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**How not to count the employed in  
developing countries**

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Economic and  
Labour Market  
Analysis  
Department

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## Preface

The primary goal of the ILO is to contribute, with member States, to achieve full and productive employment and decent work for all, including women and young people, a goal embedded in the ILO Declaration 2008 on *Social Justice for a Fair Globalization*,<sup>1</sup> and which has now been widely adopted by the international community. The integrated approach to do this was further reaffirmed by the 2010 Resolution concerning the recurrent discussion on employment.<sup>2</sup>

In order to support member States and the social partners to reach this goal, the ILO pursues a Decent Work Agenda which comprises four interrelated areas: Respect for fundamental worker's rights and international labour standards, employment promotion, social protection and social dialogue. Explanations and elaborations of this integrated approach and related challenges are contained in a number of key documents: in those explaining the concept of decent work,<sup>3</sup> in the Employment Policy Convention, 1964 (No. 122), in the Global Employment Agenda and, as applied to crisis response, in the Global Jobs Pact adopted by the 2009 ILC in the aftermath of the 2008 global economic crisis.

The Employment Sector is fully engaged in supporting countries placing employment at the centre of their economic and social policies, using these complementary frameworks, and is doing so through a large range of technical support and capacity building activities, policy advisory services and policy research. As part of its research and publications programme, the Employment Sector promotes knowledge-generation around key policy issues and topics conforming to the core elements of the Global Employment Agenda and the Decent Work Agenda. The Sector's publications consist of books, monographs, working papers, employment reports and policy briefs.

The *Employment Working Papers* series is designed to disseminate the main findings of research initiatives undertaken by the various departments and programmes of the Sector. The working papers are intended to encourage exchange of ideas and to stimulate debate. The views expressed are the responsibility of the author(s) and do not necessarily represent those of the ILO.



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<sup>1</sup> See [http://www.ilo.org/public/english/bureau/dgo/download/dg\\_announce\\_en.pdf](http://www.ilo.org/public/english/bureau/dgo/download/dg_announce_en.pdf).

<sup>2</sup> See [http://www.ilo.org/public/libdoc/ilo/2010/110B09\\_108\\_engl.pdf](http://www.ilo.org/public/libdoc/ilo/2010/110B09_108_engl.pdf).

<sup>3</sup> See the successive Reports of the Director-General to the International Labour Conference: *Decent work* (1999); *Reducing the decent work deficit: A global challenge* (2001); *Working out of poverty* (2003).



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I would like to thank Steph Trinci for her able and careful statistical assistance. Duncan Campbell, Philippe Egger, Tariq Haq, Iyantul Islam, Moazam Mahmood and Khalid Nadvi discussed and gave useful suggestions on earlier versions of this paper. To each of them my sincere thanks. Special thanks are also due to Professor Francis Stewart for her valuable and detailed comments. Ajit Ghose read the paper and gave precious guidance. I am as always in his debt. The usual disclaimer applies.



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# 1. Introduction

This paper is concerned with economy-wide categories of employment in the developing world. We use a dual economy framework<sup>4</sup> as a broad analytical device with which to categorise employment in a typical developing economy. It is our view that the framework of a dual economy is essential for constructing more meaningful economy-wide employment indicators than are in use at present. While this is a modest aim, it has directional implications for both data collection and analysis. Our arguments also try and stay away from the semantics of labeling the dual economy<sup>5</sup>.

The notion of employment has historically evolved out of a debate pertaining to economies recognised today as advanced. This discussion goes back at least to the inter-war years in Europe. Most original discussions on “employment” were inextricably tied to Keynesian macroeconomics and institutional arguments for the construction of an unemployment benefits system to support persons who sought but were not in full-time regular jobs. Thus from the measurement perspective the category of employment has always had two interconnected sides of output and income<sup>6</sup>. The employment of labour impacts output or productivity; and it has an impact on welfare of workers from the income side. However these two dimensions of employment: namely, output and income respectively, operate under very different conditions in advanced and developing economies. There are both structural and institutional reasons for these differences.

The institutional reason for this difference is essentially that in advanced economies the labour input that goes in to the production of goods and services is largely *circumscribed* by regulations governing the use of labour. This regulatory governance is affected through

<sup>4</sup> See Lewis (1954). For an empirical elaboration of this framework from an employment perspective for developing countries see the book entitled *The Global Employment Challenge* by Ghose, Majid and Ernst (2008). This book is referred to as GEC (2008) in the rest of this paper. The categorical status of dualism as an analytical device at an economy wide level is at a different level of abstraction (more aggregated) than the modeling of specific sections of the labour market in developing countries. See Basu (1997). There are many debates pertaining to the modeling either side of the dual economy. The discussions range from the lowness of the marginal product in developing economy traditional or informal sectors; the segmentation or fragmentation of the labour market; the interactions between different parts of the dual economy; to the formation of wages in each part of the dual economy. Suffice it to say that there is a part of the dual economy which is favourable to economy-wide output and income and an adverse part that is less so.

<sup>5</sup> One side of the dual economy has been termed, modern, organised and formal, sometimes even industrial; the other side of the dual economy has been termed traditional, unorganised and informal. In our view, for the task at hand, one needs to focus on what each side represents in terms of employment categories as opposed to what each side is called.

<sup>6</sup> Many decades ago Amartya Sen, in a work commissioned by the ILO’s World Employment Programme distinguished three (interconnected) dimensions of employment. These were the production, the income and the recognition dimensions (see Sen (1975)). In the context of production the employment focus was on what employment produces as output in production; in the context of income the focus was on income that employment generates for workers; and in the sphere of recognition, employment was about a sense of self-worth that is socially imparted to the worker on his/her being engaged in a worthwhile activity. The last of these dimensions is of greater philosophical import and is not quite amenable to quantification. Reddaway (1962) has also discussed this matter in the Indian context. Even when we replace the term unemployment by the phrase unemployment and underemployment, he argued, we need to be very careful. The problem according to him is not about measuring underemployment in terms of numbers of hours, rather it is about understanding these categories of employment in terms of productivity.

a social insurance or welfare system, designed to come in to play when an unemployed person cannot get a job that guarantees a return at least equal to the obtaining social norm. Often, this norm takes the form of an effective minimum wage. The existence of a guarantee of a socially acceptable minimum sets the lower bound to returns for all labour<sup>7</sup>. All workers, regardless of whether they are in employment or out of it, receive the equivalent of a social minimum. This is why the concern for a minimum absolute income becomes a relatively minor issue in advanced economies, and income dimensions of employment become more focussed on relative wage and income measures that are in effect inequality measures. In developing countries this institutional containment by regulation is not realisable as a generally functional welfare system is absent. When a welfare system is absent, it is not possible to infer too much directly from the aggregate economy-wide classifications of employment and unemployment as these are normally calculated.

On the output side, there is a parallel set of structural reasons pertaining to the dualistic nature of typical developing economies. The characterisation of a developing economy is one that is broadly divided into two parts, where one part is organised and the other unorganised with respect to labour; with a large amount of surplus labour relative to capital in the latter. Broadly speaking a situation in which surplus labour exists is one in which available capital resources are insufficient to productively employ all the available resources of labour in the economy. In the aggregate what this implies is that labour can be withdrawn from those parts of the economy where it is in surplus relative to capital without affecting output from those parts of the economy.

Clearly the framework suggests that when such a situation obtains at an economy-wide level, there will be multiple forms of labour and implicit and explicit contractual arrangements that will be observable in the economy<sup>8</sup>. Surplus labour in the absence of social welfare, leads to underemployment and this underemployment manifests itself in a range of different forms of labour. Our aim in this paper is not to elaborate on the dual economy framework due to Lewis, on which there is a vast development literature<sup>9</sup>; rather it is to take the framework as an adequate general characterisation of a less developed economy, and focus on its macro level implications for the *measurement of employment*.

The best way to introduce the core concerns of this paper is to broadly describe the existing state of affairs with respect to aggregate employment categories that are presently in use. In developing economies the category of aggregate employment in use is such that it cannot be understood as desirable employment. This is because it takes employment from the socially benign part of dual economy and adds it to employment in the adverse part. Similarly the category of unemployment adds a majority of persons who when in employment are more likely to get jobs in the socially benign part of dual economy, to a minority who are likely to go to the adverse part of the dual economy when they get jobs. Moreover, composite indicators produced to capture the adverse parts of employment in developing economies often exclude important sections of adversely employed.

<sup>7</sup> For a discussion of pre and post -recession employment structures in advanced economies, see GEC (2008). During recession in advanced economies the situation begins to change. Involuntary forms of employment of a temporary and part time variety begin to rise, in addition to the long run unemployment rate. See Majid (2010b).

<sup>8</sup> There are many micro studies that empirically focus on this issue. Two particularly useful early surveys are Binswanger and Rosenzweig (1984); and Dreze and Mukherjee, (1987).

<sup>9</sup> See Basu (1997) for a theoretical discussion.

The result is that aggregate categories pertaining to employment are out of sync with what one would conceptually associate with them in a typical developing economy. This displacement of concept from measure often trades on semantic associations that we have with words like “employment” or “unemployment”. The occasional awareness of this problem sometimes produces apologetic positions which suggest that such measures are imperfect albeit usable. This is wrong. These categories are unusable for any economy-wide monitoring of employment in developing countries. Our view is that some improvements in this state of affairs can be made. We therefore try to construct measures of employment that are consistent with a framework characterised by the absence of a welfare system on the one hand, and a dualistic economy with surplus labour on the other. There is also another set of practical reasons why we ought to make haste in such an effort.

We live in an international environment where global reports and numbers pertaining to developing economies are regularly produced by international institutions and these also find their ways in to media. These need to give a meaningful big picture of employment<sup>10</sup>, because meaningful economy-wide indicators of employment are the only way to monitor change. Secondly, the relationships of such meaningful indicators of employment with other economy-wide indicators particularly those of development and growth, become important in order to both establish general expectations and evaluate the effectiveness of social policy.

In our empirical illustrations we examine what we call core developing economies. These are essentially developing economies that are not high income developing economies<sup>11</sup>. The Central and Eastern Europe (CEE) transition economies are also excluded from the analysis. The analytical reason for these exclusions is that *high-income* “developing” countries and CEE transitions economies present somewhat special cases, and the analytical framework, used to study *developing* countries, is not quite appropriate for studying them. The selection of episodes where these are used is also based on criteria developed in some previous works<sup>12</sup>. The method adopted for illustrating the difference between employment indicators in use and our suggested second best improvements on them respectively, is to show their respective variations with proxies of long run economic development and shorter run growth. The proxy used for long run growth or economic development is simply the level of GDP per capita and for short run growth we take change episodes in the same. The illustrations are simple bi-variate relationships. Their purpose is to ascertain general plausibility with respect to theoretical expectations; and to identify **broad directions** in the co-movement of variables.

There are two broad matters that this paper sheds light on. First, it presents a realistic case for making efforts to build measures of employment that are meaningful to use at an

<sup>10</sup> While micro analysis is crucial to empirically capture the labour process it seldom gives us an answer to the question at the level of the aggregate economy.

<sup>11</sup> See <http://data.worldbank.org/about/country-classifications> for high income definition.

<sup>12</sup> For country classifications GEC (2008). For our employment related indicators of regular, self and casual employment, we had no choice but to make episodes from the data that was available. For data that relied on poverty episodes we had a greater choice. Our criteria for selection were (1) to leave out the cases where the gap between the initial and terminal periods was less than 4 years, (2) to choose, wherever data for more than two periods in one country were available, initial and terminal periods in such a way as to minimize the possibility of deriving misleading trends, (3) to choose a single time-period or “spell” for each country even though multiple “spells” could have been chosen for some (in other words we did not have multiple Chinas in our growth sample), and (4) leaving out the cases in which the incidence has been and remains very low (2 per cent or less). See Majid (2011).

economy wide level. The responsibility for this effort ultimately lies with international and national institutions that deal with statistics. Secondly, in the process of illustrating that relatively more meaningful measures can in principle be constructed, we also end up suggesting a set of expectations regarding the process of transition of employment forms during the growth process.

## 2. Unemployment, underemployment and employment in developing countries

Unemployment in an economy wide sense can be seen as a state of adversity for worker incomes and a source of deficiency in total output. While its most general reason is the scarcity of capital relative to labour in the developing economy taken as a whole<sup>13</sup>, it is worthwhile distinguishing some immediate sources of the unemployment as they may appear to a worker. For this purpose it is sufficient to rephrase what was stated by the UN as early as 1951<sup>14</sup>. First, unemployment in developing economies can be due to cyclicity. Cyclical fluctuations can be internally generated but are often due to external demand fluctuations located in movements in advanced economies. For a recent example, the recession in advanced economies may have affected some developing countries through trade and remittance loss, and this in turn could have impacted employment adversely and increased unemployment<sup>15</sup>. The extent of this impact varies across geography and history, but it is quite clear that this external dependence on the economic cycle in advanced economies was more uniform across developing countries in the middle part of the last century when the de-colonisation process was taking place. The idea was originally more informed by the specialisation of commodity production in developing countries and trends in international terms of trade. Today there can be a greater variety of cyclicity led causes of unemployment that are internal to economies of developing countries.

Second, seasonality in production brought about by natural factors mainly in agriculture can also produce potential unemployment. The response to this lack of employment due to seasonality is sought in employment in rural non-farm activities or migration<sup>16</sup>. One major effect of this type of potential unemployment is work sharing within households over time. Much research on the labour process and contractual arrangements in agriculture and rural settings in the developing world assumes this<sup>17</sup>.

