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# Improving the Application of Decent Standard of Living (KHL) for Minimum Wage Adjustments

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# Improving the Application of the Decent Standard of Living (KHL) for Minimum Wage Adjustments

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## 1. INTRODUCTION

In 2011-2012 Indonesia experienced some of the worst labor unrest in recent history. This episode was similar to the public disruption of the mid and early 2000s. Union statements and actions drew much public attention, and attracted the serious attention of business.

One key issue in the disputes between unions and employers (represented by APINDO) over revisions to the minimum wage has been disagreement over the rate of increase in the cost of living experienced by workers. This is typically measured by the KHL, *Kebutuhan Hidup Layak* or the Decent Standard of Living, which is now calculated in most districts in the country (and all districts on Java) each year. The KHL is the basis for minimum wage determination announced by the Governor of each province, for individual kabupaten and sectors, to be introduced on January 1 each year.

Another issue is the appropriate level of the KHL to be used as a basis for minimum wage (UMK) revisions at the district level. This tension has been pronounced in a number of districts, especially around the national capital, Jakarta. It is important nationally because DKI and these key districts are the pace setters in minimum wage negotiations each year. The level of national wages, and hence Indonesia's wage costs and competitiveness, are influenced by these negotiations.<sup>1</sup>

In some districts, unions and employers undertake independent surveys of prices over the past 12 months and come up with different estimates of the increases in the cost of living over this period. Typically, the estimate by union representatives is higher and that by APINDO lower, and the government representative on the Wage Council (Dewan Pengupahan) entrusted with formally deciding on the KHL comes up with a compromise figure. In the 2000-2006 period, the KHL at province level was estimated by the Central Bureau of Statistics, a professional body. Hence the figures were much less likely to be in dispute.<sup>2</sup>

This paper provides some evidence on the trends in the KHL over the past decade and especially in recent years (2008-2012). The main conclusions are as follows:

- The KHL is partly based on research and partly negotiated, as evidenced by large variations across *kabupaten*, as well as for individual kabupaten over time.
- The KHL has increased much faster than the CPI in recent years, and varies tremendously from year to year across provinces and districts.
- Regression analysis suggests that the level of the KHL announced by the Wage Council for provinces and districts each year is one determinant of the level of minimum wages, although its influence (the elasticity) with respect to minimum wages is relatively small.
- The KHL is an imperfect instrument for providing a transparent and scientifically based estimate of the level and change in the cost of living for Indonesian workers; the procedures need to be revised to take a more professional approach to the process.

In the next section we provide background on the KHL, its components and its relationship to the minimum wage at district and province level (UMK and UMP). In the third section, we investigate the

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<sup>1</sup> One important issue for research is the extent to which Jakarta and districts around the capital act as wage leaders for other districts in Indonesia. This is an important issue for future research.

<sup>2</sup> It is unclear why the calculation of the KHL was turned over to the tripartite wage councils in 2007. There was no official ministerial regulation on the matter, and the main ministerial regulation issued in 2005 specifically mentions the engagement of the local statistics office (*Kantor Statistik*) in the determination of the level of KHL.

KHL trends at province and *kabupaten* level, focusing on the latter, which has become the main focus of wage negotiations and adjustments across the country. The fourth section examines the relationship between the KHL and minimum wages (UMK) in selected provinces in Java for which data are available. The final section examines some implications of the findings for longer term wage policy and mechanisms for adjustment, as well as several questions that might be taken up in further research.

## 2. THE KHL: REGULATORY ASPECTS, COMPONENTS, AND RELATIONSHIP TO THE UMP AND UMK

In 2005, the Minister of Manpower issued a new edict introducing a revised, increased minimum standard, the KHL (*Kebutuhan Hidup Layak*), as a basis for assessing the level of minimum wages in relation to the basic needs of a single worker.<sup>3</sup> The KHL was on average 38 percent higher than the preceding standard (the KHM) on average for Indonesia; the increased standard included 3,000 calories per day of rice (as against 2,500 for the KHM), increased consumption of several other items, and several new items in the 47 basic needs basket of commodities and services.

