BPS–Statistics Indonesia

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The Informal Sector and Informal Employment in Indonesia

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Contents

Tables, Figures, and Appendixes

Tables

Figures

Appendixes

Foreword

Many studies have shown that the informal sector and informal employment continue to be a large, and even growing, component of the economies of developing countries. Employment in the informal sector is estimated to be more than 50% of nonagricultural employment and nearly 30% of nonagricultural gross domestic product (GDP) in Asia. In Indonesia, 70% of the workforce was estimated be engaged in informal employment, mostly in the agriculture sector (Firdausy 2000). This was an immediate result of the 1997 Asian financial crisis, which saw a decline in the number of workers from the urban areas and the industry sector against a concomitant increase in the number of workers in the rural areas and the agriculture sector. BPS-Statistics Indonesia estimated informal employment to be about 64% in 2006 and the share of small enterprises (that seem to be mostly informal) to the GDP output to be roughly 38%.

While it is perceived that the informal sector contributes significantly to Indonesia's economy, particularly in terms of employment, by providing economic opportunities to those displaced from or who cannot be absorbed by the formal sector, informal sector and informal employment statistics have not been regularly collected and have not been included in Indonesia's official labor force statistics. For government and policy makers to find ways of improving the conditions of those under informal employment and promoting decent work for all, it is necessary to measure this sector and incorporate in the set of official statistics data on informal sector and informal employment. However, because of their very nature, informal production units are difficult to locate, have high turnover, and have financial accounts and assets that cannot be easily separated from the households that own them. Also, surveying informal production units requires more effort and costs than the regular establishment or household surveys. This is perhaps the very reason why very few statistical systems in Asia have data series on the informal sector and informal employment.

This report is a step toward institutionalizing the measurement of the informal sector and informal employment. It presents the results of the Informal Sector Survey (ISS) that BPS-Statistics Indonesia conducted in two pilot provinces (Yogyakarta and Banten), under the Asian Development Bank's (ADB) regional technical assistance (RETA) 6430: Measuring the Informal Sector, in August 2009.

The preparation for the ISS, the analysis of the survey results, and the writing of this report were done by the following BPS-Statistics Indonesia staff:

Mr. Hamonangan Ritonga, Director, Census and Survey Methodology Development;
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Mr. Buyung Airlangga, Head, Good Account Division; and
Mrs. Etjih Tasriah, Head, Mining, Energy, and Construction Account.

BPS-Statistics Indonesia wishes to thank Dalisay S. Maligalig and her team composed of Sining Cuevas, Arturo Martinez, Jr., and Estrella V. Domingo for giving technical assistance in the preparation of all survey instruments, including questionnaires, manuals, and training materials; in the data processing; and analysis of the survey results. BPS-Statistics Indonesia also appreciates the support of its field operations staff and the cooperation of all the respondents in Yogyakarta and Banten. Special thanks go to Mr. Arizal Ahnaf, former deputy chief statistician for social statistics, in leading the BPS-Statistics Indonesia team. This report also benefited from the valuable

inputs from the Regional Economic and Social Analysis Unit of the International Labour Organization's Regional Office for Asia and the Pacific, and the Statistics Programme Director of the Women in Informal Employment: Globalizing and Organizing (WIEGO).

Through the close collaboration between BPS-Statistics Indonesia and ADB, the cost-effective data collection approach that was taken was able to provide reliable statistics on informal employment and, in general, in estimating the contribution of the informal sector to GDP. This project also provided insights on how the ISS should be enhanced to give better estimates and for institutionalization purposes. It is our hope that with the techniques that were learned from this project, BPS-Statistics Indonesia will be able to conduct the ISS in all the provinces periodically to support in-depth study of the informal sector and informal employment.

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Abbreviations

ADB	–	Asian Development Bank
EGW	–	electricity, gas, and water
GDP	–	gross domestic product
GRDP	–	gross regional domestic product
GVA	–	gross value added
HH	–	household
HUEM	–	household unincorporated enterprise with at least some market production
ISIC	–	International Standard Industrial Classification
ICLS	–	International Conference of Labour Statisticians
ICMISIE	–	Interregional Cooperation on the Measurement of Informal Sector and Informal Employment
ILO	–	International Labour Organization
ISS	–	Informal Sector Survey
LFS	–	Labor Force Survey
PSU	–	Primary sampling unit
Sakernas	–	*Survei Angkatan Kerja Nasional* (National Labor Force Survey)
TSC	–	transport, storage, and communications
UNESCAP	–	United Nations Economic and Social Commission for Asia and the Pacific
WRT	–	wholesale and retail trade

Executive Summary

Mixed Survey Approach

- The BPS-Statistics Indonesia applied the mixed survey through the Asian Development Bank's (ADB) regional technical assistance (RETA) 6430: Measuring the Informal Sector. The cost-effective data collection strategy presented a workable solution for generating informal employment and informal sector statistics in two pilot provinces (Yogyakarta and Banten).

- The mixed survey approach has two phases: the first phase is the expanded 2009 National Labor Force Survey (*Sakernas*) (second round conducted on 8–31 August 2009),[1] while the second phase is the Informal Sector Survey (ISS).

- *Sakernas* is conducted twice a year such that the February round can provide estimates at the provincial level while the August round renders district-level estimates. The total sample sizes for February and August rounds are 68,000 and 285,000 households, respectively.

- *Sakernas* was expanded by adding questions to identify household unincorporated enterprises with at least some market production (HUEMs), informal enterprises, informal employment, benefits received, and working conditions of workers.

- The second phase covered 142 primary sampling units (PSUs) for Yogyakarta and 123 PSUs for Banten. The sampling frame constituted the list of identified HUEMs in the first phase. A total of 1,830 HUEMs were included in the ISS for the two pilot provinces.

- Data processing, validation, and analyses were carried out from October 2009 to August 2010.

Informal Employment[2]

- In 2009, it was estimated that a total of 1.9 million persons were employed in Yogyakarta, and 3.8 million in Banten.[3] However, since having additional jobs is a common practice in Indonesia, the total employment (the total number of jobs) in Yogyakarta and Banten reached 2.5 million and 3.9 million, respectively.

- For all categories of employment status, more than half of the jobs were assumed by men in both provinces, except unpaid work. Specifically, in Yogyakarta, men comprised 61% of own-account workers; 69% of employers; and 65% of employees.[4] The same pattern was observed in Banten: men comprised 73% of the population of own-account workers, 78% of the employers,

[1] To design the August 2009 Informal Sector Survey (ISS), the sample packages (replicates) 1 through 4 of the August 2008 *Sakernas* were examined. Households for two packages (1 and 4) will remain the same as that of August 2008, while there will be a fresh set of households for the other two packages (2 and 3). This means that the common sampled households selected between August 2008 and August 2009 *Sakernas* will be about 50% while there will be 100% common primary sampling units (PSUs) for both rounds.

[2] Throughout the document, the term total employment is expressed as the total number of jobs, unless stated otherwise. This is to facilitate straightforward classification between formal and informal employment since an employed person may have multiple jobs. For instance, a person with two jobs may have both formal and informal jobs. In turn, this person will be counted both under total formal employment and total informal employment. A job is conveniently defined as any productive activity carried out by an employed person, following the official definition of employment adopted in Indonesia.

[3] There are slight discrepancies between the ISS total employment estimates and those from the published *Sakernas* for Yogyakarta and Banten. For reasons discussed in Section 6.3, data of the two surveys are inconsistent, and the information gathered in the ISS Form 1 were used for the estimates provided in this report.

[4] Includes employees, casual worker in agriculture, and casual worker in non-agriculture.

and 68% of the employees. Conversely, seven in 10 unpaid family jobs were carried out by women (68% in Yogyakarta and 74% in Banten).

- In Yogyakarta, two in five jobs (44%) were in the agriculture sector in 2009. The wholesale and retail trade sector provided 15% of the total number of jobs in the province, followed by the manufacturing sector at 11%. In Banten, one in five jobs (21%) was in the manufacturing sector. The wholesale and retail trade sector provided 21% of the total number of jobs in the province, followed by the agriculture sector at 17%.

- Of the total employment in Yogyakarta in 2009, nine in 10 jobs (89%) were informal. This is equivalent to 2.3 million jobs undertaken with informal arrangements. In Banten, 76% of total employment was informal.

- In both provinces, the incidence of informal employment is higher in rural areas. In 2009, informal employment in Yogyakarta's rural areas was 95% compared with 83% in urban areas. In Banten, the incidence of informal employment in rural areas reached 91% while in urban areas, it was only 67%.

- Jobs in the agriculture sector are predominantly informal in both provinces. In 2009, 99.8% of total agricultural employment in Yogyakarta had informal arrangements; it was 99% in Banten.

- Survey results suggest that four in five jobs in Yogyakarta's non-agriculture sectors were informal. In Banten, seven out of ten of non-agriculture employment had informal arrangements.

- In Yogyakarta, about 87% of total employment was sourced from informal enterprises, 13% from formal enterprises, and only 0.1% from households. Similarly, jobs in Banten were mainly provided by informal enterprises, at 71% and informal enterprises, at 29%. Only 0.1% of total jobs were supplied by households.

- Informal employment is primarily linked to informal enterprises; about 95% (in Yogyakarta) and 87% (in Banten) of the informal jobs are carried out in informal production units.

- Informal arrangements also exist in formal enterprises. Formal enterprises supplied 5% of the total informal employment in both Yogyakarta and Banten.

- In Yogyakarta, eight in 10 formal jobs (78%) were assumed by middle-aged workers (25–54 years old). About 16% of the total formal employment were carried out by young workers (aged 15–24) while 6% were associated with senior workers (aged 55 and above). A different structure is observed in informal employment. While majority of informal jobs were also carried out by middle-aged workers (65%), this is followed by the more senior workers (24%), then by young workers (6%). In Banten, the age composition of workers engaged in formal jobs is as follows: 25–54 years old, 72%; 15–24 years old, 8%; and 55 years old and above, 3%. Meanwhile, informal employment is comprised of middle-aged workers, 73%; young workers, 15%; and senior workers, 13%.

- Survey results suggest that formal employment is associated more with higher levels of education while informal employment is linked to lower educational attainment. In Yogyakarta, one in two formal jobs (48%) was assumed by a person who reached college; only 2% of all formal jobs can be associated with individuals with at most, primary education. Conversely, one in two informal jobs (49%) was carried out by individuals who have, at most, reached the primary level. In Banten, one in five formal jobs was associated with workers with college education (23%). However, one in two informal jobs (53%) was assumed by workers who did not attend school or received primary education, at most.

- In Yogyakarta, 29% of formal jobs were classified as professionals; 19%, clerks; and 15%, service workers and shop and market sales workers. Of the total informal employment in Yogyakarta, almost half (46%) were skilled agricultural

and fishery workers, followed by service workers and shop and market sales workers (19%), and craft and related workers (13%). In Banten, formal jobs were associated with elementary occupations (22%) and plant and machine operation and assembly (20%). Most of the informal jobs in Banten were distributed between plant and machine operation and assembly (32%) and service workers and shop and market sales workers (21%).

- The average monthly wage of employees in Yogyakarta is estimated at 1.2 million rupiah (Rp) while the average earnings of own-account workers reached Rp853,000. Men generally receive higher compensation than women. For instance, male employees receive Rp1.4 million per month, 38% more than women's average monthly wage of Rp988,000. Male own-account workers earn Rp1.0 million, or almost twice as much as what their female counterparts receive on the average. On the other hand, the average monthly wage of employees in Banten is estimated at Rp1.4 million while the average earnings of own-account workers reached Rp976,000. Male employees receive a monthly average of Rp1.6 million while female employees earn Rp1.2 million.

- Workers with formal arrangements generally earn better than those who depend on informal employment. Formal employees in Yogyakarta earn roughly 2.4 times more than the average informal employee. In Banten, the average wage of formal employees is Rp1.7 million a month while informal employees earn an average of Rp1.2 million a month. Among own-account workers, the average income for the formally employed is Rp1.5 million a month and for informally employed, Rp971,000.

- In 2009, seven in 10 formal wage workers in Yogyakarta were entitled to sick leave (67%), or maternity/paternity leave (66%). Three in five formal wage workers (60%) were entitled to severance pay in case of termination from work. In Banten, three in five formal wage workers (61%) were entitled to sick leave; one in two wage workers (52%) was entitled to paid leave.

- One in five informal wage workers in Yogyakarta was entitled to sick leave (19%) or maternity/paternity leave (15%). In Banten, one in four informal wage workers (25%) was entitled to sick leave; one in five was entitled to either maternity/paternity leave (21%), or paid leave (20%).

Contribution of Informal Sector to Total Economy

- In Yogyakarta, the estimated contribution of informal sector to its total gross value added (GVA) in 2009 was 37%. Informal enterprises are key players in agriculture, accounting for 89% of its GVA, manufacturing (69%), wholesale and retail trade (53%), and other services (53%). In Banten, approximately 27% of its GVA can be attributed to the informal sector. In agriculture, the informal sector accounts for 87% of its total GVA. The non-agriculture sectors with significant informal sector contribution to the province are other services (72%), wholesale and retail trade (63%), and hotels and restaurants (55%).

- In 2009, Yogyakarta's informal sector in agriculture contributed Rp5.7 trillion or 89% of its total GVA, while the non-agriculture informal sector generated Rp9.8 trillion or 28% of its GVA. On the other hand, Banten's informal sector in agriculture contributed Rp9.8 trillion or 87% of its total GVA, while non-agriculture informal sector contributed Rp25.6 trillion or 21% of its GVA.

- Labor productivity in Yogyakarta's informal sector is approximately Rp7.0 million per job, less than half of the estimated total productivity in the province. Banten's labor productivity in the informal sector is estimated at Rp12.7 million per worker's job or approximately one-third of its total labor productivity.

Characteristics of HUEMs

- In Yogyakarta, three in five informal enterprises are motivated by either family tradition or their knowledge of the profession in choosing their respective business activities. In Banten, four in five informal enterprises attributed their choice of business activities to either family tradition or knowledge of the profession.

- Survey results suggest that in 2009, nine in 10 informal enterprises from either Yogyakarta or Banten did not apply for a bank loan. In Yogyakarta, the main reason cited for not doing so is (that they are) "not interested,"[5] at 25%, while in Banten, the complicated procedures associated in getting loans hindered 35% of the informal enterprises from applying for loans.

- In 2009, three in five informal enterprises in Yogyakarta, which obtained a loan, reported an increase in the volume of their production.

- In Banten, only 12% reported an increase in production volume with the help of loans.

- In general, informal enterprises from Yogyakarta and Banten use social networks as main source of financing. In particular, 82% of the informal enterprises in Yogyakarta and 76% in Banten reported that family, relative, neighbors, or friends serve as their main source of financing.

Future Directions

- After outlining the strategies to address the areas of improvement, BPS-Statistics Indonesia plans to change the design of *Sakernas*, from two rounds in 2010 to a quarterly survey in 2011. The Bureau intends to permanently include the additional questions introduced in ISS Form 1 to expand *Sakernas*. This will be implemented at the national level. Further, the next ISS (ISS Form 2) is tentatively scheduled in August 2011.

[5] The reasons why these HUEMs in Yogyakarta are not interested to avail of bank loans are open for further investigations. For instance, it may be just a reflection of the lack of financial institutions that offer loans with minimal interest rates.

Chapter 1

Introduction

1.1 Background

While the economies of the developing member countries (DMCs) of the Asian Development Bank (ADB) continue to grow at high rates, recent research indicate that inequalities in standards of living are widening, and the poor are being bypassed by growth. Based on the household income and expenditure survey data of DMCs, the special chapter of the *2008 Key Indicators* (ADB 2008) provides evidence that absolute inequality has increased in many countries in Asia and that the rich have grown richer faster than the poor. How can this problem be addressed? One way is to improve the labor market opportunities for workers since employment is the major vehicle of the poor to rise out of poverty. To cope with poverty, the poor take on informal employment, such as subsistence informal jobs, secondary jobs, and occasional jobs. This type of labor arrangement has grown in many DMCs, making the informal sector a major component of the economy. Such situation also occurs in Indonesia. The informal sector contributes significantly to Indonesia's economy, particularly in terms of employment by providing economic opportunities to those displaced from, or who cannot be absorbed by, the formal sector. Informal sector and informal employment statistics, however, have not yet been regularly collected nor included in Indonesia's official labor force statistics.

The Interregional Cooperation on the Measurement of Informal Sector and Informal Employment (ICMISIE) ventures that the informal sector accounts for more than 50% of nonagricultural employment and about 30% of nonagricultural gross domestic product (GDP) in many countries. Consequently, understanding and measuring the informal sector is vital to improving the labor market opportunities for the poor.

The informal sector is comprised of (i) households with at least some market production; and (ii) production units with low levels of organization and technology, and with unclear distinction between labor and capital or between household and production operations. Other typical characteristics of these units are high mobility and turnover, seasonality, lack of recognizable features for identification, and reluctance to share information. The turnover of these production units is quite fast, making it highly unlikely for them to be included in the list of establishments/enterprises that is usually used as sampling frames for business surveys. Moreover, the total number of employees of these production units is usually lower than the threshold number for inclusion in the list of establishments. Thus, it is quite likely that these units are not covered by the regular establishment or enterprise surveys. And though these units might be covered by household surveys, the standard questionnaires for these surveys do not usually include questions pertaining to production. Because of these issues, informal sector statistics are not collected through the regular survey system of national statistics offices.

Recognizing the importance of measuring the informal sector and informal employment, a regional technical assistance[6] (RETA) was initiated by ADB for this purpose. The RETA aims to contribute to the measurement of the informal sector by helping national statistics offices find a sound and viable data collection strategy. With more accurate data, the prevalence of informal employment and social protection issues can be ascertained, the share of informal sector can be properly reflected in the GDP,

[6] A similar project was being implemented by the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) in Asia under the development account called Interregional Project on the Measurement of the Informal Sector and Informal Employment. ADB adopted UNESCAP's data collection methodology, which was implemented by UNESCAP in Mongolia, the Philippines, and Sri Lanka.

and the relationship between poverty and the informal sector can be thoroughly examined.

ADB had the benefit of learning from the experience of the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), which had already done the research on the existing data collection strategies for the informal sector. ADB adopted an UNESCAP's approach, which was to use the mixed survey technique to collect data on informal employment and informal sector using the definitions and concepts established by the 15th and 17th International Conferences of Labour Statisticians (ICLS). The concepts and definitions are described in Appendix 1 of this report while the cost-effective data collection strategy is discussed in detail in Appendix 2.

1.2 Objectives

This report presents the results and analysis of the informal sector and informal employment using the expanded Labor Force Survey (*Sakernas*) August 2009 Round and the succeeding informal sector survey. The processes undertaken in preparing the survey questionnaires, the sampling design, the survey operations, and data analysis are also documented in this report. Moreover, the process of institutionalizing the production of informal sector and informal employment statistics is also described in this report.

1.3 Informal Sector Statistics in the Realm of Official Statistics

The informal sector statistics in the realm of official statistics are limited. Even if the statistics are available, limitations due to the poor definition or non-use of the international concept of the informal sector prevent comparison of statistics with other countries. For the time being, statistics on the informal economy in Indonesia are based on the employment status and occupation variables collected from the regular national labor force survey (*Sakernas*). However, statistical information on the informal economy is not published as frequently as that of the labor force indicators.

1.4 Main Data Sources

The main data sources used in this report are the 2009 Informal Sector Survey (ISS), while the basic characteristics of the labor force are taken from the 2009 *Sakernas* (August Round). The ISS has two phases—with the first phase as a rider survey to the *Sakernas* and the second phase, the survey of household unincorporated enterprises with at least some market production (HUEMs) that used the HUEMs identified in the first phase as the sampling frame (details of this method are in Appendix 2.) The first phase of the ISS was conducted on 8–31 August 2009 in all districts of two provinces, namely, Yogyakarta and Banten, while the second phase was implemented in about 187 census blocks of these two pilot provinces.

1.5 Layout of the Report

The analysis of the informal sector survey will be presented in the following chapters as follows:

Chapter 2 Employment in the Informal Economy

Discussed in this chapter are labor force characteristics, jobs in the informal sector, persons employed in the informal sector, informal employment, industry of economic activity, occupation, employment status, wages and earnings, type of tax payment, type of enterprise, size of establishment, legal organization of the enterprise, kind of workplace, age composition, level of education, employment conditions of informal employees, exclusion of agriculture, and forestry and fishing.

Chapter 3 Contribution of the Informal Sector to GDP

Chapter 3 presents industry, agriculture and non-agriculture sectors, and labor productivity.

Chapter 4 Characteristics of the Informal Sector Enterprises

Chapter 4 discusses household unincorporated enterprise with at least some market production (HUEM), financing and other support structure, problems, and prospects.

Chapter 5 Institutionalizing Informal Employment and Statistics in Official Statistics

Chapter 5 presents the recommendations for institutionalizing the generation of statistics on informal employment and informal sector.

Chapter 6 Summary and Conclusions

Chapter 6 summarizes the main results, importance of measurement in informal employment and informal sector, and other issues.

Chapter 7 Recommendations

Chapter 7 outlines recommendations for further work relating to the conduct of an informal sector survey.

Chapter 2

Employment in the Informal Economy

This chapter describes the profile of the informal employment using two data sources, namely, *Sakernas* (national labor force survey) and the phase 1 data of the Informal Sector Survey (ISS). (The questionnaire for phase 1 [or ISS-1] is in Appendix 7.) The basic individual characteristics of the employed population are from *Sakernas*, while the nature of employment is mainly based on the ISS-1 data. Because the ISS was conducted in only two provinces in Indonesia, this chapter will present the results for Yogyakarta and Banten separately.

It should be noted that slight discrepancies exist between the ISS total employment estimates and those from the published *Sakernas* for Yogyakarta and Banten. For reasons discussed in Section 6.3, data of the two surveys were inconsistent and the information gathered in the ISS-1 were used for this report. This is primarily for consistency of estimates, especially those concerning the nature of employment. Also, estimation of formal and informal employment is based chiefly on the number of jobs and not the number of persons. This is an important distinction since a person may have more than one job, which is a typical situation in Asian countries, Indonesia included. An employed person may be a formal employee, for example, working as a regular bus driver in a company in his main job. But he may also be working as a tricycle driver in his second job (using a vehicle he owns) and, thus, can be considered as an own-account worker. Hence, total employment by job holding will be larger than the total number of workers. More information on the concepts and definitions of terms used in the report are available in Appendix 1, while the detailed estimation methodology and decision matrices in classifying formal and informal employment are presented in Appendix 4. Additional statistical tables are presented in Appendix 6.

Table 2 illustrates the significance of informal employment in the two provinces. In fact, 89.14% of the 2,547,320 total employment in Yogyakarta was informal, whereas the incidence of informal employment among the 3,924,663 jobs in Banten was 75.90%. While it is to be expected for informal employment to be prevalent in informal enterprises, data showed that formal enterprises also supply a substantial amount of informal jobs. Estimates showed that 30.74% of employment in formal enterprises in Yogyakarta was informal, and in Banten, 32.65% (of the 1,141,961 jobs in formal enterprises).

Table 2 Number of Informal Employment by Province and Production Unit

Province and Production Unit	Nature of Employment (Number of jobs)			Nature of Employment (%)	
	Informal	Formal	Total	Informal	Formal
Yogyakarta					
Formal	103,642	233,553	337,196	30.74	69.26
Informal	2,164,886	43,120	2,208,006	98.05	1.95
Household	2,119	0	2,119	100.00	0.00
Total	2,270,647	276,673	2,547,320	89.14	10.86
Banten					
Formal	372,874	769,087	1,141,961	32.65	67.35
Informal	2,600,403	176,845	2,777,248	93.63	6.37
Household	5,455	0	5,455	100.00	0.00
Total	2,978,732	945,931	3,924,663	75.90	24.10

Figure 2 Nature of Employment by Production Unit

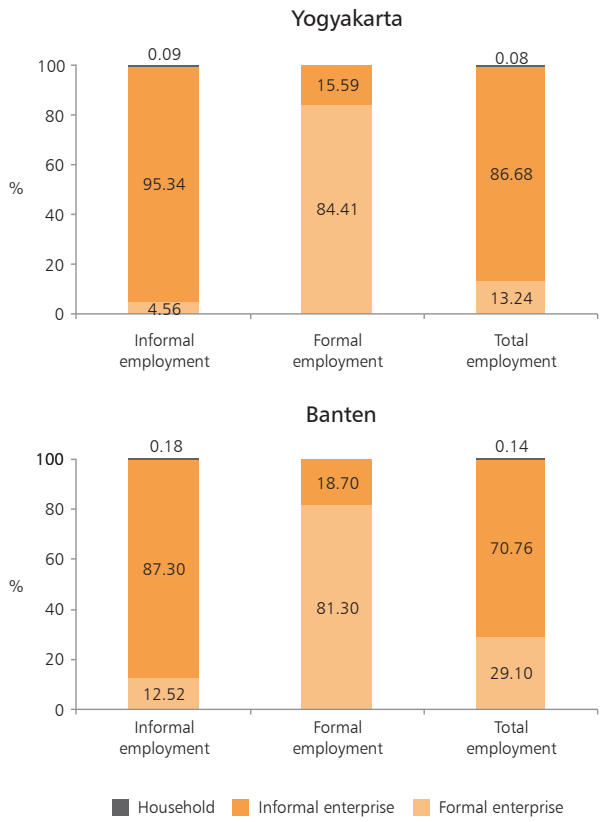


Figure 2 shows the relevance of the informal sector in providing employment. Informal enterprises engaged 86.68% of the total employment in Yogyakarta; in Banten, the jobs supplied by informal enterprises were relatively less at 70.76% of the total. Informal enterprises generally employed their workers informally, though there were instances wherein they also provided formal employment. In the same manner, formal enterprises mostly provided more formal than informal jobs.

Informal jobs in informal enterprises were 95.34% in Yogyakarta and 87.80% in Banten; whereas formal jobs in formal enterprises in Yogyakarta and Banten were registered at 84.41% and 81.30%, respectively.

2.1 Labor Force Characteristics

In analyzing this section, it is important to note that discussions are based on estimates of the labor force with persons as a unit of measure.

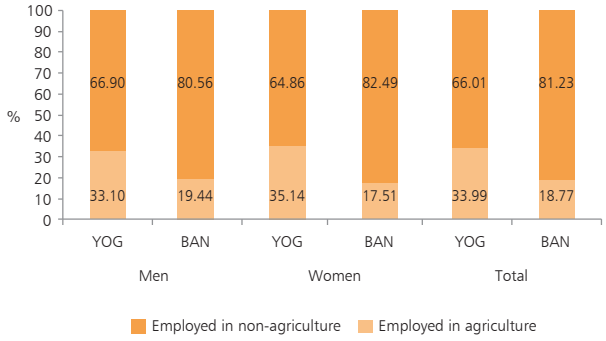
Yogyakarta is more dependent on agriculture than Banten. In Yogyakarta, the proportion of employed persons engaged in agriculture was 33.98%, while the rest (66.02%) was in the non-agriculture sector. In Banten, the percentage of employed persons engaged in agricultural activities was much less than that in Yogyakarta, at 18.77%. (Table 2.1 of Appendix 6 presents frequency statistics.)

Whereas Figure 2.1.1 characterizes labor force by sex and sector, Figure 2.1.2 examines it further by nature of employment and enterprises (formal–informal). Thus, Figure 2.1.2 divides total labor force by sex in each province into five components. Note that Figure 2.1.2 does not show the composition of formal employment in agriculture in each category due to insignificant figures: 0.13%, 0.05%, and 0.09%, respectively, for men, women, and total in Yogyakarta whereas the corresponding figures for Banten are 0.41%, 0.31%, and 0.38%. Similar reason applies for not recording the non-agriculture informal employment in households in Yogyakarta. In Banten, however, the non-agriculture informal employment registered among the women workforce at a very low percentage of 0.42, which was 0.14% of the total.

Hence, for both Yogyakarta and Banten, almost all employed persons in the agriculture sector work under informal arrangements. The percentage of men working informally in the agriculture sector was almost the same as the percentage among their women counterpart in both provinces.

Meanwhile, the percentage of informal employment in the non-agriculture sector was quite different from that in the agriculture sector. From almost 100% in the agriculture sector, informal employment in the non-agriculture sector in Yogyakarta dropped to 79.2%.

Figure 2.1.1 Labor Force Characteristics by Sex: Agriculture vs Non-Agriculture



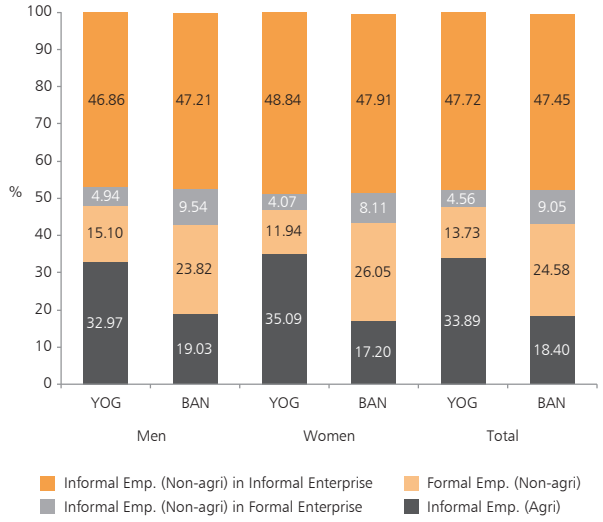
BAN = Banten, YOG = Yogyakarta.

The same pattern is noted in the non-agriculture sector in Banten where informal employment was posted at 69.73%. Hence, for both provinces, formal employment was more likely to exist in the non-agriculture sector, at 20.80% in Yogyakarta and 30.27% in Banten, rather than in the agriculture sector.

It is interesting that in Yogyakarta, the percentage of men engaged in the non-agriculture informal employment is lower than the percentage of women in the same condition at 77.83% and 81.59%, respectively. However, the opposite is observed in Banten: 70.44% of the men in the non-agriculture sector were informally employed, higher than the 68.42% of women in informal employment.

It is also noteworthy to mention that the share of non-agriculture formal enterprises in providing informal employment is significantly larger in Banten than in Yogyakarta at 15.97% and 8.73%, respectively. This implies that formal enterprises in Banten hire one out of every five informal workers in the non-agriculture sector of the province, while formal establishments in Yogyakarta only engage one in every 10.

Figure 2.1.2 Labor Force Characteristics by Sex, Nature of Employment, and Sector



Agri = agriculture, BAN = Banten, Emp = employment, YOG = Yogyakarta.

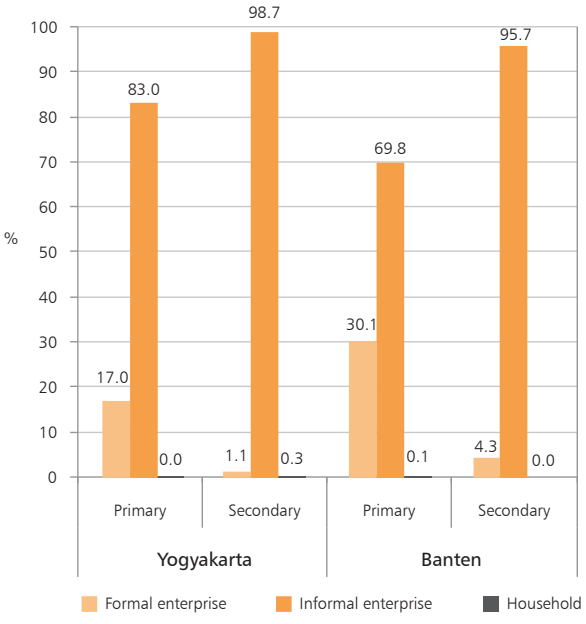
2.2 Jobs in the Informal Sector

The ISS asked about the second job of employed persons, and Table 2.2.1 shows that the percentage of second jobs to total jobs in Yogyakarta (23.7%) was higher than that in Banten (3.7%). This implies that having jobs other than the main source of income is more common in Yogyakarta than in Banten. Data for Yogyakarta showed that the household typically caters to the second jobs of workers; of the total jobs supplied by the household, second (other) jobs accounted for 78.2%. Meanwhile, of the total jobs in formal and informal enterprises, second jobs accounted for 1.9% and 26.9%, respectively. This suggests that between the two, the informal enterprise is more of the "go to" establishment when workers would like to have additional jobs over their primary employment. The same is observed in Banten. Second jobs comprised only 0.6% of the total jobs in formal enterprises, smaller than what was registered in informal enterprises, at 5.0%.

Given that having second jobs is more common in Yogyakarta than in Banten, it is but natural that employment of second jobs in each type of production unit is higher in Yogyakarta. The high occurrence of second jobs in this province could be due to less wage or earnings received by the employed persons from their main jobs.

Figure 2.2 shows that the jobs of the employed population, whether primary or secondary, are generally created by informal enterprises. Among the primary jobs, employment in informal enterprises reached 83.0% in Yogyakarta and 69.8% in Banten. Similarly, among the second jobs, employment in

Figure 2.2 Employment by Type of Enterprise: Primary and Secondary Jobs



informal enterprises also dominates in Yogyakarta and Banten at 98.7% and 95.7%, respectively.

Formal enterprises supply 30.1% of the primary jobs in Banten, higher than the 17.0% in Yogyakarta. Likewise, formal enterprises in Banten housed 4.3% of the second jobs, also higher than the 1.1% registered in Yogyakarta.

Informal employment is common in both the primary and second jobs of workers in both provinces (Table 2.2.2). Informal employment among the primary jobs in Yogyakarta was registered at 86.2%, while it was 75.0% in Banten. Meanwhile, among the second jobs, informal employment was recorded at 98.7% and 98.1% in Yogyakarta and Banten, respectively.

Job composition analysis showed that second jobs accounted for 26.2% of the total informal employment in Yogyakarta, higher than the percentage recorded in Banten (4.8%). This suggests that in Banten, informal arrangements are already a popular case in the primary source of income of workers. Moreover, it is more common among the primary jobs in Banten than in Yogyakarta. With regard to the job composition of total formal employment, 2.8% were second jobs in Yogyakarta while a lower 0.3% was posted in Banten.

Of the total employment in Yogyakarta 23.7% was classified as second jobs, while only 3.7% was registered in Banten.

Table 2.2.1 Total Number of Jobs by Activity and Production Unit

Production Unit	Frequency		Total	Percent	
	Primary	Secondary		Primary	Secondary
Yogyakarta					
Formal	330,822	6,374	337,196	98.1	1.9
Informal	1,613,484	594,521	2,208,006	73.1	26.9
Household	461	1,658	2,119	21.8	78.2
Total	1,944,767	602,553	2,547,320	76.3	23.7
Banten					
Formal	1,135,626	6,335	1,141,961	99.4	0.6
Informal	2,637,092	140,156	2,777,248	95.0	5.0
Household	5,455	0	5,455	100.0	0.0
Total	3,778,172	146,491	3,924,663	96.3	3.7

Note: Secondary jobs pertain to jobs other than the main source of income and thus may be composed of the second, third, and fourth jobs of the employed population.

Table 2.2.2 Total Number of Jobs by Nature of Employment and Activity

Nature of Employment	Activity				
	Frequency			Percent	
	Primary	Secondary	Total	Primary	Secondary
Yogyakarta					
Informal	1,675,913	594,734	2,270,647	73.8	26.2
Formal	268,854	7,819	276,673	97.2	2.8
Total	1,944,767	602,553	2,547,320	76.4	23.7
Banten					
Informal	2,835,069	143,663	2,978,732	95.2	4.8
Formal	943,103	2,828	945,931	99.7	0.3
Total	3,778,172	146,491	3,924,663	96.3	3.7

Note: Secondary jobs pertain to jobs other than the main source of income and thus may be composed of the second, third, and fourth jobs of the employed population.

2.3 Persons Employed in the Informal Sector

Majority of the formally employed in Yogyakarta work as employees (men: 90.7%; women: 93.4%) (Table 2.3). The next common employment status was employer (5.1% among male formal workers and 4.0% among their female counterparts). The situation in informal employment is quite different from the one described earlier, such that the employed persons are distributed across the different employment statuses. Among the total employed men, 33.6% were employers, 23.3% were own-account workers, and only 18.5% were employees. On the other hand, 35.5% of the total female informal workers were classified as unpaid workers, followed by 21.5% as employers and 21.2% as own-account workers. Less than 3.0% of the men and women in informal employment were casual workers in the agriculture sector.

Banten showed a pattern similar to that of Yogyakarta in terms of formal employment. The proportions of men and women working as employees were high at 96.4% and 96.5%, respectively. However, Banten has smaller percentages of formal employers, at 1.5% among men and 0.4% among women. Meanwhile, the province exhibited a different informal employment structure compared to Yogyakarta. Among the employment statuses, employee registered the highest prevalence among the total male and female workers at 34.1% and 29.4%, respectively. Among the men, informal own-account workers ranked next at 28.1%, followed by employers at 17.7%. Among the women informal workers, 29.2% were identified as unpaid family workers and 21.1% were own-account workers.

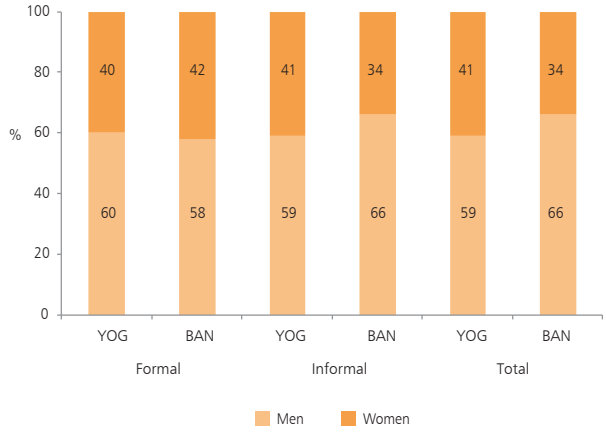
These comparisons show interesting observations. Given that the two provinces have different economies, to which more discussions are available in Section 2.5, there also seems be a distinction between Yogyakarta's and Banten's informal employment. However, none is apparent in the formal employment. One hypothesis on this notion is that the formal employment structure is generally the same regardless of the type of economy where it exists. It seems that the same cannot be said about informal employment. The results suggest that its structure is not constant and that it is affected by the characteristics of the labor economy to which it is present.

Table 2.3 Percentage of Employment by Employment Status, Nature of Employment, and Sex

	Nature of Employment					
	Formal			Informal		
Employment Status	Men	Women	Total	Men	Women	Total
Yogyakarta						
Own-account worker	0.5	0.0	0.3	23.3	21.2	22.5
Employer with temporary workers	0.8	1.3	1.0	28.8	18.3	24.5
Employer with permanent workers	4.3	2.7	3.7	4.8	3.2	4.2
Employee	90.7	93.4	91.7	18.5	16.0	17.5
Casual worker in agriculture	0.4	0.0	0.2	1.9	2.8	2.3
Casual worker in non-agriculture	3.4	2.5	3.1	11.2	3.1	7.8
Unpaid family worker	–	–	–	11.5	35.5	21.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Banten						
Own-account worker	0.5	1.2	0.7	28.1	21.1	25.8
Employer with temporary workers	0.2	0.0	0.1	14.7	8.5	12.6
Employer with permanent workers	1.3	0.4	1.0	3.0	1.6	2.5
Employee	96.4	96.5	96.4	34.1	29.4	32.5
Casual worker in agriculture	1.1	1.2	1.1	6.3	5.3	6.0
Casual worker in non-agriculture	0.6	0.8	0.7	8.9	5.0	7.6
Unpaid family worker	–	–	–	5.0	29.2	13.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

Note: – = not applicable.

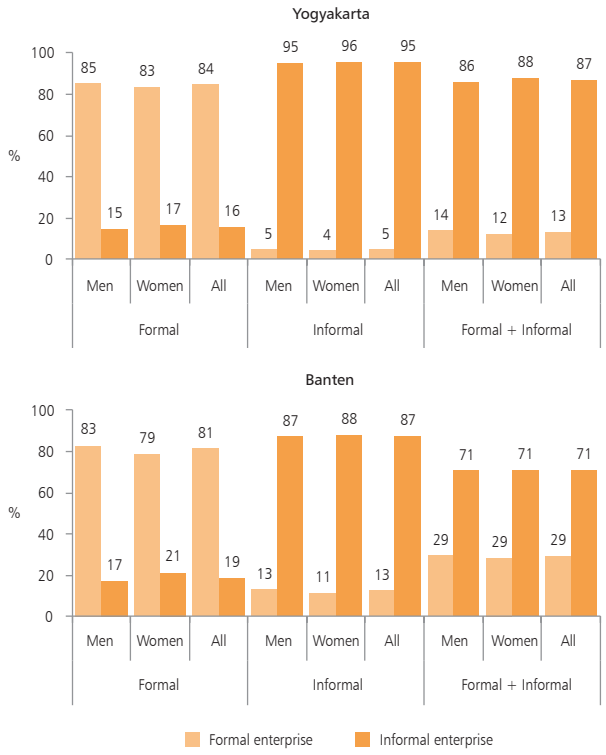
Figure 2.3 Formal and Informal Employment in Informal Enterprise by Sex and Province



Ban = Banten, Yog = Yogyakarta.

Figure 2.3 shows that there are more men than women working in informal enterprises, regardless of whether they are engaged formally or informally. However, provincial comparison shows that in Banten, the number of men engaged in informal employment is 7 percentage points more compared to the situation in Yogyakarta.

Figure 2.4.1 Employment by Type of Production Unit, Nature of Employment, and Sex

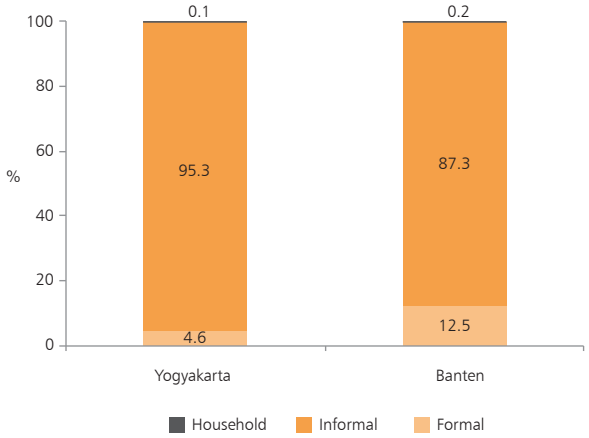


2.4 Informal Employment

Figure 2.4.1 shows that in relative terms, there are more jobs created by formal enterprises in Banten (29%) than in Yogyakarta (13%). The figure also shows that some of these jobs have informal arrangements. Formal enterprises in Banten also created more informal jobs compared to the formal establishments in Yogyakarta. In particular, among informal jobs in Banten, 13% were created by formal enterprises, much higher than the 5% registered in Yogyakarta.

Figure 2.4.2 is the same as Figure 2.4.1, but concentrates on informal employment and the production unit that provides the job. It shows that the percentage of informal jobs in formal enterprises in Banten is three times more than the percentage in Yogyakarta. Figures 2.4.1 and 2.4.2 may have provided one of the reasons for the different employment structures in the two provinces, as discussed in the previous section. Recall that informal employment in Banten was predominantly composed of employee jobs while that in Yogyakarta was mostly employer status. If the formal enterprises in Banten have a substantial role in supplying informal employment, then these are most likely the employee jobs. This is so because self-employed workers (own-account and employers) typically take the characteristics of the enterprises they owned; thus, if they work in formal enterprises, their employments are also under formal arrangements, and vice versa. This also

Figure 2.4.2 Informal Employment by Production Unit and Province

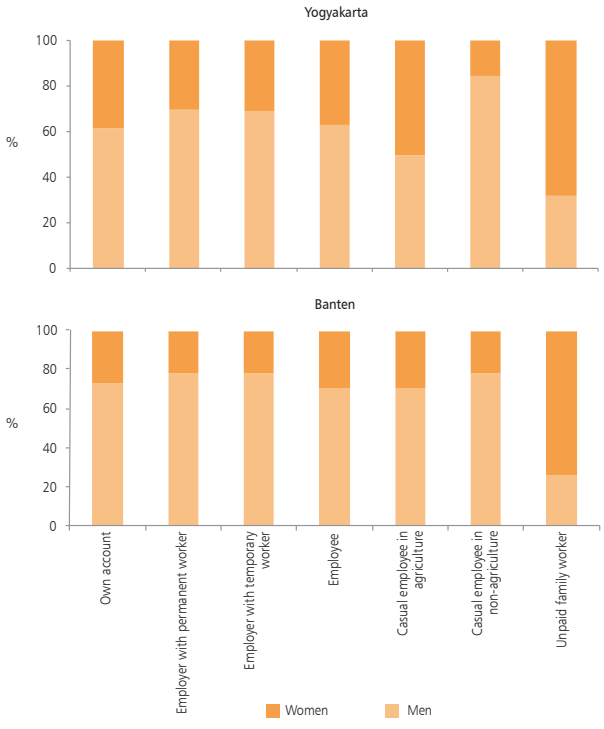


explains the large proportion of the self-employed in Yogyakarta's informal employment structure, since most of these informal jobs were provided by informal enterprises.

