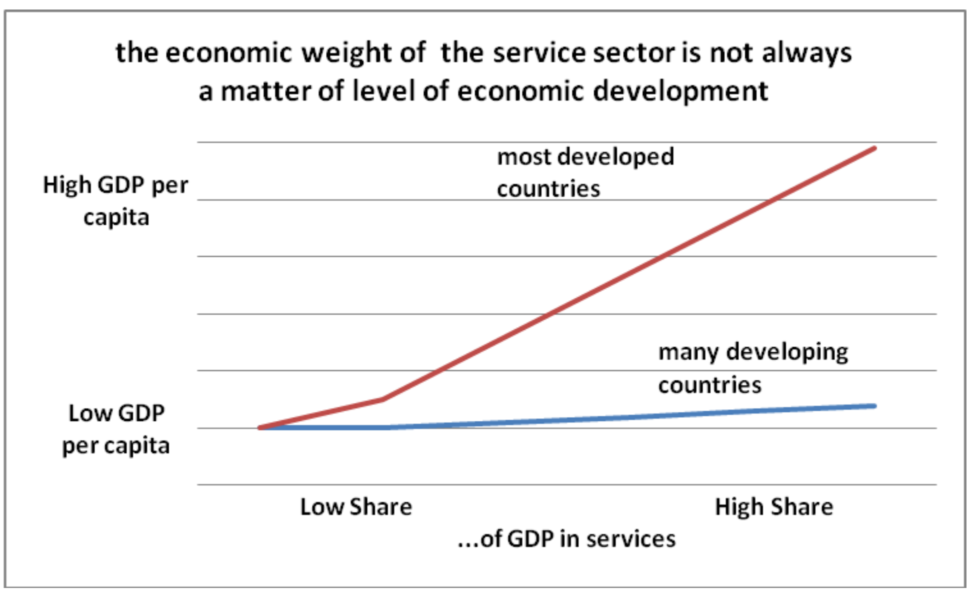
31 Ibid., pp. 84-85.

32 « vulnerability » is defined as the share of own-account workers and contributing family members in the labour market.

growth of the manufacturing sector, we are seeing deindustrialization in many developing countries, particularly in the least developed countries (LDCs). Indeed, the absolute number of employees in even the "world's manufacturer", China, has declined below what it was twenty years ago! For other developing countries, the sorts of barriers to entry cited earlier might have some explanatory role to play. Most importantly, however, is rapid technological change that substantially eroded the employment content of manufacturing output, particularly in evidence in developed countries. The abundance of unskilled, low-cost labour is no match for this.

Another doubt concerns the exact nature of the sharp increase in service-sector employment. The classic model shows a strong relationship between the level of economic development and the share of the labour force employed in the service sector. Today, even countries at substantially lower levels of economic development are witnessing a strong growth of service-sector employment. It can be assumed that only a minor share of such employment in developing countries is going into productive employment; in other words, the heady growth of India's software industry provides employment for only a tiny share of the Indian labour force. Rather, in many developing countries, rural poverty on the farm is transposing itself into urban poverty in the informal service economy of street-vending, rag-picking, restaurant work, and other low productivity activities.

Figure 8



Source: ILO *World Employment Report 2004-05*

The foregoing suggests three conclusions: structural transformation benefits developing countries and policies should address this; productivity improvements in agriculture should not be neglected at the expense of high value added manufacturing and service sectors – it is possible to achieve an adequate balance without any adverse effects on employment. Implied policy here is straightforward: there needs to be at one and the same time a focus on ending policy neglect and improving productivity in the traditional sector – agriculture. Malawi was an excellent example of this. In the 2000s, subsidies on nitrogen- based fertilizer were introduced, targeting small-hold farmers. The result was a doubling of farm output within only a year. At one and the same time, policy should not neglect constraints that could impede the growth of the modern sector. Some have likened this dual policy stance to "walking on two legs".

The third conclusion to draw is more conjectural in nature: it may well be that the paths to economic development are becoming more varied than the assumptions of the development literature of the last century. Advanced, tradable services virtually did not exist 50 years ago. The globalization of competition may be making it harder to gain a foothold in manufacturing. And technological change is reducing the employment content of that sector. Another factor that will clearly shape a developing country's capacity to diversify is human capital.

