The Philippine Labor Index:
Measuring The Country's Progress In Decent Work[1]

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ABSTRACT

The statistics covering the period 2001-2004 presented then have been updated to 2005. The paper chronicles the development of the Philippine Labor Index (PLI), from its conceptualization to the development of its measurement framework including the selection of statistical indicators deemed to translate the concept of decent work into easily understood characteristics of work taking into account national circumstances. It discusses the development of the index methodology, the selection of the final component indicators under the conceptual dimensions of decent work and their goal posts against which progress or deficit will be gauged.

Keywords: Philippine Labor Index, measurement framework, decent work, employment goals, component indicators, benchmarks, shortfall or gap approach, progress or deficit.

I. INTRODUCTION

In the Philippines, while the generation of macro-indicators on labor and employment statistics is relatively organized, mostly compliant with existing international standards, and done on a regular basis, the employment situation is traditionally described using a limited range of indicators, usually labor force participation rate, levels and rates of employment, underemployment and unemployment. These indicators sometimes send mixed signals, such that it can not be said with certainty if the situation has improved or not. A case in point is low unemployment rate but high underemployment or part-time employment rate. On the other hand, expanding the set of indicators may give rise to segmented analysis of the situation or different interpretations depending on the choice of variables. Thus there is an absence of a measurement framework consisting of a parsimonious list of indicators which can be used for analyzing the labor and employment situation of the country.

In the light of these considerations, the Philippine Labor Index (PLI) has been developed to serve as a summary measure for monitoring the country's progress in achieving the goals of decent work.

Specifically, the PLI provides a balanced and objective assessment of the collective efforts undertaken to achieve decent work. It is not intended merely to provide useful data for researchers but more importantly to generate awareness and advocacy for policy makers, program planners and other stakeholders to focus on labor and employment areas which need

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to be strengthened. Moreover, the PLI is seen as a complementary tool when related with other development indicators, such as growth in Gross Domestic Product (GDP) and Human Development Index (HDI) in monitoring the social and economic progress of the country particularly that of its working population.

II. THE PLI FRAMEWORK

The PLI Framework is patterned after the International Labour Organization's (ILO) conceptual framework on Decent Work.

But what is decent work?

Decent work is defined as **"opportunities for women and men to obtain decent and productive work in conditions of freedom, equity, security and human dignity"**.

The decent work concept evolved in response to the formidable social and labor challenges posed by globalization. It was introduced by ILO Secretary-General Juan Somavia in his first report to the 87th International Labour Conference in June 1999. Since then, it has become the overarching goal of ILO.

Decent work is a comprehensive concept of work and the workplace as it encompasses, with gender equality as a crosscutting objective, the concerns on work or employment itself, rights at work, social protection including occupational safety and health, and representation and social dialogue. Since productive and justly-remunerated work is a key element to poverty reduction and as work is a major part of people's lives in terms of their time, social integration and personal development, the integration of the decent work agenda in national development strategies according to ILO "is a means for achieving equitable, inclusive and sustainable development".

As contained in an ILO working paper "Measuring Decent Work with Statistical Indicators" decent work has six conceptual dimensions representing the quantitative and qualitative attributes of work. These are:

Opportunities for work - persons who need work are able to find work that covers all forms of economic activity including self-employment, unpaid family work and wage employment in both formal and informal sectors.

Freedom of choice of employment - work should be freely chosen and not forced on individuals; bonded and slave labor as well as child labor are unacceptable and should be eliminated *(Referred to as "Work in conditions of freedom" in the ILO paper)*.

Productive work - workers should have acceptable livelihoods that deliver fair incomes for themselves and their families while ensuring sustainable development and competitiveness of enterprises and countries.

Equity in work - women and men need to have equality of opportunity and treatment in work; it encompasses absence of discrimination at work and in access to work and ability to balance work with family life.

Security at work - safe workplaces should be ensured and workers' health, livelihoods and pensions should be safeguarded; there should be provisions for workers and their families for adequate financial and other protection in the event of health and other contingencies; it also recognizes workers' need to limit insecurity associated with the possible loss of work and livelihood.

Representation at work - workers should be treated with respect at work; they should be able to join organizations to represent their interests collectively, free to voice their concerns and participate in decision making about their terms and conditions of work. *(Referred to as "Dignity at work" in the ILO paper. It was re-named "Representation at work" as this term has more intuitive appeal than the other nomenclature. Further, it gives a more appropriate description of the component indicators under it.)*

The first two conceptual dimensions are concerned with the availability of work and the acceptable scope of work. The other four dimensions are concerned with the extent to which the work is decent and the quality of employment.

