

# THE CUBAN LABOR MARKET: AVAILABILITY AND INTERPRETATION OF STATISTICS

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Labor market issues are front and center in current debates about the future of the Cuban economy. Since his designation as interim President in August 2006, Raúl Castro has fostered a number of policy initiatives that broaden self-employment, modify pay systems to connect more closely wages with performance, eliminate salary caps, authorize workers to receive part of their salary in convertible currency, and permit individuals to hold more than one job at a time. He has also authorized the creation of small businesses with the ability to hire non-family members, reformed the social security system, and begun a process to retrench over one million state workers from the state's payroll.

Based on the statistics that are publicly available, analysis of this heavy labor-related agenda will have to be conducted largely in a statistical vacuum.<sup>1</sup> Not only are the labor market statistics that Cuba publishes sparse but, as is commonly the case with Cuban economic statistics, there are challenges in interpreting the available statistics using conventional analytical means. Cuba at times uses definitions that do not follow generally accepted international norms or lack essential information key to determine the scope of the statistics.

This paper seeks to describe and assess labor market statistics that are currently available from official Cuban statistical sources. It begins with a description of the set of labor market statistics the International Labor Organization (ILO) has identified as basic for policy-makers and researchers to assess issues related to the functioning of labor markets. It then catalogs labor market information available from official Cuban sources and identifies gaps vis-à-vis the set of basic labor market statistics identified by the ILO and evaluates the availability and usefulness of Cuban labor market information.

## ILO BASIC LABOR MARKET STATISTICS

The number of statistical series and the level of disaggregation of labor statistics vary significantly from country to country. A robust, but by no means comprehensive, set of basic statistics that can support basic labor market analysis and allow for some international comparability is the set of eighteen key labor market indicators identified by the International Labor Organization in its Key Indicators of the Labor Market (KILM) project. In this section of the paper, we first describe the statistics that constitute the KILM and then review the extent to which Cuban data are available in KILMnet, the statistical database associated with the KILM.

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1. To be sure, Cuban authorities probably collect labor market information beyond those that are in the public domain. As it is not possible for an outside observer to know what may be available within government circles, this paper concentrates on information in the public domain.

**Table 1. ILO's Key Indicators of the Labor Market (KILM)**

1. Labor force participation rate	10. Youth unemployment
2. Employment-to-population ratio	11. Long-term unemployment
3. Status in employment	12. Time-related underemployment
4. Employment by sector	13. Inactivity
5. Employment by occupation	14. Educational attainment and illiteracy
6. Part-time workers	15. Average monthly wages
7. Hours of work	16. Hourly compensation costs
8. Employment in the informal economy	17. Labor productivity
9. Unemployment	18. Poverty, income distribution and the working poor

**Source:** International Labor Organization, *Key Indicators of the Labor Market*, 7<sup>th</sup> Edition. Geneva: ILO, 2011.

### KILM Statistical Set<sup>2</sup>

The ILO developed the KILM in 1999 with the dual objectives of: (1) presenting a core set of labor market indicators and (2) improving the availability of indicators to monitor new employment trends. The indicators were chosen in a collaborative effort between ILO experts, the Organization for Economic Co-operation and Development (OECD) and national representatives from Ministries of Labor and national statistical offices. The selection of the indicators was based on the following criteria: (1) conceptual relevance; (2) data availability; and (3) relative comparability across countries and regions. Beyond identifying and collecting labor market data, the KILM “has evolved into a primary research tool that provides not only the means for analysis, i.e., the data, but also guidance on interpretation of indicators and data trends.”

The actual set of labor market measures included in the KILM has varied somewhat over time. The most recent edition of the KILM (7<sup>th</sup> edition, issued in late 2011), consists of 18 key indicators, listed in Table 1, “touching on employment and other variables related to employment (status, sector, hours, etc.), the lack of work and the characteristics of jobseekers, educa-

tion, wages and compensation costs, labor productivity, and working poverty. Taken together, the KILM indicators give a strong foundation from which to begin addressing key questions related to productive employment and decent work.” A brief description of each of the measures and its importance for labor market analysis is in Appendix A.

In addition to identifying critical labor market indicators, the KILM also includes an on-line database (KILMnet) that brings together labor market information from nearly 160 ILO member states, standardized (to the extent possible) by the ILO to allow international comparisons. The current edition of the KILM (7<sup>th</sup> edition, 2011), contains 31 statistical series related to the 18 KILM measures.<sup>3</sup> KILMnet does not contain statistics for all measures for all countries and/or years. Data are reported for the period 1980 to the latest year for which data were available at the time of preparation of the study, typically 2010.

### Cuba, the KILMnet, and Other ILO Sources

Cuban labor statistics in KILMnet are quite sparse, with information published for only 8 of the 18 indicators, in some cases only partially (Table 2). Missing altogether from the ILO compilation are

2. This section is based on International Labor Organization, *Key Indicators of the Labor Market*, 7<sup>th</sup> Edition. Geneva: ILO, 2011, “Guide to understanding the KILM,” [http://www.ilo.org/empelm/pubs/WCMS\\_114060/lang-en/index.htm](http://www.ilo.org/empelm/pubs/WCMS_114060/lang-en/index.htm)

3. With respect to some KILM measures, more than one series is provided. For example, with regard to employment by sector—KILM 4—series are presented for employment by major sector of the economy (agriculture, industry and services) and by 1-digit industry of the International Standard Industrial Classification of All Economic Activities. For the labor-force-participation rate—KILM 1—and employment-to-population ratio—KILM 2—statistics are presented as adjusted by the ILO to approximate international standards as well as reported by national statistical sources.