At the same time, from 2007, the basis for calculating KHM changed. Tripartit, local Wage Councils (*Dewan Pengupahan*) now have the authority to determine the KHL rather than the Central Bureau of Statistics (BPS), which had calculated the KHL for each province before 2007. This is the basis of recommendations made to the Bupati and Governor for the UMK and UMP. The 2005 Ministerial edict specifies, however, that the local government statistics office (*Kantor Statistik*) should be involved in the process in support of the government representatives on the Wages Council.

During the 2000s, the relevant minimum wage for determining the wage increases has increasingly shifted from the province to *kabupaten* level. While there was still only one minimum wage in almost half of all provinces in 2010,<sup>4</sup> seven provinces both in Java and the outer islands set minimum wages at the *kabupaten* level. Other combinations of minimum wage systems included wages set at the province level for certain industries, especially in the smaller resource abundant regions outside Java. In two provinces, minimum wages were set for industries at the *kabupaten* level, in West Java and North Sumatra. Industry-level minimum wages set by governors are typically 10-30 percent higher than the regional or provincial minimum, with these margins being negotiated (in theory) by employer and union groups. See the appendix or details on this rather bewildering array of practices.

It is instructive to note the extent to which estimates of the provincial standard of living have changed in the 2000s. Data in Figure 1 for Indonesia and several larger provinces show that the estimated increase in the KHL was just over 50 percent (52.5) in the period 2007-2011. This was almost double the estimated increase in the rate of inflation (30 percent) as measured by the CPI in major cities in each of 27 provinces.<sup>5</sup> Except in 2007, the second year after the KHL was introduced, the estimated increase in the KHL was double the increase in CPI nationally every year (Figure 2).

Thus, the KHL appears to be overstating the real increases in prices over the period, assuming that the calculation of the CPI by BPS is close to the actual increase in the cost of living. In several provinces, mostly resource abundant Outer Island provinces, the estimated increase was close to 100 percent (e.g., Kepulauan Riau, Papua, Kalimantan Timur and Sulawesi Barat).

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<sup>3</sup> See Ministerial Decision No. 17, 2005, Menteri Depnakertrans,

<sup>4</sup> All of these provinces were outside Java, except Yogyakarta.

<sup>5</sup> Several provinces are not included in the calculation because data are missing.

