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Labor Policy Analysis for Jobs Expansion and Development

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Philippine Institute for Development Studies
Surian sa mga Pag-aaral Pangkaunlaran ng Pilipinas

Labor Policy Analysis for Jobs Expansion and Development

*Vicente B. Paqueo, Aniceto C. Orbeta, Jr.
Leonardo A. Lanzona, Jr. and Dean Gerard C. Dulay*

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Labor Policy Analysis For Jobs Expansion and Development

Vicente Paqueo, Aniceto Orbeta, Leonardo Lanzona and Dean Dulay

Abstract

The Philippines is at a crossroad. It can choose to continue to follow current unrealistic policies that despite good intentions have been shown to be actually detrimental to the poor. Or, it can elect to try another development path to get a better chance at reducing poverty.

This study proposes a 12-point agenda, conveniently referred to as the Jobs Expansion and Development Initiative (JEDI) for poverty reduction. JEDI has two objectives. One is to expand gainful jobs through the acceleration of labor intensive production, particularly, the manufacturing of tradable commodities. The other is to improve investments in education and other human capital development and sustain total factor productivity gains. These objectives require inter alia minimum wage reform, which should be undertaken immediately, while investors are looking for new places to locate labor intensive production and the Philippine economy is getting another look as a potential destination.

The study recognizes the Filipinos aspirations for secure jobs with decent wages. But it challenges the idea that imposing minimum wages and other current labor regulations should be the weapons of choice. They do not work; worse, there is preponderant evidence of its detrimental consequences. Alternatives should, therefore, be considered, such as better education, increased labor intensive manufacturing, and greater opportunities for training on the job. Arguably, alternatives like these might take time. Consequently, bridging social protection programs need to be implemented in the meantime to help the poor directly with their subsistence needs. For this, instead of imposing mandatory minimum wages, the paper points out that it would be better to use direct and temporary income subsidy, carefully targeted to extremely poor households to meet suitable norms that society considers a public good. Such an approach would be both efficient and equitable, conforming to the general principle of public economics that a public good should be financed by general tax revenues.

The study concludes that the time has come for the country to leave the beaten path and try new approaches that would re-balance current labor laws and practices to expand gainful jobs and minimize unintended consequences detrimental to the poor, the young, the women, the less educated and the unorganized workers.

Key words: Jobs, Minimum Wages, Labor Market Policy, Human Resource Policy

JEL: J24, J31, J32, J38

Labor Policy Analysis for Jobs Expansion and Development

*Vicente B. Paqueo, Aniceto C. Orbeta, Jr., Leonardo A. Lanzona, Jr.
and Dean Gerard C. Dulay¹*

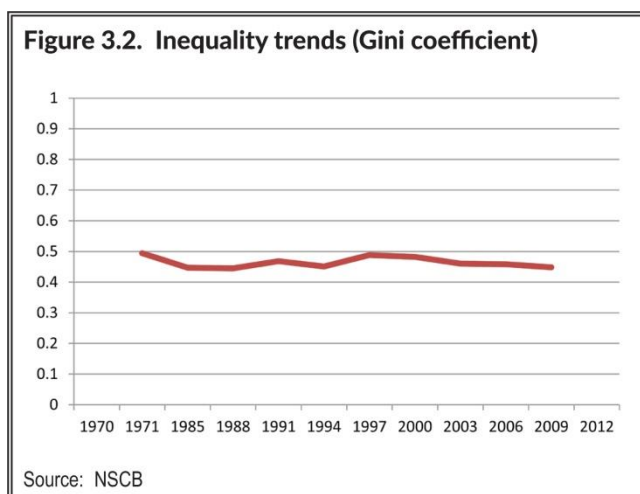
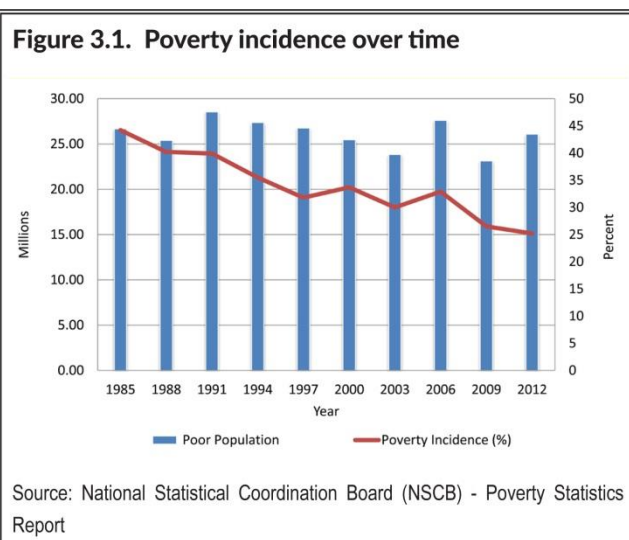
Amid the uncertain and slow recovery of the global economy from the Great Recession of 2008, the Philippines achieved rapid GDP growth of 5.1 percent between 2008 and 2013. This achievement came as a result of improved macroeconomic fundamentals and better financial management. The country's investment rating has been upgraded, lowering its cost of borrowing and boosting business confidence. These achievements have led to optimistic views of the Philippines as the next tiger or as an economy poised for sustained takeoff.

But whether its takeoff will reach escape velocity or burst like a bubble is an open question. There are early signs that the economy could be headed for sustained rapid growth, but there are also notable risks.² In any case, it is obvious that at this juncture of its history, the Philippines has another opportunity to choose two different paths. One can lead to sustained and rapid growth with massive expansion of poverty-reducing jobs. The other will almost surely keep the Philippines in the same familiar road of continued high inequality and poverty incidence. The answer relies on the wisdom and political calculations of the country's politicians and its influential citizens.

Regardless of how fast growth will turn out to be, it should be accompanied by transformative structural policy changes and programs that would enable the poor to escape the vicious cycle of poverty. The concern is that despite rapid economic growth, income inequality and poverty incidence have remained high and stable in the last two decades after significantly declining previously (Figures 3.1 and 3.2).

¹ Visiting Senior Research Fellow, Senior Research Fellow, Philippine Institute for Development Studies (PIDS); Professor, Ateneo de Manila University, and Research Consultant, PIDS, respectively. This paper is prepared as the theme chapter in the 2013 PIDS Economic Policy Monitor. We are grateful to the comments given by Professors Gerardo Sicat, Dante Canlas, Emmanuel Esguerra and Fernando Aldaba during the conceptualization of this study. Views expressed here are of the authors and not of the institutions they are affiliated with. Excellent research assistance of Sol Cortes and Georgina Gonzales is gratefully acknowledged. Janet Cuenca and Aubrey Tabuga assisted in finding materials for the Singapore Workfare Income Support (WIS) Scheme.

² See Raul Fabella's "Green shoots" in *Introspective*, BusinessWorld, February 9, 2014.



It is widely believed that this failure to attain greater inclusiveness is due to widespread joblessness among the poor and the country's inability to rapidly expand job opportunities. The issue of joblessness and "jobless growth" has resonated strongly with critics and supporters alike of the Aquino administration, as well as with the country's development partners like the World Bank, Asian Development Bank (ADB), and International Labour Organization (ILO). Not surprisingly, the resonance of the issue has led to a chorus calling for rapid and massive creation of jobs. As a result, the government quickly obliged and pivoted rhetorically, making the jobs issue a central feature of its development strategy for inclusive growth.³

Two questions arise at this point. Firstly, what does the data say about the nature of the jobs issue? Secondly, how does one address the issue, given the political configuration and historical experience of the Philippines? This article seeks to clarify the jobs issue and articulate a program to address it.

The paper is organized as follows. The next section defines the jobs issue, its importance, and its dimensions. The third section presents data on aggregate outputs, employment,

³ See *Philippine Development Plan 2011–2016*.

productivity, wages, and relative input prices. It highlights certain macroeconomic trends that are relevant to the jobs and poverty challenge. The fourth section describes the labor policy and regulatory environment. The fifth section presents evidence on the effects of a labor regulation like minimum wages on enterprises and individuals from disadvantaged groups. The penultimate section examines the impact of minimum wages on household welfare. The final section outlines a strategy and action program to support poverty-reducing employment.

Defining the jobs issue

The simple definition of the jobs issue is lack of job opportunities. A more nuanced view is the inability of the common person to earn a decent living through productive employment or self-employment. The jobs issue has many dimensions. For the nonpoor, unemployment for many of them is about investing time and money in job search. It is looking or waiting for a job that best fits their ambitions, skills, and temperament. Viewed this way, the job challenge is a middle-class issue (De Dios and Dinglasan 2014).

For the poor, however, jobs are about survival. Unlike the middle class, the poor cannot afford to be unemployed for long periods.⁴ That is why the poor and those with low levels of education have relatively low rates of unemployment. What matters for them is how to earn more from time spent on work.⁵ This observation has led some economists, e.g., De Dios and Dinglasan (2014), to question the claim that solving the unemployment problem would resolve the issue of poverty and inequality.

In fairness to employment advocates, however, what they are proposing is not mere reduction in the open unemployment rate. Rather, they mostly want the government to focus on a strategy that creates massive opportunities for more gainful jobs for the jobless. These are jobs that will give the poor and jobless workers opportunities to increase their work time and a chance to learn and raise their productivity. In this regard, a more nuanced articulation of the strategy by government is perhaps needed.

Magnitude of the jobs challenge

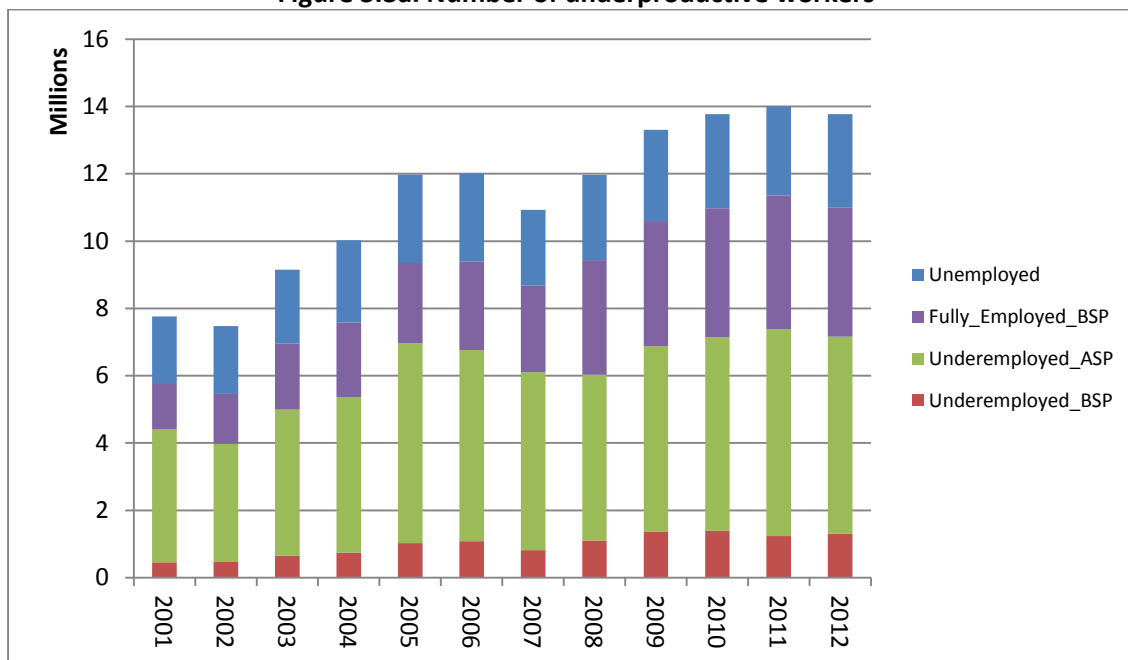
Figure 3.3a reveals that in terms of number, there are about 14 million workers in the “reserve army” of the openly unemployed, underemployed, and the low productivity workers (known also as disguised unemployment) in 2012. This army, referred to in this study as the pool of “underproductive workers”, constitutes about one third of the labor force (Table 3.1). They are unproductive in that as of the time of the survey, each of those workers is either openly unemployed or earns less than the official per capita food poverty threshold. In other words, the

⁴ Unemployment is largely accounted for by the young, the highly educated, and the well-off (WB 2013b).

⁵ The above point is worth making to belie a common view that the poor consist mainly of idle men. It has long been recognized that the poor are actually maximizing given their circumstances (Schultz 1964). A more informed view of the poor would recognize that job creation should not just be about giving the poor jobs (or any job) to keep them busy. For example, beneficiaries of the *Pantawid Pamilyang Pilipino Program* (4Ps), the government’s conditional cash transfer program, should not be made to build the proverbial roads that go to nowhere, plant trees that fail to grow, and dig holes and fill them back for lack of bureaucratic imagination. The failure to appreciate this nuanced view of the jobs challenge can and has led to inappropriately designed public jobs programs and policies. On this score, since most of the heads of poor households spend the day working to eke out a living that barely keeps their body and soul together, indiscriminately requiring all heads of the 4Ps’ beneficiary households to get involved in public work projects with little or no pay would be inefficient and cruel.