**Table 2. Cuban Labor Force Statistics in KILMnet**

KILM Series	Cuban Statistical Series
Labor force participation rate (KILM 1)	<p>Annual measures of labor force participation rate for each year during 2000–2010; statistics also available for male and female and for standardized age groups (15+, 15–24, 15–64, 25–54, 25–34, 35–54, 55–64 and 65+). These measures were developed by the ILO from national data to match the standardized age groups.</p> <p>National estimates of labor force participation rate; the latter statistics for Cuba are only available in the database for 2004–2007 for males, females and total workforce and for three age groups (15+, 15–24 and 25+).</p>
Inactivity rate (KILM 13)	<p>Inactivity rate, computed as 1 minus the labor force participation rate (KILM 1), is available for the same years and subgroups as the labor force participation rate computed by the ILO.</p>
Employment-to-population ratio (KILM 2)	<p>Annual measures of the employment-to-population ratio (and also for employment and population) for each year during 2000–2010; statistics also available for male and female and for standardized age groups (15+, 15–24, 15–64, 25–54, 25–34, 35–54, 55–64 and 65+). These measures were developed by the ILO from national data to match the standardized age groups.</p> <p>National estimates of employment-to-population ratios for 2000–2008 for males, females and for all employees (no breakdown by age group).</p>
Status in employment (KILM 3)	<p>Annual measures of total employment and of employment according to three categories: wage and salaried workers, own account workers, and co-operative members. Available for 2001–2008 for males, females, and overall employment.</p>
Employment by sector (KILM 4)	<p>Annual measures of total employment and of employment according to three major economic sectors: agriculture, industry and services. Available for 2001–2008 for males, females, and overall employment.</p>
Unemployment rate (KILM 8)	<p>Annual measures of the unemployment rate (plus unemployment and labor force). Statistics available for 2000–2008 for males and females.</p>
Youth unemployment (KILM 9)	<p>Annual measures of youth (19–24 years of age) unemployed, youth labor force, youth unemployment, and share of youth unemployed in the young labor force and in the young population for 2004 and 2006–2008 for males and females; also-annual measures of youth unemployed, adult unemployed, total unemployed, and youth’s share of total unemployed for 2000–2008 for males and females.</p>
Educational attainment and illiteracy (KILM 14)	<p>Annual measures during 2000–2008 of educational attainment of the labor force by four levels of educational attainment, namely pre-primary, primary, secondary, and tertiary, for males and females and for four age groups, 15+, 15–29, 25–29, and 30+; also shares of the labor force for each of the educational attainment categories.</p> <p>Annual measures during 2000–2008 of unemployment by levels of education (pre-primary, primary, secondary, tertiary) for males and females. (3)</p> <p>Annual measures of youth and adult illiteracy for 2002 and 2009, for males and females.</p>

Cuban statistics dealing with wages and labor costs and economic performance and poverty.<sup>4</sup>

The overall ILO repository of labor market statistics of member countries is the LABORSTA database,

available on the internet.<sup>5</sup> LABORSTA incorporates statistics for Cuba from the KILM and adds several series (generally through 2008). Among the additional series are public sector employment by type of institution, level of government and total and public employment by economic activity (which differ from national statistics), average hours of work per week by economic activity, average hours of work per week for selected manufacturing industries (through 2004 only), and monthly salaries of workers employed in selected manufacturing sectors (2-digit ISIC industries).

Another source of labor market statistics from the ILO is Cuba's response to the worldwide annual survey of wages and hours of work relating to 159 occupations in 49 industry groups and of retail prices of 93 food items. The survey, generally known as the October Inquiry, was initiated in 1924 and has been conducted regularly since then.<sup>6</sup> Cuba's participation in the inquiry has been spotty: as has been noted elsewhere, Cuba reported information on the wages portion of the survey for 9 years and on prices for 6 years over the 36-year span 1951–1986.<sup>7</sup> There is a hiatus in Cuban reporting during the 1990s and early 2000s, with statistics reported for the period 2005–2008 for all 159 occupations;<sup>8</sup> for each occupation, information is provided on: (1) average wage or salary rates per hour (in pesos); (2) normal hours of work per week (in hours); (3) average earnings per hour paid (in pesos); and (4) average hours of work per week (in hours). Information is also provided on re-

tail prices for all 93 food items in the inquiry, although only for 2007–2008.

Finally, the flagship labor publication of the ILO's Regional Office for Latin America and the Caribbean, *Panorama Laboral*, examines labor market developments in a comparative framework and includes a statistical annex with labor market and economic information on each member state of the ILO in the region. The most recent issue, *Panorama Laboral 2011*,<sup>9</sup> excludes Cuba from the regional labor market analysis in the first part of the publication, and similarly excludes Cuba from special reports on developments in urban labor markets, sectorial dimensions of employment, informal employment, good practices with respect to compensation, and rural poverty and labor markets.<sup>10</sup> The statistical annex contains 12 tables, 10 related to labor markets and 2 on general economic information; data on Cuba are only included for three of the ten labor market statistical series (rate of urban unemployment, urban labor participation rate, urban labor force employment rate), which are repeated from the KILMnet.

#### LABOR MARKET STATISTICS FROM CUBAN SOURCES

Cuba's demographic, social and economic statistics are compiled and disseminated by the National Statistical Office (Oficina Nacional de Estadísticas, ONE), established in the second half of the 1990s as successor to the State Statistics Committee (Comité Estatal de Estadísticas, CEE). The main statistical

4. The KILM groups the 18 key indicators into the following groups for analytical purposes: (1) Participation in the world of work: labor force participation rate and inactivity; (2) Employment: employment-to-population ratio; status en employment; employment by sector; part-time workers; hours of work; employment in the informal economy; (3) Unemployment: unemployment; youth unemployment; long-term unemployment; time-related underemployment; (4) Educational attainment: educational attainment and illiteracy; (5) Wages and labor costs: average monthly wages; hourly compensation costs; and (6) Performance and poverty: labor productivity; poverty, working poverty, and income distribution.

5. <http://laborsta.ilo.org/>. The ILO also maintains labor statistics databases for countries assigned to its regional or sub-regional offices. Cuba is assigned to the ILO Regional Office in Lima; the database for that regional office, LABORSTA RO-LIMA ([http://labors-ta.ilo.org/office/rlima\\_e.html](http://labors-ta.ilo.org/office/rlima_e.html)), does not contain data beyond those available in the ILO global labor statistics database.

6. <http://laborsta.ilo.org/applv8/data/labocte.html>

7. Jorge F. Pérez-López, "Wages, Earnings, Hours of Work, and Prices in Cuba," *Cuban Studies*, volume 19 (1989).

8. These data are not reported in the general ILO statistical database, LABORSTA internet, <http://laborsta.ilo.org/>

9. [oit.org.pe/wdmsdm/bib/publ/panorama/panorama11.pdf](http://oit.org.pe/wdmsdm/bib/publ/panorama/panorama11.pdf)

10. Interestingly, within the chapter on rural poverty and labor markets, there is a table on the structure of employment by major sector—agriculture, industry, services—for 2005–2009 with a row labeled "Cuba," but the row is blank.

compendium published by ONE, the *Anuario estadístico de Cuba*,<sup>11</sup> has been available—albeit with some gaps—since the late 1970s. A second ONE annual publication, *Panorama económico y social (PES)*, typically includes selected statistics from the *Anuario*; because of differences in publication schedules, the handful of labor market statistics published in *PES* are often more current than those in the *Anuario*.<sup>12</sup>

In addition to the *Anuario* and the *PES*, there are two other official sources of Cuban labor market information, namely special labor market statistics publications issued periodically by ONE and information from the provincial yearbooks, *Anuarios estadísticos provinciales* that ONE published for the first time in 2010 (for 2009) and most recently in 2011 (for 2010). These official sources of labor market information are described below.