III. THE DEVELOPMENT OF THE PHILIPPINE LABOR INDEX

The process of developing the PLI was long and cautious. It involved consultations with the tripartite constituents and other partners, technical discussions and presentations to ensure that the index will consist of indicators that can best describe the Philippine labor and employment situation with an acceptable degree of consistency and accuracy.

In March 2005, the National Tripartite Advisory Committee on Decent Work (NTAC), chaired by the Department of Labor and Employment (DOLE), expressed support for the development of the Philippine Labor Index as it could be a basis for gauging the impact or validating the success of the National Plan of Action for Decent Work. One Committee member said that the development of the PLI highlights the comparative advantage of the Philippines in its statistical capacity to generate such data with other countries and that it is an important contribution not only to the ASEAN but also to other Asian countries.

The Philippines is one of the eight countries covered by the ILO Decent Work Pilot Programme. The other countries are Bahrain, Bangladesh, Denmark, Ghana, Kazakhstan, Morocco and Panama.

The PLI was presented to the Inter-Agency Committee on Labor, Income and Productivity Statistics in June 2006 where it was reviewed and approved for endorsement to the Executive Board of the National Statistical Coordination Board, the policy making and coordinating body on statistical matters in the country.

In November 2006, the NSCB Executive Board approved the methodology for the generation of the PLI. As such, the Philippine Labor Index is now part of the official roster of Philippine statistics.

Highlights of the PLI Development

The following is a chronicle of events of the PLI development:

2001   DOLE Secretary Patricia Sto. Tomas expressed the need to come up with one indicator for decent work to be referred to as the Philippine Labor Index

2002   TUCP Deputy Secretary General Cedric Bagtas suggested the decent work framework of ILO as guide in designing the measurement framework for the PLI

2003   ILO approved the project "Development of a Philippine Labor Index based on the Decent Work Framework"; UNDP provided funding assistance thru ILO

          ➤ Measurement framework on decent work developed

2004   PLI component indicators determined, index methodology developed and indices constructed

2003-   Conduct of series of consultations, briefings, presentations with tripartite
2006   constituents, data producers and stakeholders and technical evaluation sessions

2005   National Tripartite Advisory Committee on Decent Work expressed support for the PLI development

2006   Inter-Agency Committee on Labor, Income and Productivity Statistics reviewed and approved the PLI methodology for endorsement to the Board of NSCB

          ➤ NSCB Executive Board approved the methodology for the generation of the PLI (NSCB Resolution No. 17 s.2006)

2007   Signing of the Memorandum of Understanding on the "Provision of the Data Requirements of the Philippine Labor Index and Decent Work Status Report"

The PLI Project Team is composed of technical staff from the Bureau of Labor and Employment Statistics and the Institute for Labor Studies. The measurement framework on decent work (Phase 1 of the Project) was developed under the guidance of former National Statistics Office (NSO) Deputy Administrator Nelia Marquez while the construction of the indices (Phase 2) was undertaken by Dr. Ana Maria Tabunda of the University of the Philippines School of Statistics.

Measurement Framework of Decent Work

Phase 1 of the PLI project focused on the development of the measurement framework. It included the conduct of an inventory of possible statistical indicators on decent work and assessment of the proposed indicators and organization of a series of consultations with tripartite constituents and stakeholders.

Starting with the 30 suggested indicators in the ILO working paper classified along 11 groups of statistical indicators, the inventory was expanded to include 89 indicators deemed

applicable to local conditions. After the series of consultations and evaluation workshops, the selected 64 indicators were categorized into the 6 dimensions of decent work. In reality, the indicators number more than this as most of the indicators have sub-categories, e.g., percent share of workers covered by social security schemes were further classified into: total, private, public sector, but this was counted as one indicator.

Eventually, 17 indicators were identified to comprise the PLI and 47 were considered as non-core or support variables to validate or sharpen the analysis of the core indicators.

The ILO conceptual framework of decent work focuses on the poorest and most vulnerable sector of society, thus its measurement is biased towards monitoring the behavior of negative indicators rather than the positive ones. Since one of the objectives of the Project is to construct a summary measure of the collective efforts/achievements of the Philippines in decent work across time, then the movement of the positive indicators in monitoring the status of decent work is equally important and has to be considered as well.

Thus, the indicators in each dimension were grouped into positive indicators (to reflect progress in decent work) and negative indicators (to show deficits).

In the selection of indicators on decent work, the Team took into consideration the following qualities of a good indicator which were recommended by one paper presenter during the series of consultation workshops. These are:

Relevance - must be responsive and relevant to the area of interest or for the purpose by which it is used to monitor the achievement of existing objectives;

Sensitivity - must be able to reflect actual changes in absolute levels or trends related to the aspects or conditions implicit in the goals or areas of concern;

Objectivity - must not be biased. The indicator should be capable of measuring a specific attribute or characteristic for purposes of determining the extent to which an objective has been attained. It should also be easily verifiable, factual, accurate and valid;

Comprehensiveness - must capture a wide range of interrelated socio-economic-demographic factors;

Measurability - must be capable of being expressed in quantifiable form using prevailing standard units so that it could be duplicated;

Data availability - must be readily available and there is continuity of series particularly if generation of annual index is required;

Simplicity - must be easy to understand and interpret. There should be no room for misinterpretation or misunderstanding what the indicator intends to portray; and

Acceptability - must have the concurrence of all the stakeholders.