With these observations, it would also be interesting to determine whether the quality of informal employment in Banten will be different from that in Yogyakarta, specifically for employees, because of the difference in informal job providers. Do formal enterprises offer different kinds of employment benefits than informal enterprises? This is explored in Section 2.16.

Meanwhile, Figure 2.4.3 shows that under informal employment, the jobs assumed by men outnumber those carried out by women, except the unpaid family worker category. However, in Yogyakarta, jobs performed by men and women (under the casual employee in agriculture status) are equally distributed.

Figure 2.4.3 Distribution of Men and Women Engaged in Informal Employment



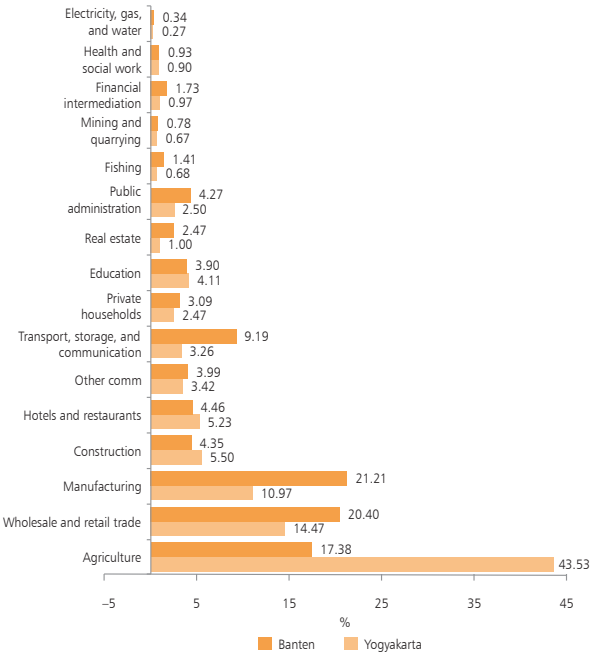
2.5 Industry of Economic Activity

The informal sector survey used the Indonesia Standard Industrial Classification (KBLI 2005) in generating the codes for the "main industry" variable. KBLI 2005 was based on the UN Statistics Division's International Standard Industrial Classification Rev. 3 as used also in *Sakernas* (Table 2.5.1).

Figure 2.5.1 shows that the agriculture sector still dominated the total employment in Yogyakarta, followed by the wholesale and retail trade (WRT) sector and manufacturing sector. Almost half of the total jobs in the province were engaged in agricultural activities. On the other hand, the manufacturing industry provides the most number of jobs in Banten, followed by WRT (20.4%) and agriculture (17.4%) sectors.

Table 2.5.2 shows that the majority of jobs in the two provinces are arranged informally, with informal jobs accounting for 89.14% and 75.9%, respectively, of the total number of jobs in Yogyakarta and Banten. This is generally true for most of the sectors of economic

Figure 2.5.1 The Structure of Total Employment in Yogyakarta and Banten



Note: Other comm = Other community and personal services.

Table 2.5.1 Comparison of Industry Classification: ISIC Rev. 3 vs. *Sakernas*

ISS	ISIC Rev. 3			Industry/Sector in *Sakernas* (ICSI)
	Industry Classification		Code(s)	Code(s)
1 Agriculture	(1)	Agriculture, hunting, and forestry	01–02	11–15, 20*
	(2)	Fishing	05	50*
2 Mining	(3)	Mining and quarrying	10–14	101–102, 111–112, 120, 131–132, 141–142
3 Manufacturing	(4)	Manufacturing	15–37	151–155, 160, 171–174, 181–182, 191–192, 201–202, 210, 221–223, 231–232, 241–243, 251–252, 261–266, 269, 271–273, 281, 289, 291–293, 300, 311–315, 319, 321–323, 331–333, 341–343, 351–353, 359, 361, 369, 371–372
4 EGW	(5)	Electricity, gas, and water supply	40–41	401–402, 410
5 Construction	(6)	Construction	45	451–455
6 WRT	(7)	Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	50–52	501–505, 511–515, 519, 521–526, (531–535, 539, 541–545, 549)**
7 Hotels	(8)	Hotels and restaurants	55	551–552
8 TSC	(9)	Transport, storage, and communications	60–64	601–603, 611–612, 622, 631–635, 639, 641–642
9 Finance	(10)	Financial intermediation	65–67	651, 659–660, 671–672
10 Education	(13)	Education	80	801–803, 809
11 Health	(14)	Health and social work	85	851–853
12 Other	(11)	Real estate, renting, and business activities	70–74	701–703, 711–713, 721–725, 729, 731–732, 741–743, 749
	(12)	Public administration and defence; compulsory social security	75	751–753
	(15)	Other community, social, and personal service activities	90–93	900, 911–912, 919, 921–924, 930
	(16)	Private households with employed persons	95	950
	(17)	Extra-territorial organizations and bodies	99	990
		No response		0

* '0' in the first digit was truncated.
** Occupations of those who have these industry codes belong to wholesale and retail trading.
ICSI = Industry Classification in Statistics Indonesia, ISIC = International Standard Industrial Classification, ISS = Informal Sector Survey.
Source: *Sakernas* Guidance Book of Supervisor.

activities except public administration, education, health/social, and financial sectors wherein 72.03%, 69.48%, 79.47%, and 62.82%, respectively, are considered as formal jobs. The same can be observed in Banten; most of the jobs in the public administration, health/social, finance, and manufacturing sectors are under formal arrangements.

A significant portion of informal employment in Yogyakarta was engaged in agriculture at 48.7% of the total number of informal jobs (2,270,647). This is followed by WRT (14.7%) and manufacturing (10.6%) as shown in Figure 2.5.2. In Yogyakarta, there are more formal jobs in mining and quarrying, electricity, gas, and water (EGW) and hotels and restaurants assumed by men than by women. Meanwhile, the private household sector fully employed women for its formal jobs. Informal employment in WRT, health/social, and private household sectors in Yogyakarta were dominated by women workers.

Unlike in Yogyakarta, the informal employment in Banten is predominantly driven by the WRT sector, followed by the agriculture and manufacturing sectors (Figure 2.5.3).

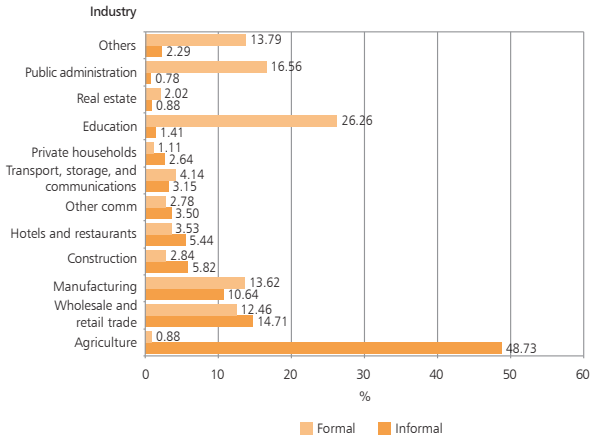
In addition, while the agriculture sector provides more informal jobs for men in Banten, more informal jobs for women are sourced from the WRT sector (Table 2.5.3). In particular, in Banten, most of the informal jobs for women were created by the WRT sector (32.27%) followed by those sourced from the agriculture sector (22.61%).

Table 2.5.2 Nature of Employment by Industry and Province (%)

Industry	Yogyakarta		Banten	
	Formal	Informal	Formal	Informal
Agriculture	0.22	99.78	1.55	98.45
Fishing	...	100.00	6.64	93.36
Mining and quarrying	7.24	92.76	15.67	84.33
Manufacturing	13.49	86.51	53.68	46.32
Electricity, gas, and water	48.15	51.85	41.02	58.98
Construction	5.61	94.39	9.91	90.09
Wholesale and retail trade	9.35	90.65	7.90	92.10
Hotels	7.33	92.67	12.43	87.57
Transport, storage, and communications	13.79	86.21	22.36	77.64
Financial intermediation	62.82	37.18	65.27	34.73
Real estate	21.92	78.08	29.70	70.30
Public administration	72.03	27.97	69.90	30.10
Education	69.48	30.52	36.76	63.24
Health and social work	79.47	20.53	55.77	44.23
Other comm	8.82	91.18	14.12	85.88
Private households	4.89	95.11	2.56	97.44
Others	...	100.00	...	100.00
Total	10.86	89.14	24.10	75.9

Notes: ... = no observation/no data available, Other comm = Other community, social, and personal services.

Figure 2.5.2 The Structure of Informal Employment in Yogyakarta

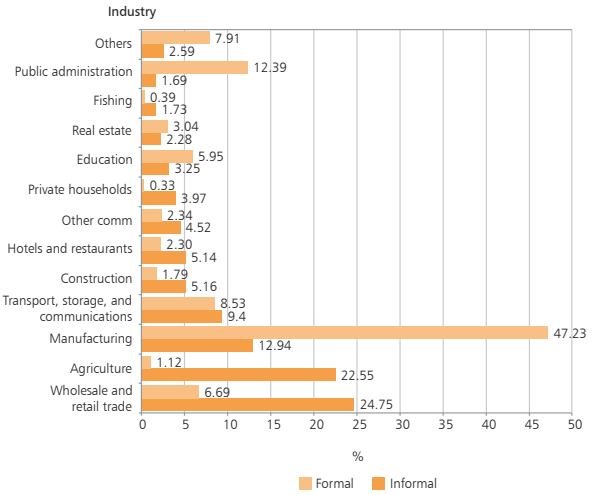


Note: Other comm = Other community, social, and personal services.

2.6 Occupation

Figures 2.6.1 and 2.6.2 illustrate the stylized fact on skill discrepancy between informal and formal workers. The types of skills, however, differed between the two provinces. Whereas jobs for skilled agricultural workers were most

Figure 2.5.3 Structure of Informal Employment in Banten



Note: Other comm = Other community, social, and personal services.

prevalent in informal employment in Yogyakarta, Banten employs more unskilled workers in its informal jobs.

The skilled agricultural and fishery workers already comprise two-fifths of the total number of jobs in Yogyakarta. Since this province shows a higher incidence of informal than formal employment, it is not surprising that 46.2% of the informal jobs are that of skilled agricultural and fishery workers; 18.7% are jobs of service workers, and shop and market sales workers; 13% are jobs of craft and related workers; and 12.1% are jobs assumed by elementary (unskilled) workers. Occupations requiring more technical skills account only for less than one-tenth of the total number of informal jobs in the province. Expectedly, skilled agricultural and fishery workers classification is the least source of formal employment in Yogyakarta, at only 1.3%. Intuitively, most of them are either professionals (28.7% of the total formal jobs) or clerks (19.3%) (Figure 2.6.1).

On the other hand, almost 40% of the total number of jobs in Banten is either elementary occupations or in-plant and machine operation and assembly. This is because Banten is relatively more industrialized and its economy depends more on the non-agriculture sector, particularly manufacturing. (Figure 2.6.2).

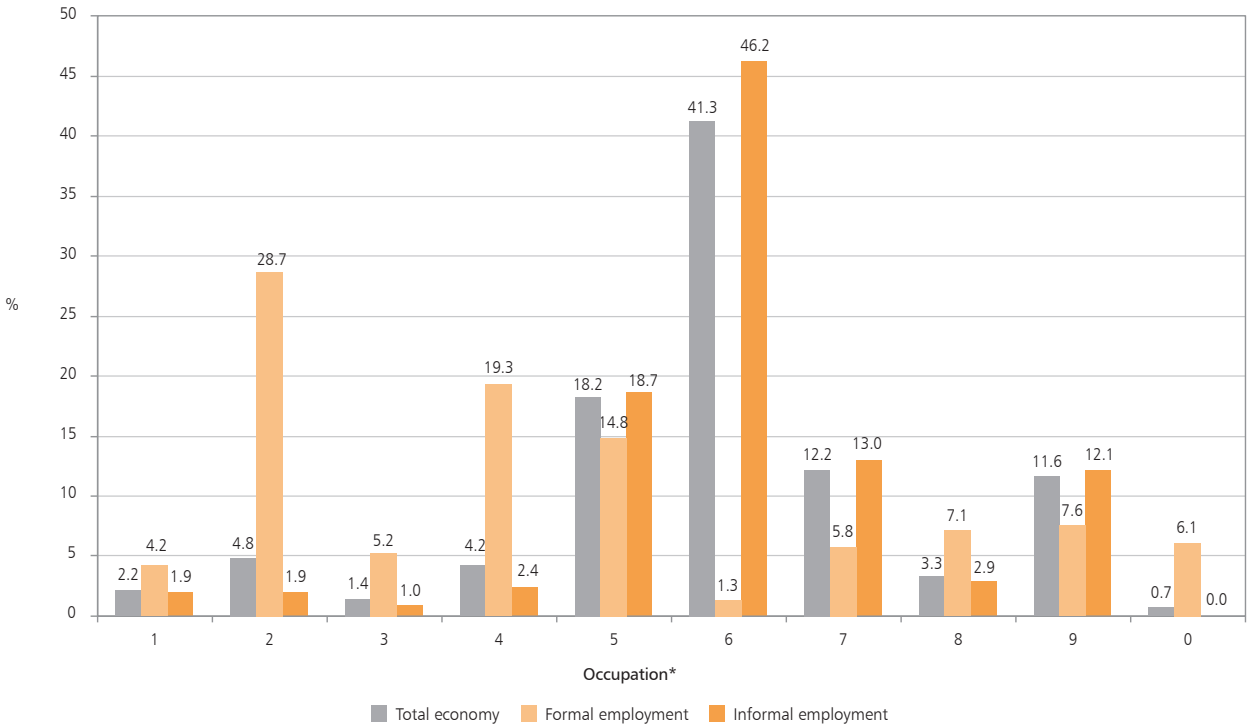
Informal jobs in Banten are generally under the following occupational classifications: service workers, skilled agricultural and fisheries workers, and the unskilled workers. Unlike Yogyakarta where agriculture employment comprises the bulk of informal employment, the informal jobs in Banten are distributed between agriculture and non-agriculture employment.

Table 2.5.3 The Structure of Employment (Total and Informal) by Province and Sex

Industry	Total				Informal Employment			
	Yogyakarta		Banten		Yogyakarta		Banten	
	Men	Women	Men	Women	Men	Women	Men	Women
Agriculture	44.06	42.77	17.60	16.97	49.58	47.50	22.61	22.43
Fishing	0.74	0.59	2.09	0.09	0.83	0.66	2.53	0.12
Mining and quarrying	0.89	0.34	1.14	0.08	0.91	0.38	1.25	0.11
Manufacturing	10.54	11.59	19.57	24.37	10.34	11.08	13.21	12.41
Electricity, gas, and water	0.37	0.13	0.46	0.09	0.17	0.14	0.33	0.12
Construction	9.15	0.21	6.45	0.27	9.83	0.10	7.61	0.26
Wholesale and retail trade	11.14	19.31	17.61	25.81	11.11	19.86	21.00	32.27
Hotels and restaurants	4.43	6.39	3.73	5.88	4.27	7.11	4.12	7.20
Transport, storage, and communications	4.63	1.27	12.80	2.18	4.64	1.02	13.14	1.91
Financial intermediation	1.07	0.81	2.13	0.95	0.46	0.32	0.83	0.72
Real Estate	1.35	0.49	2.94	1.56	1.19	0.43	2.53	1.80
Public administration	3.27	1.38	4.92	3.02	1.02	0.45	1.88	1.32
Education	3.58	4.87	2.37	6.88	1.08	1.88	2.08	5.61
Health and social work	0.49	1.49	0.65	1.47	0.03	0.46	0.46	0.71
Other comm	3.55	3.24	4.05	3.88	3.68	3.24	4.57	4.42
Private households	0.64	5.14	1.33	6.50	0.72	5.39	1.66	8.59
Others	0.11	0.00	0.15	0.00	0.13	0.00	0.20	0.00
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

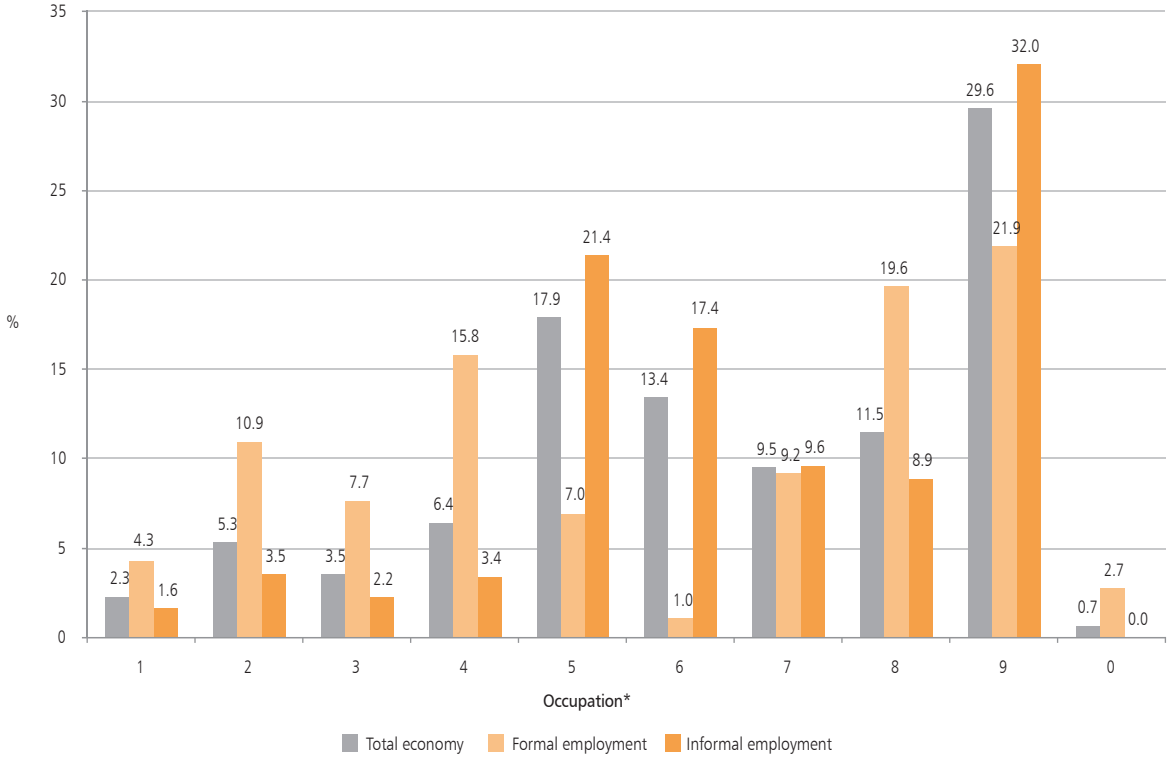
Note: Other comm = Other community, social, and personal services.

Figure 2.6.1 Employment by Occupation and Nature of Employment in Yogyakarta



Notes: * Occupations according to the Standard Classification of Occupations of Indonesia (KBJI 2002): 1. Legislators, seniors officials, and managers; 2. Professionals; 3. Technicians and associate professionals; 4. Clerks; 5. Service workers and shop and market sales workers; 6. Skilled agricultural and fishery workers; 7. Craft and related workers; 8. Plant and machine operators and assemblers; 9. Elementary occupations; 0. Armed forces.

Figure 2.6.2 Employment by Occupation and Nature of Employment in Banten



Notes: * Occupations according to the Standard Classification of Occupations of Indonesia (KBJI 2002) 1. Legislators, seniors officials, and managers; 2. Professionals; 3. Technicians and associate professionals; 4. Clerks; 5. Service workers and shop and market sales workers; 6. Skilled agricultural and fishery workers; 7. Craft and related workers; 8. Plant and machine operators and assemblers; 9. Elementary occupations; 0. Armed forces.

2.7 Employment Status

In both provinces, for each category of employment status, one can observe that more jobs are assumed by men in either formal or informal employment. This is true except for the unpaid family job in which 68% and 74% were carried out by women in Yogyakarta and Banten, respectively. Meanwhile, men comprised 61.2% of the own-account workers; 69.1%, employers; and 65.7% of the employees[7] in Yogyakarta. The same pattern is observed in Banten, though at higher levels; men composed 72.5%, 78.0%, and 68.3% of the own-account, employer, and employee jobs, respectively.

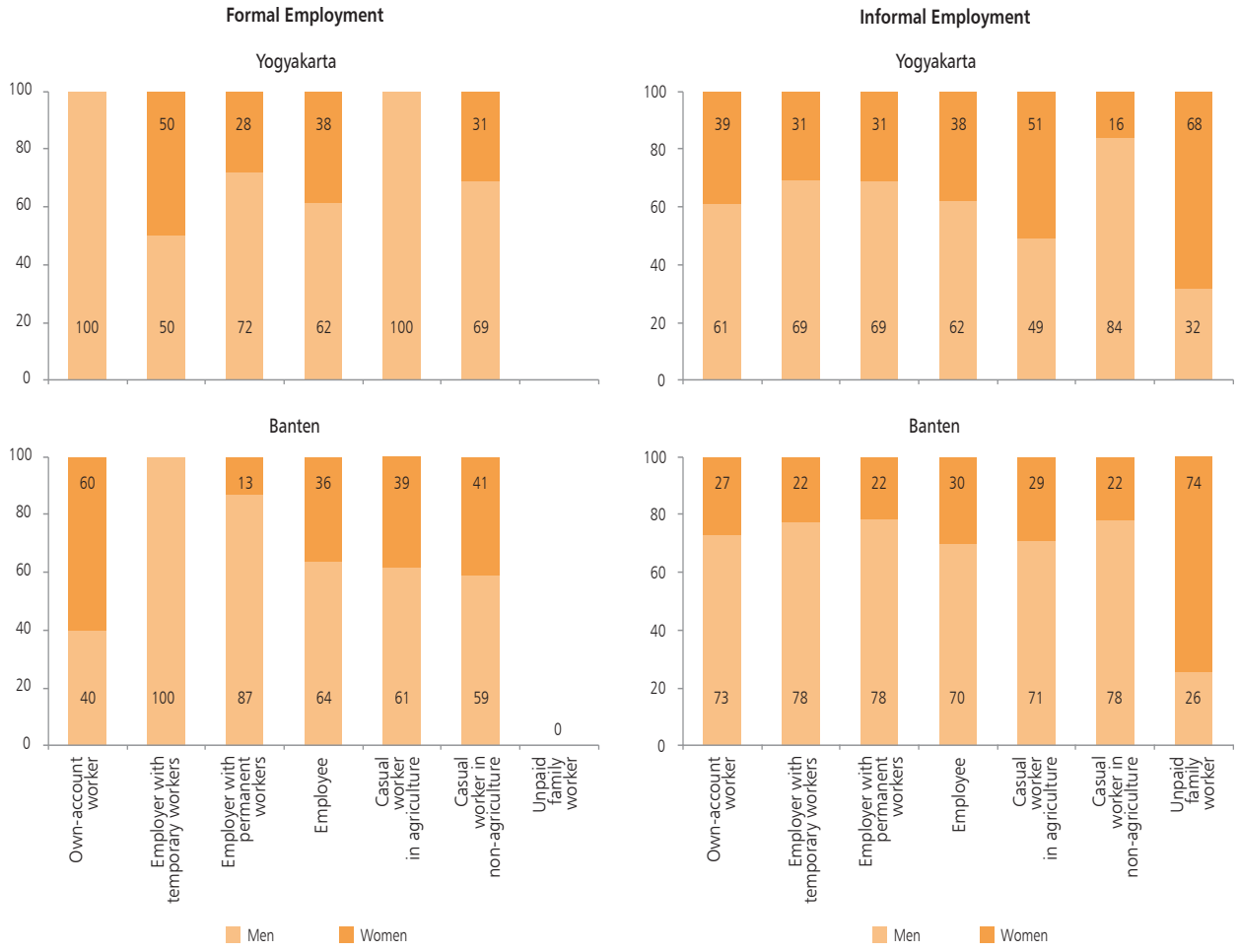
It is also interesting to note that for every five own-account jobs under formal arrangements in Banten, three are assumed by women. This pattern is unlike the ones manifested by the other own-account cases. In fact, all of the formal own-account jobs in Yogyakarta were assumed by men, while it was 61% among informal ones. In Banten, 73% of the informal own-account jobs were assumed by men. The details are illustrated in Figure 2.7.

2.8 Wages and Earnings

During data collection, strict skipping pattern has been applied in *Sakernas* with regard to the wage and earnings variable. In particular, own-account workers, casual employees in agriculture, and casual employees in non-agriculture were asked about their incomes, while employees were asked about their wages. On the other hand, workers classified as employers were not directed to answer any income/wage-related items. Hence, the analyses provided in this section are limited to non-employers. In addition, *Sakernas* only collects data on income or wages with respect to respondents' primary jobs. Hence, it should be noted that "no earnings,"

[7] Includes employees, casual worker in agriculture, and casual worker in non-agriculture.

Figure 2.7 Employment by Employment Status, Nature of Employment, and Sex (%)



specifically for own-account workers, does not suggest "no existing workers" for that classification or "no income received." This is just a case of no data reported.

Across provinces, workers in formal employment receive significantly higher earnings, twice as much on average, than those in informal employment (Table 2.8.1). Specifically, in Yogyakarta, formal employees' wages are three times what informal employees were earning. In Banten, formal employees received twice as much wages as that of informal employees. The same is observed among the self-employed.

Table 2.8.1 Average Wage and Earnings by Employment Status and Nature of Employment

Class of Workers	Formal	Informal	Ratio	All
Yogyakarta				
Employees	1,893,031	775,247	0.41	1,220,291
Own-account worker	···	853,233	···	853,233
Average earnings	1,893,031	811,806	0.43	1,092,962
Banten				
Employees	1,710,182	1,158,954	0.68	1,426,725
Own-account worker	1,491,483	970,822	0.65	975,953
Average earnings	1,704,493	1,080,460	0.63	1,304,547

··· = no observation/no data available.

On the average, male workers are better off than their female counterparts in terms of wage and earnings received (Table 2.8.2) regardless of whether one is employed formally or informally. The gap, however, is a little higher in formal employment. The wage differential is highest among formally self-employed persons in Banten while the smallest discrepancy was observed among informally self-employed in Banten, at rupiah (Rp)4,072 (Rp971,919 for men and Rp967,847 for women).

The average earnings of women engaged in formal employment are higher, at Rp1,484,579 ($161) per

Table 2.8.2 Average Wage and Earnings by Employment Status, Nature of Employment, and Sex

Class of Workers	Formal			Informal			All		
	Men	Women	Ratio	Men	Women	Ratio	Men	Women	Ratio
Yogyakarta									
Employees	2,146,251	1,484,579	0.69	847,554	657,879	0.78	1,363,882	987,797	0.72
Self-employed	···	···	···	1,017,022	616,162	0.61	1,017,022	616,162	0.61
Average earnings	2,146,251	1,484,579	0.69	925,093	637,601	0.69	1,247,017	853,113	0.68
Banten									
Employees	1,888,117	1,397,233	0.74	1,267,196	895,931	0.71	1,552,499	1,166,694	0.75
Self-employed	2,233,333	1,000,000	0.45	971,919	967,847	1.00	978,729	968,546	0.99
Average earnings	1,889,737	1,392,323	0.74	1,141,776	924,560	0.81	1,388,190	1,115,057	0.80

··· = no observation/no data available.

Table 2.8.3 Average Wage and Earnings by Employment Status, Nature of Employment, and Urbanity

Class of Workers	Formal			Informal			All		
	Men	Women	Ratio	Men	Women	Ratio	Men	Women	Ratio
Yogyakarta									
Employees	1,958,624	1,674,645	0.86	746,468	830,602	1.11	1,275,038	1,091,220	0.86
Self-employed	···	···	···	958,110	690,689	0.72	958,110	690,689	0.72
Average earnings	1,958,624	1,674,645	0.86	841,521	760,235	0.90	1,175,218	926,379	0.79
Banten									
Employees	1,753,655	1,397,844	0.80	1,302,249	793,584	0.61	1,544,134	969,201	0.63
Self-employed	2,233,333	1,000,000	0.45	1,074,178	794,679	0.74	1,081,426	797,950	0.74
Average earnings	1,755,292	1,383,600	0.79	1,214,258	794,115	0.65	1,439,173	900,040	0.63

··· = no observation/no data available.

month, compared with the average monthly earnings of Rp637,601 ($69) received by women engaged in informal employment. Table 2.8.2 also shows that on average, women in formal employment in Yogyakarta tend to be better paid than formally employed women in Banten. This advantage fades off when it comes to informal employment. In particular, women engaged in informal employment in Banten earned more than those in Yogyakarta, at an average of Rp924,560 ($101) and Rp637,601 ($69) per month, respectively.

Earlier discussions concerning the nature of employment only consider the wage differential between male and female groups or workers. In what follows are the wage differentials between urban and rural areas. As seen in Table 2.8.3, average monthly wages of workers in urban areas are higher than those in rural areas. The largest wage differential was noted among self-employed persons in Banten with the difference of Rp1,233,333 between urban and rural wages. Comparison by urbanity showed that formal workers were paid more in urban areas than in rural areas. In Yogyakarta, for example, those working in formal jobs located in urban areas earned about Rp1,958,624 ($212) on average, whereas their counterparts in rural areas only received an average of Rp1,674,645 ($182) per month. Similarly, informal workers in urban areas of Yogyakarta earned more (Rp841,521 [$91]) than those working in the rural areas (Rp760,235 [$82]). Also in Banten, those working in urban areas had relatively higher average earnings than those in rural areas: Rp1,755,292 ($191) compared with Rp1,383,600 ($151) in formal employment and Rp1,214,258 ($132) compared with Rp794,115 ($86) for those with informal jobs.

2.9 Type of Tax Payments (for Employers and Self-Employed)

In both provinces, enterprises of own-account workers and employers in urban areas are more likely registered in tax agency compared to those in the rural areas (Table 2.9.1). For every registered enterprise in the

Table 2.9.1 Distribution of Production Units of Own-Account Workers and Employers Registered in Tax Agency, by Urbanity and Type of Tax Payment

Employment Status	Enterprises							
	Registered Enterprises in Tax Agency (%)			Type of Tax Payment of All Enterprises (%)				
	Urban	Rural	Total	No Tax Payment	Corporate Tax	Others	Don't Know	Total
Yogyakarta								
Own-account worker	75.4	24.6	100.0	82.1	8.9	6.8	2.3	100.0
Employer	64.0	36.0	100.0	86.1	4.8	4.8	4.3	100.0
Total	68.2	31.8	100.0	84.3	6.6	5.7	3.4	100.0
Banten								
Own-account worker	65.8	34.2	100.0	72.0	9.0	7.5	11.5	100.0
Employer	96.0	4.0	100.0	73.1	8.7	13.4	4.9	100.0
Total	80.9	19.1	100.0	72.4	8.9	9.7	9.0	100.0

Note: Others = retribution.

rural area in Yogyakarta, two are registered in the urban area. Banten noted a higher urban–rural registration ratio (at 4:1). A possible reason is that tax agencies in rural areas are less likely to be available than in urban areas, thus, limiting the access of enterprise owners. Another possible explanation could be attributed to the educational background of the owners, that is, they do not have enough knowledge of the process and requirements in registering their enterprise. Moreover, information dissemination on the registration process may also be better in urban than in rural areas.

Table 2.9.1 shows that in Yogyakarta, 82.1% of own-account workers and 86.1% of employers reported that they do not pay taxes. More or less, Banten noted a similar pattern in terms of tax payment of enterprises of own-account workers and employers, that is, majority of them do not pay taxes. However, the percentage of tax-paying enterprises is higher in Banten (18.6%) than in Yogyakarta (12.3%). This may be due to the greater presence of formal enterprises in Banten (29.1%) compared with that in Yogyakarta (13.2%). Hence, for every formal enterprise in Yogyakarta that pays taxes, four are doing the same in Banten. Meanwhile, there are two tax-paying informal enterprises in Banten for every one in Yogyakarta. Nevertheless, the percentage of own-account workers and employers saying that they do not know whether their enterprises pay taxes or not is higher in Banten (9.0%) than in Yogyakarta (3.4%).

Table 2.9.2 Tax Agency Registration and Tax Payments of Enterprise Owned by Own-Account Workers (%)

Registered in Tax Agency?	Tax Payment				
	No Tax Payment	Corporate Tax	Others	Don't Know	Total
Yogyakarta					
Yes	58.5	22.0	16.0	3.5	100.0
No	84.2	8.3	5.9	1.6	100.0
Don't know	59.1	6.3	18.3	16.4	100.0
Total	82.1	8.9	6.8	2.3	100.0
Banten					
Yes	35.4	11.8	42.1	10.7	100.0
No	75.0	8.1	6.8	10.2	100.0
Don't know	19.9	31.9	0.0	48.2	100.0
Total	72.0	9.0	7.5	11.5	100.0

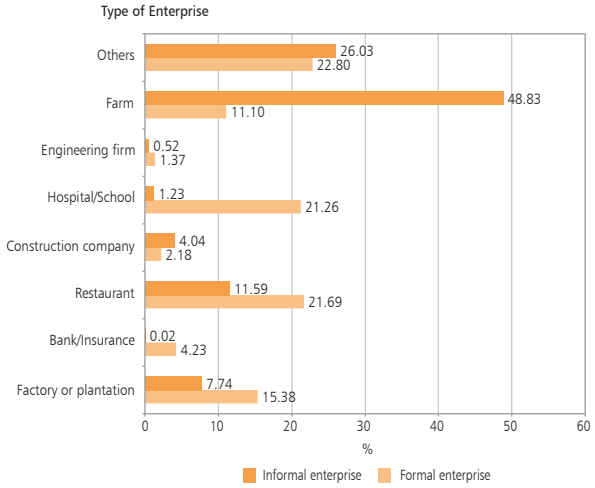
Note: Others = retribution.

Table 2.9.2 shows that among the enterprises of own-account workers that registered in tax agency, 22.0% in Yogyakarta and 11.8% in Banten pay corporate taxes. In contrast, those that pay other taxes show a higher percentage (42%) in Banten than in Yogyakarta (16%). Among enterprises of own-account workers that registered in tax agency, 3.5% reported that they do not know whether they pay taxes or not in Yogyakarta, 10.7% in Banten.

2.10 Type of Enterprise

In both provinces, almost half of the total number of jobs in informal establishments is carried out in farms/workshops (48.83% in Yogyakarta and 37.22% in Banten) (Figures 2.10.1 and 2.10.2). Most of the formal enterprises in Yogyakarta are restaurants (21.69%) and in hospitals/schools (21.26%), while in Banten, factories/plantations (45.4%) are the most frequent

Figure 2.10.1 Percentage of Jobs Worked at Formal/Informal Enterprise by Type of Enterprise in Yogyakarta



type of formal enterprise identified. These results are consistent with the economic situation in Yogyakarta, particularly in Yogyakarta City, which is a well-known tourism and university education destination.

Many students, especially those in college, from other provinces come to Yogyakarta to study. The famous Borobudur temple in the province also draws numerous domestic and foreign tourists every year. This creates a market even for small restaurants (e.g., small

Figure 2.10.2 Percentage of Jobs Worked at Formal/Informal Enterprise by Type of Enterprise in Banten

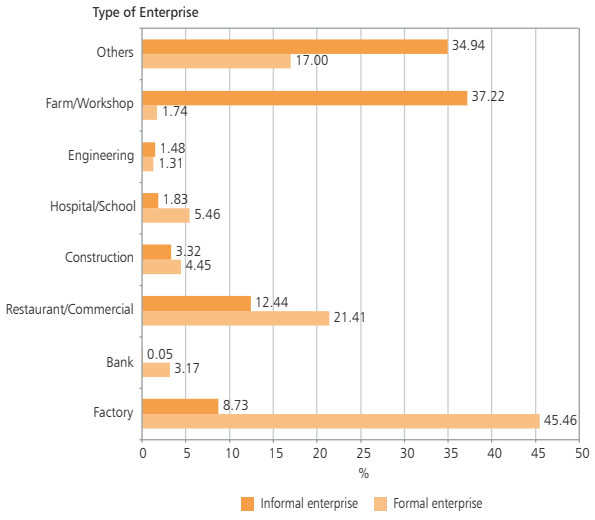


Table 2.10 Percentage of Type of Enterprise and Nature of Employment

Type of Enterprise	Yogyakarta			Banten		
	Formal Enterprise	Informal Enterprise	Household	Formal Enterprise	Informal Enterprise	Household
Factory	23.29	76.71	0.00	68.17	31.83	0.00
Bank/Insurance	97.21	2.79	0.00	96.57	3.43	0.00
Restaurant	22.22	77.78	0.00	41.45	58.55	0.00
Construction	7.62	92.38	0.00	35.53	64.47	0.00
Hospital/School	72.50	27.50	0.00	55.09	44.91	0.00
Engineering firm	28.81	71.19	0.00	26.57	73.43	0.00
Farm	3.35	96.46	0.19	1.88	97.61	0.52
Others	11.80	88.20	0.00	16.67	83.33	0.00
Total	13.24	86.68	0.08	29.10	70.76	0.14

canteens that serve *gudeg*, a special traditional menu, which is a dish made from young jackfruit). Meanwhile, since most education establishments are formal, it is not surprising to note that they generate the most number of jobs, among other formal enterprises. On the other hand, Banten is known as an urbanized and industrialized province where many manufacturing establishments (domestic and foreign) are located.

Among the total number of jobs in factories, it seems that more can be associated with formal enterprises in Banten (Yogyakarta: 23% – formal; 77% – informal; Banten: 68% – formal; 32% – informal) (Table 2.10). It should be noted that the term "factory" is interpreted in Indonesia as a manufacturing production unit regardless of the size (whether large or small); hence, one can assume that the formal factories are the large multinational corporations or even local production but large in scale. On the other hand, the informal factories correspond to those with small-scale production. Given these explanations, the results are consistent, that is, manufacturing production units in Yogyakarta are small-scale; thus, the jobs are generally in informal factories, which is the opposite in Banten where most of the manufacturing jobs are in formal factories.

In total, Banten posted a higher proportion (29.1% of the total number of jobs) of jobs associated with formal enterprises compared to Yogyakarta (13.2%). This implies that, in relative terms, Banten's formal enterprises generated more jobs than the formal enterprises in Yogyakarta. This may have stemmed out from the fact that Banten is just driving distance (3 hours) from Jakarta, the country's capital. The limited space in Jakarta has forced many establishments to build new buildings, offices and factories in nearby places. Moreover, Yogyakarta, which is less urbanized than Banten, relied on informal enterprises that are mostly undertaken on farms.

Table 2.11.1 Employment by Type of Production Unit, Nature of Employment, and Employment Size of Establishment (%)

Employment Size	Production Unit					Total
	Formal Enterprise			Informal Enterprise	Households	
	Formal Employment	Informal Employment	Total			
Yogyakarta						
1–4	11.60	42.28	21.03	83.13	100.00	74.93
5–9	11.30	12.90	11.79	10.80	0.00	10.92
10–19	30.79	18.18	26.91	3.31	0.00	6.44
20–49	27.91	9.96	22.39	1.16	0.00	3.97
50–99	17.49	15.38	16.84	1.11	0.00	3.19
Don't know	0.92	1.31	1.04	0.48	0.00	0.56
Total	100.00	100.00	100.00	100.00	100.00	100.00
Banten						
1–4	4.76	6.31	5.27	74.98	100.00	54.73
5–9	4.88	10.12	6.59	9.76	0.00	8.82
10–19	12.66	10.59	11.99	6.53	0.00	8.11
20–49	22.55	20.38	21.84	4.23	0.00	9.35
50–99	48.46	49.89	48.93	3.59	0.00	16.78
Don't know	6.68	2.71	5.39	0.91	0.00	2.21
Total	100.00	100.00	100.00	100.00	100.00	100.00

Table 2.11.2 Employment by Employment Size of Establishment, Nature of Employment, and Urbanity (%)

Employment Size	Formal Employment			Informal Employment		
	Urban	Rural	Total	Urban	Rural	Total
Yogyakarta						
1–4	13.65	14.68	13.90	75.45	88.11	82.36
5–9	15.04	7.65	13.28	14.97	7.03	10.63
10–19	26.06	42.17	29.90	4.75	2.60	3.58
20–49	26.09	18.37	24.25	2.23	0.89	1.50
50–99	18.14	17.13	17.90	2.24	0.70	1.40
Don't know	1.01	0.00	0.77	0.36	0.67	0.53
Total	100.00	100.00	100.00	100.00	100.00	100.00
Banten						
1–4	4.38	16.94	6.20	63.50	77.92	70.14
5–9	4.34	23.72	7.15	7.48	11.55	9.36
10–19	12.44	20.88	13.66	7.37	5.14	6.34
20–49	22.75	16.99	21.91	7.54	2.81	5.36
50–99	50.12	13.86	44.86	13.05	1.79	7.86
Don't know	5.99	7.61	6.22	1.07	0.79	0.94
Total	100.00	100.00	100.00	100.00	100.00	100.00

2.11 Size of Establishment

In Yogyakarta, majority of those employed in informal enterprises (83.13%) work in establishments employing less than five persons. On the other hand, only 21.03% of those employed in formal enterprises work in establishments with the same size (Table 2.11.1). Among the persons employed in formal enterprises, those holding informal jobs are more likely to work in smaller establishments while those with formal jobs are likely to work in larger establishments.

In proportion to the number of formal jobs generated by formal enterprises in Yogyakarta, 11.60% were carried out in enterprises employing less than five persons. Meanwhile, 42.28% of the informal jobs in formal enterprises were from units employing less than five persons.

Among formal enterprises in Yogyakarta, average-sized enterprises employing 10–19 workers generated the most number of formal jobs while small enterprises (employing 1–4 workers) are the main source of informal jobs. In Banten, formal enterprises employing 50–99 workers are the main source of both formal and informal jobs. In particular, 4.76% of informal employment are in formal enterprises with less than five workers; 4.88% in formal enterprises with 5–9 workers; 12.66%, with 10–19 workers; 22.55%, with 20–49 workers; and 48.46% in formal enterprises with 50–99 workers. This means that formal enterprises in Banten also significantly supply informal employment in the province. Employees comprise more than 90% of the informally employed workers in formal enterprises and generally work in factories and plantations. Meanwhile, formal employment in formal enterprises follows the same pattern observed in Yogyakarta.

It can be inferred from Table 2.11.2 that informal employment in the rural areas (88.11%) was more concentrated in small establishments (with less than five workers) than informal employment in urban areas (75.45%). Informal employment in both urban and rural areas in Banten employed more workers than that in Yogyakarta. In urban areas of Banten, for example, informal jobs tend to be concentrated in larger establishments (such as those with 50–99 workers), which registered at 13.05%; in Yogyakarta, the figure was only 2.24%.

2.12 Legal Organization of the Enterprise

In both provinces, informal employment was more likely engaged in single proprietorship. About 90.6% of the total number of jobs was engaged in entrepreneurial activities of single proprietors in Yogyakarta; the figure was 72.1% in Banten (Table 2.12). Intuitively, corporations in Banten generated the highest number of formal jobs, absorbing more or less 64% of the total formal jobs in the province.