### 1. Labor Market Statistics in the *Anuario*

Chapter 7 of the 2010 *Anuario* is “Work Force and Salaries.”<sup>13</sup> It consists of 16 tables with annual statistics at the national level (with two exceptions, noted below) on a number of topics, including employment and unemployment, salaries, educational achievement of the labor force, work-related injuries, and pensions.

Specifically, the data series include:

- economically active population and employment and unemployment, by gender, 2005-2010;
- employment according to employment status, by gender, 2007-2010;
- employment by broad economic activity, by gender, 2005-2010;

- average monthly salary in state and mixed enterprises by broad economic activity, 2005-2010;
- average monthly salary in state and mixed enterprises by province, 2005-2010;
- level of educational achievement of the economically active population, by gender, 2004-2009;
- level of educational achievement of employed persons, by gender, 2005-2010;
- age distribution of the employed (15-16 years of age, 17-19, 20-29, 30-39, 40-59, 60+) by occupational category and gender, 2010;
- distribution of the labor force by occupational category and gender, 2005-2010;
- selected indicators of work-related injuries in state and mixed enterprises, 2005-2010;
- selected indicators of work-related injuries by provinces, 2010;<sup>14</sup>
- expenditures (outlays, benefits paid) by the social security system by type, 2005-2010;
- expenditures (outlays, benefits paid) by the social security system by type and province, 2010;
- social security beneficiaries, average pension and new pensions granted, 2005-2010;
- principal indicators of the social assistance system, 2005-2010; and
- principal indicators of the social assistance system by province, 2010.

### 2. Special Labor Market Publications

In 2010–2012, Cuba’s statistical office issued four special publications on labor market topics that either provide statistical series for a longer time span with respect to some variables or contain some additional details such as breakdowns by geographic regions.

11. The most recent issue is *Anuario estadístico de Cuba 2010* (ONE, 2011). This issue of the *Anuario*, as well as earlier ones and other statistical publications, are available electronically through ONE’s website, [www.one.cu](http://www.one.cu). After more than three decades of reliance on the statistical system used by the Soviet Union and other socialist countries, volumes of the *Anuario* since the late 1990s have begun to reflect Cuba’s shift in macroeconomic statistical methodology from central planning to market orientation. On this shift see, e.g., Jorge Pérez-López and Carmelo Mesa-Lago, “Cuban GDP Statistics Under the Special Period: Discontinuities, Obfuscation and Puzzles,” *Cuba in Transition—Volume 19* (Washington: Association for the Study of the Cuban Economy, 2009).

12. The latest issue is *Panorama económico y social—Cuba 2011* (ONE, 2012), posted to the ONE website on July 10, 2012. The labor market indicators in this issue (for 2010 and 2011) are economically active population, employment by gender, employment and unemployment rates, and average salary.

13. This is ONE’s own translation of the Spanish-language title of the chapter, “Empleo y Salarios.”

14. Although the table heading is silent, it is evident that the data refer to injuries in state and mixed enterprises, as the overall figures correspond to those in the previous table, which explicitly refers to state and mixed enterprises.

- *Empleo en cifras: Cuba 2010*,<sup>15</sup> issued in May 2011, brings together several labor market statistics for the period 2000–2010.<sup>16</sup> According to ONE, the time series from 2003 to 2000 have been adjusted to reflect the current methodology and therefore the entire series provided follow a consistent methodology. Thus, while the special publication does not include any additional labor market statistics beyond those in the *Anuario*, it does provide longer time series for many.
- *Salario medio en cifras: Cuba 2011*, issued in May 2012, is a very succinct publication, containing only two tables with statistics on the average monthly wage by province and separately on average monthly wage by major sector of economic activity.<sup>17</sup> Entities covered are state enterprises and joint ventures. The period for the data is 2006–2011. The statistical information provided is identical to that in the corresponding tables of the *Anuario*.
- *Protección del trabajo: Indicadores seleccionados (enero-marzo 2012)*, issued in June 2012,<sup>18</sup> replicates information in the *Anuario* on work accidents at the national level although it also includes actual information on total man-hours of work performed and total man-hours of lost time as a result of work accidents in the first quarter of 2012 compared to a like period in 2011. Similarly, the publication replicates data on indicators of work accidents by province for

the first quarter of 2012 and a like period in 2011. Series in the special publication not available in the *Anuario* relate to indicators of work accidents for 2009 and 2010 by economic sectors, by government entities (e.g., MINBAS, Ministry of Basic Industry; MICONS, Ministry of Construction) and by provincial administrative councils (Consejos de la Administración Provincial).

- *Seguridad social: Indicadores seleccionados (enero-diciembre 2010)*, issued in March 2011,<sup>19</sup> contains data on the social security system not available in the *Anuario*. It includes the number of recipients under nine social security programs (e.g., illnesses and accidents, occupational safety and health, disability, age),<sup>20</sup> number of recipients and payments for each program by economic sector and separately by province, by state entity and by provincial administrative council. Finally, the publication also has two tables on retirements and pensions, the first showing recipients by program by province and the second new recipients added to the system in 2010.

### 3. Provincial Yearbooks

For the first time in 2010, ONE published statistical yearbooks for each of Cuba's 14 provinces and the Special Municipality of Isla de la Juventud, generally containing statistics through 2009.<sup>21</sup> In 2011, a new set of provincial yearbooks was issued by ONE, *Anuarios estadísticos provinciales 2010*, updating sta-

15. <http://www.one.cu/empleoencifras2010.htm>

16. The series are (1) economically active population and employment and unemployment, by gender; (2) employment according to employment status, by gender; (3) employment by broad economic activity, by gender; (4) level of educational achievement of the economically active population, by gender; (5) level of educational achievement of employed persons, by gender; (6) age distribution of the employed by occupational category and gender; (7) distribution of the labor force by occupational category and gender; (8) selected indicators of work-related injuries in state and mixed enterprises; and (9) selected indicators of work-related injuries by provinces.

17. <http://www.one.cu/salariomedioencifras2011.htm>

18. <http://www.one.cu/trimestralprotecciondeltrabajo.htm>

19. <http://www.one.cu/semestralseguridadsocial.htm>. A more recent issue of this publication, for January-June 2011, is announced in the ONE website but it was not accessible from the website at the time of this writing.

