Measuring the Quality of Employment in the Informal Sector

Abstract
Our paper explores and measures the quality of employment among urban, low-income households in Ecuador. It hopes to contribute to the literature by raising attention to the diversity of job quality within the informal sector and by highlighting the importance of quality of employment in the context of poverty reduction and development strategies. Building on the previous work on decent work indicators, we propose a job quality index measure and apply this measure to men and women workers in urban poor communities of Ecuador using a 2002 sample survey. We also show that there are differentiated patterns on job quality among women and men in these households. In addressing the importance of employment quality, this paper hopes to provide a better understanding of the issue, especially as it relates to poverty alleviation and to illustrate a way of measuring employment quality.

Key words: Measurement, Quality of Employment, Gender, Decent Work, Informal sector

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1. Introduction

There have been various interpretations of the role of the informal sector in the economy as well as the characterization of informal workers in the growing literature on this subject. Informal sector activities have become increasingly prominent in policy discussions regarding poverty alleviation, employment generation and economic growth. To date however, with the exception of some studies, there has been paucity in the measurement and analysis of the quality of informal sector jobs. The discourse on this topic has tended to focus on the reasons for the existence of informal sector activities and their functions. For example, the question of whether informal sector employment serves as mainly a survival strategy for the poor or whether it leads to efficient allocation of labor resources has been addressed in several studies (Dabla-Norris et al 2005, Rakowski 1994, Perry et al 2007 to name a few). This calls for a better understanding of the quality of employment in the informal sector, particularly with the growing proliferation of different types of informal and nonstandard employment.

Our paper hopes to address this issue and to provide a more nuanced view of the diverse working life of men and women engaged in the informal sector (ILO 2000, Todaro and Yanez 2004, Chen et al 2005, ILO 2002, Standing 1999). In particular, we develop a measurement of job quality that takes into account the heterogeneity of informal sector jobs. The ubiquity of jobs and types of activities undertaken in the informal sector merits careful study especially since the majority of the urban poor in developing countries depend on the informal sector for their livelihood. Privatization and public sector downsizing, increased global competition and firm restructuring, economic fluctuations and labor market deregulation have contributed to the expansion of informal activities and casualized labor contracts. This expansion has extended the links, direct or indirect, between formal and informal sectors, often making the distinction between the two types become increasingly blurred in the developing world (Pérez-Sainz, 2000, Beneria and Floro 2006). The present labor market conditions have raised new questions not only on the nature of job informality but also on its consequences. Understanding the quality and not just quantity of employment particularly in the informal sector can provide valuable insight into the nature of poverty and vulnerability. Poverty may be a result of low pay, variable levels of income, and other factors that are lost in standard employment or occupation data. The measurement of job quality among low-income workers highlights the particular determinants of poverty and allows policy makers to better address the core issues in poverty reduction strategies.

We intend to explore in this paper the varied dimensions of jobs that influence the quality of employment in the urban informal sector. Section 2 provides background on decent work. Section 3 develops a job quality measure based on pertinent attributes. The composite job quality index, referred to as JQI, takes into account not only the earned income, but also those aspects of economic security and individual functioning that are

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1 Along these lines, the literature on structural adjustment policies has provided ample evidence on the effects of deregulation and labor market flexibilization across countries since the 1980s. For a summary of this literature, see Beneria 2001.
influenced by the employment conditions. In section 4, we calculate the JQI of urban, low-income workers in Ecuador using 2002 sample data of 379 men and women respondents, the majority of whom are engaged in informal work in Ecuador. Our results demonstrate the propensity for households engaged in informalized employment to become increasingly differentiated. While some are able to take advantage of market opportunities to raise their incomes, many types of self-employed and subcontracted workers have become part of the informalized periphery and are caught in a vicious cycle, thus raising distributional consequences.

2. Notion of Decent Work and the Working Patterns of Urban Poor Workers in Ecuador

During the past three decades, increased job informality and the heterogeneity of working conditions in the informal sector have taken place in Ecuador, a developing country of 12.8 million people.\(^2\) This trend has been facilitated by market liberalization policies adopted since the late 1980’s and the subsequent pattern of stagnant or slow economic growth in the late 90’s that resulted in the formal market economy’s incapacity to generate adequate jobs. There is by now some evidence in the literature regarding increases in informal employment following market liberalization and adjustment episodes (Pollin and Heinz 2002, Beneria 2001, Beneria and Floro 2006, Chen et al. 2005). As with other Latin American countries, rural-to-urban migration has also contributed to the swelling ranks of the urban informal workers.