<sup>13</sup> Strictly speaking, the most general reason for unemployment is the relative scarcity of capital, only when one assumes there is a limitation on choice of techniques. This is a plausible assumption. The scarcity is essentially scarcity of capital for modern capital-intensive technologies, which in turn also implies the existence of limitations on complementary asset building (including infrastructure and human capital) in the economy.

<sup>14</sup> See United Nations (1951). The Report, prepared by group that included Lewis, was appointed by the UN Secretary General. The point in citing this important work is that more than half a century later we have still not quite followed up on most of its recommendations.

<sup>15</sup> See Majid (2010a). As it happens in our view the present global recession has in general had limited direct employment effects in developing economies. There are regional differences of course.

<sup>16</sup> See Saith (1992) for an early ILO work on this topic.

<sup>17</sup> The finite labour demand relative to the greater supply of labour which leads to work sharing is generally true at the economy-wide level at a given point in time. The extent of this work sharing would alter over time. In other words, the “informal” sector in itself can thus be differentiated into at

Third, gaps in technology can also potentially produce unemployment. When the number of workers required for a given activity decline because of technological shifts, it can also potentially result in unemployment. Often the adjustment to new technology will be greatest where the gap between the old and new technology is so wide that the old techniques are effectively rendered useless. Workers skilled in old technology may ultimately need to look for less skilled jobs. And sometimes, when they are able to and prepared to wait for long periods they become the unemployed. The examples of this in the production process are many, but even in services and public employment gaps in technology can be serious<sup>18</sup>. In a similar vein improved management efficiency without changes in production technology can produce a similar unemployment effect.

These immediate sources of potential unemployment for the individual worker- whether they are due to external or internal cyclical and demand, or seasonality or technological change or changes in organisation methods- are in a sense all superimposed on the structural condition of the economy that is already characterised by surplus labour. The individual responses, often governed by household decisions, always appear to be adjustments to the aforementioned immediate sources of potential unemployment. However it is important to bear in mind that even in the absence of all these immediate causes of unemployment, there would be unemployment in an economy wide sense in an economy characterised by a relative labour surplus. *Forms of labour characterised by underemployment are an outcome of households adjusting to immediate sources of economy wide unemployment in a labour surplus economy.*

In our view the (non-) treatment of the phenomenon of underemployment has a critical bearing on current practices in the economy wide measurement of employment in the developing world. Most people, who face the prospect of unemployment, will individually be able to reduce some of their potential period of anticipated joblessness by finding some temporary work. However, all these persons will not be able to completely overcome these gaps because the aggregate employment problem in this situation is driven by a relative surplus of labour to capital as opposed to a deficiency in aggregate demand with excess capacity in the economy<sup>19</sup>. Thus their remaining lack of employment will be disguised by the fact that they are employed some of the time. Since labour force classifications are very liberal in counting respondents as employed, the employment (and unemployment) estimates are affected. *In an economy-wide sense, employment will be seriously overestimated and unemployment seriously underestimated.* Underemployment will be retained in some employment forms more than others. The less developed an economy the greater will be incidence of such employment forms in total employment; and the more the true extent of economy-wide “unemployment” in such an economy will be concealed and disguised as employment.

least two segments, a ‘modernising’ part and a ‘traditional’ part. The former can innovate, create new jobs etc. latter behaves in this aforementioned manner. See Stewart and G Ranis (1999). Also see the discussion on the transformational dimension of self-employment below.

<sup>18</sup> The use of word processing in developing countries is case in point.

<sup>19</sup> See Dasgupta (1954) on the general applicability of the Keynesian economics to developing economies.

The underemployed or disguised unemployed<sup>20</sup> in developing countries are mostly persons who work on their own account; and whose population is so large relative to the non-labour resources they employ, that if a section of such persons were to be withdrawn from work altogether, the total output of the segment of the economy from which they were withdrawn could be maintained (without any reorganisation of production and without substitution of capital). While it is the case that underemployment is normally associated with family enterprises and own account work, it is worth recognising that the pure (assetless) casual labourer is underemployed as well. This is because it is for parts of the year that such a worker is employed on a casual wage in low productivity activities and for remaining parts is without any work at all. This means that unlike a self-employed person who may also do casual work, the pure casual labourer can get classified as the unemployed, especially in surveys that do not distinguish between short and long run unemployment.

In the original context of present day developed economies, workers who were found to be in “less than full time employment” were generically considered a part the phenomenon of “unemployment”- as opposed to being part of the phenomenon of “employment”. The measurement practice for developing countries has evolved in quite the opposite direction with the same categories. The underemployed in developing countries in an economy-wide sense are counted as a part of the “employed”. Current measurement practice ensures that all those individuals who offer themselves in the labour market- ranging from those who have limited employment relative to their capacity to supply labour to those who are in full time employment- are considered equally employed. This is at the heart of the problem of classification.

## **2.1. The standard practice in the measurement of employment**

Labour force surveys are the main source of estimates on employment and unemployment. Originally developed for advanced economies<sup>21</sup>, when these survey modules were applied to developing countries, it was done without much adjustment to definitions in the light of structurally different conditions in developing countries. It is worth reminding ourselves what a typical labour force survey, conducted in developing countries picks up as employment. It counts as employed, persons of working age (typically 16 years and over) who, during the reference week, had done some work (typically at least 1 hour) in paid employment, **or** if they worked in their own business, profession, **or** on their own farm (typically as self-employed), **or** worked 15 hours or more as unpaid workers in an enterprise operated by a member of the family (unpaid family workers)<sup>22</sup>. In other words, the measure of employment in developing countries covers all

<sup>20</sup> This is akin to (but different from) what was called disguised unemployment in present day advanced economies at a time when the welfare system was emerging in these economies. Originally disguised unemployment (see Robinson, 1937) was used to describe a situation of inadequate effective demand in which workers with greater skill and capacity have to take up low productivity jobs, as would be in times of severe recession in an advanced economy. In developing countries the notion is more about a surplus of human labour in the economy relative to capital.

<sup>21</sup> See Card (2011) for a history of the emergence of the unemployment calculation.

<sup>22</sup> Furthermore, all persons who are not working but who have jobs or businesses from which they are temporarily absent at the time of survey because of special reasons (e.g. vacation, illness, bad weather, childcare problems, maternity or paternity leave, temporary labour-management disputes,

those who are in full time regular employment *as well as* others in the labour market who do some work that is defined so generously in the survey that it virtually includes everyone who is not unambiguously without any work, i.e. the purely unemployed. In an environment where an economy wide social welfare system does not exist, those who would otherwise be unemployed and would get social welfare must work to survive. There is a kind of “forcedness” about the work they do, but these workers get counted as the employed, just as those who are in full time regular paid employment do.

It should be obvious that the “template” of an economy in which the existing way of measuring employment makes economic sense is really one in which social welfare is available to those who are not in full time employment<sup>23</sup>. Moreover in such an environment that has a welfare system, the importance of a measure of employment lies in the identification of the *excluded* group of persons who are left out by this measure, namely the unemployed in the labour force. This is of course completely understandable in the context of an advanced economy, where the focus of Keynesian economic theory was indeed unemployment and its social and institutional counterpart was the welfare of the unemployed. We shall discuss this below in the examination of the unemployment rate more specifically, suffice it to say at this point that few could disagree that the main focus unemployment in the Keynesian framework is *involuntary* unemployment. It would be very difficult to argue that the majority of unemployed in developing countries are unemployed involuntarily in the same sense as they are in advanced economies. In fact it is adverseness of the employment of the poor that can be better characterised as involving involuntariness.

## 2.2. What does employment as share of labour force represent?

We have stated that the aggregate measurement of employment in developing countries tells us very little about employment; but does the measure represent anything else? In fact the relationship of this category often has a greater link with population dynamics in a developing country than it does with development and growth in it. The reason is quite straight forward. If there is no unemployment benefit available then most persons who cannot afford to wait for jobs they prefer, would do any work that is available. Such persons when added to those who are in regular employment would be picked up as employed and constitute the bulk of the labour force. What we call the **employment rate is the share of the employed in the labour force**<sup>24</sup>.

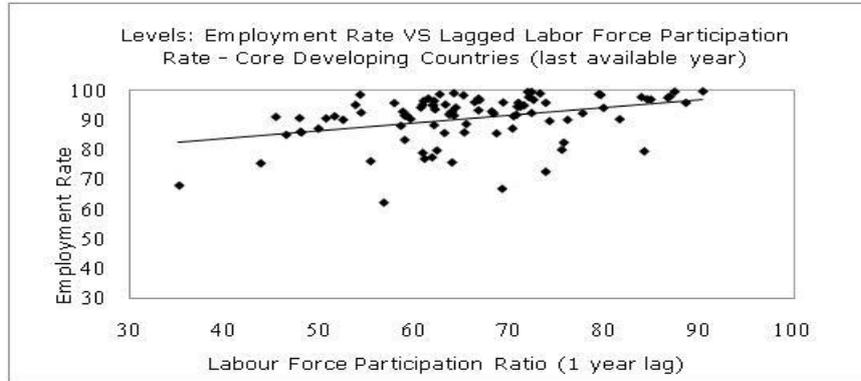
job training, or other family or personal reasons, whether or not they are paid for the time off or are seeking other jobs) are also counted as employed

<sup>23</sup> The weakening of the welfare state and the rise of precarious forms of employment will also make this categorisation less generally valid for advanced economies.

<sup>24</sup> Sometimes the ratio of the employed to population is referred to as the employment rate. We tend to call the latter the employment population ratio.

**Figure 1. Levels: Employment rate vs. lagged labour force participation rate – Core developing countries (last available year)**

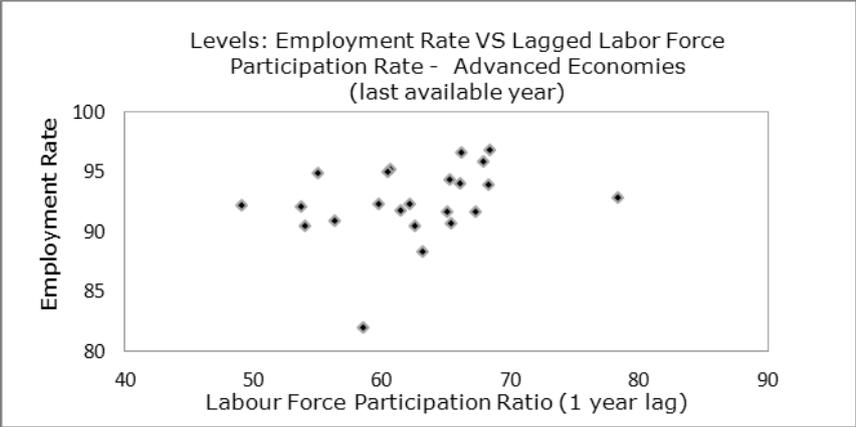
*Employment as it is standardly measured is a function population dynamics in developing countries*



**Note:** The regression equation is:  $y = 0.2592x + 73.501$  with  $R^2 = 0.1328$ ,  $N = 91$ . The coefficient is statistically significant at the 1% level. Source: The data is ILO data taken from World Bank's World Development Indicators (<http://data.worldbank.org/data-catalog/world-development-indicators>) Download Date: 04/04/2012. LABORSTA, ILO.

Figure 2. Levels: Employment rate vs. lagged labour force participation rate – Advanced economies (last available year)

*In contrast to developing countries employment in advanced economies as it is standardly measured is not a function of population dynamics*



Note: The regression equation is:  $y = 0.1332x + 84.141$  with  $R^2 = 0.0716$ ,  $N = 23$ . The coefficient is not statistically significant.

Source: World Bank World Development Indicators (<http://data.worldbank.org/data-catalog/world-development-indicators>). LABORSTA, ILO.

The increase in the employment rate, in an environment without social welfare, is therefore driven more by the dynamics of participation of labour in the economy than it is by the development of the economy itself. This is why the employment rate tends to follow labour force participation rates in developing countries (Figure 1). The labour force participation rate is of course simply the percentage of working-age persons in an economy who are in the labour force. It is also the case because of absence of the same reasons that this relationship does not obtain in advanced economies (Figure 2).

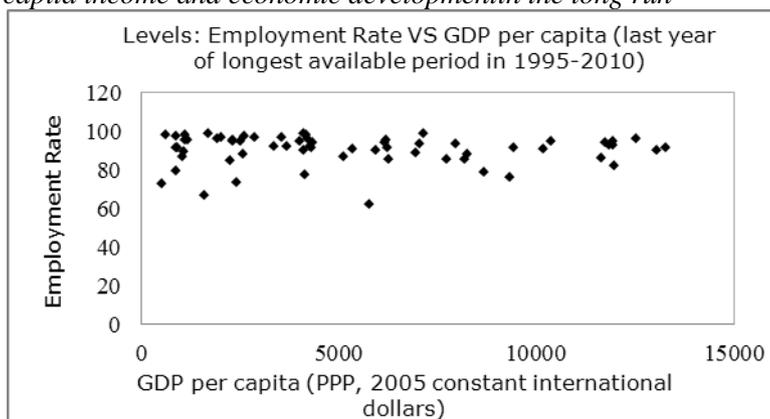
**2.3. The employment rate in relation to long-run economic development and shorter run economic growth**

Since GDP per capita is the employment to population ratio times the productivity of employment ( ie. GDP per employed) one would expect lower productivity of employment at lower income levels. However we should also have some expectation that the share of employed in the labour force (what we call the employment rate) to increase and the share of unemployed in the labour force to decline in the longer run. That is if the measure of employment and unemployment were infact measures that captured what they were meant to from any perspective (income or contractual) in a developing country.