2.13 Workplace

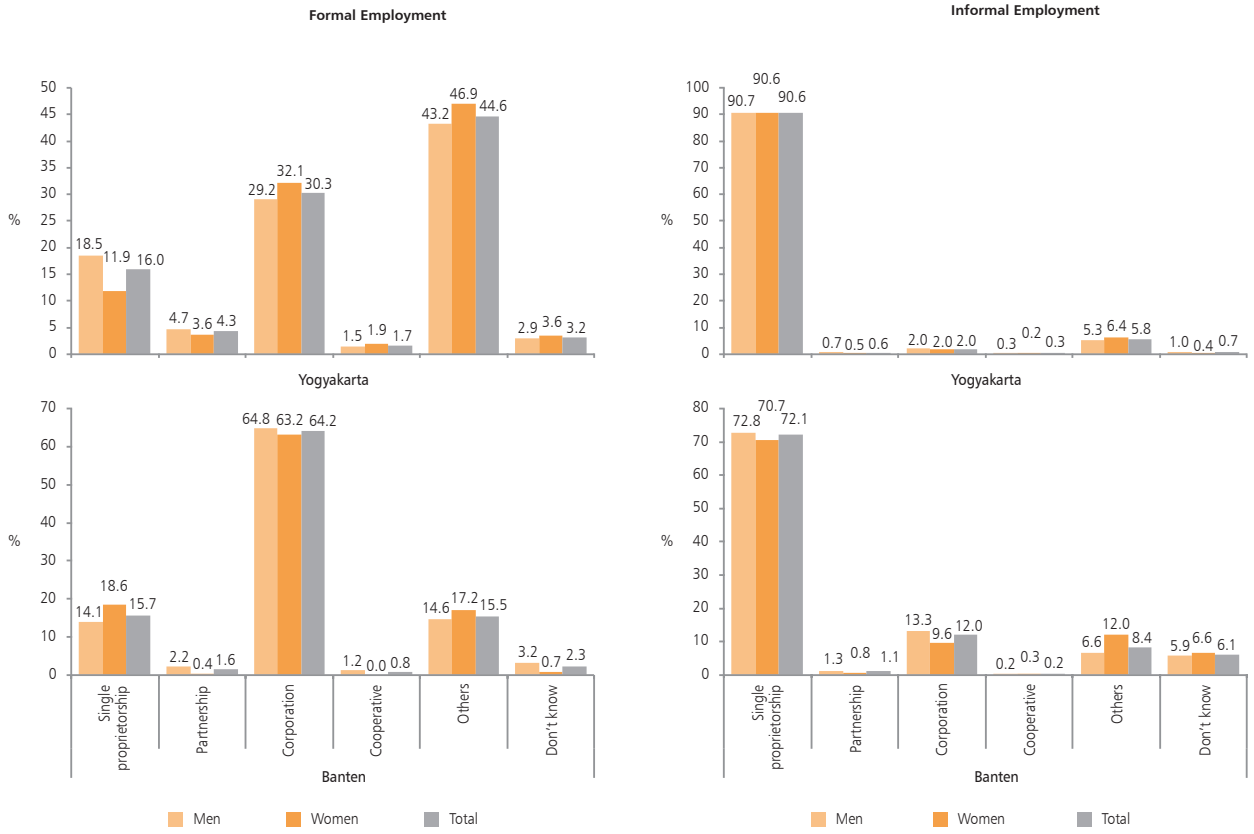
Survey results presented in Table 2.13.1, which describes the place of work, may provide useful hints in inferring the nature of employment. Although there are uniformly more informal jobs across different places of work, the propensity to have formal jobs is higher when one is working in fixed location (away from home) or construction site. Such characteristic is associated with formal entrepreneurial activities.

Table 2.12 Employment by Legal Organization, Nature of Employment, and Sex (%)

Legal Organization	Formal			Informal		
	Men	Women	Total	Men	Women	Total
Yogyakarta						
Single proprietorship	18.48	11.86	15.98	90.65	90.61	90.64
Partnership	4.74	3.58	4.30	0.71	0.48	0.61
Corporation	29.15	32.13	30.28	2.03	1.97	2.01
Cooperative	1.51	1.93	1.67	0.31	0.17	0.25
Others	43.21	46.93	44.61	5.34	6.37	5.77
Don't know	2.91	3.57	3.16	0.95	0.41	0.73
Total	100.00	100.00	100.00	100.00	100.00	100.00
Banten						
Single proprietorship	14.08	18.55	15.7	72.78	70.7	72.09
Partnership	2.20	0.40	1.55	1.26	0.79	1.10
Corporation	64.78	63.15	64.19	13.25	9.59	12.03
Cooperative	1.21	...	0.77	0.20	0.30	0.23
Others	14.56	17.18	15.51	6.62	12.03	8.42
Don't know	3.16	0.72	2.28	5.88	6.59	6.11
Total	100.00	100.00	100.00	100.00	100.00	100.00

... = no observation/no data available.

Figure 2.12 Employment by Legal Organization, Nature of Employment, and Sex



Similarly, in Yogyakarta, those working at home, on farms, markets, streets, employer's homes, and their vehicles are more likely to engage in informal jobs.

Intuitively, those who reported to be working on farms usually have informal jobs. Informal jobs accounted for 99.63% (in Yogyakarta) and 98.24% (in Banten) of the total number of jobs undertaken on farms. In other words, those working on farms are generally engaged in informal employment. Since the farm, as a workplace, is associated with agriculture, this confirms that in agriculture, informal employment is more prevalent.

In Yogyakarta, the most common workplace among the formal workers was fixed location away from home (55.72%). This type of workplace was also the most common (55.52%) among formally employed persons in Banten.

Construction site was the second most common workplace among formal workers in Banten. In addition, among the total jobs with this kind of workplace (594,537 – see Table 2.13.1 in Appendix 6), 52.52% was formal and 47.48% was informal. In fact, this is the only type of workplace in Banten wherein formal employment exceeded informal employment.

Table 2.13.2 describes the place of work of those engaged in informal employment. Excluding the jobs in agriculture and farm as a workplace, fixed location away from home is the most popular location for informal employment in both Yogyakarta and Banten. More than half of informal employment in rural areas in Yogyakarta and 30.79% in urban areas in Banten were working in a fixed location away from home. Meanwhile, 58.94% of those working in a fixed location away from home in Yogyakarta were in rural areas compared to only 32.5% posted in Banten.

In urban areas in Yogyakarta, 33.39% of informal employment worked in a fixed location away from home. Similarly, in urban areas in Banten, workers with informal jobs were also more likely to work in a fixed location away from home (30.79%). Such a workplace was also the most prevalent (25.76%) in rural areas in Banten. To summarize, in Yogyakarta and Banten, employed persons who lived in both urban and rural areas preferred to work at home with no work space.

The place of work that has the lowest informal employment in Yogyakarta was in the workplace of

Table 2.13.1 Employment by Place of Work and Nature of Employment (%)

Place of Work	Row Percent		Column Percent		
	Formal Employment	Informal Employment	Formal Employment	Informal Employment	Total
Yogyakarta					
Home with no work space	5.04	94.96	4.35	9.98	9.37
Home with work space	2.76	97.24	0.90	3.86	3.54
Fixed location away from home	18.16	81.84	55.72	30.60	33.33
Farm	0.37	99.63	0.90	29.49	26.38
Workplace of client	11.36	88.64	1.89	1.80	1.81
Construction site	21.39	78.61	10.65	4.77	5.41
Market	8.31	91.69	3.37	4.54	4.41
Street	9.56	90.44	2.68	3.08	3.04
Employer's home	3.26	96.74	1.40	5.05	4.65
Others	7.54	92.46	0.15	0.23	0.22
Vehicle	3.66	96.34	1.21	3.87	3.58
No fixed location	42.85	57.15	16.78	2.73	4.25
Total	10.86	89.14	100.00	100.00	100.00
Banten					
Home with no work space	8.18	91.82	2.38	8.49	7.02
Home with work space	11.41	88.59	2.56	6.32	5.42
Fixed location away from home	43.18	56.82	55.52	23.20	30.99
Farm	1.76	98.24	1.12	19.86	15.34
Workplace of client	14.97	85.03	1.08	1.95	1.74
Construction site	52.52	47.48	33.01	9.48	15.15
Market	5.87	94.13	1.02	5.21	4.20
Street	4.65	95.35	0.85	5.52	4.39
Employer's home	4.34	95.66	0.47	3.30	2.62
Others	2.09	97.91	0.25	3.70	2.87
Vehicle	0.00	100.00	0.00	9.85	7.48
No fixed location	15.03	84.97	1.74	3.12	2.78
Total	24.10	75.90	100.00	100.00	100.00

client (urban areas) and street (rural areas) at 2.51% and 2.23%, respectively. On the other hand, informal employment in Banten was recorded the least in the workplace of client, at 0.67% (urban areas) and in employer's home, at 2.64% (rural areas).

2.14 Age Composition

The composition of employment in Yogyakarta and Banten for all age groups showed different trends. In Yogyakarta, the proportion of jobs assumed by more senior workers (aged 55 and over) was higher than that of jobs assumed by younger persons (aged 15–24) at 21.68% versus 8.59%, respectively. In contrast, in Banten, employment of persons aged 15–24 was higher (17.09%) than employment of persons aged 55 and over (10.52%). Jobs assumed by middle-aged workers comprised the bulk of the total number of jobs. This is true for the rural and urban areas in both provinces.

In Yogyakarta, the proportion of formal jobs assumed by younger workers (aged 15–24) was twice that of informal employment (Table 2.14.2). Banten has a pattern similar to that of Yogyakarta, though at a lesser degree in which 24.93% of formal jobs were assumed by those aged 15–24 compared to 14.59% of informal jobs. This suggests that, in relative terms, formal employment provides more jobs for younger workers than informal employment does.

Figure 2.14 shows more informal jobs across any age group. At young age (15–24 years old), 79.43% of the jobs done by young workers were informal, and the remaining jobs (20.57%) were formal in Yogyakarta;

Table 2.13.2 Informal Employment by Place of Work (Excluding Farm and Agricultural Plots) and Urbanity

Place of Work	Informal Employment			
	Row Percent		Column Percent	
	Urban	Rural	Urban	Rural
Yogyakarta				
Home with no work space	57.13	42.87	15.15	13.01
Home with work space	71.31	28.69	7.32	3.37
Fixed location away from home	41.06	58.94	33.39	54.86
Workplace of client	52.84	47.16	2.52	2.58
Construction site	62.70	37.30	7.95	5.41
Market	79.46	20.54	9.58	2.84
Street	76.23	23.77	6.25	2.23
Employer's home	52.91	47.09	7.10	7.23
Others	41.50	58.50	0.25	0.40
Vehicle	53.84	46.16	5.54	5.44
No fixed location	68.30	31.70	4.95	2.63
Total	53.37	46.63	100.00	100.00
Banten				
Home with no work space	74.63	25.37	12.45	7.38
Home with work space	79.98	20.02	9.93	4.33
Fixed location away from home	67.55	32.45	30.79	25.76
Workplace of client	17.45	82.55	0.67	5.50
Construction site	67.14	32.86	12.50	10.66
Market	62.60	37.40	6.40	6.66
Street	72.16	27.84	7.82	5.26
Employer's home	76.62	23.38	4.97	2.64
Others	61.79	38.21	4.49	4.83
Vehicle	46.25	53.75	8.95	18.12
No fixed location	16.98	83.02	1.04	8.85
Total	63.53	36.47	100.00	100.00

Table 2.14.1 Employment by Urbanity and Age Group (%)

Age Group	Yogyakarta			Banten		
	Urban	Rural	Total	Urban	Rural	Total
15–24	11.33	5.98	8.59	19.51	13.18	17.09
25–54	74.74	64.96	69.73	72.71	71.87	72.39
55+	13.93	29.06	21.68	7.78	14.96	10.52
Total	100.00	100.00	100.00	100.00	100.00	100.00

Table 2.14.2 Employment by Nature of Employment and Age Group (%)

Age Group	Yogyakarta			Banten		
	Formal	Informal	Total	Formal	Informal	Total
15–24	16.21	7.66	8.59	24.93	14.59	16.21
25–54	78.12	68.70	69.73	72.11	72.48	78.12
55+	5.67	23.64	21.68	2.96	12.93	5.67
Total	100.00	100.00	100.00	100.00	100.00	100.00

Figure 2.14 Employment by Nature of Employment and Age Group

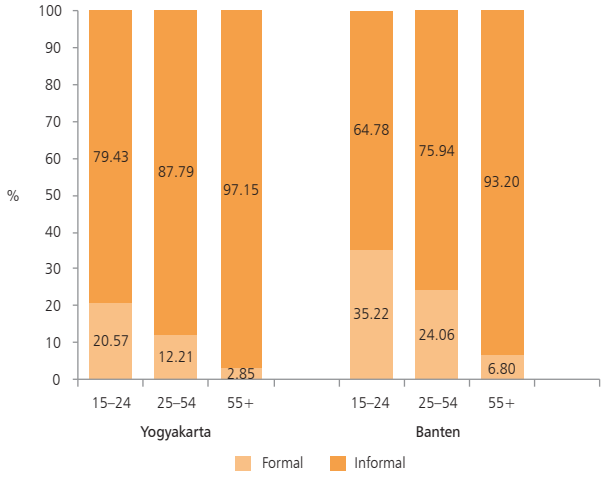


Table 2.14.3 Informal Employment by Unit of Production and Age Group (%)

Age Group	Yogyakarta			Banten		
	Formal	Informal	Household	Formal	Informal	Household
15–24	15.18	7.59	0.00	21.11	15.46	0.00
25–54	78.32	68.43	56.49	75.86	70.90	100.00
55+	6.50	23.99	43.51	3.03	13.65	0.00
Total	100.00	100.00	100.00	100.00	100.00	100.00

the corresponding figures in Banten are 64.78% and 35.22%, respectively. In the case of jobs assumed by middle-aged workers (25–54 years old), 87.8% and 75.9% were informal in Yogyakarta and Banten, respectively. The incidence of informal jobs was most likely among senior workers (55 years and above).

2.15 Level of Education

In Yogyakarta, 26.1% of those engaged in employee jobs reached college or university levels, higher than the percentage registered among the own-account workers (8.3%), employers (6.1%), unpaid family workers (3.0%), and casual workers (1.7%) (Table 2.15.1). Meanwhile, the percentage of unpaid workers with no education was recorded at 12.8%, more than the percentages recorded among the employers (10.9%), casual workers (5.8%), and own-account workers (5.7%). The least proportion was reported among employees, at 0.7%.

The table also shows that in Banten, the number of employees with college or university background reached

Table 2.15.1 Employment by Level of Education and Employment Status (%)

Level of Education	Employment Status				
	Employees	Own-account	Employer	Unpaid Family Worker	Casual Worker
Yogyakarta					
No education	0.7	5.7	10.9	12.8	5.8
Pre-primary	6.1	18.7	17.0	13.3	15.7
Primary	10.8	22.9	30.2	28.5	34.3
Junior HS	12.0	18.8	11.9	14.0	19.6
Vocational JHS	0.9	0.6	0.7	0.9	0.7
Senior HS	19.7	14.1	11.7	15.6	12.0
Vocational SHS	23.6	10.8	11.4	11.9	10.2
College	9.5	3.9	2.0	1.4	1.0
University	16.6	4.4	4.1	1.6	0.7
Total	100.0	100.0	100.0	100.0	100.0
Banten					
No education	1.1	4.1	8.0	6.3	8.2
Pre-primary	7.2	21.5	31.4	26.6	32.7
Primary	16.3	31.3	27.8	31.1	41.3
Junior HS	16.8	15.6	9.8	16.1	10.4
Vocational JHS	1.0	2.5	1.4	2.2	1.1
Senior HS	21.8	16.0	9.1	6.8	4.3
Vocational SHS	16.3	6.8	8.0	8.7	0.8
College	6.7	1.2	1.6	1.0	1.2
University	12.8	0.9	2.9	1.3	0.0
Total	100.0	100.0	100.0	100.0	100.0

HS = high school, JHS = junior high school, SHS = senior high school.

Notes: See Table 2.15.2 in Appendix 6 for absolute figures (frequency counts). **Junior HS** is a level of schooling that acts as a bridge between primary school and high school and which includes grades 7 through 9. **Vocational JHS** is the same level of schooling as junior high school in which students are taught the skills needed to perform a particular job (job-specific skills). **Senior HS**, known locally as *Sekolah Menengah Atas* (SMA) and, in other terms, *Sekolah Menengah Umum* (SMU), is a level of schooling after junior high school which includes grades 10 through 12. **Vocational SHS** is an educational institution similar to and has the same level as SMA, but focuses on one specific career major known locally as *Sekolah Menengah Kejuruan* (SMK).

Table 2.15.2 Unpaid Family Workers with No Education by Industry

Industry	Yogyakarta		Banten	
	Frequency	Percentage	Frequency	Percentage
Agriculture	58,441	94.43	19,868	80.57
Manufacturing	2,116	3.42	0	0.00
Wholesale and retail trade	429	0.69	1,069	4.33
Hotels and restaurants	474	0.77	0	0.00
Transport, storage and communications	429	0.69	0	0.00
Real estate	0	0.00	3,723	15.10
Total	61,889	100.00	24,660	100.00

19.5%; employers, 4.5%; unpaid family workers, 2.3%; own-account workers, 2.1%; and casual workers, 1.2%. No casual worker recorded a university background though 1.2% of them reached college. The percentage of casual workers with no education was 8.2%, followed by employers, 8.0%; unpaid workers, 6.3%; own-account workers, 4.1%; and employees, 1.1%.

Those with no education are likely to be employers and/or unpaid family workers in Yogyakarta, and employers and/or casual workers in Banten. Meanwhile, those with higher education, college degrees, and the like are likely to be employees in both provinces. This suggests that people tend to work for themselves if their educational background is low, while jobs in someone else's enterprise are the general path of those with higher education. This may be because the marketability of people with low levels of education is much less than those with high levels and that they are generally not among the first to be hired. Thus, they resort to self-employment jobs. Meanwhile, the reported high percentage of unpaid family workers with no schooling in Yogyakarta may reflect the agricultural characteristic of its economy. These unpaid family workers work mostly on farms and provide their services to their family-owned enterprise. It is clearly shown in Table 2.15.2 that 94.43% of unpaid family workers with no education are concentrated on agriculture.

Table 2.15.3 shows that of the total jobs assumed by women, 11.6% were carried out by those with no education. Among female unpaid family workers, the percentage of those with no education reached 17.7%, which was quite high compared with the figure recorded by their male counterparts, at 2.1%. This implies that women who have very limited formal education are most likely to end up working as unpaid family workers than their male equivalent.

The survey results for the two provinces also validate the general notion that there is a link between educational attainment and the nature of employment. In Yogyakarta, junior high school is the lowest level of education recorded among the own-account workers and employers under formal employment. Meanwhile, more than half of the informal employers and 47.5% of informal own-account workers did not even reach the junior high school level. In Banten, all of the formal own-account workers reached or completed at least primary school; among employers, 85.8% had primary (or higher) level of education. In contrast, 25.8%

Table 2.15.3 Employment by Level of Education, Employment Status, and Sex (%)

Level of Education	Employment Status										Total	
	Employees		Own-account		Employer		Unpaid Family Worker		Others			
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Yogyakarta												
No education	0.1	1.7	2.7	10.5	9.7	13.5	2.1	17.7	2.6	15.8	4.1	11.6
Pre-primary	5.9	6.4	20.0	16.8	18.3	14.3	9.5	15.0	14.3	20.2	13.9	13.4
Primary	10.3	11.7	20.9	26.1	28.6	33.9	26.9	29.3	33.2	37.8	22.5	25.9
Junior HS	13.7	9.3	18.0	19.9	11.8	12.3	15.9	13.1	22.1	11.9	15.2	13.3
Vocational JHS	1.1	0.5	0.7	0.5	0.5	1.1	0.9	1.0	0.6	1.0	0.8	0.8
Senior HS	23.3	13.9	14.3	13.8	12.9	9.2	19.2	13.9	13.0	8.7	16.6	12.7
Vocational SHS	23.7	23.5	14.0	5.8	11.7	10.7	21.2	7.6	12.2	4.1	16.4	11.4
College	6.4	14.6	3.7	4.1	2.0	2.0	2.4	1.0	1.1	0.7	3.5	5.0
University	15.6	18.3	5.7	2.4	4.5	3.1	1.9	1.5	0.9	0.0	7.0	5.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Banten												
No education	1.3	0.5	3.7	5.2	7.0	11.5	2.1	7.8	4.0	20.2	2.8	5.3
Pre-primary	7.8	6.1	19.9	25.6	31.3	31.5	12.5	31.4	31.1	37.4	16.7	19.2
Primary	15.5	17.7	33.6	25.1	30.9	17.0	27.0	32.5	42.6	37.5	25.3	23.7
Junior HS	16.0	18.5	15.2	16.8	11.3	4.8	30.0	11.3	12.6	3.9	15.3	14.4
Vocational JHS	1.3	0.4	2.2	3.4	0.8	3.7	3.9	1.6	1.5	0.0	1.5	1.4
Senior HS	22.9	19.6	17.6	11.6	7.7	14.0	5.4	7.2	5.8	0.0	16.9	13.6
Vocational SHS	17.3	14.4	5.8	9.5	6.7	12.6	14.0	6.8	1.1	0.0	11.3	10.7
College	4.8	10.5	1.5	0.6	0.7	4.8	1.2	0.9	1.2	1.0	2.9	5.6
University	13.0	12.3	0.5	2.2	3.7	0.0	3.9	0.5	0.0	0.0	7.1	6.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

HS = high school, JHS = junior high school, SHS = senior high school.

Notes: See Table 2.15.1 in Appendix 6 for absolute figures (frequency counts). **Junior HS** is a level of schooling that acts as a sort of bridge between primary school and high school and which includes grades 7 through 9. **Vocational JHS** is the same level of schooling as junior high school in which students are taught the skills needed to perform a particular job (job-specific skills). **Senior HS**, known locally as *Sekolah Menengah Atas* (SMA) and, in other terms, *Sekolah Menengah Umum* (SMU), is a level of schooling after junior high school, which includes grades 10 through 12. Vocational SHS is an educational institution similar to and has the same level as SMA, but focuses on one specific career major known locally as *Sekolah Menengah Kejuruan* (SMK).

and 39.9% of informal own-account and employers, respectively, did not even reach primary school. Hence, better educational background seems to be more common among those engaged in formal than informal employment (Table 2.15.4).

In both provinces, the higher the level of education of workers, the lower their likelihood of becoming unpaid family workers. For example, 54.6% and 64.0% of the unpaid jobs in Yogyakarta and Banten, respectively, were assumed by workers with low educational backgrounds (no education, pre-primary, and primary). On the other hand, unpaid work was carried out by only 3.0% and 2.3% of workers with college/university levels in Yogyakarta and Banten, respectively.

As a whole, workers who were informally employed tend to have lower educational backgrounds than those with formal jobs. Among the total number of formal jobs in Yogyakarta, 30.8% were assumed by persons with university education levels and 16.0%, by those with college levels. No worker with a formal job failed to enter the formal education system; 0.1% had incomplete primary school; and only 2.9% had primary education background. In contrast, among those engaged in informal employment, only 3.6% had university education and only 2.6% went to college. A larger proportion of workers with informal jobs had lower levels of education: 8.0% had no formal education, 15.4% reached pre-primary, and 26.4% attended primary school. Banten showed a similar pattern. For example, 56.4% of workers with informal jobs had primary school as the highest level of educational attainment, compared to only 13.1% of workers in formal employment with the same background.

Table 2.15.4 Employment by Level of Education, Employment Status, and Nature of Employment (%)

Level of Education	Employment Status										Total	
	Employees		Own-account		Employer		Unpaid Family Worker		Others			
	Informal	Formal	Informal	Formal	Informal	Formal	Informal	Formal	Informal	Formal	Informal	Formal
Yogyakarta												
No education	1.2	0.0	5.7	0.0	11.1	0.0	12.8	–	6.0	0.0	8.0	0.0
Pre-primary	9.8	0.2	18.8	0.0	17.4	0.0	13.3	–	16.4	0.0	15.4	0.1
Primary	16.5	2.0	23.0	0.0	30.9	0.0	28.5	–	34.4	32.0	26.4	2.9
Junior HS	16.8	4.5	18.7	48.3	11.7	23.2	14.0	–	19.5	21.7	15.5	6.1
Vocational JHS	0.5	1.4	0.6	0.0	0.7	0.0	0.9	–	0.4	6.9	0.7	1.5
Senior HS	20.0	19.3	14.2	0.0	11.8	7.8	15.6	–	11.7	19.7	14.5	18.7
Vocational SHS	22.9	24.7	10.8	0.0	11.3	14.3	11.9	–	10.0	15.0	13.2	23.9
College	4.9	16.7	3.9	0.0	1.8	13.7	1.4	–	1.1	0.0	2.6	16.0
University	7.3	31.2	4.3	51.7	3.3	41.0	1.6	–	0.5	4.6	3.6	30.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	–	100.0	100.0	100.0	100.0
Banten												
No education	1.7	0.4	4.1	0.0	8.2	0.0	6.3	–	8.5	0.0	4.8	0.4
Pre-primary	12.0	2.1	21.7	0.0	31.7	14.1	26.6	–	31.5	62.1	22.0	3.3
Primary	23.5	8.5	31.0	60.2	28.3	8.7	31.1	–	41.4	37.9	29.6	9.4
Junior HS	17.8	15.8	15.8	0.0	10.1	0.0	16.1	–	10.8	0.0	14.9	15.2
Vocational JHS	0.8	1.2	2.6	0.0	1.1	12.8	2.2	–	1.2	0.0	1.5	1.3
Senior HS	15.8	28.2	16.0	19.0	8.7	26.1	6.8	–	4.5	0.0	12.1	27.6
Vocational SHS	12.2	20.7	6.9	0.0	8.2	0.0	8.7	–	0.9	0.0	8.2	20.0
College	5.6	7.9	1.3	0.0	1.4	11.4	1.0	–	1.2	0.0	2.6	7.7
University	10.5	15.2	0.8	20.9	2.3	26.8	1.3	–	0.0	0.0	4.1	15.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	–	100.0	100.0	100.0	100.0

HS = high school, JHS = junior high school, SHS = senior high school.
– = not applicable.

2.16 Employment Conditions of Informal Employees

The proportion of informal wage workers[8] receiving benefits in Banten is higher than that in Yogyakarta (Figure 2.16). Furthermore, Figure 2.16 also illustrates the advantage of persons with formal employment over those who are informally employed in terms of the benefits received. The number of formal wage workers receiving benefits is generally more than twice that of the informal workers, in all kinds of benefits analyzed.

The most common benefit received by wage workers is the sick leave, regardless of whether they are formally or informally employed. For instance, 66.5% of formal wage workers in Yogyakarta received sick leaves, followed by maternity leaves (66.3%), and compensations upon termination of employment (severance pay) (60.1%). Similarly, among the informally employed, 18.8% received sick leaves, 15.1% received maternity leaves, and 11.8% received paid leaves. In Banten, 61.1% of those engaged in formal employment received sick leaves, while 51.7% received severance pay and 51.1% received paid leaves. On the other hand, 25.0% of the informal wage workers received sick leaves, followed by those who received maternity and paid leaves, at 21.0% and 19.7%, respectively.

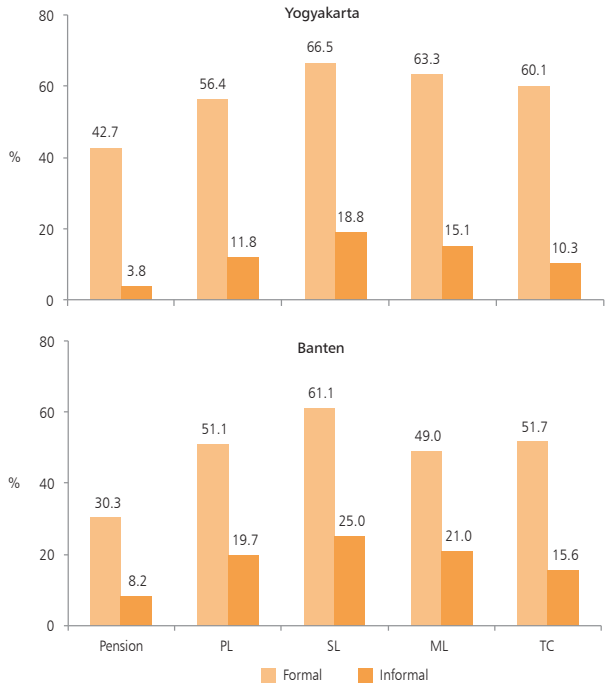
The number and percentage[9] of wage workers who received benefits are shown in Table 2.16.1 and Table 2.16.2. As mentioned earlier, the percentages of wage workers who received benefits are generally higher in Banten than in Yogyakarta. This is true not only for informal workers, but for formal workers as well.

It is interesting to note that among those engaged in formal employment, the number of men who received benefits is generally higher than the number of women who received benefits. This is the case in both provinces. On the other hand, the opposite is observed among the informal wage workers. The percentage of female

[8] Composed of employees, casual employees in agriculture, and casual employees in non-agriculture in either the primary or other jobs.

[9] Percentage to total wage workers.

Figure 2.16 Percentage of Wage Workers Who Received Benefits by Nature of Employment: Yogyakarta and Banten, 2009



Notes: PL = paid leave, SL = sick leave, ML = maternity leave, TC = compensation upon termination/severance pay.

informal workers[10] who received benefits is usually higher than the percentage of male informal workers who received benefits[11] (Table 2.16.2).

Analysis of benefits received, by sex, showed that, in Yogyakarata, the men's top three benefits are sick leaves (30.3%), maternity/paternity leaves (25.9%), and severance pays (24.0%). On the other hand, male wage workers in Banten generally received sick leaves (38.3%), paid leaves (33.8%), and severance pays (29.7%). The least common benefit received is the pension fund for both provinces. The usual benefits provided to female wage workers in Yogyakarta are sick and maternity leaves, at 38.3% and 36.4%, respectively. The same trend is observed in Banten, when 42.8% of female wage workers received sick leaves and 41.4% received maternity leaves.

2.17 Exclusion of Agriculture, Forestry, and Fishing

Self-employment (own-account worker and employer) is prevalent in informal enterprises among non-agricultural jobs. In fact, this accounts for 37.7% of jobs assumed by men and 49.7% by women in Yogyakarta. On the other hand, self-employment comprised 47.6% and 38.9% of jobs carried out by men and women, respectively, in Banten.

In general, three in five non-agricultural jobs in both provinces were assumed by men. (Table 2.17.1).

By excluding agriculture, forestry, and fishing, the number of jobs in informal enterprises decreased from 2,208,006 to 1,099,834 in Yogyakarta and from 2,777,248 to 2,069,472 in Banten. This decline also brought a drop in the share of informal enterprises in providing jobs, from 86.68% to 77.39% in Yogyakarta and from 70.76% to 64.93% in Banten.

Employees registered the highest prevalence in informal enterprises in Yogyakarta, at 30.35%, followed by the own-account (25.69%), employers (17.05%), casual workers/other (14.03%), and unpaid family workers (12.85%). A different trend was observed in Banten; informal enterprises in the province provided the most jobs to employees, at 34.99%, then the own-account (32.82%), employers (11.75%), unpaid family workers (10.23%), and casual workers/other (10.20%).

Table 2.16.1 Number of Wage Workers Who Received Benefits by Nature of Employment and Sex

Nature of Employment	Pension Fund		Paid Leave		Sick Leave		Maternity/Paternity Leave		Compensation Upon Termination	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Yogyakarta										
Formal	72,689	39,050	93,261	54,093	111,879	62,126	104,613	60,851	102,338	54,849
Informal	14,554	8,874	36,778	35,835	61,607	53,459	43,705	49,109	35,282	27,638
Total	87,243	47,924	130,039	89,928	173,485	115,586	148,317	109,960	137,620	82,487
Banten										
Formal	181,146	99,982	313,826	159,832	365,169	201,622	259,452	194,774	311,274	168,103
Informal	80,174	31,084	212,735	53,858	231,063	107,724	178,655	104,721	151,537	59,285
Total	261,319	131,066	526,561	213,690	596,232	309,346	438,107	299,495	462,812	227,388

[10] Percentage to total female informal workers.
[11] Percentage to total male informal workers.

Table 2.16.2 Percentage of Wage Workers Who Received Benefits by Nature of Employment and Sex

Nature of Employment	Pension Fund		Paid Leave		Sick Leave		Maternity/Paternity Leave		Compensation Upon Termination/ Severance Pay	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Yogyakarta										
Formal	44.9	39.1	57.7	54.2	69.2	62.3	64.7	61.0	63.3	55.0
Informal	3.5	4.4	8.9	17.7	15.0	26.4	10.6	24.3	8.6	13.7
Total	15.2	15.9	22.7	29.8	30.3	38.3	25.9	36.4	24.0	27.3
Banten										
Formal	30.7	29.6	53.2	47.4	61.9	59.7	44.0	57.7	52.8	49.8
Informal	8.3	8.1	22.0	13.9	23.9	27.9	18.5	27.1	15.7	15.4
Total	16.8	18.1	33.8	29.5	38.3	42.8	28.1	41.4	29.7	31.4

Table 2.17.1 Informal Employment by Employment Status, Production Unit, and Sex (Excluding Agriculture) (%)

Class of Workers	Production Unit					
	Formal Enterprise		Informal Enterprise		Household	
	Men	Women	Men	Women	Men	Women
Yogyakarta						
Employees	95.01	95.11	19.39	15.61	0.00	0.00
Own-account worker	0.42	0.00	27.42	22.83	100.00	100.00
Employer	4.57	3.61	39.69	23.26	0.00	0.00
Unpaid family worker	0.00	1.28	13.50	38.30	0.00	0.00
Total	100.00	100.00	100.00	100.00	100.00	100.00
Banten						
Employees	98.44	97.87	34.34	30.53	0.00	0.00
Own-account worker	0.36	1.10	36.41	23.96	0.00	100.00
Employer	1.19	0.33	22.78	11.77	0.00	0.00
Unpaid family worker	0.00	0.70	6.48	33.74	0.00	0.00
Total	100.00	100.00	100.00	100.00	0.00	100.00

Table 2.17.2 Employment by Employment Status and Production Unit (Excluding Agriculture)

Class of Workers	Total			Percentage		
	Formal Enterprise	Informal Enterprise	Household	Formal Enterprise	Informal Enterprise	Household
Yogyakarta						
Employees	294,321	333,781	0	91.60	30.35	0.00
Own account worker	815	282,543	0	0.25	25.69	0.00
Employer	11,650	187,543	0	3.63	17.05	0.00
Unpaid family worker	1,513	141,376	0	0.47	12.85	0.00
Other	13,014	154,293	0	4.05	14.03	0.00
Total	321,313	1,099,834	0	100.00	100.00	0.00
Banten						
Employees	1,083,864	724,206	0	97.45	34.99	0.00
Own account worker	6,798	679,212	5,455	0.61	32.82	100.00
Employer	10,080	243,208	0	0.91	11.75	0.00
Unpaid family worker	2,580	211,720	0	0.23	10.23	0.00
Other	8,921	211,126	0	0.80	10.20	0.00
Total	1,112,242	2,069,472	5,455	100.00	100.00	100.00

Employment analysis of the non-agriculture sector also showed that in both provinces, formal enterprises generally provide employee jobs. In Yogyakarta, about 91.6% of jobs in formal enterprises were for employees; in Banten, it was posted at 97.45%.

Based on Table 2.17.2, it can be inferred that even for the non-agriculture sector, the structure of job provision remains unchanged, that is, the number of jobs supplied by informal enterprises is higher than those provided by formal enterprises. Meanwhile, the jobs in informal enterprises are relatively more distributed compared to the condition in formal enterprises.

Exclusion of agricultural activities give a different picture on the share of informal employment in two provinces. Excluding agriculture related jobs, the total informal employment in Yogyakarta reached 1,146,921. The informal employment now accounts for only 80.70% of total non-agriculture jobs in Yogyakarta, while it was 89.14% as far as all jobs including agricultural activities are concerned. In Banten, the exclusion resulted to a share of informal jobs from 75.90% to 70.76%, with the total informal jobs in the non-agricultural sector at 2,255,502 (Appendix Table 2.17.2). More than half of the total informal jobs in the non-agriculture sector are composed of employees and own-account workers.

Chapter 3

Contribution of the Informal Sector to GDP

Emerging views of the informal economy suggest that it has been consistently expanding with modern and industrial growth, providing goods and services to lower-income groups in most developing countries (Chen 2007). The informal economy has continuously served as an important source of employment for more than 50% of the global non-agricultural employment (Charmes 2000), primarily attributed to high-intensity labor production that the informal sector is usually associated with. In DI Yogyakarta and Banten alone, as noted from the previous chapter, the informal sector provides approximately 5 million jobs.

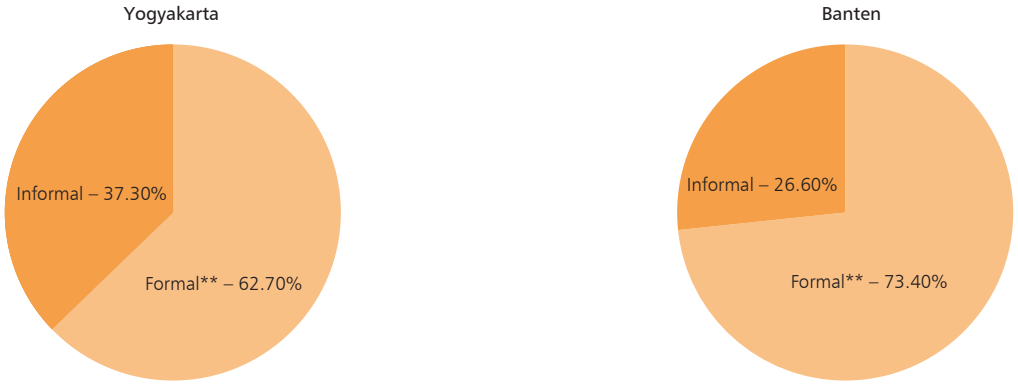
Direct estimation of the contribution of the informal sector has gained attention in recent years. The International Labour Organization's (ILO) *Manual on Surveys of Informal Employment and Informal Sector* argues that existing approaches on indirect estimation of the informal sector is limited by the fact that most of these procedures rely heavily on hypothetical assumptions. In addition, computing the informal sector's contribution at disaggregated levels posts difficulty due to limited availability of detailed information on the production boundaries in the informal economy.[12] Direct estimation, on the other hand, offers a good alternative tool toward adopting a sustainable approach for exhaustive compilation of national accounts. Its importance corresponds to the need for evidence-based reorientation of economic policies that will be more sensitive to the informal sector. This chapter discusses the estimated contribution of the informal sector to gross regional domestic product (GRDP) of the two pilot provinces using results from the Informal Sector Survey. In addition, the section briefly describes the value added and labor productivity in the informal economy.

3.1 Industry

The two provinces are fast-growing economies in Indonesia. As of 2009, DI Yogyakarta had a population of 3,501,900 while Banten's population stood at 9,782,800. While the country's total output is growing at 4.93% on the average, Yogyakarta and Banten posted growth of 4.39% and 4.69%, respectively. Estimates for 2009 show that the per capita (total) gross valued added (GVA) in Yogyakarta amounted to rupiah (Rp)11.83 million while in Banten, it is estimated at Rp13.60 million. In particular, more than half of Yogyakarta's economy is driven by its four largest sectors: agriculture, hunting, forestry, and fishery (15%); public administration and defense (14%); manufacturing (13%); and hotels and restaurants (12%). DI Yogyakarta is also known as the "city of education" due to the volume of educational institutions in the province. As the cultural center of Java, the province also draws 45,883 tourists who arrive at Adi Sucipto Airport, Yogyakarta, every year. In addition, its economy is also supported by strong agricultural development and export-oriented production. On the other hand, Banten, formerly a part of West Java, had been considered as a separate province in 2000 by virtue of Act No. 23. Banten is strategically located near Jakarta, which has helped manufacturing and wholesale and retail trade (WRT) to flourish in the province. The Merak port, also in Banten, is one of the ports in Java island with the highest export volume in Indonesia. In 2009, the manufacturing industry accounted for as much as 43% of its total GVA, followed by WRT (17%). In general, Banten's factories and industrial sectors, accompanied by infrastructure, have continuously contributed to accelerating the

[12] In this chapter, the gross value added (GVA) of formal** sector does not represent the GVA of the formal sector alone, as it is computed as the residual of the total GVA less informal sector's GVA. Hence, the term formal** may span both the formal and household (whose production is only for its own final consumption) sectors.

Figure 3.1 Formal and Informal Contributions to GDP



economic growth of the province. Recently, Banten has started promoting ecotourism spots, such as the natural reserve, water tourism, and stone tourism.

Overall, preliminary survey estimates suggest that the informal sector accounts for 37.3% and 26.6% of the total GRDP of Yogyakarta and Banten, respectively. Figures 3.1 and 3.2 depict the respective contribution of the informal sector, by industry, for the two provinces.

At a glance, Yogyakarta's informal enterprises are major players in the sectors of agriculture, forestry, and fishery; manufacturing; and WRT, accounting for more than half of its respective GVA. In particular, these sectors already account for Rp11.30 trillion, or 73.10% of Yogyakarta's total informal sector's GVA.

Noted to be relatively more industrialized than Yogyakarta, the bulk of GVA among informal enterprises in Banten comes from WRT; agriculture, forestry, and fishery; and hotels and restaurants, contributing Rp27.21 trillion, or 76.87% of Banten's total informal sector's GVA.

In both provinces, service-oriented sectors, such as electricity, gas, and water; public administration; defense and social security; and transport, storage, and communications, are comprised mostly of formal enterprises. Other capital-intensive sectors,[13] such as finance, provide limited opportunities for entrepreneurial activity among informal enterprises, as these sectors require a larger pool of human and financial capital.

[13] The construction industry in Yogyakarta has noted a relatively low contribution of the informal sector (0.83% of its total GVA). This may be due to the confusion over the HUEM-screening question, "Do you sell goods or services," where a number of survey respondents engaged in the construction sector did not consider themselves to be selling their services.

3.2 Agriculture and Non-Agriculture Sectors

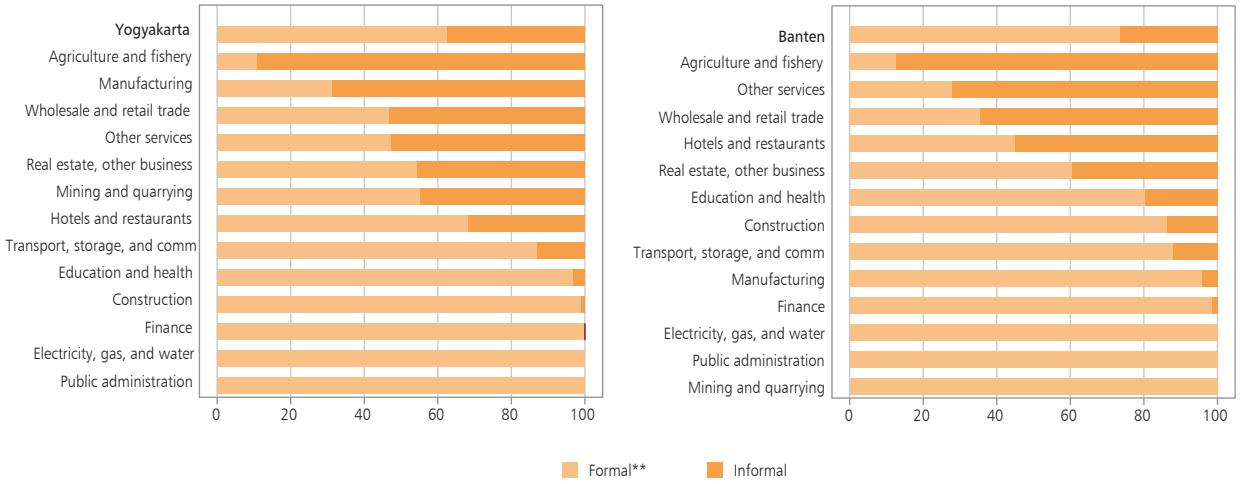
In Yogyakarta, the informal sector in agriculture contributed Rp5.65 trillion, or 88.95% of its total GVA, while the informal sector in non-agriculture generated Rp9.80 trillion, or 27.95% of gross domestic product (GDP) of non-agriculture. The fact that Yogyakarta's economy is based on agriculture is one of the reasons for the high contribution of the informal sector in agriculture. Yogyakarta's landscape, climate condition, and its reputation as one of the major food suppliers to the country are key factors that allowed agriculture to flourish as the dominant sector in the province.

In Banten, the informal sector in agriculture contributed Rp9.8 trillion, or 87.43% of its total GVA, while non-agriculture contributed Rp25.59 trillion, or 21% of GDP of non-agriculture. It seems that, in Banten, the informal sector engaged in non-agriculture production contributed more than that engaged in agriculture. Banten's economy is well known as a buffer zone for the metropolitan area of Jakarta. In particular, although a number of large multinational companies' headquarters are in the capital city of Jakarta, most of its factories are situated in Banten. Hence, it is not surprising that manufacturing industries exceed the contribution of the agriculture sector in the province.

3.3 Labor Productivity

This section investigates how productively labor is used to generate economic output among informal enterprises in Yogyakarta and Banten. Productivity

Figure 3.2 Contributions to GDP by Sector and Industry (%)



comm = communications.