Figure 1  
*Increase in the KHL and CPI, Indonesia 2006-2011*

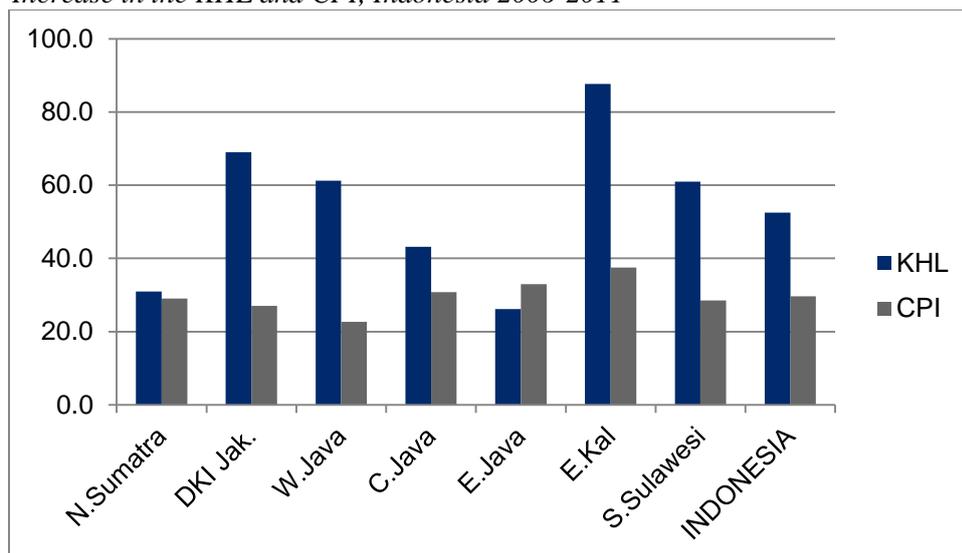
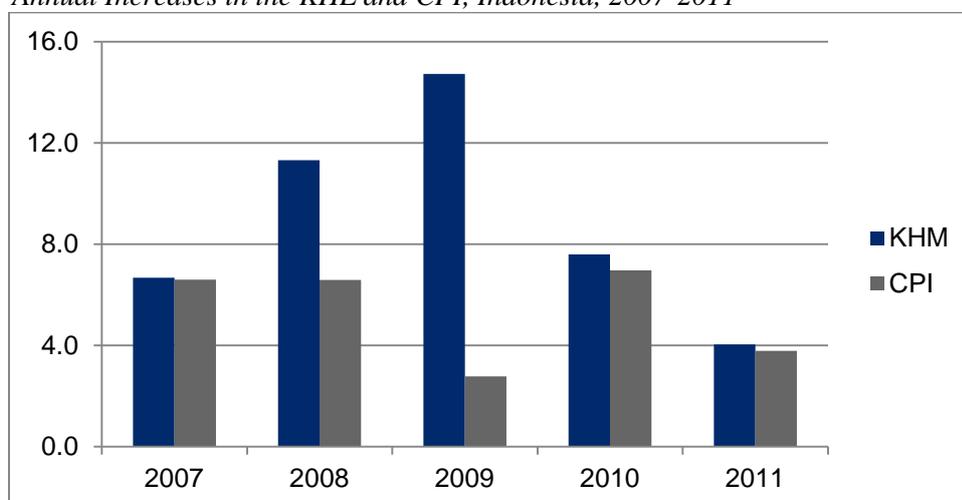
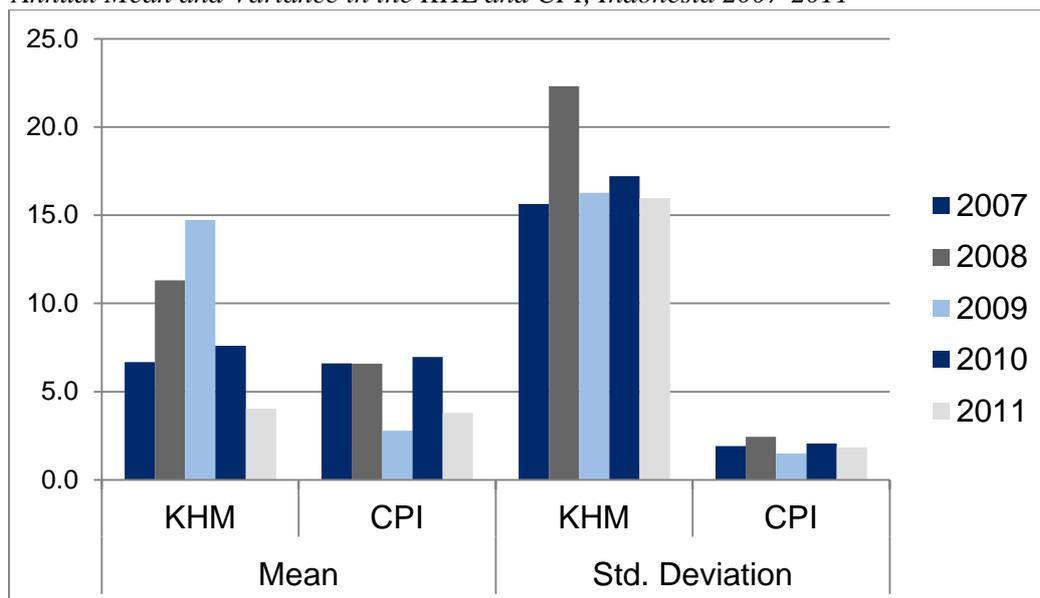


Figure 2  
*Annual Increases in the KHL and CPI, Indonesia, 2007-2011*



More alarming are the huge variations in the KHL across provinces from year to year. Thus, the standard deviation in the KHL was almost twice the mean increase in each year (Figure 3); this means a coefficient of variation of close to 2. In contrast, the variance was very much smaller across provinces, even though CPI increases also varied.