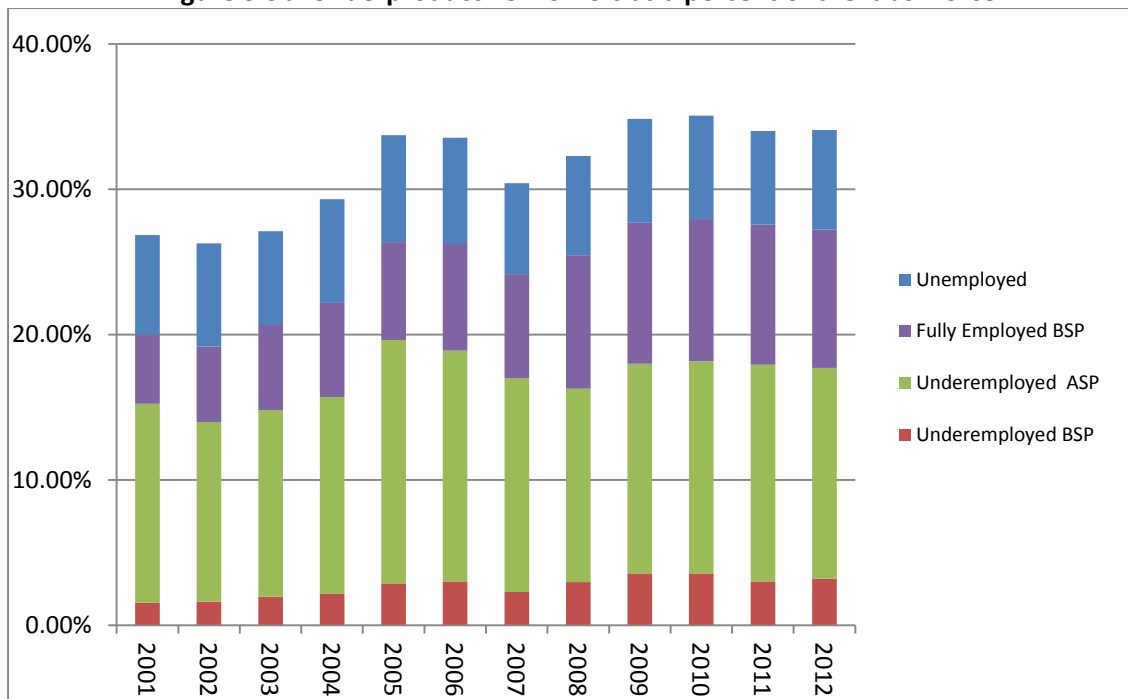
worker is not productive enough to survive on his or her own earnings, let alone feed others. In addition, there are workers who are earning above subsistence but still wanting additional work.

Figure 3.3a. Number of underproductive workers



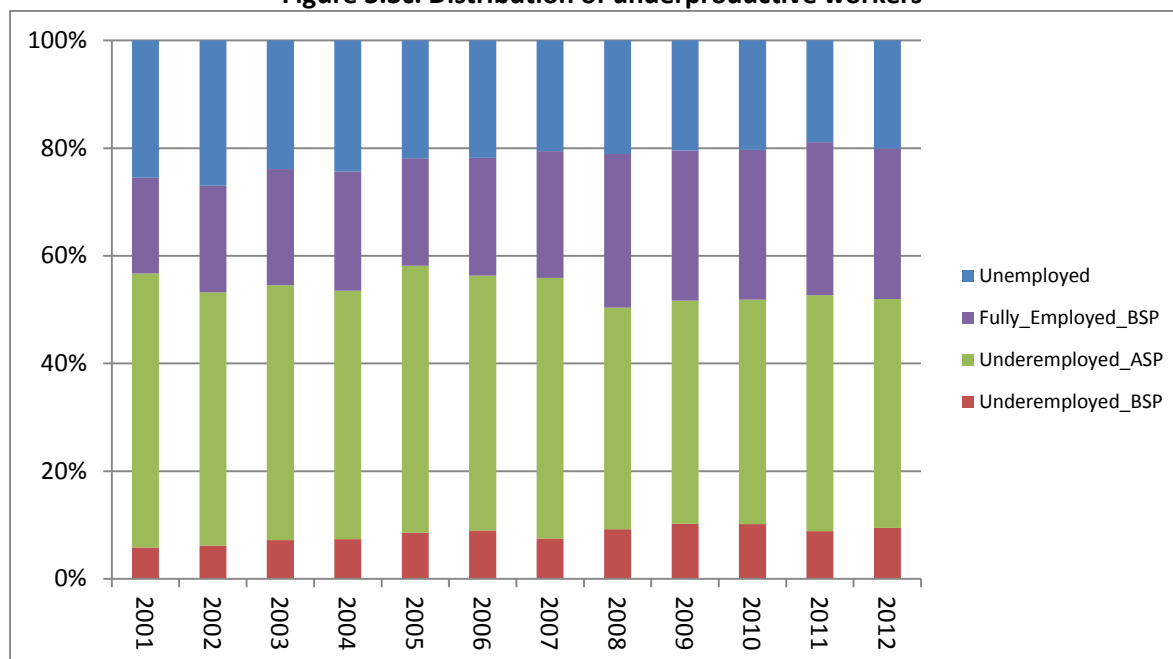
BSP-below subsistence productivity; ASP – above subsistence productivity
 Source: Author’s estimates using Labor Force Survey (LFS) data, October series

Figure 3.3b. Underproductive workers as a percent of the labor force



BSP-below subsistence productivity; ASP – above subsistence productivity
 Source: Author’s estimates using Labor Force Survey (LFS) data, October series

Figure 3.3c. Distribution of underproductive workers



BSP-below subsistence productivity; ASP – above subsistence productivity
Source: Author's estimates using Labor Force Survey (LFS) data, October series

Table 3.1. Summary of values, percentage distribution of underproductive labor (in thousands)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Unemployed	1,978	2,013	2,183	2,443	2,619	2,620	2,246	2,525	2,719	2,799	2,643	2,763
	25%	27%	24%	24%	22%	22%	21%	21%	20%	20%	19%	20%
Underemployed BSP	450	462	658	736	1,025	1,079	818	1,099	1,362	1,398	1,236	1,302
	6%	6%	7%	7%	9%	9%	7%	9%	10%	10%	9%	9%
Underemployed ASP	3,952	3,515	4,331	4,628	5,937	5,683	5,291	4,929	5,513	5,743	6,145	5,858
	51%	47%	47%	46%	50%	47%	48%	41%	41%	42%	44%	43%
Fully Employed BSP	1,380	1,480	1,976	2,215	2,391	2,632	2,571	3,410	3,716	3,834	3,980	3,849
	18%	20%	22%	22%	20%	22%	24%	29%	28%	28%	28%	28%
Total	7,761	7,471	9,149	10,022	11,972	12,014	10,925	11,964	13,311	13,774	14,004	13,773
Memo:												
Labor Force	28,909	28,442	33,736	34,184	35,494	35,808	35,918	37,058	38,197	39,287	41,193	40,433

BSP – below subsistence poverty; ASP – above subsistence poverty

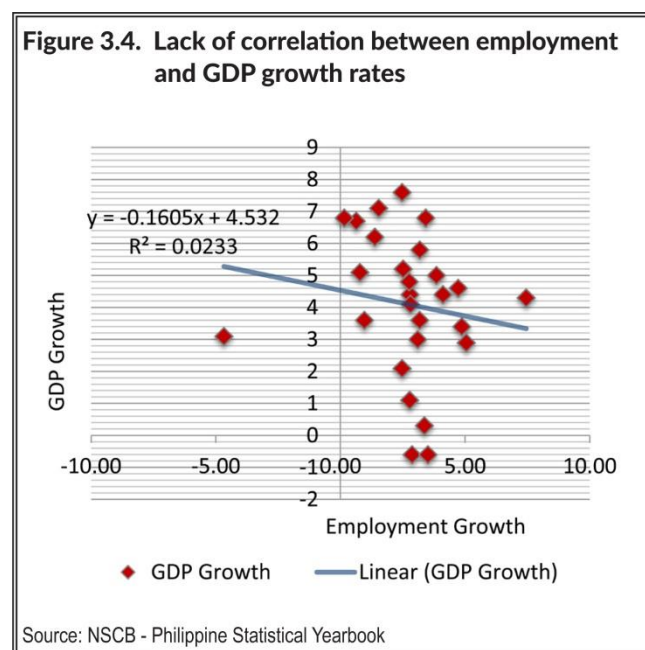
There are several conclusions that one can draw from the data. First, the total number of underproductive labor grew to 13.7 million from 7.8 million workers between 2001 and 2012 (Figure 3.3a). The number increased in all categories in absolute terms. As a percentage of the labor force, the number increased to 33 percent or over in 2006–2011 from about 29 percent in 2001–2005 (Figure 3.3b). Second, open unemployment accounts for only 19–22 percent of the total underproductive workers in 2006–2011, down from 22–25 percent in 2001–2005. Third,

the vast majority of workers have jobs but their productivity is too low to support their own survival, or they want to earn more, presumably to meet needs beyond food for subsistence. These workers constitute about 80 percent of the total number of unproductive workers (Figure 3.3c). Therefore, fourth, the issue of poverty is not primarily about idleness; the core of the issue is more accurately described as a combination of joblessness (open unemployment and underemployment) and lack of opportunities for productive and rewarding work.⁷ The point here is not to minimize the problem of open unemployment; rather, it is to emphasize the need for a multidimensional solution to the issue of jobs and poverty.

Economic growth without commensurate job creation

The jobs issue is an old concern. In fact, it was the central issue for the ILO mission led by Professor Ranis of Yale University in the 1960s (Sicat 2004). What has provoked renewed concern about the issue is the observation that the recent acceleration of GDP has not led to reduction in joblessness. The phrase “jobless growth” has become a popular term to denote economic growth without expanding employment opportunities or without reduction in joblessness.

The usual expectation, based on Okun’s Law,⁸ is that a faster rise in GDP leads to a lower unemployment rate. Contrary to expectations, however, the recent achievement of higher economic growth was accompanied by neither a decline in the unemployment rate nor a rise in employment growth. This finding was used to denigrate the recent performance of the economy under the current administration. The finding is true, but interestingly it applies as well to past decades (Figure 3.4).

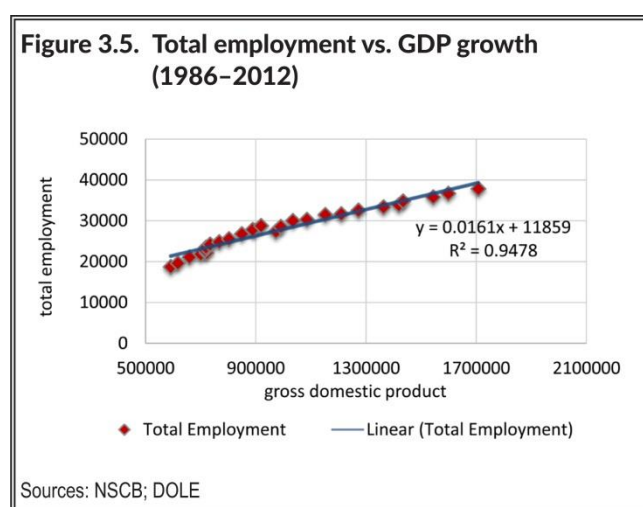


⁷ Broadly, the Social Weather Stations (SWS) data convey similar messages about the job challenges highlighted above, although there are differences in definitions and methodologies between the LFS and SWS employment survey data (see Mangahas 2013 and Albert 2014).

⁸ For a brief discussion of the Okun’s Law, see Fuhrmann (2012).

There are a couple of reasons to think that Figure 3.4 probably gives a distorted view of reality. The Philippine Labor Force Surveys (LFS) are known to suffer from lack of consistency in their definitions of terms and from other measurement errors.⁹ Moreover, it takes only an hour of work within a narrow timeframe to be considered employed. Those deficiencies make “rates of change variables” look more volatile or scattered than what might really be happening.

In contrast, we observe that there is a high correlation (Figure 3.5) between the level of employment and output. This relationship is probably more realistic. The graph uses “level variables” that are likely to average out statistical errors and minimize exaggerated swings in employment data from one year to the next.



The statistical caveat above notwithstanding, the relationship depicted by Figure 3.5 appears consistent with the observation of international studies. They find that despite the volatility of employment growth in the short run, the number of employed workers tend to converge with population trends in the long run (WB 2013a). This tendency suggests that there are mechanisms that move labor markets toward equilibrium over time (perhaps, not actually reaching it).

The conclusion then is that the characterization of economic growth in the Philippines as “jobless” needs clarification. To make sense, “jobless growth” cannot mean no jobs have been added as the economy produces more output. Rather, it should mean that the number of additional jobs or amount of time worked associated with growth of GDP or sector outputs are too little to make a substantial dent on the unemployment and underemployment rates over a year or a quarter. It is this definition of jobless growth that we shall use in the rest of the paper.

Elasticity, labor intensiveness, productivity, and wages: The broad view

This section broadly discusses why the economy is not able to generate substantial employment despite substantial growth. One hypothesis is that perverse incentives (discussed below) are promoting the growth of sectors that are not utilizing the country’s abundant labor and

⁹ Felipe Medalla, professor of the University of the Philippines School of Economics and member of the Monetary Board of the BSP, has cautioned commentators against over-interpreting short-term changes in unemployment in the LFS due to data problems.

discourages the development of enterprises that employ lower-skilled workers (e.g., labor-intensive manufacturing). Another hypothesis is that we are not producing competencies demanded by the fast-growing modern sectors, preventing the economy from achieving its potential.¹⁰

These points can be supported by looking at employment elasticity in relation to output, productivity, input prices, and labor intensiveness. These broad views provide the context to the microeconomic view that is presented later.

Employment elasticity

The above conclusion about the relationship between aggregate employment and output begs the question: How many additional jobs are usually generated by increases in outputs in the medium to long run? A standard practice to answer this question is to measure the elasticity of employment with respect to output. This elasticity parameter is defined as the percentage change in employment with respect to a percentage change in output. Table 3.2 shows employment-output elasticity estimates for the Philippines and other countries for the economy as a whole and for agriculture, industry, and services.

	Sector Employment Elasticity to GDP				Sector Employment Elasticity to Sector Value-added			
	1956– 1969	1970– 1985	1986– 1996	1997– 2010	1956– 1969	1970– 1985	1986– 1996	1997– 2010
Economy wide	0.59	0.64	0.82	0.54				
Agriculture	0.46	0.65	0.43	0.30	0.52	0.97	0.81	0.42
Industry	0.55	0.63	1.26	0.29	0.50	0.48	1.16	0.34
Service	0.97	0.95	1.19	0.80	0.97	1.01	1.00	0.66

Source: World Bank (WB) staff estimates using LFS and NSCB data
Note: All estimates are significant at the 95-percent confidence level.

On the whole, Philippine employment appears to be inelastic with respect to GDP. It means that the economy-wide response of employment to a percentage increase in GDP is estimated to be less than 1 percent. Although inelastic, it is nevertheless large compared with that of successful neighbors, based on estimates reported by the World Bank (2013b) and Felipe and Hasan (2006).