20. For this statistic only, information for 2009 and 2010 is provided. For all other series, the reporting period is calendar year 2010.

21. The individual yearbooks can be accessed at <http://www.one.cu/aed2009.htm>. Also in 2010, ONE issued a special publication titled *Los territorios de Cuba*, AE Separata 2009, which provides a range of information on each of the island's provinces. With respect to labor market statistics, the information is essentially the same as contained in the three series contained in the national yearbook for which provincial breakdown is given. See <http://www.one.cu/aec2009/datos/los%20%20territorios%20de%cuba.pdf>

**Table 3. Labor Market Statistics in Provincial Statistical Yearbooks**

Labor Force Indicator (2010 <i>Anuario</i> )	PR	LH	CLH	M	VC	CF	SS	CA	C	LT	H	GR	SC	G	IJ
Economically active population and employment and unemployment by gender	√			√	√	√			√		√	√			
Employment according to status of employment, by gender	√		√+	√+	√	√	√		√+	√	√+	√+	√+	√+	√+
Employment by broad economic activity, by gender	√+	√+		√+	√+	√-	√	√-	√	√+	√+	√+	√+	√+	√+
Average monthly salary in state and mixed enterprises, by broad economic activity	√+	√+	√+	√+	√+	√	√	√	√	√+	√	√+	√+	√+	√+
Level of educational achievement of the economically active population, by gender	√			√+								√			√
Level of educational achievement of employed persons, by gender	√				√	√	√-					√			
Age distribution of employed, by occupational category and gender				√-	√	√	√-					√			
Distribution of the labor force by occupational category and gender	√-	√	√	√	√				√-	√	√	√	√-		√
Selected indicators of work-related injuries in state and mixed enterprises	√+		√	√	√+	√	√	√			√	√	√+	√+	
Expenditures (benefits paid) by the social security system, by type				√	√+	√	√				√	√		√	√
Social security beneficiaries, average pension and new pensions granted															
Principal indicators of the social assistance system				√						√	√				

PR—Pinar del Río; LH—La Habana; CLH—Ciudad de la Habana; M—Matanzas; VC—Villa Clara; CF—Cienfuegos; SS—Sancti Spiritus; CA—Ciego de Avila; C—Camagüey; LT—Las Tunas; H—Holguín; GR—Granma; SC—Santiago de Cuba; G—Guantánamo; IJ—Isla de la Juventud.

**Source:** Source: Based on *Anuarios estadísticos provinciales 2010*; see text for explanation.

tistics though 2010.<sup>22</sup> The provincial yearbooks generally mirror the format of the national yearbook and each contains a section on “Empleo y Salarios.” The actual content of such section varies substantially from province to province, in most instances containing fewer statistical series than the national yearbook but in others actually including data not available in the national-level publication.

Table 3 compares the contents of the labor market section of the 2010 *Anuario* with the corresponding sections in the provincial yearbook for the same year. The rows list each of the labor market statistical series in the 2010 *Anuario*;<sup>23</sup> columns 2 through 16 mean-

while refer to each of Cuba’s 15 provinces. A check mark (√) in a cell indicates that the subject statistical series in the national yearbook is also included in the provincial yearbook; a plus sign alongside a check mark indicates that the provincial yearbook contains data detail beyond those in the national yearbook, while a minus sign indicates the opposite.

The principal reason for undertaking a review of each of the provincial yearbooks was to determine if they could be mined to obtain additional labor market information that would bear on analysis of labor market issues. One possibility explored was whether it was feasible to aggregate information from the indi-

22. <http://www.one.cu/aed2010.htm>. In what follows, the Special Municipality of Isla de la Juventud is treated as a province for ease of exposition.

23. Four of the series are excluded from the table, as they are essentially breakdowns by province of national data and are out of scope for the provincial yearbooks. They are: average monthly salary in state and mixed enterprises by province; selected indicators of work-related injuries by province; expenditures (benefits paid) by the social security system, by type and province; and principal indicators of the social security system by province.

vidual provincial yearbooks to obtain labor market statistics not currently available at the national level. As is discussed below, this did not turn out to be the case on a first attempt, but additional research is in order.

As is clear from Table 3, many labor market statistics series in the national yearbook are replicated in the provincial yearbooks. This is the case, for example, for average monthly salary in state and mixed enterprises (available in all 15 provincial yearbooks), employment by broad economic activity (available in 14 provincial yearbooks) and employment according to status of employment (available in 13 provincial yearbooks). Also commonly included in the provincial yearbooks are distribution of the labor force by occupational category and gender and selected indicators of work-related injuries (in 11 provincial yearbooks). For other series, e.g., economically active population, employment and unemployment by gender and expenditures by the social security system, about half of the provincial yearbooks contain the subject series. Relatively few of the provincial yearbooks (4 of 15) include information on level of educational achievement of the economically active population, age distribution of the employed, and principal indicators of social assistance. Only 3 of the provincial yearbooks report information on the social assistance system and none of them reports information on social security beneficiaries, average pension and new recipients. Turning to individual provincial yearbooks, the coverage of labor market statistics in the 2010 provincial yearbooks was most extensive for Matanzas and Granma, with statistics reported for 10 of 12 series, and least in the yearbooks for La Habana and Ciego de Avila (3 series each).<sup>24</sup>

The provincial yearbooks contain some labor market statistics not available in the national yearbook. In

some instances, the additional information is in the form of additional detail at the level of municipalities within a province. In other cases, however, the provincial yearbooks provide statistics not included in the national yearbook, with no explanation as to why such data are absent from the national yearbook, as presumably all of the information originates from a common national reporting system.<sup>25</sup> Some examples of the differences are:

- Finer breakdown of economic activity sectors (applicable to series on employment and average salaries by broad economic activity) than in the national yearbook. Some of the provincial yearbooks (e.g., Pinar del Rio, Villa Clara) separate out fishing from the larger category of “agriculture, hunting, forestry and fishing” in the national yearbook; the sugar industry from “manufacturing”; economic activity of hotels and restaurants and of enterprises providing repair of personal items from “commerce, restaurants and hotels”; financial intermediation and “services to enterprises, real estate and housing” from “financial establishments, insurance, real estate and services to enterprises”; and “public administration, defense and social security,” science and technological innovation, education, public health and social assistance, culture and sports, and “community, association and personal services” from “community, social and personal services.”
- Finer, and more descriptive, classification of employment by status of employment. Statistics in the national yearbook on this topic are very sparse, limited to total employment, employment in cooperatives, and private employment (self-employment is provided as a subcategory under private employment). Analysts typically constructed non-state sector employment by

24. Throughout most of the 20<sup>th</sup> century, Cuba was divided administratively into six provinces: from east to west, Oriente, Camagüey, Las Villas, Matanzas, La Habana and Pinar del Río. In 1975, a major political-administrative reorganization was implemented that split the country for administrative purposes into 14 provinces and created the Special Municipality of Isle of Youth. Effective January 1, 2011, Cuba created two new provinces, Mayabeque and Artemisa, carved out of the province of La Habana. We tested the hypothesis that the number of labor market statistical series was higher for those provinces whose boundaries were relatively close to the boundaries of the “original” six provinces, but did not find support for it.