The Team was also guided by some pointers presented by one of the authors of the ILO working paper during his country mission in 2003 to assist in the elaboration of the labor index. These are: i) consider a limited number of indicators, one or at most two per group; ii) restrict measurement to outcomes rather than inputs and processes (This means that conventions, legislation, and institutional arrangements need not be considered. Inputs and process evaluations may be left to the Decent Work Status Report); iii) measure change as opposed to level (This makes the results less vulnerable to the choice of indicators. This will be less vulnerable also to possible controversies surrounding particular concepts and definitions. But more importantly, it provides a sound basis for interpretation of the results); and iv) rely on a single source of information for index calculation, preferably the Labor Force Survey (LFS) of the NSO, and for evaluation, from multiple sources.

Construction of the Indices

The second phase of the PLI Project focused on delimiting the identified core indicators, come up with indices for each of the six conceptual dimensions of decent work and an overall index on Philippine labor, and validating these indices. For these, quarterly data for the 16 regions of the country were used as validation of the indices will be facilitated by comparing the regions on the indicators. However, the reorganization of the administrative regions in Mindanao that resulted in the regrouping of the areas in Regions X, XI, XII and Autonomous Region of Muslim Mindanao necessitated the use of data only for the years 2001 and 2002 for comparability considerations. There were thus 128 data points for each of the indicators in the data set. The outputs of the study though were national level indices and cover the period 1998 to 2002. At the time of the index construction, data estimates from the LFS have been adjusted based on the 1995 Census-based population projections and the revised statistics were available only as far back as 1998.

In determining the indicators to retain for a given dimension of decent work, the study first used factor analysis (FA) on all indicators for the dimension **(instead of just the core indicators identified in Phase 1)** in order to identify the indicators that are so highly correlated that they may be considered to represent an underlying factor. *(For example, unemployment to working age population, unemployment rate and youth unemployment rate constitute the unemployment factor.)* Only those indicators with "loadings" or coefficients exceeding 0.5 in absolute value were considered for retention. Principal components analysis (PCA) was then performed on the reduced set of indicators to determine which indicators contribute the most to explaining variation in work conditions among the regions (only those with "loadings" exceeding 0.3 in absolute value were candidates for retention). Running PCA on the whole set of core and non-core indicators also served to identify indicators which may be important to explaining total variation but not common variation as FA does. These tests were done as the presence of too many indicators will weaken the sensitivity of the indices to the aspects of the labor situation being measured aside from the difficulty entailed in monitoring many indicators.

Technical sessions were also conducted by the Project Team where measurement issues and availability of data were taken into consideration in the choice of component indicators for the PLI. A case in point is frequency rate of occupational injuries. While it could be an indicator under the Security at Work dimension, annual data is not available from surveys and administrative data, though available annually, has limited coverage. Likewise,

statistics on balancing work and family life are not regularly produced though there may be studies on this area.

In general, indicators with low coefficient of variation (CV) were chosen. However, in the case of the Representation at Work dimension, the indicators were retained despite the high CVs for lack of other less variable indicators.

There were 66 indicators considered in the series of statistical tests taking into account correlations among the variables. Based on these tests and team evaluation, the number was reduced to **18 indicators for index construction.**

The PLI Indicators

The 18 component indicators across the six conceptual dimensions of decent work used for the construction of the indices are:

Opportunities for Work
- Unemployment to working age population ratio
- Percentage of employees to total employed
- Percentage of part-time workers to total employed

Freedom of Choice of Employment
- Economic activity rate of children 10-14 years old
- School attendance rate of children 10-14 years old

Productive Work
- Percentage of employed working 40-48 hours a week to total employed
- Visible underemployment rate
- Percentage of low-paid employees to total employees

Equity in Work
- Female-male ratio in non-agricultural wage employment
- Industry-agriculture hourly basic pay ratio
- Female-male hourly basic pay ratio for clerical, sales and service occupations

Security at Work
- Percentage of permanently employed to total employed
- Percentage of workers covered by social security schemes to total self-employed and employees
- Permanently displaced workers due to economic reasons per 1,000 employees in private establishments

Representation at Work
- Union density rate in private and government establishments
- Collective bargaining coverage rate in private establishments
- Workdays not worked due to strikes and lockouts per worker
- Percentage of worker association membership to total employed

The Index Methodology

The gap or shortfall approach, also used in the computation of the Human Development Index (HDI), was chosen as the index methodology because it is simple, flexible and appropriate.