Box 3.1 A Snapshot of the Informal Economy in Yogyakarta and Banten

Like other agriculture-driven economies, it is typical to see people in Yogyakarta working in rice fields, growing sugarcanes, tending their sheep, or breeding buffaloes. Traditionally, these activities are associated with households but raising their production levels allows them to market their goods beyond their own final consumption. Small-scale (mostly informal) manufacturing enterprises transform the agricultural products into different commodities. A popular example is the *batik*, which basically starts from an agricultural product (textile) and is transformed into a beautiful piece of art. Famous around the world and even accorded as the "Masterpiece of Oral and Intangible Heritage of Humanity" in 2009 by UNESCO, the Indonesian batik is a cloth that uses manual wax-dyeing technique, sporting designs related to Javanese conceptualization of the universe or patterns that depict everyday life. In addition, Yogyakarta is also known to be the education and cultural center of Java which, in turn, creates the need for more affordable room rental, small cafeterias, laundry, and other services for students; and souvenir shops (*e.g., batiks at Malioboro Street*) for tourists.

On the other hand, being strategically located near Jakarta, Banten attracts capital-intensive manufacturing industries that choose to construct their plants in the province for expected cost savings. The list of typical manufacturing activities in the province includes manufacturing of basic iron and metal, chemicals, and chemical wrapping. Hence, it is not surprising to note that the informal economy in this sector is very small. However, the presence of these manufacturing plants, which employ laborers and other elementary workers, creates a market for informal economy in food and other services and wholesale and retail trade to flourish in Banten.

UNESCO = United Nations Educational, Scientific and Cultural Organization.

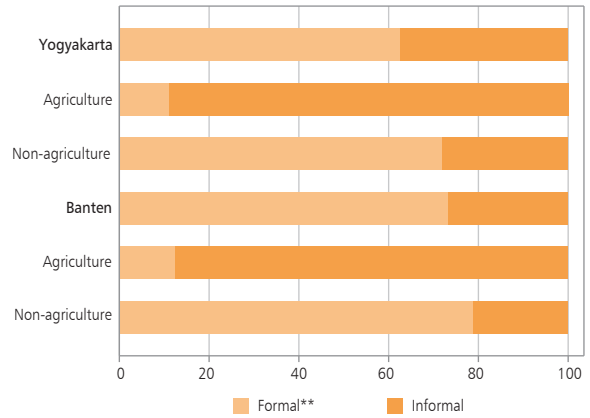
measures reflect the joint influence of changes in capital, intermediate inputs, technical efficiency, economies of scale, and capacity utilization of enterprises (OECD 2001).

A variety of productivity measures can be used. For example, gross output-based labor productivity measures labor requirements per unit of output while value added-based labor productivity serves as an alternative measure that can be directly linked with existing income-based measures of living standards. For detailed comparison of these statistical measures, readers are referred to *OECD Manual on Measuring Productivity* (OECD 2001). This section uses value added-based measure of labor productivity.

Whereas total labor productivity is usually computed per worker, it is more straightforward to compute labor productivity in the informal sector by job. This is because a person may have multiple jobs—a first job in the formal sector, and a second is in the informal sector. Consequently, it is operationally difficult to classify this person as working in the formal or informal sector. For comparability, all estimates of labor productivity provided in this section are expressed on a per job basis.

Based on the 2009 survey results, total labor productivity, measured by the ratio of GRDP to total employment (i.e., total number of jobs), is estimated at Rp16.26 million in Yogyakarta. In Banten, it is estimated at Rp33.90 million, more than twice that in Yogyakarta.

Figure 3.3 Informal Sector Productions in the Agriculture and Non-Agriculture Sectors (%)



Note: Formal** = formal sector + households.

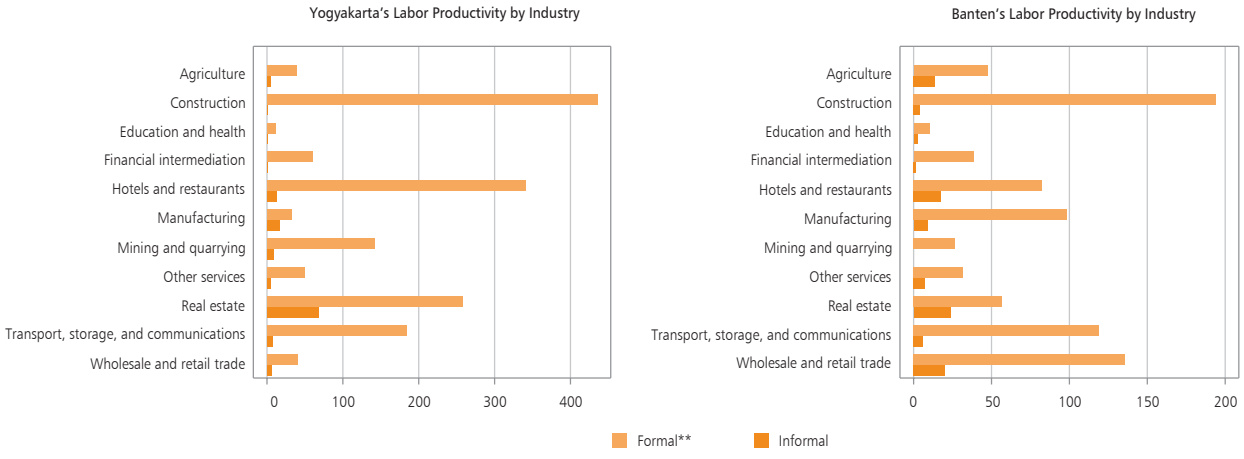
Although the concept of formal** sector[14] in this chapter also accounts for the subsistence household production, it is not surprising to note that the labor productivity in the formal** sector highly exceeds that of the informal sector. On the average, a job in Yogyakarta's formal** sector contributed Rp76.55 million value added while its informal sector counterpart contributed Rp7.00 million. On the other hand, labor productivity in Banten's informal economy is estimated at Rp12.74 million per worker's job, about six times less than the Rp85.12 million contribution of an average job in the formal** sector in 2009.

Labor productivity for the informal sector in real estate, renting, and business activities in Yogyakarta showed the highest figure of Rp68.46 million, indicating the flourishing opportunities for informal players in tapping the market created by the city's famous landmark: the educational institutions. In Yogyakarta, the lowest labor productivity is in finance, which recorded a figure of Rp0.07 million, probably suggesting the steep competition posted by the existing players in this capital-intensive industry.

The informal sector industry, such as real estate and other business activities, had the highest labor productivity in Banten. Labor productivity in real estate recorded Rp23.7 million, indicating that, in Banten, informal sector workers engaged in this industry are more productive compared with informal workers in other industries. The lowest labor productivity, at Rp1.7 million, occurred in finance.

Overall, the estimates provided in this chapter support the notion that the informal sector accounts for a significant portion of the economy. After estimating the contribution of the informal sector to its respective regional economy, the next chapter examines the characteristics of these informal enterprises.

Figure 3.4 Labor Productivity by Industry in the Formal and Informal Sectors (Rp million)



Note: Formal** = formal sector + households, RP = rupiah.

[14] Formal and households.

Chapter 4

Characteristics of Informal Sector Enterprises

The estimates provided in the previous chapter support the notion that the informal sector accounts for a significant portion of the economy. To better understand the production behavior of the informal sector, this chapter examines the different aspects of the production behavior of these enterprises. In particular, we will probe for answers on questions, such as (i) between Yogyakarta and Banten, are there differences in terms of what motivates people to engage in informal activities, (ii) where do they usually get financial resources from, (iii) what are the typical problems confronting these enterprises, among others.

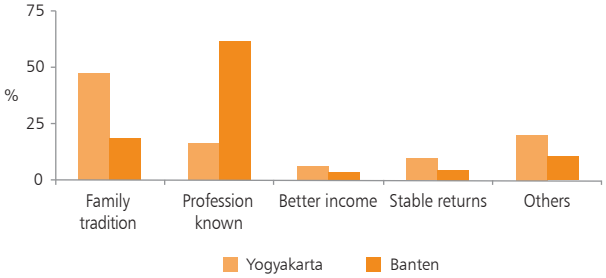
4.1 Household Unincorporated Enterprises with At Least Some Market Production (HUEM)[15]

It appears that HUEM operators tend to carry out business activities in the informal economy not necessarily because they want to maximize income, but because this is the only activity that they are more familiar with. This is consistent with the findings of Brooks et al. (2010), such that those at the bottom part of the labor population are forced to make suboptimal choices to reduce income risks. Operators of informal enterprises which are associated with low-scale production and thus, more vulnerable to income shocks, are less inclined toward participating in riskier entrepreneurial activities even though riskier entrepreneurial activities promise higher future returns. Brooks et al. (2010) concluded that when the vulnerable members of the population discount the future, this can have a negative impact on the economy in the long run because investment decisions at the household level are suboptimal. Such observation should guide policy makers in outlining programs that are more sensitive to the needs of the informal sector. For example, programs should be geared toward improving the skills of these people and build their capacity to engage in more productive entrepreneurial activities. Details are provided in Figure 4.1 and Table 4.1.

The creation of HUEMs or the engagements in these types of business activities are generally not motivated by the possible increase in income or the potential for having stable income sources. They are motivated by social norms, such as family traditions and continuation of family practices—the reason most business owners in Yogyakarta cited—and the types of skills known by the owners, which is the more popular justification of HUEM owners in Banten.

What does this imply? This can mean that if the establishment of HUEMs will be supported, programs should concentrate on developing the skills of the workers, especially in Banten, since most of the HUEM owners say that they are in the activity because that is the only profession they know. Either programs can improve the skills of people in the existing profession or widen the range of skills of workers so that they can venture into other lines of work. On the other hand, a different approach should be taken for Yogyakarta since most of the HUEM owners established the HUEMs or are working in the activity due to family tradition.

Figure 4.1 Reasons for Establishing HUEMs (%)



HUEM = household unincorporated enterprises with at least some market production.

[15] In the case of Indonesia, all HUEMs are considered as informal enterprises.

Table 4.1 Distribution of Reasons for Establishing HUEMs by Province

Industry	Family Tradition	Profession Known	Better Income	Stable Returns	Others	Total
Yogyakarta						
Agriculture	473,847	43,375	19,070	42,387	106,207	684,886
Construction	0	0	3,087	0	0	3,087
Education	627	0	1,520	0	2,335	4,482
Finance	440	473	394	1,290	2,581	5,178
Health and social work	0	394	0	0	421	815
Hotels and restaurants	9,056	17,754	12,270	14,598	12,399	66,077
Manufacturing	25,906	22,449	7,493	8,033	20,225	84,106
Mining and quarrying	1,263	5,537	1,282	0	4,977	13,059
Other services	4,264	23,801	6,651	3,996	17,851	56,563
Transport, storage, and communications	0	24,477	394	4,502	7,541	36,914
Wholesale and retail trade	33,640	50,036	20,483	37,707	57,214	199,080
Total	549,043	188,297	72,644	112,512	231,751	1,154,247
Banten						
Agriculture	119,540	151,857	0	1,290	14,363	28,7050
Construction	0	6,838	0	0	0	6,838
Education	0	1,419	1,367	0	0	2,786
Finance	12,791	7,102	1,482	3,604	6,338	31,319
Health and social work	0	7,050	0	0	1,491	8,541
Hotels and restaurants	11,374	73,841	0	11,903	2,413	99,530
Manufacturing	4,962	27,502	4,011	0	6,490	42,965
Other services	13,620	53,365	1,089	9,154	20,149	97,378
Transport, storage, and communications	15,489	125,201	2,634	0	31,196	174,520
Wholesale and retail trade	44,107	288,907	32,016	31,849	48,923	445,802
Total	221,883	743,084	42,598	57,801	13,1363	1,196,729

While family tradition seems to be the popular reason for setting up HUEMs in Yogyakarta, industry analysis showed that it is actually only widely chosen in two industries, namely, in agriculture (69.2%) and manufacturing (30.8%). The choice "profession known" was the most common answer of HUEMs in four industries: transport, storage, and communications, 66.3%; mining, 42.4%; other services, 42.1%; and hotels, 26.9%. Meanwhile, education, finance, health, and wholesale and retail trade registered "others" as the most prevalent reason for the establishment of HUEMs. All of the HUEMs identified under construction cited "better income" as the driving force behind the business.

The situation in Banten is clearly different from that in Yogyakarta. The HUEMs in all of the industries recorded "profession known" to be the most popular motivation among the owners, except for the finance industry in which 40.8% of HUEMs registered the reason "family tradition." This suggests that HUEM owners in Banten are more skills oriented and, thus, engage in businesses based on their expertise.

On the other hand, the HUEM in agriculture, hunting, and forestry industry in Yogyakarta posted minimum revenue of Rp0.001 million and maximum revenue of Rp1.1 trillion. However, it should be noted that this is also the industry where a large portion of the production is allocated for household food consumption; thus, the revenue reported in the survey does not necessarily reflect the production output of the HUEM. Thus, generalization using the revenue data of HUEMs should be done with caution, especially concerning the agriculture sector.

In Banten, the least revenue, reaching only Rp29 million, was recorded by a HUEM in the "others" industry. Meanwhile, a HUEM in manufacturing reported the highest revenue of Rp2.05 trillion.

In Yogyakarta, the industry with the least intermediate costs was the other community, social and personal services, with a HUEM that reported

a cost of Rp2 million. In Banten, the HUEM in the "others" industry posted the lowest cost of Rp7 million. On the other hand, the wholesale and retail trade, etc. industry in Yogyakarta and the manufacturing industry in Banten registered the highest intermediate costs incurred by HUEMs, of Rp686 billion and Rp1.68 trillion, respectively (Appendix Table 4.1).

4.2 Financing and Other Support Structures

It is generally accepted that the existence of an efficient financial sector contributes positively to poverty reduction by expanding the access of poor and vulnerable segments of the population to credit (Brooks et al. 2010). Indirectly, doing so allows the poor to contribute to economic growth.

Based on the survey results, the HUEM's utility of credit schemes is limited primarily because its accessibility is limited as well. In particular, majority of the HUEMs (89.86% in Yogyakarta and 88.76% in Banten) did not apply for a bank loan. Geographically, in the urban areas of Yogyakarta, 84.44% of the total number of HUEMs did not apply for a bank loan. Meanwhile, 93.78% of those in the rural areas did not apply. In Banten, 87.88% of HUEMs in urban areas and 89.95% in rural areas did not apply for a bank loan.

For HUEMs in Yogyakarta, the main reason cited for not getting a loan is "not interested,"[16] (24.6%), while in Banten, the complicated procedures associated in getting loans hinder 35.1% of HUEM owners from applying for one.

Another source of credit besides bank loan is microfinance services. HUEMs in Yogyakarta (49.5%) and in Banten (25.9%) were aware of (the existence of) microfinance services. On urban–rural perspective, 59.1% of HUEMs in urban areas of Yogyakarta knew of microfinance services; in the rural areas, the level was 42.5%. In Banten, only 24.6% of HUEMs in urban areas and 27.7% in the rural areas were aware. Of those who were aware of microfinance, 78.9% in Yogyakarta and 62.2% in Banten reported to have known it through word of mouth.

These results present a number of possible public and private sector interventions to assist HUEMs or other small businesses acquire financial sources. One avenue that can be pursued is determining the reason why HUEM owners in Yogyakarta are more aware of the microfinance services available to them, compared with HUEM owners in Banten. This situation is true regardless of whether the area is urban or rural; the same condition is observed.

On the other hand, information on other financial sources has spread among the target audience through word of mouth or recommendation of peers. It is apparent that the traditional personal passing of news among people is the most effective approach to inform them. Thus, while further studies still need to be conducted, strategies can also be formulated around this type of information dissemination for a better reception of the target participants.

The survey results also provide a snapshot on the perceived impact of loans on business activities. It is interesting to note that among those who obtained

Table 4.2.1 Access to Credit (%)

Finance	Yogyakarta	Banten
Applied for a bank loan		
Yes	10.1	11.2
No	89.9	88.8
Successful in getting loan from the bank?		
Yes	90.3	66.7
No	9.7	33.3
Why never applied for a loan?		
Complicated procedure	12.9	35.1
High interest rate	10.8	18.9
Too much collateral	10.0	9.0
Loan does not correspond to needs	1.3	1.5
Not interested	24.6	14.3
Not needed	21.0	7.6
Others	19.5	13.6
Other than bank services, do you know any microfinance services?		
Yes	49.5	25.9
No	50.5	74.1
Applied for a loan not from banks		
Yes	10.4	8.0
No	89.6	92.0
Successful in getting loan?		
Yes	93.3	23.4
No	6.7	76.6

[16] The reasons why HUEMs in Yogyakarta are not interested to avail of bank loans could be investigated further, as this may just be a reflection of the lack of financial institutions that offer loans with minimal interest rates.

Table 4.2.2 Distribution of HUEMs by Reason of Not Applying for Loan; by Reason for Loan Rejection (%)

For sources other than banks		
Why not apply for a loan?	Yogyakarta	Banten
Loan amount insufficient	2.0	7.5
Complicated procedures	10.0	33.3
High interest rate	7.5	12.3
Short maturity	0.7	1.1
Too much collateral	3.3	7.4
Not needed	30.8	9.1
Do not believe in paying interests	35.9	16.2
Others	9.9	13.0
Reason for loan rejection?		
Incomplete documents	15.9	23.5
Complete but not convincing documents	0.0	31.8
Insufficient collateral	0.0	4.9
Insufficient initial capital	0.0	0.0
Activity/enterprise was deemed not viable	0.0	0.0
Others	58.9	39.8

loan from any other source, it seems that more HUEM operators from Yogyakarta experienced positive impacts of loans on their respective business activities. For example, in Yogyakarta, about 62.6% reported an increase in the volume of production with the help of loans; only 12.2% said so in Banten. Table 4.2.3 summarizes the results.

4.3 Problems and Prospects

HUEMs face diverse problems and difficulties in operating their business, which are summarized in Table 4.5. The chief problems of HUEMs are related to capital, inputs to production, and marketing of products. HUEMs in Yogyakarta reported that their main concerns included advertising of new products and services (37.3%); financial difficulties, such as getting loans (31.0%); and the lack of space and supply of raw materials, which were cited by 25.7% and 23.2% of HUEM owners, respectively.

On the other hand, HUEMs in Banten confronted financial difficulties (54.9%); product sales problems, such as too much competition (46.3%); and concerns over the lack of customers (45.0%).

The HUEM owners in Banten recorded more "yes" answers to the queries on the type of assistance they would like to receive than those in Yogyakarta (Figure 4.2). Different interpretations can be devised from these results, and such assumptions can be used in designing assistance programs extended by both private and government agencies. These plans should include how to approach the intended beneficiaries and take into consideration their behaviors.

The primary types of assistance identified by the HUEM owners in both provinces are consistent with most of the main problems cited, which are capital and production-related issues. The top three items chosen by the respondents are the same in both provinces, though with difference in priorities. Respondents in Yogyakarta named the following as their main concerns: assistance in obtaining supplies (30.1%), access to loans (22.9%), and access to information on the market (19.1%). On the other hand, the chief assistance identified by 57.0% of HUEM owners in

Table 4.2.3 Distribution of HUEMs by Impact of Loan (%)

Impact of Loan on Business	Yogyakarta	Banten
1. Increase in the volume of production	62.59	12.19
2. Diversification of production	34.11	6.56
3. Increase of the volume of sales	55.64	9.88
4. Improvement of competitiveness/ profitability	15.64	4.64
5. Recruitment of additional staff	4.75	0.96
6. Working less time	8.11	3.67
7. Utilization of less staff	3.39	2.03
8. Financial difficulties	64.45	12.65
9. Others	16.02	1.68

Table 4.3.1 Distribution of HUEMs by Type of Problems Encountered (%)

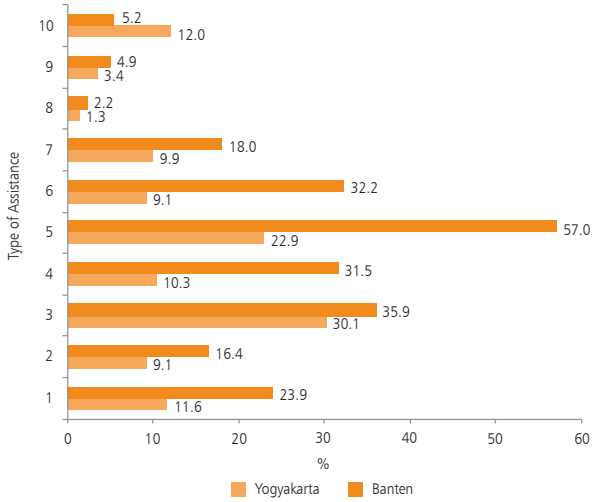
Problems	Yogyakarta	Banten
1. Supply of raw materials (quantity or quality)	23.16	27.36
2. Sales of products - lack of customers	18.69	44.97
3. Sales of products - too much competition	21.88	46.31
4. Financial difficulties (e.g., difficult to get loan)	31.07	54.88
5. Lack of space, adapted premises	25.65	30.28
6. Lack of machines or equipment	7.68	24.23
7. Organization, management difficulty	3.67	6.22
8. Too much control, taxes	0.81	2.95
9. Advertising of new products, services	37.32	41.45
10. Others	12.80	4.73

Banten was access to loans, followed by assistance in obtaining supplies (35.9%) and access to information on the market (32.2%).

It is interesting to note that while advertising of new products and services was the most common problem in Yogyakarta, the assistance on advertising was chosen by only a minimal 3.4% of the respondents. Furthermore, these results show that registration of their businesses is the least of the concerns of HUEM owners in Yogyakarta and Banten.

While few HUEMs in Banten (compared to Yogyakarta) reported having experienced positive impacts of loans on their business activities, a significant number of HUEMs reported having been helped by professional business organization in which they are a member of.

Figure 4.2 Type of Assistance Needed by HUEMs (%)



Notes: 1 - Technical training, 2 - Training in organizational and financial management, 3- Assistance in obtaining supplies, 4 - Access to modern machines, 5 - Access to loans, 6 - Access to information on the market, 7 - Access to large business orders, 8 - Registration of business, 9 - Advertising of new products/services, 10 - Others.

Table 4.3.2 Proportion of HUEMs Helped by Professional Business Organization, by Type of Difficulty (%)

Type of Difficulty	Yogyakarta	Banten
1. Technical training	58.36	64.40
2. Training in organizational and financial management	16.51	28.99
3. Assistance in obtaining supplies	43.08	57.56
4. Access to modern machines	15.24	48.97
5. Access to loans	44.88	93.15
6. Access to information on the market	24.70	35.26
7. Access to large business orders	12.64	28.99
8. Problems/linkages with government	6.61	57.56
9. Litigation with competitors	2.07	…
10. Security problems	10.85	6.85
11. Interactions with employees	2.83	22.29
12. Others	16.51	…

… = no observation/no data available.

Chapter 5

Institutionalizing Informal Employment and Informal Sector in Official Statistics

This chapter presents the recommendations for institutionalizing the generation of the statistics on informal employment and informal sector. It discusses the relevance of informal employment and informal sector to Indonesia and, consequently, the significance of producing the related statistics. It also explains the process by which the data can be regularly collected and the planned integration of the informal employment and informal sector among the official statistics released by BPS-Statistics Indonesia.

Results of the pilot Informal Sector Survey (ISS) in Yogyakarta and Banten confirmed the significance of informal employment and informal sector in the economies of the two provinces. Even if Yogyakarta and Banten exhibit different levels of economic development, informal employment is still prevalent in both of their labor markets. Meanwhile, the informal sector is vital in agriculture in Yogyakarta and in the wholesale and retail trade industry in Banten. If these results are representative of the Indonesian economy as one of the developing countries, Indonesia, may also be characterized as having a sizable informal employment, and industry-specific high economic contribution of the informal sector.

Competition among the labor force to engage in formal employment is very high. Thus, only those highly skilled are expected to engage in formal employment and reap the benefits it provides. On the other hand, those with low skills, and especially with low educational background, are likely to be employed informally and, hence, are receiving relatively lower incomes and fewer benefits. However, while formal employment presents better opportunities to the employed population, informal employment provides the needed income to most. Therefore, the informal sector plays an important role in running the Indonesian economy, and its existence increases the chance of the poor to participate in the labor market. The informal sector creates an alternative employment for production and income generation. Due to a high rate of population growth or urbanization in Indonesia, the huge labor force, especially in urban areas, can be absorbed in the labor market through informal employment. On the other hand, to survive, the poor tend to be involved in any kind of activity even if a job is characterized by a very low wage, irregular working time, uncertainty in job tenure, and other similar conditions. Hence, with the links between the informal sector and the poor, it is important to learn more about the different aspects of the sector, such as its production processes; the social, economic, and demographic characteristics of its employment population; and the enterprises that compose it.

Given these, policy makers should take into account informal employment and informal sector conditions, especially with regard to regulations and policies that aim to improve the working conditions, as well as the legal and social protection of persons employed in the informal economy, to increase the productivity of informal economic activities and the like. With the results of the ISS and the corresponding estimates based on the data, policy makers would have sufficient knowledge of the size and characteristics of informal employment and the informal sector in the country for informed decision making. The Government of Indonesia, especially those who formulate the pro-poor policies, should also support the informal sector by providing the informal enterprises the needed access to credit, labor skill development, among others.

Based on the key role of the informal employment and informal sector in supporting the macroeconomy of the country as a whole, the need for statistics has become more important, to assess the contributions of all workers, women in particular, or those with a low level of education, to the economy. These statistics, however, are not regularly provided due to limited information

supplied by the regular labor force survey (*Sakernas*). The *Sakernas* questionnaire is designed primarily to collect and estimate the employed and unemployed population and does not contain many questions that can classify workers as being engaged in formal or informal work.[17] Because of the sparseness of statistics on informal employment, Indonesia's informal sector has not benefited from well-informed policies that will eventually mainstream the informal workers into the formal sector, provide social protection, and enhance their productivity.

Thus, to generate the needed statistics and for BPS-Statistics Indonesia to have a regular, officially published statistics on informal sector, the *Sakernas* can be administered together with the ISS Form 1. With this, BPS-Statistics Indonesia may provide better statistics on informal employment and the informal sector on a regular basis for both the policy makers in the Government of Indonesia and the decision makers in the private sector of the economy.

In addition to the employment statistics, the ISS also provides information on the economic contribution of the informal sector to gross domestic product (GDP) through the ISS Form 2 or the Household Unincorporated Enterprises With at Least Some Market Production (HUEM) survey. While informal employment is more notable than the share of the informal sector production to the whole economy, the sector's significance is magnified in the individual provincial economies. The informal sector's economic production, in fact, is more significant in less industrial and more predominantly agriculture areas.

Institutionalizing the collection of informal statistics, through the more frequent and regular conduct of an ISS, would generate the needed labor and economic statistics. Hence, instead of modifying the Labor Force Survey (LFS) and integrating in it the queries in ISS Form 1, BPS-Statistics Indonesia plans to adopt the complete ISS conducted in Yogyakarta and Banten. This means that both the ISS Form 1 and ISS Form 2 will be administered. Moreover, the agency intends to extend the survey coverage by enlarging the number of census block sample. The idea is to continue the survey design administered during the pilot ISS, that is, the *Sakernas* and the ISS will be two separate surveys linked together. While the pilot ISS was funded by the Asian Development Bank (ADB) under the regional technical assistance on Measuring the Informal Sector project, the first national ISS, which will be carried out simultaneously with the *Sakernas* in August 2011, will be funded by the Government of Indonesia. This survey will cover more or less 25,000 households in 2,500 census blocks across the country and will cover all 33 provinces in Indonesia. This plan aims to provide statistics on the informal employment and informal sector at the national level.

BPS-Statistics Indonesia, which is in full support of the ISS endeavor, originally would like to implement the national ISS in 2010; however, the 2010 Population Census necessitates BPS-Statistics Indonesia to delay the survey until 2011. Thus, the ISS Form 1 questionnaire, as used in the pilot ISS in Yogyakarta and Banten, will be administered with the 2011 *Sakernas*. BPS-Statistics Indonesia plans to change the design of *Sakernas*, from two rounds in 2010 to a quarterly survey in 2011. However, the national ISS may not be administered as frequently as the 2011 *Sakernas* and will only be carried out in August 2011. Thus, the 2011 ISS census blocks will be subsample of the 2011 *Sakernas* (third quarter).

Once this survey is realized, the official statistics published by BPS-Statistics Indonesia will now also include the statistics on the informal employment and informal sector. Through this survey, BPS-Statistics Indonesia will also be able to estimate more accurately the contribution of the informal sector to GDP and determine who among the employed population are informally employed. If, in the future, the ISS Form 2 or the HUEM survey will be implemented continuously, the contribution of the informal sector to GDP will be easily estimated. But if the regular conduct of the HUEM survey is not possible, BPS-Statistics Indonesia will use the estimates from the 2011 August *Sakernas* as the benchmark data and continue the measurement of the gross value added (GVA) of the informal sector, using small-scale enterprise data and the labor productivity statistics and other characteristics of the informal employment in the estimation process.

[17] In fact, based on the combination of employment status and occupation variables, BPS-Statistics Indonesia could identify informal employment. Hence, these are the set of statistics on the informal sector that are published by BPS-Statistics Indonesia. Still, BPS-Statistics Indonesia has provided informal employment statistics, based on its national definition, that utilize the employment status and occupation variables. These are the set of statistics on the informal sector published by BPS-Statistics Indonesia, which are not internationally comparable.

Table 5.1 Summary of Recommendations

Modification	Justification	Relevance
1. More intensive training of the enumerators who will conduct the ISS, through better and clear explanations of the concepts, especially in relation to the customs and norms in Indonesia.	Experience from the pilot ISS showed that due to misinterpretation of questions, some of the data collected were inconsistent (see Appendix 4). Particularly, more explanation on the type of enterprise (question 17) query must be provided since the question is a newly introduced concept. Also, the observed confusion that may have occurred in interpreting the questions on (i) selling of products and services (question 27), and (ii) type of contract (question 7) suggests that training of enumerators must be improved.	The enumerators' better understanding of the concepts, especially of the key questions, will help prevent confusion of the respondent in answering the queries. This will lessen inconsistencies in the data collected.
2. Incorporation of ISS Form 1 questions in *Sakernas* for the expanded (LFS) *Sakernas* or an annual ISS Form 1 survey administered with the *Sakernas*	It has been seen that generating informal employment statistics is significant for Indonesia. Modifying the *Sakernas* questionnaire to incorporate the informal employment–related queries will ensure that the necessary data to produce these statistics will be available. Less cost will be incurred if the ISS Form 1 questions will be integrated with the *Sakernas* questionnaire, forming the expanded LFS. The additional questions will extend the interview time for only a few minutes. If incorporation of the ISS questions in the *Sakernas* questionnaire is not possible, the annual ISS Form 1 and *Sakernas* survey operations can be carried out simultaneously.	If the informal employment queries are added in the *Sakernas* questionnaire or the ISS Form 1 be administered with the *Sakernas* annually, regular estimates of informal employment may be produced. Moreover, the annual statistics in informal employment can be used to estimate the growth in informal sector production, which can then be applied to the 2011 benchmark estimate of the contribution of the informal sector to gross domestic product.
3. Periodic conduct of ISS Form 2 or HUEM survey	ISS Form 2 or the HUEM survey is expensive to carry out annually. Hence, a 3-year or a 5-year interval between the HUEM surveys can lessen the costs and ensure the continuity of reliable statistics on the contribution of the informal sector to the whole economy of Indonesia. During the years without the HUEM survey, the results of the expanded *Sakernas* or the annual ISS Form 1 can be used to estimate the growth of the sector. This can be done through a methodology that establishes the links between informal employment and the output of the informal sector.	A regular conduct of the ISS Form 2 or HUEM survey will guarantee an updated set of data that will determine the economic contribution of the informal sector. Through updated statistics, the changes in the sector can be captured and the effects of the policies and regulations on the production of the sector can be monitored. These statistics will present the evidence on whether the policies have improved the economic performance of the sector and the workers that rely on it.
4. Involvement of the national accounts personnel in the enumeration process of ISS Form 2 or HUEM survey	Experience from the pilot ISS in Yogyakarta and Banten showed that while ISS Form 1 can be administered by the regular enumerators, the ISS Form 2 needs a specialist with knowledge of national accounts in the enumeration process. ISS Form 2 is primarily used in the estimation of the national accounts, hence, the data collected should be the kind that will be useful in the estimation. However, computing for the economic output is a complicated process, and enumerators who will administer the questionnaire would need some knowledge regarding this process. The presence of the national accounts personnel during the survey can help in improving the quality of the data collected. He/she can guide the enumerators in the correct manner by which to ask survey questions and help them understand the useful data that need to be gathered from the survey.	Better set of data can be collected if national accounts staff will be present in the enumeration process of the ISS Form 2. The benefits of the participation of a national accounts personnel are (i) correct classification of HUEMs to their industries in the context of national accounts estimation; (ii) better levels of sales, inventories, and costs can be gathered since the questions will be correctly asked from the HUEM owners; and the like.

Notes: HUEM = household unincorporated enterprises with at least some market production, ISS = informal sector survey, LFS = labor force survey.

Chapter 6

Summary and Conclusions

6.1 Summary of Main Results

The results of the 2009 Informal Sector Survey (ISS) in Yogyakarta and Banten showed that informal employment is an integral part of the labor market, accounting for 81.9% and 75.9%, respectively, of the total employment in Yogyakarta and Banten. Yogyakarta, the less industrialized of the two provinces, presented a larger dependence on informal employment than Banten. This implies that jobs in less developed areas are more informal. Despite the difference in their levels of economic development, the predominance of informal employment, measured by the number of jobs, is apparent and supports the conclusion that the labor market in these two provinces is dominated by informal employment. These are also indications that considering the similarity of Banten and Yogyakarta to other provinces in Indonesia, informal employment is prevalent in most of Indonesia.

Results also showed that formal enterprises, and not only informal enterprises, create informal employment. In Yogyakarta, for example, there are 103,642 (30.7%) out of 337,196 jobs under informal employment. The same is observed in Banten where as much as 32.7% of the jobs in formal enterprises are informal. Meanwhile, data from both provinces showed that all jobs in the households are informal.

As a whole, persons who are informally employed tend to have a lower level of education than those with formal jobs. The lower the level of education the workers have, the bigger the opportunity to be absorbed in informal jobs. Workers in formal employment receive significantly better wages than those in informal employment; male workers are better off than their female counterparts who are more likely to be involved in informal jobs.

In terms of the gross regional domestic product (GRDP), estimates present the share of the informal sector in the economic output of Yogyakarta to be 34.1%. On the other hand, the contribution of the informal sector in the production in Banten is smaller at 20.2%. Banten, the more industrialized of the two provinces, is the seat of many large-scale enterprises, both domestic and foreign. Hence, the larger extent of the manufacturing production and provision of services is from formal enterprises.

The share of the informal sector is 28.2% of non-agriculture GRDP in Yogyakarta, lower than the registered share of 20.9% in Banten.

The informal sector posted a 67.2% share in the agricultural production of Yogyakarta, greater than its contribution in the non-agriculture sector. By contrast, the informal sector is more significant in non-agriculture than in agriculture in Banten. While the non-agriculture informal sector contributes 20.9% of the production, 12.0% of the agricultural production is from the informal sector.

These results show that in terms of economic production, as measured by the GRDP, the share of the informal sector is much less than that of the formal sector. However, with regard to jobs, informal employment is a vital source of income to the employed population.

6.2 Importance of Measuring Informal Employment and the Informal Sector

This study has provided concrete evidence that the informal sector contributes substantially to the nation's outputs and that informal employment is an integral part of the labor market. The analysis in the report provides policy makers and the development community with a clearer picture of the state of the labor market, the access of workers to various social

protection instruments, and the conditions of informal enterprises.

If this data collection approach can be further refined and periodically conducted across all the provinces of Indonesia, then existing policies on the labor market and enterprises can be regularly reviewed and adjusted, if necessary, to promote decent jobs for all and, consequently, inclusive growth.

6.3 Other Issues

The Informal Sector Survey (ISS) under the Asian Development Bank's regional technical assistance on Measuring the Informal Sector project covered only two out of 33 provinces in Indonesia. The results of the survey, therefore, can only describe the situation of the informal sector and informal employment in the provinces of Yogyakarta and Banten. While the estimates generated for the two provinces provided a glimpse of the situation for the whole of Indonesia, a more concrete data covering the entire country would be a better set to represent the situation for the whole country.

While the ISS proved to be generally successful in the two pilot provinces, many enhancements can still be done in future surveys. As to be expected from a pilot survey, many data inconsistencies in the ISS were observed from various phases of survey design and operations—from the design of the questionnaires, to field operations to data encoding and processing. Some of the questions in the ISS Forms 1 and 2 were not formulated in accordance to the customs and norms in Indonesia, which caused confusion during the survey interview process. Having a written contract, for example, is not commonly used by the civil servants or armies; they are more familiar with the term "certificates," the official letter they receive upon entering the service, which will take effect until they retire. Also, some of the critical items in the questionnaires, which may not have been properly explained by the enumerators, were misinterpreted by the survey respondents. Moreover, data inconsistencies also resulted because of the different data processing procedures of the ISS and the National Labor Force Survey (*Sakernas*). The *Sakernas* data were encoded in the regional offices, while the data gathered through informal sector questionnaires were sent to the headquarters office for encoding. Consequently, during the linkage process between the *Sakernas* and the ISS, it became difficult to correct either *Sakernas* form or ISS form to make them consistent.

In addition, the informal sector survey is the first survey from the social statistics point of view that uses the concepts of the national accounts, such as the gross value added, inventory, intermediate input, and so forth. Thus, it was very difficult for the enumerators to ask several questions related to the national accounts, thereby affecting the quality of data collected from the ISS Form 2 or the Household Unincorporated Enterprise With at Least Some Market Production (HUEM) Survey questionnaire. It would have been better if ISS Form 2 was administered by enumerators trained in conducting establishment/enterprise surveys.

Chapter 7

Recommendations

Reliable and timely data on critical issues strongly support evidenced-based policy making. A good example of this is the Informal Sector Survey (ISS) conducted in the two pilot provinces. The general perception that informal employment is prevalent is validated by reliable statistics. More importantly, in addition to being able to quantify the size of the informal economy, the ISS data also enabled researchers to undertake more in-depth studies on the determinants and constraints in the informal economy. Policy makers and government agencies concerned, as well as the public, will have more data and information regarding the informal sector and informal employment. It is therefore imperative that the ISS be institutionalized in the BPS-Statistics Indonesia's system of household surveys.

The cost-effective data collection strategy that was implemented in the two provinces calls for the first phase of the survey to be undertaken as a rider to the National Labor Force Survey (*Sakernas*). In the long term, it will be more efficient if this first phase will be fully integrated into *Sakernas* to eliminate data processing issues described in the previous chapter of this report. The second phase of the ISS, which deals with informal sector production units, can be undertaken every 2 or 3 years, depending on the availability of the budget. In the intervening years of the second phase, estimates on the contribution of the informal sector to gross domestic product (GDP) can be derived using results on the first phase or the expanded *Sakernas*.

The institutionalization process of the ISS, which is scheduled to begin in August 2011, will cover all 33 provinces in Indonesia. It will be the first official ISS done by BPS-Statistics Indonesia.

Before August 2011, BPS-Statistics Indonesia should review the questionnaires that were used in the two pilot provinces and revise them accordingly. The views of all those who were involved in the pilot survey should be consolidated to improve the questionnaires, as well as the field operations and data processing. For example, based on the results of the pilot ISS conducted in Yogyakarta and Banten, several questions in the questionnaire should be revised because they were misunderstood by the enumerators.

The phase 2 questionnaire (Informal Sector Survey) must be reviewed to make it more user-friendly and to ensure that the concepts and definitions needed to derive the contribution of the informal sector to GDP are used properly. For example, rice is classified under the agriculture sector in the phase 2 questionnaire; however, in the national account concept, rice is a product of the food manufacturing sector. National accountants in BPS-Statistics Indonesia should lead the review process; this activity should be done by a multidisciplinary team that includes experts in questionnaire design, sampling design, survey operations, and labor and employment statistics.

The sampling design, when adopted for national coverage, should be reviewed to ensure that all economic activities are adequately represented in the sample and that the design effects at the national accounts sector level do not go beyond the acceptable limit.

Some of the data inconsistencies that occurred in the pilot survey can be attributed to the enumerators' lack of knowledge of the concepts and definitions used in the phase 2 questionnaire, which is very similar to a standard establishment survey. Hence, the decision on whether to use enumerators who are already familiar with establishment surveys for phase 2 of the ISS or to offer more intensive training to the enumerators of *Sakernas* to improve their performance will have to be undertaken by BPS-Statistics Indonesia's management.

Another source of data inconsistencies was the different data processing centers used for the ISS and

Sakernas. Since phase 1 of the ISS is recommended to be fully integrated into *Sakernas*, data processing for phase 1 should be done by the same entity that processes *Sakernas* to reduce data inconsistencies, whether they be the BPS-Statistics Indonesia's provincial office or the central office. Data validation rules should be established with the help of labor statisticians for phase 1 and national accountants for phase 2 of the ISS.

A data dissemination plan should be developed to convey this very important set of statistics to the public on a timely basis. The survey data should be shared with researchers to support evidenced-based policy making.

Appendix 1

Concepts and Definitions

The Concepts and Definitions used in the national labor force survey (*Sakernas*) to identify labor characteristics according to the field enumerator guidance of the 2009 *Sakernas* are as follows:

1. ***Working:*** *An activity done by a person who worked for pay or assisted others in obtaining pay or profit for the duration of at least 1 hour during the survey week. Includes an unpaid worker who helps in an economic activity/ business.*

2. ***Educational attainment:*** *The highest level of education completed by a person, verified with the receipt of a diploma or a letter of completion/ certificate.*

3. ***Industry:*** *Refers to the activity of the place of work/company/office in which a person is employed, classified according to the Indonesian Standard Industrial Classification (KBLI) 2005.*

4. ***Occupation:*** *Refers to the type of work carried out by a particular respondent, classified according to the KBJI 2002 that referred to ISCO 88.*

5. ***Employment status:*** *The status of a person at the place where she/he works. There are seven different categories:*

    a. ***Own-account worker*** *is a person who works at her/his own risk and is not assisted by a paid worker or unpaid family worker.*

    b. ***Employer assisted by temporary workers/ unpaid workers*** *is a person who works at her/his own risk and assisted by temporary worker/unpaid worker.*

    c. ***Employer assisted by permanent workers/ paid workers*** *is a person who works at her/ his own risk and assisted by at least one paid permanent worker.*

    d. ***Employee*** *is a person who works permanently for other people or institution/office/company and gains some money/cash or goods as wage/salary. A laborer who has no permanent employer is not categorized as a laborer/worker/employee but as a casual worker. A laborer, in general, is considered to have a permanent employer if he has the same employer during the past month (for building construction sector, duration is three (3) months) and if the employer is an institution, more than one (1) month employment duration.*

    e. ***Casual employee in agriculture*** *is a person who does not work permanently for other people/employer/institution (more than 1 employer during the last 1 month) in the agriculture sector, either home or non-home industry, based on remuneration paid with money or goods, and based on daily or contact payment system. Agricultural industry covers food-based agricultural, plantation, forestry, livestock, fishery, hunting, and agricultural services.*

    f. ***Employer*** *is a person who gives a job with an agreed payment.*

    g. ***Casual employee not in agriculture*** *is a person who does not work permanently for other people/employer/institution (more than 1 employer during the past 1 month) in non-agriculture and gets money or goods as wage/salary either based on daily or contract payment system. These sectors include non-agriculture sectors: mining; manufacturing; electricity, gas, and water; construction; wholesale and retail trade; transport, storage, and communications; financing; insurance, real estate, and business services; and community, social, and personal services.*

h. ***Unpaid worker*** is a person who works for other people without pay in cash or goods. Those unpaid workers could be

   1. Family member who works for another person in their family, e.g., wife who helps her husband or child who helps his/her father work in farms.
   2. Not a household family member but is a relative working in the family business.
   3. Other persons who are neither family members nor relatives and who work for another person, e.g., a person who weaves hats for their neighbors' home industry.

Concepts and Definitions for Informal Employment (Discussions were lifted from the ADB Handbook on Using the Mixed Survey in Measuring the Informal Employment and Informal Sector)

For an internationally comparable definition of informal employment in Indonesia, classification of the employed population was primarily based on the Fifteenth (15th) and Seventeenth (17th) International Conference of Labour Statisticians (ICLS) guidelines. The 15th ICLS (ILO 1993) conceptualized the informal sector as

(1) The informal sector may be broadly characterized as consisting of units engaged in the production of goods or services with the primary objective of generating employment and incomes to the persons concerned. These units typically operate at a low level of organization, with little or no division between labor and capital as factors of production and on a small scale. Labor relations—where they exist—are based mostly on casual employment, kinship or personal and social relations rather than contractual arrangements with formal guarantees.