In the World Bank's 2013 *Philippine Development Report* (PDR), the country's elasticity of employment with respect to GDP was reported to be around 0.54 in 1997–2010 (Table 3.2). This means that a 10-percent increase in GDP was associated with a 5.4-percent rise in employment. This estimate is the lowest for the period 1956–2010. The employment-GDP elasticities were 0.59 in 1956–1969, to 0.64 in 1970–1985, 0.82 in 1986–1996, and to 0.54 in 1997–2010. Had the elasticity remained at its peak of 0.82, a 10-percent rise in GDP would have had generated an 8.2-percent expansion of employment instead of only 5.4 percent.

¹⁰ This is observed in the current needs of the service sector which is currently the country's main employment generator. It is indicated by many studies that the service sector actually requires highly skilled and educated workers to remain competitive with the rest of the world.

In the ADB study “Labor markets in Asia”, Kapsos (2006) presents estimates of the employment-GDP elasticity of around 0.42 (Southeast Asia), 0.36 (South Asia), and 0.18 (East Asia) in 1999–2003. The corresponding figure for the Philippines ranges from 0.54 to 0.82, as mentioned.

High elasticity indicates that expanding output by 1 percentage point would require a much greater percentage increase in labor inputs. That the Philippines has had a relatively high employment-output elasticity is, thus, an indication that it is less productive than its neighbors. The high elasticity can be explained by two reasons. First, the country’s labor productivity is low. Second, the economy is not able to attract as much capital as the other countries.¹¹ This is a matter of concern, but it is old news, as the Philippines has started to move toward near convergence with its neighbors. Its employment elasticity fell in 1997, after rising between 1956 and 1996.

Labor intensity of output and the relative cost of inputs

The extent to which demand for labor rises with output depends on the mix of labor and capital inputs. On this point, it is generally recognized that a country’s GDP and sectorial outputs can be produced through a wide range of capital/labor combinations. Which combinations prevail depends on several factors. First, they depend on the composition of aggregate outputs and, therefore, on market demand. Some commodities are more labor intensive than others. Second, for a given commodity, producers have a choice of labor or capital-intensive processes. Among other factors, the choice will depend on relative factor prices, defined broadly to include not only the explicit price tag of inputs (e.g., wages and rentals) but also other costs incidental to the actual use of a factor of production, such as the difficulties and uncertainties associated with certain labor practices. On the whole, markets tend to choose more capital-intensive processes and commodities in the long run, when labor becomes expensive relative to capital inputs.

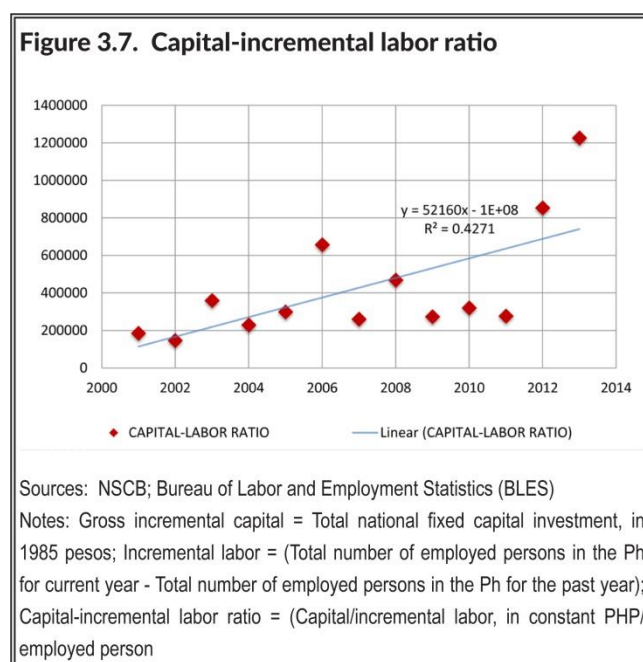
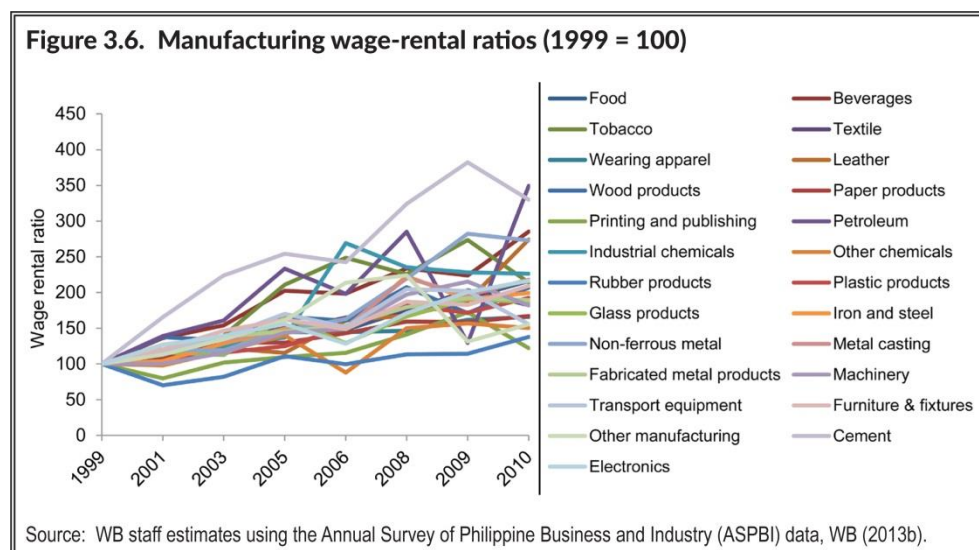
The ability of labor-intensive industries to compete, particularly in manufacturing, has been seriously hampered by the elevated cost of labor relative to capital. In the context of China’s and Viet Nam’s cheap and disciplined labor, this handicap has been identified as one of the key causes of the remarkable shedding of labor-intensive manufacturing activities in the Philippines in the past and its failure to hire more workers. This shedding is premature at this stage of the country’s development, given its superabundant labor supply.

The cause of the shedding has been attributed, at least in part, to distortions in the cost of labor inputs relative to capital. Part of these distortions were brought about by capital-biased subsidies, work disruptions, mandates on minimum wages and other labor remuneration, as well as other regulations and practices that make it difficult and costly to deal with labor issues.

Looking forward, the concern is that similar policies and practices will continue to make labor relatively more expensive and difficult to manage, and thus will be a drag on the country’s ability to compete and grow its labor-intensive industries. There is reason for this concern. As can be observed in Figure 3.6, the ratios of manufacturing wages (for different subsectors)

¹¹ Given the high unemployment, there is a need to increase labor productivity and to attract more investments. Other countries have done this, resulting in growth and employment at the same time.

relative to the rental price of capital exhibit an upward trend. Concomitantly, there is a tendency for the incremental capital-labor ratio to rise (Figure 3.7).

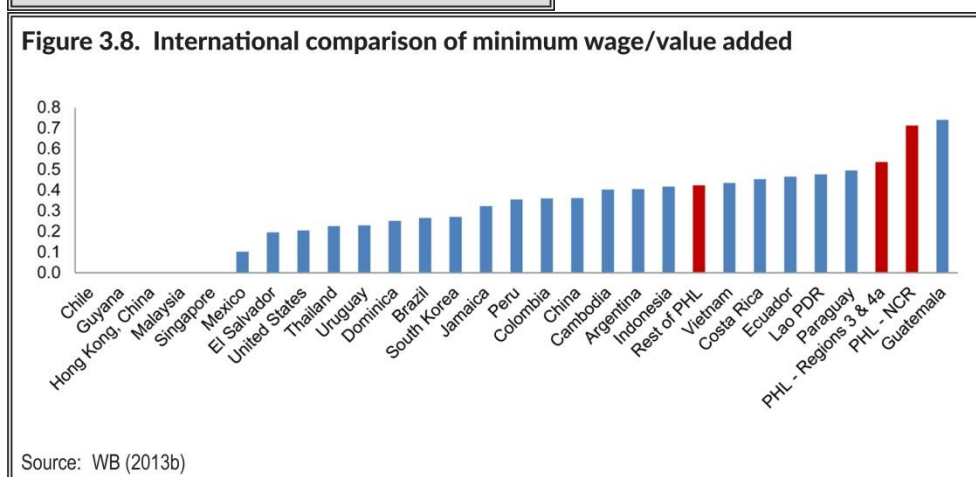


From the standpoint of international competitiveness, Philippine labor cost (in terms of minimum wage) remains high compared with competitors' cost. Table 3.3 shows that Philippine minimum wage is higher than that of China, Thailand, Indonesia, and Viet Nam, and the East Asian average. Without productivity adjustment, Philippine labor cost is three times more expensive than Viet Nam's (Table 3.3). Except for Viet Nam, Philippine labor cost remains higher than that of competitor countries, even when differences in workers' productivity are taken into account. Interestingly, the Philippines looks competitive against Viet Nam, when minimum wage relative to average labor productivity is used as the measure of competitiveness (Figure 3.8) although this is only true for the rest of the Philippines and not so for the NCR.

Table 3.3. International comparison of wages

Country	USD (2005 prices)
Philippines	1,860
China	1,728
Papua New Guinea	1,296
Indonesia	1,140
Thailand	852
Lao PDR	684
Cambodia	444
Viet Nam	408
Kiribati	0
Malaysia	0
Timor-Leste	0
East Asia and Pacific (developing)	888

Source: WB (2013a), 2010 or latest available data; WB (2013b)

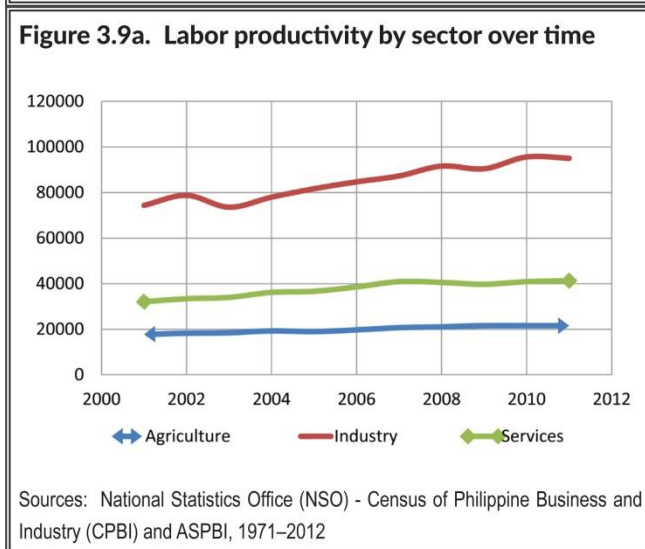
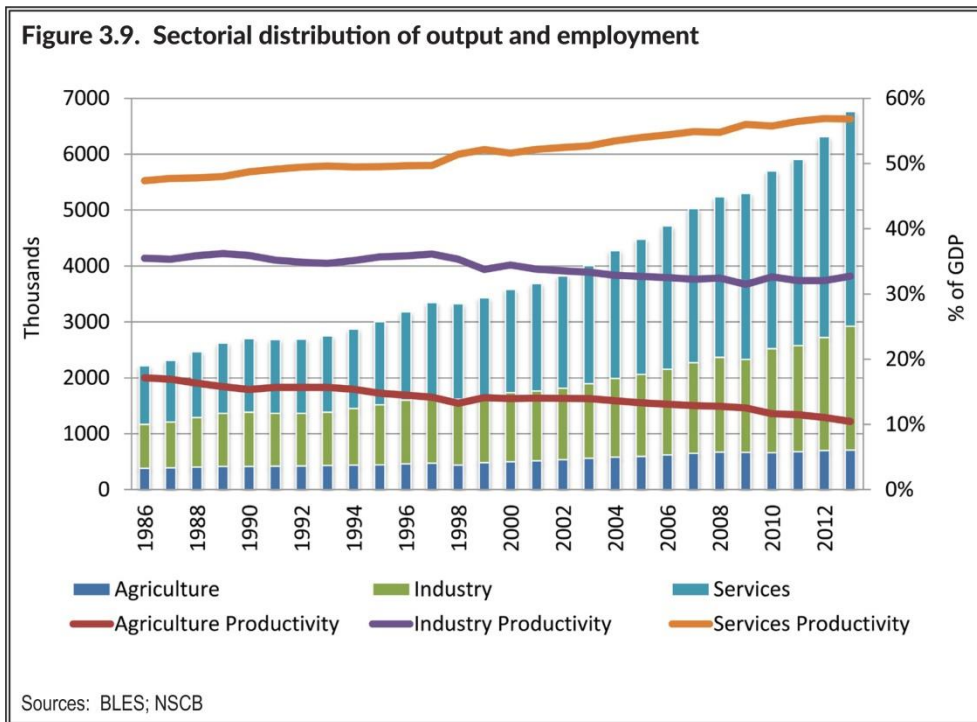


These convey two key messages. On the one hand, they show that increased labor productivity can attenuate a country's high labor cost disadvantage against some competitors. On the other hand, they highlight the disconcerting fact that increased productivity alone is not enough to be competitive with the rest. For the Philippines, efforts to increase labor productivity should be taken as a complement and not as a substitute for moderation in minimum wage rises and other cost increases arising from burdensome labor regulations.