25. Both the national yearbook and the provincial yearbooks indicate that the statistics originate from the National Statistical Information System (Sistema de Información Estadística Nacional, SIE-N).

summing up employment in cooperatives and in the private sector. The yearbook for the province of Santiago de Cuba, for example, within state employment goes beyond the national yearbook and provides statistics on employment in “sociedades mercantiles” (defined as “sociedades anónimas” or S.A., entities owned and operated by the Cuban state). It also provides an aggregate for non-state employment and, within the latter, information on employment in cooperatives (broken out by Cooperativas de Producción Agrícola, CPA, and Unidades Básicas de Producción Cooperativa, UBPC, with the latter further broken into sugar cane and non-sugar cane UBPCs), private employment (broken out by Cooperativas de Créditos y Servicios, CSS, private farmers, associations and foundations, and subsidiaries of SA), and mixed enterprises. The yearbook also provides information on employment in political and mass organizations; this category of employment most likely is part of state employment, although not reported as a subcategory under such in the yearbook.

- Employment by entity employing the workers, a statistic not included in the national yearbook. For example, the yearbook for the province of Pinar del Río provides information on average number of workers employed by 31 government entities in economic, social, and administrative areas, such as SIME (Ministerio de la Industria Sidero-Metalúrgica), MINBAS (Ministerio de la Industria Básica), MINAZ (Ministerio del Azúcar), MINAGRI (Ministerio de Agricultura), MICONS (Ministerio de la Construcción), MINSAP (Ministerio de Salud Pública), MINED (Ministerio de Educación), People’s Power (Poder Popular), FMC (Federación de Mujeres Cubanas), and so on.
- Information on number of self-employed workers by occupation and by municipality. The yearbook for the province of Las Tunas, for example, provides information on the number of self-employed workers engaged in 18 specific occupa-

tions for each of the years 2005–2010, among them barbers, hair stylists, messengers, automobile tire repairmen, cobblers, carpenters, cigarette lighter repairmen and refillers, manicurists, food preparers, and so on. A separate table provides the information (for 2010 only<sup>26</sup>) for each of the 8 municipalities within the region.

- Additional information on wages, specifically the wage bill and money wages by entity employing the workers. While the national yearbook merely reports average monthly wages by provinces and by broad economic activity, some of the provincial yearbooks also provide information on the wage bill (total wages paid). For example, the yearbook for the province of Guantánamo contains information on the wage bill by economic sector and by municipality.
- Selected provincial yearbooks also report labor productivity statistics. For example, the yearbooks for Ciego de Avila and Isla de la Juventud show labor productivity (value of output per worker) within the province for broad economic sectors for each of the years 2005–2010. Meanwhile, the yearbooks for Las Tunas and Santiago de Cuba show labor productivity within the province by state entity (e.g., SIME, MINBAS) for 2005–2010; further, the yearbooks for Santiago de Cuba compares growth in average salaries and labor productivity for each of the selected entities.
- More detailed statistics on work-related injuries. The yearbook for Camagüey, for example, reports on the number of work-related injuries at the level of categories of economic activity.

### INTERPRETING CUBAN LABOR MARKET STATISTICS

Interpreting Cuban statistics is always challenging, no matter to what field they may refer; doing so with respect to labor market statistics is no exception. What follows illustrates some of these challenges through three specific examples: (1) employment and unemployment statistics; (2) wages in a dual currency system; and (3) money v. real wages.

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26. The provincial yearbook for 2009 contains similar information for 2009.

### Cuba's Employment/Unemployment Statistics

If valid, Cuban official employment and unemployment statistics would suggest very healthy labor market developments, typically associated with a fast growing economy: high labor force participation rates, strong labor demand, high levels of employment, and consequently, very low levels of unemployment. Cuba's official unemployment rate of 2.5% in 2010, although substantially higher than the 1.7% recorded in 2009, was by far the lowest in Latin America and the Caribbean—about a third of the region's average 7.3%—and significantly higher than in nations with well-performing economies such as Brazil (6.7%), Chile (8.2%), Colombia (12.4%) and Peru (7.9%) (Table 4).

Cuba's official unemployment statistics mask a massive underutilization of labor and an effective unemployment rate many-fold higher than the reported rate.<sup>27</sup> First, Cuban statistics overestimate employment, considering as employed, inter alia: dismissed workers undertaking training, dislocated workers receiving a retraining stipend even if they were not enrolled in schools, and part-time farmers producing food for own consumption in their homes or in urban gardens. Second, they underestimate unemployment, as workers without jobs do not seek the assistance of municipal job placement offices—which would formally count them as unemployed—because they do not want to be assigned to work in agriculture.

Moreover, underemployment in the state sector is rampant. For 1989–1998, CEPAL calculated the underutilization of the labor force—what CEPAL called “equivalent unemployment”—by estimating the difference between the average product of workers in each year compared to the base year 1989.<sup>28</sup> CEPAL concluded that during the through of the re-

**Table 4. Average Annual Unemployment Rate (percentage)**

	2005	2006	2007	2008	2009	2010
Argentina	11.6	10.2	8.5	7.9	8.7	7.7
Bahamas	10.2	7.6	7.9	8.7	14.2	
Barbados	9.1	8.7	7.4	8.1	10.0	10.8
Belize	11.0	9.4	8.5	8.2	13.1	
Bolivia	8.1	8.0	7.7	6.7	7.9	6.5
Brazil	9.8	10.0	9.3	7.9	8.1	6.7
Chile	9.2	7.7	7.1	7.8	9.7	8.2
Colombia	14.3	13.1	11.4	11.5	13.0	12.4
Costa Rica	6.9	6.0	4.8	4.8	8.5	7.1
Cuba	1.9	1.9	1.8	1.6	1.7	2.5
Dominican Republic	17.9	16.2	15.6	14.1	14.9	14.3
Ecuador	8.5	8.1	7.4	6.9	8.5	7.6
El Salvador	7.3	5.7	5.8	5.5	7.1	6.8
Guatemala						4.8
Honduras	6.5	4.9	4.0	4.1	4.9	6.4
Jamaica	11.3	10.3	9.8	10.6	11.4	12.4
Mexico	4.7	4.6	4.8	4.9	6.6	6.4
Nicaragua	7.0	7.0	6.9	8.0	10.5	9.7
Panama	12.1	10.4	7.8	6.5	7.9	7.7
Paraguay	7.6	8.9	7.2	7.4	8.2	7.8
Peru	9.6	8.5	8.4	8.4	8.4	7.9
Suriname	11.2	12.1				
Trinidad & Tobago	8.0	6.2	5.6	4.6	5.3	5.8
Uruguay	12.2	11.4	9.6	7.9	7.6	7.1
Venezuela	12.4	10.0	8.4	7.3	7.8	8.6
Latin America & the Caribbean	9.0	8.6	7.9	7.3	8.1	7.3