When we examine the employment rate across developing countries with different per capita incomes, the basic question that we are asking is whether a higher per capita income of a country is associated with a higher employment rate? This is a very simple way to test if a relationship obtains with respect to long term economic development. The expectation is that if there is no fundamental problem with the employment measure, and it is a variable that does capture something that is both welfare and productivity increasing, we should get a positive relationship. We would not, in general, expect these bivariate relationships to be strong, as variations on other factors across developing countries obtain, but there is an expectation that over time with development and growth the employment rate would increase. That is of course if it were measured properly.

**Figure 3. Levels: Employment rate vs. GDP per capita (last of longest available period in 1995-2010)**

*Employment rate as it is measured is unrelated to the level of per capita income and economic development in the long run*

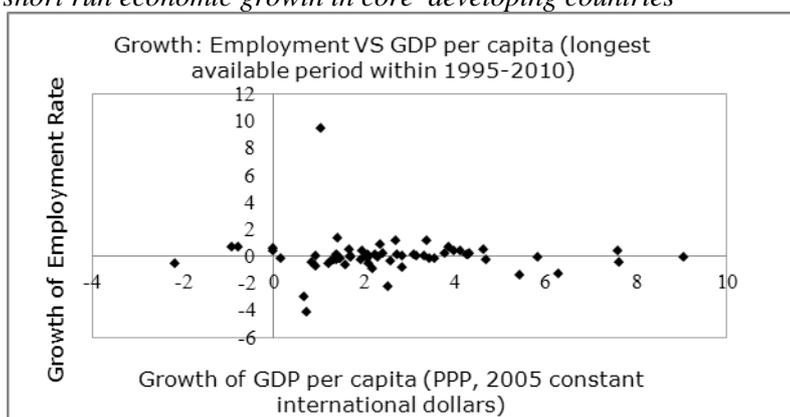


Notes: N = 64. Source: World Bank World Development Indicators  
 Source: <http://data.worldbank.org/data-catalog/world-development-indicators>. Download Date: 13/04/2012. LABORSTA, ILO.

The level of GDP per capita in developing economies is found to be completely unrelated to the employment rate. In other words, there is no systematic increase in the employment rate with a higher level of average income in a country. So clearly the expectation that productivity is higher at higher GDP per capita levels is not reflected in the employment measure being higher. In a shorter run dynamic perspective, the question is directly about economic growth as opposed to development in the longer run. When we take growth<sup>25</sup> in the employment rate and try to examine its variation with per capita economic growth, once again we find that economic growth has no systematic relationship with growth in the employment rate in the developing world.

**Figure 4. Growth: Employment vs. GDP per capita (longest available period within 1995-2010)**

*Growth in the employment rate as it is measured is unrelated to short run economic growth in core developing countries*



Notes: N = 64. Source: World Bank World Development Indicators  
 Source: <http://data.worldbank.org/data-catalog/world-development-indicators>. Download Date: 13/04/2012. LABORSTA, ILO.

<sup>25</sup> All growth rates for episodes used in this paper are compound annual growth rates.

The upshot of the foregoing illustrations is that we ought not to expect the share of employment in the labour force to rise as a country moves to a higher level of income; nor should we expect any systematic increase in it as economic growth takes place. Our choice is very simple, and there is no getting away from it.

We can take the view (as we ought to) that the expectations on the complementary relationship between the a proper indicator of employment and per capita income levels and economic growth is valid to hold, and the problem is really with the indicator of employment that is being used. Alternatively, we can ignore the gravity of the problem with the indicator, and pretend it is a useable albeit an imperfect approximation of what employment ought to represent. We would then need to explain away the lack of a relationship between employment on the one hand and development and growth on the other. Even if this is done by asserting that there is jobless growth across the developing world, which is an empirical proposition, any scrutiny of the indicator will expose the weakness of taking such a position. The extent to which growth has produced proper or desirable jobs is a valid question but it cannot be tested by such indicators.

We need to take the former view. There are casualties. First any statistical analysis at an economy-wide level that uses this measure of employment (country specific over time or across countries) will be as good as the measure itself. The implication is that we can perhaps only use this measure with some justification for those parts of the developing economy where we know the incidence of regular employment is very high. If we do that we still need to make an *independent assessment* of the share of such ( sectoral or sub sectoral) employment in the economy as a whole. So for example using the sectoral aggregate employment number for an analysis of the industrial sector or subsectors within it may typically be more justifiable than using the same in the analysis of services or agriculture<sup>26</sup>. Third, adding up employment in advanced economies and developing economies to produce a global number and monitor its movements makes no conceptual sense at all.

## **2.4 Regular employment: towards an alternative measure of employment in developing countries**

In organised parts of a developing economy employment is similar to what we understand by employment in an advanced economy<sup>27</sup>. Organised jobs are generally full time jobs, and there are some set of rules that provide job security. The employers are generally identifiable, unions can be formed, and these can in principle bargain with employers on wages and employment conditions<sup>28</sup>. Typically organised parts of a developing economy employ a minority though significant proportion of all workers in most developing economies. We can say that the organised part of the economy is likely to offer regular employment, part of which is also formal.

<sup>26</sup> But even here at a sub sectoral level we may find important services that have high productivity regular employment like in the case of India or high productivity large scale mechanized agriculture as in some Latin American economies.

<sup>27</sup> In crisis situation in an advanced economy, employment forms do become more heterogeneous.

<sup>28</sup> Moreover it is our view that it is in this segment of the economy that the bulk of unemployment obtains.

In the longer run there is no alternative but to enhance information collection in surveys<sup>29</sup>. However in the interim it is imperative that we address the problem of measurement of employment constructively, so that it can be used with some validity at the economy-wide level in a developing economy context. In the shorter run, ways in which employment can be measured meaningfully, given the different types of data that are available, are limited. We need to make plausible assumptions as we approach constructing such alternate measures.

We first need to make a few general remarks about the organised part of the economy in relation to what we call regular employment. Regular employment is more likely to exist in those parts of the economy that *can be subject* to regulations covering job security and wage bargaining. The wage form is likely to be the dominant instrument for delivering welfare in this part of the economy, as opposed to earnings. The regularity of this employment is with respect to it being full time. This is also not to say that all regular employment is effectively subject to legal regulations, but it is more than likely that it is subject to some regulation. One can say regular employment is full time contractual wage employment where the contract is *potentially* subject to existing regulations for the employment of labour, while formal employment -that is clearly subject to these regulations- can be seen as a sub-set of regular employment<sup>30</sup>. The question is how to capture this employment.

Apart from the labour force data that give us estimates of total employment, unemployment and importantly employment status classifications<sup>31</sup>, there are additional sources of information that are sometimes available and can be useful. In some countries, we can get data bases that capture a common sub-set of households in labour force surveys and household income and expenditures (HIES) surveys<sup>32</sup>. Some such surveys have a sufficient degree of employment information. Another source of such information is the establishment survey. Problems of uneven and incomplete coverage exist with these as well, and the periodicity with which establishment surveys are conducted even in one country is generally uneven. However these can be utilised for the purposes of estimating regular employment. In the cases we have used establishment surveys, we argue that if a person happens to work in an establishment above a minimum cut off size (say 10 persons)<sup>33</sup>, then it can plausibly be suggested that this is regular employment<sup>34</sup>. This is one kind of count that establishment surveys provide. Since public sectors are not included in establishment surveys, we ought to add independent information on public employment to

<sup>29</sup> This will take a long time for a host of reasons that are procedural and financial. However it is worth noting that there is information that is being generated at the country level, in many economies today that can be utilized to produce meaningful proxies.

<sup>30</sup> This may be a convenient way to distinguish formal employment from regular employment.

<sup>31</sup> These status categories as we shall argue need to be transformed with a developing economy context in mind.

<sup>32</sup> Some LSMS surveys of the World Bank can also do this.

<sup>33</sup> Ultimately the choice of a cutoff point, like for a poverty line, is arbitrary.

<sup>34</sup> It is the case that establishment surveys, like labour force surveys, do not specify if the persons employed are permanent employees or in casual employment. Just as it is a possibility that there is a minority of regular workers excluded from establishment surveys, (because there can be regularly employed persons in establishments that employ less than 10 persons and are also not family enterprises), it is possible that some casual employment is counted in the greater than 10 person enterprises. We assume that these categories cancel each other out.

this category, where it is possible<sup>35</sup>. This category could arguably give us a better measure of employment that is not only regular but has some other other connotations of desirable employment<sup>36</sup>. By virtue of being in regular employment the majority of these persons are also likely to be getting adequate wages. Workers in such employment will generally work full time and are potentially subject subject to basic regulations that obtain with respect to the employment of wage labour in the country.

The basic point however is simple. This measure of “regular employment rate”, imperfect as it is, can be used more defensibly than the share of the employed in the labour force, which we call the “employment rate”. The important thing to note from the point of view of information is that we can only generate information on regular employment from different sources for 22 developing country episodes. While some of these countries are large and therefore population coverage is good, it is still alarming that we cannot compute a plausible indicator of what employment ought to capture for no more than 22 developing country episodes<sup>37</sup>. The other thing that is clear is that unless such data are produced across a critical minimum of countries, it would not be possible to monitor change in what can be defended as an estimate of “employment” in the developing world.

## **2.5 The “regular employment rate” in relation to long-run economic development and shorter run growth**

Does this measure of regular employment tell us something different about the interaction of long run development and employment? Recall, that we get no evidence of any relationship when we use the employment rate; which strongly suggests that it is not a serious measure of employment in the developing economy context. The regular employment rate is a definite improvement.

We can test the expectation that in the longer run- as countries that achieve higher levels of development measured by GDP per capita, labour markets would transform; and the share of employment forms that are “regular” would become greater. We first examine if there is systematic variation in regular employment as a percentage of total employment with respect to the level of per capita national income, i.e the level of economic development.

There is a positive and systematic relationship between the share of regular employment in total employment and the level of GDP per capita. On average, for higher levels, we get higher shares of regular employment. The change in the level of the regular employment rate is greater the lower the initial level of per capita national income. It seems that that initially regular employment shares rise faster; and this increase slows down as economies become relatively prosperous. This is of course an intuitively more plausible finding, and in the long run it would be reasonable to expect this transformation in the labour market. We now address the relationship (for the shorter run) involving change and

<sup>35</sup> Essentially the procedure would be to take establishment surveys and calculate the number of persons employed in enterprises above a certain number of persons (e.g. 10 or more workers) and then add to that number public sector employees where this information is available.

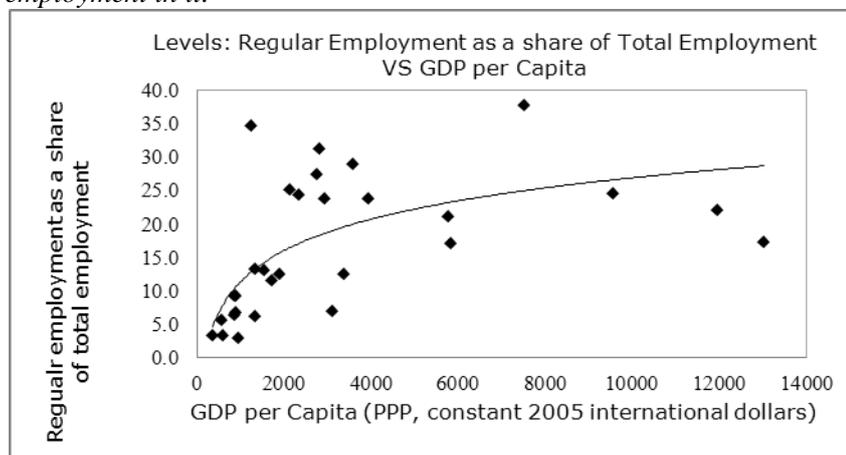
<sup>36</sup> ILO (2007). The Yearbooks of Labour Statistics produced by the ILO, gives estimates of enterprise survey based employment.

<sup>37</sup> Abstracting from episodic data, for single years in the 2000s, we have 6 more observations.

examine how growth in the share of regular employment in total employment varies with shorter run growth in per capita GDP.

**Figure 5. Levels: Regular employment as a share of total employment vs. GDP per capita**

*The greater the level of national income of a developing economy the greater will be the proportion of regular employment in total employment in it.*

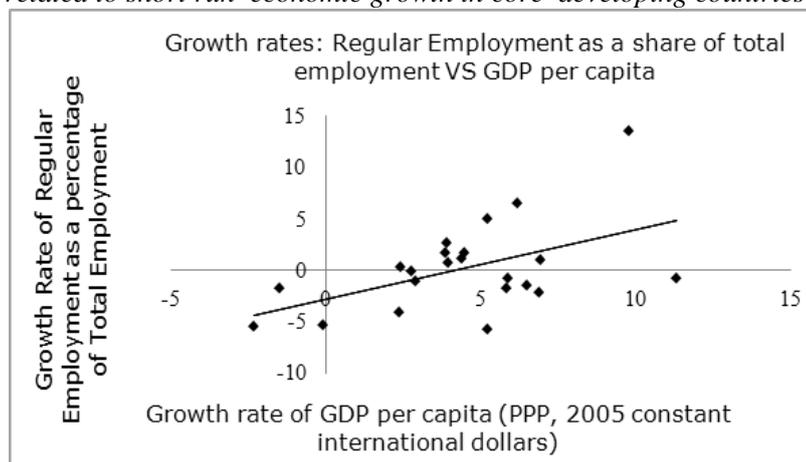


Note: The equation is:  $y = 6.76\ln(x) - 35.332$ ,  $R^2 = 0.3882$ ,  $N = 29$ . Coefficient is significant at the 1% level. The individual observations are for latest years and include 7 more countries as these countries do not have earlier values to make an episode. The results do not change if levels are taken for the last years of the 22 episodes, and the results improve if we pool in all observations.