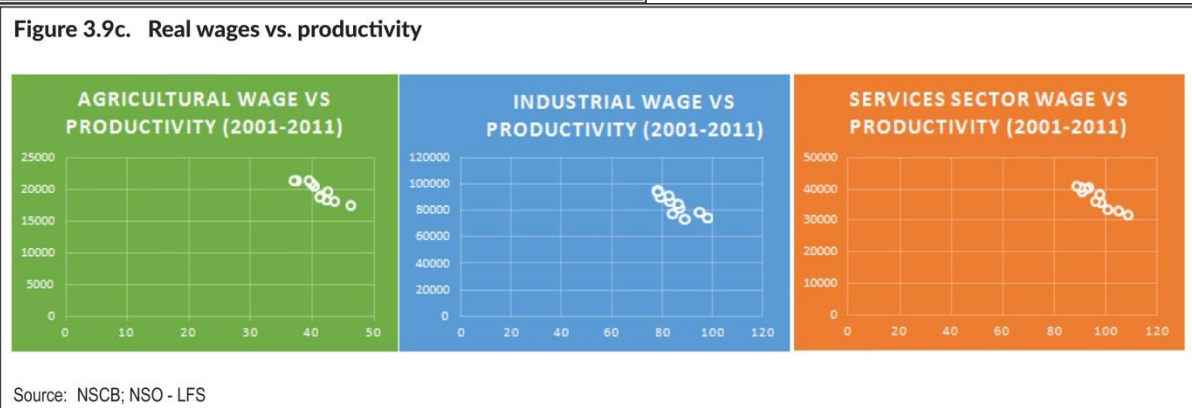
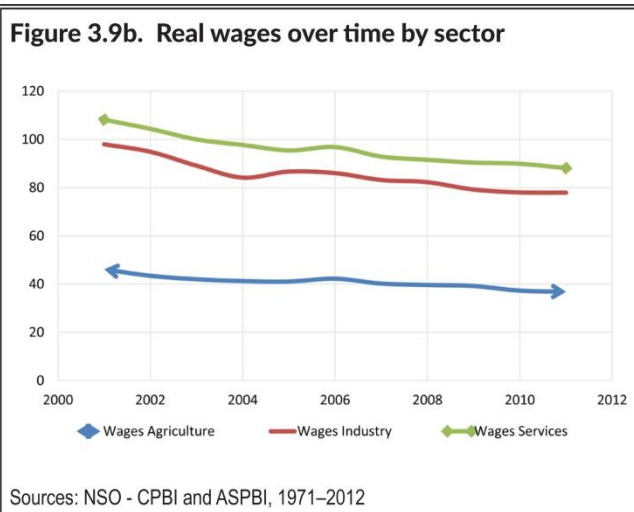
Productivity, wages, and employment

Aggregate data reveal that Philippine labor productivity has been rising over time on average, while the daily wage rate seems to be declining. These two variables seem to be negatively

correlated. Figures 3.9, 3.9a, 3.9b, and 3.9c present these observations for the economy as a whole as well as for the industrial, agricultural, and services sectors.¹²



¹² Lanzona (2014) also finds declining real wages.



The wage decline is surprising in the face of rising labor productivity. Standard neoclassical economic theory predicts that a rise in labor productivity should lead to wage increases. Competition is supposed to induce employers to pay workers the value of their contribution to total output. Why the wage rate is declining is a puzzle that needs further research, beginning with an analysis of data quality. One issue here is that the wage data might not capture accurately nonwage benefits.

In analyzing the employment issue vis-à-vis labor productivity and wage policy, a model of an economy with unlimited or superabundant labor surplus can be a useful guide. The underlying view of this study is that the Philippines can be characterized as an economy with “unlimited” supply of labor. In such an economy, the real wage of a predominantly unskilled labor force would tend to settle at around some natural minimum wage (NMW) equilibrium.¹³ The presumption is that there is a wage level below which employers will find it disadvantageous to bid wages further down. One reason is that below that wage level, the productivity of workers would become so low due to ill health and malnutrition effects that it does not pay to hire them at wages lower than NMW. Conversely, if for some reason such as increased minimum wage, the real wage of unskilled workers goes beyond the NMW, competition among surplus laborers would push the real wage back to NMW (probably with a time lag).

¹³ We call the wage rate at that level a natural minimum wage (NMW). Unlike the traditional idea of subsistence wage, NMW does not presume that the income from work at that rate will be enough to cover all expenses needed to survive in the long run.

The labor surplus model predicts that *ceteris paribus*, labor productivity would be uncorrelated with the wage rate of unskilled workers. Similarly, a minimum wage higher than the equilibrium wage rate will render increases in labor productivity uncorrelated with increases in wage rate. The demand for unskilled labor, however, is expected to rise with increased productivity and, therefore, reduce joblessness.

An exploratory analysis of panel data, using fixed effects models and frequency of typhoons as instrumental variable (IV) for labor productivity, was undertaken to test those two hypotheses. Table 3.4 presents estimates of the elasticity of the regional employment and underemployment rates with respect to regional labor productivity. As expected, productivity is positively and negatively related with employment and underemployment, respectively. These results are consistent with the aforementioned hypotheses. Incidentally, the elasticities say that a 10-percent rise in overall regional labor productivity increases the employment rate by 3 percent and reduces the underemployment rate by about 3 percent. We also find that wage rate (not shown in the table) is uncorrelated with productivity. These results indicate that the Philippines can be reasonably described as if it were an economy with unlimited supply of labor.

Table 3.4. Effect of aggregate labor productivity on employment and underemployment, IV estimates, years		
	Employment Rate	Underemployment Rate
Constant	71.4406	23.42156
Regional aggregate labor productivity (output per worker)	.5372195*** (.0149954)	-.0976515*** (.023024)
R-squared	0.3060	0.0685
Elasticity	.2994079	-.3107145
Notes:		
1/ Productivity data taken from the BLES website and employment and unemployment rate for Labor Force Surveys.		
2/ Fixed effects model, using frequency of regional typhoons as instrumental variable for labor productivity.		
3/ Authors' estimate using IV and frequency of typhoons as IV to productivity		
*** Significant at 1-percent level		

The impact of a minimum wage mandate will be estimated and discussed in detail in later sections. The hypothesis is that in an economy with labor surplus, a rapid rate of increase in the legal minimum wage (above the NMW or the equilibrium wage rate) would reduce the income of the average households, especially the poor, because of increased joblessness among household members even if this may mean higher wages for those who gets employed.

It should be emphasized at this point that a world with unlimited supply of unskilled labor can coexist with shortages of workers with skills and character traits highly valued by the

market. In this regard, investment in education and other forms of human capital will command a wage premium. As demand for this type of workers increases and shortages develop, the wage premium is expected to rise. Remarkably, Di Gropello et al. (2010) have noted an upward trend in the wage premium for skilled and educated workers in recent years in the Philippines, implying the emergence of shortages in this type of workers.

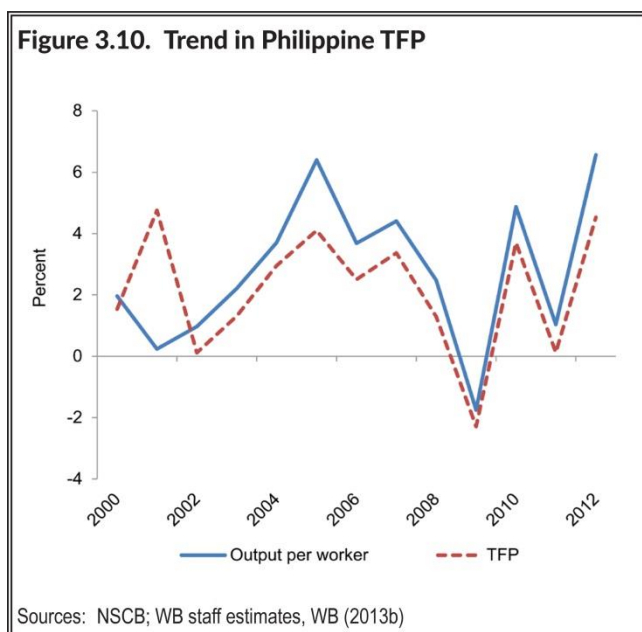
Broadening the discussion on productivity, we now look at the country's total factor productivity (TFP) growth. TFP is the residual change in output after deducting the contributions of labor and capital inputs to total output. It is well known that Philippine TFP growth had historically been consistently negative. This means that for the most part of the postwar years, the economy was becoming less efficient in the use of its resources, unlike the experience of its more successful neighbors¹⁴ (Table 3.5).

	Growth in Output per Worker	Contribution to Growth of		
		Physical Capital	Human Capital	TFP
Philippines	1.0	0.9	0.4	-0.3
East Asia	4.4	2.4	0.5	1.4
China	4.8	1.7	0.4	2.6
Indonesia	3.0	1.8	0.5	0.6
Korea	4.8	2.8	0.7	1.2
Malaysia	3.6	2.2	0.6	0.8
Singapore	5.0	3.0	0.5	1.5
Taiwan	5.8	3.0	0.6	2.1
Thailand	4.1	2.5	0.4	1.2

Source: WB (2013a), staff estimates using data from 1961 to 2000

It is remarkable, therefore, that TFP growth appears to have turned positive in recent years (Figure 3.10). This implies that, if sustained, the country's GDP and labor productivity could grow at a faster rate than its historical experience. The question is: Will the recent TFP experience of the Philippines be sustained? There is little doubt that efficiency increases can be sustained. These will, however, require government actions on certain critical issues beyond the scope of this study. These issues, however, are discussed in detail by Llanto and Navarro (Chapter 1, this volume), World Bank (2013b), and Usui (2011).

¹⁴ Sustained TFP increases, which imply reduced labor and capital cost per unit of output, have generally been the historical experience of economically successful countries. The effect of labor saving here, it should be noted, is different from that induced by government mandates. These mandates make the price of labor artificially more expensive relative to capital, while TFP growth increases output and demand for labor.



Shifting the center of gravity

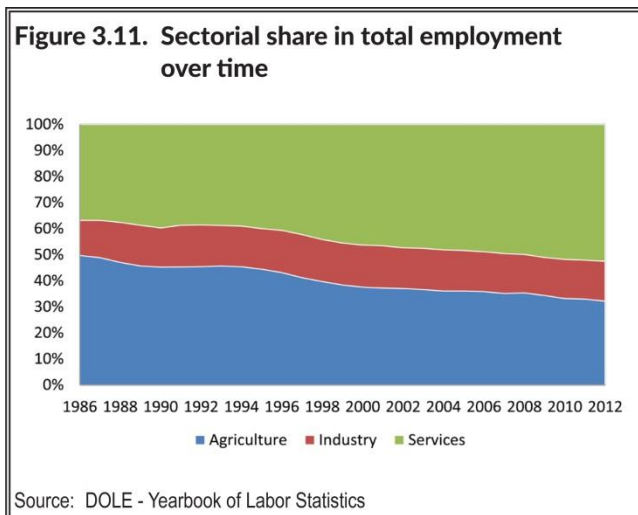
Further on employment and productivity, a key lesson of development experience is that moving labor resources from low- to high-productivity sectors and activities has historically been a key driver of TFP growth. Development strategies based on these dynamics has been shown to work in various developing countries that have achieved sustained economic takeoff and poverty reduction (e.g., China, Singapore, Thailand, Malaysia, and Indonesia).

On this issue, there is wide agreement that the Philippines should pursue a more robust shift of its economic center of gravity from low- to high-productivity activities. Historically, this means increasing the share of the non-agricultural sector (manufacturing, particularly) in total employment. The assumption is that the manufacturing and other industrial sectors are more productive and have more potential room for expansion¹⁵ than agriculture or some services subsectors for that matter. Despite wide agreement on the goal of industrialization, there are serious disagreements on how to achieve it.

What has been the extent and pace of the country's evolution toward industrial development? The share of agriculture, which exhibits lower labor productivity compared to other sectors, has been reduced, while the share of the non-agricultural sector has increased on the whole (Figure 3.11). The issue, however, is that the share of the manufacturing industry remains small and it has been stagnating, until recently. Instead of manufacturing, the center of economic activity in the Philippines has moved toward the service sector, prematurely in the view of some economists (Fabella 2013). We emphasize, however, that agricultural productivity growth is critical to sustainable transformation of the economy.¹⁶

¹⁵ Demand for agricultural product is inelastic with respect to income growth compared with that of manufacturing and other non-agricultural outputs.

¹⁶ A well-recognized impact of the stagnant agricultural productivity is increased food prices that fuels demand for higher minimum wage. Habito (2014), however, has pointed out that so many resources have already been spent on agriculture with little results. We need new strategies here.



The evolution of the share of manufacturing in the economy is unsurprising. As mentioned, businesses left labor-intensive manufacturing years ago because labor and other business costs in the Philippines were higher than those of its neighbors like China and Viet Nam, making it difficult for Philippine businesses to compete.

Propitiously, there is a new opening for the Philippines to reenter the competition today. With China now starting to shed labor-intensive manufactures in a big way, there are plenty of opportunities for revitalizing and expanding labor-intensive manufacturing in the Philippines. Success in this regard will, however, depend on the timely institution of a business environment that is more supportive of labor-intensive manufacturing.

Section summary

The foregoing discussion highlights the need to focus on the rapid expansion of labor demand for low- skilled labor and the promotion of labor productivity growth. These twin strategic priorities can be achieved by: (i) more realistic pricing of Philippine labor and capital inputs to expand employment in labor-intensive sectors and the demand for existing skilled and semiskilled workers; and (ii) increasing human capital through greater and more efficient investments in education, training, and other forms of human development activities. Although the latter may require substantial investments, the rate of return has been shown to be high (as discussed in the next section), making it a sound investment. Realistic pricing means that the Philippines needs to maintain an economic policy that closely aligns factor prices with the scarcity value of the country's labor and capital endowments.

To be clear, the idea is to have an appropriately priced labor to achieve full employment. The real prize to keep in mind in the long run should be the eventual achievement of sustained rises in real wages and incomes of the household, particularly of the poor, with as little government dictation as possible. It should also be stressed that increased wage-capital rental ratios should not in themselves be a concern. But the issue is that those ratios have been distorted by policies that have tended to artificially raise the cost of labor and lower the price of capital, creating an environment that is unfavorable to investment in labor-intensive industries and the creation of good job opportunities.

Labor policy, regulations, and rationale

This section reviews the regulatory and policy environment governing the labor market. It lays the foundation for the next sections, which present and discuss estimates of the effects of legal minimum wages (LMWs) on outputs, employment, incomes, wages, and poverty in the Philippines. Although the study focuses on the LMW issue, the intention is to use it to illustrate the need to do an evidence-based analysis of the other labor laws, regulations, policies, and practices. Our motivation in this regard is to ensure that labor regulations like LMWs do indeed benefit the poor and disadvantaged population and that complementary and alternative ways to improve their incomes are systematically explored. On this point, it would be wrong to ignore strong suspicion that the current labor regulatory environment supposedly intended to protect workers might not in reality be as helpful as they are thought to be. Worse, it might even be detrimental to the welfare of the poor.

This section accordingly is structured as follows. It first discusses the minimum wage law and, more generally, the country's labor policy and regulatory environment. It then highlights the main arguments for and against the minimum wage law and other labor market interventions. The following discussion draws heavily from Lanzona (2014).