**Source:** CEPALSTAT database. Statistics as of December 21, 2011.

cession of the 1990s (1993–1995), equivalent unemployment was about one-third, falling to about one quarter by the end of the decade (Table 5). CEPAL has not made estimates of labor force underutilization for more recent periods. However, the estimates of redundant workers in the state labor force given out by Raúl Castro and other officials in speeches in the last few years—from 1 million to 1.3 million—would imply labor underutilization rates ranging from 22% to 27%.<sup>29</sup>

### Wages in a Dual Currency System

Cuba has two local currencies: (1) the Cuban peso (CUP), the currency in which most Cuban workers

27. This section draws from Carmelo Mesa-Lago and Jorge Pérez-López, *Cuba Under Raúl Castro: Assessing the Reforms*, forthcoming, 2013.

28. CEPAL, *La economía cubana: Reformas estructurales y desarrollo en los noventa* (Mexico: Fondo de Cultura Económica, 2000). The methodology for the calculation of equivalent unemployment is on pp. 251–252. Note that since the methodology assumes that average output per worker in 1989 was associated with full employment, the estimates of equivalent unemployment are probably conservative.

29. See, e.g., Carmelo Mesa-Lago, “El desempleo en Cuba: De oculto a visible,” *Espacio Laical*, April 2010, p.62.

**Table 5. Measures of Official Unemployment and Equivalent Unemployment (%)**

Year	Official Unemployment Rate	Equivalent Unemployment Rate
1989	7.9	7.9
1990	7.3	10.3
1991	7.7	19.0
1992	6.1	24.2
1993	6.2	34.0
1994	6.7	32.5
1995	7.9	32.1
1996	7.6	26.6
1997	7.0	25.7
1998	6.6	25.1

**Source:** CEPAL, *La economía cubana: Reformas estructurales y desarrollo en los noventa* (México: Fondo de Cultura Económica, 2000), p. 253.

are paid their wages and they use to purchase basic consumer goods; and (2) the convertible Cuban peso (CUC), a currency created in 1994 with a value then at par with the U.S. dollar, which is used in transactions of goods that are normally not available through normal distribution channels. The official exchange rate of 1 CUP equivalent to one U.S. dollar (or one CUC) is used in national accounts and in commercial transactions between domestic enterprises but not in consumer markets. Cuban citizens can sell and buy CUC at government-operated exchange houses at the rate of 1 CUC equivalent to 24 or 25 CUP (depending on whether CUC are being sold or purchased).

The methodological notes to the “Empleo y salarios” section of the *Anuario* are silent on the origin and coverage of the information on wages. The mentioned special ONE publication on average wages does clarify that the information has been gathered only from formal sector entities and that they refer to wages in CUP.<sup>30</sup> Not included in the statistics are payments of wages or wage supplements in CUC or hard currency, which are increasingly common in the island as a means to motivate workers. Reported wag-

es in CUP, then, underestimate wages actually received by workers but measurement of the degree of underestimation is not possible because data on CUP wage payments is not available.

### Money v. Real Wages

Cuban statistical sources report average monthly wages of state sector workers in domestic currency, ordinary pesos (CUP). The national statistical yearbook reports such statistics for the economy as a whole and for large groupings of economic activities or industries (e.g., fishing, manufacturing, sugar industry); in a separate table, ONE also reports average monthly salaries by province.

While the behavior of money wages is important for labor market analysis, even more important is the behavior of real wages, since it is the most important motivator of workers. Cuban economist Pavel Vidal Alejandro has estimated average real wages of Cuban workers for the period 1989–2006 by adjusting nominal wages with the Consumer Price Index (Índice de Precios al Consumidor, IPC) calculated by Cuba’s statistical office.<sup>31</sup> As is clear from Table 6, based on Vidal Alejandro updated through 2010, despite a more than doubling of money wages (138% increase, from 188 to 448 CUP per month), real wages actually shrank by 73%, from 188 CUP in 1989 to 51 CUP in 2010 (Table 6).

**Table 6. Money and Real Wages, 1989–2010**

	Inflation (%)	Price Index (1989=1)	Average Monthly Money Wage (CUP)	Average Monthly Real Wage (1989 CUP)
1989		1.00	188	188
1990	2.6	1.03	187	182
1991	91.5	1.96	185	94
1992	76.0	3.46	182	53
1993	183.0	9.78	182	19

**Source:** 1989–2006: Pavel Vidal Alejandro, “La inflación y el salario real,” February 2007; 2007–2010: Mesa-Lago and Pérez-López, *Cuba in Raúl Castro’s Era: Economic and Social Reforms and Their Effects*, 2012.

30. The introduction to *Salario medio en cifras: Cuba 2011*, p. 1, states: “The information used to calculate the average wages originates from the National Statistical Information System, Form No. 0005–11, called General Indicators, which gathers information from budgeted units, enterprises and economic organizations, Cuban commercial corporations, joint ventures, wholly foreign-owned enterprises, and political and mass organizations.” <http://www.one.cu/salariomedioencifras2011.htm>

31. Pavel Vidal Alejandro, “La inflación y el salario real,” February 2007, [www.nodo50.org/cubasigloXXI.../vidal\\_300607](http://www.nodo50.org/cubasigloXXI.../vidal_300607)

**Table 6. Money and Real Wages, 1989–2010**

	Inflation (%)	Price Index (1989=1)	Average Monthly Money Wage (CUP)	Average Monthly Real Wage (1989 CUP)
1994	-8.5	8.95	185	21
1995	-11.5	7.92	194	24
1996	-4.9	7.54	202	27
1997	1.9	7.68	206	27
1998	2.9	7.90	207	26
1999	-2.9	7.67	222	29
2000	-2.3	7.50	238	32
2001	-1.4	7.39	252	34
2002	7.3	7.93	261	33
2003	-3.8	7.63	273	36
2004	2.9	7.85	284	35
2005	4.2	8.18	330	40
2006	5.5	8.63	385	45
2007	2.8	8.87	408	46
2008	-0.1	8.86	415	47
2009	-0.1	8.85	429	49
2010	1.4	8.98	448	51

**Source:** 1989–2006: Pavel Vidal Alejandro, “La inflación y el salario real,” February 2007; 2007–2010: Mesa-Lago and Pérez-López, *Cuba in Raúl Castro’s Era: Economic and Social Reforms and Their Effects*, 2012.