Figure 3  
Annual Mean and Variance in the KHL and CPI, Indonesia 2007-2011



Finally, while it makes more sense to concentrate on the how the KHL compares with the UMK (the *kabupaten* minimum wage), one stated goal of the calculation of the KHL is to ensure that provinces move in a “staged” way (*bertahap*) toward a UMP, which is at least equivalent to the KHL, taking into account local conditions. In the 2000-2005 period, the then-KHM increased continuously to almost equal parity for Indonesia as a whole, as well as for most provinces (despite some large fluctuations from year to year among provinces; see selected provinces shown in Figure 4a). In the subsequent years, 2006-2011, after the new standard (KHL) was introduced, the minimum wage relative to the minimum cost of living value for a single worker fell, as might be expected. It has since remained below 90 percent of the UMP, although it has been increasing slowly and exceeding the UMP in some provinces, such as North Sumatra (Figure 4b). The UM/KHM ratio has fluctuated in most provinces and especially in DKI Jakarta, partly due to uneven decision-making on minimum wages, and even more so in regard to the level of the KHL, as discussed above.

Figure 4a  
Ratio of KHM to UMP, Selected Provinces, Indonesia 2000-2005

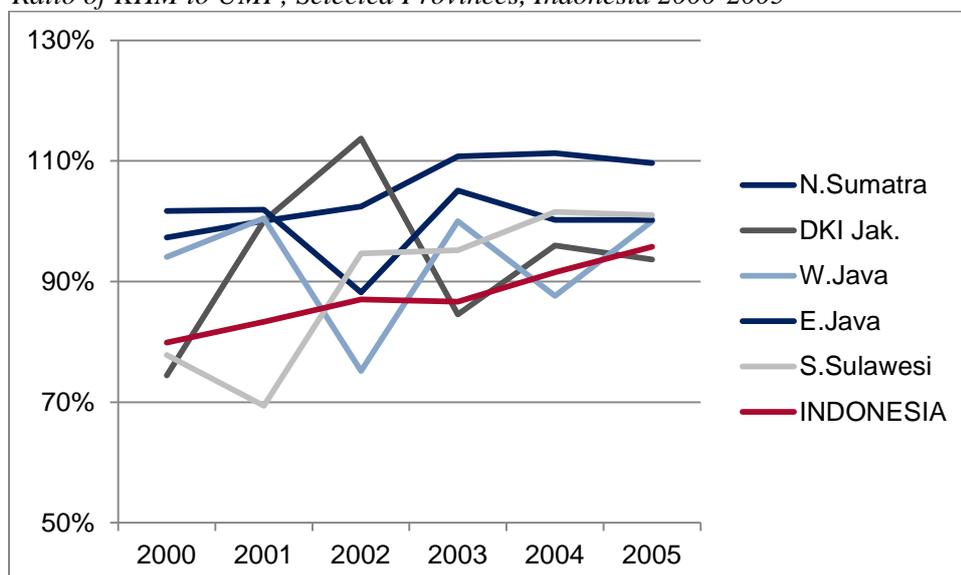
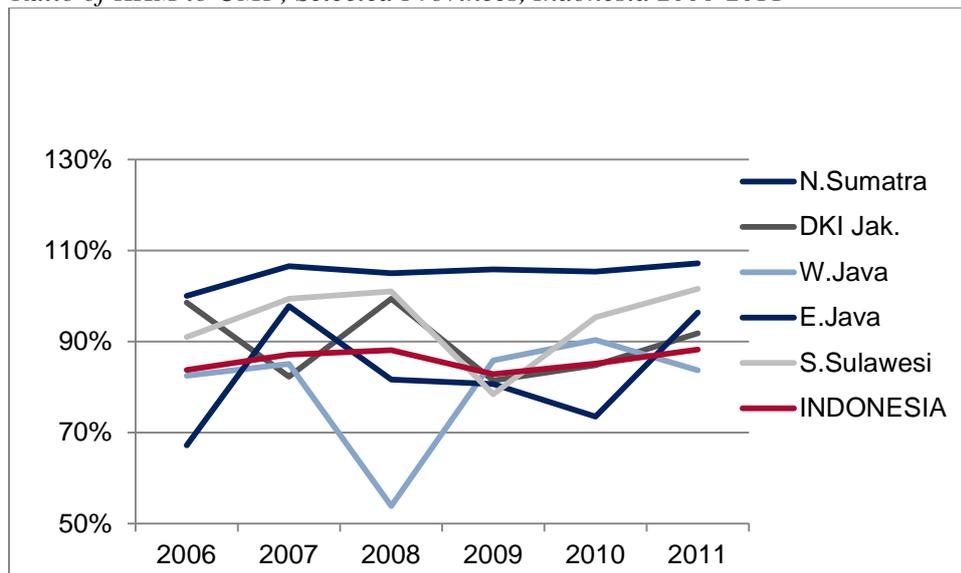