Human capital and Investment capital

Human capital is critical in determining the quality of the labour force of countries. This theme will be explored in Chapter 7. Developing nations tend to have lower quality of human capital than developed ones. While adult literacy rates in developing nations have improved over the last 20 years – the share of the literate working population has increased from 70% to 80% in 2000 – the remaining 20% of the illiterate population consists of a significant proportion of females, most of whom are concentrated in the developing countries of South and East Asia[33]. Africa has higher adult literacy rates than South Asia, a reflection of the higher literacy rates among African women compared to South Asian women. However, African men are noted to be 50% more likely to be literate than women.[34] Moreover, in 1990, only 25% of Africa's population had completed primary school, compared to 32% in South Asia. African countries have been successful in increasing primary school enrolment, but the drop-out rates have outpaced the increase –children do not stay in school long enough to acquire any qualifications.

The returns to education in developing countries have been highlighted in many studies. One estimate suggests that, during the post-Green revolution in agriculture, productivity in Asia had increased by an average of 4% for a one year increase in schooling.[35] In Bangladesh, access to education and capital was found to be more important than access to land in ascertaining income levels in the rural areas.[36] Other studies have established a link between schooling and technology adoption: one study found that returns to schooling were augmented by more education enabling the use of better (i.e. more productive) technologies. Households having primary education saw their profits increase by 70%.[37] As such, schools and primary education are complements to a technological progress, with a positive effect on households: returns to schooling are higher in the presence of new technologies.

[33] UNESCO (2002)
[34] Appleton and Teal (1998)
[35] Hussain and Byerlee (1995)
[36] Byerlee, Diao and Jackson (2005)
[37] Foster and Rosenzweig (1996)

Child school attendance is nonetheless determined by seasonal income fluctuations, as has been found in rural Indian households. Household responses to aggregate and household income shocks reveal that children withdrawn from schools serve as a sort of insurance to mitigate the seasonal hardship. For poorer households that are vulnerable to risk, this self-insurance is likely to be very costly in terms of the children missing out on essential schooling.[38]

Quite obviously, the disparity in the quality of human capital between developing and developed countries has its roots in the quality as well as the quantity of education. Overall, less developed nations are characterized by inadequate levels and poor quality of education and skill accumulation. Despite increasing enrolment and years of schooling since 1960, around 113 million children of primary school age were not enrolled in school in the mid-2000s, and 94% of these are from the developing countries.[39] Just a decade ago, only 80% of the children in low-income countries had completed the full four years of primary school. Low-income countries are 10 to 20 years behind middle-income countries in enrolment, and about 70 to 80 years behind high-income countries.[40]

The quality of schools is often abject, with grade repetition, dropout rates and absent teachers in classrooms being far too common.[41] In the rural areas of Vietnam's Northern Upland regions, 39% of the primary school classrooms did not have blackboards in 1998, while Indian schools in 1987 had 8% of schools without a building.[42] In the northeastern region of Brazil in the 1980s, 60% of primary school teachers had not completed their own primary education.[43] Furthermore, educational systems in developing countries are often geared towards elites. Policymakers, who tend to be elites themselves in such countries, choose curricula that are more suitable for advanced students than an "average" student. Evidence from Kenya found that the availability of advanced textbooks increased the test scores of the top two quintiles; but the grades, dropout and repetition rates of the average and below average students did not improve.[44] In consequence, the quality of human capital accumulation in developing countries faces daunting constraints – a result that inexorably spills over into the quality of labour supply.

Low levels of labour productivity in many developing countries are in part a reflection of the low quality of human capital, and, in turn, a constraint to earnings growth. Low rates of gross fixed capital formation are one consequence of a context in which low productivity reduces the incentive to invest. On a regional basis, Africa has the slowest growth rate of fixed capital, at 1% per year, compared to South Asia (3.6%), East Asia (7.9%) and South-East Asia (3.4%), and these figures mirror the respective levels and rates of growth of productivity.

