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Changes in Formal and Informal Sector Employment in 2010 and 2011

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1. MAIN ISSUES AND FINDINGS

Data from the February and August rounds of SAKERNAS imply that employment in the formal sector accelerated significantly in 2010 and especially in 2011. The increase was a whopping 15 percent in 2011. On the other hand, the SAKERNAS data suggest that employment in the informal sector declined very steeply by 7 percent in 2011.¹ Both sets of figures are implausible under the relatively “normal” economic circumstances that prevailed in these years.

This policy brief makes adjustments to account for the influence of BPS’s use of new weights to estimate the size of the population in urban and rural areas in 2011. The new weights have a significant impact on comparisons of employment with previous years, and especially between 2011 and 2010. Based on a recalculation of employment trends, we find that

- While exaggerated in the SAKERNAS data, the formal sector has indeed grown rapidly recently, and quite quickly for several years.
- The rate of formal sector job creation accelerated in 2010, and this trend continued into 2011.

However, the increase in formal sector and the decline in informal sector employment are exaggerated in the raw SAKERNAS data for 2011. Assuming a rate of growth of the working-age population that is more consistent with the Population Census results,² we estimate that

- Formal sector employment probably increased about 12 percent or by 5 million jobs in 2011, compared with the original estimate of a 15 percent increase. By any standard, the figures for 2011 are remarkable, and warrant more much discussion among policymakers.
- Employment in the informal sector declined slightly, implying some net movement out of the informal sector into the formal sector. However, this shift out of the informal was much smaller (-2 percent) than the unadjusted figures suggest.

These patterns are shown in Figures 1 through 4.

The adjusted figures suggest that the fastest growing industries for formal sector jobs in the two-year period 2009 to 2011 were trade, hotels, and restaurants, which created about one-third of new jobs. Other rapidly growing industries were financial and business services and mining (all of which grew by close to 20 percent in the two-year period).³ Formal jobs in manufacturing and other services also grew strongly. Job loss in the informal sector occurred mainly in transport and communications, and to a lesser extent in construction and agriculture. Workers appear to have moved out of informal employment in these industries into formal sector jobs in the booming industries (see Figure 5). It is reasonable to conclude that growth in employment was largely demand driven.

¹ Figures cited here are for the August round of SAKERNAS.

² The real rate of growth in the working-age population is unknown for 2011; data in SAKERNAS imply a decline which is most unlikely.

³ We applied the revised total FS and IFS employment totals in 2011 based on the new population estimates, to the recorded share of employment in each industry in the FS and IFS in SAKERNAS in 2011.

Figure 1
Percentage of Employment in the Formal Sector, Indonesia 2010-2011

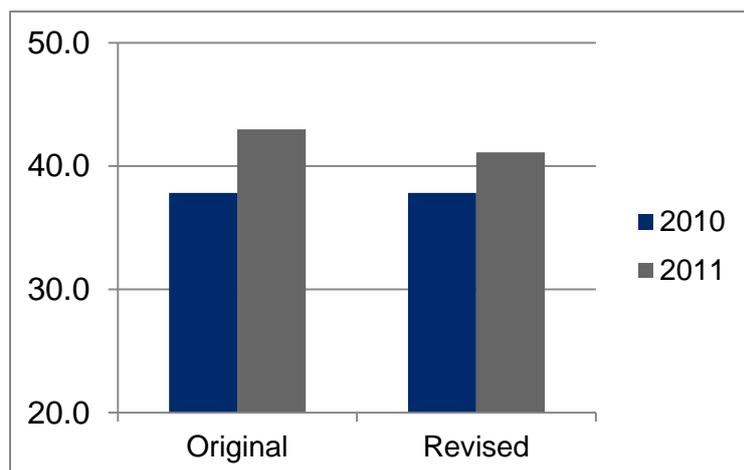


Figure 2
Estimate of the Number of Jobs Created in the Formal and Informal Sectors, Indonesia 2007-11 (000 jobs)

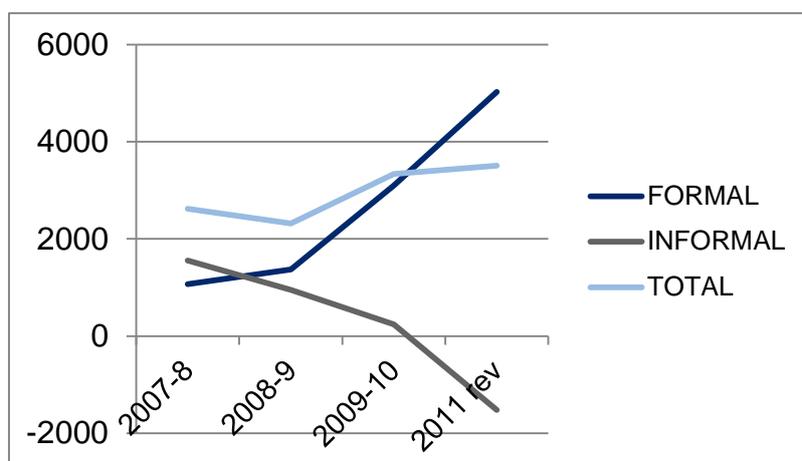


Figure 3
Annual Growth Rates in Formal and Informal Sector Employment, Indonesia 2010-2011