Sources: World Bank and World Bank World Development Indicators (<http://data.worldbank.org/data-catalog/world-development-indicators>). ILO KILM, ILO LABORSTA. Regular Employment: Author's calculations.

**Figure 6. Growth rates: Regular employment as a share of total employment vs. GDP per capita**

*Growth in regular employment as a % of total employment is positively related to short run economic growth in core developing countries*



Note: The equation is:  $y = 0.6803x - 2.8437$  with  $R^2 = 0.2567$ ,  $N = 22$ . The coefficient is significant at the 5% level.

Source: World Bank World Development Indicators for GDP per capita. <http://data.worldbank.org/data-catalog/world-development-indicators>. ILO KILM, ILO LABORSTA. Regular Employment: Author's calculations.

We find that in general, economic growth is associated with an increased regular employment share in total employment. The generalisation that can be based on the change illustration above is that while economic growth does not always enhance regular

employment shares in total employment, and sometimes leads to their reduction as well (jobless growth), regular employment shares do tend to increase more often than not with economic growth.

As noted the data on this indicator is limited by country counts and time periods and better and more complete information over time may allow us to make improved generalisations- but as the information stands, this is what is found. Both the level and change in cross country results show positive slopes and importantly, these are not inconsistent with common sense expectations. The results are also in complete contrast to those obtained when using the employment rate. In the longer run with economic development, we should expect regular employment shares to increase and reasonable economic growth ought to increase the growth in the share of regular full time employment in total employment .

Our view is that the employment rate is as problematic an indicator of employment for the developing world as it is a meaningful one for the advanced world. The regular employment rate though still a very rough indicator, and calculable for far fewer country episodes, is a relatively more meaningful indicator of employment for developing countries. When this is used, it produces findings that are more plausible. It is worth pointing out here that equating industrial jobs with regular employment, which is sometimes done, is far too restrictive to be meaningful at an economywide level.

## **2.6 The share of the adequately paid (the working non-poor) in total employment**

The regular employment classification captures something about the time dimension of employment. It is therefore likely to be related, on average, to jobs with relatively higher productivity and returns than jobs not in this classification. In earlier works, we have attempted to calculate employment at an economy-wide level from an income perspective. One aspect of the income dimension of employment focuses on whether the worker gets returns (whatever the form of the returns) that are above what is considered socially acceptable. If one is using published data some conventions need to be adopted and assumptions made<sup>38</sup>. Income based indicators of employment are best understood as general welfare indicators, and while these are consistent with dual economy frameworks they are not specific to them. Such measures only become specific to developing economies by virtue of the income cut off used (i.e. the poverty line). If this were for example 30 dollars a day, instead of \$2 or \$1.25 it would be more relevant for the advanced economy, as nearly 100 per cent of the employed in developing countries would get classified as poor. The critical developmental element in this measure is therefore the poverty line itself. If this is considered appropriate for capturing a defensible social minimum, the count of persons above that cut off line can be considered a measure of adequately paid employment, and the count below of badly paid employment.

This measure of adequately paid employment is based on poverty estimates from World Bank's PovcalNet<sup>39</sup> data sets and other labour force data. The number of these

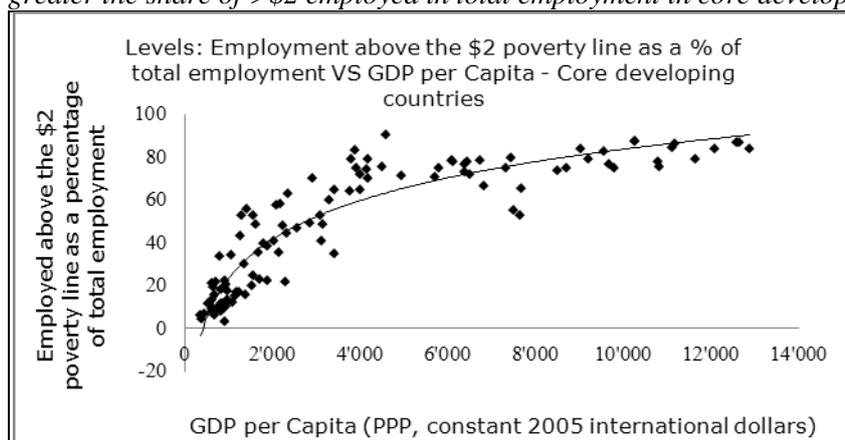
<sup>38</sup> Our estimate of the working non poor and the working poor is based on making certain assumptions about the dependency ratios, participation rates, and unemployment rates amongst the poor and the non-poor. (For details see Majid (2001), Majid (2005), Majid (2010)). Direct estimates are also possible but these require the use of raw data from the surveys from which poverty estimates are produced.

<sup>39</sup> <http://iresearch.worldbank.org/PovcalNet/index.htm>

estimates is limited by both periodicity and number of countries covered in poverty database, but this is the largest useable data base that is available. We first examine the relationship between the percentage of >\$2 employed in total employed and GDP per capita with as many observations as are possible to get for core developing countries. We pool in data for the two years of each episode although the results are the same when we use half the sample for either of the single (start or end) years in the episodes.

**Figure 7. Levels: Employment above the \$2 poverty line as a % of total employment vs. GDP per capita – Core developing countries**

*The greater the level of average economic prosperity in a developing economy the greater the share of >\$2 employed in total employment in core developing countries*



Note: The regression equation is:  $y = 26.104\ln(x) - 156.87$ ,  $R^2 = 0.8568$ ,  $N = 112$ . The coefficient is significant at the 1% level. Pooled data: Start year and end year of the episode period are taken as separate observations. The calculation of non-poor employment and criteria for episode selection are based on the methodology available in Majid (2010).

Sources: PovcalNet (<http://research.worldbank.org/PovcalNet/index.htm>); World Development Indicators (<http://data.worldbank.org/data-catalog/world-development-indicators>); ILO KILM; ILO LABORSTA.

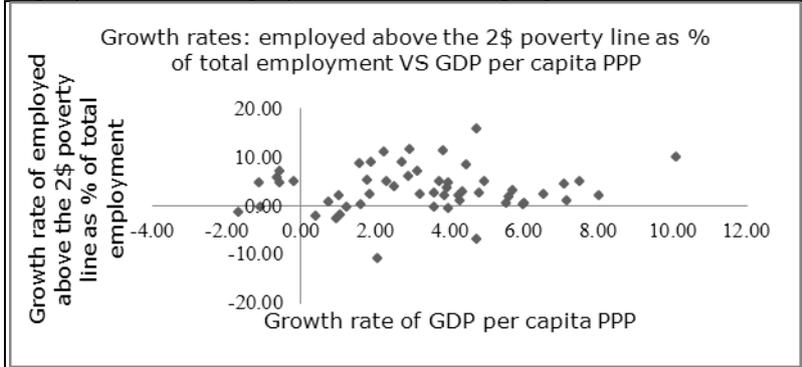
The graph above shows that in the universe of employed persons the share of those above the \$2 level increases as a country moves to a higher level of national income. So it is the case that in the longer run, returns to labour in employment improve. Furthermore, the increases in this share of \$2 employed are likely to be faster in lower ranges of national per capita income. So in the longer run we should expect the share of \$2 employed to be higher. This is also consistent with the expectations on regular employment in the long run.

What about the economic growth in the shorter run? It is important to note that in the developing world there is no general systematic relationship to be found between economic growth and the growth of employment of those above two dollars in total employment<sup>40</sup>. In other words *the change relationship* between the two variables is not significant. However, what is also quite clear is that in most countries this share rises- and in very few countries does it show a decline- with economic growth.

<sup>40</sup> It is possible that as we move to a higher poverty line a relationship emerges, our data does not permit us to do that.

**Figure 8. Growth rates: Employed above the 2\$ poverty line as % of total employment vs. GDP per capita PPP**

*Economic growth increases unsystematically with the share >\$2 employed in total employed in core developing countries*



Source: World Bank World Development Indicators for GDP per capita. <http://data.worldbank.org/data-catalog/world-development-indicators>. Author's calculations : >\$2 employed.

So from the income perspective, while there is a long run expectation for returns to employment to improve systematically with higher per capita incomes, in the shorter run the process is not systematic, and may well be more contingent on other factors.

**2.7 Overview of the two indicators of desirable employment**

After having shown that the employment rate as it is calculated makes little sense as an employment category for typical developing economies, we suggested two broad directions in which one could move to produce more meaningful measures of employment. One direction that we suggest is to measure employment in such a way that it captures full time regular work in the (relatively more) organised part of the developing economy. The other direction was to develop a measure based on an income cut off poverty/prosperity line. The income cut off line was >\$2 in this case. Our alternative measure of the regular employment rate suggests that development and growth will be associated with an increasing share of regular employment in total employment<sup>41</sup>. This is according to expectation. The income based measure suggests while long run development will be associated with an increase in the share of those who are above the \$2 line, in the shorter run growth rates may well operate around thresholds to vary positively and systematically with the share of \$2 employed.

The general objective here was to suggest measures of relatively productive and properly paid employment can be constructed, given that we do not have economy wide measures of employment that are either directly reflective of productivity or of income. With greater effort these measures can be improved upon. We have argued that these can be constructed with the justification that results using them are more plausible and consistent with respect to broad theoretical expectations for developing countries. The proposed measures of the regular employment rate and the employment share of the

<sup>41</sup> It is important to recognise that while the category of paid wage employment will also tend to increase with growth and development, paid wage employed include what we call regular employed as well as casual employment, which is arguably the worst form of labour in developing economies. Majid (2005).

working non- poor (the \$2 employed) tend to be moving in the right direction in this context. There is strong case for refining measures in these directions. This will allow us to use employment in economic analysis, allow some sensible monitoring and aggregations for country groups.

It should be quite clear that the standard measure of employment generates an erroneous overview for developing economies and a broadly correct one for advanced economies. Behind the measurement problem there is a kind of universalisation of a measurement template of employment - that is really relevant to advanced economies. Whether or not this is not tantamount to a classificatory *Orientalism*<sup>42</sup>, it does suggest that economy wide employment indicators used for developing economies are indifferent to development theory.

### **3. The adverse side of the dual labour market in developing countries: non- regular employment**

Our discussion until now has focussed on capturing employment in the developing world that may be deemed relatively productive and remunerative to a standard. This is employment in the relatively organised part of the economy. We called it regular employment. We can now look at its opposite.

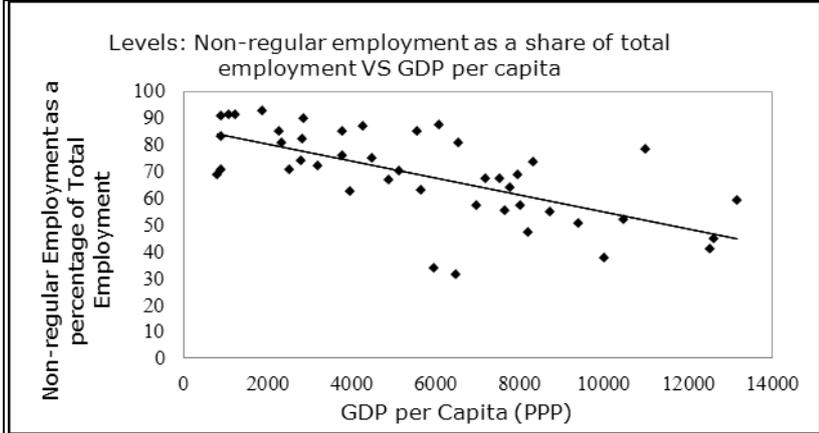
In conditions without social welfare, a realistic minimum standard of income in the labour market cannot obtain for all. The adverse side of the labour market in developing countries is characterised by the absence of effective regulation even where laws exist. The nature of implicit contracts here cannot accommodate a proper principal-agent form. While many advances in micro theory and micro applied work pertaining to labour in development are related to the investigation of such contracts, but at a macro and economy-wide level we have not progressed very far in generating monitorable and analytically sensible employment categories. We have suggested already why these indicators are important to have today.

In empirical terms, it ought to be expected that the types of problems encountered in capturing regular, productive and adequately remunerated employment forms discussed in the first section, will also affect the empirical capture of non- regular, less productive and inadequately compensated forms of employment. As in the foregoing section there are also two main directions in which we need to move the discussion. One can explore employment that is not regular, and employment that gives less than a threshold income respectively. As we shall see later it is the unpacking of this category of non-regular employment that is at the heart of the aggregate employment problem in the developing world. We first illustrate this category in relation to per capita income and growth respectively. The results in a directional sense are self-evident.