For this purpose, benchmarks were established for each component indicator of the PLI. The minimum and maximum values specified for each component indicator are the lowest and highest values that an indicator can possibly attain. These benchmarks were determined based on existing theoretical considerations, acceptable norms and value judgment including the analysis of historical data.

The plus (+) or minus (-) signs refer to the orientation of the indicator. A positive sign means that increasing values of the indicator indicate improvement. On the other hand, a negative sign means that increasing values of the indicator reflect deterioration. The figures in bold italics in Table 1 are the desired targets or goalposts. The coefficients of variation (CVs) of their annual data are likewise shown.

TABLE 1a: Benchmarks of the PLI Component Indicators

Orientation	Dimension and Indicator	Minimum	Maximum	CV
Opportunities for Work				
-	Unemployment to working age population ratio	*5*	95	6.9
+	Percentage of employees to total employed	20	*80*	1.4
-	Percentage of part-time workers to total employed	*20*	80	6.0
Freedom of Choice of Employment				
-	Economic activity rate of children 10-14 years old	*1*	99	6.3[a]
+	School attendance rate of children 10-14 years old	0	*100*	1.3
Productive Work				
+	Percentage of employed working 40-48 hours a week to total employed	20	*80*	4.8
-	Visible underemployment rate	*5*	95	2.8
-	Percentage of low-paid employees to total employees	*0*	45	1.8

a – refers to coefficient of variation of "Employment rate of children 10-14 years old". This was replaced due to the discontinuation of the data collection on unemployed children 10-14 years old starting the April 2005 round of the Labor Force Survey. Economic activity rate of children 10-14 years old is defined as the proportion of employed children 10-14 years old to its respective household population.

TABLE 1a: Benchmarks of the PLI Component Indicators *(cont'd.)*

Orientation	Dimension and Indicator	Minimum	Maximum	CV
Security at Work				
+	Percentage of permanently employed to total employed	10	*90*	0.7
+	Percentage of workers covered by social security schemes to total self-employed and employees	0	*100*	9.4
-	Permanently displaced workers due to economic reasons per 1,000 employees in private establishments	*5*	95	8.2
Representation at Work				
+	Union density rate for employees in private and government establishments	0	*20*	3.6
+	Collective bargaining coverage rate for employees in private establishments	0	*20*	9.9
-	Workdays not worked due to strikes/lockouts per worker	*1*	26	36.2
+	Percentage of workers association membership to total employed	0	*5*	10.7

The benchmarks for the component indicators for Equity in Work dimension are presented separately. These are not the minima or maxima but the absolute difference from the benchmark of one (1). Ratios above or below the reference value (ideal ratio) indicate inequity in work.

TABLE 1b: Benchmarks of the PLI Component Indicators

Orientation	Dimension and Indicator	Reference	Max|actual value-1|	CV
Equity in Work				
+/-	Female-male ratio in non-agricultural wage employment	1	1	1.4
+/-	Industry-agriculture hourly basic pay ratio	1	2	3.0
+/-	Female-male hourly basic pay ratio for clerical, sales and service occupations	1	1	2.5

The Formulation of the Indices

The derivation of the index of the component indicator in a conceptual dimension is shown below.

Component Index = 100 - Shortfall

$$= 100 - \left[100 \times \left(\frac{maximum - actual\ value}{maximum - minimum}\right)\right]$$

$$= 100 \times \left(1 - \frac{maximum - actual\ value}{maximum - minimum}\right)$$

$$= 100 \times \left(\frac{maximum - minimum - maximum + actual\ value}{maximum - minimum}\right)$$

$$= 100 \times \left(\frac{actual\ value - minimum}{maximum - minimum}\right)$$

The shortfall is the distance that the actual value of the observation has traveled towards the maximum value relative to the total distance it has to go to achieve the ideal situation of 100. To put it another way, the index is the distance that the value of the observation has gone from its minimum value relative to the total distance.

This formulation, however, has to be modified for indicators that do not have a positive orientation, meaning that increasing values for such indicator would mean deterioration in the aspect it intends to measure, e.g., proportion of low paid employees. In this instance, the indicator has to be translated such that all indicators would have conformable scales or uniformly positive orientation with larger values indicating more favorable outcomes. The component index is thus:,

$$Component\ Index = 100 \times \left(\frac{translated\ value - minimum}{maximum - minimum}\right)$$

where the translated value is the actual value subtracted from 100 (except for the percentage of low paid employees to total employees and the number of workdays not worked due to strikes/lockouts per worker, for which the actual values are subtracted from 45 and 27, respectively).