Informal market work has increasingly involved diverse forms; while some jobs are stable, the majority is characterized by unstable, albeit low, earning patterns and precarious working conditions. Occupations can range from those that are subject to ease of entry and high levels of competition such as laundry washing, garbage scavenging, food vending and street hawking, to those that have some entry barriers including required skills and capital e.g. dressmaking, tailoring, grocery store retailing and mechanic repair shop activities. Furthermore, given the quasi-legal nature of the work that is sometimes involved, there are jobs that are subject to police harassment, fines and even eviction such as street vending; others are able to remain outside the purview of government regulations such as occupational safety and hazard prevention laws and legal enforcement mechanisms.

Hence, the mere existence of employment or being employed does not sufficiently define the economic condition or the ability of the worker to function in the capability space. Employment needs to be seen as acting together with a number of other factors that enable the worker to meet his/her subsistence needs, to provide economic security and to continue his/her functioning in the face of income shortfalls and shocks.

In recent years, there has been a growing interest on developing an index of decent work. The International Labor Organization (ILO) study in 2002 provided the groundwork for conceptualizing and measuring decent work. The ILO has coined the term in order to epitomize what it means for workers to have a good working life – work

\(^2\) As of 2002 (UNDP 2004)
without oppression, in reasonable security and with steadily improving opportunities for personal development, while earning enough to support themselves and their families.³ Anker et al (2003) conceptualize the notion of decent work and identify six dimensions of decent work namely: a) opportunities for work; b) work in conditions of freedom; c) productive work; d) equity in work; e) security in work and f) dignity at work. The first two dimensions focus on the availability of work while the remaining four dimensions focus on the decency of the work itself. In a similar fashion, Ghai (2003) considers the factors that are important in determining the decency of work. He argues that at the macro level, a country provides decent work when there are ample employment opportunities, remunerative employment, safe conditions of employment, social security provision, no forced or child labor, no discrimination at work, freedom of association in the workplace, collective bargaining, and economic democracy.

Standing (2002) focuses on several dimensions of economic security that relate to decent work. These include: a) labor market security – having adequate employment and work opportunities, through high levels of employment ensured by macroeconomic policy; b) employment security – protection against arbitrary dismissal, and employment stability compatible with economic dynamism; c) job security – a job linked to an occupation or “career” that will not become structurally obsolete including barriers to skill dilution; d) work security – protection against accidents and illness at work, through safety and health regulations, limits on working time, on unsociable hours, and on night work; e) skill reproduction security – widespread opportunities to gain and retain skills, through apprenticeships, vocational training, etc.; f) income security – having a regular assured income, and access to non-wage benefits and income-supplementing (or -replacing) entitlements. – protection of income through minimum wage machinery, wage indexation, comprehensive social security, progressive taxation, etc.; and g) representation security – protection of collective voice through independent trade unions and employers’ associations and other bodies able to represent the interests of workers and working communities.

Using this framework, Standing (2002) constructs several indices on job, work, employment, skill reproduction, income and representation security using his economic security framework, culminating in a composite index called Decent Work Index (DWI). In a similar manner, Bescond, Châtaignier and Mehran (2003) have constructed a Decent Work Deficit (DWD) by measuring quantifiable deficits in decent work including low hourly pay; excessive hours of work; national unemployment; child labor; youth unemployment; male female gap in labor force participation; and lack of pension for old age.⁴ Their measure allows for international comparisons of decent work deficits across countries.

While these studies provide an important contribution to the discussion of quality of employment at the aggregate level and their measures of decent work (or lack thereof) have highlighted the importance of developing new indicators to address the gap in

⁴ Ahmed (2003) later used this index to empirically demonstrate that decent work leads to economic growth.
employment quality, they only capture some aspects of the nature of employment among informal workers. By its very nature, informal work is heterogeneous in scope and generally operates outside any legal recognition or oversight. As such, these quasi-legal jobs are not governed by minimum laws, union representation or other worker rights. In this setting, the measures of decent work proposed by Standing and others are of limited use. Therefore, we build upon the foundation of decent work indicators to propose a new measure of job quality that is designed to characterize both the quality and features of employment in the urban informal sector.

3. Construction of Job Quality Index

Our approach differs from the ILO studies in that we focus on the quality of jobs in the informal economy, and the nature of the urban informal sector activities undertaken by workers in the bottom rung of employment. The index we construct, called Job Quality Index or JQI, will be used to measure an individual worker’s job quality using information on the terms of employment and working conditions and moves beyond simple measures of economic security that focus on earnings alone.