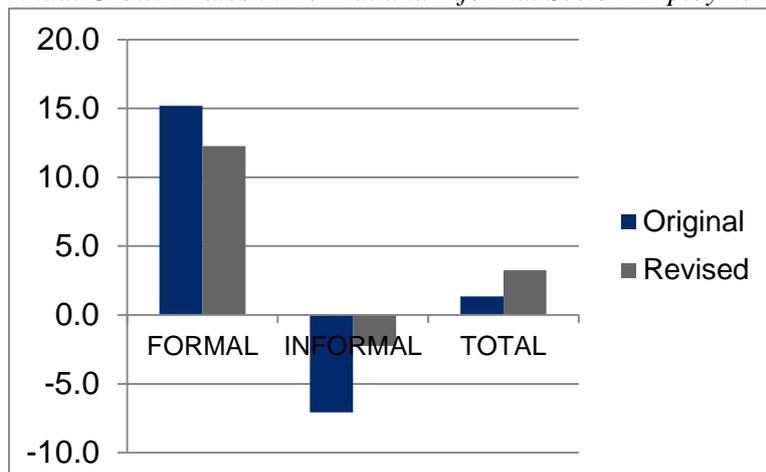


Figure 4

Estimate of Annual Growth Rates in Formal and Informal Sector Employment, Indonesia 2010-2011

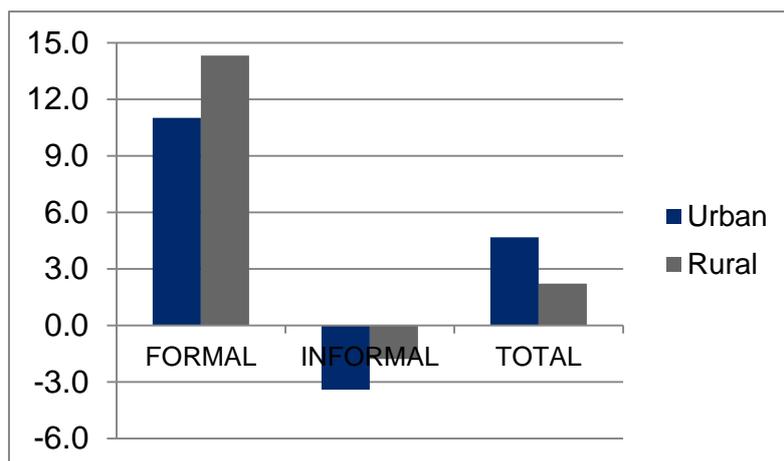
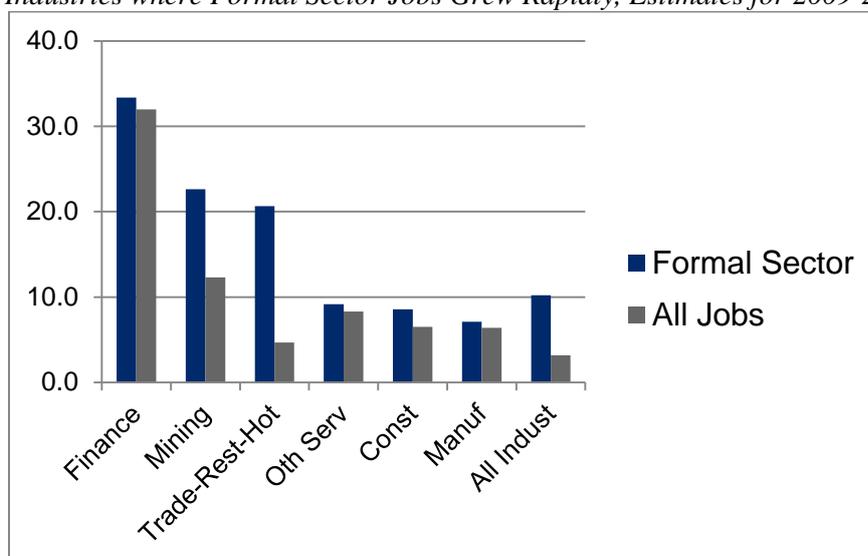


Figure 5

Industries where Formal Sector Jobs Grew Rapidly, Estimates for 2009-2011 (% p.a.)