<sup>42</sup> Said(1979). Edward Said's influential work examines the set of beliefs now known in most social science disciplines as Orientalism. This idea forms an important background for the entire field of postcolonial studies today. Basically Said's work shows the inaccuracies with respect to a wide variety of assumptions in different disciplines of thought which exist in academic and political discourses have in their origins an ideological function.

**Figure 9. Levels: Non-regular employment as a share of total employment vs. GDP per capita**

*The greater the level of per capita income and economic development the lower will be the proportion of non-regular employment in total employment*

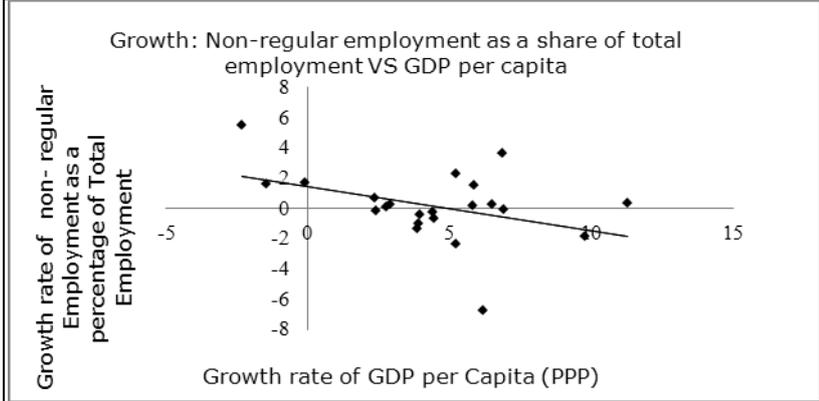


Note: The regression equation is  $y = -0.003x + 85.161$ ,  $R^2 = 0.3983$ ,  $N = 42$ . The data is pooled. The coefficient is significant at the 1% level.

Source: World Bank World Development Indicators for GDP per capita. <http://data.worldbank.org/data-catalog/world-development-indicators>. Author's calculations for the non-regular employment.

**Figure 10. Growth: Non-regular employment as a share of total employment vs. GDP per capita**

*Growth in non-regular employment as a % of total employment is inversely related to short run economic growth in core developing countries*



Note: Regression equation is  $y = -0.2906 + 1.3917x$ ,  $R^2 = 0.157$ ,  $N = 21$ . The coefficient is significant at the 10% level.

Source: World Bank World Development Indicators for GDP per capita. <http://data.worldbank.org/data-catalog/world-development-indicators>. Author's calculations for >\$2 employed.

### **3.1 The share of the working poor in total employment: employment that provides less than a minimum acceptable level of income**

There is much written on the centrality of employment in poverty reduction<sup>43</sup>. The core view in this type of discussion is that the problem of poverty can be solved in a sustainable way through employment. This is of course quite correct. However from the employment perspective we ought to show exactly how this statement is meaningful. The non- regularly employed are in fact likely to be poor<sup>44</sup>. While a central focus of development policy is poverty eradication, and employment is rightly considered the only sustainable way out of poverty- the question as to what to monitor in employment terms does not find its rightful place in the economy-wide empirical discussions of poverty reduction. As should be obvious this is because the standard employment measure for developing countries, as shown in the previous discussion, is not meaningful in a developing economy context.

Persons, who need to work as a consequence of their poverty, constitute the most important category of labour adversity in typical developing country labour markets. What growth actually does to the incidence of poverty in the population or the share of the working poor in total employment then becomes critical. Analytically this depends on the relationship between economic growth and income distribution<sup>45</sup>. Given the literature on growth, inequality and poverty; we ought to expect that a systematic reduction of the share of the working poor in total employment will take place as an economy moves to a higher level of per capita income in the longer run. This is to be expected from the well-known inverse relation between growth and absolute poverty rate. It is obvious that in the long run as countries develop and grow they will eliminate the worst paid forms of employment. This is clear from the graph shown below.

However in the shorter run (examining change data) which is more important from a policy perspective the relationship involving economic growth and change in poverty in employment is an extremely weak one. In the present sample of episodes of core developing economies there is no significant relationship. It is worth noting that that if the sample is increased to include transition economies we do get a weak but significant inverse relation<sup>46</sup>. The bulk of the observations are however in the third quadrant.

<sup>43</sup> See Osmani (2002) for an overview and areas for investigation.

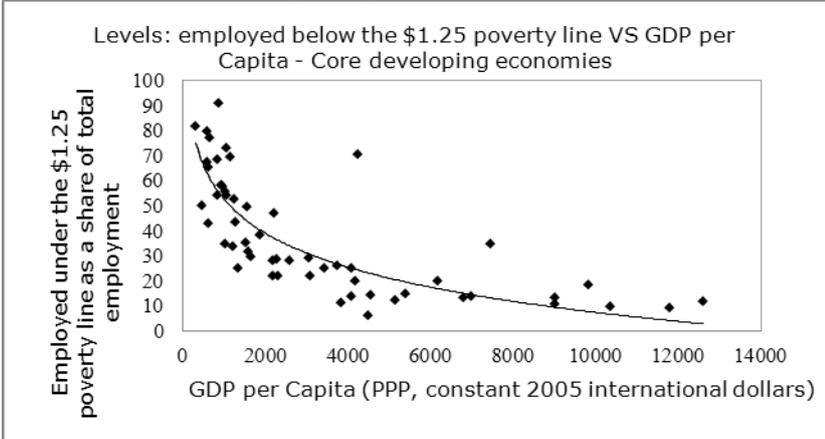
<sup>44</sup> While this makes intuitive sense, if we had data on both categories for the same periods for a sufficient number of countries the issue could be illustrated directly. Unfortunately we only have 9 observations for which this can be done. The correlation is positive but not significant. For such a low number of observations, nothing much can be said in any case. An added complication is that the poverty line cut off and the definition of the non-regular (that implies a cut off of the number of workers) are ultimately arbitrary and makes the association between the non-regularly employed and the working poor imprecise. But in principle there will be a point at which both cut offs will coincide to produce the same number.

<sup>45</sup> Bourguignon (2003); also see Majid (2011) for a perspective on how different indicators of growth change the results.

<sup>46</sup> Our estimates of the working poor are in part driven by poverty headcount itself; however what is being argued here applies if we used the poverty rate instead of the \$1.25 working poor share in total employment.

**Figure 11. Levels: Employed below the \$1.25 poverty line vs. GDP per capita – Core developing economies**

*In the long run an inverse relation between levels of per capita income and the absolute poverty rate obtains*

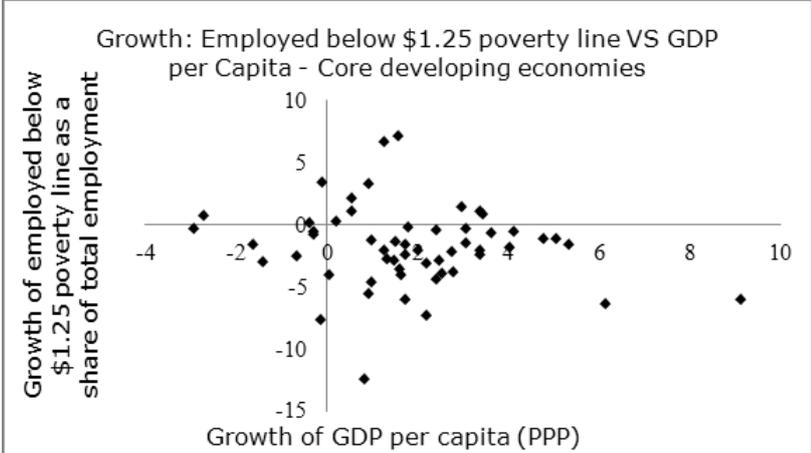


Notes: The regression equation is  $y = -19.71\ln(x) + 188.96$ ,  $R^2 = 0.6586$ ,  $N = 55$ . The coefficient is statistically significant at the 1% level.

Source: World Bank PovcalNet. WDI. Author's calculations: <\$1.25 employed.

**Figure 12. Growth: Employed below \$1.25 poverty line vs. GDP per capita – Core developing economies**

*There is no systematic inverse relationship found between the growth of the (\$1.25) working poor in total employment and short run economic growth*



Notes: N = 55. The coefficient is not statistically significant:

Sources: World Bank PovcalNet; WDI. Author's calculations: <\$1.25 employed.

The significant inverse relation between working poor share in employment and per capita national income is found with level data but not with change data. Taken together this is not a very strong result<sup>47</sup>. We actually have a situation where in the longer run we

<sup>47</sup> Using absolute poverty rates instead of working poor estimates based on the former, the episodic data for core countries just about acquires a significant coefficient (at the 10 per cent level) but the general fit remains poor. The stronger results showing the famous inverse relation between growth and (\$1.25) poverty reduction rely on the use of a questionable indicator of economic growth.

expect poverty to decline with rising average incomes, but in the shorter run economic growth is not systematically associated with the reduction in the share of the employed work in absolute poverty. These findings are only weakly consistent with the allegedly strong findings on economic growth and poverty reduction, that was taken as an economic regularity in the 1980s and 1990s decades often emerging from applied research at the World Bank<sup>48</sup>.

We shall return to the issue of non-regular employment and poverty within employment later. Suffice it to say at this stage that we expect that non-regular forms of employment taken together will decline with development in the longer run and growth in the shorter run. On the other hand, extreme income poverty in employment is likely to decline with development in the longer run but will be a much more contingent phenomenon when it comes to its decline in the shorter run with growth.

### 3.2. Overview of the two indicators of adverse employment

We followed two broad complementary dimensions in which one could move to produce more meaningful measures of adverse employment. One direction was to estimate non-regular work in the (relatively more) unorganised part of the developing economy. The other direction was to develop a measure based on an income cut-off poverty/prosperity line. The income cut off line was the <\$1.25 poverty line. Our measure of the non-regular employment rate suggests that development and growth will be associated with a decreasing share of non-regular employment in total employment. This is according to expectation. The income based measure suggests that while long run development will be associated with decreases in the share of those who work and earn below the \$1.25 line, in the shorter run economic growth may not be (systematically) related inversely to the changes in working poor rates. The general objective here was to suggest measures of relatively less productive and poorly paid employment can in principle be constructed, that capture the incidence of those who are underemployed. Improvements and refinements can be made in these directions, much in the same way as can be done for desirable employment.

## 4. The unemployment rate

We argued in the opening discussion argued that economy-wide unemployment – resulting from surplus labour – gets distributed into the underemployed and unemployed respectively in a typical developing economy. This means that the true degree of economy-wide unemployment will be underestimated by the unemployment rate in developing countries. Given that we expect non-regular forms of employment (which effectively disguise economy-wide unemployment) to be declining in the growth and development process, we should expect the unemployment rate to progressively become *more representative* of true economy-wide unemployment. A rising unemployment rate in the process of economic development therefore ought not to be surprising. The reason why we

<sup>48</sup> The way it is shown that economic growth strongly reduces poverty on change data is by using growth in the mean of the survey (from which poverty is calculated) as proxy for growth. Growth is normally understood as change in GDP per capita calculated from national income accounts. Whatever the rationale that is offered to use the change in the mean of the survey as a growth proxy, it would be very difficult to convince an applied economist of growth to accept this idea. See GEC (2008.), Majid (2011).

introduce the discussion of unemployment at this stage is two-fold. Using the unemployment rate as an indicator in econometric analysis for developing countries is highly problematic, when it is not clearly specified what that measure represents or rather what it does not represent. Our discussion will clarify what is typically being referred to when this indicator is used in analysis. The second reason is that unless we show exactly what the unemployment rate picks up, we cannot go in to examining the components of non-regular employment, as the latter is essentially composed of underemployed labour. That is, labour where most of the disguised economy-wide unemployment is spread and hidden.

In developing countries since welfare support is largely absent; people who are counted as unemployed are mostly those who can only wait for jobs that they would consider appropriate on the basis of personal savings or family support networks. The extent of their waiting may vary with the depth of private support mechanisms but the fact they can wait for some time is a given. There is also a second kind of person in developing countries who can get picked up in the unemployed count. Such a person is typically an (assetless) pure casual labourer who does not belong to a “self-employed” statused household and who seeks casual work as a main source of income. Pure casual workers cannot afford to remain unemployed for too long because they lack income support networks, and it is by virtue of poverty that these persons can only be unemployed for short periods. In the longer time horizon, these persons are more aptly classifiable as unskilled low productivity underemployed workers<sup>49</sup>. From a measurement perspective some casual workers get caught in the count of the unemployed because their occasional “unemployment” happens to occur during that period in which the survey takes place and because often, though not always, a time dimension to unemployment questions is not included in the surveys. Given the nature of the sporadic unemployment of the pure casual labourer it is very likely that that there will be nothing systematic about the share of the casual labour in unemployment over time, though it is certain that these persons are likely to be in the minority amongst the unemployed. Essentially the measure of the unemployed in the developing world commits the fallacy of **adding** a minority of workers who happen to be unemployed during the survey week and who will normally be in non-regular work; **to** those unemployed who are waiting for regular jobs and who have private support networks to tide them the period of waiting<sup>50</sup>. Before we examine the relationship of unemployment with development and growth, we need to corroborate some of the preceding points that have been made. The first point is that poverty amongst the employed is a far larger phenomenon than unemployment in the developing world. The figure below shows this clearly.

It is obvious that the bulk of the unemployment rates in the majority of developing countries are at less than the 10 per cent (of the labour force) level, while the share of working poor in total employment, range from 10 to 90 per cent (of total employment).