This approach is not without limitations however. Quality is, by its very nature, subjective and any components used to quantify a measurement of quality are subject to scrutiny and debate. Issues of weighting are also important. The decision to weigh a particular variable over others in measuring quality is controversial. A priori, we have no preconceived notion as to which component of our proposed index is relatively more important and will therefore equally weight all components of the proposed job quality index.

The measure focuses on three areas namely: earnings capacity, balancing work and home life, and social protection. High quality jobs should generate sufficient earnings to allow workers to support themselves and their family members above the poverty level. This is especially important in an era of cuts in government subsidies and social programs that requires families to purchase at market prices many basic goods and services that were formerly provided at free or reduced rates by governments. Second, high quality jobs should not require unreasonably long hours of work. Individuals need to be able to balance work requirements and household responsibilities such as caring for children, the elderly or the ill. Excessive hours of work are particularly harmful to women due to social norms leaving much of household reproduction responsibilities in their hands. In particular, men and women are likely to respond differently in terms of time allocation to household illness and to presence of dependents. This may leave women in a more vulnerable position as they shoulder more responsibilities around the house, resulting in either more hours of household reproduction, fewer hours of work (and lower earnings) or both. Finally, given the multitude of risks faced by urban poor households in developing countries, access to insurance is an important form of risk management. Jobs that offer health, retirement and disability insurance reduce the stress that individuals and households face. Those that possess jobs offering health insurance and/or retirement benefits are considered fortunate and better able to minimize risk.
Within the three areas outlined above, we measure the quality of a particular job in the following categories: adequate earnings, adequate hours of work, number of jobs, job location, and non-wage benefits. Each of these attributes are briefly discussed below.

Adequate Earnings
A starting point for measuring job quality is the level of earnings. High quality jobs should allow workers to support themselves and at least one other family member above the poverty threshold. While earnings by themselves are an insufficient measure of job quality, they are an important component. For JQI calculation purposes, we develop a binary component whereby a zero is reported if earnings are below twice the poverty threshold and one is reported if otherwise.\(^5\)

Adequate Hours of Work
One of the consequences of low quality jobs is that workers must put in long hours at low pay in order to meet their basic needs. This essentially creates hardships on workers trying to balance family and employment responsibilities, leading to stress, particularly on women who often are responsible for household reproduction as well as contributing to household income. Based on ILO Hours of Work (Industry) Convention, 1919 (No. 1), hours of work should not exceed 48 hours. The component measure for this job quality characteristic reports a value of 1 if the individual reports working 48 hours per week or less; zero if the individual works between 48 and 80 hours per week; and a value of -1 if the individual works more than 80 hours per week.\(^6\)

Number of Jobs held simultaneously
Workers may hold multiple jobs for a variety of reasons. One reason is that their main job does not offer enough hours or earnings to meet household needs. Another is that the level of earnings or employment in the main job is highly variable so that the worker engages in multiple jobs as livelihood diversification and risk management strategy. Regardless of the reason, individuals with multiple jobs are likely to face additional strain in coordinating the multiple activities in order to ensure that the hours and demands of each are met. Also, individuals with multiple jobs have additional time constraints preparing for and traveling to work. This strain is likely to increase with the number of jobs a person holds. Therefore more jobs are associated with lower quality of employment. As such, a value of 1 is recorded for this JQI component if the individual reports only working one job, 0 is recorded if the individual reports working 2 jobs; and a value of -1 is recorded if the individual reports working more than 2 jobs.

Job Location
Job location has implications for the degree of risk that workers face in their job. The location of work can lead to health problems; increase the chance of eviction, bribes, police harassment, theft, or other criminal acts. Street vendors, for example are exposed to harsh weather and other unpleasant conditions in pursuit of sales. This puts street

\(^5\) For a discussion on measuring earnings adequacy see Bescond, Chatagnier and Mehran (2003).
\(^6\) While this methodology raises the JQI for the underemployed within the hours of work sphere, the overall negative impact of underemployment will be captured in other categories, principally Earnings and Number of Jobs.
vendors at greater health risk as well as increasing the likelihood of harassment, accidents, and theft. Further, the location of work is an indicator of the barriers to entry into a particular type of employment such as capital requirement, and proxies for the amount of competition. Jobs with no fixed location such as street hawking have the highest amount of competition as there are little or no skill or capital barriers to entry. When economic shocks lead to formal market contraction, the competition in jobs without barriers to entry dramatically expands. This leads to low and variable earnings. On the other hand, store owners operating in commercial space and stand-alone buildings are likely to face relatively less competition due to overhead capital requirement. Therefore, a value of 1 is recorded if the individual reports working in a free standing building, a commercial space or other permanent location detached from the house. A value of 0 is recorded if the individual reports working from the household. A value of -1 is recorded if the individual reports not operating from a fixed location.