2. POLICY DISCUSSION

Achievement. Indonesia has been remarkably successful supporting the creation of new jobs, especially for more educated people since 2009. This is reflected not only in the accelerated rate of job expansion in the formal but also by the sharp decline in educated unemployment for SMU and tertiary graduates since around 2009. Steady rates of economic growth and rising investment, and the revival of manufacturing, mining, and modern service jobs have all contributed to these impressive rates of job creation.

Vulnerabilities. The main vulnerabilities are twofold. First, job creation has been uncertain for less educated people, especially for those (1) who have only a primary level of schooling or less, or (2) who are only SMP educated. The first group is likely to consist mainly of older workers in rural areas. The second group is likely to include younger and older people who are shut out of formal sector jobs. In both cases, slow rates of job creation are likely to be associated with significant levels of poverty. The conclusion is clear. The job support programs should be better balanced between more and less educated workers, with more emphasis on difficulties faced by the latter. Less educated and older persons are more vulnerable to falling into poverty. Assistance needs to address supply (e.g., better

provision of lower level, blue-collar worker skills), as well as demand side (e.g., urban and rural jobs in services and construction).

Second, a slowdown in growth rates in the second half of 2012 and in 2013 could threaten jobs in the modern sector, as export growth weakens. Support for and expansion of domestic demand can counterbalance this development, as flagged in the draft RAPBN for 2013. However, it is unclear whether support for domestic demand will result in continued expansion of formal sector jobs. If the rate of formal sector job creation slows, the new strategy will result in less favorable employment prospects for more educated people, including youth. The situation needs careful monitoring in the months ahead.

Interpreting Labor Market Developments. The new quarterly labor force data to be produced by BPS in 2012-2-2013 could help policymakers monitor these developments. But data analysis and management must be improved to ensure that the government and its advisers are in a position to interpret developments. One priority is to back-cast the population data on which labor statistics are based, at least to 2007. This is a pressing need, which, once met, will shed light on some of the seemingly puzzling developments in 2011, in the context of medium-term trends. These trends can then be monitored with more precision, for policy and planning purposes, such as RPJM.

3. NOTES ON METHODOLOGY

The problem addressed in this brief relates to comparisons of the SAKERNAS survey results in 2011 with those for 2010 and earlier years.

- The main issue is the implausibly large increase in formal sector employment implied by the data. The source of the problem is the application by BPS of population weights from the 2010 census, as a basis for estimating employment and other labor force parameters in 2011, without making similar adjustment to weights for estimating urban and rural population in 2010 and earlier years.
- The problem has arisen because the assumed rate of urbanization for the period 2005-2015 (based on the intercensal [SUPAS] survey) appears to have been far too low. This was the basis for estimating the size of the urban (and rural) population in the 2006-2010 period. Since a high proportion of the formal sector workforce typically resides in urban areas, estimates based on SUPAS have meant that the earlier SAKERNAS survey data significantly underestimated the size of the formal sector work force, in the second half of the 2000s through to 2010.

In this exercise, we have adjusted the urban and rural population data for 2011 to a level consistent with estimates for earlier years. This allows us to make a more realistic estimate of trends in FS employment in 2011, by applying employment rates (i.e., the employment to working-age population ratio) and share of formal and informal sectors work found in SAKERNAS, to population data that are consistent with estimates for earlier years. However, the *level* of formal sector work is underestimated in these calculations.

To facilitate informed discussion of labor force trends as well as levels of key parameters, BPS needs to back-cast the population data for at least the past five years, based on the new estimates of urban and rural population growth that are implicit in the population census data.

The following methodological points are also relevant for interpreting these results:

- ***Growth rates of the working-age population.*** It is assumed that the working-age population grew at 2 percent in 2011 in urban areas, and 1 percent in rural areas. These urban and rural

growth rates for the working-age population are broadly consistent with the Population Census results. The results are robust when compared with alternative estimates: for example, a continuation of the same growth rates of the working-age population in urban and rural areas in 2011 as had occurred in the previous five years, 2005-2010.

- ***August and February rounds of SAKERNAS.*** The estimates are based on the August round of SAKERNAS 2005-2011 (November in 2005). The data for the February round of SAKERNAS are less reliable because of the smaller sampling fraction in this round of the survey.
- ***Definition of the FS and IFS.*** We use “crude” definition of the formal and informal sectors, which counts all employers, employees, and casual workers as part of the formal sector. The results are robust to alternative definitions of the formal and informal sectors (e.g., including all casual workers as informal).