Figure 4b

*Ratio of KHM to UMP, Selected Provinces, Indonesia 2006-2011*



In the early 2000s, the UMP and KHM for provinces was relevant to decision-making in regard to wages in Indonesia. By the late 2000s, the UMP mostly referred to the district with the lowest minimum wage in each of the main provinces on Java, and in some Outer Island provinces. In Java, where most minimum wage workers reside (especially in manufacturing), a large part of the decision-making in regard to wages is now made at the district level. We now turn to the KHL in relation to *kabupaten* cost of living and setting the *kabupaten* minimum wage, or the UMK.

### 3. KHL PATTERNS AND TRENDS AND THE UMK AT THE KABUPATEN/KOTA LEVEL

Following Law 13, 2003, the minimum needs of single workers are to be determined at the *kabupaten* level, according to the KHL, which is examined each year and negotiated by the tripartite members of the *kabupaten* Wage Councils. Data on KHL at the *kabupaten* level are fragmentary; they are not collected regularly by BPS and we depend on the web sites of *kabupaten* councils and governments, or blog sites to examine trends and determinants.

Two complete sets of data for all the districts in West Java and East Java (2011-2012) and Central Java (2008-2010) provide information on the level and variation of KHL at the *kabupaten* level of government. The West and East Java data show that there were significant variations in both KHL and UMK across both provinces. Table 1 shows data for 2012; the highest KHL was 40 percent above the lowest in East Java, and the gap was only slightly smaller for West Java. The variance was greater for the UMK, and in West Java for both the KHL and the UMK. This reflects greater variation in wage bargains especially in the JABOTADEBEK parts of West Java, where some of the more active union groups are based.

Figure 5 shows the mean KHL and UMK in West Java and East Java in 2011 and 2012, for *kota* and *kabupaten* separately. It suggests that the UMK grew more rapidly than the KHL in both provinces. The gap was especially large for cities and towns in East Java, where the estimated KHL grew only by an average of 3 percent while the UMK rose by close to 8 percent.

There is an interesting difference, once the data are controlled for the initial UMK/KHL ratio. It is clear that larger increases in the KHL and the UMK were recorded by the *kabupaten* in East Java, where the gap between the KHL and UMK were largest (see Table 2). It seems that there is likely

greater pressure to push up the KHL in negotiations in cases where the gap with the existing KHL is large. This is evident in Table 3, which shows that the push towards a higher UMK is especially evident in the *kota/kodya* in East Java, in cases where the gap with the KHL was large in 2011.