Non-wage Benefits
Non-wage benefits such as health insurance offer workers additional risk coping mechanisms in the event of a negative shock such as accident or illness, which can result in lost work, medical expenses, or both. In the absence of social safety nets, poor households are ill equipped to deal with these added stresses, so that jobs which offer health insurance are highly desirable. Therefore, a value of 1 is recorded if the job offers non-wage benefits such as health insurance or a pension; 0 is recorded if no work benefits are offered.

The Job Quality Index (JQI) is a composite index that combines the values recorded for the adequate earnings, adequate hours, number of jobs, job location and non-wage benefits components. The JQI is then normalized [0,1], similar to the procedure pioneered by the UNDP with its Human Development Index. Hence,

$$\text{Normalized value JQI} = \frac{\text{Actual value-Minimum value}}{\text{Maximum value-Minimum value}}$$

where the actual value is the score attained by a particular job. The minimum value is the lowest value any job could attain and the maximum value is the maximum any job could attain. The value of the normalized index is calculated and the result gives value to the job quality index ranging from 0 (lowest or worst) to 1 (highest or best). It should be noted that this is a relative ranking and high quality is not necessarily the same as ideal. A listing of the JQI components and their corresponding values and definition is given in Table 1. It details the construction of the JQI for Ecuador using the 2002 national poverty threshold and mean hours of work per week as benchmarks.

[Table 1 about here.]

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7 For a general discussion on construction of decent work indices see Bonnet, Figueiredo and Standing (2003).
We recognize that any discussion of job quality is, by its very nature, subjective. However, given the increasing levels of globalization, measures of job security and quality are relevant and critical to understanding the vulnerability faced by many worldwide (Standing 2002, Floro and Messier 2007). Our measure of job quality is a further step in the direction of characterizing the processes that lead to high levels of insecurity and risk exposure among the urban working poor. The measure is not complete however, for it lacks a measure of earnings variability that would highlight further the economic insecurity and stresses faced by urban informal workers. It is our hope that future research will be conducted along these lines in order to better understand the notion of decent work in the context of informal employment.

4. Applying the Job Quality Index: The Case of Urban Poor Workers in Ecuador

Ecuador has experienced a dramatic expansion of the informal economy in the last two decades, facilitated by a pattern of economic growth and structural change that brought about flexibilization of labor contracts and slow growth in formal sector employment in the 1980s and 90’s. In late nineties and early 2000s, Ecuador experienced a severe economic crisis that led to increased unemployment and poverty. Using household and individual sample survey data collected in 2002, we examine the quality of jobs held by workers in six urban poor neighborhoods of Quito and Guayaquil, the two largest cities in Ecuador. The data set is unique in that it identifies the occupation of both men and women in randomly selected households and documents for all jobs currently held by these individuals, the various terms of employment including the earnings, hours of work, job location and any job-related benefits provided.

Table 2 presents the pertinent characteristics of the household sample and their respondents. The majority (128) of the households are male-headed, although a third (66) of the heads are female. The majority of female heads are in single-parent households that comprise nearly forty percent (40%) of the total household sample as a result of divorce, separation, widowhood, or migration of spouse. In several cases, the ‘de facto’ female headship in Ecuador is brought about by the migration of the husband or partner to another city or country. The mean age of heads and spouses are 42 and 38 years of age respectively. With regards to education, heads have slightly more years of schooling (10 years) compared to the spouses (9.2 years). For the most part, the households in our sample heavily rely on labor earnings. Spouses earn less on average, roughly $206 per month, compared to the household head $292.

[Insert Table 2 about here.]

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8 The Urban Poor Home Worker Survey (UPHWS) was conducted on households in six representative urban poor communities in Ecuador with at least one household member engaged in the informal sector.
9 International labor migration has dramatically increased during the period 1998-2000. An estimated 200,000 Ecuadorians has left the country during that period in search of better job opportunities. (Herrera 2004).
Table 3 provides the main job classification held by workers in the urban low-income household sample. The sample includes both formal and informal workers, though each household purposively chosen in the survey contains at least one informal worker. Table 3 shows the difference in job sectors that men and women are engaged in and demonstrates a pattern of gender-based occupational segmentation. Men are more likely to be employed as wage and salaried workers in the formal sector compared to women, with 37 (28.5%) working in the formal sector compared to only 10 (6.8 %) women. Within the informal sector, women are over represented in grocery/retail, food vending, dress making and domestic service work while men tend to predominate in construction work, skills trade (e.g. mechanics repair, tailoring, etc) and transportation.