For indicators expressed as ratios as in the case of indicators in the Equity in Work dimension, a slightly different approach is used which nevertheless follows the shortfall or gap principle. The ideal or reference value of the indicator is one such that ratios above or below this indicate inequity in work. The indicator index takes the form,

Component Index = 100 − Shortfall

$$where,\ Shortfall = 100 \times \frac{|actual\ value - 1|}{maximum\ |actual\ value - 1|}$$

and the values of the denominator have been predetermined as indicated earlier.

Each dimension index of decent work in the shortfall approach is computed simply by taking the average of the index values of its component indicators.

$$Dimension\ Index = \frac{\sum_{i=1}^{n} Component\ Index_i}{n}$$

where n is the number of indicators in the dimension

After deriving the index for each dimension using the shortfall approach, the overall labor index or PLI is computed as the sum of the weighted average of the dimension indices. The average of the indices on Opportunities for Work and Freedom of Choice of Employment is given a weight of 0.5 while the average of the indices for the four other dimensions also has a weight of 0.5. This simple weighing scheme is based on the argument that quantity and quality aspects are equally important in achieving decent work.

$$PLI = 0.5\left(\frac{\sum_{i=1}^{2} Dimension\ index_{D_i}}{2}\right) + 0.5\left(\frac{\sum_{i=3}^{6} Dimension\ Index_{D_i}}{4}\right)$$

where:

D_1 = Opportunities for Work   *D_4 = Equity in Work*
D_2 = Freedom of Choice of Employment   *D_5 = Security at Work*
D_3 = Productive Work   *D_6 = Representation at Work*

IV. THE 2001-2005 PHILIPPINE LABOR INDEX

The Philippine Labor Index and the dimension indices being presented are for 2001 to 2005 as these are the years for which data are currently available for all the component indicators of the PLI. Statistics on most of the indicators are directly sourced from the Labor Force Survey (LFS) of the National Statistics Office (NSO) while the others are derived based on LFS data and administrative sources *(See Table 4 - Basic Data Sources and Definitions of PLI Component Indicators)*.

The Index Values

The overall index or the PLI throughout the 5-year period ranged from 71 to 74 and the country's deficit from the ideal index of 100 was around 27. The indices on Freedom of Choice of Employment recorded the highest values averaging to 93 over the 5-year period and consequently the smallest shortfall at 7. Indices for Representation at Work remained to be the lowest at about 40 (conversely it has the largest shortfall at 60) followed by those on Productive Work at close to 62. On the other hand, the index values for Opportunities for Work, Equity in Work and Security at Work were at least 72.

TABLE 2: The Philippine Labor Index, 2001-2005

Dimension	2001	2002	2003	2004	2005	Annual Average
Philippine Labor Index	**71.94**	**71.34**	**73.10**	**73.58**	**73.49**	**72.69**
Opportunities for Work	72.46	71.89	73.04	74.10	73.75	73.05
Freedom of Choice of Employment	92.54	92.43	93.13	91.99	92.57	92.53
Productive Work	61.69	60.83	61.64	61.80	62.44	61.68
Equity in Work	75.33	75.33	74.83	76.83	77.67	76.00
Security at Work	72.25	72.09	71.55	72.67	72.72	72.26
Representation at Work	36.20	33.83	44.48	45.15	42.49	40.43

Notes:
1. Statistics on unemployment used to derive unemployment to working age population ratio, one of the component indicators in the opportunities for work dimension, are based on the old definition of unemployment.
2. Shortfall is 100 - Index value.

Source of data: Bureau of Labor and Employment Statistics.

Progress in Decent Work

The PLI and its dimension indices provide indication on how close the country is in achieving its goals of decent work. However, the more important consideration is to monitor their evolution over time, that is, the **progress made or the rates of change as opposed to levels** as these would indicate the sustainability of efforts in achieving the labor and employment goals.

TABLE 3: Rates of Change in the PLI and its Dimension Indices, 2002-2005

(in percent)

Dimension	2002	2003	2004	2005	Annual Average
Philippine Labor Index	**(0.83)**	**2.47**	**0.66**	**(0.12)**	**0.55**
Opportunities for Work	(0.79)	1.60	1.45	(0.47)	0.45
Freedom of Choice of Employment	(0.12)	0.76	(1.22)	0.63	0.01
Productive Work	(1.39)	1.33	0.26	1.04	0.31
Equity in Work	0.00	(0.66)	2.67	1.09	0.78
Security at Work	(0.22)	(0.75)	1.57	0.07	0.17
Representation at Work	(6.55)	31.48	1.51	(5.89)	5.14

Source of data: Bureau of Labor and Employment Statistics.