Finally, we have gathered some data on the KHL and UMK/UMP for several major cities in 2011-2012 (Table 4). First, it is clear that the ratio of the UMK to the KHL is already high in all the cities. Second, the UMK/P increased much faster than the KHL and, third, it also increased faster than the CPI. The data clearly suggest that factors other than the KHL influence the increase in UMK/P.

However, can we find evidence of a close relationship between the KHL and the UMK/P? We address this question in the next section.

Table 1  
*Highest and Lowest UMK and KHL, West and East Java 2012*

	UMK		KHL	
<b>WEST JAVA</b>				
Highest (RP.M.)	1.49	1.42	1.36	1.35
	Kab. Bekasi	Kota Bekasi	Kab. Bekasi	Kota Bekasi
Lowest (RP.M.)	0.79	0.8	0.87	0.87
	Ciamis	Majalenka	Ciamis	Sukabumi
Mean	0.93		0.98	
Standard Deviation	0.22		0.19	
<b>EAST JAVA</b>				
Highest (RP.M.)	1.26	1.26	1.26	1.26
	Surabaya	Gresik	Surabaya	Gresik
Lowest (RP.M.)	0.74	0.75	0.76	0.77
	Ponorogo	Magetan	Ponorogo	Magetan
Mean	0.93		0.96	
Standard Deviation	0.15		0.15	

Figure 5  
*Percentage Increase in KHL and UMK, West and East Java, 2011-2012*

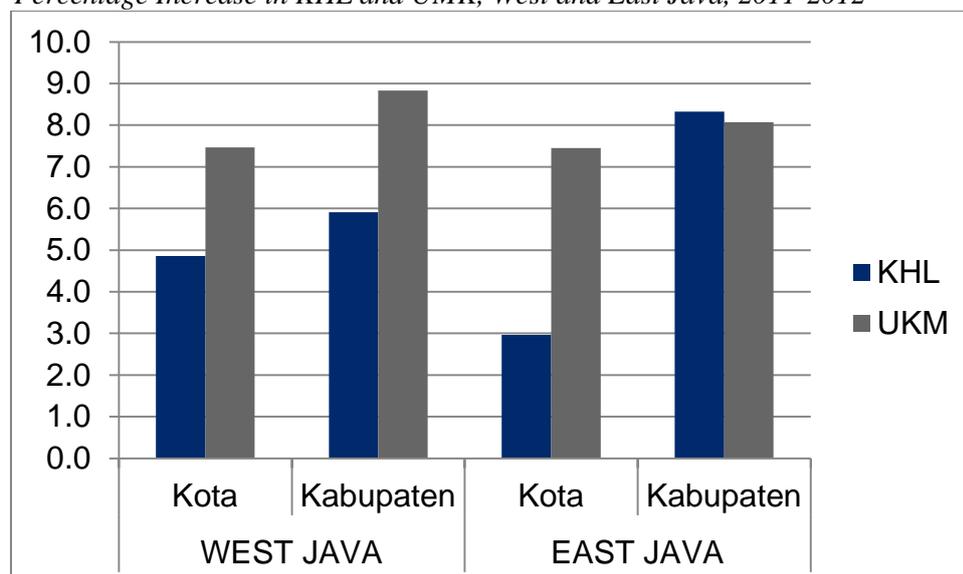


Table 2

*Level of UMK and KHL, Single Employees, Kabupaten and Kota, West and East Java, 2011-2012*