The gender-based occupational segmentation has implications for differing job quality experienced by men and women. Table 4 provides a breakdown of job characteristics of urban low-income workers in terms of adequacy of earned income, length of working hours, multiplicity of jobs held, secure work location, and access to benefits.

Table 4 highlights both the heterogeneous nature of jobs in the informal sector and the multi-level impact of low quality jobs on poor workers. Beyond low earnings, many informal jobs are beset with long hours, unsafe working environment, precariousness, and rarely provide insurance. This results in multiple dimensions of vulnerability among urban informal workers. Low pay often results in lack of savings and increased worker stress in order to meet basic needs including adequate nutrition, access to health services, etc. Long hours of work coupled with poor nutrition increases the likelihood of illness or accident which workers are ill equipped to cope with due to absence of health insurance.

Surprisingly, some informal jobs meet earning adequacy thresholds, more so compared to formal jobs held by urban, low-income workers. For example, 67% drivers and taxi owners meet earnings adequacy compared to 48% of formal sector workers. However, these relatively high earnings come at a cost namely, very long working hours. Only 17% of drivers report working at or below the ILO-based working hour threshold of 48 hours.

Nearly 82% of construction workers work under 48 hours compared to 81% of formal salaried workers. All dressmakers and drivers in our sample only held one job compared to 95% of formal salaried workers. It is only in the area of non-wage benefits that formal salaried workers exceed all other job classes with 71% of formal sector jobs providing some form of insurance. This highlights the heterogeneous nature and complexity of informal sector job attributes.

Figure 1 presents a pictorial view of the JQI components in the case of urban, low-income workers in Ecuador. It illustrates how JQI goes beyond the standard notion of employment, typically viewed as having a source of income, and thus encompasses important aspects of decent work that conventional employment data do not take into
account. By building on the earnings adequacy component, the figure graphically depicts how other job characteristics can either strengthen or diminish the quality of employment. First we divide all jobs into 2 categories – those with adequate earnings (blue) and those without (red). This is represented by the middle bar that indicates whether or not a worker’s job provides adequate earnings. The length of the horizontal bar represents the frequency within the given category. Hence 204 workers (74%) do not hold jobs that fail to provide adequate earnings while 73 (26%) do. A vertical line provides a divide between those with adequate earnings and those without.

[Figure 1 about here.]

Next, for all jobs with adequate earnings, we categorize them according to the adequacy of working hours. Those that involve adequate hours of work, 26 (36% of jobs with adequate earnings) continue to move up and to the right, demonstrating a rising JQI (blue). Those that are overworked in the sense of very long working hours, 47 (64% of those with adequate earnings move down and to the left away from the origin (red). In this manner, we expand the notion of job quality by adding each JQI component or category. As we move towards the upper right section of the graph, other aspects of the job held by the worker increases the job quality index. On the other hand, a movement below, towards the lower left section of the graph is associated with lower job quality. The resulting dispersion in Figure 1 reflects the heterogeneity in job quality among urban formal and informal sector workers in Ecuador. It also illustrates the varying dimension of job characteristics. While some jobs meet adequacy in some of the categories, they fall short in others. Only 11 workers (about 4%) hold jobs that meet adequacy standards in all categories.

The estimated values of the various attributes or components presented in Figure 1 are combined to generate the JQI of each worker. Table 5 provides the estimated average job quality index for both men and women workers, in the different job occupational categories. Not surprisingly, workers with regular, formal sector jobs e.g. government employee, bank clerks, security guards, etc. have relatively high JQI (close to 1), while daily or casual domestic service workers have the lowest JQI measure. It is important to note that although formal sector jobs are considered to be of relatively high quality, they do not offer the highest level of monthly earnings. Average monthly earnings for drivers and craftspeople exceed those in the formal sector.\(^\text{10}\) It is the presence of other job attributes, namely reasonable hours of work, safe working conditions, and access to benefits including health insurance that makes formal sector jobs desirable.

[Insert Table 5 about here.]

Table 5 also shows that there are significant gender dimensions in job quality among urban poor workers. Overall, men in urban, low-income households have on average a higher JQI than women.\(^\text{11}\) This reinforces the notion of the precarious and

\(^{10}\) On average formal sector workers earn $199.68 per month compared to $320.65 for drivers and $275.65 for craftspeople.