The Philippine Labor Index recorded an annual average growth of 0.55% from 2002 to 2005. Highest progress was observed in the index of Representation at Work at 5.14% due to the substantial improvement in the index in 2003 from its year-ago level attributed to the

marked drop in the actual observations on workdays not worked due to strikes and lockouts (one of the component indicators in the dimension). The rest of the dimension indices except for Security at Work index (0.78%) recorded improvements below half of a percentage point.

The annual rates of change of the PLI and its dimensions had erratic patterns[3] possibly indicating the lack of sustainable interventions over the time period reviewed.

V. COMPARISONS WITH RELATED INDICATORS

The PLI is viewed to complement other development indicators such as GDP growth and the HDI in monitoring the social and economic progress of the country particularly of its working population.

GDP and PLI Growth Rates

To show the relationship, comparisons were done for the rates of change in the PLI and GDP growth from 2002 to 2005. The data show parallel movements in these two indicators in 2002 and 2003 with the PLI exhibiting lower growth rates.

Figure 1: Annual Rates of Change in GDP and PLI, 2002-2005
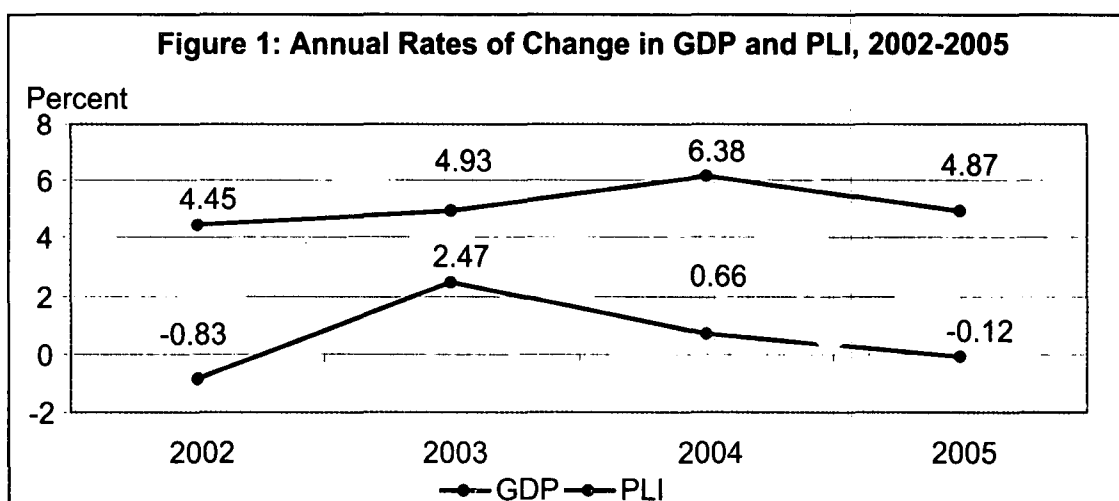
Sources of data: The National Accounts of the Philippines, National Statistical Coordination Board, Bureau of Labor and Employment Statistics.

However, as GDP growth continued to accelerate in 2004, rate of change of PLI markedly dropped. The similarity in the behavior of the two was again repeated in 2005 when GDP growth declined and that of the PLI dropped further than its 2004 rate of change. Further, GDP growth rate averaged around 5% annually over the period in review while the PLI average rate of change was only 0.55%. While there are only four pairs of observations, the movements of the PLI adds to the analysis of the country's situation particularly that of labor which otherwise would be masked by looking at economic growth only.

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[3] To determine what changes in the indices are **statistically significant**, sufficiently long data series are needed. For this, a running standard deviation has to be computed. For the time being, the behavior of the indices to drastic changes in the labor situation can give some indications of their sensitivity to the situation.

HDI and the PLI

Another comparison is between the PLI and the HDI for the Philippines as computed by the United Nations Development Programme. The HDI is a summary measure of human development in three selected aspects of human life – life expectancy, education and income. The index values show proximity with each other.

Using the HDI classification (in the absence of similar categorization for labor indices across countries), the 2004 index values placed the Philippines in the medium development stage
(index of 0.50-0.79). A value below this range or above it situates a country in a low or developed stage, respectively.

PLI   0.736 *(expressed in HDI units for comparability)*
HDI   0.763

The comparisons show an apparent data coherence of the PLI with the two development indicators of GDP growth and HDI and its potential as a tool in monitoring the progress made towards achieving the goal of increasing employment opportunities, promoting decent work and increasing the productivity of people living in poverty.

VI. SUMMARY AND RECOMMENDATIONS

Globalization that demands enhanced competitiveness and structural adjustments in the economy has inevitably resulted to phenomena such as work precariousness, informal employment, among others. Necessarily, policy making and program planning would require a much wider range of employment and labor indicators to measure and analyze employment problems and conditions of work in the country. This implies the need to modify the traditional framework of indicators.