Mandatory minimum wages

The primary objective of the law when minimum wages were instituted in the 1950s was to set a decent wage level for workers. Sicat (1986), however, noted that the timing of the institution of minimum wages coincided with import substitution policies and the state's bias against export-oriented labor-intensive industries. In time, these policies, by Sicat's reckoning, led to a greater application of mechanized operations at the expense of labor (a development favorable to monopolies during the time).

When first set up, there was only one minimum wage set by Congress for the entire country regardless of regional and industrial differences. In the beginning, during the early years of tripartite meetings (organized by the government, labor, and employers), the agreement was to aim for some form of indexed minimum-wage package that would include benefits. In the end, the result was a "bilateral monopoly bargaining process" on the wage package. The consequence was that, as Lanzona (2014) writes:

"Monopolists were able to keep their rents, with organized labor receiving a portion of such rents. In the process, a number of workers who were not part of the bargaining process were left unemployed or employed in marginal occupations."

In July 1989, to appease other employers, protect workers, and spur regional development, Congress enacted RA 6727, which delegates Congress power to set minimum wages to the newly created Regional Tripartite Wages and Productivity Boards (RTWPBs). The RTWPBs are mandated to prescribe minimum wage rates for their respective regions while taking into account their regional conditions.

Decentralized wage setting was thought to be a more efficient approach for several reasons. In general, a decentralized system allows for minimum wages to be better aligned with local preferences and labor market conditions, which differ by region. Citing Moretti (2010), Lanzona (2014) argues:

“... For example, an underdeveloped region can set lower minimum wages to attract new investments and thus move the region from a bad equilibrium (i.e., low density of economic activity and low employment) to a good equilibrium (i.e., high density of economic activity and high employment). In this case, the short-run efficiency costs of setting minimum wages could be small compared to the potential long-run benefits of moving to a better equilibrium” (Moretti 2010).

The labor policy and legal framework in general

The rules of the game covering the labor market is embodied in the Philippine Constitution, the 1974 Labor Code, and other executive policy instruments. The 1974 Philippine Labor Code prescribes rules governing the relationships of workers and employers, including regulations on hiring and termination of private employees; the conditions of work including maximum work hours and overtime; employee benefits such as holiday pay, 13th month pay, and retirement pay; and the guidelines on the organization and membership in labor unions as well as in collective bargaining. Specifically, the following are the salient features of the labor policy and legal framework:

- (i) Promotion of *tripartism*, a policy that seeks to resolve labor issues through consultation and conflict resolution processes that involve the government, employers, and workers;
- (ii) A sustained government policy prioritizing the establishment of a negotiation environment that respects the rights of both labor and management to bargain for their respective interests, guided only by the condition that these negotiations must not hinder government programs and development goals;
- (iii) Recognition of the right to form trade unions and the right of a union to insist on a closed shop;
- (iv) Authorization of strikes for as long as they comply with the strict requirements under the Labor Code, and workers who organize or participate in illegal strikes may be subject to dismissal;
- (v) Management recognition of the importance of labor unions and labor organizations, which are in turn expected to assume a similar degree of responsibility for the firm (in terms of meeting any demands and challenges from competition, both domestic and global);
- (vi) Employment laws governing individual contracts and determining the compensation, the length of trial periods, and the conditions of part-time work;
- (vii) Restrictions on the range of feasible contracts and the cost of laying off workers and increasing hours of work (regulations on this score tend to favor full-time indefinite contracts, over short-term, fixed-term, or temporary contracts);

- (viii) Provisions in the Labor Code mandating a minimum advanced notice period prior to termination, specifying justifiable dismissal, and establishing compensation to be awarded to laid-off workers based on the reasons of their job terminations;¹⁷
- (ix) Provisions relating to collective or industrial relations laws that regulate bargaining, adoption, and enforcement of collective agreements, the organization of trade unions, and the industrial action by workers and employers;¹⁸ and
- (x) Jurisprudence that tends to resolve cases in favor of labor in case of doubt about the interpretation and application of labor laws and regulations.¹⁹

The overall intent and significance of the abovementioned provisions of the labor code and jurisprudence is to change the balance of bargaining power between workers and employers by empowering labor unions to represent workers collectively and protect particular union approaches in negotiations with the employers.

With the current labor regulatory and policy environment, therefore, employers face three binding constraints. These are, to quote, Lanzona (2014):

- (i) “Labor relations and the protection of permanent and unionized workers (Article 234, 253A, 260, and 264) whose services cannot be terminated except for just and authorized cause and subject to the requirement of due process (Article 278).
- (ii) The restrictions to subcontracting arrangements (Article 106) and ... probationary period of six months (Article 281) after which the employer should offer permanent employment (Article 279).
- (iii) [M]inimum wage law that prohibits wages from going below a certain level and which does not allow the diminution of benefits once awarded (Article 127).”

Worker protection is commonly assumed to be desirable not only for its social value but also for its ability to form skills. Ensuring workers of their respective jobs creates incentives for them to learn more firm-specific skills and in the process be more productive. Protectionism, however, can be overdone and can cause deleterious effects on the industry, and hence can increase unemployment and eventually reduce skill formation. Just like medicine, when abused, it can be worse than the disease. The welfare of workers, particularly the poor, the less educated, the young, and women can be seriously hurt by government mandates and regulations intended to curb presumed employers’ abuses, monopsony power, and unfair bargaining advantage over individual workers. For example, it can be argued that high minimum wages in conjunction with other laws that prevent firms from recouping their investments in training the young and inexperienced (the six-month regularization rule) can result in firms not investing enough in

¹⁷ Termination of short-term contracts at no cost to the firm is allowed, provided the duration of the contract has expired. To prevent firms from exclusively hiring workers on temporary contracts, the use of such arrangements is severely limited. The Labor Code also allows a limit of six months to test and dismiss a worker at no cost if his or her performance is considered unsatisfactory.

¹⁸ Labor laws effectively allow workers to participate in the contract negotiation process, especially in the area of compensation through participation in collective bargaining agreements (CBAs) and the arbitration process.

¹⁹ Lanzona (2014) has noted that “Philippine jurisprudence has long applied a rule that any doubts in the interpretation of law, especially the Labor Code, will be resolved in favor of labor and against management.”

on-the-job training, resulting in inadequate skills formation and high unemployment rate among the aforementioned disadvantaged groups.

To summarize, Philippine laws, regulations, and policies seek to advance the welfare of workers by strengthening their bargaining position against employers, protecting them against abuses, and mandating minimum wages for them to earn a decent living. Some of these government measures can enhance the welfare of the workers; others can be detrimental despite good intentions, particularly when overdone. The question is: What have been their effects on the welfare of households and enterprises?

The effects of minimum wages on enterprises and disadvantaged workers

This section presents empirical evidence on the above question. The evidence presented is based on modern impact evaluation methods. There are two parts to this section. The first relates to the response of enterprises to minimum wage; the other is about its impact on the economic welfare of the individuals belonging to selected disadvantaged population groups.

Impact on enterprises

Using various econometric methods and applying them on the combined sample of small and large enterprises, Lanzona (2014) found a statistically significant negative relationship between minimum wages and employment (Tables 3.6a, 3.6b, 3.7, 3.8, 3.9a, 3.9b). The relationship implies that, on the whole, the minimum wage policy reduces employment. This finding holds, even when the regression analysis is limited to small-scale enterprises, which incidentally constitute the vast majority of the enterprise sample. In contrast, when the regression analysis is limited to large firms, the results tend to show that they hire more workers with higher minimum wages. The latter findings are consistent with the monopsony theory of labor markets, although there are other possible explanations (see below). With monopsony power, firms can easily adjust their employment patterns given the regulated wages and retain most of their profits. In conclusion, it should be emphasized that despite this seemingly positive impact of minimum wages on employment among large enterprises, their net effect is negative, when all enterprises are combined.

Table 3.6a. Minimum wage elasticities on labor employment by type of enterprise and worker

Data	Methodology	All Enterprises		Small Enterprises		Large Enterprises	
		Production	Nonproduction	Production	Nonproduction	Production	Nonproduction
Industry level with regional controls -	Difference-in-difference	-0.513**	-0.386**	-0.702**	-0.385**	1.113**	0.102
Kaiz index	Fixed Effects	-0.295**	-0.607**	-0.284*	-0.600**	-0.031	-0.821**
Firm level (panel data)	Fixed Effects	-0.927**	-0.782**	-1.107**	-0.915**	0.991*	-0.859
- minimum wage	Random Effects	-0.926**	-0.783**	-1.131**	-0.858**	0.980*	-0.936

Note: ** indicates significance at 1-percent level, and * indicates significance at 5-percent level.
Source: Authors' estimates

Table 3.6b. Minimum wage elasticities on labor market participation (employment probability)

All Workers	No Schooling	Primary School	Teenage	Young	Middle Age	Male
Panel logit						
Fixed effects	-0.636**	0.022	-0.597**	-0.364**	-0.459**	1.983**
Random effects	-0.689**	-0.446**	-0.298**	-0.091	-0.306**	0.283

Note: Probabilities are relative to college education for schooling variables, and relative to old working age (50 and above) for age variables. For specific workers, these probabilities are based on interactions of minimum wages and specific worker qualities.
** indicates significance at 1-percent level.
Source: Authors' estimates

Data/Tests	Minimum Wage Indicator	Pooled Cross-Section, Difference in Difference	Fixed Effects	Random Effects-GLS	First Differencing
A. National data (industry level)	Kaitz index	-34,025.47	117,271.60**	138,307.30**	-141.90
Hausman test			7.07		
Serial correlation			37.66		
R-squared		0.69	0.45	0.45	0.11
B. Regional data (industry level)	Kaitz index	-12,427.29**	-9,217.39**	24,031.89**	n.a.
Hausman test			224.56		
R-squared		0.48	0.52	0.57	
C. Panel data (firm level)	Real minimum wage	n.a.	-6.60**	-6.59**	3.01
Hausman test			3.33		
Serial correlation			0.745		
R-squared			0.02	0.02	0.001

Notes: Within R-squared is used for fixed and random effects. The standard error for the first differencing is based on the Huber-White estimator (robust standard error) to control for serial correlation. ** indicates significance at 1-percent level.
Source: Authors' estimates

	Small	Large
A. Regional data (industry level): Kaitz index		
Difference-in-difference	-14,653.81**	38,491.47**
Fixed effects	-8,101.19**	-8,028.526
B. Firm panel (firm level): Real minimum wage		
Fixed effects	-6.40**	6.81
Random effects	-6.48**	6.68
Hausman tests	45.22	1.26**

Note: ** indicates significance at 1-percent level.
Source: Authors' estimates

Table 3.9a. Effects of minimum wages on production workers			
	All	Small	Large
A. Regional data (industry level): Kaitz index			
Difference-in-difference	-10,360.86**	-12,770.32**	37,625.22**
Fixed effects	-5,964.95**	-5,160.63*	-1,053.41
B. Firm panel (firm level): Real minimum wage			
Fixed effects	-5.21**	-5.10**	9.52*
Random effects	-5.20**	-5.21**	9.41*
Hausman tests	1.52**	29.14	1.27**
Note: ** indicates significance at 1 percent-level; * indicates significance at 5-percent level.			
Source: Authors' estimates			

Table 3.9b. Effects of minimum wages on nonproduction workers			
	All	Small	Large
A. Regional data (industry level): Kaitz index			
Difference-in-difference	-2,066.42**	-1,883.49**	866.25
Fixed effects	-3,252.44**	-2,940.56**	-6,975.11**
B. Firm panel (firm level): Real minimum wage			
Fixed effects	-1.385**	-1.299**	-2.711
Random effects	-1.387**	-1.217**	-2.954
Hausman tests	15.25**	118.22	2.22**
Note: ** indicates significance at 1-percent level.			
Source: Authors' estimates			

Lanzona's study also finds that minimum wages cause firms to reduce their production workers. This impact is, at least, due to scale effect. Normally, because the marginal cost of output rises with scale of production, firms will reduce their output to restore profitability. This means that with increased wage rates, firms will cut employment of production workers. Microeconomic theory further predicts an additional impact. With higher labor cost, firms are expected to substitute capital for labor inputs. In the process, the demand for production workers declines. A related finding of the study is that while some production and nonproduction workers are laid off simultaneously as a result of hikes in minimum wages, relatively more production workers are generally laid off than nonproduction workers.

Interestingly, the study was unable to find compelling evidence of significant substitution effects. One possible explanation, according to Lanzona, is that capital expenditures may be complementary to labor and may also be constrained by higher labor costs. Incidentally, firms with larger capital are also those that maintained their workers despite the increases in minimum wages. In fact, larger firms were able to increase their employment of production workers as workers who may have lost their jobs in the smaller enterprises could have been absorbed by the larger firms. Smaller firms may have closed since even nonproduction workers were reduced because of the policy. The reason is that while increasing the scale of production allowed the larger firms to limit their average costs, including their labor costs, smaller and

more labor-intensive firms were unable to reduce their costs. Finally, Lanzona observes that the Kaitz index²⁰ is higher for more labor-intensive industries. In effect, the labor-intensive firms and those with relatively higher labor costs are those affected by the minimum wage.²¹ This finding suggests that the minimum wage policy may have failed to account for the labor requirements of these small industries. This is not surprising as the policy focus has mainly been on protecting workers at the regional level.

The conclusion then from these findings is that there may be serious consequences in the way the Labor Code affects production efficiency and social protection. And as Lanzona points out, “There is thus a need to coordinate these policy areas in a way that they reinforce one another.”

Minimum wage impact on disadvantaged workers

It is well known in the international literature that minimum wages tend to be disadvantageous to the less educated, inexperienced, and young workers. The reason simply is that in cutting back workers, it will be profitable for them to start with those whose productivity (in value terms) is less than their increased wage cost. Arguably, these pertain to the aforementioned workers.

Lanzona (2014) in the same study discussed above analyzed the impact of minimum wages on the employment of the less educated, inexperienced, and young workers, using the LFS panel data. As predicted and shown in Table 3.10, the study finds, using fixed effects models, that the impact of minimum wages on employment is negative. The estimated impact indicates that higher minimum wages lead to a significant decrease in the likelihood of employment. With the introduction of the interaction terms in the second specification, the direct effect of minimum wages is no longer significant. However, the impact of minimum wages on unemployment is now reflected in the different population subgroupings. In general, minimum wages appear to create significant employment effects unfavorable to the least educated, the teenagers, the young, and women. The common factor of these demographic groups is their low levels of accumulated human capital and productivity compared with other workers.