It is important to keep in mind that Cuban measures of inflation reflect only transactions in CUP in three markets: (1) the official or formal market, controlled by the state and largely consisting of goods and services offered by the state through the rationing system and the parallel market (40% weight); (2) agricultural markets (30% weight); and (3) informal (black) markets (30% weight). Not entering into the calculation of the official ICP are transactions conducted in hard currencies, whether foreign currencies (e.g., euros) or convertible Cuban pesos (CUC). This omission is of critical importance in assessing the real value of wages as increasingly Cuban families are be-

ing forced to turn to *Tiendas de Recaudación de Divisas* (TRD), where CUC are required, in order to obtain basic necessities. Prices in TRD and in other outlets that operate in CUC are likely to fluctuate in response to world market conditions. ONE is reportedly in the process of reviewing the IPC to take into account changes in the structure of the economy associated with the emergence of the non-state sector and transactions conducted in CUC; the revised IPC is likely to be available in 2011–2012.<sup>32</sup>

## CONCLUDING REMARKS

Labor market statistics produced by Cuban statistical sources are sparse. Using the 18 series in the KILM as a set of core labor market statistics to conduct labor market analysis, we find that Cuba produces statistics at best only with respect to 10, concentrated in the areas of labor force participation, employment and unemployment, educational attainment of the labor force, and average money wages. Not available are data related to important concepts such use of part-time workers, hours of work, employment in the informal sector, specific unemployment characteristics, compensation costs, labor productivity, and poverty and income distribution of the working poor.

In addition to their sparseness, Cuban labor market statistics suffer a number of other challenges, such as definitions that lack clarity or lack of disaggregated data that would permit analysis of policy alternatives. Particularly at a time when Cuba is attempting structural reforms that are likely to affect—and be affected by—labor market developments, the lack of a coherent body of labor market statistics will severely affect the ability of analysts and policy makers to properly factor in the labor market dimension.

## Appendix A Description of KILM Indicators

**KILM 1. Labor force participation rate:** The labor force participation rate is a measure of the proportion of a country’s working-age population that engages actively in the labor market, by either working or

looking for work. It provides an indication of the relative size of the supply of labor available to engage in the production of goods and services. The breakdown of the labor force by sex and age group (for the

32. ONE, “Información sobre el Índice de Precios al Consumidor,” September 28, 2010, [www.one.cu](http://www.one.cu)

standardized age groups 15+, 15–24, 15–64, 25–54, 25–34, 35–54, 55–64 and 65+) gives a profile of the distribution of the economically active population within a country.

**KILM 2. Employment-to-population ratio:** The employment-to-population ratio provides information on the ability of an economy to create employment; for many countries the indicator is often more insightful than the unemployment rate. It is defined as the proportion of a country’s working-age population that is employed. A high ratio means that a large proportion of a country’s population is employed, while a low ratio means that a large share of the population is not involved directly in market-related activities, because they are either unemployed or (more likely) out of the labor force altogether. Although a high overall ratio is typically considered as positive, the indicator alone is not sufficient for assessing the level of decent work or the level of a decent work deficit. Additional indicators are required to assess such issues as earnings, hours of work, informal sector employment, underemployment and working conditions.

**KILM 3. Status in employment:** Indicators of status in employment distinguish between four important and useful categories of the employed—(1) wage and salaried workers, (2) employers, (3) self-employed workers, and (4) contributing family workers—with each being expressed as a proportion of the total employed. Categorization by employment status can help in understanding both the dynamics of the labor market and the level of development of countries. Over the years, and with growth of the country, one would typically expect to see a shift in employment from the agriculture to the industry and services sectors, with a corresponding increase in wage and salaried workers and decreases in self-employed and contributing family workers, previously employed in the agricultural sector.

**KILM 4. Employment by sector:** This indicator disaggregates employment into three broad sectors—agriculture, industry and services—and expresses each as a percentage of total employment. The indicator shows employment growth and decline on a broad sectorial scale, while highlighting differences in

trends and levels between developed and developing economies. Sectorial employment flows are an important factor in the analysis of productivity trends, because within-sector productivity growth needs to be distinguished from growth resulting from shifts from lower to higher productivity sectors.

**KILM 5. Employment by occupation:** Economists use occupation in the analysis of differences in the distribution of earnings and incomes over time and between groups—men and women, for example—as well as in the analysis of imbalances in supply and demand in different labor markets. Policy-makers use occupational statistics in the formulation, implementation and monitoring of economic and social policies, including manpower planning and the planning of educational and vocational training. Managers need occupational statistics for planning and deciding on personnel policies and monitoring working conditions, at the enterprise and in the context of industry and relevant labor markets.

**KILM 6. Part-time workers:** The indicator on part-time workers focuses on individuals whose working hours total less than “full time,” as a proportion of total employment. Because there is no agreed international definition as to the minimum number of hours in a week that constitute fulltime work, the dividing line is determined either on a country-by-country basis or through the use of special estimations.

**KILM 7. Hours of work:** The number of hours worked have an impact on the health and well-being of workers as well as on the levels of productivity and labor costs of establishments. Two measurements related to working time are included in order to give an overall picture of the time that the employed throughout the world devote to work activities. The first measure relates to the hours an employed person works per week based on certain hour bands (e.g., less than 25 hours per week, between 25 and 34 hours per week, etc.). The second measure is the average annual actual hours worked per person.

**KILM 8. Employment in the informal economy:** The informal economy plays a major role in employment creation, income generation and production in many countries. Since the informal economy is gen-

erally recognized as entailing missing legal identity, poor working conditions, lack of membership in social protection systems, incidence of work related ailments, and limited freedom of association, statistics on that count the number of persons in the informal economy broadens the knowledge base concerning the extent and content of policy responses required. Those employed in the informal economy comprise all persons who, during a given reference period, were employed in at least one informal production unit, irrespective of their status in employment and whether it was their main or a secondary job.