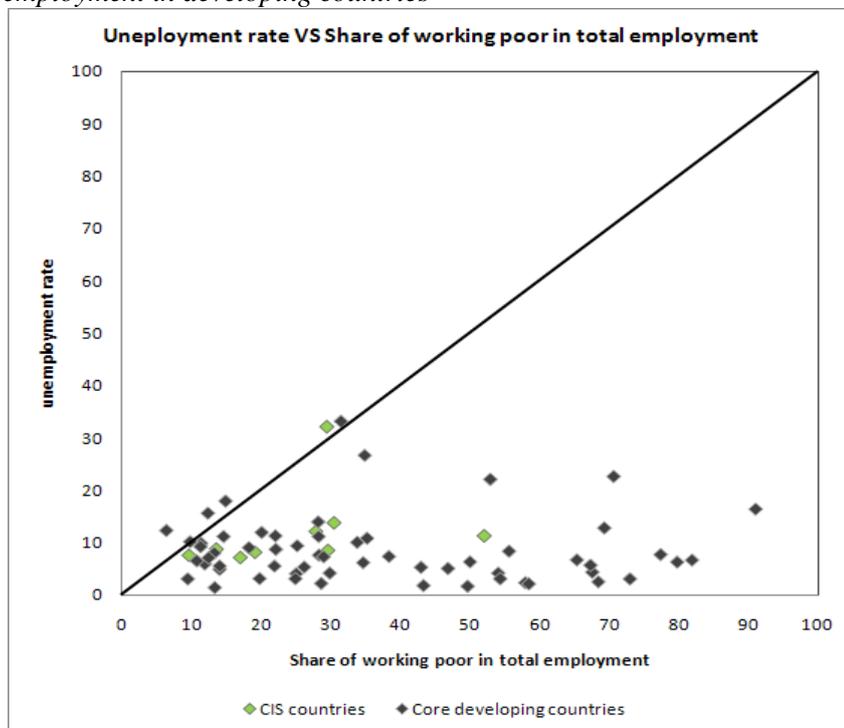
<sup>49</sup> Underemployment is about low productivity work and not about the difficulties in the conditions of work and the toll that it takes on the worker. Conditions of work are almost always bad for non-regular workers. They are the worst for casual workers. The notion of surplus labour (of which underemployment is a consequence) is about the surplus of labour relative to capital at an economy wide level.

<sup>50</sup> See Majid (2000). In this study on Pakistan we had analysed the Labour Force Survey of 1993-94. We found that nearly 75% of the unemployed expressed the wish for employment with government, a proportion which, if realized, would be more than twice the then governmental share in employment. Moreover, nearly 25% of the unemployed show a preference to do clerical and related jobs. On the other hand, only 1 per cent of the unemployed said that they would like to work in the agricultural sector.

The absolute numbers of the working poor in developing countries are also generally much higher than those of the unemployed.

**Figure 13. Unemployment rate vs. share of working poor in total employment**

*The unemployment rate is generally far lower than the rate of poverty in employment in developing countries*

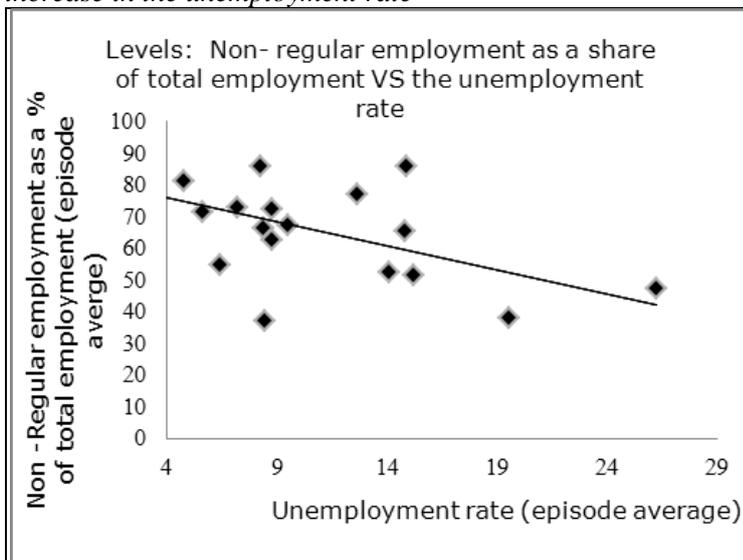


Notes: Each observation represents the last year where both the unemployment rate was available and the share of working poor in total employment could be calculated. Of the 68 countries, only 6 have a higher unemployment rate than the share of working poor in total employment rate.

The second point that can be illustrated concerns the economy-wide level relationship between the non-regularly (under) employed who represent surplus labour on the one hand; and the unemployed on the other. If it is the case that surplus labour which is symptomatic of economy-wide unemployment partly gets distributed in non-regular underemployed forms of labour, disguising the *true extent* of economy-wide unemployment, we would expect an inverse relation between the unemployed and non-regularly employed in developing economies. In other words, we should expect that in a cross section of developing economies, the greater the incidence of forms of labour that retain underemployment and labour surplus within them, the lower will be the observed unemployment rate and vice versa. This is what the figure below shows.

**Figure 14. Levels: Non-regular employment as a share of total employment vs. the unemployment rate**

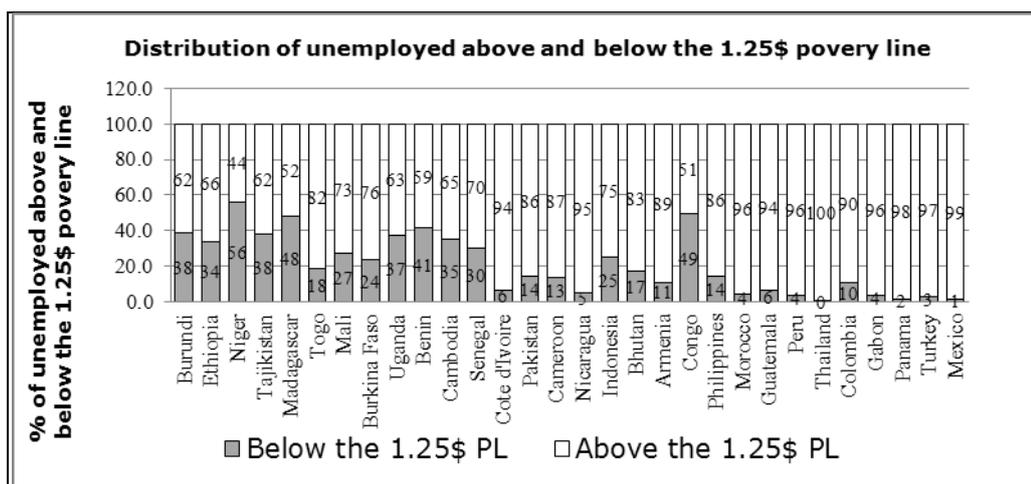
*As non-regular employment shares go down some of the surplus labour declining with the category shows up as an increase in the unemployment rate*



Note: The equation is  $y = -1.5228x + 82.264$   $N=17$ ;  $R^2 = 0.3476$ . The coefficient is significant at less than 1% level.

The third point that can be illustrated is about the composition of the unemployed. The chart below shows clearly that the majority of the unemployed are amongst the non-poor in developing countries and this majority continues to rise at higher levels of per capita income. Generally speaking the majority of the unemployed are non-poor and the composition of the unemployed between the poor and non-poor is likely to increase further in favour of the non-poor with economic development.

**Figure 15. Distribution of unemployment above and below the \$1.25 poverty line**



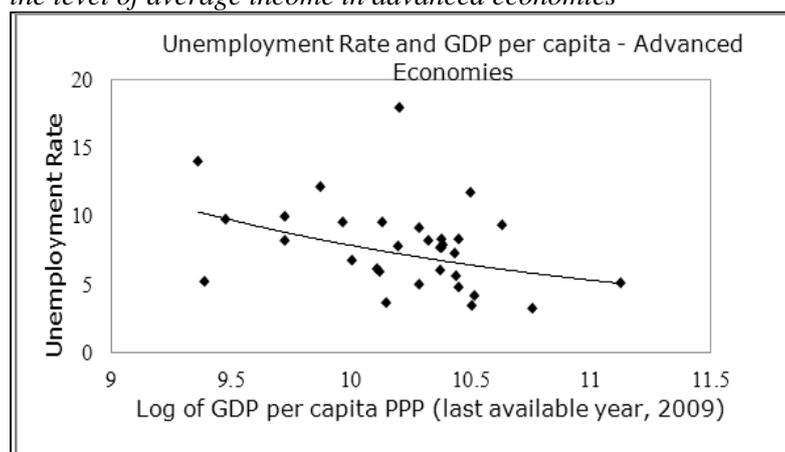
Note: Countries are sorted using GDP per Capita (US\$ constant 2000) in ascending order. Sources: Selected LSMS surveys.

To recap, what the unemployment rate captures in the developing world is a smaller phenomenon of labour market adversity than poverty (and underemployment) in work. There is a substitutive relationship between the incidence of non-regular employment and the unemployment rate in developing countries that pertains to their fundamental characterisation as labour surplus economies. Lastly, the count of the unemployed is dominated by the non-poor who were in regular jobs before and wait for the same in the future. This bias increases with development.

We can now examine associations of the unemployment rate with development and growth. But before we do that, we need to remind ourselves of the expectation that we have between the unemployment rate and national income in advanced economies, where the aforementioned features *do not* obtain. In an advanced economy, a social insurance and benefits system exists and workers who cannot get jobs, become recipients of State support (i.e. unemployment benefits)<sup>51</sup>. It is well known that *in the longer run* a lower unemployment rate in advanced countries will be associated with a higher level of average income. This is illustrated below and is to be expected. The result obtains because the unemployment rate does indeed represent the main form of labour market adversity in advanced economies, and greater per capita outputs in an environment with social insurance is likely to obtain with lower unemployment rates.

**Figure 16. Unemployment rate and GDP per capita – Advanced economies**

*The Unemployment rate as it is measured is negatively related to the level of average income in advanced economies*



Note: The line of the equation uses a power fit:  $y = 108949x^{-4.142}$ , with  $R^2 = 0.1532$ ,  $N = 32$ . Coefficient is significant at the 5% level. We choose the most recent observation for each Advanced Economy (2009).

Sources: World Bank World Development Indicators (<http://data.worldbank.org/data-catalog/world-development-indicators>). Download Date: 16/04/2012. LABOURSTA,ILO.

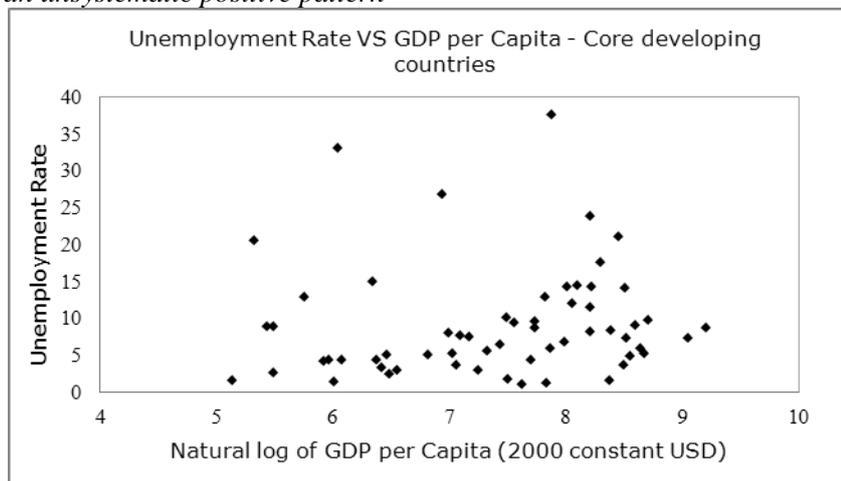
Now we come to the developing economies, bearing in mind the specificities of the unemployed in developing countries. It ought to be clear that a similar expectation as we have for advanced economies ought not to be formed on an *a priori* basis with respect to unemployment in developing countries. We ought to recognise that all forms of adversity in

<sup>51</sup> While this is supposed to be generally true, it is only so in a strict sense in three or four post war decades. The recession facing advanced economies today has been preceded (since the 1980s) by a systematic dismantling of the welfare state that came in to being after the second world war. Today with incomplete social insurance in advanced economies there is the emergence of a dualism in the labour market as well.

the labour market need to be seen together in the developing world, because it is these that together capture-economy wide unemployment

**Figure 17. Unemployment rate vs. GDP per capita – Core developing countries**

*The unemployment rate as it is measured is not systematically related to the level of per capita income in the developing world but there is an unsystematic positive pattern*



Note : We chose the most recent observation available for each Core Developing Economy at the time of writing this paper. N= 60.

Sources: World Bank World Development Indicators (<http://data.worldbank.org/data-catalog/world-development-indicators>). Download Date: 16/04/2012. LABORSTA, ILO.