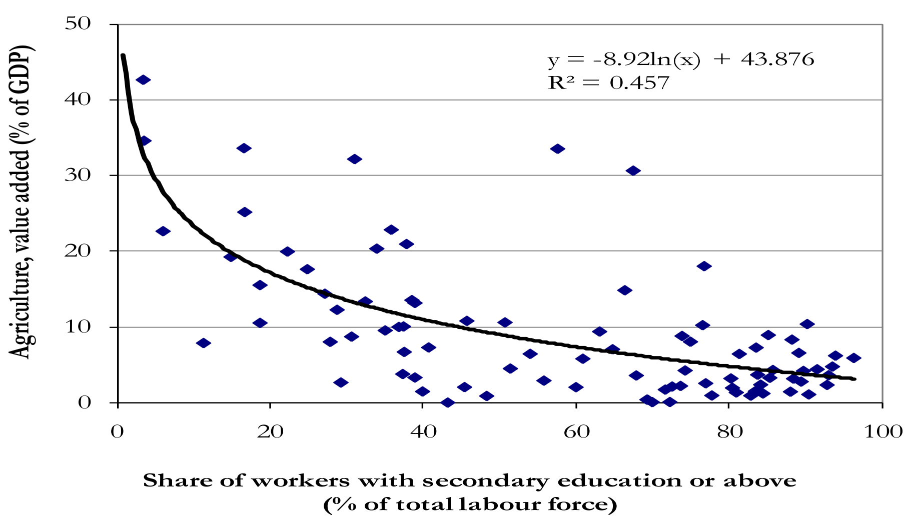
[38] Jacoby and Skoufias (1997)
[39] (UNESCO, 2002) and UNDP 2003
[40] Glewwe and Kremer (2005)
[41] (Glewwe, 1999; Lockheed and Verspoor, 1991).
[42] (World Bank, 1997)
[43] (Harbison and Hanushek, 1992)
[44] Glewwe et al. (2002)

There is a well-known nutritional impact on labour productivity in less developed countries. Investments in nutrition have been revealed to have higher productivity effects in very poor countries than direct investments in schooling – although, when improved nutrition is delivered through the school system, the result, as in Kenya, is improved health, improved attendance, better schooling results, and improved earnings in the labour market. Initial investments in health and nutrition in the year 1965 were found to have had a greater "predictive power" for economic growth for the next 25 years when compared to investments in schooling.[45] The pursuit of the Millennium Development Goals relating to health, nutrition, and education are thus not unrelated to labour markets, as they are likely to result in improved employment opportunities and productivity increases.

Education and Structural Transformation

One of the principal ways in which these improved opportunities manifest themselves is through changes in the economic structure of developing countries. Here, too, there is an important, "supply-side" effect. As the figure below shows, there is a strong relation between educational attainment and a measure of structural change – the share of agriculture in the economy. Moreover, the causal direction of this relation is dual: education facilitates structural change, but structural change also leads to greater enrolment: in other words, while greater wealth and urban growth result in higher enrolment rates, it is also true that an educated workforce facilitates a country's economic diversification.

Figure 9



Source: ADB book on Indonesia

45 Behrman (1999)

Finally, while this section has dwelt on the continued existing disparities in human capital between developed and developing countries, there is another, rather dramatic side of the story: enrolment in tertiary education and investments in the education system have skyrocketed in emerging economies in particular: China and Brazil now graduate more engineers than does the United States. Malaysia and Mexico have become world leaders in some domains of software engineering.[46] The Republic of Korea's Samsung has become the world's largest electronics manufacturer. While it might be premature to proclaim, these trends do bode well for a more homogeneous distribution of innovation in the world.

Weak Market Integration

A strong rural/urban divide, a dualistic cleavage between formal and informal economies, high variance in intra-sectoral levels of productivity – all of these features of developing countries suggest a lower level of the integration of markets of all sorts than usually prevail in developed countries.

Comprehensive labour market institutions that are either absent or inadequate not only leave workers unprotected, but result in substantial « information asymmetries », such as ignorance of what labour market opportunities there might be and where they might be.[47] Chapter 6 will explore this issue. Transportation, electricity, and communications infrastructure that is either missing – (e.g. the majority of the population of Bangladesh is not connected to an electricity grid) – or of woeful quality, is an exogenous drain on productivity and impedes mobility. Dualism itself implies at a minimum the existence of "two" labour markets. For all these reasons, an argument can be made that, at least in the poorest developing countries, there is really no such thing as a "national" labour market, or at least a well-functioning one.

Even if markets are imperfectly integrated, internal migration is a fact of life in developing countries, most notably rural-to-urban. In somewhat narrow, economic terms, people migrate from one location to another if the present discounted value of benefits is greater than the discounted value of costs. Nevertheless, this "calculus" implies that migration could be a more attractive proposition for those who are better informed about job prospects elsewhere, have longer time horizons, are more adaptable and perhaps younger and better educated – or, quite obviously, those who are living close to desperation in their present location. Temporary migration and remittances in households in Botswana serve as an insurance arrangement when household incomes suffer from an adverse shock.[48] The absence of a credit market might be an additional "push" factor – credit-constrained households that face unanticipated income shocks may compel a family member or members to migrate for opportunities elsewhere.

Another cost-based insight suggests that the introduction of a system of land property rights (often lacking) could act as a "push" factor to encourage migration from rural areas. Unemployed workers and

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46 World Employment Report 2001, ILO.