(2) Production units of the informal sector have the characteristic features of household enterprises. The fixed and other assets used do not belong to the production units as such but to their owners. The units as such cannot engage in transactions or enter into contracts with other units, nor incur liabilities, on their own behalf. The owners have to raise the necessary finance at their own risk and are personally liable, without limit, for any debts or obligations incurred in the production process. Expenditure for production is often indistinguishable from household expenditure. Similarly, capital goods such as buildings or vehicles may be used indistinguishably for business and household purposes.

(3) Activities performed by production units of the informal sector are not necessarily performed with the deliberate intention of evading the payment of taxes or social security contributions, or infringing labour or other legislations or administrative provisions. Accordingly, the concept of informal sector activities should be distinguished from the concept of activities of the hidden or underground economy.

According to the 17th ICLS final report (ILO 2003), "since the adoption of the resolution concerning statistics of employment in the informal sector by the 15th ICLS in 1993, and the inclusion in the *System of National Accounts*, 1993, of the 15th ICLS informal sector definition, it had been recommended by the Expert Group on Informal Sector Statistics (Delhi Group) and others that the definition and measurement of employment in the informal sector should be complemented with a definition and measurement of informal employment." Hence, the conceptual framework on informal employment developed by the International Labour Organization (ILO) linked the enterprise-based concept of employment in the informal sector with a broader, job-based concept of informal employment (Appendix 1, Figure A1). As a result, clear delineations among (i) employment in the informal economy; (ii) informal employment; (iii) employment in the informal sector; and (iv) informal employment outside the informal sector were established.

While the concept of informal sector refers to production units as observation units, the concept of informal employment refers to jobs as observation units. The framework above also applied, for the purpose of statistics on informal employment, the 15th ICLS resolution that excludes households employing paid domestic workers from informal sector enterprises, and to treat them separately as part of a category named "households." On the other hand, informal employment comprises the total number of informal jobs whether carried out in formal sector enterprises, informal sector enterprises, or households, during a given reference period.

Table A1 17th ICLS Conceptual Framework on Informal Employment

Production units by type	Jobs by Status in Employment								
	Own-Account Workers		Employers		Contributing (Unpaid) Family Workers	Employees		Members of Producers', Consumers' Cooperatives	
	Informal	Formal	Informal	Formal	Informal	Informal	Formal	Informal	Formal
Formal sector enterprises					1	2			
Informal sector enterprises[a]	3		4		5	6	7	8	
Households[b]	9					10			

[a] As defined by the Fifteenth International Conference of Labour Statisticians (ICLS) (excluding households employing paid domestic workers).
[b] Households producing goods exclusively for their own final use and households employing paid domestic workers.

Sources: 17th ICLS Final Report and Hussmanns 2004a.

Hence, given the conceptual framework, informal employment includes

(i) own-account workers and employers employed in their own informal sector enterprises (cells 3 and 4)—The employment situation of own-account workers and employers can hardly be separated from the type of enterprise, which they own. The informal nature of their jobs follows thus directly from the characteristics of the enterprise.

(ii) contributing family workers, irrespective of whether they work in formal or informal sector enterprises (cells 1 and 5)—The informal nature of their jobs is due to the fact that contributing family workers usually do not have explicit, written contracts of employment, and that usually their employment is not subject to labor legislation, social security regulations, collective agreements, etc.

(iii) members of informal producers' cooperatives (cell 8)—The informal nature of their jobs follows directly from the characteristics of the cooperative of which they are members.

(iv) employees holding informal jobs in formal sector enterprises, informal sector enterprises, or as paid domestic workers employed by households (cells 2, 6, and 10)—Employees are considered to have informal jobs if their employment relationship is, in law or in practice, not subject to national labor legislation, income taxation, social protection, or entitlement to certain employment benefits (advance notice of dismissal, severance pay, paid annual or sick leave, etc.) for reasons, such as no declaration of the jobs or the employees; casual jobs or jobs of a limited short duration; jobs with hours of work or wages below a specified threshold (e.g., for social security contributions); employment by unincorporated enterprises or by persons in households; jobs where the employee's place of work is outside the premises of the employer's enterprise (e.g., outworkers without employment contract); or jobs, for which labor regulations are not applied, not enforced, or not complied with for any other reason.

(v) own-account workers engaged in the production of goods exclusively for own final use by their household (cell 9).

The framework also presents the important information of informal employment outside the informal sector, which is comprised by the following types of jobs:

(i) employees holding informal jobs (as defined in paragraph 3(5) above) in formal sector enterprises (cell 2) or as paid domestic workers employed by households (cell 10);

(ii) contributing family workers working in formal sector enterprises (cell 1); and

(iii) own-account workers engaged in the production of goods exclusively for own final use by their household (cell 9), if considered employed according to the resolution concerning statistics of the economically active population, employment, unemployment, and underemployment adopted by the 13th ICLS.

"One significant idea to consider in analyzing the nature of employment is whether informality pertains to persons or jobs. According to the 15th and 17th ICLS, employment in the informal sector is defined as

comprising all jobs in informal sector enterprises, or all persons who, during a given reference period, were employed in at least one informal sector enterprise, irrespective of their status in employment and whether it was their main or a secondary job …. A person can simultaneously have two or more formal and/or informal jobs. Due to the existence of such multiple jobholding, jobs rather than employed persons were taken as the observation units for employment … informal employment as comprising the total number of informal jobs, whether carried out in formal sector enterprises, informal sector enterprises, or households, during a given reference period" (Hussmanns 2004a and 2004b).

Additional concepts have also been introduced by organizations dedicated to endeavors pertaining to the informal economy and informal employment, such as the Women in Informal Employment: Globalizing and Organizing (WIEGO). According to one of the known affiliates of WIEGO, Martha Chen, in her paper, entitled "Rethinking the Informal Economy: Linkages with the Formal Economy and the Formal Regulatory Environment," while the informal economy consists of a range of informal enterprises and informal jobs, it can still be segmented into the following:

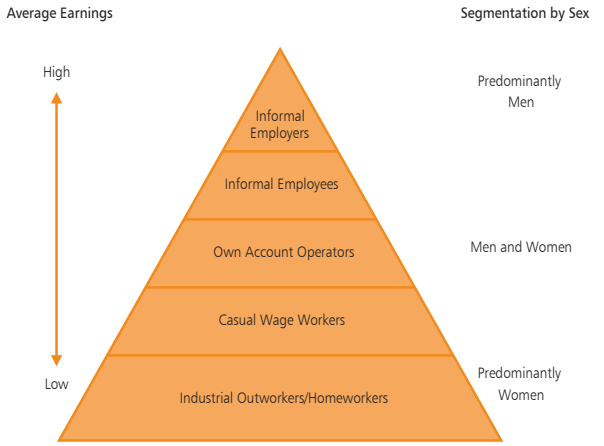
1. Self-employment in informal enterprises: workers in small unregistered or unincorporated enterprises, including
   - employers,
   - own-account operators: both heads of family enterprises and single person operators, and
   - unpaid family workers.

2. Wage employment in informal jobs: workers without worker benefits or social protection who work for formal or informal firms, for households, or with no fixed employer, including
   - employees of informal enterprises;
   - other informal wage workers, such as
     - casual or day laborers,
     - domestic workers,
     - unregistered or undeclared workers,
     - some temporary or part-time workers; and
   - industrial outworkers (also called home workers).

Research also showed distinct characteristics of the informal economy in terms of income earnings and sex of workers. Chen (2007) depicted this in an "iceberg" segmentation of the informal economy, which illustrates the significant gaps in earnings within the informal economy and general trends in men–women employment ratios (Appendix 1, Figure A1). Given that the figure represents increasing earnings toward the top, it shows that employers have the highest earnings, followed by their employees and other more "regular" informal wage workers, own-account operators, "casual" informal wage workers, and industrial outworkers. Meanwhile, it also demonstrates that, in general, men are likely to be overrepresented in the top segment while women tend to be overrepresented in the bottom segments. However, the shares of men and women in the intermediate segments vary across sectors. These concepts, ultimately, point to the significant gender disparity in earnings within the informal economy, with men having the advantage over women.

The concepts and ideas presented are the chief considerations applied in the estimation and analysis of informal employment in Indonesia using the 2009 Pilot Informal Sector Survey conducted in the provinces of Yogyakarta and Banten.

Figure A1 Segmentation of the Informal Economy



Note: The informal economy may also be segmented by race, ethnicity, or region.

Source: Chen 2007.

Appendix 2

Cost-Effective Sampling Design for the Informal Sector

The Mixed Survey: Overview (*Discussions are lifted verbatim from Maligalig 2010.*)

On the basis of the definitions of the informal sector that were agreed at the 15th International Conference of Labour Statisticians (ICLS), there are two types of informal sector production units: informal own-account enterprises and enterprises of informal employers. Both these types of informal production units are owned by households, and since the operations of these enterprises are not easily distinguishable from those of the households that own them, a household survey has an advantage in identifying these production units. How can this be done? Respondent households have to be screened for these enterprises following the dichotomy presented in Appendix 2, Figure A2.1. Those household enterprises that are producing at least some goods and services for the market and belonging either in the agricultural or non-agricultural informal sectors will be the target sampling units. These are called household unincorporated enterprises with at least some market production (HUEMs).

Table A2.1 Dichotomy of Household Enterprises

Household Enterprises					
Producing at least some goods and services for market				Producing goods and services for own final use	
Non-agricultural		Agricultural		Goods	Services
Formal sector	Informal sector	Formal sector	Informal sector	Agriculture, forestry, fishing	Paid domestic services
				Other activities	Owner-occupied dwelling services

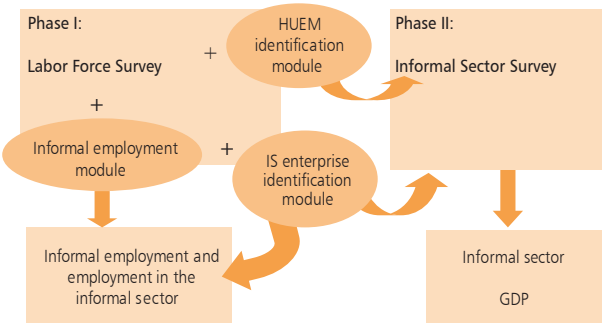
Household Unincorporated Enterprises With at Least Some Market Production (HUEMs)

The mixed survey approach utilizes a household survey in the first phase to identify the HUEMs, some of which will be sampled for the second phase survey or the HUEM survey. Since the labor force survey's (LFS) ultimate sampling units are the adults in sampled households and its questions are mostly on labor and employment, LFS is the most appropriate household survey to use for the first phase. Also, LFS is the most frequently conducted household survey and hence, informal employment statistics will be up to date. LFS is expanded by adding questions to identify HUEMs, informal enterprises, informal employment, benefits received, and working conditions of workers.

The graphical description of the mixed survey approach is shown in Appendix 2, Figure A2. Phase 1 or expanded LFS contains additional questions that can be classified into three categories: (i) informal employment module, (ii) informal sector enterprise module, and (iii) HUEM identification module. The informal employment module will determine the extent of informal employment by distinguishing the informal from the formal workers. The data to be collected will be used to analyze the characteristics of the informal workers, available social protection mechanisms, and working conditions. This module, when combined with the informal enterprise module, will further enrich the examination by determining informal employment in the informal sector. The informal sector enterprise module will determine if the enterprise/establishment of a respondent worker is informal or not. This is significant since the concept of informal employment also covers the people who are informally employed in the formal sector. The HUEM identification module determines the existence of a probable HUEM in the household and identifies the respondent in phase 2 of the survey. Meanwhile, phase 2 concentrates on the enterprise and its production, providing relevant information on the informal sector's contribution to the country's economic output or the gross domestic product (GDP).

The HUEMs that were identified in the second phase will be used as the sampling frame for the phase 2 survey. Hence, the cost of listing operations, which could be very large because small production units are difficult to identify, will not be incurred, and the second phase—the HUEM survey—will still maintain a probability sample design.

Figure A2 Mixed Survey Approach



Modified from Gennari, Guerrero, and Orhun (2010). The "1–2" Survey: A Data Collection Strategy for Informal Sector and Informal Employment Statistics. *UN ICMISIE Working Paper No. 1*.

Sampling Design of Phase 2 in the 1–2 Mixed Survey

The mixed survey is a variant of double phase sampling in which the second phase survey is usually a subset of the first phase sample and hence, both phases have the same ultimate sampling units. In the case of the mixed survey, however, the sampling units differ with households/individuals in LFS or phase 1 and HUEMs in the second phase. LFS is usually designed such that all the relevant geographical areas and household social/income classes are well represented. However, the LFS design does not include a mechanism that will ensure that all sectors of national accounts will be well represented in phase 2. Some sectors may be overrepresented and some, with very few HUEMs. Hence, the strategy might result in less-efficient estimates than those from independent informal sector surveys (ISSs) in which the sampling frame of HUEMs is the result of listing operations conducted solely for that purpose. It is, therefore, important to carefully design the phase 2 sample in order to address this issue.

Another issue that has to be considered in designing the second phase survey is the high turnover of HUEMs. To control for unit non-response (e.g., cannot be located, closed) in the second-phase HUEM survey, the interval between the two phases should be kept short. In fact, survey operations can be designed such that the two phases can be done almost simultaneously. This would not only reduce the ineligible HUEMs and those that cannot be located but would also save some travel costs for the enumerators and the supervisors. This, of course, is straightforward if all the HUEMs that are identified in the LFS will also be enumerated in the HUEM survey. Otherwise, reliable auxiliary information from previous survey is needed. For example, if the sample primary sampling units (PSUs) in the LFS are the same or very similar in previous surveys, the distribution of "own-accounts" and self-employed individuals in the survey can be a good auxiliary variable that can be used as a measure of size or stratification variable in subsampling PSUs.

To implement the simultaneous field operations, there are several options in designing the second phase: (i) a subsample of the PSUs of the household sample survey can be taken, in which all the informal sector units will be enumerated; (ii) a subsample of the HUEMs that were identified will be interviewed for the second phase survey; and (iii) all HUEMs that have been identified will be interviewed. Decision on which is the most appropriate variation depends on the following conditions: (i) availability of auxiliary information from previous survey results, (ii) budget limitations, and (iii) skill level of enumerators and field supervisors.

A subsample of PSUs may be drawn prior to the survey if relevant auxiliary information is available. For example, if the distribution of "own-account" or self-employed individuals by sector (of national accounts) is available for each domain, then the PSUs can be selected accordingly. Subsampling HUEMs for the second phase would usually require another field operation; this subsampling would require a list frame and hence, results of the first phase must first be processed. Furthermore, since the HUEMs are likely not distributed evenly across geographical areas, balancing the workload of field operation staff will be more challenging. Subsampling HUEMs in simultaneous phase 1 and phase 2 operations can only be implemented only if the enumerators and field supervisors are adept in screening the HUEMs and are able to apply the correct sampling fractions. Option 3 is the easiest to implement but would require a large budget since the sample size is not controlled at the onset. The sample size could turn out to be very large and may require longer enumeration period and more human resources to complete. Also, the number of questionnaires that have to be printed will be quite large. And there is no mechanism for making the workload among enumerators equitable.

In Indonesia, option 1 (subsample of PSUs) was deemed the most viable due to budget limitations.

Good auxiliary data are needed for subsampling the PSUs. Moreover, since the primary purpose of phase 2 is to estimate the contribution of the informal sector to GDP, the sectors of national accounts must be well represented in the phase 2 sample. Hence, the PSUs must be stratified according to the sectors of national accounts. This would be straightforward if the HUEMs in the PSUs are homogeneous. Oftentimes, HUEMs in a PSU could come from different sectors of the industry—some are quite prevalent or widespread in many PSUs (e.g., agriculture; wholesale and retail trade; transport, storage, and communications) while others are hard to find (these we will term as sparse sectors).

As a solution, the following rule can be applied in stratifying the HUEMs: If a PSU contains any sparse sector, classify it under the sector that has the least HUEM count. Otherwise, classify it under the sector with the most HUEM count. The first part of the rule is to ensure that sparse sectors will be represented in phase 2. The second part of the rule, which identifies the dominant sector, allows us to develop a subsampling strategy for the PSUs that contain the dominant sector. The application of this rule is further explained in Appendix 2. Only PSUs in the dominant sectors will be subsampled, and all those in the sparse sectors will be included in the phase 2 survey.

Table A2.2 PSU Distribution for LFS and Phase 2 of the Informal Sector Survey: Indonesia

Sector Strata	Banten		Yogyakarta	
	Sakernas	Subsample for Phase 2	*Sakernas*	Subsample for Phase 2
Agriculture	29	10	51	17
Construction	17	17	15	15
Electricity, gas, and water	2	2		
Education	2	2	2	2
Finance	1	1	1	1
Health and social work	3	3	5	5
Hotels and restaurants	8	8	6	6
Manufacturing	6	6	12	12
Mining and quarrying	5	5	9	9
Others	4	4	10	10
Transport, storage, and communications	10	10		
Wholesale and retail trade	36	12	31	10
Total	123	80	142	87

LFS = labor force survey, PSU = primary sampling unit.

This stratification rule requires that the sector of the possible HUEMs in sample PSUs in LFS must be known or can be inferred or estimated. Possible HUEMs are those self-employed or own-account workers. The industry and classification of worker can only be gathered from previous LFS in which the same PSUs and households were selected. The sample design of Indonesia's LFS fulfills this requirement. In Indonesia, the same set of PSUs is surveyed, half of which will have the same households as respondents. Hence, the PSUs can be stratified according to the dominant/sparse sector rule.

As mentioned earlier, because of budget limitations, the ISS was piloted in two provinces (Banten and Yogyakarta). These two provinces were chosen because all the sectors of national accounts were well represented in the distribution of their possible HUEMs from the 2008 February round *Sakernas*. Agriculture and wholesale and retail trade (WRT) were considered the only dominant sectors where subsampling was done.

The survey weight for the phase 2 survey is the product of the survey weights in phase 1 and the inverse of the selection probability of the sampled PSU. The survey weights of respondents in phase 1 are well known since phase 1 is the expanded LFS. In the case of Indonesia, if a HUEM is in a PSU that is classified under the sectors other than agriculture and WRT, its phase 2 survey weight is equal to the phase 1 survey weight. However, the survey weight for a HUEM in a PSU that has been classified under agriculture, say in Banten, will be the phase 1 survey weight of the household that owns it times 29/10 or 2.91; and for those HUEMs in the PSUs under WRT, times 36/12 or 3.0.

Note that the initial survey weight of all HUEMs in a specific PSU will be uniform regardless of the current sectors of the HUEMs. Hence, if a HUEM is in the transport sector in a PSU that has been classified under agriculture in Banten, Indonesia, then that HUEM will have 29/10 or 2.91 as survey weight for phase 2.

Evaluation of the Phase 2 Sampling Design

Since most of the estimates in the phase 2 survey will be derived at the sector level, and this sector may be different from the sector to which the PSUs were classified, it is expected from the discussion in the previous section that survey weights in phase 2 will vary

widely. Wide variation in survey weights may cause a substantial increase in the variance of the estimate and hence, the estimate of the sampling error. It is, therefore, prudent to validate to what extent is the increase in the variance of the estimate at the sector level due to the variation of the survey weights. A rough approximation of contribution of the increase in the variation of weights to the variance of the estimate (Kish 1992) is $1 + L = 1 + cv(w)^2$, where $cv(w)$ is the coefficient of variation of weights.

The contribution of the informal sector to GDP will be computed at the provincial level in Indonesia and hence, the province was set as the domain for the phase 2 survey. Phase 1 survey is *Sakernas* (Indonesia's Labor Force Survey) and the ISS Form 1 that has all the additional questions that screen for the HUEMs, classify informal/formal employment, and ask about social protection issues and household consumption expenditure. Contrary to what was expected, ISS Form 1 was only administered to phase 2 PSUs while *Sakernas* was administered to the full sample. Hence, the survey weights for both ISS Form 1 and phase 2 surveys will be uniform. The HUEM distributions, by sector, from ISS Form 1 and phase 2 survey will be the same. However, if the survey weights need to be trimmed, weighting adjustments to compensate for noncoverage are not possible.

The contribution of the survey weights to the variance of an estimate for both ISS Form 1 and phase 2 surveys, however, is not substantial for all industry in the two pilot provinces (Appendix 2, Table A2.2). Hence, trimming of weights is not required. For Indonesia, the percentage of HUEMs that were correctly classified under the dominant/sparse sector stratification rule do not differ significantly as presented in Appendix Table 3. The multipliers for the HUEMs in the PSUs classified under agriculture and WRT strata in the phase 2 survey weights for Banten and Yogyakarta, Indonesia, are not large and only ranged from 2.9 to 3.1, respectively. Hence, despite the nonhomogeneity of these PSUs, the survey weights did not vary widely.

Table A2.3 Summary Statistics of Survey Weights by Phase 2 Sector, by Province: Indonesia

Industry	No. of HUEMs	Minimum	Mean	Maximum	Standard Deviation	$1+CV^2$
Banten						
Agriculture	689	386	890	2,877	517.59	1.34
Construction	1	421	421	421		
Education	6	395	681	1,364	353.02	1.27
Finance	10	394	518	1,364	298.38	1.33
Health and social work	2	394	408	421	19.09	1.00
Hotels and restaurants	93	386	691	1,947	428.99	1.39
Manufacturing	123	386	658	1,884	389.10	1.35
Mining and quarrying	24	409	544	928	190.94	1.12
Other services	62	386	816	2,781	525.26	1.41
Transport, storage, and communications	43	394	825	2,781	601.73	1.53
Wholesale and retail trade	232	386	805	2,781	508.88	1.40
Yogyakarta						
Agriculture	76	880	2,293	4,257	1,008.32	1.19
Construction	3	1,290	2,279	4,257	1,712.71	1.56
Education	2	1,367	1,393	1,419	36.77	1.00
Finance	16	1,151	1,886	3,873	1,067.89	1.32
Health and social work	4	1,089	1,848	3,798	1,302.81	1.50
Hotels and restaurants	53	1,089	1,832	4,257	1,070.44	1.34
Manufacturing	27	880	1,474	3,873	759.23	1.27
Other services	52	880	1,578	3,870	800.85	1.26
Transport, storage, and communications	86	879	1,989	4,575	1,093.22	1.30
Wholesale and retail trade	226	879	1,836	4,260	1,037.14	1.32

HUEMs = household unincorporated enterprises with at least some market production.

It is, therefore, imperative that the phase 1 survey should cover all the PSUs and that subsampling be done in phase 2 so that trimming and weighting adjustment could be applied when the wide variation of survey weights could cause substantial increase in the variance of an estimate.

Survey Weight

The original sampling design called for the adoption of the *Sakernas* sampling design for phase 1 of the survey and subsampling of the PSUs in phase 2 of the survey. If this design was followed, the final survey weight for phase 1 respondents will be the same as that of the *Sakernas*, while for phase 2 HUEM respondents, the base weight will be the final survey weight of phase 1 respondent (owner of the HUEM) multiplied by the inverse of the PSU selection probability.

When field operations were conducted, phase 1 of the survey was administered only in the PSUs that were subsampled for phase 2. Hence, the final survey weight of phase 1 respondents became the *Sakernas* final survey weight multiplied by the inverse of the selection probability of the PSU of the respondent. The base weight for the phase 2 HUEM respondents is the same: *Sakernas* final survey weight multiplied by the inverse of the selection probability of the PSU of the HUEM respondent. However, adjustments for nonresponse and noncoverage were introduced.

Data validation showed that some HUEMs were not interviewed by enumerators for various reasons, some that should have been HUEMs were considered not HUEMs, and those that should not be HUEMs were interviewed. The summary of these misclassifications and nonresponse is presented in Appendix 2, Table A2.3.

A cell-weighting adjustment was introduced to compensate for these noncoverage and nonresponse occurrences. In the cell-weighting procedure that was implemented, the adjustment cells that were formed were based on the sector of national accounts (first three digits of the International Standard Industrial Classification [ISIC] codes). The adjustment ratio is the total weighted final count of HUEMs based on phase 1 questionnaire to the total weighted final count of HUEMs based on phase 2 questionnaire. The final survey weight for a HUEM in phase 2 is its base weight multiplied by the adjustment ratio. These are available upon request.

Table A2.4 Classification of HUEMs in ISS Forms 1 and 2

Industry	No. of Identified HUEMs in ISS 1	No. of Interviewed HUEMs in ISS 2	No. of Correctly classified HUEMs
Agriculture	774	768	765
Construction	4	5	4
Education	9	8	8
Finance	26	26	26
Health and social work	6	6	6
Hotels and restaurants	147	147	146
Manufacturing	152	151	150
Mining and quarrying	24	24	24
Other services	117	116	114
Transport, storage, and communications	131	130	129
Wholesale and retail trade	467	460	458
Total	1,857	1,841	1,830

HUEMs = household unincorporated enterprises with at least some market production, ISS = informal sector survey.

Notes: Subsequent analysis revealed that the question, "Does the enterprise you own/where you work sell or barter some of its good and/or services?" was misunderstood by some respondents in Form 1 as referring only to tangible products. Consequently, post-cell weighting adjustments were also carried out to account for some service-oriented enterprises that should have been classified as HUEMs but were not due to the misinterpretation of this question.

Informal Sector Survey Forms

Given that the ISS has two phases, the survey questionnaires are also separated into two forms. Below are brief descriptions of each form:

The objectives of the ISS Form 1 (Phase 1) Questionnaire are to

- identify and construct a sampling frame of household unincorporated enterprises engaged at least partially in market production (HUEMs) among the enterprises in which employed persons work;
- provide data for estimating employment in informal sector enterprises; and
- provide data for estimating informal employment.

In this document, the questionnaire items relating to each of these objectives are grouped into three modules: a module on informal employment, a module on the registration and employment size criterion for identifying informal sector enterprises, and a module to identify HUEMs.

Meanwhile, research has shown a clear link between poverty and employment in the informal

Table A2.5 Brief Descriptions of ISS Forms 1 and 2

ISS Form 1 Informal Sector Survey (Phase 1) Questionnaire	This is the Form 1 questionnaire used to interview and record information about the household members who are employed. This questionnaire gathers information on the following: Employment Status, Nature of Employment, Terms of Employment, Social Security Contribution, Paid Leave; Maternity/ Paternity Leave, Termination of Employment, Place of Work, Industry of Enterprise, Legal Organization, Employment Size, Registration, Bookkeeping and Accounting Practices, and Production. This form also incorporates a one-page add-on worksheet that inquires about the household expenditure. This records information about the food and nonfood consumption of the household.
ISS Form 2 HUEM Survey (Phase 2) Questionnaire	This questionnaire records information about HUEMs, such as Identification and General Information, Organization and Status of Business, Employment and Compensation, Production and Sale, Expenditures on Raw Material and Stocks, Capital Expenditure, and Credit Information. The respondents for this form are own-account workers who are owners of the HUEM.

HUEM = household unincorporated enterprise with at least some market production, ISS = informal sector survey.

sector; however, due to lack of data, the following issues have not yet been determined in many countries: (i) the number of working poor, (ii) the number employed in the informal sector, and (iii) the prevalence of poor in the informal sector compared with the formal sector. To address this need for information, the ISS in Indonesia included a one-page household expenditure worksheet in the ISS Form 1. This was incorporated in the questionnaire design chiefly to determine the poverty status of workers so that employment poverty analysis can be performed. Using the data that will be collected and the existing poverty lines in Indonesia, poverty rates, the number of poor, and other poverty indicators will be estimated. With the potential poverty statistics to be generated, it would be possible to determine how many of those working in the informal sector and those engaged in informal employment are poor.

Information in Section IV of the ISS Form 1, the Household Expenditure worksheet, are based on the consumption items available in the National Socioeconomic Survey (*Susenas*) questionnaire. They are divided into two main groups, the food and nonfood expenditures. The reference period for the food expenditure is the previous week, while its total is the sum of all items from 1 to 14. On the other hand, nonfood items are divided into two groups, one pertaining to expenditures during the last month, while the other has the last 12 months as reference period. These are items 16 through 24.

On the other hand, the primary purpose of the ISS Form 2 (HUEM) Questionnaire is to generate data that can be a direct measure of informal production activities. The results of the HUEM Survey will provide the basis for estimating the benchmark gross value added (GVA) for the informal sector and, thus, measure its contribution to the gross domestic product (GDP) of the country. The HUEM Survey is meant to provide the data specifically for the informal sector.

The ISS Form 2 has seven (7) sections:

1. Organization of Business
2. Employment and Compensation
3. Production, Inventory, and Sale
4. Expenditures on Raw Materials and Stock
5. Capital Expenditures
6. Banks, Microfinance Services, and Other Support Structure
7. Problems and Prospects

Since the data that will be collected from the ISS Form 2 or the HUEM survey will be the benchmark of the informal sector GVA, it is imperative that all the items in the questionnaire be filled up completely and carefully. Sections B through E are sections significant for the GVA estimation. Sections F and G are added to collect information in aid of policy making.

Screening of HUEM Survey Respondents

The mixed survey approach administered in Indonesia utilized the ISS Form 1 in the first phase to screen the respondents for the second phase or the HUEM survey. The following questionnaire items from the ISS Form 1 were used to identify the potential HUEMs, whose owners were interviewed in the next phase: (i) employment status, (ii) legal status, (iii) marketed production, and (iv) business records or accounts.

Table A2.6 HUEM Decision Matrix

Employment Status		Legal Status		Marketed Production		Business Records or Accounts
Own-account worker	&	Single proprietorship/ individual business or farm	&	Yes	&	No written accounts
Employer		Others				Informal records for personal use
		Do not know				Simplified accounting format required for tax payment

Meanwhile, the following conditions were applied to determine whether or not the enterprise is a potential HUEM:

Those respondents that satisfied the conditions presented above were evaluated as either owning or working in a potential HUEM and, therefore, were interviewed for the HUEM survey. This assessment was conducted for all the respondents and job numbers. It was necessary that all jobs—whether primary or secondary and regardless if it is the same respondent or not—were screened for the HUEM survey. For example, an employed person may be a formal employee, working as a regular bus driver in a company (his main job), but may also be working as a tricycle driver (his second job). Thus, he can be considered as an own-account worker in this other job. If he receives payment for the transportation services he provides, and the legal status of his business is single proprietorship with no business records or accounts, then his business is a potential HUEM. These considerations were applied in the HUEM surveys conducted; thus, a person with the described characteristics was a respondent in this phase.

It should be noted that, as a rule, the respondent interviewed for the HUEM survey was the owner of the enterprise. This is a strict condition implemented because the respondent must have extensive knowledge of the revenues and expenditures, as well as the production process, of the enterprise to be able to answer the questions in the HUEM.

Appendix 3

Sampling Errors

Table A3.1 Distribution of Jobs by Industry

Province	Industry	Proportion	Linearized Standard Error	95% Confidence Interval	
Yogyakarta	Agriculture	0.44	0.03	0.38	0.50
	Mining and quarrying	0.01	0.00	0.00	0.01
	Manufacturing	0.11	0.01	0.08	0.14
	Electricity, gas, and water	0.00	0.00	0.00	0.01
	Construction	0.06	0.01	0.04	0.07
	Wholesale and retail trade	0.14	0.01	0.12	0.17
	Hotels and restaurants	0.05	0.01	0.03	0.07
	Transport, storage, and communications	0.03	0.00	0.02	0.04
	Finance	0.01	0.00	0.01	0.02
	Education	0.04	0.01	0.03	0.05
	Health and social work	0.01	0.00	0.01	0.01
	Other services	0.09	0.01	0.07	0.11
Banten	Agriculture	0.19	0.03	0.13	0.25
	Mining and quarrying	0.01	0.00	0.00	0.01
	Manufacturing	0.21	0.02	0.17	0.26
	Electricity, gas, and water	0.00	0.00	0.00	0.01
	Construction	0.04	0.01	0.03	0.05
	Wholesale and retail trade	0.20	0.02	0.17	0.24
	Hotels and restaurants	0.04	0.01	0.03	0.06
	Transport, storage, and communications	0.09	0.01	0.07	0.12
	Finance	0.03	0.01	0.02	0.04
	Education	0.04	0.01	0.02	0.05
	Health and social work	0.01	0.00	0.00	0.01
	Other services	0.13	0.02	0.10	0.16

Table A3.2 Number of Jobs by Industry

Province	Industry	Total	Linearized Standard Error	95% Confidence Interval	
Yogyakarta	Agriculture	1,126,174	154,049	821,868	1,430,479
	Mining and quarrying	16,954	9,212	–1,244	35,152
	Manufacturing	279,324	42,787	194,803	363,844
	Electricity, gas, and water	6,941	3,553	–78	13,960
	Construction	140,122	18,766	103,052	177,193
	Wholesale and retail trade	368,601	47,137	275,487	461,714
	Hotels and restaurants	133,291	24,864	84,175	182,407
	Transport, storage, and communications	82,985	12,915	57,472	108,497
	Finance	29,811	6,322	17,323	42,299
	Education	104,593	15,583	73,811	135,375
	Health and social work	22,813	5,018	12,901	32,726
	Other services	235,712	30,272	175,913	295,512
Banten	Agriculture	737,495	149,640	441,899	1,033,091
	Mining and quarrying	30,668	8,615	13,650	47,685
	Manufacturing	832,239	125,667	583,999	1,080,479
	Electricity, gas, and water	13,152	5,287	2,709	23,595
	Construction	170,753	25,947	119,498	222,007
	Wholesale and retail trade	800,584	102,151	598,796	1,002,371
	Hotels and restaurants	174,946	42,862	90,277	259,615
	Transport, storage, and communications	360,736	61,202	239,838	481,633
	Finance	111,412	29,657	52,828	169,995
	Education	153,230	34,935	84,220	222,240
	Health and social work	36,508	10,728	15,315	57,701
	Other services	502,943	76,664	351,502	654,384

Table A3.3 Distribution of Jobs by Employment Status

Province	Employment Status	Proportion	Linearized Standard Error	95% Confidence Interval	
Yogyakarta	Own-account worker	0.20	0.01	0.18	0.22
	Employer with temporary worker	0.22	0.02	0.19	0.25
	Employer with permanent worker	0.04	0.01	0.03	0.05
	Employee	0.26	0.02	0.22	0.29
	Casual employee in agriculture	0.02	0.01	0.01	0.03
	Casual employee in non-agriculture	0.07	0.01	0.06	0.09
	Unpaid worker	0.19	0.02	0.16	0.22
Banten	Own-account worker	0.20	0.02	0.17	0.23
	Employer with temporary worker	0.10	0.01	0.08	0.12
	Employer with permanent worker	0.02	0.00	0.01	0.03
	Employee	0.48	0.03	0.42	0.54
	Casual employee in agriculture	0.05	0.01	0.02	0.07
	Casual employee in non-agriculture	0.06	0.01	0.04	0.08
	Unpaid worker	0.10	0.01	0.08	0.12

Table A3.4 Number of Jobs by Employment Status

Province	Employment Status	Total	Linearized Standard Error	95% Confidence Interval	
Yogyakarta	Own-account worker	510,549	52,907	406,036	615,061
	Employer with temporary worker	558,891	73,729	413,248	704,534
	Employer with permanent worker	104,508	17,546	69,848	139,168
	Employee	649,975	69,865	511,964	787,986
	Casual employee in agriculture	52,524	14,795	23,298	81,749
	Casual employee in non-agriculture	186,240	24,512	137,818	234,661
	Unpaid worker	484,634	67,556	351,185	618,083
Banten	Own-account worker	775,024	97,146	583,122	966,925
	Employer with temporary worker	376,138	60,317	256,990	495,287
	Employer with permanent worker	83,839	17,428	49,413	118,265
	Employee	1,880,726	221,334	1,443,506	2,317,947
	Casual employee in agriculture	188,603	52,075	85,736	291,471
	Casual employee in non-agriculture	231,551	42,724	147,154	315,948
	Unpaid worker	388,783	65,822	258,759	518,807

Table A3.5 Informal Employment Jobs by Province

Province	Proportion	Linearized Standard Error	95% Confidence Interval	
Yogyakarta	0.89	0.01	0.87	0.92
Banten	0.76	0.03	0.71	0.81

Table A3.6 Magnitude of Formal Employment Jobs by Province

Province	Total	Linearized Standard Error	95% Confidence Interval	
Yogyakarta	276,673	36,430	204,710	348,636
Banten	945,931	134,102	681,028	1,210,834

Table A3.7 Magnitude of Formal Employment Jobs by Industry

Province	Industry	Total	Linearized Standard Error	95% Confidence Interval	
Yogyakarta	Agriculture	2,448	1,588	–714	5,610
	Mining and quarrying	1,227	1,227	–1,216	3,670
	Manufacturing	37,680	8,457	20,840	54,520
	Electricity, gas, and water	3,342	2,274	–1,187	7,871
	Construction	7,865	2,984	1,922	13,807
	Wholesale and retail trade	34,477	7,139	20,262	48,693
	Hotels and restaurants	9,768	4,374	1,057	18,478
	Transport, storage, and communications	11,447	4,393	2,699	20,194
	Finance	15,457	4,343	6,810	24,105
	Education	72,666	11,775	49,219	96,112
	Health and social work	18,130	4,028	10,109	26,151
	Other services	62,166	8,804	44,636	79,696
Banten	Agriculture	14,264	11,211	–8,107	36,636
	Mining and quarrying	4,806	2,318	181	9,431
	Manufacturing	446,731	79,658	287,776	605,686
	Electricity, gas, and water	5,395	3,355	–1,301	12,091
	Construction	16,927	5,676	5,600	28,254
	Wholesale and retail trade	63,250	12,703	37,902	88,598
	Hotels and restaurants	21,741	8,655	4,470	39,012
	Transport, storage, and communications	80,665	24,889	31,000	130,329
	Finance	47,928	16,209	15,584	80,271
	Education	56,320	15,867	24,657	87,982
	Health and social work	20,361	8,768	2,865	37,857
	Other services	167,544	35,459	96,787	238,301

Table A3.8 Magnitude of Informal Employment Jobs by Province

Province	Total	Linearized Standard Error	95% Confidence Interval	
Yogyakarta	2,270,647	223,601	1,828,948	2,712,346
Banten	2,978,732	323,752	2,339,197	3,618,268

Table A3.9 Magnitude of Informal Employment Jobs by Industry

Province	Industry	Total	Linearized Standard Error	95% Confidence Interval	
Yogyakarta	Agriculture	1,123,726	104,214	916,210	1,331,241
	Mining and quarrying	15,727	8,720	–1,637	33,091
	Manufacturing	241,644	32,400	177,126	306,161
	Electricity, gas, and water	3,599	1,948	–280	7,478
	Construction	132,257	13,657	105,063	159,452
	Wholesale and retail trade	334,123	32,948	268,516	399,731
	Hotels and restaurants	123,523	20,011	83,677	163,370
	Transport, storage, and communications	71,538	9,779	52,066	91,010
	Finance	14,353	4,096	6,196	22,510
	Education	31,928	5,259	21,456	42,399
	Health and social work	4,683	2,355	–6	9,372
	Other services	173,546	16,928	139,838	207,253
Banten	Agriculture	723,230	101,052	521,584	924,877
	Mining and quarrying	25,862	7,906	10,086	41,637
	Manufacturing	385,508	42,660	300,381	470,636
	Electricity, gas, and water	7,757	3,073	1,625	13,889
	Construction	153,826	19,893	114,129	193,522
	Wholesale and retail trade	737,334	69,084	599,478	875,189
	Hotels and restaurants	153,205	36,315	80,740	225,669
	Transport, storage, and communications	280,071	37,216	205,808	354,333
	Finance	63,484	21,639	20,305	106,663
	Education	96,910	24,238	48,545	145,276
	Health and social work	16,147	6,017	4,140	28,154
	Other services	335,399	43,346	248,904	421,894

Table A3.10 Social Protection for Employee Jobs

Province	Benefits	Proportion	Linearized Standard Error	95% Confidence Interval	
Yogyakarta	Employers pay contribution to the pension fund	0.05	0.01	0.04	0.07
	Receiving paid leave	0.09	0.01	0.07	0.11
	Receiving paid sick leave	0.11	0.01	0.09	0.14
	Receiving paid maternity / paternity leave	0.10	0.01	0.08	0.12
	Post-termination benefits	0.12	0.01	0.10	0.15
Banten	Employers pay contribution to the pension fund	0.10	0.02	0.07	0.13
	Receiving paid leave	0.19	0.02	0.15	0.22
	Receiving paid sick leave	0.23	0.02	0.19	0.27
	Receiving paid maternity / paternity leave	0.19	0.02	0.15	0.23
	Post-termination benefits	0.21	0.02	0.17	0.26

Appendix 4

Measuring Informal Employment (Discussion lifted from Chapter 3 of the *ADB Handbook on Using the Mixed Survey on Measuring Informal Employment and the Informal Sector*)

Informal Employment

Classifying informal employment using the informal sector survey (ISS) data entailed determining the characteristics of the dataset itself and then applying the International Conferences of Labour Statisticians (ICLS) concepts and definitions in consideration of these characteristics. The significance of this type of dataset analysis was acquired from Maligalig et al.'s (2008) results in identifying informal employment in Bangladesh using the 2005–2006 Labor Force Survey (LFS). The methodology developed, that is, cross tabulating variables to determine the properties of the dataset as well as identify the relationships between them, is also an appropriate process to apply in the ISS of Indonesia. In particular, it follows the recommendations of the study of Cuevas et al. (2009) to add questions in *Sakernas* that could efficiently estimate informal employment. Through the series of cross tabulations, the survey questions were examined, the responses validated, and reliable variables to apply in the informal employment decision matrix were identified. The combination of questions used for the cross tabulation analysis is shown in Appendix 4, Table A4.1.

The cross tabulations described the type of dataset and the potential variables to consider for the informal employment decision matrix. To illustrate, the own-account workers are self-employed workers with no employees; thus, for them to have a type of enterprise like a factory/plantation or restaurant/commercial/service chain or hospital/school seems questionable. To further examine this line of reasoning, the type of enterprise was cross-tabulated with the place of work. However, this also resulted in inconsistencies, such as

1. factory or plantation at home with no work space, home with work space, construction site, market, street, vehicle, mobile;
2. bank or insurance company at home with no work space and at construction site;
3. restaurant or commercial or service chain at home with or without work space and at construction site; and
4. hospital or school at home with or without work space; construction site; or with no fixed location/mobile.

There are also instances when combinations of three or four variables were cross-tabulated to further validate the inconsistencies and understand their source. For example, to confirm whether the hypothesis that the enumerators, as well as the respondents, misinterpreted the type of enterprise question, the employment and legal statuses of those working at home with no workspace (place of work) and with a factory/plantation (type of enterprise) were tabulated. This is in response to the observations on the employment status versus type of enterprise and place of work versus type of enterprise cross tabulations. This investigation showed a number of self-employed (own-account workers and employers) respondents who are single proprietors that worked at home in a factory or plantation type of enterprise. These results provide contradictory conclusions. First, a self-employed person cannot have a plantation or factory type of enterprise since he/she is a single worker in the business. And second, it is difficult to imagine a factory or plantation and the home as a workplace of the same business. Similar inconsistencies were also observed in other multi-variable cross tabulations, which may have stemmed from the unfamiliarity of enumerators and respondents to some introduced concepts and misinterpretations of the questions. These are to be expected since the ISS is a new survey;

Table A4.1 Combination of Questions from the 2009 Indonesia ISS Used for the Cross Tabulation Analysis

Question	Description		Question	Description
Q.05	Employment status	versus	Q.17	Type of enterprise
Q.05	Employment status	versus	Q.16	Legal status of enterprise
Q.05	Employment status	versus	Q.28	Bookkeeping practice
Q.05	Employment status	versus	Q.07	Type of contract
Q.05	Employment status	versus	Q.29	Type of payslip
Q.05	Employment status	versus	Q.27	Market enterprise (sell goods or services)
Q.07	Type of contract	versus	Q.29	Type of payslip
Q.14	Place of work	versus	Q.17	Type of enterprise
Q.14	Place of work	versus	Q.16	Legal status of enterprise
Q.28	Bookkeeping practice	versus	Q.22–25	Registration of enterprise
Q.28	Bookkeeping practice	versus	Q.16	Legal status of enterprise
Q.16	Legal status of enterprise	versus	Q.22–25	Registration of enterprise
Q.16	Legal status of enterprise	versus	Q.29	Type of payslip
Q.29	Type of payslip	versus	Q.18	Employment size

Table A4.2a Decision Matrix for Determining Formal and Informal Employment: Employees and Unpaid Family Workers

Criteria		Employment Status			Contract
Informal employment	4	Employee	&	2	Verbal contract
	5	Casual employee in agriculture	&	3	No contract
	6	Casual employee not in agriculture			
	7	Unpaid workers			
Formal employment	4	Employee	&	1	Written contract
	5	Casual employee in agriculture			
	6	Casual employee not in agriculture			

Table A4.2b Decision Matrix for Determining Formal and Informal Employment: Own-Account Workers and Employers

Criteria		Employment Status			Records of Accounts
Informal employment	1	Own-account worker	&	1	No written accounts
				2	Informal records for personal use
	2	Employer assisted by temporary workers/ unpaid worker		3	Simplified accounting format for tax purposes
	3	Employer assisted by permanent workers		5	Others
Formal employment	1	Own-account worker	&	4	With detailed formal accounts
	2	Employer assisted by temporary workers/ unpaid worker			
	3	Employer assisted by permanent workers			

hence, additional care and attention must be applied in analyzing the dataset.