The DOLE-PLI Project, a pioneering effort in the international arena, came up with such a measurement framework that encompasses the quantitative and qualitative attributes of decent work. More than that, it was able to develop a summary measure of the collective efforts or achievements of the country in pursuing its labor and employment goals which is anchored on the decent work framework called **Philippine Labor Index**.

In the absence of an existing international standard, the PLI can best describe the country's achievements in decent work considering...

- that 12 of the 18 component indicators of the PLI came from the pool of core indicators identified to monitor the status of decent work in the country *(Phase 1 of the project)*[4]

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[4] Opportunities for Work **(1** out of 3 indicators): unemployment to working age population ratio; Freedom of Choice of Employment **(1** out of 2): school attendance rate of children 10-14 years old; Productive Work **(3** out of 3): percentage of employed working 40-48 hours a week to total employed; visible underemployment rate; percentage of low-paid employees to total employees; Equity in Work **(2** out of 3): female-male ratio in non-agricultural wage employment; female-male hourly basic ratio for clerical, sales and service occupations; Security at Work **(2** out of 3):

were selected to comprise the PLI using statistical techniques *(Phase 2)*, indicates a high concordance between subject matter considerations and objective statistical scrutiny;

- that the number of indicators is relatively manageable, their measurements transparent, the index methodology simple and most of the data come from one source, facilitate data collection and interpretability; and

- that there is an almost equal mix of positive and negative oriented indicators reflecting the ability of the index to capture progress and deficits in decent work at the same time.

As in any macro-indicator, the PLI and its dimension indices are **signals** for policy makers and program planners on areas needing attention. For example, the Productive Work dimension needs closer examination since this aspect covers underemployment, a problem more serious than unemployment, and workers still receiving pay below the minimum basic pay. The inequity in pay between agriculture and industry that is related to productivity issues, in the Equity in Work dimension is another area of interest.

In the Security of Work dimension, attention should be focused on the expansion of social security membership as the coverage rates are still low relative to what is contemplated under existing laws. In the Representation at Work dimension, concern is raised on the low proportions of worker participation in non-establishment based associations. Although the Freedom of Choice of Employment dimension has the lowest shortfall, the efforts to eliminate child labor and other forms of commercial exploitation should be sustained. In the Opportunities for Work dimension, concern is also raised on the need to create more full-time work as the proportions of part-time employment are still substantial and this reduces workers' productivity and their incomes.

Studies should be initiated to analyze the cause and effect relationships between the PLI component indicators, its supporting or non-core indicators (considering gender differentials as well) and other economic and social measurements. These efforts will yield an integrated diagnosis of the labor and employment problems ensuing from globalization and consequently serve as guide in designing and implementing appropriate, efficient and effective policies and programs to achieve decent work.

But central to all these is the strengthening of the data collection and processing systems and their continual improvement to ensure that quality statistics are produced (not only for the PLI). In particular, more resources must be provided to the Labor Force Survey that has been identified as the main source of statistics on decent work. Essential too is the need to strengthen and enhance the accuracy and timeliness of data collected from administrative records. Greater advocacy work and inter-agency linkages have to be undertaken not only for required data sets to be generated and released on time but also to solicit substantive inputs in fine-tuning the PLI. These will require strong collaboration with data providers both inside and outside of DOLE.

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percentage of permanently employed to total employed; percentage of workers covered by social security schemes to total self-employed and employees; Representation at Work (**3** out of 4): union density rate in private and government establishments; collective bargaining coverage rate in private establishments; workdays not worked due to strikes and lockouts per worker.

VII. CONCLUDING REMARKS

As in any developmental work, the PLI indicators require periodic assessment for their choice is crucial in capturing the actual situations of workers. In some future time or under different economic and social conditions, a new set of indicators and consequently new benchmarks or limits may evolve. But presently, the PLI indicators are the "best descriptors" of the labor and employment situation and the PLI is deemed as the composite measure in monitoring the country's progress towards achieving the goals of decent work.

In conclusion, as the Philippine Labor Index endeavors to measure progress in decent work, all efforts related to it are work in progress.

TABLE 4: Basic Data Sources and Definitions of PLI Component Indicators

Dimension and Indicator	Source of Basic Data	Definition
Opportunities for Work		
Unemployment to working age population ratio	National Statistics Office (NSO), Labor Force Survey (LFS)	(Unemployed 15 years old and over / Household population 15 years old and over) x 100%
Percentage of employees to total employed	National Statistics Office (NSO), Labor Force Survey (LFS)	(Wage and salary workers) / Total employed) x 100% *Note: Employees or wage and salary workers (latter nomenclature used in LFS) consist of those who worked for private households, private establishments, government/government corporations and family-operated farm or business.*
Percentage of part-time workers to total employed	National Statistics Office (NSO), Labor Force Survey (LFS)	(Employed working less than 40 hours a week / Total employed) x 100%
Freedom of Choice of Employment		
Economic activity rate of children 10-14 years old	National Statistics Office (NSO), Labor Force Survey (LFS)	(Employed children 10-14 years old / Household population 10-14 years old) x 100%
School attendance rate of children 10-14 years old	National Statistics Office (NSO), Labor Force Survey (LFS)	(Children 10-14 years old currently attending school / Household population 10-14 years old) x 100%

TABLE 4: Basic Data Sources and Definitions of PLI Component Indicators (cont'd.)