²⁰ The Kaitz index is the ratio of the minimum wage to the average adult wage multiplied by the percent of persons covered by the minimum wage.

²¹ Contrary to the criticism by a labor movement spokesperson, this study has noted the effect of the share of labor cost on the size of the employment impact of minimum wage. On this score, the movement needs to clarify the policy implications of its argument for a hefty daily minimum wage increase of PHP 125. Noting that the share of labor in production cost is small, it argues that a large rise in minimum wage will not hurt demand for labor. This is a highly simplistic argument. First, the share of labor cost in many industries is not negligible. Second, in the long run, firms tend to shift to technologies and industries that are less labor intensive, lowering further the share of labor cost in production expenses. Decades ago, the Philippines witnessed such a shift to the detriment of the poor unskilled workers in garment and other labor-intensive industries. By its logic, the said movement would, therefore, appear to welcome a further reduction in the share of labor cost. To workers that are lucky enough to have stable full-time jobs, this reduction would not be highly concerning. However, for the growing number of jobless poor as well as the young and inexperienced, such a development would mean greater exclusion and impoverishment.

Table 3.10. Panel logit estimates of employment

	Without Minimum Wage Interactions	With Minimum Wage Interactions
	Fixed Effects	Fixed Effects
Real minimum wage	-0.012** (2.26)	-0.009 (0.74)
No schooling	0.0004 (0.00)	3.77** (3.48)
Primary school	-0.13 (1.32)	-0.20 (0.37)
High school	-0.17** (2.29)	-0.52 (1.09)
Middle age	0.48** (6.87)	2.14** (4.90)
Teen age	-1.08** (8.45)	3.19** (4.30)
Young working age	0.27** (2.80)	2.18** (4.27)
Male	- -	- -
No schooling * minimum wage		-0.08** (3.60)
Primary school * minimum wage		0.001 (0.12)
High school * minimum wage		0.01 (0.72)
Teen age * minimum wage		-0.08** (5.84)
Young working age * minimum wage		-0.04** (3.79)
Middle age * minimum wage		-0.03** (3.84)
Male * minimum wage		0.07** (6.94)
Constant		
Year and regional effects	Yes	Yes
Worker effects	Yes	No
Hausman test	506.17	630.5
Likelihood ratio test	614.96	716.33
Wald test		
Number of observations	31850	31850
Number of individuals	3178	3178

Source: Adopted from Lanzona (2014)
Note: ** indicates significance at 1-percent level.

Household perspectives: Impediments and enabling factors

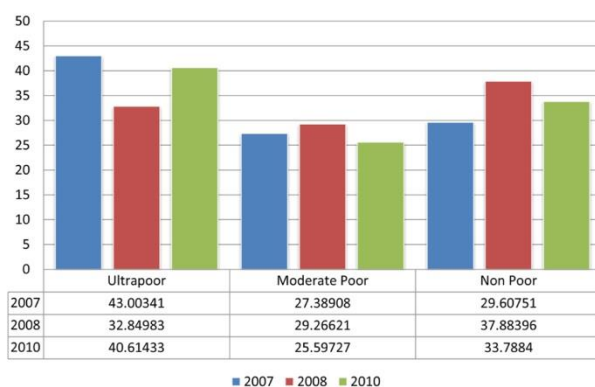
This section now focuses on the households. It lays out the challenges that households face and highlights strategic factors that raise their chances of getting out of poverty or lowering their risk of becoming poor. There are three parts to this section. First, it profiles households and their challenges. Second, it discusses the impact of minimum wages on household income and poverty to empirically verify and illustrate the damage wrought by burdensome regulatory mandates. The question being addressed in this regard is: How helpful (or detrimental) is a faster rise in minimum wages to household income and the goal of poverty reduction? Third, the discussion in this section raises the issue about the translation of productivity improvements into increased household income and reduced poverty incidence. Do they benefit the common man and the poor?

Profiling the poor versus other households

The conventional view is that the poverty rate has not changed much since the beginning of this century. The reality, however, is more complex, as pointed out by Reyes et al. (2011). Using panel data from the Annual Poverty Indicators Survey (APIS) 2004–2010, they find that there is, in fact, a lot of economic mobility.

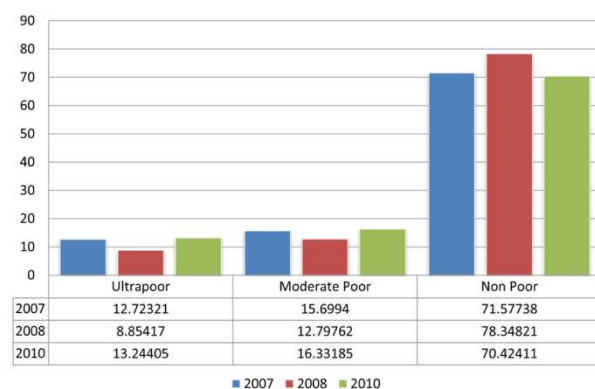
Figures 3.12a, 3.12b, and 3.12c show the distribution of households by economic status in 2004 in comparison with the distribution of the same in 2010. As can be seen from the graph, a good proportion (34%) of the moderate poor in 2004 became nonpoor by 2010. A smaller but significant proportion, however, of the nonpoor in 2004 became poor in 2010. Relatively more of the poor who had moved upwards came from agricultural households.

Figure 3.12a. Where were the moderate poor of the 2004 APIS in 2010?



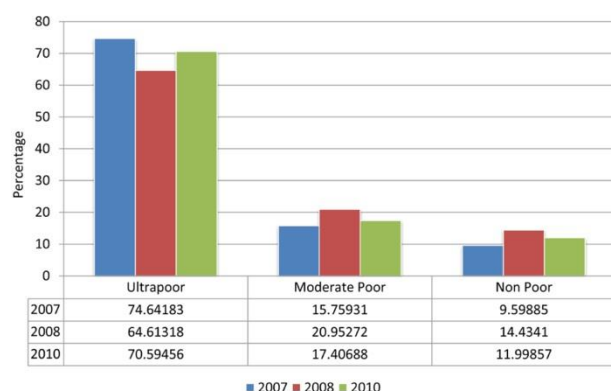
Source: Estimates of Reyes et al. (2011) from APIS, 2004–2010

Figure 3.12b. Where were the nonpoor of the 2004 APIS in 2010?



Source: Estimates of Reyes et al. (2011) from APIS, 2004–2010

Figure 3.12c. Where were the ultrapoor of the 2004 APIS in 2010?



Source: Estimates of Reyes et al. (2011) from APIS, 2004–2010

Table 3.11 presents in more detail household profiles according to economic mobility status. The APIS panel data of 2004, 2007, 2008, and 2010 were used to construct the table. A

household is classified as persistently poor if in all the survey years they were poor (conversely, a household is classified as persistently nonpoor if in all the survey years they were nonpoor). However, if the households were found poor at least once during any of the survey years, they were classified as transient or near-poor households. These households mostly cycle back and forth between being poor and nonpoor. They are highly vulnerable to idiosyncratic and covariant shocks. They are likely to be at a tipping point of becoming poor, as opposed to the hard core or persistently poor households.

Table 3.11. Employment and other characteristics of households by economic mobility

All HHs	Persistently Poor	Near Poor	Persistently Nonpoor	Profiles
100	8.9	38.65	52.45	Distribution
38.82	19.36	43.13	65.19	% Urban household
47.87	66.23	45.57	19.80	% Did not graduate high school
				Household mean:
88352.32	46038.36	78284.69	180500.5	Total income
35628.04	17465.67	29354.37	78672.28	Wages and salaries
24318.58	17424.86	24720.21	35679.59	Entrepreneurial income
28405.71	11147.83	24210.11	66148.66	Other income
78274.48	45313.55	69912.2	150984.3	Total expenditures
3915.794	1392.178	3069.368	9851.464	Education expenditures
2541.679	655.2633	2128.184	6586.586	Medical expenditures
2727.969	1477.232	2363.472	5571.398	Loans from other families
2754.213	127.6611	1361.787	9846.716	Amount deposited in banks and investments
83.16	92.33	79.47	73.72	% Employed
				% Class of worker:
2.33	2.49	2.59	1.48	Worked for private HH
33.42	38.02	32.08	25.93	Worked for private establishments
8.08	3.84	6.63	20.19	Worked for government
47.38	50.46	48.75	37.96	Self-employed without any employee
7.59	4.47	8.50	12.69	Employed in own family-operated farm or business
0.16	0.17	0.10	0.28	Worked with pay on own family-operated business
1.03	0.55	1.34	1.48	Worked without pay on own family-operated business
35.58	34.44	34.10	40.25	% Wages of total income
32.16	38.30	32.10	21.46	% Entrepreneurial activity of total income
32.26	27.23	33.81	38.29	% Other income of total income
77.73	57.38	86.21	98.48	% with own electricity
28.37	11.99	29.48	55.38	% with own water
73.25	55.31	78.53	95.51	% Houses made of strong/predominantly strong materials
72.71	63.88	75.47	83.35	% Own lot

Note: All variables except household means are in percentages. Household means are in pesos. Persistently nonpoor households are households that are not poor in all four survey periods. Persistently poor households are households that are poor in all four survey periods. Transient poor is defined as either those households that were not poor in 2004 and became poor in at least one of the three subsequent survey periods or were poor in 2004 and achieved nonpoor status at least once in the subsequent survey periods.

Source: Authors' estimates, Annual Poverty Indicators Survey (APIS) 2004–2010

The total households in the panel are distributed as follows: 8.9 percent are persistently poor, 38.65 percent are near poor, and 52.45 percent are persistently nonpoor. The differences between the persistently poor and the persistently nonpoor are very telling. As expected, the gaps between them are huge in terms of total income and expenditures. These huge gaps are also reflected in specific expenditures like education and health spending. Not surprisingly, the characteristics of the nearpoor are between those of the persistently poor and the nonpoor. Remarkably, the average characteristics of the transient households are closer to those of the persistently poor (hence, the alternative label of near-poor).

The persistently nonpoor are much better educated and predominantly live in urban areas. While only 19 percent of the persistently poor are in urban locations, 65 percent of the persistently nonpoor live in them. In regard to education, moreover, only about 20 percent of the heads of the latter households did not graduate from high school. The corresponding figure for the persistently poor is 66 percent. Education is clearly a key factor in economic mobility, reflecting the importance of human capital investments in poverty reduction.

The employment rate of heads of households differs in a way that had surprised many commentators. The rate of employment of the persistently poor (92%) is much lower than that of the nonpoor (74%). As mentioned at the beginning, the core issue for the poor is not idleness, as pointed out by de Dios and Dinglasan (2014). Clearly, for the educated and well-off, it is not the issue either. Being unemployed for them is largely voluntary. Their issue relates more to the cost effectiveness of unemployment as a way of finding better jobs. Investing in job search and looking and waiting for the right job to come along could arguably yield better-paying jobs that are at the same time more suited to the workers' skills and temperament. This explanation based on search theory is plausible, although it has yet to be validated empirically in the Philippines. It would be useful in this regard to look at the return from being temporarily unemployed to search for more gainful and suitable job offers.

The households' sources of livelihood also differ. Self-employment and employment in private business establishments account for a higher share of employment among the persistently poor than among the nonpoor. In comparison, the relative share of employment in government work (20.2%) and in own family-operated farm or business (12.7%) appears to be remarkably greater for the persistently nonpoor. The corresponding figures for the persistently poor are only 3.8 percent and 0.2 percent, respectively.

Finally, the share of entrepreneurial activity in total income is highest for the persistently poor at 38.3 percent (versus 21.5% for the nonpoor). This activity is dominated by low-productivity work such as fishing and operating *sari-sari* stores. Furthermore, the share of wages and salaries to total income dominates among the persistently nonpoor at 40.3 percent, followed closely by other income at 38.3 percent. The latter consists of income from assets and transfers from relatives and other domestic and foreign sources.

Household impact of minimum wages

Poverty incidence is usually reckoned in terms of households or families. Yet, at present, there are no causal models that estimate the impact of minimum wages in the Philippines on household income, poverty incidence, employment, and other welfare indicators. The usual

practice has been to estimate the impact of minimum wage on the national employment aggregate (Brooks 2002) or individual worker's employment, unemployment, and underemployment. The following discussion presents estimates of the effects of minimum wage on household income and poverty status. It also teases out the policy implications of the findings. The analysis uses a Difference-in-Difference (DID) methodology²² that requires observing treatment and comparison groups over two periods of time—baseline and post-intervention period. The regions with higher rates of minimum wage increase between 2004 and 2007 were considered the treatment group and those with lower rates of minimum wage increase were used as the comparison group. The year 2007 was then considered as baseline year and 2010 as the post-intervention year. Details of the estimation are provided in Orbeta et al. (forthcoming).

Tables 3.12a and 3.12b present estimates of the impact of a rapid minimum wage rise from 2004 to 2007 versus a slow minimum wage rise on household poverty status and per capita household income in 2007–2010. The DID framework identifies the coefficient of the interaction term between the treatment dummy and post-intervention dummy as the measure of impact. Tables 3.12a and 3.12b²³ show the estimation results for non-agricultural and agricultural minimum wages, respectively. The results reveal that a rapid increase in either agricultural minimum wage or industrial minimum wage induces a large negative impact on per capita household income. As shown in Table 3.13, the per capita household income of the treatment group would have been about PHP 1,689–PHP 1,717²⁴ greater (2000 prices) or about 20 percent higher, if it had followed the same non-agricultural minimum wage increase as that of the control group. The incidence of poverty would have also fallen by about 3–4 percentage points (Table 3.12a). Interestingly, the employment probability of household heads is not significantly affected. The reason is simply that they have little choice but to eke out a living for the family. The impact of higher changes in agricultural minimum wage generated similar impact, albeit of smaller magnitude. It reduces per capita income by PHP 1,455–PHP 1,501²⁵ and the poverty incidence increase by 1.7–2.6 percentage points (Table 3.12b).²⁶

²² This analysis is inspired by Duflo (2001).