The whole process of determining the properties of the dataset has led to the assessment that the reliable variables to use in classifying the informality of employment for own-account workers and employers are the employment status and bookkeeping practice of the enterprise with the priority on the following answer choices: (i) no written accounts, (ii) informal records, and (iii) simplified accounting practices. On the other hand, for employees, the employment status and type of contract variables are the significant conditions to apply.

Informal Enterprises

Classification of enterprises requires the application of the ICLS conceptual framework, which identified three types of production units, namely, formal enterprises, informal enterprises, and households. Determining the workers that are employed in households poses a difficulty since no single variable or answer choice from the questionnaire may be used. Typically, this variable is available in the employment status query, like in the Philippines, through the answer choice of "Worked in private households." On the other hand, Armenia can identify the households using the legal status variable answer choice of "Private household employing domestic staff."

One of the variables deemed critical in identifying the households in Indonesia is the query, "Does the enterprise you own sell its goods or services?" since households are defined in the framework to be producing exclusively for its own consumption. However, cross tabulations suggested caution in using the variable. Results implied that there may be

respondents that did not fully understand the question in relation to their type of work. For example, the respondents who work in corporations and receive detailed payslips may be employed in a construction company which, in the view of the employee, does not sell any tangible product. Technically, the company "sells" its services to the agency/people/other companies that hire them. But, to an ordinary employee, this concept may not easily be grasped. Hence, when asked if the enterprise sells any of its products or services, the respondent may have answered "No." The same reasoning is hypothesized to those own-account workers and employers who answered "No" to the query but exhibit qualities of owning market-producing enterprises, such as (i) the self-employed worker posting income during the reference period, and/or (ii) the enterprise engaging paid employees for the production during the reference period. The enterprise may have been providing services, which is typically not associated with "selling" of products.

Thus, given the results of the cross tabulations, the dataset was revalidated to determine the consistency of the answers to "selling" query with the other variables that make up the characteristics of each observation. Individual analysis and evaluation of the observations (which answered "No" to the "selling" question) were conducted, and records were revised based on the examination. After each cycle of revisions, the variables are again evaluated. The process is reiterated until no inconsistency is observed when the variables are cross-tabulated. With this methodology, the decision matrices for informal enterprises are formulated as follows:

Table A4.3a Decision Matrix for Determining Formal and Informal Market Enterprises: Own-Account Workers and Employers

Production Unit	Employment Status			Bookkeeping			Sell Good or Service		
Formal enterprise	1	Own-account worker	&	4	With detailed formal accounts	&	1	Yes
	2	Employer with temporary workers						
	3	Employer with permanent workers						
	7	Unpaid family workers						
Informal enterprise	1	Own-account worker	&	1	No written accounts	&	1	Yes
				2	Informal records for personal use			
	2	Employer with temporary workers		3	Simplified accounting format for tax purposes			
	3	Employer with permanent workers		5	Others			
	7	Unpaid family workers	&	1	No written accounting			
				2	Informal records for personal use			
				3	Simplified accounting format for tax purposes			
				5	Others			
Households	1	Own-account worker	&	1	No written accounts	&	1	No
				2	Informal records for personal use			
				3	Simplified accounting format for tax purposes			
				5	Others			

Table A4.3b Decision Matrix for Determining Formal and Informal Market Enterprises and Households: Employees (Regular and Casual)

Production Unit	Employment Status		Place of Work			Payslip			Sell Good or Service		
Formal enterprise	4	Employee				&	1	Yes, with complete information			
	5	Casual employee in agriculture									
	6	Casual employee not in agriculture									
Informal enterprise	4	Employee				&	2	Yes, with simple payslip			
	5	Casual employee in agriculture									
	6	Casual employee not in agriculture					3	No			
Households	4	Employee	&	9	Employer's home	&	2	Yes, with simple payslip	&	2	No
	6	Casual employee not in agriculture					3	No			

Appendix 5

Estimating the Contribution of Informal Sector to GDP (Discussion lifted from Chapter 4 of the *ADB Handbook on Using the Mixed Survey on Measuring Informal Employment and the Informal Sector*)

- Assessment of data quality of ISS Form 2 or the HUEM Survey
  - Completeness of coverage and response
    - There are 11 observations that have no response
    - Some industry have not been covered, or maybe it is because ISS 2 is a household-based survey; for example, electricity, gas, and water supply
    - Too much coverage on agriculture; it is suspected that this is the reason why informal sector agriculture in Yogyakarta was exceeding its gross regional domestic product (GRDP) by 170%.
  - Consistency of response
    - Many inconsistencies are found among variables; for example, the number of paid employee does not correspond to salaries and wages
    - There are many accounting rules that have been violated; it is suspected that this is due to the enumerator's lack of economic-background. For economic-based survey, such as ISS 2, a good sense of economic background is a must, because in many occasions, respondents tend to overestimate their cost and underestimate their revenue.

- Estimation methodology

Measuring the contribution of the informal sector to the total economy is best achieved by estimating its gross value added (GVA) and its share to the total gross domestic product (GDP) of the country. GDP measures the total GVA of all resident institutional units (establishments or enterprises) in the country.

As cited earlier, only the production and income approaches can be applied to the estimation of GVA for the informal sector. The expenditures approach measures only the total final expenditures by type, which cannot be disaggregated into formal and informal.

Production Approach

Output at basic or producers' prices *Equation 1*

Output = Total value of products sold after transformation
- \+ Total value of products sold without transformation
- \+ Own-account consumption
- \+ Own-account capital formation
- – Cost of products sold for resale (wholesale and retail trade)
- \+ Value of services offered
- \+ Changes in inventories (output)

Note: Valuation of gross output, either basic or producer's prices, depends on whether taxes on products is included.

Intermediate inputs at purchaser's prices *Equation 2*

Intermediate inputs = Value of raw materials used
- \+ Fuel, gasoline, and lubricants
- \+ Water
- \+ Electricity
- \+ Rental payments
- \+ Transport services
- \+ Communication expenses
- \+ Non-industrial (production) services
- \+ Repair and maintenance of facilities and equipment
- \+ Other industrial (production) services
- \+ Insurance
- \+ Packaging
- \+ Other costs

GVA at producers' prices *Equation 3*

GVA = Output (producers' prices) – Intermediate inputs (purchaser's prices)

Income Approach

GVA = Compensation of employees (CE) *Equation 4*
- \+ Taxes on production
- – Subsidies on production
- \+ Operating surplus/mixed income

OS = GVA (Production Approach) *Equation 5*
- – Compensation of employees
- – Taxes on production
- \+ Subsidies on production

Output

Section C of the HUEM survey (Production, Inventory, and Sales) provides the basic data to compute for the informal sector HUEM output (Equation 1). It is assumed that prior to estimation, the dataset has already been assessed and edited for item and unit nonresponse, sum of parts not equal to total, etc. Therefore, the totals for items C.2, C.3, C.4, C.5, C.6, and C.7 are assumed to be reliable numbers to work on.

Following the System of National Accounts (SNA) coverage of output, the following HUEM survey items will be utilized to estimate output:

Value of products sold after transformation (Final Goods)	C.2
Value of products sold without transformation	C.3
Value of services offered	C.4
Purchases of goods for resale	D.2.2
Value of products for own-consumption	C.7
Value of own-produced capital assets	E.
Change in inventories	C.5, C.6

Based on the above data items, output for the informal sector HUEMs is operationalized as follows:

Output at basic or producer's price *Equation 6*	
= Total sales of products	C.2+C.3+C.4
\+ Changes in inventories of finished goods and work-in-progress	C5
– Purchases of goods for resale	D.2.2
– Changes in inventory of goods for resale	C.6
\+ Value of own-consumption	C.7
\+ Value of own-produced capital assets	E[18]

[18] Values of own-produced capital assets, as recorded in Section E, will be added to output after obtaining annual of estimates of output.

Intermediate inputs

Items concerning the intermediate inputs are available in Section D (Expenditures on Raw Materials and Stock) of the HUEM survey questionnaire. Not all items under Section D can be considered as intermediate inputs. Thus, the intermediate inputs have to be drawn individually from D.3.

For value of raw materials used, the data given for D.1 is assumed to be the value of raw materials used (D.1) for manufacturing, electricity, gas and water, agriculture, mining, and construction. On the other hand, D.2 is assumed to be the value of purchases of goods for resale during the period.

Intermediate inputs at purchasers' prices *Equation 7*
- = Value of raw materials used
- \+ Fuel, gasoline, and lubricants
- \+ Water
- \+ Electricity
- \+ Rental payments
- \+ Transport services
- \+ Communication expenses
- \+ Non-industrial services
- \+ Repair and maintenance of facilities and equipment
- \+ Other industrial services
- \+ Insurance
- \+ Packaging
- \+ Other costs

The cost of products sold is shown as a deduction from output.

Gross Value Added

Gross value added at producers' prices

GVA = Output – Intermediate inputs *Equation 8*

Under the Income Approach, the following data items are considered:

Salaries and wages, social insurance, bonuses and allowances	B.3.1, D.3.1-3
Taxes on products	D.3.16
GVA	Production Approach

Thus,

GVA = Compensation + Taxes on production + OS Equation 9

$OS = GVA_{Production}$ – Compensation – Taxes on production

Compensation is the sum of salaries and wages, social insurance contributions, and bonuses and allowances. GVA is obtained from the production approach.

- Documentation of Guidelines on Computing Contribution of Informal Sector in Total Economy

Notes on Preliminary Estimation Exercises (Country Report Writing Workshop)

1. The ISS 2 survey weights were recomputed to account for the misunderstanding in the ISS 1 question "*Do you sell goods/services*" and include the enterprises that should have been classified as HUEMs but were not because they answered "No" in this question. Also, in computing for non/under coverage, ISS 2 survey weight adjustments are now computed using weighted number of HUEMs by three-digit subsector in ISS 1 as control totals.

2. To ensure the quality of survey data, different strategies designed to identify questionable entries should be explored. These approaches include eyeballing the data, computation of descriptive statistics, and generation of distributional plots by neighborhood, to identify usual data discrepancies (e.g., missing values, data values falling outside expected range, total is not equal to sum of parts and outliers).

3. As noted from the workshop, it is possible to misclassify a HUEM's activity under an incorrect International Standard Industrial Classification (ISIC). This can be identified by carefully examining the reported ISIC code and the kind of products sold with and without transformation. During the workshop, cleaning of survey data was done especially in agriculture, when upon verification of the ISIC codes and description, it was noted that most of the items under products sold with transformation are under the manufacturing sector. However, kindly note that we should not remove the entire variable from one sector and simply transfer it to another sector (e.g., taking out products sold after transformation and transferring from agriculture, hunting, forestry, fishery to manufacturing) without detailed investigations. Rather, this should be done on a case-to-case basis. Further, utmost care should be taken when transferring the GVA to the appropriate sector considering that agriculture and non-agricultural activities have different reference periods.

4. In the case of the HUEM survey, it is possible to encounter cases where there was hardly any business activity during the reference period. This may be due to the seasonality of production, such as in agriculture (e.g., planting, harvesting, etc.). Similarly, it may be the case wherein outputs are generally works-in-progress, such as growing of crops, timber, livestock raised for food, which are treated as continuous process of production. Conceptually, work-in-progress consists of inventories of goods, held by the HUEM in this case, which have been produced as output but require further processing. Consequently, during a particular reference period, these may not be in the form which can be sold. In particular, when we observe zero or missing output and/or intermediate inputs, we should carefully examine the entire production process of the underlying HUEMs. In particular, when we observe unreasonably small aggregated total output and intermediate input for a particular ISIC group, we need to check if this might have been caused by unaccounted work-in-progress goods. In turn, we may consider availing for the usual imputation procedures using information from neighboring ISIC groups.

5. The issues on possible "misclassification" of economic activities under incorrect industries, especially on agriculture, may be linked with the concept of work-in-progress. In particular, there was a concern raised on the possibility that a respondent whose main activity is agriculture (hence, this is what is reflected from the reported ISIC code) but during the reference period the agricultural goods are currently works-in-progress. If during this period, the respondent diverted his/her attention to other economic activities outside agriculture, we will probably observe incoherent results such that the reported goods sold are not what one would expect given the reported ISIC. This can be confirmed through careful examination of the entire production process of the HUEMs under consideration.

6. To account for imputed rent and the financial intermediation services indirectly measured

(FISIM), the formula of output involves these two concepts. Imputed rent is derived from the reported response on the question, *A.3.1 if you were to rent an office space for your business, how much do you think will be your rental cost?* while FISIM is computed from reported values of interest received and interest paid under Section D.3. In converting these components to annual values, we may examine whether it is reasonable to assume that the imputed rent is constant throughout the year, depending on the industry under consideration.

7. The reported own-produced capital assets should be carefully examined. Depending on the industry or subsector under consideration, some reported own-produced capital assets should be excluded, such as jewelry, residential buildings, residential/inherited land, among other types of assets which are not entirely used for production activities of an enterprise; in the case of land, it is a non-produced asset. Again, this should be done on a case-to-case basis instead of simply dropping an entire variable for a particular ISIC group. During the workshop, there were warehouses that were misclassified under buildings instead of other structures. Since in one of the exercises, we excluded all buildings for agriculture, these warehouses were also unreasonably excluded in the computation of the own-produced capital assets. But in fact, these should have been included because they are used in the production activities.

8. Some respondents may have reported the entire market value of a particular asset instead of imputing only for the value of that portion of the asset which was actually used for the production process (e.g., a respondent may report the entire value of the house although only a small area of the house is used to carry out the enterprise's production activities). In such cases, we can look for other supplementary indicators to impute for the replacement cost of the portion of the asset actually used for production.

9. For a particular HUEM, it is possible to observe negative GVAs. Although this is the case, we should still watch out for data inconsistencies that might have caused this. Hence, it is ideal to examine each component of output and intermediate inputs first before accepting negative GVAs. In particular, look for missing values and confirm whether it should be zero or indeed missing. In addition, watch out for encoding errors. In either case, imputations may be carried out. If even after imputations, aggregated total GVA for a particular ISIC group is still negative, the use of income approach may be explored. Kindly note that an independent computation of the GVA through the income approach would require a certain value of operating surplus or mixed income. A simplifying approach for this case is to work on the assumption that this group of HUEMs is earning at most negligible profits. Consequently, for this group of HUEMs with negative GVA production, we may assume zero mixed income/operating surplus. There is also the possibility of understated or overstated GRDP.

10. When converting estimates of GVA components to annual figures, it may be reasonable to assume that the value of own consumption reported for the survey's reference period is constant throughout the year.

11. There were observations that have missing data on business fluctuation. These should be imputed using the neighborhood approach to be able to compute for annualized GVAs.

12. The seemingly low contribution of the informal sector in the construction sector might have been caused by the misunderstanding in the question, "*Do you sell goods or services?*" Although the survey weights were adjusted to account for this undercoverage, it is possible that we only captured construction HUEMs with low outputs in ISS 2. A suggestion was made on improving the questionnaire for the next survey round. This is considered a limitation of data operations. In the case of Agriculture, Hunting, Forestry and Fishery, further investigations need to be carried out to identify the cause of very low contribution of the informal sector especially in Banten.

Appendix 6

Statistical Tables

Table 2 Number of Informal Jobs by Employment Status, Province, and Production Unit

Province and Production Unit	Employment Status and Nature of Employment								
	Own-account Workers			Employer with Temporary Workers			Employer with Permanent Workers		
	Informal	Formal	Total	Informal	Formal	Total	Informal	Formal	Total
Yogyakarta									
Formal	0	815	815	0	2,824	2,824	0	10,252	10,252
Informal	507,615	0	507,615	556,067	0	556,067	94,256	0	94,256
Household	2,119	0	2,119	0	0	0	0	0	0
Total	509,734	815	510,549	556,067	2,824	558,891	94,256	10,252	104,508
Banten									
Formal	0	6,798	6,798	0	879	879	0	9,201	9,201
Informal	762,771	0	762,771	375,259	0	375,259	74,638	0	74,638
Household	5,455	0	5,455	0	0	0	0	0	0
Total	768,226	6,798	775,024	375,259	879	376,138	74,638	9,201	83,839

Province and Production Unit	Employment Status and Nature of Employment								
	Employee			Casual in Agriculture			Casual in Non-Agriculture		
	Informal	Formal	Total	Informal	Formal	Total	Informal	Formal	Total
Yogyakarta									
Formal	77,308	218,393	295,701	5,126	0	5,126	19,696	1,269	20,965
Informal	318,983	35,292	354,274	46,770	628	47,398	158,075	7,200	165,275
Household	0	0	0	0	0	0	0	0	0
Total	396,290	253,685	649,975	51,896	628	52,524	177,771	8,469	186,240
Banten									
Formal	341,623	752,209	1,093,832	19,751	0	19,751	8,921	0	8,921
Informal	626,881	160,014	786,895	158,259	10,593	168,852	216,392	6,238	222,630
Household	0	0	0	0	0	0	0	0	0
Total	968,504	912,222	1,880,726	178,010	10,593	188,603	225,313	6,238	231,551

Province and Production Unit	Employment Status and Nature of Employment			Total		
	Unpaid Family Worker					
	Informal	Formal	Total	Informal	Formal	Total
Yogyakarta						
Formal	1,513	–	1,513	103,642	233,553	337,196
Informal	483,121	–	483,121	2,164,886	43,120	2,208,006
Household	0	–	0	2,119	0	2,119
Total	484,634	–	484,634	2,270,647	276,673	2,547,320
Banten						
Formal	2,580	–	2,580	372,874	769,087	1,141,961
Informal	386,203	–	386,203	2,600,403	176,845	2,777,248
Household	0	–	0	5,455	0	5,455
Total	388,783	–	388,783	2,978,732	945,931	3,924,663

– = not applicable.

Table 2.1 Population and Labor Force Characteristics by Sex

	Frequency			Percentage	
	Men	Women	Total	Men	Women
Yogyakarta					
Employed in agriculture	364,946	296,000	660,946	55.2	44.8
Formal employment	1,426	394	1,820	78.4	21.6
Informal employment	363,520	295,606	659,126	55.2	44.8
Employed in non-agriculture	737,487	546,333	1,283,821	57.4	42.6
Formal employment	166,430	100,604	267,034	62.3	37.7
Informal employment	571,057	445,729	1,016,787	56.2	43.8
Formal enterprise	54,447	34,299	88,745	61.4	38.6
Informal enterprise	516,611	411,431	928,041	55.7	44.3
Household	0	0	0	0.0	0.0
Total	1,102,434	842,333	1,944,767	56.7	43.3
Banten					
Employed in agriculture	481,650	227,669	709,319	67.9	32.1
Formal employment	10,178	4,086	14,264	71.4	28.6
Informal employment	471,471	223,583	695,054	67.8	32.2
Employed in non-agriculture	1,996,269	1,072,585	3,068,854	65.0	35.0
Formal employment	590,161	338,678	928,839	63.5	36.5
Informal employment	1,406,109	733,906	2,140,015	65.7	34.3
Formal enterprise	236,398	105,467	341,865	69.1	30.9
Informal enterprise	1,169,711	622,984	1,792,695	65.2	34.8
Household	0	5,455	5,455	0.0	100.0
Total	2,477,919	1,300,253	3,778,172	65.6	34.3

Table 2.2.1 Total Number of Jobs by Activity and Production Unit

	Frequency			Percent	
Production Unit	Primary	Secondary	Total	Primary	Secondary
Yogyakarta					
Formal enterprise	330,822	6,374	337,196	98.1	1.9
Informal enterprise	1,613,484	594,521	2,208,006	73.1	26.9
Household	461	1,658	2,119	21.8	78.2
Total	1,944,767	602,553	2,547,320	76.3	23.7
Banten					
Formal enterprise	1,135,626	6,335	1,141,961	99.4	0.6
Informal enterprise	2,637,092	140,156	2,777,248	95.0	5.0
Household	5,455	0	5,455	100.0	0.0
Total	3,778,172	146,491	3,924,663	96.3	3.7

Table 2.2.2 Total Number of Jobs by Nature of Employment and Production Unit

	Nature of Employment				
	Frequency			Percent	
Production Unit	Informal	Formal	Total	Informal	Formal
Yogyakarta					
Formal enterprise	103,642	233,553	337,196	30.7	69.3
Informal enterprise	2,164,886	43,120	2,208,006	98.0	2.0
Household	2,119	0	2,119	100.0	0.0
Total	2,270,647	276,673	2,547,320	89.1	10.9
Banten					
Formal enterprise	372,874	769,087	1,141,961	32.7	67.3
Informal enterprise	2,600,403	176,845	2,777,248	93.6	6.4
Household	5,455	0	5,455	100.0	0.0
Total	2,978,732	945,931	3,924,663	75.9	24.1

Table 2.3.1 Employment by Type of Production Unit and Employment

Employment Status	Production Unit						
	Frequency				Percent		
	Formal	Informal	Household	Total	Formal	Informal	Household
Yogyakarta							
Own-account worker	815	507,615	2,119	510,549	0.2	99.4	0.4
Employer with temporary workers	2,824	556,067	0	558,891	0.5	99.5	0.0
Employer with permanent workers	10,252	94,256	0	104,508	9.8	90.2	0.0
Employee	295,701	354,274	0	649,975	45.5	54.5	0.0
Casual worker in agriculture	5,126	47,398	0	52,524	9.8	90.2	0.0
Casual worker in non-agriculture	20,965	165,275	0	186,240	11.3	88.7	0.0
Unpaid family worker	1,513	483,121	0	484,634	0.3	99.7	0.0
Total	337,196	2,208,006	2,119	2,547,320	13.2	86.7	0.1
Banten							
Own-account worker	6,798	762,771	5,455	775,024	0.9	98.4	0.7
Employer with temporary workers	879	375,259	0	376,138	0.2	99.8	0.0
Employer with permanent workers	9,201	74,638	0	83,839	11.0	89.0	0.0
Employee	1,093,832	786,895	0	1,880,726	58.2	41.8	0.0
Casual worker in agriculture	19,751	168,852	0	188,603	10.5	89.5	0.0
Casual worker in non-agriculture	8,921	222,630	0	231,551	3.9	96.1	0.0
Unpaid family worker	2,580	386,203	0	388,783	0.7	99.3	0.0
Total	1,141,961	2,777,248	5,455	3,924,663	29.1	70.8	0.1

Table 2.4.1 Employment by Type of Production Unit, Nature of Employment, and Sex

Production Unit	Nature of Employment								
	Formal			Informal			Formal +Informal		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Yogyakarta									
Formal enterprise	146,549	87,004	233,553	63,477	40,166	103,642	210,026	127,170	337,196
Informal enterprise	25,672	17,448	43,120	1,271,599	893,287	2,164,886	1,297,271	910,735	2,208,006
Household	0	0	0	922	1,197	2,119	0	1,197	2,119
Total	172,221	104,452	276,673	1,335,998	934,649	2,270,647	1,508,219	1,039,101	2,547,320
Banten									
Formal enterprise	499,917	269,170	769,087	260,469	112,405	372,874	760,386	381,575	1,141,961
Informal enterprise	103,250	73,595	176,845	1,726,758	873,645	2,600,403	1,830,008	947,240	2,777,248
Household	0	0	0	0	5,455	5,455	0	5,455	5,455
Total	603,167	342,764	945,931	1,987,227	991,505	2,978,732	2,590,394	1,334,269	3,924,663

Table 2.4.2 Nature of Employment by Type of Production Unit

Nature of Employment	Production Unit			
	Frequency			Total
	Formal	Informal	Household	
Yogyakarta				
Formal	233,553	43,120	0	276,673
Informal	103,642	2,164,886	2,119	2,270,647
Total	337,196	2,208,006	2,119	2,547,320
Banten				
Formal	769,087	176,845	0	945,931
Informal	372,874	2,600,403	5,455	2,978,732
Total	1,141,961	2,777,248	5,455	3,924,663

Table 2.5 Frequency Distribution of Employed Persons by Nature of Employment, Industry, and Sex

Industry	Nature of Employment				Total	
	Formal		Informal			
	Men	Women	Men	Women	Formal	Informal
Yogyakarta						
Agriculture	2,054	394	662,447	444,005	2,448	1,106,452
Fishing	0	0	11,149	6,125	0	17,274
Mining and quarrying	1,227	0	12,207	3,520	1,227	15,727
Manufacturing	20,823	16,857	138,099	103,545	37,680	241,643
Electricity, gas, and water	3,342	0	2,294	1,305	3,342	3,599
Construction	6,685	1,180	131,300	957	7,865	132,257
Wholesale and retail trade	19,532	14,945	148,468	185,655	34,477	334,123
Hotels	9,768	0	57,098	66,425	9,768	123,523
Transport	7,789	3,658	62,031	9,507	11,447	71,538
Financial intermediation	9,967	5,491	6,188	2,960	15,457	9,148
Real estate	4,493	1,092	15,894	4,003	5,585	19,897
Public administration	35,663	10,152	13,596	4,198	45,815	17,794
Education	39,649	33,017	14,376	17,551	72,666	31,927
Health and social work	6,912	11,218	421	4,262	18,130	4,683
Other comm	4,318	3,369	49,172	30,262	7,687	79,435
Private households	0	3,079	9,582	50,367	3,079	59,949
Others	0	0	1,676	0	0	1,676
Total	172,221	104,452	1,335,998	934,649	276,673	2,270,647
Banten						
Agriculture	6,507	4,086	449,280	222,369	10,593	671,649
Fishing	3,671	0	50,368	1,214	3,671	51,582
Mining and quarrying	4,806	0	24,768	1,094	4,806	25,862
Manufacturing	244,559	202,172	262,492	123,017	446,731	385,508
Electricity, gas, and water	5,395	0	6,543	1,214	5,395	7,757
Construction	15,838	1,089	151,246	2,580	16,927	153,826
Wholesale and retail trade	38,912	24,338	417,351	319,983	63,250	737,334
Hotels	14,631	7,110	81,863	71,342	21,741	153,205
Transport	70,458	10,207	261,139	18,932	80,665	280,071
Financial intermediation	38,732	5,555	16,463	7,107	44,287	23,570
Real estate	25,816	2,946	50,215	17,849	28,762	68,064
Public administration	90,017	27,175	37,344	13,123	117,192	50,467
Education	20,239	36,081	41,245	55,665	56,320	96,910
Health and social work	7,850	12,511	9,085	7,062	20,361	16,147
Other comm	14,210	7,915	90,805	43,804	22,125	134,609
Private households	1,526	1,580	33,053	85,151	3,106	118,204
Others	0	0	3,969	0	0	3,969
Total	603,167	342,764	1,987,227	991,505	945,931	2,978,732

Note: Other comm - other community and personal services.

Table 2.6.1 Employment by Occupation and Nature of Employment

Occupation	Nature of Employment		
	Frequency		
	Formal	Informal	Total
Yogyakarta			
Legislator, senior officials, and managers	11,708	43,811	55,519
Professionals	79,379	43,121	122,500
Technicians and associate professionals	14,491	21,643	36,134
Clerks	53,301	54,117	107,418
Service workers and shop and market sales workers	41,036	423,686	464,722
Skill agricultural and fishery workers	3,606	1,048,939	1,052,545
Craft and related workers	15,898	294,525	310,424
Plant and machine operators and assemblers	19,577	65,330	84,906
Elementary occupations	20,875	275,474	296,349
Armed forces	16,802	0	16,802
Total	**276,673**	**2,270,647**	**2,547,320**
Banten			
Legislator, senior officials, and managers	40,169	48,254	88,423
Professionals	103,344	104,993	208,336
Technicians and associate professionals	72,388	65,933	138,321
Clerks	149,782	101,356	251,137
Service workers and shop and market sales workers	65,788	636,112	701,900
Skill agricultural and fishery workers	9,829	517,227	527,057
Craft and related workers	86,627	286,602	373,229
Plant and machine operators and assemblers	185,458	264,056	449,514
Elementary occupations	206,977	954,200	1,161,176
Armed forces	25,571	0	25,571
Total	945,931	2,978,732	3,924,663

Table 2.6.2 Employment by Occupation and Production Unit

Occupation	Production Unit			
	Frequency		Household	Total
	Formal	Informal		
Yogyakarta				
Legislator, senior officials, and managers	10,705	44,814	0	55,519
Professionals	86,980	35,520	0	122,500
Technicians and associate professionals	18,944	17,190	0	36,134
Clerks	63,933	43,484	0	107,418
Service workers and shop and market sales workers	45,816	418,906	0	464,722
Skill agricultural and fishery workers	15,341	1,035,086	2,119	1,052,545
Craft and related workers	23,630	286,793	0	310,424
Plant and machine operators and assemblers	29,026	55,880	0	84,906
Elementary occupations	26,018	270,331	0	296,349
Armed forces	16,802	0	0	16,802
Total	337,196	2,208,006	2,119	2,547,320
Banten				
Legislator, senior officials, and managers	43,170	45,253	0	88,423
Professionals	125,001	83,335	0	208,336
Technicians and associate professionals	79,706	58,615	0	138,321
Clerks	200,575	50,562	0	251,137
Service workers and shop and market sales workers	65,129	631,316	5,455	701,900
Skill agricultural and fishery workers	17,389	509,668	0	527,057
Craft and related workers	117,108	256,121	0	373,229
Plant and machine operators and assemblers	220,171	229,343	0	449,514
Elementary occupations	248,141	913,035	0	1,161,176
Armed forces	25,571	0	0	25,571
Total	1,141,961	2,777,248	5,455	3,924,663

Table 2.6.3 Informal Employment by Occupation and Production Unit

Occupation	Production Unit			
	Frequency		Household	Total
	Formal	Informal		
Yogyakarta				
Legislator, senior officials, and managers	882	42,929	0	43,811
Professionals	12,882	30,239	0	43,121
Technicians and associate professionals	6,604	15,039	0	21,643
Clerks	18,744	35,372	0	54,117
Service workers and shop and market sales workers	12,881	410,805	0	423,686
Skill agricultural and fishery workers	12,757	1,034,064	2,119	1,048,939
Craft and related workers	11,661	282,864	0	294,525
Plant and machine operators and assemblers	12,470	52,860	0	65,330
Elementary occupations	14,761	260,713	0	275,474
Total	103,642	2,164,886	2,119	2,270,647
Banten				
Legislator, senior officials, and managers	14,584	33,670	0	48,254
Professionals	36,813	68,179	0	104,993
Technicians and associate professionals	19,739	46,194	0	65,933
Clerks	64,601	36,755	0	101,356
Service workers and shop and market sales workers	19,513	611,144	5,455	636,112
Skill agricultural and fishery workers	11,231	505,996	0	517,227
Craft and related workers	41,308	245,294	0	286,602
Plant and machine operators and assemblers	62,707	201,350	0	264,056
Elementary occupations	102,378	851,821	0	954,200
Total	372,874	2,600,403	5,455	2,978,732

Table 2.7.1 Employment by Employment Status, Nature of Employment, and Sex

Employment Status	Nature of Employment					
	Formal			Informal		
	Men	Women	Total	Men	Women	Total
Yogyakarta						
Own-account worker	815	0	815	311,687	198,047	509,734
Employer with temporary workers	1,426	1,398	2,824	385,074	170,993	556,067
Employer with permanent workers	7,393	2,859	10,252	64,729	29,527	94,256
Employee	156,148	97,537	253,685	247,029	149,261	396,290
Casual worker in agriculture	628	0	628	25,569	26,326	51,896
Casual worker in non-agriculture	5,811	2,658	8,469	148,960	28,811	177,771
Unpaid family worker	0	0	0	152,950	331,685	484,634
Total	172,221	104,452	276,673	1,335,998	934,649	2,270,647
Banten						
Own-account worker	2,709	4,089	6,798	559,138	209,088	768,226
Employer with temporary workers	879	0	879	291,301	83,959	375,259
Employer with permanent workers	7,987	1,214	9,201	58,546	16,092	74,638
Employee	581,414	330,809	912,222	677,011	291,492	968,504
Casual worker in agriculture	6,507	4,086	10,593	125,859	52,151	178,010
Casual worker in non-agriculture	3,671	2,567	6,238	175,909	49,404	225,313
Unpaid family worker	0	0	0	99,464	289,319	388,783
Total	603,167	342,764	945,931	1,987,227	991,505	2,978,732

Table 2.9 Number of Production Units of Own-Account Workers and Employers Registered in Tax Agency, by Urbanity and Type of Tax Payment

Employment Status	Enterprises							
	Registered in Tax Agency			Payment				
	Urban	Rural	Total	No Tax Payment	Corporate Tax	Others	Don't Know	Total
Yogyakarta								
Own-account worker	18,065	5,895	23,960	418,919	45,444	34,664	11,522	510,549
Employer with temporary workers	7,208	10,402	17,610	491,710	21,208	17,673	28,300	558,891
Employer with permanent workers	18,979	4,308	23,287	79,183	10,639	14,245	440	104,508
Total	44,252	20,605	64,858	989,812	77,291	66,582	40,262	1,173,947
Banten								
Own-account worker	14,348	7,454	21,802	558,362	69,580	58,319	88,763	775,024
Employer with temporary workers	2,576	879	3,455	294,743	26,104	35,064	20,227	376,138
Employer with permanent workers	18,358	0	18,358	41,366	13,942	26,437	2,094	83,839
Total	35,282	8,333	43,615	894,470	109,627	119,820	111,084	1,235,001

Table 2.10 Employment by Type of Enterprise, Nature of Employment, and Production Unit

Type of Enterprise	Production Unit					Total
	Formal Enterprise			Informal Enterprise	Households	
	Formal	Informal	Total			
Yogyakarta						
Factory	34,931	16,929	51,861	170,853	0	222,714
Bank	9,940	4,314	14,254	409	0	14,663
Restaurant/ commercial	49,356	23,767	73,123	255,918	0	329,041
Construction	2,576	4,789	7,365	89,285	0	96,650
Hospital/school	61,055	10,621	71,676	27,193	0	98,868
Engineering	3,262	1,361	4,623	11,425	0	16,048
Farm/workshop	16,472	20,947	37,419	1,078,229	2,119	1,117,767
Others	55,961	20,914	76,875	574,694	0	651,569
Total	233,553	103,642	337,196	2,208,006	2,119	2,547,320
Banten						
Factory	356,610	162,582	519,192	242,474	0	761,666
Bank	25,178	11,055	36,234	1,287	0	37,521
Restaurant/ commercial	174,470	70,046	244,516	345,362	0	589,877
Construction	31,992	18,799	50,791	92,175	0	142,966
Hospital/school	43,323	19,011	62,334	50,816	0	113,150
Engineering	9,400	5,524	14,924	41,236	0	56,160
Farm/workshop	7,791	12,084	19,875	1,033,572	5,455	1,058,902
Others	120,322	73,773	194,095	970,326	0	1,164,422
Total	769,087	372,874	1,141,961	2,777,248	5,455	3,924,663

Table 2.11.1 Employment by Type of Production, Nature of Employment, and Employment Size of Establishment

Employment Size	Production Unit					
	Formal Enterprise					
	Formal Employment	Informal Employment	Total	Informal Enterprise	Households	Total
Yogyakarta						
1–4	27,095	43,819	70,914	1,835,574	2,119	1,908,607
5–9	26,384	13,369	39,753	238,361	0	278,115
10–19	71,910	18,846	90,756	73,174	0	163,930
20–49	65,181	10,319	75,500	25,630	0	101,130
50–99	40,844	15,936	56,780	24,565	0	81,345
Don't know	2,139	1,353	3,492	10,702	0	14,194
Total	233,553	103,642	337,196	2,208,006	2,119	2,547,320
Banten						
1–4	36,636	23,518	60,154	2,082,412	5,455	2,148,021
5–9	37,523	37,737	75,260	271,068	0	346,328
10–19	97,365	39,506	136,871	181,237	0	318,107
20–49	173,441	75,983	249,423	117,460	0	366,883
50–99	372,737	186,012	558,749	99,753	0	658,502
Don't know	51,384	10,119	61,504	25,318	0	86,822
Total	769,087	372,874	1,141,961	2,777,248	5,455	3,924,663

Table 2.11.2 Employment by Employment Size of Establishment, Nature of Employment, and Urbanity

Employment Size	Formal Employment			Informal Employment		
	Urban	Rural	Total	Urban	Rural	Total
Yogyakarta						
1–4	28,769	9,679	38,448	777,353	1,092,806	1,870,159
5–9	31,708	5,040	36,748	154,216	87,150	241,367
10–19	54,924	27,794	82,717	48,965	32,247	81,213
20–49	54,989	12,108	67,097	22,989	11,044	34,032
50–99	38,232	11,291	49,523	23,085	8,736	31,822
Don't know	2,139	0	2,139	3,736	8,319	12,055
Total	210,762	65,911	276,673	1,030,344	1,240,303	2,270,647
Banten						
1–4	35,387	23,237	58,624	1,019,897	1,069,499	2,089,396
5–9	35,062	32,547	67,609	120,194	158,525	278,719
10–19	100,579	28,642	129,221	118,315	70,571	188,886
20–49	183,973	23,314	207,287	121,043	38,554	159,597
50–99	405,313	19,019	424,332	209,557	24,613	234,170
Don't know	48,419	10,439	58,858	17,168	10,795	27,963
Total	808,733	137,198	945,931	1,606,174	1,372,558	2,978,732

Table 2.12 Employment by Legal Organization, Nature of Employment, and Sex

Legal Organization	Nature of Employment					
	Formal			Informal		
	Men	Women	Total	Men	Women	Total
Yogyakarta						
Single proprietorship	31,821	12,393	44,214	1,211,143	846,873	2,058,015
Partnership	8,168	3,738	11,906	9,453	4,445	13,898
Corporation	50,210	33,557	83,767	27,169	18,385	45,554
Cooperative	2,605	2,014	4,618	4,121	1,553	5,674
Others	74,411	49,022	123,433	71,354	59,562	130,917
Don't know	5,006	3,728	8,734	12,758	3,831	16,589
Total	172,221	104,452	276,673	1,335,998	934,649	2,270,647
Banten						
Single proprietorship	84,955	63,596	148,551	1,446,393	701,019	2,147,411
Partnership	13,277	1,366	14,643	25,061	7,803	32,864
Corporation	390,703	216,470	607,172	263,403	95,083	358,486
Cooperative	7,317	0	7,317	3,992	2,947	6,939
Others	87,839	58,873	146,712	131,596	119,322	250,918
Don't know	19,076	2,460	21,536	116,783	65,332	182,115
Total	603,167	342,764	945,931	1,987,227	991,505	2,978,732

Table 2.13.1 Employment by Place of Work and Nature of Employment

Place of Work	Nature of Employment				
	Frequency			Percentage	
	Formal	Informal	Total	Formal	Informal
Yogyakarta					
Home with no work space	12,025	226,626	238,651	5.04	94.96
Home with work space	2,490	87,748	90,238	2.76	97.24
Fixed location away from home	154,151	694,841	848,993	18.16	81.84
Farm	2,494	669,569	672,063	0.37	99.63
Workplace of client	5,232	40,823	46,055	11.36	88.64
Construction site	29,475	108,309	137,784	21.39	78.61
Market	9,336	103,047	112,383	8.31	91.69
Street	7,407	70,049	77,455	9.56	90.44
Employer's home	3,865	114,618	118,483	3.26	96.74
Others	421	5,161	5,582	7.54	92.46
Vehicle	3,341	87,914	91,255	3.66	96.34
No fixed location/mobile	46,436	61,943	108,378	42.85	57.15
Total	276,673	2,270,647	2,547,320	10.86	89.14
Banten					
Home with no work space	22,552	253,005	275,557	8.18	91.82
Home with work space	24,256	188,399	212,655	11.41	88.59
Fixed location away from home	525,156	691,176	1,216,332	43.18	56.82
Farm	10,593	591,630	602,223	1.76	98.24
Workplace of client	10,213	58,005	68,218	14.97	85.03
Construction site	312,232	282,305	594,537	52.52	47.48
Market	9,681	155,103	164,784	5.87	94.13
Street	8,010	164,364	172,374	4.65	95.35
Employer's home	4,466	98,329	102,794	4.34	95.66
Others	2,354	110,152	112,506	2.09	97.91
Vehicle	0	293,460	293,460	0.00	100.00
No fixed location/mobile	16,419	92,804	109,223	15.03	84.97
Total	945,931	2,978,732	3,924,663	24.10	75.90

Table 2.14.1 Employment by Urbanity and Age Group

Age Group	Frequency			Percentage		Frequency			Percentage	
	Urban	Rural	Total	Urban	Rural	Urban	Rural	Total	Urban	Rural
	Yogyakarta					Banten				
15–19	32,991	19,698	52,689	62.6	37.4	155,513	71,047	226,560	68.6	31.4
20–24	107,383	57,938	165,321	65.0	35.1	314,632	125,674	440,306	71.5	28.5
25–29	145,575	102,441	248,016	58.7	41.3	396,292	186,961	583,253	68.0	32.1
30–34	198,895	196,027	394,923	50.4	49.6	317,822	190,082	507,904	62.6	37.4
35–39	154,686	126,706	281,392	55.0	45.0	329,652	219,889	549,541	60.0	40.0
40–44	176,643	146,762	323,405	54.6	45.4	283,362	205,203	488,565	58.0	42.0
45–49	111,210	149,671	260,881	42.6	57.4	241,556	157,155	398,711	60.6	39.4
50–54	138,780	122,400	261,180	53.1	46.9	183,435	113,466	296,901	61.8	38.2
55–59	56,030	123,557	179,587	31.2	68.8	81,826	76,991	158,817	51.5	48.5
60–over	116,561	254,075	370,636	31.5	68.6	105,562	146,259	251,821	41.9	58.1
Total	1,238,755	1,299,276	2,538,031	48.8	51.2	2,409,652	1,492,726	3,902,378	61.8	38.3

Table 2.14.2 Employment by Nature of Employment and Age Group

Age Group	Frequency			Percentage		Frequency			Percentage	
	Formal	Informal	Total	Formal	Informal	Formal	Informal	Total	Formal	Informal
	Yogyakarta					Banten				
15–19	7,893	44,796	52,689	15.0	85.0	53,602	172,958	226,560	23.7	76.3
20–24	36,953	128,368	165,321	22.4	77.7	181,295	259,011	440,306	41.2	58.8
25–29	45,193	202,823	248,016	18.2	81.8	221,607	361,646	583,253	38.0	62.0
30–34	43,918	351,005	394,923	11.1	88.9	157,926	349,978	507,904	31.1	68.9
35–39	36,101	245,292	281,392	12.8	87.2	102,935	446,606	549,541	18.7	81.3
40–44	27,543	295,862	323,405	8.5	91.5	67,224	421,342	488,565	13.8	86.2
45–49	39,486	221,395	260,881	15.1	84.9	81,055	317,656	398,711	20.3	79.7
50–54	23,901	237,278	261,180	9.2	90.9	48,861	248,040	296,901	16.5	83.5
55–59	12,183	167,404	179,587	6.8	93.2	17,278	141,539	158,817	10.9	89.1
60–over	3,502	367,134	370,636	0.9	99.1	10,631	241,191	251,821	4.2	95.8
Total	276,673	2,261,358	2,538,031	10.9	89.1	942,414	2,959,965	3,902,378	24.2	75.9

Table 2.14.3 Informal Employment by Production Unit and Age Group

Age Group	Production Unit				Percentage		
	Formal	Informal	Household	Total	Formal	Informal	Household
Yogyakarta							
15–19	5,924	46,765	0	52,689	11.24	88.76	0.00
20–24	45,267	120,054	0	165,321	27.38	72.62	0.00
25–29	57,737	190,280	0	248,016	23.28	76.72	0.00
30–34	46,567	348,356	0	394,923	11.79	88.21	0.00
35–39	45,500	235,892	0	281,392	16.17	83.83	0.00
40–44	35,386	288,019	0	323,405	10.94	89.06	0.00
45–49	45,600	214,085	1,197	260,881	17.48	82.06	0.46
50–54	33,290	227,890	0	261,180	12.75	87.25	0.00
55–59	16,635	162,952	0	179,587	9.26	90.74	0.00
60–over	5,290	364,424	922	370,636	1.43	98.32	0.25
Total	337,196	2,198,717	2,119	2,538,031	13.29	86.63	0.08
Banten							
15–19	39,392	187,168	0	226,560	17.39	82.61	0.00
20–24	201,445	238,860	0	440,306	45.75	54.25	0.00
25–29	247,751	334,136	1,366	583,253	42.48	57.29	0.23
30–34	194,222	309,593	4,089	507,904	38.24	60.95	0.81
35–39	152,592	396,950	0	549,541	27.77	72.23	0.00
40–44	101,899	386,666	0	488,565	20.86	79.14	0.00
45–49	94,508	304,203	0	398,711	23.70	76.30	0.00
50–54	74,515	222,386	0	296,901	25.10	74.90	0.00
55–59	25,342	133,475	0	158,817	15.96	84.04	0.00
60–over	9,206	242,615	0	251,821	3.66	96.34	0.00
Total	1,140,872	2,756,052	5,455	3,902,378	29.24	70.62	0.14

Table 2.15.1 Employment by Level of Education, Employment Status, and Sex

Education Level	Employment Status										Total	
	Employees		Own-account Worker		Employer		Unpaid Family Worker		Casual Worker			
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Yogyakarta												
No education	394	4,209	8,401	20,758	44,599	27,637	3,166	58,723	4,716	9,136	61,276	120,463
Pre-primary	23,707	15,696	62,349	33,248	83,752	29,317	14,494	49,806	25,917	11,659	210,219	139,726
Primary	41,600	28,898	65,350	51,736	131,263	69,374	41,110	97,201	60,013	21,829	339,336	269,038
Junior HS	55,216	23,019	56,385	39,470	53,985	25,277	24,378	43,451	39,934	6,853	229,898	138,069
Vocational JHS	4,336	1,263	2,327	902	2,419	2,158	1,323	3,268	1,022	562	11,427	8,153
Senior HS	93,744	34,294	44,754	27,423	59,059	18,750	29,428	45,995	23,588	5,007	250,573	131,468
Vocational SHS	95,438	58,036	43,685	11,540	53,749	21,843	32,490	25,071	22,041	2,354	247,404	118,843
College	25,833	36,123	11,571	8,124	9,143	4,096	3,704	3,157	2,062	395	52,312	51,895
University	62,909	45,260	17,680	4,847	20,652	6,325	2,857	5,013	1,676	0	105,774	61,445
Total	403,177	246,798	312,502	198,047	458,621	204,777	152,950	331,685	180,968	57,795	1,508,219	1,039,101
Banten												
No education	16,560	3,282	20,545	11,161	25,139	11,687	2,138	22,522	12,453	21,841	73,318	70,493
Pre-primary	97,844	37,686	111,909	54,622	112,308	31,913	12,390	90,889	97,096	40,476	431,548	255,586
Primary	195,612	110,183	188,718	53,515	110,849	17,254	26,888	94,087	132,881	40,600	654,949	315,638
Junior HS	201,504	115,113	85,247	35,832	40,359	4,910	29,861	32,667	39,406	4,199	396,376	192,721
Vocational JHS	16,246	2,581	12,387	7,218	2,709	3,723	3,870	4,606	4,734	0	39,946	18,128
Senior HS	288,629	121,721	99,124	24,811	27,620	14,141	5,391	20,867	18,101	0	438,863	181,540
Vocational SHS	217,613	89,680	32,739	20,171	24,034	12,753	13,917	19,745	3,480	0	291,783	142,349
College	60,408	65,294	8,469	1,214	2,570	4,884	1,151	2,569	3,795	1,092	76,393	75,053
University	164,011	76,762	2,709	4,633	13,124	0	3,858	1,367	0	0	183,702	82,762
Total	1,258,425	622,301	561,847	213,177	358,712	101,265	99,464	289,319	311,946	108,208	2,590,394	1,334,269

Notes: HS = high school, JHS = junior high school, SHS = senior high school.