	KHL (Rp. M.)		% increase	UMK (Rp. M.)		% increase
	2011	2012	KHL	2011	2012	UMK
<b>WEST JAVA</b>						
Towns and cities	1.06	1.12	4.9	1.05	1.13	7.5
<i>Kabupaten</i>						
Low MW/KHL ratio*	1.02	1.07	5.3	0.88	0.96	9.2
High MW/KHL ratio*	1.04	1.11	6.6	1.04	1.13	8.5
All West Java	0.92	0.98	6.6	0.86	0.93	7.8
<b>EAST JAVA</b>						
Towns and cities						
Low MW/KHL ratio*	0.97	0.95	-1.9	0.86	0.93	7.1
High MW/KHL ratio*	0.99	1.05	6.8	0.96	1.04	7.7
<i>Kabupaten</i>						
Low MW/KHL ratio*	0.85	0.93	9.5	0.76	0.83	8.3
Moderate MW/KHL ratio*	0.84	0.90	8.0	0.81	0.87	8.0
High MW/KHL ratio*	0.98	1.05	7.5	0.98	1.05	7.8
All East Java	0.90	0.96	6.6	0.86	0.93	7.8
TOTAL	0.96	1.02	6.2	0.91	0.98	7.7

\* Kota/Kabupaten with a low/high ratio UMK to KHL in the initial year 2011.

Table 3

*Ratio of UMK to the KHL, West and East Java, 2011-2012*

	Ratio		Number of Cases
	UMK/KHL 2011	UMK/KHL 2012	
<b>WEST JAVA</b>			
Towns and cities	0.99	1.01	8
<i>Kabupaten</i>			
Low MW/KHL ratio*	0.87	0.90	10
High MW/KHL ratio*	1.00	1.02	8
All West Java	0.93	0.94	26
<b>EAST JAVA</b>			
Towns and cities			
Low MW/KHL ratio*	0.89	0.97	5
High MW/KHL ratio*	1.0	1.0	5
<i>Kabupaten</i>			
Low MW/KHL ratio*	0.90	0.90	9
Moderate MW/KHL ratio*	0.96	0.97	12
High MW/KHL ratio*	1.00	1.00	7
All East Java	0.93	0.96	38

\* Kota/Kabupaten with a low/high ratio UMK to KHL in the initial year 2011.

#### 4. THE KHL IMPACT ON MINIMUM WAGES

To estimate how the decent living need standard (KHL) might affect minimum wages, we use the following equations:

$$\ln MW_{it} = \beta_{it} + \delta \ln KHL_{it} + \varepsilon_{it} \quad (1)$$

In addition, to capture the catch-up effect of minimum wages to the KHL, we also use the ratio of minimum wages over the KHL in previous year as the alternative model, as follows:

$$\ln MW_{it} = \beta + \delta \ln KHL_{it} + \gamma(MW_{it-1}/KHL_{it-1}) + \varepsilon_{it} \quad (2)$$

We expect that with the inclusion of the ratio of lag minimum wages over lag KHL, we could control the past gap between the minimum wage and the KHL.

Three different data sets are used to estimate the relationship: district-level data for West and East Java in 2011-2012, district-level data for Central Java during 2006-2010, and province data for 2006-2011. The results are shown in Table 4.

Table 4  
*Estimation Results*

Sample	West Java and East Java 2011-2012	Central Java, 2006-2010		All Provinces, 2006-2011	
	(1)	(2)	(3)	(4)	(5)
Log of KHL	0.524*** (0.090)	0.286*** (0.073)	0.590*** (0.093)	0.059* (0.034)	0.355*** (0.082)
MWt-1/KHLt-1			0.004*** (0.001)		0.002*** (0.001)
_constant	6.520*** (1.227)	9.306*** (0.960)	5.144*** (1.274)	12.504*** (0.450)	8.676*** (1.129)
Includes year dummies	yes	yes	yes	Yes	yes
Number of observations	128	175	140	198	165
R2 within	0.545	0.962	0.961	0.950	0.869
R2 between	0.928	0.282	0.807	0.535	0.836
R2 Overall	0.810	0.837	0.868	0.494	0.678

Note: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . Number in parentheses is standard errors.

The results show that the elasticity of minimum wages with respect to KHL was low, which indicates that the percentage increase in minimum wages in response to a one percent increase in the KHL was positive and significant, although quite low (around 0.2-0.5).. The elasticity was much lower for Central Java (0.2 in column 2) compared to West Java and East Java (0.5 in column 1). This might happen because the data for Central Java includes an earlier time period (2008-2010) and most district minimum wages were much lower than the KHL. In the latest period for West Java and East Java, it is expected that districts will catch up with the KHL. This finding was strengthened by the result in column 3, which controls for the catch-up effect by including the ratio of lag minimum wage over the lag of KHL. It shows a quite similar elasticity with West Java.