²³ Treatment = 1, if the household is located in regions with rapidly rising minimum wages (0 if not) and Post = 1, if the year of the observation is post-treatment after 2007 or 2010. The Treatment*Post coefficient is the DID estimator of the effect of the faster increase of minimum wage in the treatment group over that of the control group.

²⁴ With control variables, not shown.

²⁵ Ibid.

²⁶ Invalidation test using higher-income groups that are not expected to be subject to minimum wage expectedly show insignificant results. Parallel trend analysis prior to treatment is verified in the case of non-agricultural minimum wage but not for the agricultural minimum wage case.

Variables	(1a) Full Sample per Capita Incomes w/o Additional Controls	(1b) Full Sample per Capita Incomes w/ Additional Controls	(2a) Full Sample Poverty Rate w/o Additional Controls	(2b) Full Sample Poverty Rate w/ Additional Controls
Constant	19510.74	-505.6215	.5478261	1.088117
Treatment	8535.064*** (879.7499)	7655.683*** (865.7232)	-.1455301*** (.0123897)	-.1256576*** (.0118464)
Post	2679.683*** (585.9493)	1674.175*** (592.7001)	.0555766*** (.0094215)	.0913905*** (.0097833)
Treatment * post	-1689.498** (754.9644)	-1717.252** (757.6506)	.0302732** (.0121391)	.0403149*** (.0124011)
Age		800.8779*** (153.2097)		-.0178653*** (.0021197)
Age-squared		-4.92714*** (1.451096)		.0001182*** (.0000201)
Sex		-6055.816*** (925.5632)		.0865541*** (.0129439)
Other incomes		—		-.0000009*** (.00000009)
Elementary graduate		-4301.706*** (723.0703)		-.0157131 (.0103519)
High school graduate		3676.901 (812.6434)		-.1995226*** (.0113577)
R-squared	0.0120	0.0514	0.0220	0.1132

Source: Authors' difference-in-difference estimates based on APIS panel data 2004, 2007, 2008, and 2010. The following variables are defined as follows:
(i) Treatment = 1 if the household's regional LMW was made to rise rapidly in 2004–2007; 0 if increased only slowly during the said period
(ii) P = 1 if year is post-treatment, 0 if not
Notes: Per capita income is yearly; ** significant at 5-percent level; *** significant at 1-percent level

Table 3.12b. Impact of agricultural minimum wage on household income and poverty				
Variables	(1a) Full Sample per Capita Incomes w/o Additional Controls	(1b) Full Sample per Capita Incomes w/ Additional Controls	(2a) Full Sample Poverty Rate w/o Additional Controls	(2b) Full Sample Poverty Rate w/ Additional Controls
Constant	19510.74	-505.6215	.5478261	1.088117
Treatment	8535.064*** (879.7499)	2807.637*** (854.7371)	-.0043395 (.0123144)	-.0046716 (.0117116)
Post	2303.664*** (494.2616)	1278.059** (501.7343)	.0661646*** (.007949)	.1048574*** (.0083946)
Treatment * post	-1454.853* (744.2228)	-1501.061** (747.2403)	.0173391 (.011969)	.0261553** (.012225)
Age		794.7559*** (153.7734)		-.01754*** (.0021322)
Age-squared		-4.816266*** (1.456226)		.0001144*** (.0000202)
Sex		-6444.177*** (927.3206)		.0937671*** (.0129963)
Other incomes				-.0000001*** (.00000009)
Elementary graduate		-4204.521*** (725.4464)		-.015387 (.0104105)
High school graduate		4128.82*** (814.0158)		-.2068838*** (.0113989)
R-squared	0.0017	0.0442	0.0055	0.1041
Source: Authors' difference-in-difference estimates based on APIS panel data 2004, 2007, 2008, and 2010. The following variables are defined as follows: (i) Treatment = 1 if the household's regional LMW was made to rise rapidly in 2004–2007; 0 if increased only slowly during the said period (ii) P = 1 if year is post-treatment, 0 if not Notes: Per capita income is yearly; ** significant at 5-percent level; *** significant at 1-percent level				

Regional Minimum Wage of Household Location	Rapid Minimum Wage Rise (Treatment)	Slow Minimum Wage Rise (Comparison)	Difference	Difference-in-Difference		
				Total	Per Peso Change	
NAMW level (2004) ^a	209.99	193.09	16.9			
Rate of increase in NAMW ^a (non-agricultural minimum wage) in 2004–2007	53.82	23.78	36.04			
AMW level (2004)	177.83	186.40	-8.57			
Rate of increase in AMW ^a (agricultural minimum wage) in 2004–2007	55.85	24.54	31.31			
Household income per capita by change in NAMW ^a	2010	29036	22190	6846	-1689 ^b	-46.9
	2007	28046	19511	8335		
Household income per capita by change in AMW	2010	27170	25639	1531	-1,455 ^b	-46.5
	2007	26321	23335	2986		
Increased probability of poverty due to faster rise in NAMW vs. the counterfactual	2010	.4881	.4023	.0858	0.0302 ^b	.00084
	2007	.6034	.5478	.0556		
Increased probability of poverty due to faster rise in AMW vs the counterfactual	2010	.5412	.4577	.0835	0.0173 ^b	.00055
	2007	.5282	.4620	.0662		
Notes:						
^a NAMW = Non-agricultural daily minimum wage rate; AMW = agricultural daily minimum wage rate						
^b In constant 2000 prices without controls. The estimate with controls is not too different at 1,717 for non-agriculture and 1,501 for agriculture wages. In the case of probability of falling into poverty, it is 0.04 for non-agriculture and 0.026 for agriculture wages.						
"Difference", is the simple difference computed from subtracting treatment-comparison. This is to not confuse the reader from other values which is actually a "Difference-in-Difference".						
Source: Authors' estimates						

The implications of the findings are thought provoking. Hefty increases in minimum wages do result in huge potential income losses, contrary to current views that regard the welfare effects of minimum wage to be modest (WB 2013b). They create more poor people, undermining the assumption and rhetoric about the effectiveness of the current tripartite system. It fails to represent the interest of the poor and the workers effectively.

At this point, one might ask: Why is household income lower with a more rapid increase in legal minimum wages, if the employment of the household heads is not affected. The answer must be that the affected households must have fewer members with jobs—either they have difficulty landing a job or they have been laid-off. This explanation is consistent with the findings of Canales (2013) who studied the impact of minimum wage increase using the July 2007–July 2008 panel of the LFS and regression discontinuity design. This particular study concluded that the increase in minimum wages implemented in 2007 reduced the weekly work hours by 2.7 hours. In addition, it also decreased the probability of retaining or gaining employment by 8 percent to 22 percent. Finally, this is also consistent with the findings of Lanzona (2014) that minimum wages significantly

reduce the probability of employment of teenagers, the young, the women, and the less educated. Another explanation is that workers had to shift from formal to informal employment, which yields lower income.

In summary, the household evidence presented above points to the need to moderate rises in minimum wages. The findings about the size of the effects of minimum wages illustrate the need to evaluate the impact of other aspects of labor regulations, policies, and practices such as the six-month regularization requirement, severance payments, subcontracting, and the hiring and firing rules.

Productivity improvement efforts and household benefits

Do productivity improvements both at the level of the household and at higher levels of aggregation translate into income benefits for the common person, especially the poor? This question is highly topical, given the administration's concerns and the critics' complaints about the failure of rapid GDP and productivity growth to create more jobs, raise real wages, improve income distribution, and reduce poverty incidence.

A review of evidence suggests that the answer to the question is: It depends. Improvements in education, nutrition, skills formation, and the character traits of individuals appear to be rewarded by the labor market with higher wages and better economic future. On this score, international and local studies have shown that the impact of education on workers' earnings and poverty incidence can be substantial. In the Philippines, education appears to have a high rate of return. Paqueo et al. (2013), for example, estimated that the rate of return to high school education is over 20 percent. Combining the gains in the daily wage rate and increased hours worked, the average earnings during the year of a high school graduate is more than double that of an elementary school graduate. Moreover, the study finds that the additional income from high school education is large relative to the country's official poverty threshold.

The Philippine experience is consistent with international studies. They also show that improvements in human capital lead to increased income. In addition to showing that the rate of return to years of education is high, available international studies further indicate that cognitive learning ability and technical skills lead to more gainful jobs. Moreover, individuals with desirable character traits like grit, curiosity, discipline, resilience, honesty, and other traits valued by the market tend to be more successful in life. These traits account for about two-thirds of the future success of children, according to 2006 Nobel Laureate in Economics James Heckman and his colleagues working on this issue (Tough 2012).

Other examples of human capital investments are improvements in nutrition status. International studies have documented evidence on the impact of nutrition on productivity. In the Philippines, a careful study on the issue has shown that better nutrition, as measured by anthropometric indicators, resulted in improved agricultural productivity, which is reflected in increased wages (Haddad and Bouis 1991).

It must be emphasized, though, that greater inputs do not automatically mean more human capital. This is illustrated by international experience with training programs. Training is often the first intervention that comes to mind when thinking of ways to help low-income households get more gainful jobs. A review of country experiences, however, reveals that some

programs are effective, but most public training programs are not. In general, the effectiveness of training programs is mixed, depending on program design and implementation (Betcherman et al. 2004; J-PAL 2013; WB 2013a).

Little has been done to evaluate the impact of training in the Philippines. Available evidence, though, suggests that the results in the Philippines are also mixed. This gap in knowledge about the effectiveness of Philippine training programs and other interventions to improve skills needs to be addressed systematically. The so-called “creative destruction” of jobs and enterprises arising from accelerating technological progress and greater global competition necessitates constant training and retraining of workers. The challenge is to find efficient ways by which the Philippines and its workers can make timely and effective adaptation to the rapidly changing environment.

On this score, there are several fundamental issues that need to be addressed (Paqueo et al. 2011). One of these issues is that only 3 percent of the labor force had obtained technical and vocational education and training (TVET) based on the 2008 APIS. Another (related) issue is lack of opportunities for enterprise-based training. This type of training, which is the most effective in terms of employment, needs expansion. In 2010, only 4 percent of TVET graduates came from enterprise-based training (Orbeta and Abrigo 2013). A large part of the explanation of the lack of enterprise-based training opportunities is that labor regulations create unintended disincentives against firms investing in job-based human capital accumulation.

Conclusions

To summarize, we draw the following strategic conclusions from the above discussion. First, the Philippines remains a country with a huge and growing labor surplus; consequently, wages will be under great pressure to settle down at some low-level equilibrium so that firms, particularly small-scale enterprises, will have the capacity to absorb this labor surplus. Until enough of the labor surplus has disappeared (signaled by sustained increases in the wages of unskilled labor), a rising wage rate is going to be an unlikely engine of poverty reduction for workers without substantial human capital.

Second, for poverty reduction and lower inequality, the core issue is not about open unemployment and idleness; rather, it is about raising household incomes by raising the productivity of the general economy and moving workers from low- to high-productivity sectors. It is also about increasing their employability in jobs that give premium wages for workers with character traits and competencies that are in short supply.

Third, contrary to the perceptions of many critics, the level of employment does rise with increased output over time. On this point, it would make sense to facilitate the expansion of labor-intensive industrial production, especially the manufacturing of tradable commodities. Facilitation means not just moderating minimum wage mandates and other restrictive labor regulations, but also pushing reforms that go beyond the responsibility of the DOLE. These include reforms that will effectively deal with critical binding constraints and counterproductive policies (discussed in Chapter 2, this volume). Examples include *inter alia* infrastructure

underdevelopment, elevated cost of subsistence²⁷ due to rice import policy, high cost of doing business, high energy cost, weak enforcement of contracts and protection of property rights, and confusing laws.

Fourth, minimum wages do have substantial negative impacts on household economic welfare. These are reflected in the income and poverty status of households. These are also indicated by the lower employment of individuals with low human capital (e.g., the young, the inexperienced, the less educated, and women). Support for these findings is further strengthened by statistical results showing significant damaging effects of minimum wages on demand for workers by SMEs. The foregoing observations are perhaps only the tip of the iceberg as the above estimates do not include yet the effects of minimum wages on human capital formation and the impact of other regulations like the six-month worker regularization law and separation pay. The effects of these other labor regulations and the high cost and uncertainty of conflict resolution processes could be as substantial (if not more so) as the impact of minimum wages. Therefore, they need to be empirically evaluated.²⁸

Fourth, under a superabundant labor surplus situation, increased average labor productivity does not automatically lead to a rise in the wage rate of unskilled workers, but it is likely to increase demand for their services. Many poor families with underemployed and underproductive workers can benefit from this increased labor demand through off-farm work and/or by moving from traditional farming to jobs generated by manufacturing revitalization and expansion.

Fifth, investments in education, training, and other forms of human capital like improved health and nutrition do lead to higher wages, provided that those investments are effective in building up human capital. Labor markets do reward effective human capital investments and raise the wage rates of the poor without having to wait first for the disappearance of the huge and growing labor surplus.

Reflections and recommendations

Alternative strategy

The Philippines is at a crossroads. It can choose to continue to follow current unrealistic policies that despite good intentions have been actually detrimental to the poor. Alternatively, with China's massive shedding of labor-intensive manufacturing jobs, it can opt to try another development path to get a better chance at reducing poverty. That mass poverty can be dramatically reduced within a few decades is a proven fact. But for this to be achieved, it is necessary to adopt a policy and regulatory environment that enables and motivates (i) the reallocation of the country's superabundant labor from low- to high-productivity activities, specifically labor-intensive manufacturing; and (ii) the development of the human capital of its workers, especially the unskilled labor.

²⁷ Relative food price is one of the key drivers of minimum wages. This could be reduced by reforming regulations on the importation of rice.

²⁸ Surveys of business enterprises show that other labor regulation concerns rank higher than minimum wage (WB 2013a).

This strategic view is based on lessons learned from the experience of successful neighbors like China, Singapore, Indonesia, Malaysia, and Thailand. It builds on earlier studies.²⁹ It also draws inspiration from the new structural development economics (Lin 2011).

At the heart of the proposed alternative strategy is the idea that “following its comparative advantage to build up its industries is the best way for any developing country to sustain industrial upgrading and economic growth” (Lin 2011). The challenge is how to find those industries in which the Philippines has comparative advantage. The challenge looks easy. Past decades, however, have seen plenty of well-intentioned industrial plans in developing countries that had failed because they were unrealistic.³⁰

To overcome knowledge constraints and ensure realism, Filipino policymakers and the public will benefit from looking at those industries that China is becoming less competitive in. As mentioned, these are labor-intensive industries that employ millions of workers. The Philippines can choose those industries that are suitable to its superabundant labor endowments and in which China and other more advanced countries do not have a leg up over the Philippines.