Table 2.15.2 Employment by Level of Education, Employment Status, and Nature of Employment

Education Level	Employment Status										Total	
	Employees		Own-account Worker		Employer		Unpaid Family Worker		Casual Worker			
	Informal	Formal	Informal	Formal	Informal	Formal	Informal	Formal	Informal	Formal	Informal	Formal
Yogyakarta												
No education	4,603	0	29,158	0	72,236	0	61,889	–	13,852	0	181,739	0
Pre-primary	39,009	394	95,597	0	113,069	0	64,300	–	37,576	0	349,551	394
Primary	65,366	5,132	117,085	0	200,637	0	138,311	–	78,928	2,913	600,329	8,045
Junior HS	66,738	11,497	95,460	394	76,230	3,031	67,829	–	44,809	1,978	351,067	16,900
Vocational JHS	2,143	3,456	3,229	0	4,577	0	4,591	–	956	628	15,496	4,084
Senior HS	79,141	48,897	72,177	0	76,787	1,022	75,422	–	26,802	1,793	330,329	51,712
Vocational SHS	90,688	62,786	55,225	0	73,726	1,866	57,561	–	23,031	1,364	300,231	66,016
College	19,505	42,450	19,695	0	11,447	1,792	6,861	–	2,457	0	59,965	44,242
University	29,097	79,072	22,106	421	21,612	5,365	7,870	–	1,255	421	81,941	85,279
Total	396,290	253,685	509,734	815	650,322	13,076	484,634	–	229,666	9,097	2,270,647	276,673
Banten												
No education	16,324	3,518	31,706	0	36,826	0	24,660	–	34,294	0	143,810	3,518
Pre-primary	116,138	19,393	166,531	0	142,801	1,420	103,279	–	127,122	10,451	655,870	31,263
Primary	227,868	77,927	238,144	4,089	127,224	879	120,975	–	167,100	6,380	881,311	89,275
Junior HS	172,800	143,818	121,079	0	45,269	0	62,527	–	43,605	0	445,280	143,818
Vocational JHS	8,074	10,753	1,9605	0	5,142	1,290	8,476	–	4,734	0	46,031	12,043
Senior HS	153,438	256,912	122,645	1,290	39,127	2,634	26,258	–	18,101	0	359,568	260,836
Vocational SHS	118,137	189,155	52,910	0	36,787	0	33,662	–	3,480	0	244,977	189,155
College	54,055	71,646	9,683	0	6,303	1,151	3,720	–	4,887	0	78,649	72,797
University	101,670	139,102	5,923	1,419	10,418	2,706	5,225	–	0	0	123,236	143,227
Total	968,504	912,222	768,226	6,798	449,897	10,080	388,783	–	403,323	16,831	2,978,732	945,931

Notes: HS = high school, JHS = junior high school, SHS = senior high school, – = not applicable.

Table 2.17.1 Employment by Employment Status, Production Unit, and Sex (Excluding Agriculture)

Employment Status	Production Unit					
	Formal Enterprise		Informal Enterprise		Household	
	Men	Women	Men	Women	Men	Women
Yogyakarta						
Employee	182,116	112,205	206,689	127,092	0	0
Own-account worker	815	0	146,526	136,017	0	0
Employer	7,393	4,257	91,805	96,036	0	0
Unpaid family worker	0	1,513	55,524	85,852	0	0
Others	9,686	3,328	132,016	22,277	0	0
Total	200,010	121,303	632,559	467,274	0	0
Banten						
Employee	721,059	362,804	470,294	253,912	0	0
Own-account worker	2,709	4,089	483,564	195,648	0	5,455
Employer	8,866	1,214	155,771	87,436	0	0
Unpaid family worker	0	2,580	67,062	144,658	0	0
Others	4,971	3,950	166,273	44,854	0	0
Total	737,605	374,637	1,342,963	726,508	0	5,455

Table 2.17.2 Total Number of Jobs by Nature of Employment

Nature of Employment	Frequency			Percentage		
	Yogyakarta	Banten	Total	Yogyakarta	Banten	Total
All Sectors						
Formal	276,673	945,931	1,222,604	10.9	24.1	18.9
Informal	2,270,647	2,978,732	5,249,379	89.1	75.9	81.1
Total	2,547,320	3,924,663	6,471,983	100.0	100.0	100.0
Non-agriculture Sector						
Formal	274,225	931,667	1,205,892	19.3	29.2	26.2
Informal	1,146,921	2,255,502	3,402,423	80.7	70.8	73.8
Total	1,421,146	3,187,169	4,608,315	100.0	100.0	100.0

Table 3.1 Gross Value Added in Formal and Informal Sectors by Industry

Industry	Gross Value Added			
	Rp Million		Percentage	
	Formal	Informal	Formal	Informal
Yogyakarta				
Agriculture	702,491	5,652,953	11.1	89.0
Fishing				
Mining and quarrying	173,400	141,084	55.1	44.9
Manufacturing	1,718,806	3,787,244	31.2	68.8
Electricity, gas, and water	560,316	0	100.0	0.0
Construction	4,394,676	3.735.30	99.2	0.8
Wholesale and retail trade	1,639,871	1,857,157	46.9	53.1
Hotels and restaurants	3,236,668	1,502,320	68.3	31.7
Transport, storage, and communications	3,307,972	493,541	87.0	13.0
Financial intermediation	1,201,235	313	100.0	0.0
Real estate	1,586,973	1,322,820	54.5	45.5
Public administration	5,766,984	0	100.0	0.0
Education	1,119,599	30,419	97.0	3.0
Health and social work		4,685		
Other community, social, and personal services	564,242	22,342	47.5	52.6
Private households		52,297		
Others		550,170		
Total	**25,973,232**	**15,454,080**	**62.7**	**37.3**
Banten				
Agriculture	1,408,656	9,802,043	12.6	87.4
Fishing				
Mining and quarrying	168,560	0	100.0	0.0
Manufacturing	54,995,007	2,445,672	95.7	4.3
Electricity, gas, and water	5,272,730	0	100.0	0.0
Construction	4,027,500	641,484	86.3	13.7
Wholesale and retail trade	8,129,439	14,797,264	35.5	64.5
Hotels and restaurants	2,130,258	2,605,750	45.0	55.0
Transport, storage, and communications	11,632,626	1,597,957	87.9	12.1
Financial intermediation	1,894,384	30,591	98.4	1.6
Real estate	2,150,690	1,399,859	60.6	39.4
Public administration	4,179,163	0	100.0	0.0
Education	970,416	19,217	80.4	19.6
Health and social work		217,202		
Other community, social, and personal services	708,181	0	27.8	72.2
Private households		201,438		
Others		1,633,891		
Total	**97,667,609**	**35,392,367**	**73.4**	**26.6**

Rp = rupiah.

Table 3.2 Formal and Informal Sectors' Contribution to GDP by Agriculture and Non-Agriculture Sector Segregation

Sector	Rp Million		Percentage	
	Formal**	Informal	Formal**	Informal
Yogyakarta				
Agriculture	702,490	5,652,953	11.05	88.95
Non-agriculture	25,270,741	9,801,127	72.05	27.95
Banten				
Agriculture	1,408,656	9,802,043	12.57	87.43
Non-agriculture	96,258,953	25,590,324	79.00	21.00

Notes: Formal** = formal sector + households, GDP = gross domestic product, Rp = rupiah.

Table 3.3 Labor Productivity

Industry	Gross Value Added (Rp million)			
	Formal**	Informal	Formal**	Informal
	Yogyakarta		Banten	
Agriculture	39.02	5.10	47.40	13.85
Fishing				
Mining and quarrying	141.32	8.97	26.66	0.00
Manufacturing	32.56	16.72	98.40	8.95
Electricity, gas, and water	120.58	0.00	1037.53	0.00
Construction	435.11	0.28	194.25	4.28
Wholesale and retail trade	40.14	5.67	135.47	19.98
Hotels and restaurants	340.63	12.14	82.22	17.48
Transport, storage, and communications	184.12	7.59	118.88	6.08
Financial intermediation	59.67	0.07	38.36	1.66
Real estate	257.68	68.46	56.94	23.70
Public administration	116.35	0.00	30.29	0.00
Education	11.56	1.15	10.17	2.51
Health and social work				
Other community, social, and personal services	48.96	4.45	31.73	7.07
Private households				
Others				

Notes: Formal** = formal sector + households, Rp = rupiah.

Table 4.1 Descriptive Statistics of an Informal Enterprise Production by Industry

Industry	Informal Enterprise Production (Rp Thousands)								
	Revenue			Intermediate Costs			Capital Expenditure		
	Minimum	Average	Maximum	Minimum	Average	Maximum	Minimum	Average	Maximum
Yogyakarta									
Agriculture	0	9,337	1,109,658	4	1,679	524,159	0	22	1,620
Fishing	30	15,781	91,467	19	3,935	31,160	2	19	57
Mining and quarrying	678	6,363	29,175	19	522	5,491	0	3	25
Manufacturing	74	34,775	331,864	14	22,665	317,568	0	26	751
Electricity, gas, and water									
Construction	7,157	7,157	7,157	2,147	2,147	2,147	301	301	301
Wholesale and retail trade	424	52,829	1,019,403	87	14,270	686,268	0	16	950
Hotels and restaurants	109	35,713	358,255	13	21,238	179,869	0	55	890
Transport, storage, and communications	473	18,877	181,827	11	6,223	46,869	0	8	130
Financial intermediation	493	493	493	179	179	179	0	0	0
Real estate	515	14,072	32,280	180	22,514	303,120	0	130	441
Public administration									
Education	370	6,423	20,628	61	1,151	4,126	8	130	700
Health and social work	820	2,491	4,163	95	149	203	0	2	4
Other community, social, and personal services	138	3,205	20,545	2	776	3,896	0	1	5
Private households	185	5,892	13,442	9	1,570	4,818	0	56	422
Others	84	10,450	80,765	8	3,004	38,434	0	36	1,205
Total	0	14,924	1,109,658	2	6,802	686,268	0	54	1,620
Banten									
Agriculture	170	23,605	163,100	31	6,450	62,223	0	26	350
Fishing	1,792	13,056	28,844	80	2,587	6,029	0	10	49
Mining and quarrying									
Manufacturing	177	82,127	2,053,168	312	52,422	1,684,359	0	23	490
Electricity, gas, and water									
Construction	5,422	971,179	1,936,935	1,162	650,436	1,299,711	0	20	79
Wholesale and retail trade	424	52,829	1,019,403	87	14,270	686,268	0	16	950
Hotels and restaurants	2,841	121,171	1,722,326	1,410	85,888	939,679	0	6	88
Transport, storage, and communications	359	25,625	372,322	60	11,624	295,830	0	9	45
Financial intermediation	3,441	23,068	42,695	1,319	8,159	14,998	47	59	71
Real estate	3,351	48,877	162,803	276	26,901	128,047	2	93	500
Public administration									
Education	5,463	11,754	18,044	780	2,145	3,510	9	9	9
Health and social work	13,519	41,968	125,334	306	937	2,507	0	10	21
Other community, social, and personal services									
Private households	63	18,893	58,051	11	7,453	32,580	0	10	161
Others	29	57,072	1,159,940	7	9,433	201,612	0	10	35
Total	29	114,709	2,053,168	7	67,593	1,684,359	0	23	950

Rp = rupiah.

Table 4.2.1 Reasons of an Informal Enterprise Owner for Not Applying for a Bank Loan by Administrative Unit (%)

Province	Reasons for Not applying for a financial loan						
	Procedures Too Complicated	High Interest Rate	High Collateral	Available Loans Don't Correspond to Needs	Not Interested	Do Not Need Loans	Others
Yogyakarta	12.88	10.76	9.99	1.27	24.61	21.02	19.47
Banten	35.08	18.94	8.96	1.45	14.29	7.63	13.64

Table 4.2.2 Knowledge of Microfinance Services by Administrative Unit (%)

Province	Knowledge of microfinance services					
	Through Word of Mouth	Through Professional Environment	Through Associations	Through Visit to Institution	Through Advertisements	Others
Yogyakarta	78.88	4.78	8.41	0.33	5.61	1.99
Banten	62.20	16.63	7.10	2.25	9.23	2.59

Table 4.3 Type of Assistance Needed by HUEMs

Type of Assistance		Yogyakarta			Banten		
		No Answer	Yes	No	No Answer	Yes	No
1	Technical training	0	134,195	1,020,051	1,116	286,176	909,437
2	Training in organizational and financial management	0	105,221	1,049,026	3,811	196,339	996,579
3	Assistance in obtaining supplies	0	347,242	807,005	3,811	429,165	763,752
4	Access to modern machines	0	118,716	1,035,531	3,811	377,085	815,833
5	Access to loans	0	264,084	890,163	2,696	681,774	512,260
6	Access to information on the market	0	220,507	933,740	3,811	385,503	807,415
7	Access to large business orders	0	114,433	1,039,814	3,811	214,984	977,934
8	Registration of business	0	15,101	1,139,145	3,811	26,302	1,166,616
9	Advertising of new products/services	0	39,690	1,114,556	3,811	58,679	1,134,239
10	Others	0	138,878	1,015,369	4,729	61,892	1,130,109

HUEMs = household unincorporated enterprises with at least some market production.

Appendix 7

Informal Sector Survey Form 1 Questionnaire: English Version

ISS Form 1

BPS Statistics Indonesia

THE INFORMAL SECTOR SURVEY

(LISTING OF EMPLOYED PERSONS 10 YEARS OLD AND OVER)

CONFIDENTIAL

SECTION I. LOCATION IDENTIFICATION			
1	Province		☐☐
2	Regency/Municipality *)		☐☐
3	Sub-Regency		
4	Village *)		
5	Village Category	*Urban - 1 Rural - 2*	☐
6	a. Census Block Code		
	b. Sub-Census Block Code		
7	Serial Number of Sampled Sakernas		☐☐☐☐☐
8	Serial Number of Sampled Household		☐☐
9	Name of Household Head		

SECTION II. ENUMERATORS AND SUPERVISORS			
1	ID Number of Enumerator :	☐☐☐☐	
2	Name of Enumerator : _____	Enumeration Date : _____	Signature of Enumerator: _____
3	Name of Supervisor: _____	Supervision Date : _____	Signature of Supervisor: _____

SECTION III: INFORMAL SECTOR AND EMPLOYMENT

Serial No. (Copy from Section III, Column 1 of SAKERNAS)	Name of employed person (Copy from Section III, Column 2 of SAKERNAS)	Job Number	What is your occupation?	ISOC Codes	What is your employment status last week? (Enter code)	What is the nature of your employment? If Column 05= 1, 2, 3, and 7 go to column 14 (Enter code)	Ask column 07-13 if column 05 = 4, 5, and 6						
							Are the terms of your employment covered by a written contract? (Enter code)	Does your employer pay for your contribution to the pension fund? 1 - Yes 2 - No 3 - Don't know (Enter code)	Do you benefit from paid leave/ or from compensation instead of leave? 1 - Yes 2 - No 3 - Don't know (Enter code)	In case of incapacity to work due to health reasons, would you benefit from paid sick leave? 1 - Yes 2 - No 3 - Don't know (Enter code)	In case of a birth of a child, would you be given the opportunity to benefit from paid maternity/paternity leave? 1 - Yes 2 - No 3 - Don't know (Enter code)	If there is due cause, could your employment be terminated by your employer without advance notice? 1 - Yes 2 - No 3 - Don't know (Enter code)	In case of termination of employment (either initiated by you or your employer) would you receive the benefits and compensation specified in the existing labor laws? 1 - Yes 2 - No 3 - Don't know (Enter code)
(01)	(02)	(03)	(04)	(04a)	(05)	(06)	(07)	(08)	(09)	(10)	(11)	(12)	(13)

Codes for Column 05 (Employment Status)

1 - Own account worker
2 - Employer assisted by temporary workers/unpaid worker
3 - Employer assisted by permanent workers
4 - Employee
5 - Casual employee in agriculture
6 - Casual employee not in agriculture
7 - Unpaid workers

Codes for Column 06 (Nature of Employment)

1 - Permanent job/business
2 - Short-term or seasonal or casual work
3 - Worked for different employer on day-to-day or week-to-week

Codes for Column 07 (Contract)

1 - Yes, I have a written contract for long-term employment
2 - Yes, I have a written contract for short-term employment
3 - No, I only have a verbal contract
4 - No, I do not have a contract

Serial No. (Copy from Section III, Column 1 of SAKERNAS)	Job Number	Place of Work	Industry Enterprise		Legal Organization		Employment Size				Registration					Production
		Where do you mainly undertake your work? (Enter code)	What is the kind of business/ industry of this work?	ISIC Codes	What is the legal status/ organization of the enterprise where you work? (Enter code)	Type of Enterprise: In which type of enterprise do you work? (Enter code)	How many persons (including yourself) usually work in the place where you work/your business/your production unit? Total	Male	Female	How many are paid employees? Enter the total number	Under which form is the enterprise, in which you work, registered? Tax agency 1 - Yes 2 - No 3 - Don't know (Enter code)	Business Registration, local govt 1 - Yes 2 - No 3 - Don't know (Enter code)	Business Registration, national govt 1 - Yes 2 - No 3 - Don't know (Enter code)	Social security agency 1 - Yes 2 - No 3 - Don't know (Enter code)	What is the type of tax payment by the enterprise? (Enter code)	Does the enterprise you own/where you work sell or barter some of its goods and/or services? 1 - Yes 2 - No (Enter code)
(01)	(03)	(14)	(15)	(15a)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)

Codes for Column 14 (Place of work)

Fixed Premises
1 - At home with no special work space
2 - At home with work space inside/attached to the home
3 - Business premises with fixed location independent from home
4 - Farm or individual agricultural /subsidiary plot
5 - Home or workplace of the client
6 - Construction site
7 - Market, bazaar stall, trade fair
8 - Street pavement or highway with fixed post
9 - Employer's home
10 - Others (specify) _____

No fixed premises
11 - Transport vehicle
12 - No fixed location (e.g., mobile, door-to-door; street w/o fixed post)

Codes for Column 16 (Legal Status/ Organization)
1 - Single proprietorship/individual business or farm
2 - Partnership
3 - Corporation (stock or non-stock; non-profit)
4 - Cooperative
5 - Others (specify) _____
6 - Don't know

Codes for Column 17 (Type of Enterprise)
1 - Factory or plantation
2 - Bank or insurance company
3 - Commercial/restaurant/service chain
4 - Construction company
5 - Hospital or school
6 - Engineering firm
7 - Farm, small workshop/ garage/shop, mobile
8 - Others (specify) _____

Codes for Column 26 (Type of Tax Payment)
1 - No tax payment
2 - Corporate tax
3 - Other types of taxes (e.g., lump-sum tax, special regime tax, patent, retribution)
4 - Don't know

Serial No. (Copy from Section III, Column 1 of SAKERNAS)	Name of employed person (Copy from Section III, Column 2 of SAKERNAS)	Job Number	Bookkeeping and Accounting Practices		Do you have other jobs?	TO BE FILLED-UP BY THE ENUMERATOR					What is the full name and address/location of your enterprise?
			Ask Column 28 if Column 05 = 1, 2, 3, and 7	**Ask Column 29 if Column 05 = 4, 5, and 6**	If "YES" enter the number, go to page 2 Column 03	If the entry in Column 05 is either code 1, 2, or 3 enter "O". Otherwise enter "X".	If the entry in Column 16 is either code 1, 5, or 6, enter "O". Otherwise, enter "X".	If entry in Column 27 is code 1, enter "O". Otherwise enter "X".	If entry in Column 28 is either code 1, 2, or 3, enter "O". Otherwise enter "X".	Put a check mark (√) if the entries in Columns 31 to 34 are all "O" and go to Column 36.	***If place of work is in fixed business premise outside of housing unit, write complete name and address.*** ***Otherwise, write "Housing Unit".*** ***Go to next job of employed person/next employed person. If this is the last person or job, proceed to Section IV. After completing ISS Form 1, continue with ISS Form 2 interviews for each IS identified and marked in Column 35.*** ***(Write the name of the business (if applicable)/Name of operator)***
			How does your enterprise/ business maintain its records or account? (Enter code)	Do you get a payslip? (Enter code)	If "NO" enter "0", go to next employed person/ household (Enter code)						
(01)	(02)	(03)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)
											Name: Address:
											Name: Address:
											Name: Address:
											Name: Address:
											Name: Address:
											Name: Address:
											Name: Address:
											Name: Address:
											Name: Address:
											Name: Address:

Codes for Column 28 (Bookkeeping)

1 - No written accounts kept
2 - Informal records for personal use
3 - Simplified accounting format required for tax payment
4 - Detailed formal accounts (balance sheet)
5 - Others (specify)

Codes for Column 29 (Payslip)

1 - Yes, with complete information
2 - Yes, simple pay slip
3 - No

SECTION IV. HOUSEHOLD EXPENDITURE			
I.A. FOOD EXPENDITURE (1)	**Last Week (Rp) (2)**	**Last Month (Rp) (3)**	**12 Months Ago (Rp) (4)**
1. **Cereals**			
a. Rice			
b. Other (corn, white flour, rice flour, corn flour, etc)			
2. **Tuber** (cassava, sweet potato, potato, dried cassava chip, taro, sago, etc)			
3. **Fish/Shrimp**			
a. Fresh fish			
b. Salted/preserved fish			
4. **Meat** (beef/buffalo/lamb/mutton/ham/chicken, entrails, liver, spleen, shredded dried meat, dried meat, etc)			
5. **Egg And Milk**			
a. Chicken/duck/quail egg			
b. Fresh milk, sweetened condensed milk, powdered milk, etc			
6. **Vegetables** (spinach, swamp cabbage, cucumber, carrot, string bean, green bean, union, Chili, tomato, etc)			
7. **Pulses** (peanut/mungbean/ soybean/ kidney bean/ lima bean/ cashew nut, tofu, fermented soybean sauce, peanut expeller cake, etc)			
8. **Fruits** (orange, mango, apple, durian, rambutan, snakefruit, lanzon, pineapple, water melon, banana, papaya, etc)			
9. **Oil and Fat** (coconut oil,/frying oil, coconut butter, etc)			
10. **Beverage Flavour** (granulated sugar, palm sugar, tea, coffee, cocoa, syrup, etc)			
11. **Spices** (salt, candle nut, coriander, pepper, fish paste, soybean sauce, monosodium glutamate, etc)			
12. **Other consumption**			
a. Noodle, dry/wet noodle, white noodle, macaroni			
b. Other (crisp, crisp chip, etc)			
13. **Prepared food and beverages**			
a. **Prepare food** (bread, biscuits, wet cake, porridge, meat ball, mix vegetables, plate of rice and side dish, etc)			
b. **Non alcoholic beverages** (soft drink, syrup ice, lemonade, mineral water, etc),			
c. **Alcoholic beverages** (beer, wine, and other alcoholic drink)			
14. **Tobacco and betel**			
a. Cigarette (clove cigarette, menthol cigarette, cigar)			
b. Other (betel, tobacco, areca nut, etc)			
15. **Total food (Item 1 to Item 14)**			
I.B. NON FOOD EXPENDITURE			
16. **Housing and household facility**			
a. Rent, value of imputed rent, house rent estimate (own-home, free, official property, etc)			
b. Electricity bill, water, gas, kerosene, wood, etc			
c. Handphone pulse, public telephone, house telecommunication, post materials, etc			
17. **Miscellaneous goods and services**			
a. Soaps, cosmetics, hair treatment/face care, Kleenex, etc			
b. Transportation, gasoline, diesel fuel, lubricating oil			
c. Other services (sopir, housekeeping, hotel, etc)			
18. **House maintenance and repairs**			
19. **Health expenses** (hospital, puskesmas, practice doctor, traditional healer, medicines, etc)			
20. **Education expenses** (entry/registration fee, tuition, uang daftar ulang, scouts, handicraft, course fee, etc)			
21. **Clothing, footwear, head gear** (ready-made clothes, material clothes, shoes, hat, etc)			
22. **Durable goods** (household appliance, tools, kitchen ware, amusement tools, sport equipment, expensive jewellery/imitation jewellery, vehicles, umbrellas, watches, cameras, telephone installment expenses)			
23. **Taxes, retribution, and insurance**			
a. Taxes (building and land tax, vehicle tax)			
b. Retribution			
c. Health insurance			
d. Others (another insurance, traffic ticket, income tax, etc)			
24. **Festivities and ceremonies without food** (wedding, circumsion, b-day, religious festival, trad ceremony, etc)			
ITEMS 25 TO 29 ARE FOR ENUMERATORS ONLY			
25. **Total Non Food (Last Month) (Item 16 Item 17)**			
26. **Total Non Food (Last 12 Months) (Item 18 Item 24)**			
27. **Average of monthly food expenditure (Item 15 x 30/7)**			
28. **Average of monthly non food expenditure (Last 12 months) (Item 26 column 4/ 12)**			
29. **Average of monthly household expenditure (Item 25 + Item 27 + Item 28)**			
30. **The largest income of household** (from household member with the largest income)			
a. Main industry			
b. Status of worker 0. receiver income 1. employer 2. entrepreneur 3. Other			

Appendix 8

Informal Sector Survey Form 1 Questionnaire: Bahasa Version

SSI-1

Waktu mulai ☐☐☐☐

Waktu selesai ☐☐☐☐

SURVEI
SEKTOR INFORMAL 2009
(LISTING UNTUK PEKERJA BERUMUR 10 TAHUN KE ATAS)

RAHASIA

I. PENGENALAN TEMPAT			
1.	PROVINSI		☐☐
2.	KABUPATEN/KOTA *)		☐☐
3.	KECAMATAN		☐☐☐
4.	DESA/KELURAHAN *)		☐☐☐
5.	KLASIFIKASI DESA/KELURAHAN	PERKOTAAN -1 PERDESAAN -2	☐
6.	a. KODE BLOK SENSUS		
	b. KODE SUB BLOK SENSUS		
7.	KODE SAMPEL SAKERNAS		☐☐☐☐☐
8.	NOMOR RUMAH TANGGA SAMPEL		☐☐
9.	NAMA KEPALA RUMAH TANGGA		

II. KETERANGAN PETUGAS			
1.	NOMOR ID PENCACAH:	☐☐☐☐	
2.	NAMA PENCACAH:	TANGGAL PENCACAHAN:	TANDA TANGAN: .....
3.	NAMA KOORDINATOR TIM:	TANGGAL PEMERIKSAAN:	TANDA TANGAN: .....

*) *Coret yang tidak perlu*

BLOK III. SEKTOR INFORMAL DAN PEKERJAAN

Nomor: (SALIN NO. URUT ART DARI DAFTAR SAK 09-AK BLOK V UNTUK ART YANG R10A ADA - ISIAN)	Nama pekerja (SALIN NAMA ART DARI DAFTAR SAK09-AK BLOK V, NAMA UNTUK R10A ADA ISIAN)	Apakah jenis pekerjaan/jabatan Anda selama seminggu yang lalu?			Apakah status pekerjaan (*NAMA*) selama seminggu yang lalu?	Apakah sifat pekerjaan Anda selama seminggu yang lalu?	Tanyakan Kol. (7) - (13) jika Kol. (5) = 4, 5, atau 6						
		No. urut peker-jaan	Uraian	Kode KBJI			Apakah mempu-nyai kontrak kerja?	Apakah perusahaan/majikan menyediakan dana pensiun?	pesangon jika berhenti dari pekerjaan?	kompen-sasi jika tidak masuk kerja karena sakit?	kompensasi melahirkan?	Jika ada permasa-lahan, apakah Anda bisa diberhenti-kan tanpa pemberita-huan sebelum-nya?	Dalam kasus PHK/mengun durkan diri, apakah Anda mendapatkan kompen-sasi sesuai dengan undang-undang ketenaga-kerjaan?
						Jika Kol (5)= 1,2,3, atau 7 lanjutkan ke Kol. 14		Ya 1 Tidak 2 Tidak tahu 3	Ya 1 Tidak 2 Tidak tahu 3	Ya 1 Tidak 2 Tidak tahu 3	Ya 1 Tidak 2 Tidak tahu 3	Ya 1 Tidak 2 Tidak tahu 3	Ya 1 Tidak 2 Tidak tahu 3
					(Kode)	(Kode)	(Kode)	(Kode)	(Kode)	(Kode)	(Kode)	(Kode)	(Kode)
(1)	(2)	(3)	(4)	(4.a)	(05)	(06)	(07)	(08)	(09)	(10)	(11)	(12)	(13)
				☐☐☐☐									
				☐☐☐☐									
				☐☐☐☐									
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				☐☐☐☐									
				☐☐☐☐									

Kode untuk Kolom 5

Berusaha sendiri	1
Berusaha dibantu buruh tidak tetap/buruh tidak dibayar	2
Berusaha dibantu buruh tetap/buruh dibayar	3
Buruh/karyawan/pegawai	4
Pekerja bebas di pertanian	5
Pekerja bebas di non pertanian	6
Pekerja keluarga	7

Kode untuk Kolom 6

Pekerja tetap	1
Pekerja paruh waktu atau musiman atau pekerja bebas	2
Bekerja untuk orang yang berbeda-beda dari hari ke hari atau dari minggu ke minggu	3

Kode untuk Kolom 7

Ya, kontrak kerja tertulis	1
Ya, kontrak kerja secara lisan	2
Tidak ada kontrak kerja	3

Nomor: (SALIN NO. URUT ART DARI DAFTAR SAK09-AK BLOK V UNTUK ART YANG R10A ADA ISIAN)	No. urut pekerjaan	Tempat Bekerja	Perusahaan		Organisasi Resmi		Jumlah Pekerja				Pendaftaran Perusahaan					Produksi
		Dimana lokasi utama tempat usaha Anda?	Apa lapangan usaha/bidang pekerjaan Anda yang tercantum di Kol. (14)?	Kode KBLI	Apa status resmi perusaha-an tempat Anda bekerja?	Jenis Perusa-haan: Apa jenis perusa-haan tempat Anda bekerja?	Berapa orang (termasuk Anda) yang biasanya bekerja di tempat Anda bekerja? Total	Laki-laki	Perem-puan	Berapa banyak pekerja yang dibayar? Isikan jumlah (total)	Dimana perusahaan/usaha Anda tercatat? Kantor pajak	Pemerin-tah daerah	Pemerin-tah pusat	Kantor Jaminan Sosial Tenaga Kerja (Jamsos-tek)	Apa tipe pem-bayaran pajak oleh peru-sahaan Anda?	Apakah perusahaan tempat Anda bekerja menjual atau barter beberapa barang atau jasa?
		(Kode)			(Kode)	(Kode)					Ya 1 Tidak 2 Tidak Tahu 3 (Kode)	Ya 1 Tidak 2 Tidak Tahu 3 (Kode)	Ya 1 Tidak 2 Tidak Tahu 3 (Kode)	Ya 1 Tidak 2 Tidak Tahu 3 (Kode)	(Kode)	Ya 1 Tidak 2 (Kode)
(1)	(3)	(14)	(15)	(15.a)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																

Kode untuk Kolom 14

* **Tempat tetap**

Di rumah dengan tidak ada ruangan khusus	1
Di rumah dengan tempat bekerja di luar	2
Tempat usaha dengan lokasi tetap, pisah dengan rumah	3
Ladang atau lahan pertanian sendiri	4
Rumah atau tempat kerja dari rekan pelanggan	5
Lokasi konstruksi/bangunan	6
Pasar, bazaar, pekan raya	7
Jalan, trotoar dengan tempat tetap	8
Rumah majikan	9

* **Tempat tidak tetap**

Kendaraan	10
Lokasi yang tidak tetap, contohnya berpindah-pindah, dari pintu ke pintu, jalan tanpa lokasi yang tetap	11
Lainnya, sebutkan:	12

Kode untuk Kolom 16

Perusahaan perorangan	1
Kemitraan	2
Perusahaan (saham atau tidak ada saham; nirlaba)	3
Koperasi	4
Lainnya, sebutkan:	5
Tidak tahu	6

Kode untuk Kolom 17

Pabrik atau perkebunan	1
Bank/Perusahaan asuransi	2
Komersial/restoran/perusahaan jasa	3
Perusahaan konstruksi	4
Rumah sakit/sekolah	5
Perusahaan teknik	6
Ladang, toko kecil/garasi/toko, kaki lima	7
Lainnya, sebutkan:	8

Kode untuk Kolom 26

Tidak ada pajak	1
Pajak perusahaan	2
Tipe pajak lainnya (Retribusi)	3
Tidak tahu	4

Nomor (SALIN NO. URUT ART DARI DAFTAR SAK09-AK BLOK V UNTUK R10A ADA ISIAN)	Nama pekerja (SALIN NAMA ART DARI DAFTAR SAK09-AK BLOK V, NAMA UNTUK R10A ADA ISIAN)	No urut pekerjaan	Pembukuan dan Akuntansi		Apakah Anda memiliki pekerjaan lain? **Jika "Ya" isikan jumlahnya lanjut ke Halaman 2 Kolom 3.** **Jika "Tidak" isikan "0" lanjut ke ART yang bekerja/ rumah tangga berikutnya.**	Diisi oleh Pencacah					Tuliskan nama dan alamat perusahaan. **Jika perusahaan mempunyai lokasi tetap dan berada di luar rumah, tuliskan nama dan alamat lengkapnya.** **Lainnya tuliskan "di rumah".** **Jika responden merupakan orang terakhir atau jenis pekerjaan yang terakhir, lanjutkan ke Blok IV.** **Setelah selesai dengan Daftar SSI-1, lanjutkan dengan wawancara Daftar SSI-2 untuk setiap sektor informal yang teridentifikasi dan ditandai "✓" pada Kolom 35.**
			Tanyakan Kol. (28) jika Kol. (5) = 1, 2, 3, atau 7	Tanyakan Kol. (29) jika Kol. (5) = 4, 5, atau 6							
			Bagaimana perusahaan Anda melakukan pembukuan barang maupun keuangan? (Kode)	Apakah Anda memperoleh slip gaji? (Kode)		**Jika isian Kolom 5 adalah 1, 2, atau 3 isikan "O", yang lainnya "X".**	**Jika isian Kolom 16 adalah 1, 5 atau 6 isikan "O", yang lainnya "X".**	**Jika isian Kolom 27 adalah 1 isikan "O", yang lainnya "X".**	**Jika isian Kolom 28 adalah 1, 2 atau 3 isikan "O", yang lainnya "X".**	**Beri tanda cek "✓" dan nomor urut jika isian Kolom 31-34 semuanya "O", dan lanjutkan ke Kolom 36**	
(1)	(2)	(3)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)
											Nama: Alamat:
											Nama: Alamat:
											Nama: Alamat:
											Nama: Alamat:
											Nama: Alamat:
											Nama: Alamat:
											Nama: Alamat:
											Nama: Alamat:
											Nama: Alamat:
											Nama: Alamat:

Kode untuk Kolom 28

Tidak ada pembukuan tertulis	1
Ada catatan tetapi untuk keperluan sendiri	2
Ada pembukuan untuk keperluan pembayaran pajak	3
Pembukuan lengkap	4
Lainnya, sebutkan:	5

Kode untuk Kolom 29

Ya, dengan informasi lengkap	1
Ya, dengan nota pembayaran sederhana	2
Tidak	3

IV. PENGELUARAN RUMAH TANGGA

A. PENGELUARAN UNTUK MAKANAN SELAMA SEMINGGU TERAKHIR [BERASAL DARI PEMBELIAN, PRODUKSI SENDIRI, DAN PEMBERIAN]	Jumlah (Rp)	Satu Bulan Terakhir (Rp)	12 Bulan Terakhir (Rp)
(1)	(2)	(3)	(4)
1. **Padi-padian**			
a. Beras			
b. Lainnya (jagung, terigu, tepung beras, tepung jagung, dll.)			
2. **Umbi-umbian** (ketela pohon, ketela rambat, kentang, gaplek, talas, sagu, dll.)			
3. **Ikan/udang/cumi/kerang**			
a. Segar/basah			
b. Asin/diawetkan			
4. **Daging** (daging sapi/kerbau/kambing/domba/babi/ayam, jeroan, hati, limpa, abon, dendeng, dll)			
5. **Telur dan susu**			
a. Telur ayam/itik/puyuh			
b. Susu murni, susu kental, susu bubuk, dll			
6. **Sayur-sayuran** (bayam, kangkung, ketimun, wortel, kacang panjang, buncis, bawang, cabe, tomat, dll.)			
7. **Kacang-kacangan** (kacang tanah/hijau/kedele/merah/tunggak/mete, tahu, tempe,tauco, oncom, dll.)			
8. **Buah-buahan** (jeruk, mangga, apel, durian,rambutan, salak, duku, nanas, semangka,pisang, pepaya, dll.)			
9. **Minyak dan lemak** (minyak kelapa/goreng, kelapa, mentega, dll.)			
10. **Bahan minuman** (gula pasir, gula merah, teh, kopi, coklat, sirup, dll.)			
11. **Bumbu-bumbuan** (garam, kemiri, ketumbar, merica, terasi, kecap, vetsin, dll.)			
12. **Konsumsi lainnya**			
a. Mie instant, mie basah, bihun, makaroni/mie kering			
b. Lainnya (kerupuk, emping, dll.)			
13. **Makanan dan minuman jadi**			
a. **Makanan jadi** (roti, biskuit, kue basah,bubur, bakso, gado-gado, nasi rames, dll.)			
b. **Minuman non alkohol** (Soft drink, essirop, limun, air mineral, dll)			
c. **Minuman mengandung alkohol** (bir, anggur, dan minuman keras lainnya)			
14. **Tembakau dan sirih**			
a. Rokok (rokok kretek, rokok putih, cerutu)			
b. Lainnya (sirih, pinang, tembakau, danlainnya)			
15. **Jumlah Pengeluaran Makanan (Rincian 1 s.d. 14)**			
B. PENGELUARAN BUKAN MAKANAN (BERASAL DARI PEMBELIAN, PRODUKSI SENDIRI DAN			
16. **Perumahan dan fasilitas rumah tangga**			
a. Sewa, kontrak, perkiraan sewa rumah (milik sendiri, bebas sewa, dinas), dan lain-lain			
b. Pemeliharaan rumah dan perbaikan ringan			
c. Rekening listrik, air, gas, minyak tanah, kayu bakar, dll.			
d. Rekening telepon rumah, pulsa HP, telepon umum, wartel, benda			

IV. PENGELUARAN RUMAH TANGGA			
A. PENGELUARAN UNTUK MAKANAN SELAMA SEMINGGU TERAKHIR [BERASAL DARI PEMBELIAN, PRODUKSI SENDIRI, DAN PEMBERIAN]	**Jumlah (Rp)**	**Satu Bulan Terakhir (Rp)**	**12 Bulan Terakhir (Rp)**
(1)	(2)	(3)	(4)
17. **Aneka barang dan jasa**			
a. Sabun mandi/cuci, kosmetik, perawatan rambut/muka, tissue dll			
b. Biaya kesehatan (rumah sakit, puskesmas, dokter praktek, dukun, obat-obatan, dan lainnya)			
c. Biaya pendidikan (uang pendaftaran, SPP, POMG/BP3, uang pangkal/daftar ulang, pramuka, prakarya, kursus, dan lainnya)			
d. Transportasi, pengangkutan, bensin, solar, minyak pelumas			
e. Jasa lainnya (gaji sopir, pembantu rumah tangga, hotel, dll)			
18. **Pakaian, alas kaki, dan tutup kepala** (pakaian jadi, bahan pakaian, sepatu, topi, dan lainnya)			
19. **Barang tahan lama** (alat rumah tangga, perkakas, alat dapur, alat hiburan (elektronik), alat olahraga, perhiasan, kendaraan, payung, arloji, kamera, HP, pasang telepon, pasang listrik, barang elektronikdll.)			
20. **Pajak, pungutan, dan asuransi**			
a. Pajak (PBB, pajak kendaraan)			
b. Pungutan/retribusi			
c. Asuransi kesehatan			
d. Lainnya (Asuransi lainnya, tilang, PPh, dll)			
21. **Keperluan pesta dan upacara/kenduri tidak termasuk makanan** (perkawinan, ulang tahun, khitanan, upacara keagamaan, upacara adat, dan lainnya)			
22. **Jumlah Pengeluaran Bukan Makanan (Rincian 16 s.d. Rincian 21)**			
23. **Rata-rata pengeluaran makanan sebulan (Rincian 15 x 30/7)**			
24. **Rata-rata pengeluaran bukan makanan sebulan** $\frac{\text{(Rincian 22 Kolom 3)}}{12}$			
25. **Rata-rata pengeluaran rumah tangga sebulan (Rincian 23 + Rincian 24)**			
26. **Sumber penghasilan terbesar rumah tangga** (pilih dari art dengan penghasilan terbesar)			
a. Lapangan usaha [Kode lihat Blok III Kol (15) yang Kol. (3)=1]			
b. Status pekerjaan 0. Penerima pendapatan 1. Buruh/karyawan 2. Pengusaha 3. Lainnya			

Appendix 9

Informal Sector Survey Form 2 Questionnaire: English Version

ISS Form 2

Time Started

Time Ended

BPS Statistics Indonesia

THE INFORMAL SECTOR SURVEY (ISS)

CONFIDENTIAL

I. LOCATION IDENTIFICATION			
1	Province		
2	Regency/Municipality *)		
3	Sub-Regency		
4	Village *)		
5	Village Category	*Urban - 1 Rural - 2*	
6	a. Census Block Code		
	b. Sub-Census Block Code		
7	Serial Number of Sampled Sakernas		
8	Serial Number of Sampled Household		
9	Name of HUEM Owner		

II. ENUMERATORS AND SUPERVISORS			
1	ID Number of Enumerator :		
2	Name of Enumerator : _____	Enumeration Date : _____	Signature of Enumerator: _____
3	Name of Supervisor: _____	Supervision Date : _____	Signature of Supervisor: _____

SECTION A. ORGANIZATION OF BUSINESS

A.1. What is the main industry (NAME) (product made and/or sold/service provided for pay) of your business? (Copy from ISS-1 column 15)

_____ **ISIC** ☐☐☐☐

A.2. In what year was this business established? ☐☐☐☐

A.3. In which type of premises do you conduct this business activity? (Copy from ISS-1 Column 14)

Fixed premises

At home with no special work space	1	***Proceed to OB.3.1***
At home with work space inside/attached to the home	2	
Business premises with fixed location independent from home	3	
Farm or individual agriculture/subsidiary plot	4	***Proceed to OB.4***
Home or workplace of the client	5	
Construction site	6	
Market, bazaar stall, trade fair	7	
Street, pavement or highway with fixed post	8	
Employer's home	9	

No fixed premises

Transport vehicle	10
No fixed location (e.g., mobile, door-to-door, street w/o fixed post)	11
Others (specify) _____	12

A.3.1 If you were to rent an office space for your business, how much do you think will be your rental cost?