Dimension and Indicator	Source of Basic Data	Definition
Productive Work		
Percentage of employed working 40-48 hours a week to total employed	National Statistics Office (NSO), Labor Force Survey (LFS)	(Employed working 40-48 hours a week/ Total employed) x 100%
Visible underemployment rate	National Statistics Office (NSO), Labor Force Survey (LFS)	(Employed working less than 40 hours a week and still wanting additional work / Total employed) x 100%
Percentage of low-paid employees to total employees	National Statistics Office (NSO), Labor Force Survey (LFS)	(Wage and salary workers with hourly basic pay below ½ of the median hourly basic pay / Total wage and salary workers) x 100% *Note: Hourly basic pay per employee = Daily basic pay / Normal working hours per day*
Equity in Work		
Female-male ratio in non-agricultural wage employment	National Statistics Office (NSO), Labor Force Survey (LFS)	[(Employed females in non-agricultural wage employment / Total employed females in non-agriculture)] / [(Employed males in non-agricultural wage employment / Total employed males in non-agriculture)]
Industry-agriculture hourly basic pay ratio	National Statistics Office (NSO), Labor Force Survey (LFS)	Hourly basic pay of industry sector / Hourly basic pay of agricultural sector *Note: Industry sector consists of mining and quarrying; manufacturing; electricity, gas and water supply; and construction. Agricultural sector consist of agriculture, forestry and hunting; and fishery.*
Female-male hourly basic pay ratio for clerical, sales and service occupations	National Statistics Office (NSO), Labor Force Survey (LFS)	Hourly basic pay of female wage and salary workers in clerical, sales and service occupations / Hourly basic pay of male wage and salary workers in clerical, sales and service occupations

TABLE 4: Basic Data Sources and Definitions of PLI Component Indicators *(cont'd.)*

Dimension and Indicator	Source of Basic Data	Definition
Security at Work		
Percentage of permanently employed to total employed	National Statistics Office (NSO), Labor Force Survey (LFS)	(Employed with permanent nature of employment / Total employed) x 100% *Note: Permanent employment refers to work that is expected to last for one year or longer.*
Percentage of workers covered by social security schemes to total self-employed and employees	Administrative Reports-Social Security System, Government Service Insurance System, Armed Forces of the Philippines Retirement and Separation Benefits System, Philippine National Police, Bureau of Fire Protection and Bureau of Jail Management and Penology; NSO-LFS	[(Private sector members + government sector members) / (Wage and salary workers + self-employed)] x 100% *Note: Private sector (SSS): paying members except voluntary members or those separated from employment or ceased to be self-employed, OFWs and non-working spouses of SSS members Government sector (GSIS and uniformed personnel): National/GOCC/LGU workers including civilian personnel + uniformed personnel*
Permanently displaced workers due to economic reasons per 1,000 employees in private establishments	Bureau of Labor and Employment Statistics (BLES), Administrative Reports-Job Displacement Monitoring System (JDMS); NSO-LFS	(Permanently displaced workers due to economic reasons / Wage and salary workers in private establishments) x 1,000

TABLE 4: Basic Data Sources and Definitions of PLI Component Indicators (cont'd.)

Dimension and Indicator	Source of Basic Data	Definition
Representation at Work		
Union density rate in private and government establishments	Administrative Reports-Bureau of Labor Relations (BLR); NSO-LFS	(Union members in private establishments and government / Wage and salary workers in private establishments and government) x 100%
Collective bargaining coverage rate in private establishments	Administrative Reports-BLR; NSO-LFS	(Workers covered by CBAs in private establishments / Wage and salary workers in private establishments) x 100%
Workdays not worked due to strikes/lockouts per worker	Administrative Reports-National Conciliation and Mediation Board	Workdays not worked due to strikes or lockouts / Total employment in establishments involved in strikes or lockouts *Note: Workdays not worked refer to total amount of time not worked, in terms of workdays, by workers directly involved for the full duration of the strikes or lockouts.*
Percentage of workers association membership to total employed	Administrative Reports-BLR; NSO-LFS	(Members of workers associations registered with the DOLE / Total employed) x 100%

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