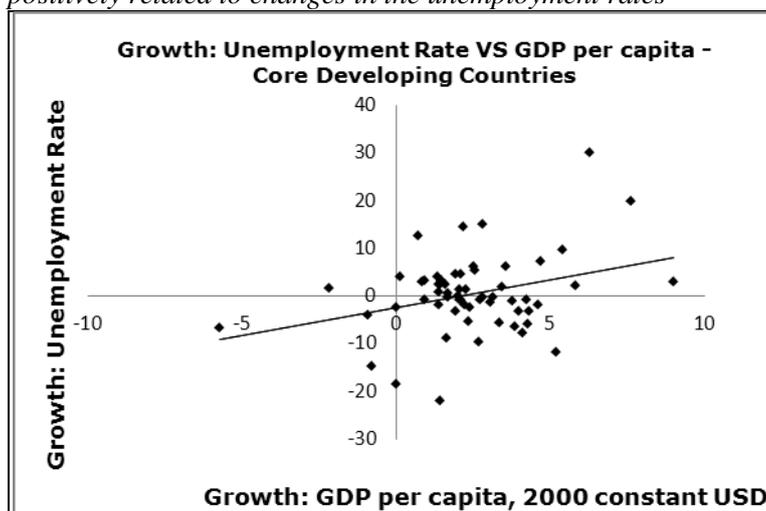
The figure above shows that not only is there no systematic inverse relation between the unemployment rate and the level of national income in developing economies, and also that there is in fact some positive pattern between level of per capita income and the unemployment rate<sup>52</sup>. This means that as a developing country makes its transition to a higher level of income we ought not to be surprised if the unemployment rate does not fall; rather we ought not to be surprised even if it rises<sup>53</sup>. In fact the shorter run growth illustration shows precisely that. This matter must be properly understood, and one ought to be cautious in making inferences that suggest that growth in developing countries has been generally adverse for labour by solely referring to the unemployment rate, because in order to make that judgment we also need to see what is happening to non- regular employment shares in total employment.

<sup>52</sup> In fact if we take out two outliers it does show up as a positive relationship.

<sup>53</sup> It is worth remembering that in the stylised Harris-Todaro type of model (Harris and Todaro(1970)), it is not the level of national income that determines the unemployment rate, but ultimately the difference in incomes between the modern sector and the traditional sector. In this model if wages in the modern sector are reduced, then unemployment is also likely to fall

**Figure 18. Growth: Unemployment rate vs. GDP per capita – Core developing countries**

*Shorter run economic growth in core developing countries is positively related to changes in the unemployment rates*



**Note:** We choose the longest possible period available between 1995 and 2010 for each country and select episodes of 4 years or more. The regression equation is:  $y = 1.1676x - 2.6047$ ,  $R^2 = 0.1016$ ,  $N = 60$ . The coefficient is significant at the 2% level.

Sources: World Bank World Development Indicators (<http://data.worldbank.org/data-catalog/world-development-indicators>). Download Date: 16/04/2012

The general reason for one not to be surprised by a rising unemployment rate in developing countries during the growth and development process is that with economic expansion non-regular and adverse forms of employment will on average decline. We have shown that falling non-regular employment shares are associated with rising unemployment rates, and there may be some shifting of the disguised labour surplus from the non-organised parts of the economy (which will reveal itself as a fall in the incidence of non-regular employment) to the organised parts (where it will reveal itself as a rise in unemployment). Secondly since the incidence of regular forms of employment will also be rising with growth and development, there will be a larger population that would in principle have the capacity to wait<sup>54</sup> when faced with unemployment, because we know that over the development and growth process there will be an increasing majority of the non-poor amongst the unemployed.

In a situation where the expectation is for regular employment forms to increase, non-regular forms to decline and the composition of the unemployed to move further in favour of a non-poor majority, the finding of a rising unemployment rate is neither surprising nor alarming. Moreover this is also not inconsistent with an assessment of possible improvement in the overall employment situation, although falling unemployment rates would improve such situations further. This relationship becomes alarming and counter intuitive only when we forget that our intuition is informed by a specific context, that is if we forget that same indicator represents different phenomena in two structurally different situations of developing and advanced economies respectively.

When there is near complete social insurance, as is the case in advanced economies, economic growth will indeed increase employment rates and decrease unemployment rates.

<sup>54</sup> If there are more unemployment support systems that are getting established as a country grows, this capacity would increase further.

Extending this valid albeit local expectation (i.e. local to advanced economies) to developing countries without giving reasons is erroneous. And reasons are seldom given. It is equivalent to presuming that the applicable universal template is one of an advanced economy. Such views warrant reflection; otherwise the stigma of a *classificatory orientalism* may tend to stick.

## 5. Components of non-regular employment

### 5.1. Differentiating employment forms within non-regular employment

We have seen that while non-regular employment declines with growth and development, unemployment rates may rise. Our next objective is to further differentiate non-regular employment. This is an important requirement because we need to identify some monitorable tendencies of change within non-regular employment in order to capture the employment transition process in developing countries.

To put it simply, the core measurement problem here is the following. The correspondence between the numbers of workers (the headcount) and the labour time associated with those workers is only possible to defend for the measure of regular employment. This is why the regular employment estimate is amenable for use in the measurement of productivity. Where there is underemployment, as is the case for all non-regular forms of employment, the correspondence between the numbers of workers and labour time breaks down<sup>55</sup>. From the measurement perspective we differentiate two categories within non-regular employment: the self-employed and the other group of dominantly pure casual employment.

The work of non-regularly employed workers is characterised not only by low income (as we have seen earlier) but by *variability* in the intensity as well as timing of labour use over the production cycle by individual workers in this category. However this does not affect in the aggregate the quantum of labour input used in production by these workers. In other words, the quantum of labour time utilised to produce the output of all non-regular workers is fixed in the short run, but the *number of workers* utilised for this production can and does vary. This is because labour use regulation does not govern employment; and there is no social welfare that would enable some workers to withdraw from their existing “employment” and join the unemployment queue. This state of affairs obtains because the labour time utilised in production of goods and services by non-regular workers is less than what is collectively at their disposal. Work sharing across activities and work spreading over time- which is a consequence of this surplus labour situation- tend to equalise the distribution of available work. So rather than one part being fully employed and another being fully unemployed, everyone becomes underemployed. This is why they are “non-regular” workers. The distinguishing institutional feature of both self-employment as well as casual employment is a lack of a stable transactional principal-agent relation. The self-employed are both principals and agents simultaneously. Casual workers are agents who change their principals too frequently.

<sup>55</sup> We cannot infer anything about labour use from a count of the number of non-regular workers. In other words, even if other things are exactly the same in two separate worlds, the same number workers who are categorisable as being in non-regular employment can be producing different outputs

## 5.2. Self-employment in the process of economic development and growth

The self-employed in our framework are largely persons who work in family concerns<sup>56</sup>. The minimum requirement for self-employment is that some minimal assets or implements that are necessary for the self-employment activity are owned by the household. The self-employed can and do supplement their incomes by casual labour. A self-employed person cannot be unemployed but is underemployed. The allocation of labour for a self-employed household can be characterised in the following way. First, the work that is needed to produce the output of the household is distributed across members according to household preferences and decisions. The time left after these allocations is then allocated across individuals who are considered fit for work outside. The important thing is that the self-employed can *spread work* that is needed to produce their output or services between individual members *across time* both for activities pertaining to the household concern as well as for work taken up outside the household. Since their labour time is in relative surplus over that which they will use in self-employment or in doing casual labour over a time cycle, these persons can spread out their labour over that time cycle<sup>57</sup>. Information on employment status is available in labour force surveys and it can be used to examine the non-regular parts of the labour market in developing economies in greater detail. Employment status categories that are useful for refining our estimates of non-regular employment, are that of employers<sup>58</sup>, own account workers and unpaid family helpers. Together these can be considered to constitute *self-employment*<sup>59</sup>.

There are many persons who would be classified as the self-employed who would also do casual work, and our estimate is clearly not exclusive. We cannot distinguish between those individuals who take up casual work and those who do not within self-employed households. The category is of persons who are classifiable as self-employed but some of whom may be doing some casual work as well. The poorer a self-employed household the more likely it is that at least some of its members seek casual work to supplement household income.

<sup>56</sup> It needs to be emphasised that the category of the self-employed that is associated with meaningful entrepreneurship and small enterprises growth is a phenomenon more relevant to wealthier developing economies and advanced economies. There is a degree of confusion that is found with respect to this category that ought to be dispelled. This point is made in detail in the following discussion.

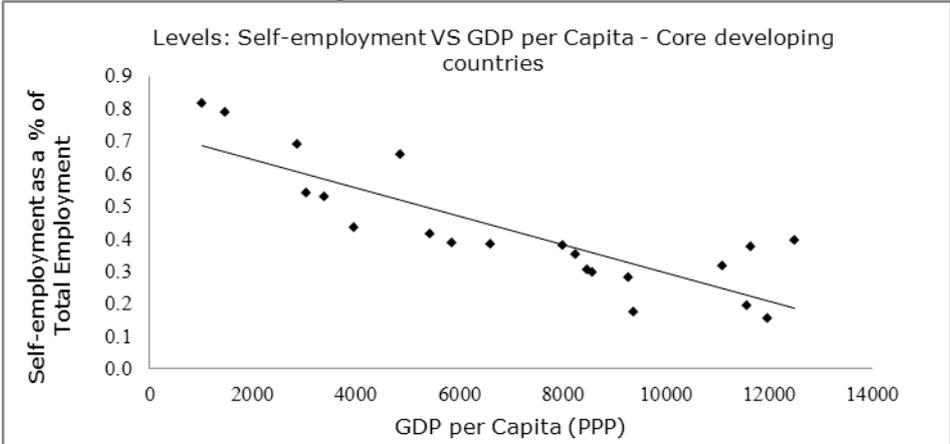
<sup>57</sup> Economy wide underemployment or surplus labour when expressed at the level of the individual worker ought not to be confused with notions about hard work. Such workers work in very poor conditions of work and therefore the work that they do is very hard.

<sup>58</sup> The numbers of employers are typically small, and are dominated by small family enterprises that are themselves poor

<sup>59</sup> In our view family helpers are part of the household that is engaged in self-employment. Unpaid family helpers are better thought of as a family labour pool whose labour goes in to the production of output that is shared.

**Figure 19. Levels: Self-employment vs. GDP per capita – Core developing countries**

*The share of self-employment in total employment declines with per capita income and economic development*

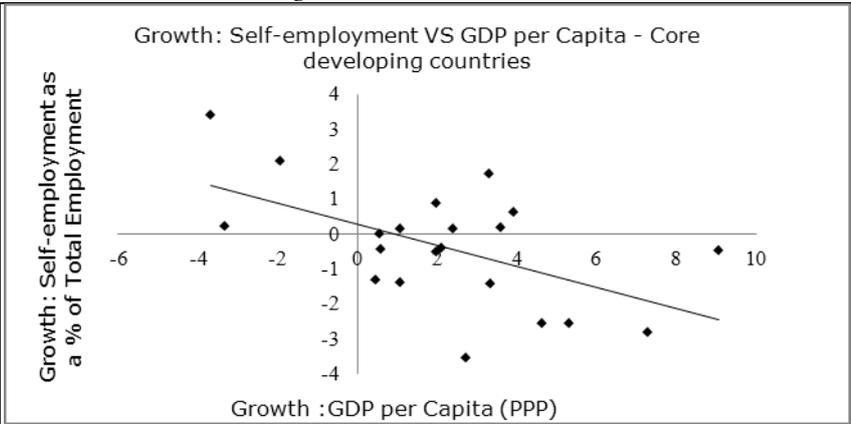


Note: The regression equation is  $y = -4E-05 + 0.7308x$ ,  $R^2 = 0.7079$ ,  $N = 21$ . The coefficient is significant at the 1% level.

Sources: Self-employment: Author's calculations based on Labour force Surveys data from ILO KILM; WDI, World Bank.

**Figure 20. Growth: Self-employment vs. GDP per capita – Core developing countries**

*The growth in share of self-employment in total employment declines with short run economic growth*



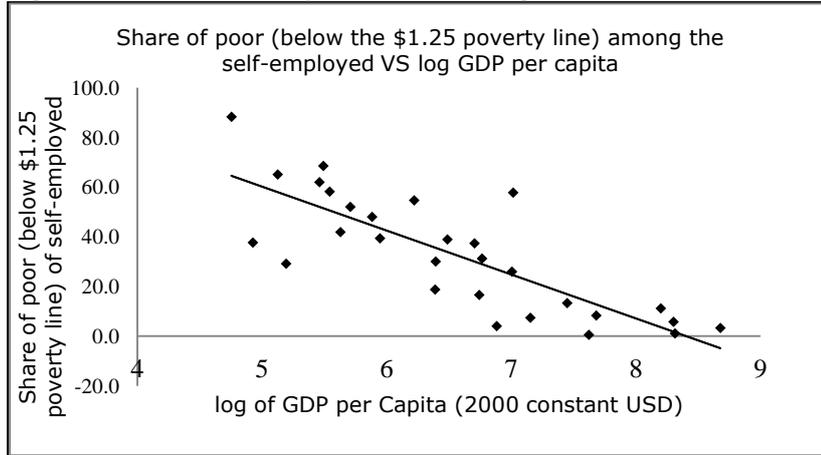
Note : The regression equation is  $y = -0.3031x + 0.2829$ ,  $R^2 = 0.303$ ,  $N = 21$ .

Source: Labour force Surveys data from ILO KILM; WDI, World Bank.

The two figures clearly show that in the longer run we should expect self-employment to decline and that the growth process in particular would tend to drive this reduction. It is however our view that as self-employment declines it changes its income and welfare characteristics. This is shown in the figures below.