(Rupiah) ☐☐☐☐☐☐☐☐

A.4. In addition to the main activity you described above, do you carry out other activities in this place of business?

Yes, specify _____ 1 No 2

A.5. Do you have other places of business where you also conduct your main activity?

Yes 1 No 2 → ***Skip to OB6***

E.5.1. How many other places? ☐☐

A.6. Is your business registered in any of the following? (Copy from ISS-1 Columns 22-25)

	YES	NO	NOT KNOW
OB.6.1. Tax agency	1	2	3
OB.6.2. Business registration, local gov't	1	2	3
OB.6.3. Business registration, nat'l gov't	1	2	3
OB.6.4. Social security agency	1	2	3

A.7. Do you have a bank account in the name of this business?

Yes 1 No 2

A.8. What type of bookkeeping and account practices do you keep for this business? (Copy from ISS-1 Column 28)

No written records are kept	1
Informal records for personal use	2
Simplified accounting format required for tax payment	3
Detailed formal accounts (balance sheets)	4
Others (specify) _____	5

A.9. Do you run a business here or in other locations which is different from this main activity?

Yes 1 No 2 → *Skip to section B*

A.9.1. How many other places? ☐☐

SECTION B. EMPLOYMENT AND COMPENSATION

B.1. How many persons, including yourself, worked in your business even for just an hour during the last week of operation?

Total number of employees ☐☐

How many paid workers? ☐☐

B.2.1. How many days did they work in the last month? ☐☐

B2.2. How many days did your business operated in the last month? ☐☐

B.3. Including yourself, list the characteristics of those who worked regularly in the business you operated. (last 6 months of operation for agriculture; last month of operation for non-agriculture)

No.	Name	Sex	Age (yrs)	Status	Contract	Total working hours	Total working days	Payment	Wages and salaries (In Rupiah)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									

B.3.1. Total for the last month/last 6 months (Rupiah) ☐☐☐☐☐☐☐☐

Codes for Sex

1- Male
2- Female

Codes for Status

1- Own account worker
2- Employer assisted by temporary workers/ unpaid worker
3- Employer assisted by permanent workers
4- Employee
5- Casual employee in agriculture
6- Casual employee not in agriculture
7- Unpaid workers

Codes for Contract

1- Operator
2- Written contract without fixed duration
3- Written contract with fix ed duration
4- Verbal agreement
5- On trial/probation
6- No contract

Codes for Payment

1- Fixed weekly salary
2- Fixed weekly salary
3- Daily or per hour of work
4- Per job/task based
5- Commission
6- Profit share
7- In kind payment
8- No payment

B.4. Worker's Benefits (last 6 months of operation for agriculture; last month of operation for non-agriculture)

B.4.1. Social insurance contributed by employer (Rupiah)

B.4.2. Total of all other allowances/bonuses paid by employer (Rupiah)

B.4.3. Total for the reference period (Total of EC.3.1 and EC.3.2) (Rupiah)

SECTION C. PRODUCTION, INVENTORY AND SALE

(Last SIX MONTHS of operation for agriculture and last MONTH for non-agriculture)

C.1.1. FOR AGRICULTURE: What was the total amount of your gross sale/revenue for the last 6 months of operation?

(Rupiah)

C.1.2. FOR NON-AGRICULTURE: What was the total amount of your gross sale/revenue for the last month of operation?

(Rupiah)

C.2. Products sold after transformation

AGRICULTURE					NON-AGRICULTURE				
No.	Kind of product	Qty	Unit	Total value (Rupiah)	No.	Kind of product	Qty	Unit	Total value (Rupiah)
1					1				
2					2				
3					3				
4					4				
5					5				
6					6				
7					7				
8					8				
9					9				
10					10				
C.2.1. TOTAL (for the last 6 months)					C.2.2. TOTAL (for the last month)				

C.3. Products sold without transformation

AGRICULTURE					NON-AGRICULTURE				
No.	Kind of product	Qty	Unit	Total value (Rupiah)	No.	Kind of product	Qty	Unit	Total value (Rupiah)
1					1				
2					2				
3					3				
4					4				
5					5				
6					6				
7					7				
8					8				
9					9				
10					10				
C.3.1. TOTAL (for the last 6 months)					C.3.2. TOTAL (for the last month)				

C.4. Services offered

AGRICULTURE			NON-AGRICULTURE		
No.	Type of service	Total value (Rupiah)	No.	Type of service	Total value (Rupiah)
1			1		
2			2		
3			3		
4			4		
5			5		
6			6		
7			7		
8			8		
9			9		
10			10		
C.4.1. TOTAL (for the last 6 months)			C.4.2 TOTAL (for the last month)		

C.5. Inventory of Products with transformation

AGRICULTURE					NON-AGRICULTURE				
No.	Kind of product	Qty	Unit	Total value (Rupiah)	No.	Kind of product	Qty	Unit	Total value (Rupiah)
1					1				
2					2				
3					3				
4					4				
5					5				
6					6				
7					7				
8					8				
9					9				
10					10				
C.5.1. TOTAL (for the last 6 months)					C.5.2. TOTAL (for the last month)				

C.6. Inventory of Products without transformation

AGRICULTURE					NON-AGRICULTURE				
No.	Kind of product	Qty	Unit	Total value (Rupiah)	No.	Kind of product	Qty	Unit	Total value (Rupiah)
1					1				
2					2				
3					3				
4					4				
5					5				
6					6				
7					7				
8					8				
9					9				
10					10				
C.6.1. TOTAL (for the last 6 months)					C.6.2. TOTAL (for the last month)				

C.7. Value of Production for Own Consumption

AGRICULTURE					NON-AGRICULTURE				
No.	Kind of product	Qty	Unit	Total value (Rupiah)	No.	Kind of product	Qty	Unit	Total value (Rupiah)
1					1				
2					2				
3					3				
4					4				
5					5				
6					6				
7					7				
8					8				
9					9				
10					10				
C.7.1. TOTAL (for the last 6 months)					C.7.2. TOTAL (for the last month)				

C.8. How did your business activity fluctuate within the past 12 months?

Variable	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Activity code												

Activity codes: 0 - No activity 1 - Minimum 2 - Average 3 - Maximum

C.9. Maximum gross sale/revenue, average gross sale/revenue, and minimum gross sale/revenue

AGRICULTURE	(RUPIAH)	NON-AGRICULTURE	(RUPIAH)
C.9.1.1. Minimum gross sale/revenue		C.9.2.1. Minimum gross sale/revenue	
C.9.1.2. Average gross sale/revenue		C.9.2.2. Average gross sale/revenue	
C.9.1.3. Maximum gross sale/revenue		C.9.2.3. Maximum gross sale/revenue	

C.10. Did you employ temporary workers within the past 12 months?

Yes 1 No 2 → *Skip to section D*

C.10.1. How many temporary workers were there in the month wherein there was a maximum gross sale?

C.10.1.1. How many are male? **C.9.10.2. How many are female?**

SECTION D. EXPENDITURES ON RAW MATERIALS AND STOCK

(Last SIX MONTHS of operation for agriculture and last MONTH for non-agriculture)

D.1. How much did you spend on raw materials used for your business over the specified period?

AGRICULTURE					NON-AGRICULTURE				
No.	Kind of product	Qty	Unit	Total value (Rupiah)	No.	Kind of product	Qty	Unit	Total value (Rupiah)
1					1				
2					2				
3					3				
4					4				
5					5				
6					6				
7					7				
8					8				
9					9				
10					10				
D.1.1. TOTAL (for the last 6 months)					D.1.2. TOTAL (for the last month)				

D.2. For products sold without transformation, how much did you spend to buy your stocks?

AGRICULTURE					NON-AGRICULTURE				
	Kind of product	Qty	Unit	Total value (Rupiah)	No.	Kind of product	Qty	Unit	Total value (Rupiah)
1					1				
2					2				
3					3				
4					4				
5					5				
6					6				
7					7				
8					8				
9					9				
10					10				
D.2.1. TOTAL (for the last 6 months)					**D.2.2. TOTAL (for the last month)**				

D.3. What were your business expenses during the operation?

Expenses/Cost	Value (In Rupiah)	
	Agriculture (Last 6 months)	Non-agriculture (Last month)
1. Wages and salaries		
2. Social insurance		
3. Bonuses & allowances		
4. Raw materials (from D.1.1)		
5. Purchase cost of products sold (from D.2.1)		
6. Fuel, gasoline & lubricants		
7. Water		
8. Electricity		
9. Rental payments *(space, machinery, structures)*		
10. Transport services		
11. Post, communication, internet		
12. Other non-industrial services *(bank charges excluding interest, professional, business and other service fees, representation and entertainment expense, storage and warehousing fees, stevedoring, forwarding and other freight charges)*		
13. Repair & maintenance of facilities & equipment		
14. Other industrial services *(maintenance and installation work, drydocking)*		
15. Interests		
a. Paid		
b. Received		
16. Taxes *(business license, documentary stamps and other fees)*		
a. Tax on product		
b. Tax on producing the product		
17. Insurance		
18. Other charges (specify)		
a. ATK		
b. Land		
c. Packaging		
d. Gifts, contribution and the like		
e. Other costs		
TOTAL		

SECTION E. CAPITAL EXPENDITURES

E.1. What are the capital assets you used for your business activity during the past 12 months?

Type		Characteristics (Short Description)	Mode of transaction	Owner-ship	Date of acquisition/ sale/lost (month / year)	Value (replacement cost) (In Rupiah)
1. Land	a)					
	b)					
	c)					
2. Buildings	a)					
	b)					
	c)					
3. Other structures	a)					
	b)					
	c)					
4. Transport equipment	a)					
	b)					
	c)					
5. Other machinery and equipment	a)					
	b)					
	c)					
6. Furniture and office equipment	a)					
	b)					
	c)					
7. Small tools	a)					
	b)					
	c)					
8. Other agricultural assets	a)					
	b)					
	c)					
9. Livestock and poultry	a)					
	b)					
	c)					
10. Others	a)					
	b)					
	c)					

Mode codes: 1 - Bought new 2 - Bought used 3 - Made major improvements 4 - Own-produced 5 - Sold 6 - Loss 7 - Not Applicable

Ownership codes: 1 - Personal property 2 - Rent 3 - Lease 4 - Share property 5 - Borrow, free of charge

SECTION F. BANKS, MICRO-FINANCE SERVICES & OTHER SUPPORT STRUCTURES

F.1. What is the main reason you chose this business activity?

Family tradition	1
It is the profession that I know	2
It gives better income/higher profits than other products or services	3
More stable returns than other products/services	4
Other (specify) _____	5

F.2. Have you ever applied for a bank loan for your business?

Yes 1 No 2 → ***Skip to F3***

F.2.1 *IF YES,* Did you succeed in obtaining a loan?

Yes 1 → ***Skip to F4*** No 2

F.3. *If you never applied for a bank loan,* what is the main reason**?**

Procedures are too complicated	1
Interest rates are too high	2
Guarantee/collateral asked for is too much	3
Available loans do not correspond to my needs	4
I am not interested in getting a loan	5
Did not need it	6
Other (specify) _____	7

F.4. Other than bank services, do you know of any microfinance services?

Yes 1 No 2 → ***Skip to F4.2***

F.4.1. *If yes,* how did you come to know them?

Through word-of-mouth (family, friends, neighbours, etc.)	1
Through professional milieu/environment	2
Through an association of my village	3
Through a visit to one of the institutions	4
Through an advertisement (mass media, internet, poster)	5
Other (specify) _____	6

F.4.2. Have you applied for a loan from sources other than a bank?

Yes 1 → *Skip to F4.4* No 2

F.4.3. *If you did not apply for a loan,* what was the main reason?

Amount of loan offered is insufficient	1
Procedures are too complicated	2
Interest rate is too high	3
Maturity period is too short	4
Guarantees/collateral required is too much	5
Do not need a loan	6
I do not believe in paying interest	7
Other (specify) _____	8

F.4.4. *If YES*, did you get a loan?

Yes 1 → *Skip to F4.6* No 2

F.4.5. What was the main reason your application was rejected?

Incomplete documents	1
Complete but not convincing documents	2
Insufficient guarantees/collateral	3
Insufficient initial capital	4
Activity/enterprise was deemed not viable	5
Other (specify) _____	6

F.4.6. If you ever obtained a loan from any other sources, what was the impact of the loan on your business activity?

		YES	NO
1	Increase in the volume of production	1	2
2	Diversification of production	3	4
3	Increase of the volume of sales	1	2
4	Improvement of competitiveness/profitability	3	4
5	Recruitment of additional staff	1	2
6	Working less time	3	4
7	Utilisation of less staff	1	2
8	Financial difficulties	3	4
9	Other (specify)	1	2

F.5. What was/were your other source(s) of financing your business?

		YES	NO
1	Family/relative	1	2
2	Neighbor/friends	3	4
3	Employer/landlord	1	2
4	Private money lender/pawnshop	3	4
5	Others, specify _____	1	2

F.6. Apart from the institutions previously mentioned (banks, micro credit institutions), do you know of other support structures to small businesses like yours?

Yes 1 No 2 → ***Skip to Section G***

F.6.1. Did you have contact with any one of these support institutions?

Yes 1 No 2 → ***Skip to F.6.3***

F.6.2. *IF YES,* Results of contact with support institutions:

Institution	Contacted?	If contacted	
		Type of Assistance Requested	Outcome
1 International program/project	Yes 1 No 2	☐	Granted 1 Not Granted 2
2 National government program/project	Yes 1 No 2	☐	Granted 1 Not Granted 2
3 Local government	Yes 1 No 2	☐	Granted 1 Not Granted 2
4 Professional Associations/NGO	Yes 1 No 2	☐	Granted 1 Not Granted 2
5 Government Finance Institutions	Yes 1 No 2	☐	Granted 1 Not Granted 2
6 Cooperative	Yes 1 No 2	☐	Granted 1 Not Granted 2

F.6.3. Were you contacted by any one of these support institutions?

Yes 1 No 2 → ***Skip to Section G***

F.6.4. *IF YES,* Results of contact with support institutions:

Institution	Were you contacted?	If contacted	
		Type of Assistance Offered	Outcome
1 International program/project	Yes 1 No 2	☐	Accepted 1 Rejected 2
2 National government program/project	Yes 1 No 2	☐	Accepted 1 Rejected 2
3 Local government	Yes 1 No 2	☐	Accepted 1 Rejected 2
4 Professional Associations/NGO	Yes 1 No 2	☐	Accepted 1 Rejected 2
5 Government Finance Institutions	Yes 1 No 2	☐	Accepted 1 Rejected 2
6 Cooperative	Yes 1 No 2	☐	Accepted 1 Rejected 2

Codes for Type of Assistance Requested: 1- Technical training 2- Training in organizational and financial management 3- Assistance in obtaining supplies 4- Access to modern machines 5- Access to information on the markets 6- Access to large business orders 7- Registration of business 8- Advertising of new products/services 9- Other (specify)

SECTION G. PROBLEMS AND PROSPECTS

G.1. Do you have problems/difficulties related to the following aspects of your business?

	YES	NO
1 Supply of raw materials (quantity or quality)	1	2
2 Sale of products- lack of customers	3	4
3 Sale of products- too much competition	1	2
4 Financial difficulties (e.g., difficult to get loan)	3	4
5 Lack of space, adapted premises	1	2
6 Lack of machines or equipment	3	4
7 Organization, management difficulty	1	2
8 Too much control, taxes	3	4
9 Too little revenue	1	2
10 Other (specify) _____	3	4

G.2. To solve your present problems, do you wish to have help in the following areas?

		YES	NO
1	Technical training	1	2
2	Training in organizational and financial management	3	4
3	Assistance in obtaining supplies	1	2
4	Access to modern machines	3	4
5	Access to loans	1	2
6	Access to information on the market	3	4
7	Access to large business orders	1	2
8	Registration of business	3	4
9	Advertising of new products/services	1	2
10	Other (specify) _____	3	4

G.3. Do you belong to a professional organization in your domain of business activity?

Yes 1 No 2 → ***END***

***G3.1. IF YES,* For which type of difficulties does this organization help you?**

		YES	NO
1	Technical training	1	2
2	Training in organizational and financial management	3	4
3	Assistance in obtaining supplies	1	2
4	Access to modern machines	3	4
5	Access to loans	1	2
6	Access to information on the market	3	4
7	Access to large business orders	1	2
8	Problems/linkages with government	3	4
9	Litigation with the competitors	1	2
10	Security problems	3	4
11	Interactions with employees	1	2
12	Other (specify) _____	3	4

END

Thank You!!!

Appendix 10

Informal Sector Survey Form 2 Questionnaire: Bahasa Version

BADAN PUSAT STATISTIK

SSI-2

SURVEI
SEKTOR INFORMAL 2009

RAHASIA

I. PENGENALAN TEMPAT DAN INFORMASI LAIN			
1.	PROVINSI		
2.	KABUPATEN/KOTA *)		
3.	KECAMATAN		
4.	DESA/KELURAHAN *)		
5.	KLASIFIKASI DESA/KELURAHAN	PERKOTAAN -1 PERDESAAN -2	
6.	a. KODE BLOK SENSUS		
	b. KODE SUB BLOK SENSUS		
7.	KODE SAMPEL SAKERNAS		
8.	NOMOR RUMAH TANGGA SAMPEL		
9.	NAMA ART YANG MEMILIKI USAHA		SALIN DARI DAFTAR SSI-1 KOL. 2 YG KOL. 35= "✓"
10.	NO URUT PEKERJAAN		SALIN DARI DAFTAR SSI-1 KOL. 3

II. KETERANGAN PETUGAS			
1.	NOMOR ID PENCACAH:		
2.	NAMA PENCACAH:	TANGGAL PENCACAHAN:	TANDA TANGAN: .....
3.	NAMA PEMERIKSA:	TANGGAL PEMERIKSAAN:	TANDA TANGAN: .....

*) *Coret yang tidak perlu*

BLOK A. ORGANISASI PERUSAHAAN

A1. Apakah lapangan usaha/bidang pekerjaan utama dari tempat bekerja Anda selama seminggu yang lalu? {Salin dari Daftar SSI-1 Kolom (15)}

.....

Salin dari Daftar SSI-1 Kolom (15.a) [ ][ ][ ][ ][ ]

A2. Pada tahun berapa usaha ini mulai beroperasi? [ ][ ][ ][ ]

A3. Bagaimana tipe tempat yang Anda gunakan untuk menjalankan usaha? {Salin dari Daftar SSI-1 Kolom (14)}

Tempat tetap

Di rumah dengan tidak ada ruangan khusus	1	A.3.1
Di rumah dengan tempat bekerja di luar	2	
Tempat usaha dengan lokasi tetap, pisah dengan rumah	3	A.4
Ladang atau lahan pertanian sendiri	4	
Rumah atau tempat kerja dari pelanggan	5	
Tempat semi permanen	6	
Pasar, bazar, pekan raya	7	
Jalan, trotoar dengan tempat tetap	8	
Rumah majikan	9	

Tempat tidak tetap

Kendaraan	10	A.4
Lokasi yang tidak tetap (contoh: berpindah-pindah, dari pintu ke pintu, jalan tanpa lokasi yang tetap)	11	
Lainnya, sebutkan:	12	

A.3.1. Berapa perkiraan sewa ruangan untuk usaha ini sebulan?

..... Rupiah [ ][ ][ ][ ][ ][ ][ ][ ]

A4. Selain kegiatan usaha yang disebutkan di atas, apakah Anda melakukan kegiatan non ekonomi lainnya di tempat usaha ini?

Ya, sebutkan : ..... 1 Tidak 2

A5. Apakah Anda mempunyai tempat usaha lain dimana Anda juga menjalankan kegiatan utama?

Ya 1 Tidak 2 → R. A6

A5.1. Ada berapa tempat? [ ][ ]

A6. Apakah usaha Anda terdaftar pada salah satu institusi di bawah ini? {Salin dari Daftar SSI-1 Kolom (22-25)}

	Ya	Tidak	Tidak Tahu
A6.1. Kantor pajak	1	2	3
A6.2. Pemerintah Daerah	1	2	3
A6.3. Pemerintah Pusat	1	2	3
A6.4. Kantor Jamsostek	1	2	3

A7. Apakah Anda memiliki rekening bank atas nama usaha ini?

Ya 1 Tidak 2

A8. Apa jenis pembukuan yang Anda lakukan pada usaha ini? {Salin dari Daftar SSI-1 Kolom (28)}

Tidak ada pembukuan	1
Pembukuan informal untuk kepentingan pribadi	2
Pembukuan sederhana untuk pembayaran pajak	3
Pembukuan formal yang rinci	4
Lainnya, sebutkan :	5

A9. Apakah Anda mengelola usaha di lokasi lain dengan jenis usaha yang berbeda dengan lapangan usaha utama?

Ya 1 Tidak 2 → Blok B

A9.1. Ada berapa tempat? [ ][ ]

BLOK B. PEKERJA DAN KOMPENSASI

B1. Berapa orang termasuk Anda, yang dipekerjakan dalam usaha Anda walau hanya sejam dalam seminggu yang lalu?

Jumlah pekerja : .....

Jumlah pekerja dibayar : .....

B2.1. Berapa hari kerja perusahaan dalam sebulan yang lalu?

B2.2. Berapa bulan perusahaan beroperasi dalam setahun yang lalu?

B3. Karakteristik pekerja dalam sebulan terakhir (termasuk diri Anda)

No.	Nama	Jenis kelamin (kode)	Umur *(tahun)*	Status pekerjaan (kode)	Kontrak kerja (kode)	Jumlah jam kerja	Jumlah hari kerja	Dasar pemba-yaran (kode)	Gaji dan pendapatan (dalam rupiah)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									

Kode Kolom (2):		Kode Kolom (5):		Kode Kolom (6):		Kode Kolom (9):	
Laki-laki	1	Pemilik/yang mempekerjakan orang lain	1	Pemilik (pengusaha)	1	Per minggu	1
Perempuan	2	Berusaha sendiri	2	Kontrak tertulis tanpa jangka		Per bulan	2
		Buruh//karyawan/pegawai	3	waktu tertentu	2	Setiap hari per jam	3
		Pekerja keluarga yang dibayar	4	Kontrak tertulis dengan jangka		Per pekerjaan	4
		Pekerja keluarga yang tak dibayar	5	waktu tertentu	3	Komisi	5
		Rekan kerja	6	Perjanjian lisan	4	Laba	6
				Masa percobaan	5	Berupa barang	7
				Tanpa kontrak	6	Tidak dibayar	8

B4. Tunjangan dan bonus yang dibayarkan kepada pekerja (selain pemilik) dalam sebulan yang lalu

B4.1. Total jaminan sosial yang dibayar pemilik (rupiah)

B4.2. Total bonus lain yang dibayar pemilik (rupiah)

B4.3. Total dalam sebulan (B4.1 + B4.2) (rupiah)

BLOK C. PRODUKSI, PERSEDIAAN DAN PENJUALAN

1.1. Untuk Pertanian: Jumlah pendapatan dari hasil penjualan selama 6 bulan yang lalu:
(Rupiah) ☐☐☐☐☐☐☐☐☐

1.2. Untuk Non Pertanian: Jumlah pendapatan dari hasil penjualan selama sebulan yang lalu:
(Rupiah) ☐☐☐☐☐☐☐☐☐

2. Barang yang dijual yang telah melalui proses pengolahan:

PERTANIAN					NON PERTANIAN				
No.	Jenis produk	Jumlah	Satuan	Total Nilai (Rp)	No.	Jenis produk	Jumlah	Satuan	Total Nilai (Rp)
1					1				
2					2				
3					3				
4					4				
5					5				
6					6				
7					7				
8					8				
9					9				
10					10				
2.1. TOTAL (selama 6 bulan yang lalu)					2.2. TOTAL (selama sebulan yang lalu)				

3. Barang yang dijual dalam bentuk yang sama (tanpa melalui proses pengolahan):

PERTANIAN					NON PERTANIAN				
No.	Jenis produk	Jumlah	Satuan	Total Nilai (Rp)	No.	Jenis produk	Jumlah	Satuan	Total Nilai (Rp)
1					1				
2					2				
3					3				
4					4				
5					5				
6					6				
7					7				
8					8				
9					9				
10					10				
3.1. TOTAL (selama 6 bulan yang lalu)					3.2. TOTAL (selama sebulan yang lalu)				

4. Jasa yang ditawarkan:

PERTANIAN			NON PERTANIAN		
No.	Jasa yang ditawarkan	Nilai Total (Rp)	No.	Jasa yang ditawarkan	Nilai Total (Rp)
1			1		
2			2		
3			3		
4			4		
5			5		
6			6		
7			7		
8			8		
9			9		
10			10		
4.1. TOTAL (selama 6 bulan yang lalu)			4.2. TOTAL (selama satu bulan yang lalu)		

5. Persediaan barang setelah diolah (barang jadi maupun setengah jadi):

PERTANIAN					NON PERTANIAN				
No.	Jenis produk	Jumlah	Satuan	Total Nilai (Rp)	No.	Jenis produk	Jumlah	Satuan	Total Nilai (Rp)
1					1				
2					2				
3					3				
4					4				
5					5				
6					6				
7					7				
8					8				
9					9				
10					10				
5.1. TOTAL (sehari yang lalu)					5.2. TOTAL (sehari yang lalu)				

6. Persediaan barang tanpa diolah:

PERTANIAN					NON PERTANIAN				
No.	Jenis produk	Jumlah	Satuan	Total Nilai (Rp)	No.	Jenis produk	Jumlah	Satuan	Total Nilai (Rp)
1					1				
2					2				
3					3				
4					4				
5					5				
6					6				
7					7				
8					8				
9					9				
10					10				
6.1. TOTAL (sehari yang lalu)					6.2. TOTAL (sehari yang lalu)				

7. Nilai produksi yang dikonsumsi/digunakan sendiri dan atau diberikan kepada pihak lain:

PERTANIAN					NON PERTANIAN				
No.	Jenis produk	Jumlah	Satuan	Total Nilai (Rp)	No.	Jenis produk	Jumlah	Satuan	Total Nilai (Rp)
1					1				
2					2				
3					3				
4					4				
5					5				
6					6				
7					7				
8					8				
9					9				
10					10				
7.1. TOTAL (selama 6 bulan yang lalu)					7.2. TOTAL (selama sebulan yang lalu)				

8. Bagaimanakah fluktuasi kegiatan usaha Anda selama 12 bulan yang lalu?

Variabel	Agt 08	Sep 08	Okt 08	Nov 08	Des 08	Jan 09	Feb 09	Mar 09	April 09	Mei 09	Juni 09	Juli 09
Kode Kegiatan												

Kode kegiatan: 0 Tidak ada kegiatan 1 Minimum 2 Rata-rata 3 Maksimum

9. Penjualan/pendapatan minimum, penjualan/pendapatan rata-rata, dan penjualan/pendapatan maximum :

PERTANIAN	(Rupiah)	NON PERTANIAN	(Rupiah)
9.1.1. Penjualan/pendapatan minimum		9.2.1. Penjualan minimum	
9.1.2. Penjualan/pendapatan rata-rata		9.2.2. Penjualan rata-rata	
9.1.3. Penjualan/pendapatan maksimum		9.2.3. Penjualan maksimum	

10. Apakah anda mempekerjakan pekerja tidak tetap dalam 12 bulan yang lalu?

Ya 1 Tidak 2 → **BLOK D** ☐

10.1. Berapa banyak pekerja tidak tetap yang dipekerjakan dalam sebulan Ketika ada penjualan/pendapatan maksimum ? ☐☐

10.1.1. Berapa banyak laki-laki? ☐☐ 10.1.2. Berapa banyak perempuan? ☐☐

BLOK D. PENGELUARAN BAHAN BAKU DAN STOK

(6 bulan yang lalu untuk pertanian dan sebulan yang lalu untuk non pertanian)

1. Berapa banyak Anda menggunakan bahan baku untuk usaha Anda selama periode waktu yang ditentukan?

PERTANIAN					NON PERTANIAN				
No.	Jenis produk	Jumlah	Satuan	Total Nilai (Rp)	No.	Jenis produk	Jumlah	Satuan	Total Nilai (Rp)
1					1				
2					2				
3					3				
4					4				
5					5				
6					6				
7					7				
8					8				
9					9				
10					10				
1.1. TOTAL (selama 6 bulan yang lalu):					1.2. TOTAL (selama sebulan yang lalu):				

2. Untuk produk yang tidak diolah, berapa banyak yang dihabiskan untuk membeli stok?
   PEMBELIAN UNTUK PRODUK YANG DIJUAL DALAM BENTUK YANG SAMA

PERTANIAN					NON PERTANIAN				
No.	Jenis produk	Jumlah	Satuan	Total Nilai (Rp)	No.	Jenis produk	Jumlah	Satuan	Total Nilai (Rp)
1					1				
2					2				
3					3				
4					4				
5					5				
6					6				
7					7				
8					8				
9					9				
10					10				
2.1. TOTAL (selama 6 bulan yang lalu):					2.2. TOTAL (selama sebulan yang lalu):				

PENGELUARAN	Jumlah (Rupiah)	
	Pertanian (6 bulan yang lalu)	Non Pertanian (sebulan yang lalu)
3. Apa saja bentuk pembayaran untuk usaha selama beroperasi?		
Pengeluaran/Biaya		
1. Upah dan gaji		
2. Jaminan sosial (asuransi yang berhubungan dengan pekerja, misalnya Jamsostek, asuransi jiwa)		
3. Bonus (tidak termasuk hadiah)		
4. Bahan mentah (salin dari D.1.1)		
5. Biaya pembelian (salin dari D.2.1)		
6. Bahan bakar minyak (BBM), LPG, dan pelumas		
7. Air		
8. Listrik		
9. Biaya sewa (ruang, gedung, kendaraan atau peralatan tanpa operator)		
10. Jasa angkutan		
11. Pengiriman, komunikasi (telepon) dan internet		
12. Jasa lainnya (biaya bank, biaya konsultan, biaya bisnis dan jasa perusahaan lainnya, biaya hiburan, biaya gudang, kuli angkut, pengurusan surat-surat dan biaya pengapalan barang lainnya)		
13. Biaya perbaikan dan pemeliharaan fasilitas dan peralatan (selain kapal)		
14. Jasa industri lainnya (pemeliharaan, instalasi, dan biaya *docking)*		
15. Bunga		
a. Bunga dibayar		
b. Bunga diterima		
16. Pajak tak langsung (izin usaha, pembelian materai dan biaya lainnya)		
a. Pajak yang berkaitan dengan produk (PPN, bea masuk, pajak impor, dll)		
b. Pajak yang berkaitan dengan usaha/perusahaan (PBB, materai, dll)		
17. Asuransi perusahaan/barang modal		
18. Biaya lainnya		
a. ATK		
b. Sewa tanah		
c. Biaya pemasaran, pengangkutan dan pengepakan		
d. Hadiah, sumbangan, derma, dan sejenisnya		
e. Biaya lainnya, sebutkan.....		
TOTAL		

BLOK E. JUMLAH ASET

E1. Apa aset yang Anda gunakan dalam 12 bulan yang lalu?

Jenis	Karakteristik (deskripsi singkat)	Model transaksi (kode)	Kepemilikan (kode)	Tanggal (bulan/tahun)		Nilai jual/sekarang (rupiah)
				Perolehan	Penjualan/ kehilangan	
1. Tanah	a).					
	b).					
	c).					
2. Bangunan	a).					
	b).					
	c).					
3. Bangunan lainnya	a).					
	b).					
	c).					
4. Alat transportasi	a).					
	b).					
	c).					
5. Peralatan dan mesin lainnya	a).					
	b).					
	c).					
6. Furniture dan peralatan kantor	a).					
	b).					
	c).					
7. Peralatan kecil	a).					
	b).					
	c).					
8. Aset pertanian lainnya	a).					
	b).					
	c).					
9. Ternak	a).					
	b).					
	c).					
10. Lainnya	a).					
	b).					
	c).					
	d).					
	e).					
	f).					

Kode model transaksi :	Pembelian baru	1	Terjual	5
	Pembelian bekas	2	Hilang	6
	Perbaikan besar	3	Tidak tahu	7
	Dihasilkan sendiri	4		
Kode kepemilikan :	Milik pribadi	1	Milik bersama	4
	Sewa	2	Meminjam (tanpa biaya)	5
	Kontrak	3		

BLOK F. BANK, LEMBAGA KEUANGAN MIKRO DAN LAINNYA

F.1. Apa alasan utama Anda memilih kegiatan usaha ini?

Tradisi keluarga	1
Hanya profesi ini yang saya ketahui	2
Pendapatannya lebih besar dibandingkan usaha lainnya	3
Keuntungan lebih stabil	4
Lainnya, sebutkan :	5

F.2. Apakah Anda pernah mengajukan permohonan pinjaman di bank untuk usaha Anda?

Ya 1 Tidak 2 → **F.3**

F.2.1. Jika "Ya", apakah Anda berhasil memperoleh pinjaman?

Ya 1 → **F.4** Tidak 2

F.3. Jika Anda tidak pernah mengajukan permohonan pinjaman ke bank, apa alasannya?

Prosedurnya rumit	1
Bunga terlalu tinggi	2
Jaminan yang disyaratkan terlalu besar nilainya	3
Tidak ada skema pinjaman yang cocok dengan yang diperlukan	4
Tidak tertarik untuk meminjam	5
Tidak memerlukan pinjaman	6
Lainnya, sebutkan :	7

F.4. Selain jasa perbankan, apakah Anda mengetahui adanya jasa lembaga keuangan mikro?

Ya 1 Tidak 2 → **F.4.2**

F.4.1. Jika "Ya", bagaimana Anda mengetahuinya?

Secara lisan (keluarga, teman, tetangga, dan lain-lain)	1
Melalui rekan kerja	2
Melalui asosiasi di lingkungan tempat tinggal	3
Mengunjungi salah satu lembaga	4
Melalui iklan misalnya, media massa, internet, poster	5
Lainnya, sebutkan :	6

F.4.2. Apakah Anda pernah mengajukan permohonan pinjaman selain kepada lembaga keuangan mikro?

Ya 1 → **F.4.4** Tidak 2

F.4.3. Jika Anda tidak pernah mengajukan pinjaman, apa alasan utamanya?

Jumlah pinjaman yang ditawarkan tidak mencukupi	1
Prosedurnya rumit	2
Bunga terlalu tinggi	3
Jatuh tempo terlalu pendek	4
Jaminan yang disyaratkan terlalu besar nilainya	5
Tidak memerlukan pinjaman	6
Tidak yakin sanggup membayar bunga	7
Lainnya, sebutkan:	8

F.4.4. Jika "Ya", apakah Anda memperoleh pinjaman?

Ya 1 → **F.4.6** Tidak 2

F.4.5. Apa alasan utama permohonan pinjaman ditolak?

Dokumen tidak lengkap	1
Lengkap tetapi dokumen tidak meyakinkan	2
Tidak mencukupi ada jaminan	3
Modal awal tidak mencukupi	4
Perusahaan sudah tidak aktif	5
Lainnya, sebutkan:	6

F.4.6. Jika Anda pernah memperoleh pinjaman, bagaimana pengaruh pinjaman tersebut terhadap kegiatan usaha Anda?

	YA	TIDAK
Meningkatkan volume produksi	1	2
Menambah keragaman jenis produksi	3	4
Meningkatkan volume penjualan	1	2
Meningkatkan daya saing	3	4
Menambah pekerja	1	2
Bekerja dalam jangka waktu cepat	3	4
Pemanfaatan sedikit pekerja	1	2
Dapat mengatasi kesulitan keuangan	3	4
Lainnya, sebutkan:	1	2

F.5. Apakah sumber-sumber pemblayaan berikut digunakan untuk kegiatan usaha Anda?

	YA	TIDAK
1. Keluarga/Saudara	1	2
2. Tetangga/Teman	3	4
3. Majikan	1	2
4. Rentenir/"pegadaian" (tidak termasuk perum pegadaian)	3	4
5. Lainnya, sebutkan:	1	2

F.6. Selain dari yang telah disebutkan sebelumnya: bank, lembaga keuangan mikro, apakah Anda mengetahui lembaga lain untuk mendukung usaha ini?

YA 1 TIDAK 2 → BLOK G

F.6.1. Apakah Anda pernah dihubungi oleh salah satu dari institusi berikut?

YA 1 TIDAK 2 → F.6.3

F.6.2. Jika "YA", apakah hasilnya?

Institusi	Dihubungi	Jika dihubungi	
		Tipe bantuan yang ditawarkan	Hasil
1. Program/proyek internasional	Ya 1 Tidak 2	☐	Diterima 1 Tidak diterima 2
2. Program/proyek pemerintah	Ya 1 Tidak 2	☐	Diterima 1 Tidak diterima 2
3. Pemerintah daerah	Ya 1 Tidak 2	☐	Diterima 1 Tidak diterima 2
4. Assosiasi profesional/LSM	Ya 1 Tidak 2	☐	Diterima 1 Tidak diterima 2
5. Lembaga Keuangan Pemerintah (Perum Pegadaian)	Ya 1 Tidak 2	☐	Diterima 1 Tidak diterima 2
6. Koperasi	Ya 1 Tidak 2	☐	Diterima 1 Tidak diterima 2

Kode Tipe Bantuan yang dibutuhkan:

Pelatihan teknis	1	Akses terhadap pesanan dari perusahaan besar	6
Pelatihan dalam manajemen organisasi dan keuangan	2	Pendaftaran usaha	7
Bantuan dalam memperoleh suplai	3	Iklan untuk produk atau layanan baru	8
Akses untuk menggunakan mesin modern	4	Lainnya (sebutkan)	9
Akses untuk informasi pasar	5		

F.6.3. Apakah Anda pernah menghubungi salah satu dari institusi berikut?

YA 1 TIDAK 2 → BLOK G

F.6.4. Jika "YA", apakah hasilnya?

Institusi	Menghubungi	Jika menghubungi	
		Tipe bantuan yang diinginkan	Hasil
1. Program/proyek internasional	Ya 1 Tidak 2	☐	Disetujui 1 Tidak disetujui 2
2. Program/proyek pemerintah	Ya 1 Tidak 2	☐	Disetujui 1 Tidak disetujui 2
3. Pemerintah daerah	Ya 1 Tidak 2	☐	Disetujui 1 Tidak disetujui 2
4. Assosiasi profesional/LSM	Ya 1 Tidak 2	☐	Disetujui 1 Tidak disetujui 2
5. Lembaga Keuangan Pemerintah (Perum Pegadaian)	Ya 1 Tidak 2	☐	Disetujui 1 Tidak disetujui 2
6. Koperasi	Ya 1 Tidak 2	☐	Disetujui 1 Tidak disetujui 2

Kode Tipe Bantuan yang dibutuhkan:

Pelatihan teknis	1	Akses terhadap pesanan dari perusahaan besar	6
Pelatihan dalam manajemen organisasi dan keuangan	2	Pendaftaran usaha	7
Bantuan dalam memperoleh suplai	3	Iklan untuk produk atau layanan baru	8
Akses untuk menggunakan mesin modern	4	Lainnya (sebutkan)	9
Akses untuk informasi pasar	5		

BLOK G. PERMASALAHAN DAN PROSPEK

G.1. Apakah Anda mempunyai masalah atau kesulitan terkait dengan aspek-aspek di bawah ini sesuai dengan usaha Anda?

	Ya	Tidak
Pasokan bahan baku	1	2
Penjualan produk – kekurangan pelanggan	3	4
Penjualan produk – terlalu banyak pesaing	1	2
Kesulitan keuangan (Contoh: susah mendapatkan pinjaman)	3	4
Tempat usaha terlalu sempit	1	2
Kekurangan mesin/perlengkapan	3	4
Kesulitan organisasi, manajemen	1	2
Terlalu banyak aturan, pajak	3	4
Pendapatan terlalu sedikit	1	2
Lainnya, sebutkan:	3	4

G.2. Untuk menyelesaikan masalah tersebut, apakah Anda memiliki keinginan untuk dibantu dalam hal:

	Ya	Tidak
Pelatihan teknis	1	2
Pelatihan manajemen organisasi dan keuangan	3	4
Bantuan untuk mendapatkan bahan baku	1	2
Akses terhadap penggunaan peralatan modern	3	4
Akses untuk mendapatkan pinjaman	1	2
Akses memperoleh informasi pasar	3	4
Akses terhadap pesanan dari perusahaan besar	1	2
Pendaftaran bisnis	3	4
Iklan untuk produk/layanan baru	1	2
Lainnya, sebutkan :	3	4

G.3. Apakah Anda menjadi anggota organisasi profesi dalam lingkup kegiatan usaha Anda?

Ya 1 Tidak 2 → **SELESAI**

G.3.1. Jika "Ya", kalau mengalami kesulitan, apakah bantuan yang diberikan kepada Anda?

	Ya	Tidak
Pelatihan teknis	1	2
Pelatihan manajemen organisasi dan keuangan	3	4
Bantuan untuk mendapatkan bahan baku	1	2
Akses terhadap penggunaan peralatan modern	3	4
Akses untuk mendapatkan pinjaman	1	2
Akses memperoleh informasi pasar	3	4
Akses terhadap pesanan dari perusahaan besar	1	2
Masalah/hubungan dengan pemerintah	3	4
Proses pengadilan jalannya perkara dengan pesaing	1	2
Masalah keamanan	3	4
Berlnteraksi dengan para karyawannya	1	2
Lainnya, sebutkan :	3	4

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About the Country Report

This country report is one of the outputs of Asian Development Bank's (ADB) regional technical assistance (RETA) 6430: Measuring the Informal Sector. The BPS–Statistics Indonesia, one of the three partner statistical agencies of RETA 6430, worked closely with ADB in adapting the mixed survey approach for collecting informal sector and informal employment data, in analyzing the survey results, and in writing this country report.

The country report presents an in-depth analysis for the provinces of Yogyakarta and Banten. Of the total employment in Yogyakarta and Banten in 2009, 89.14% and 75.90 % were informal, respectively. The method for estimating the contribution of the informal sector to the gross domestic product, the resulting estimates, labor productivity, and the characteristics of informal sector production units are also discussed in this report.

About the Asian Development Bank

ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries substantially reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to two-thirds of the world's poor: 1.8 billion people who live on less than $2 a day, with 903 million struggling on less than $1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

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