\(^{11}\) Statistically significantly different from zero at the 1% level.
vulnerable position that women find themselves in. Occupational segmentation seems to occur in the informal sector as well, resulting in women being overrepresented in low quality jobs such as food vendors or small grocery/retail stores and domestic service. Even in jobs where men and women are equally represented such as craftsmanship, the estimated JQI for women lags that of men. Low quality jobs coupled with gender norms regarding household tasks including child care, cleaning and other household responsibilities are likely to induce high levels of stress among women and generate tensions within the household.\(^{12}\)

We also observe in Table 5 that entry barriers tend to be associated with higher job quality. Jobs that require human and/or physical capital have higher job quality. For example, among informal sector workers, those engaged in skilled trade such as carpenters, electricians and mechanics as well as dress makers and barbers/hair stylists have higher quality jobs (higher JQI) than those engaged in highly competitive jobs such as mobile food vendors, street peddlers and water sellers.

5. Concluding Remarks

The quality of informalized employment merit increased scrutiny and careful study given both the predominance and growth of the informal sector in developing countries. Understanding the quality of employment particularly in the informal sector can provide valuable insight into the nature of poverty and vulnerability that is missed by standard employment rate or level of earnings. Building on the effort to provide decent work indicators, we develop a measurement of job quality called JQI that takes into account pertinent characteristics of informal sector employment which directly affect the worker’s functioning and determine his/her vulnerability. Our study illustrates the use of this index by calculating the JQI of urban, low-income workers in Ecuador using 2002 sample data in the examination of their job patterns. Our results show the propensity for households engaged in informalized employment to become increasingly differentiated.

While some are able to take advantage of market opportunities to increase their earnings, many types of self-employed and subcontracted workers have become part of the informalized periphery. More than just low earnings, the majority of informal jobs are beset with long hours of work often in unsafe working environment. The precarious nature of informal work is exacerbated by the lack of insurance that limits workers ability to manage risk. Hence, they are caught in a vicious cycle, working to meet daily needs, with little opportunity to save in the hopes of expanding future earning potential. Moreover, job characteristics coupled with poor nutrition and limited access to health care leaves many workers balanced on a razor’s edge. An accident or illness can be devastating to the worker and their families as work time is lost and scarce resources used to meet medical needs.

Although our study does not address the broad spectrum of the informal sector and focuses only on jobs undertaken by workers in urban, poor communities, it

\(^{12}\) Many of the women in the survey discussed how little time they had and the difficulties meeting home and work expectations.
nevertheless contributes towards a better understanding of the varied conditions of workers in the informal sector, particularly the quality of their jobs and highlights the need for deeper exploration of the impact of economic policies and structural changes on the quality of employment. The JQI estimation in the case of urban workers in Ecuador demonstrates that jobs in the informal sector are widely diverse. Further research and exploration is required on both welfare and sustainable growth implications of poor job quality and on the determinants of job quality including those in the informal sector.

Moreover, there are gender dimensions in the informal labor market that merit attention. The gender-based occupational segmentation observed in our case study shows women tend to have lower quality jobs compared to men in urban low-income households. Policies aimed toward poverty alleviation should consider the need for decent work and not just the goal of employment generation. In addressing the importance of employment quality, this paper hopes to provide a better understanding of an important yet often neglected issue that is crucial to sustainable human development.
References


<table>
<thead>
<tr>
<th>Component</th>
<th>Definition</th>
<th>Threshold</th>
<th>Value in JQI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate Earnings¹</td>
<td>Adequate earnings are defined as earnings sufficient to support the worker and one other individual above the poverty threshold</td>
<td>$\leq 226.78$ per month $&gt; 226.78$ per month</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$226.78 &gt;$ per month</td>
<td>1</td>
</tr>
<tr>
<td>Adequate hours of work</td>
<td>Number of hours worked per week in the job.</td>
<td>$\leq 48$ 48 &lt; Hours ≤ 80 &gt;80</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Num Jobs=1 Num Jobs=2 Num Jobs&gt;2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-1</td>
</tr>
<tr>
<td>Number of jobs</td>
<td>Current number of jobs worked for pay</td>
<td>Num Jobs=1 Num Jobs=2 Num Jobs&gt;2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-1</td>
</tr>
<tr>
<td>Job Location</td>
<td>Physical location where majority of work is preformed</td>
<td>Office building, workshop or other permanent location detached from the house. The household No fixed location.</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>-1</td>
</tr>
<tr>
<td>Non-wage Benefits</td>
<td>Job provision of non wage benefits such as social security, health benefits, etc.</td>
<td>Offers non wage benefits No benefits</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