The estimation results using provincial data show an even lower elasticity. This was expected, as the minimum wages at the province level is used more as guide for the district government in calculating and recommending the district level minimum wages.

## 5. CONCLUSIONS AND DISCUSSION

Two issues related to the relationship between the KHL and the UMK/P have been highlighted in this paper.

- First, the KHL as currently calculated is a very rough measure of the level and changes in the cost of living across provinces and districts.
- Second, the extent to which the level of the KHL, as an absolute standard, is appropriate in Indonesia at the present time and the future of the index for minimum wage policy.

We found that the KHL is an important determinant of minimum wages, even if its impact is relatively small, especially in the case of Central Java in the period 2008-2010. At the same time, the KHL is not closely correlated with the CPI. Besides providing a rough indicator of changes in the cost of living, the KHL appears to be a negotiated value between employers and employees in many regions.

In regard to the level of KHL, in many regions the UMK/P is now equal to 100 percent or more of the KHL. Thus, there is now pressure from labor unions to move to a higher absolute standard for setting minimum wages. This seems likely in the future, given the approach of the regulating agency, *Depnakertrans*, to wage policy (especially the raising of the standard over time from KFM to the KHM to the KHL). The proliferation of UMK and more recently UMKS means that a new standard would become the entry level wage for most new employees in blue collar jobs in Indonesia. The transition would probably push up the minimum wage by about 20-30 percent, thus moving Indonesia onto a higher plateau. It is not clear that this policy will be helpful for employment.

Further analysis is certainly needed to explore the usefulness of the KHL as a standard for revising wages in the future. One area of analysis would be to examine the expenditure patterns in SUSENAS among wage working families in different income classes and compare the KHL. A second is to interview wage councils regarding procedures adopted in practice to arrive at the KHL and how this translates in practice to the UMK.

## APPENDIX. MINIMUM WAGE COVERAGE IN INDONESIA BY REGION AND INDUSTRY

Regional-Industry Coverage	Provinces/Districts
<b>SUMATRA</b>	
Provincial only	Aceh, W.Sumatra, Bengkulu, S.Sumatra,
	Lampung
Kabupaten only	a. Riau, Riau Islands, Bangka-Belitung
	b. N. Sumatra, except for Medan and Deli Serdang
Kabupaten-sectoral	North Sumatra (Medan City, Deli-Serdang
By industry	
<b>JAVA BALI</b>	
Provincial only	Yogyakarta
Kabupaten only	a. Banten, Central Java, East Java, Bali;
	b. About half the districts in West Java (Depok, Sukabumi,, Kuningan, Garut, Cimahi, Bandung Barat, Indramayu, Banjar, Ciamis; Kota/Kab: Tasikmalaya, Cirebon, Bandung)
Province-sectoral	Jakarta
Kabupaten-sectoral	Several districts in West Java
a. By industry	(Sukabumi, Kab./Kota Bekasi, Subang, Purwakarta)
b. By group of industries (e.g., I, II, III; A, B)	Several district in West Java (Kota Bekasi, Krawang, Majalengka)
<b>KALIMANTAN</b>	
Province only	E. Kalimantan
Province-sectoral	W.,C, and S. Kalimantan
By industry	
<b>SULAWESI</b>	
Province only	All provinces in Sulawesi (6)
<b>MALUKU AND PAPUA</b>	
Province only	Papua
Province-sectoral	Maluku, Maluka Utara, West Papua
By industry	
<b>RECAP</b>	
Province only	14 provinces
Kabupaten only	7 provinces
Province-sectoral	7 provinces
Kabupaten-sectoral	Some kabupaten in two provinces

SOURCE: APINDO, 2010.