47 Some fascinating micro-level research investigates how a worker in a poor country actually finds his or her job. The short answer is that it is certainly not through the Internet or the "Classified Ads" section of the newspaper.

48 Lucas and Stark (1985)

land owners secure in the knowledge that their assets are protected and can be used as collateral to finance their migration, are more likely to migrate to urban areas.[49] But there are, in fact, many motives for migration: in Nepal, the greatest single motive behind the internal migration of young women is for marriage.

Internal migration in an information-constrained context carries downside risks. Rural migrants might face discrimination and difficulties in gaining access to credit, housing and public goods. Rural-urban migration might also result in cities unable to absorb the influx of people, thereby creating urban slums such as those in Rio de Janeiro, Mumbai and Dhaka. Unfettered, rural-to-urban migration can actually equalize rural-urban income disparities, but at a cost. The assumption is that in developing countries high skilled workers reside in cities since returns to skills are higher in urban areas relative to rural areas.[50] But the wage differential also attracts unskilled workers, who have an incentive to migrate to cities in search of higher wages and more opportunities for earning a living.

Of course, the economics of the matter is one thing, putting constraints on rural-to-urban migration, whatever perceived economic sense this might make, is clearly questionable on moral grounds. Policy should instead focus on the incentives underlying the economics of migration, which would mean a focus on rural industrial development. As long as a perceived or real disparity in livelihood opportunities persists between rural and urban areas, over-crowded cities and a deficit of productive earnings opportunities will continue.

Infrastructure

In addition to the reach of the rule of law, infrastructure is the most central vehicle for market integration. Inadequate infrastructure in developing countries, such as roads and public transport, mean that workers waste time in commuting to and from work and looking for employment opportunities elsewhere. Poor telecommunications systems in particular mean that workers are deprived of time-saving access to relevant information. Inadequacies in these areas lead to loss of efficiency, and thus place downward pressure on both earnings and productivity. Poor access to markets, roads, highways, credit and public transport keep markets, including labour markets, fragmented rather than integrated.

In Tanzania, the average time it takes to travel to the nearest economic center is inversely related to the number of rural households participating in the labour market.[51] The greater the distance, the more negative the impact on people likely to join the labour market. Access to markets is vital for enhancing the development of non-farm rural employment and in alleviating poverty. In Latin America, insufficient infrastructure investment during the 1990s led to a reduction in long-term growth by 1 to 3 percentage points.[52] Poor infrastructure could explain about one-third of the difference in output per worker

[49] Lall et al. (2006)
[50] Fan and Stark (2008)
[51] Mduma and Wobst (2005)
[52] Easterly and Serven (2003)

between East Asia and Latin America. Poor telecommunications infrastructure explains 50 per cent of the difference in export performance between Africa and Asia.[53]

The positive impact of infrastructure on poor households is evident from greater income-generating activities and the increased profitability of firms. In Southern Mexico, a 10% increase in market access increases labour productivity by 6%.[54] A percentage point increase in market access increases productivity by US$ 118 per worker. Productivity is, of course, one indicator of competitiveness. The Global Competitiveness Indices (GCIs) for sub-Saharan Africa shows that competitiveness is consistently lower than other developing regions and poor infrastructure takes the lion's share of the blame for this.[55]

Summing Up

The intent of this chapter has been to provide in a parsimonious way a stylized description of labour markets in developing countries. As with any stylized description, the discussion has necessarily been (1) general, and (2) somewhat static – more of a snapshot than a moving picture. In concluding, therefore, it is useful to note that things are indeed moving in the developing world. Growth there greatly outstrips that of developed economies, a fact accentuated in the aftermath of the Great Recession. One developing country, China, is in fact the second economy in the world.

As noted, both China and Brazil graduate substantially more engineers than the United States. Indeed, in international, comparative surveys, several developing countries score more highly in math and science education than do several developed countries. Of concern to the United States and other developed countries, moreover, a greater number of jobs higher up on the rungs of the occupational ladder are increasingly "contestable" by developing countries with the adequate skill base and infrastructure, such as India or Malaysia.

As a final word, whereas the middle class might be being squeezed in the developed world, globally, the middle class is clearly on the rise, and no more so than in the emerging economies of the developing world. Indeed, developing Asia has seen its middle-class workforce increase by 1.3 billion people since 1990, a growth rate far surpassing that of the labour force as a whole. Thus, while poverty still abounds in the world, taken in the aggregate, developing countries are converging with – some quite rapidly, others quite slowly – rather than diverging from developed-country living standards.

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53 World Employment Report 2001, ILO.

54 Deichmann et al. (2002)

55 (UNECA, 2010).

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