In implementing its comparative advantage, reliance on market mechanisms is a must. But the government must also play its central role of solving market failures. A key thesis of the new structural development approach is that there are massive externalities and public goods that require government action to support more efficient use of resources (e.g., labor) and achieve poverty reduction. In this view, the government will have to guide, target, facilitate, and coordinate policies and public expenditures that will correct the aforementioned market failures (Lin 2011). For example, the location of public infrastructure investments on roads, bridges, and ports needs good coordination to maximize the country’s ability to attract good investors and facilitate implementation of their projects.

A 12-point job program

In support of the general recommendation above, a concrete 12-point jobs and human capital development program is proposed below, conveniently referred to as the **Jobs Expansion and Development Initiative (JEDI)** for poverty reduction. JEDI has two main objectives. One is to expand gainful jobs through the acceleration of labor-intensive production, particularly the manufacturing of tradable commodities. The other objective is to improve investments in education and other human capital development activities and sustain TFP gains. To achieve these objectives, JEDI calls for:

²⁹ Strictly, most of the elements of the proposed strategy are not completely new. A few or more of them have already been discussed by Sicut (2010), ILO (1974), World Bank (2013b), and Usui (2011) and various studies at the University of the Philippines School of Economics. Similar ideas have been floating around for years, if not for decades, waiting to be seriously adopted and implemented.

³⁰ Ambitious policymakers and politicians adopted them for various reasons. Some did not know any better. Others were misled by ideologues or were captured by vested interests. Moreover, it was politically smart to spouse industrialization and social development short-cuts that were popular but economically naive.

- (i) Simplifying labor dispute resolution processes to cut the time, cost, inconvenience, and uncertainty involved;
- (ii) Making the rules on hiring and firing decisions more flexible, leaving the firms and workers to negotiate and work out agreements that are mutually beneficial;
- (iii) Instituting measures that will minimize the imposition of labor regulations and practices detrimental to and discriminatory against the poor and other disadvantaged populations;
- (iv) Allowing firms to hire low-skilled and poor workers who want to voluntarily opt out of the mandatory minimum wage norm, recognizing that it hurts rather than helps them;³¹
- (v) Experimenting with a Singaporean style policy (Box 3.1), providing limited grants to targeted ultrapoor workers whose market-determined wages fall far too short of a predetermined social norm on decent wages (should the government find conformity to this norm of public good);³²
- (vi) Transforming the consultation process from a tripartite into a quadripartite system that would give the poor, unemployed, underemployed, and self-employed direct representation in the determination of labor regulations and policies;
- (vii) Encouraging labor unions to focus on raising the competencies and productivity of workers as a means to achieving decent wages;
- (viii) Lengthening to two years from six months the compulsory regularization of young workers to expand their learning experience and build their skills on the job;
- (ix) Ensuring quality implementation of the K-12 reform; undertaking institutional reform of the Technical Education and Skills Development Authority as articulated in the *2011 Economic Policy Monitor* of PIDS; and pursuing ongoing Commission on Higher Education initiatives like the Unified Student Financial Assistance System for Higher and Technical Education (UNIFAST)³³ aimed at improving access to quality higher education and the production of good research;
- (x) Implementing the extension of demand-side education assistance of the 4Ps to high school students and complementing it with policies and programs that facilitate on-the-job training and employment in private enterprises;
- (xi) Promoting research and development activities in support of this proposed 12-point program, including piloting and testing of innovative approaches; and
- (xii) Facilitating the emergence of a well-organized coalition of stakeholders devoted to finding and promoting approaches that effectively advance the interest of poor workers now being excluded from gainful job opportunities.

³¹ The government must ensure, though, that workers' acceptance of the offers is voluntary and well-informed.

³² It is best to finance public goods through general tax revenues rather than raise the cost to firms using more labor inputs.

³³ A UNIFAST bill was recently passed by the House of Representatives Committee on Education and is now being discussed in the Senate Committee on Education. The bill seeks to rationalize and expand student financial assistance, providing grant-in-aid for poor but deserving students, scholarships for the gifted and talented regardless of poverty status, and loans for students with better-off parents with liquidity issues.

Box 3.1. Singapore's support for low-wage workers

Singapore does not have a minimum wage policy but supports its low-wage earners through several programs. First is the Workfare Income Supplement (WIS) scheme. Second is the reduction in the employer's contribution to the Central Provident Fund (CPF), the country's mandated individual pension fund, to improve their employability. Similarly, to increase their take-home pay, their personal CPF contribution rate was also reduced. Third is the Workfare Training Support (WTS).

The WIS scheme was introduced in 2007 as a key pillar of Singapore's social security system. The WIS encourages its older, low-wage workers to continue working and enhance their skills. Since 2010, the government has made changes toward expanding the coverage by increasing the ceiling wage for their qualified beneficiaries. They have also included younger people with disability. Grants have also increased in payout frequency and amount. These are now given four times a year. Under this program, a worker receives as much as SGD 3,500 per year (as of 2013). Box Table 3.1 shows the benefit table by age as of 2013. The employees receive 40 percent in cash (deposited directly into their bank accounts or given in check in the absence of a bank account) and 60 percent in CPF contribution.

Age Group	Maximum WIS Payout for Employees	Maximum
35-44	1,400	933
45-54	2,100	1,400
55-59	2,800	1,867
60 and above	3,500	2,333

Basic qualifications for the WIS include: (i) Singaporean citizenship; (ii) age of at least 35 years old; (iii) work of at least two months in a three-month period; (iv) an average gross monthly income of not greater than SGD 1,900 for the period worked; and (iv) residence in a property with annual value of SGD 13,000.

In addition, the WIS comes hand in hand with the WTS scheme. Under this program, employees attend training to gain certifiable skills accredited by the Singapore Workforce Development Agency. For those who are not enrolled by their employers, 95 percent of the course fee is funded. Added allowance is also given provided that they (1) were not enrolled by their employers; (2) complete 75 percent of attendance; (3) pass the course; and (4) are employed in a job related to the course.

Sources: www.mycpf.cpf.gov.sg/Members/Gen-Info/WIS/WIS_Scheme.htm; <http://www.workfare.sg/> (accessed March 2014)

Though the 12-point program above does not cover all relevant issues, we believe that substantial progress can be achieved in expanding sustainable, poverty-reducing jobs. For this, it is necessary that *inter alia* minimum wage is reformed. The reform should be undertaken immediately, while investors are looking for new locations for labor-intensive production and while the Philippine economy is getting another look as a potential destination.

JEDI emphasizes minimum wage reform because there is now clear and preponderant evidence of its deleterious impact on the employment, income, and poverty status of households, especially those belonging to disadvantaged population groups. Undoubtedly, though, other complementary labor reforms and measures are necessary (as discussed in Chapter 2, this volume).

It should be emphasized that the proposal recognizes the aspirations of Filipinos for secure jobs with decent wages. But it challenges the idea that imposing minimum wages and other current labor regulations should be the weapons of choice. They do not work; worse, they have detrimental consequences, as mentioned. Alternatives should, therefore, be considered, such as better education, increased labor-intensive manufacturing, and greater opportunities for on-the-job training. Arguably, alternatives like these might take time.

Consequently, bridging social protection programs needs strengthening to help the poor directly with their subsistence needs. For this, instead of imposing mandatory minimum wages, it would be better to use direct and temporary income subsidy, carefully targeted to extremely poor households to meet suitable norms that society considers a public good. Such an approach will be both efficient and equitable, conforming to the general principle of public economics that a public good should be financed by general tax revenues. On that score, the Singaporean experience is worth studying: it subsidizes the difference between the wage of a poor worker as determined by the market and the wage level it considers suitable to the achievement of the public good. The advantage of this approach (subject to implementation design details) is that it spreads the cost of such a policy over the general population, who benefits from it, instead of concentrating on and penalizing those enterprises that should be encouraged to employ more workers.

The study, therefore, concludes that the time has come for the country to leave the beaten path and try new approaches that will rebalance current labor laws and practices to expand gainful jobs and minimize unintended consequences detrimental to the poor, the young, the women, the less educated, and the unorganized workers. For too long now, policies and regulations have been advocated on their behalf but have turned out to be detrimental to them and their families.

References

- Abdul Latif Jameel Poverty Action Lab (J-PAL). 2013. J-PAL youth initiative review paper. Cambridge, MA: J-PAL.
- Albert, J. 2014. Growth isn't jobless, folks, but certainly, statistics show that there are challenges in job creation. Unpublished.
- Betcherman, G., K. Olivas, and A. Dar. 2004. Impacts of active labor market programs: New evidence from evaluations with particular attention to developing and transition countries. Washington, D.C.: The World Bank Social Protection Unit.
- Brooks, R. 2002. Why is unemployment high in the Philippines? IMF Working Paper WP/02/23. Washington, D.C.: International Monetary Fund.
- Canales, K. 2013. Effects of minimum wage increase on employment outcome using regression discontinuity design. Unpublished master's thesis, School of Statistics, University of the Philippines.
- De Dios, N. and K. Dinglasan. 2014. Just how good is unemployment as a measure of welfare? A policy note. UPSE Discussion Paper No. 2014-01. Diliman: University of the Philippines School of Economics.
- Di Gropello, E., H. Tan, and P. Tandon. 2010. *Skills for the labor market in the Philippines*. Washington, D.C.: World Bank.
- Duflo, E. 2001. Schooling and labor market consequences of school construction in Indonesia: Evidence from an unusual policy experiment. *American Economic Review* 91(4):795–813. <http://www.aeaweb.org/articles.php?doi=10.1257/aer.91.4.795>.
- Fabella, R. 2013. Development progeria: Genesis and healing. BSP Professorial Chair Lectures. Manila: Bangko Sentral ng Philipinas.
- Felipe, J. and R. Hasan, Editors. 2006. *Labor markets in Asia: Issues and perspectives*. New York: Palgrave MacMillan.
- Fuhrmann, R. 2012. Okun's law: Economic growth and unemployment. www.investopedia.com/articles/economics/12/okuns-law.asp (accessed December 13, 2013).
- Habito, C. 2014. Paradigm shifts in agriculture. No free lunch column. *Philippine Daily Inquirer*. March 11.
- Haddad, L. and H. Bouis. 1991. The impact of nutritional status on agricultural productivity: Wage evidence from the Philippines. *Oxford Bulletin of Economics and Statistics* 53(1):45–68. <http://213.154.74.164/invenio//record/12028/files/haddadPNABK429.pdf>.
- Heckman, J., J. Stixrud, and S. Urzua. 2006. The effects of cognitive and noncognitive abilities on labor market outcomes and social behavior. *Journal of Labor Economics* 24, 3(Jul):411–482. <http://www.nber.org/papers/w12006>.
- International Labour Organization (ILO). 1974. *Sharing in development: A programme of employment, equity, and growth for the Philippines*. Geneva: ILO.
- Kapsos, S. 2006. The employment intensity of growth: Trends and macroeconomic determinants. In *Labor markets in Asia: Issues and perspectives*, edited by J. Felipe and R. Hasan. Manila: Asian Development Bank.
- Lanzona, L. 2014. A review of labor laws and its effects on the Philippine economy. PIDS Policy Notes No. 2014-11. Makati City: Philippine Institute for Development Studies.

- Lin, J.Y. 2011. From flying geese to leading dragons: New opportunities and strategies for structural transformation in developing countries. WIDER Annual Lecture 15. Tokyo: World Institute for Development Economics Research, United Nations University.
- Mangahas, M. 2013. Joblessness versus idleness. Social climate column. *Philippine Daily Inquirer*. October 11.
- Moretti, E. 2010. Local labor markets. NBER Working Paper No. 15947. Cambridge, MA: National Bureau of Economic Research.
- National Statistics Office (NSO). Various years. *Annual Poverty Indicators Survey*. Manila: NSO.
- Orbeta, A. and M. Abrigo. 2013. Assessment of TESDA scholarship program. PIDS Research Paper No. 2013-01. Makati City: Philippine Institute for Development Studies.
- Orbeta, A., V. Paqueo, and D. Dulay. Forthcoming. Impact of minimum wage on household income and poverty: A difference-in-difference analysis. Background paper for the report.
- Paqueo, V., A. Orbeta, and J.R. Albert. 2011. A critical look at the education sector: Achievements, challenges and reform idea. In *PIDS 2011 Economic Policy Monitor*. Makati City: Philippine Institute for Development Studies
- Paqueo V., A. Orbeta, T. Castaneda, and C. Spohr. 2013. After five years of Pantawid, what next? PIDS Discussion Paper No. 2013-41. Makati City: Philippine Institute for Development Studies.
- Reyes, C., A. Tabuga, C. Mina, R. Asis, and M.B. Datu. 2011. Dynamics of poverty in the Philippines: Distinguishing the chronic from the transient poor. PIDS Discussion Paper No. 2011-31. Makati City: Philippine Institute for Development Studies.
- Schultz, T.W. 1964. *Transforming traditional agriculture*. New Haven: Yale University Press.
- Sicat, G. 2010. Spotlighting on high economic growth, employment of the poor, and poverty reduction: A three-pronged strategy. UPSE Discussion Paper No. 2010-07. Quezon City: University of the Philippines School of Economics.
- . 2004. Labor issues in Philippine development during Blas Ople's times. UPSE Discussion Paper No. 0402. Quezon City: University of the Philippines School of Economics.
- . 1986. A historical and current perspective of Philippine economic problems. PIDS Monograph Series 86-11. Makati City: Philippine Institute of Development Studies
- Tough, P. 2012. *How children succeed: Grit, curiosity, and the hidden power of character*. New York: Houghton, Mifflin Harcourt Publishing Company.
- Usui, N. 2011. Transforming the Philippine economy: Walking on two legs. ADB Economics Working Papers No. 252. Manila: Asian Development Bank.
- World Bank (WB). 2013a. Jobs - data and research. *World Development Report*. Washington, D.C.: WB.
- . 2013b. *Philippine Development Report*. Manila: WB.