**Figure 21. Share of poor (below the \$1.25 poverty line) among the self-employed vs. log GDP per capita**

*Extreme poverty amongst the self-employed is lower the higher the per capita income and level of economic development.*

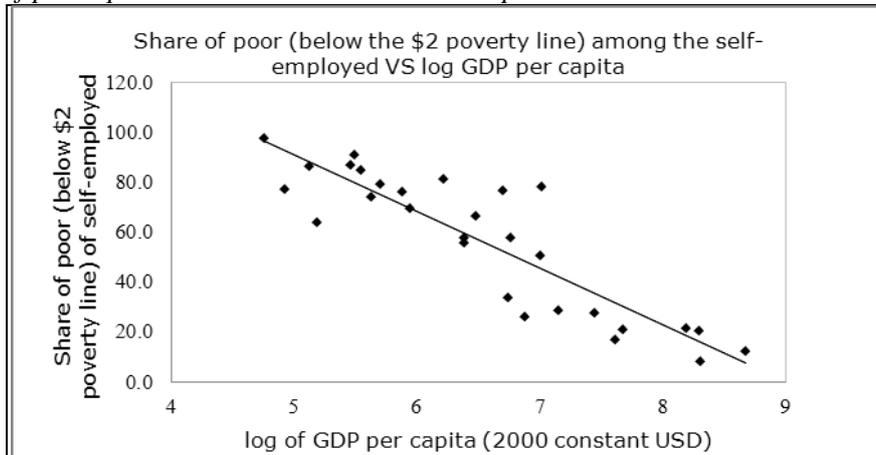


Note: The equation is:  $y = -17.676x + 148.55$ ,  $R^2 = 0.6538$ ,  $N = 29$ ; Coefficient significant at the 1% level.

Sources: GDP data from World Development indicators downloaded 16/04/2012. Data on poverty amongst the self-employed come from the World Bank LSMS Survey data.

**Figure 22. Share of poor (below the \$2 poverty line) among the self-employed vs. log GDP per capita**

*\$2 poverty amongst the self-employed is also lower the higher the level of per capita income and economic development.*



Note: The equation is:  $y = -22.618x + 203.88$ ,  $R^2 = 0.7849$ ,  $N = 29$ . The coefficient significant at the 1% level.

Sources: GDP data from World Development indicators downloaded 16/04/2012. Data on poverty amongst the self-employed come from the World Bank LSMS Survey data. A mean of 2 observations is taken for Indonesia, because of data problems.

What is quite clear from the illustrations above is that while self-employment is likely to be an indicator of adversity in typical poor developing countries more than it is an indicator of entrepreneurship and enterprise at low levels of per capita income; as we get to higher levels of national income not only does self-employment decline, but the non-poor within self-employment become dominant. In other words, this is the sub category of the non-regularly employed that is most likely to *transform* with respect to its income dimensions in the process of development.

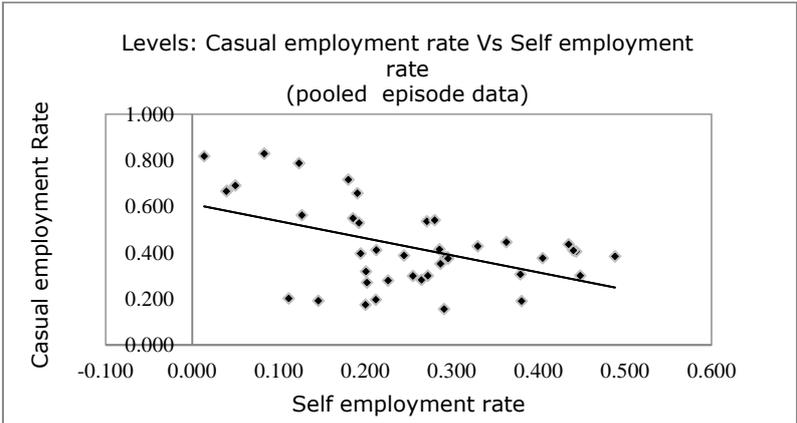
### 5.3. Pure casual labourers and the precariously employed in the process of economic development and growth.

To estimate pure casual labour requires us to go back to how we got to the category of regular and non-regular employment. This was based on using household surveys that had employment details, as well as enterprise surveys that classify enterprises by a minimum cut off determined by the number of persons working in these enterprises, and adding to these numbers estimates of public employment, where possible. The total employment figure was taken from labour force surveys. The difference between total employment and regular employment gave us non-regular employment. We used self-employment in the previous section which a part of non-regular employment. If we take self-employment away from our estimate of non-regular employment we get a category that is likely to mostly do casual work. Such casual workers who do not have any assets and are probably the worst off persons in the labour market are likely to dominate this group.

This idea is also sustained by another finding. Recall that in the previous section it was argued that the self-employed supplement their income by doing occasional casual work. This would imply that the greater the incidence of self-employment in total employment the greater will be the quantum of casual work absorbed by the self-employed. This would mean that the incidence of assetless pure casual workers who would only be doing casual work would be less. Furthermore as self-employment declines as we have seen it ought to in the development process; and the self-employed also become richer as we have also seen, the likelihood of self-employed households doing casual work to supplement incomes would decline. This phenomenon would show up as an inverse relation between the share of self employed in total employment and the share of the pure casual employment category.

**Figure 23. Levels: Casual employment rate vs. self-employment rate**

*The lower the incidence of self-employment the greater the incidence of labour forms in which pure casual labour dominates*

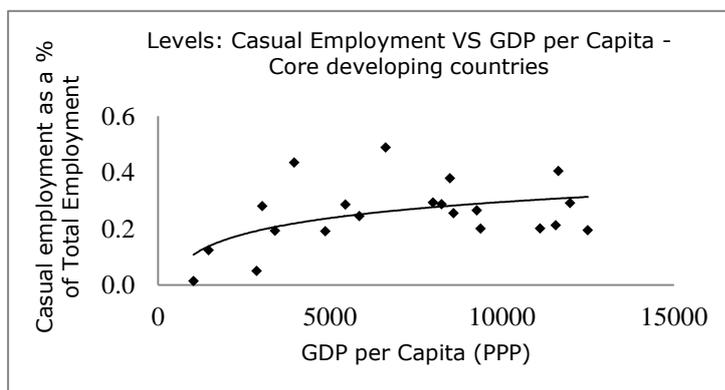


Note: The equation is  $y = -0.7404x + 0.6105$   $R^2 = 0.2417$   $N = 42$ . The coefficient is significant at less than 1% level. Casual and self-employment are based on author's calculations.

When we examine this category in relation to our proxies of long run development and growth we find that its incidence rises with long run development. However in the shorter run while there are mostly positive observations in positive growth cases, the pattern is not systematic.

**Figure 24. Levels: Casual employment vs. GDP per capita – Core developing countries**

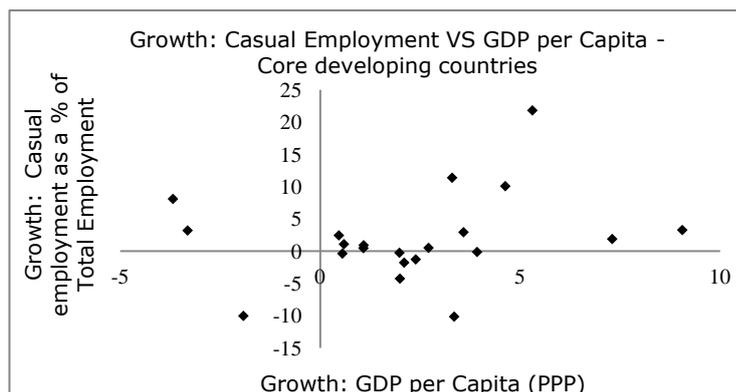
*Casual Employment shares in total employment increase as per capita income grows*



Note: The regression equation is  $y = 0.0821\ln(x) - 0.462$ .  $R^2 = 0.246$ ;  $N = 21$ . The coefficient is statistically significant at less than 5% level.

**Figure 25. Growth: Casual employment vs. GDP per capita – Core developing countries**

*Pure casual labour is not systematically related to short run economic growth although there is a positive pattern*



Sources: GDP World Bank World Development Indicators, Casual Labour is based on author's calculations. (<http://data.worldbank.org/data-catalog/world-development-indicators>)

Given results on non-regular employment and the self-employment component in it, and the findings on what we consider to proxy purer casual labour, it would not be unreasonable to argue that that it is also this category in non-regular forms of employment that is likely to persist and perhaps it is this category whose persistence is behind the slow and non-systematic short term decline of working poor in work in many countries.

It is not possible to examine casual labour with respect to income levels, like we did with self-employment, as that categorisation is not possible to construct from the household data that we have. However given the nature of casual work, it is quite clear that pure casual workers are amongst worst off in the working poor. The growth and development process is likely to successfully overcome adversity more successfully in the self-employed part of non-regular employment. It would seem that much more targeted policy interventions are required to deal with pure casual labour as growth and development take place.

## 6. Conclusions

In the foregoing discussion we have tried to argue and illustrate relatively better ways of measuring employment at an economy-wide level in developing countries. Efforts in these directions can be made and would improve both monitoring and macro analysis. Unless these ways of seeing employment are integrated in to our macro level measurement of employment in developing countries, employment policies will remain disjointed from poverty reduction policies; and growth policies from employment policies. If anything they will only find superficial integration through truisms that claim employment is central to forge the link between growth and poverty reduction. We begin with some minor conclusions of the paper with implications for popular practice, and then go on to broader findings. Aggregating the employed as it is calculated across advanced and developing countries, is unjustifiable; and using the employment category in cross sectional statistical analyses that include both advanced and developing countries is problematic. This is because employment as it is calculated at the macro level in developing countries is not economically meaningful, while the same category has a plausible economic meaning associated with it in advanced economies. The same is the case with the unemployment rate which is used much more in analysis. The unemployment rate does not capture economy-wide unemployment in developing countries, while in advanced economies it mostly does. Presuming that the unemployed occupy the same categorical space in developing economies as they do in advanced countries is therefore wrong. Moreover the unemployed in developing economies contain two very different types of workers without work; the majority are the long run unemployed who are neither the worst off in the labour market nor likely to be the lowest productivity workers when in employment. It can also be said that estimates of composite indicators of adverse parts of the dual economy either from the income or output perspective need to be carefully conceived. Whatever name is given to them - if these indicators exclude important parts of labour market adversity, they cease to have economy-wide meaning. So for example excluding rural activities from estimate of “informal” employment; or excluding pure casual workers from what is called “vulnerable” employment is completely arbitrary and makes these categories not only partial and obviously problematic for monitoring purposes. We now recap some general associative tendencies between our measures of employment and long run development and short run growth.

**Table 1. Direction of associations between employment categories and the level of national income and economic growth in developing economies (\*= statistically significant)**

	Per capita income and (long run) development	Short run growth
Employment as a % of labour force	No relation	No relation
Unemployment rate	Positive	Positive*
Regular employment as a % total employment	Positive *	Positive *
Adequately paid employed as a % total employment	Positive *	Positive *
Non- regular employment as a % of total employment	Negative*	Negative*
of which		
Self-Employment as a % of total employment	Negative*	Negative*
Causal Employment as a % of total employment	Positive*	Positive
Working poor as a % of total employment	Negative*	Negative

In the development and growth process as per capita incomes rise, regular employment rates as well as income based measures of the adequately paid amongst the employed would tend to rise. We should simultaneously expect underemployment amongst the non-regularly employed to decline and the unemployment rate to become slightly more representative of economy-wide unemployment. This may even show up as a rise in the unemployment rate. Within the group of underemployed workers, the self-employed are likely to be the category that is subject to positive transformation. The self-employed are likely to decline in incidence but in the process become increasingly non-poor. As economies grow the bulk of the decreasing underemployment in them is likely to fall on casual type of activities. Thus with the development process, economy-wide “underemployment” that is disguised and embedded in the calculation of the “employed” – which at lower levels of development primarily manifests itself in a higher incidence of non-regular employment (and in low rates of unemployment) – begins to alter its manifest composition. The incidence of casual labour may show a tendency to rise as the incidence of self-employment falls. At the same time unemployment rates may begin to rise with growth. From a policy perspective the general category in need of greatest macro policy attention in typical developing countries is of persons who are employed on a non-regular basis. These include the self-employed as well as casual workers. Both these categories face underemployment. As we suggest these categories are subject to dynamic changes. The other focus of policy attention needs to be on the conditions of work of the regularly employed and the enhancement of support systems to those who are unemployed for longer periods and queue for regular jobs. The unemployed may dominantly be non-poor but they are also not well off. This focus becomes increasingly important as developing economies grow and become richer.

The problem facing economy-wide assessments of employment in developing economies is not that we lack theory or supportive micro level empirical knowledge of how transformations come about; but rather that we are forced to use the twin categories of employment and unemployment rates for the ostensible lack of other useable data at the economy wide level. This makes a meaningful economy wide empirical assessment of the employment situation in a developing country impossible. The importance of having plausible economy-wide indicators is three fold. It lies in monitoring; presenting meaningful aggregations across countries; and in conducting macro level analysis across developing economies and within economies over time. In particular, for international institutions that need to say something meaningful about employment in the developing world at any of these aforementioned levels, this often becomes a serious problem. We have argued in this paper that there is a need to fundamentally and practically rethink the measurement of macro level employment categories in line with basic development theory. At present economy-wide categories are produced mechanically with an ahistorical template that is more appropriate for the typical (non-recessionary) advanced economy. Our work suggests interim directions to follow as a way forward in a very poor data situation.

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