¹ The national poverty line for Ecuador in 2002 is calculated from SIISE unpublished data. The reported poverty line of $42 per person per month in 1999 is adjusted for inflation to determine the poverty threshold. Inflation is 96.09% in 2000 and 37.68% in 2001. This leads to a poverty line of $113.39 per person per month in 2002.
Table 2
Individual Characteristics of Workers\textsuperscript{a} by household status
\begin{tabular}{|l|c|c|c|}
\hline
INDIVIDUAL & HEAD (N=194) & SPOUSE (N=115) & ALL (N=309) \\
\hline
Sex & & & \\
Male & 128 & 5 & 133 \\
Female & 66 & 110 & 176 \\
\hline
Mean Age (in years) & 41.5 & 37.6 & 40.1 \\
\hline
Average Years of Schooling & 10 & 9.2 & 9.7 \\
\hline
Employment Status & & & \\
1. Formal & 60 & 14 & 74 \\
2. Informal & 126 & 77 & 203 \\
3. Not Employed & 8 & 24 & 32 \\
\hline
Ave Monthly Earnings (in $)\textsuperscript{b} & 291.84 & 206.39 & 260.36 \\
\hline
\end{tabular}

Notes:
\textsuperscript{a} Some individual respondents dropped due to incomplete information or missing variables.
\textsuperscript{b} Earnings refer to monthly wages and salaries of wage workers, piece rate payment of contracted workers and net earnings of self-employed.
<table>
<thead>
<tr>
<th>Type of Main Occupation</th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Informal Sector</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grocery/Retail Storekeeping</td>
<td>29(22.31%)</td>
<td>62(42.18%)</td>
<td>91(32.85%)</td>
</tr>
<tr>
<td>Food Vendor</td>
<td>23(17.69%)</td>
<td>38(25.85%)</td>
<td>61(22.02%)</td>
</tr>
<tr>
<td>Dressmaker/Barber</td>
<td>5(3.85%)</td>
<td>17(11.56%)</td>
<td>22(7.94%)</td>
</tr>
<tr>
<td>Domestic Service Worker</td>
<td>1(0.77%)</td>
<td>10(6.8%)</td>
<td>11(3.97%)</td>
</tr>
<tr>
<td>Construction Worker</td>
<td>10(7.69%)</td>
<td>1(0.68%)</td>
<td>11(3.97%)</td>
</tr>
<tr>
<td>Skilled Tradesperson</td>
<td>15(11.54%)</td>
<td>5(3.4%)</td>
<td>20(7.22%)</td>
</tr>
<tr>
<td>Transport Driver</td>
<td>6(4.62%)</td>
<td>0(0%)</td>
<td>6(2.17%)</td>
</tr>
<tr>
<td>Crafts maker</td>
<td>2(1.54%)</td>
<td>4(2.72%)</td>
<td>6(2.17%)</td>
</tr>
<tr>
<td>Shrimp Farmer</td>
<td>2(1.54%)</td>
<td>0(0%)</td>
<td>2(.72%)</td>
</tr>
<tr>
<td>II. Formal Sector</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wage worker</td>
<td>22(16.92%)</td>
<td>4(2.72%)</td>
<td>26(9.39%)</td>
</tr>
<tr>
<td>Salaried worker</td>
<td>15(11.54%)</td>
<td>6(4.08%)</td>
<td>21(7.58%)</td>
</tr>
<tr>
<td>All Workers</td>
<td>130(100%)</td>
<td>147(100%)</td>
<td>277(100%)</td>
</tr>
</tbody>
</table>

Notes:

a. Skilled tradesperson refers to auto mechanic, carpenter, plumber, cobbler, electrician, locksmith and photographer.
b. Transport drivers in the informal sector are self-employed and either own or hire the vehicle.
c. Formal sector wageworkers include factory workers, chauffeurs, security guards and clerks among others.
d. Formal sector salaried workers includes government employees, accountants and bank employees.
### Table 4
**Work Characteristics of Urban Low Income Workers by Job Classification**