**KILM 9. Unemployment:** The unemployment rate tells the proportion of the labor force that does not have a job and is actively looking for work. Together with the labor force participation rate (KILM 1) and employment-to-population ratio (KILM 2), it provides the broadest available indicator of economic activity and status in terms of labor markets for countries that regularly collect information on the labor force. The ILO defines the unemployed as all persons above a specified age who, during the reference period, were without work, currently available for work and seeking work. However, national definitions and coverage of unemployment can vary with regard to factors such as age limits, criteria for seeking work, and treatment of, for example, persons temporarily laid off, discouraged about job prospects or seeking work for the first time.

**KILM 10. Youth unemployment:** Youth unemployment is an important policy issue for many countries, regardless of the stage of development. For the purpose of this indicator, the term “youth” covers persons aged 15 to 24, while “adults” are defined as persons aged 25 and over. Youth unemployment is presented in the following ways: (a) the youth unemployment rate; (b) the youth unemployment rate as a percentage of the adult unemployment rate; (c) the youth share in total unemployment; and (d) youth unemployment as a proportion of the youth population. Taken together, the four indicators provide a comprehensive indication of the problems that young people face in finding jobs.

**KILM 11. Long-term unemployment:** Unemployment tends to have more severe effects the longer it lasts. Short periods of joblessness can normally be dealt with through unemployment compensation, savings and, perhaps, assistance from family members. Unemployment lasting a year or longer, however, can cause substantial financial hardship, especially when unemployment benefits either do not exist or have been exhausted. Long-term unemployment is not generally viewed as an important indicator for developing economies, where the duration of unemployment often tends to be short, due to the lack of unemployment compensation and the fact that most people cannot afford to be without work for long periods. Two separate measures of long-term unemployment are included: (a) those unemployed one year or more as a percentage of the labor force and (b) those unemployed one year or more as a percentage of the total unemployed (the incidence of long-term unemployment).

**KILM 12. Time-related underemployment:** Underemployment reflects underutilization of the productive capacity of the labor force. Time-related underemployment is defined as all persons in employment whose hours of work “are insufficient in relation to an alternative employment situation in which the person is willing and available to engage.” It is an important indicator for improving the description of employment-related problems, as well as assessing of the extent of utilization of available human resources in the production process. It also provides useful insights for the design and evaluation of employment, income and social programs. The indicator includes two measures—time-related underemployment as a percentage of the labor force and as a percentage of total employment.

**KILM 13. Inactivity:** The inactivity rate is defined as the percentage of the population that is neither working nor seeking work (that is, not in the labor force). The inactivity rate is usually reported for the age groups 15+, 15–24, 15–64, 25–54, 25–34, 35–54, 55–64 and 65+. The 25–54 age group is of particular interest since it is considered the “prime-age” group in which individuals are expected to be in the labor force, as they have typically completed their ed-

ucation but have not yet reached retirement age. The inactivity rate of women, in particular, tells us a lot about the social customs of a country, attitudes towards women in the labor force, and family structures in general. The inactivity rates, when added to the labor force participation rate (KILM 1) for the corresponding group, will equal 100 per cent.

**KILM 14. Educational attainment and illiteracy:**

An increasingly important aspect of labor market performance and national competitiveness is the skill level of the workforce. Information on levels of educational attainment is currently the best available indicator of labor-force skill levels. These are important determinants of a country's capacity to compete successfully in world markets and to make efficient use of rapid technological advances; they are also among the factors determining the employability of workers. This indicator reflects the levels and distribution of the knowledge and skills base of the labor force and population.

**KILM 15. Average monthly wages:** Information on average monthly wages represents one of the most important aspects of labor market information. Because wages are an important form of income accruing to a high proportion of the economically active population, information on wage levels is essential to evaluate living standards and conditions of life and work of the working age population. The indicator includes average monthly wages in nominal and in real terms, in local currency to avoid distortions caused by exchange rate fluctuations.

**KILM 16. Hourly compensation costs:** Average hourly compensation cost is a measure intended to represent employers' expenditure on the benefits granted to their employees as compensation for an hour of labor. These benefits accrue to employees, either directly—in the form of total gross earnings – or indirectly—in terms of employers' contributions to compulsory, contractual and private social security schemes, pension plans, casualty or life insurance schemes and benefit plans in respect of their employees. This latter group of benefits is commonly known as “non-wage benefits” or “non-wage labor costs.” The indicators within KILM 16 are concerned with the levels, trends and structures of employers' hourly

compensation costs for the employment of workers in the manufacturing sector. At both the national and international levels, labor costs are a crucial factor in the abilities of enterprises and countries to compete. When specific to the manufacturing sector, compensation costs serves as an indicator of competitiveness of manufactured goods in world trade.

**KILM 17. Labor productivity:** Productivity, in combination with hourly compensation costs, can be used to assess the international competitiveness of a labor market. Economic growth in a country or sector can be ascribed either to increased employment or to greater work efficiency by those who are employed. The latter can be described through data on labor productivity. Labor productivity, therefore, is a key measure of economic performance. An understanding of the driving forces behind it, in particular the accumulation of machinery and equipment, improvements in organization as well as physical and institutional infrastructures, improved health and skills of workers (“human capital”) and the generation of new technology, is important in formulating policies to support economic growth. Labor productivity is defined as output per unit of labor input.

**KILM 18. Poverty, income distribution, and the working poor:** Poverty can result when individuals are unable to generate sufficient income from their labor to maintain a minimum standard of living. The extent of poverty, therefore, can be viewed as an outcome of the functioning of labor markets. Because labor is often the most significant, if not the only, asset of individuals in poverty, the most effective way to improve the level of welfare is to increase employment opportunities and labor productivity through education and training. An estimate of the number of people in poverty in a country depends on the choice of the poverty threshold. However, what constitutes such a threshold of minimum basic needs is subjective, varying with culture and national priorities. Definitional variations create difficulties when it comes to making international comparisons. Therefore, in addition to national poverty measurements, KILM 18 presents data relative to the World Bank international poverty lines of US\$1 and US\$2 per person per day. The poverty gap is included as an

overall measure of the depth of poverty. The Gini index is also given, as it is a convenient summary measure of the degree of inequality based on either income or expenditure. Estimates of the “working poor”—defined as the proportion of employed per-

sons living in a household whose members are estimated to be below the poverty line—are also made available in KILM 18.

**Source:** Extracted from “Guide to Understanding the KILM,” [kilm.ilo.org/2011/download/GuidEN.pdf](http://kilm.ilo.org/2011/download/GuidEN.pdf).