<table>
<thead>
<tr>
<th>Job Classification</th>
<th>% with Adequate Earnings&lt;sup&gt;a&lt;/sup&gt;</th>
<th>% with Adequate Hours&lt;sup&gt;b&lt;/sup&gt;</th>
<th>% Holding One Job</th>
<th>% Mobile Work Location&lt;sup&gt;c&lt;/sup&gt;</th>
<th>% with Non Wage Benefits&lt;sup&gt;d&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal sector wage worker</td>
<td>42.31</td>
<td>50.00</td>
<td>88.46</td>
<td>7.69</td>
<td>26.92</td>
</tr>
<tr>
<td>Formal salaried worker</td>
<td>47.62</td>
<td>80.95</td>
<td>95.24</td>
<td>0.00</td>
<td>71.43</td>
</tr>
<tr>
<td>Grocery/Retail</td>
<td>20.88</td>
<td>21.98</td>
<td>87.91</td>
<td>15.38</td>
<td>0.00</td>
</tr>
<tr>
<td>Food Vendor</td>
<td>11.67</td>
<td>41.67</td>
<td>95.00</td>
<td>31.67</td>
<td>0.00</td>
</tr>
<tr>
<td>Dressmaker/Barber</td>
<td>36.36</td>
<td>63.64</td>
<td>100.00</td>
<td>4.55</td>
<td>0.00</td>
</tr>
<tr>
<td>Domestic Service Worker</td>
<td>0.00</td>
<td>36.36</td>
<td>63.64</td>
<td>36.36</td>
<td>0.00</td>
</tr>
<tr>
<td>Construction Worker</td>
<td>18.18</td>
<td>81.82</td>
<td>90.91</td>
<td>100.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Skills Tradeperson</td>
<td>35.00</td>
<td>50.00</td>
<td>75.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Transport Driver</td>
<td>66.67</td>
<td>16.67</td>
<td>100.00</td>
<td>100.00</td>
<td>16.67</td>
</tr>
<tr>
<td>Craftsman</td>
<td>50.00</td>
<td>16.67</td>
<td>83.33</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Other</td>
<td>66.67</td>
<td>0</td>
<td>66.67</td>
<td>33.33</td>
<td>33.33</td>
</tr>
</tbody>
</table>

**Average for all Workers**  
26.35  41.16  87.72  20.58  8.66

<sup>a</sup> Adequate pay is defined as having earnings sufficient to support yourself and one other individual above the poverty line

<sup>b</sup> Adequate hours is defined as working 48 hours or less per week.

<sup>c</sup> Mobile workers are those that do not operate from a fixed location such as street vendors.

<sup>d</sup> Non wage benefits are provided by employers such as health insurance or pension plans.

### Table 5
**Mean Job Quality Index by Sex**

<table>
<thead>
<tr>
<th>Job Classification</th>
<th>Women</th>
<th>Men</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal sector wage worker</td>
<td>0.6875</td>
<td>0.7216</td>
<td>0.7163</td>
</tr>
<tr>
<td>Formal salaried</td>
<td>0.8542</td>
<td>0.8750</td>
<td>0.8690</td>
</tr>
<tr>
<td>Grocery/Retail</td>
<td>0.4738</td>
<td>0.5129</td>
<td>0.4863</td>
</tr>
<tr>
<td>Food Vendor</td>
<td>0.5296</td>
<td>0.4716</td>
<td>0.5083</td>
</tr>
<tr>
<td>Dressmaker/Barber</td>
<td>0.6471</td>
<td>0.6750</td>
<td>0.6534</td>
</tr>
<tr>
<td>Domestic Service Worker</td>
<td>0.4250</td>
<td>0.3750</td>
<td>0.4205</td>
</tr>
<tr>
<td>Construction Worker</td>
<td>0.5000</td>
<td>0.4875</td>
<td>0.4886</td>
</tr>
<tr>
<td>Skills Tradeperson</td>
<td>0.5500</td>
<td>0.6083</td>
<td>0.5938</td>
</tr>
<tr>
<td>Transport driver</td>
<td></td>
<td>0.4792</td>
<td>0.4792</td>
</tr>
<tr>
<td>Craftsman</td>
<td>0.4688</td>
<td>0.6250</td>
<td>0.5208</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>0.5417</td>
<td>0.5417</td>
</tr>
<tr>
<td>All</td>
<td>0.5289</td>
<td>0.5981</td>
<td>0.5614</td>
</tr>
</tbody>
</table>
Figure 1
Conceptualizing JQI

Blue indicates meets adequacy standards
Red indicates does not meet adequacy standards

<table>
<thead>
<tr>
<th>JQI Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non Wage Benefits</td>
</tr>
<tr>
<td>Job Location</td>
</tr>
<tr>
<td>Number of Jobs</td>
</tr>
<tr>
<td>Hours Worked</td>
</tr>
</tbody>
</table>

Hours Worked: 116, 88, 20, 15
Number of Jobs: 26, 116, 88, 15
Job Location: 116, 88, 20, 15
Non Wage Benefits: 26, 116, 88, 15

Highest Quality Jobs
Non Wage Benefits
Job Location
Number of Jobs
Hours Worked

- Inadequate Earnings
- Adequate Earnings
- 204 Workers
- 73 Workers

- Lowest Quality Jobs