INDONESIA'S ACHILLES HEEL IN THE FIRST DECADE OF THE 2000s: EMPLOYMENT AND LABOUR PRODUCTIVITY IN MANUFACTURING

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ABSTRACT[1]

In Indonesia, sluggish growth in productivity and job creation in manufacturing was particularly disappointing in the first decade of the 2000s. The work of Anne Booth has grappled with the nexus between productivity, employment and welfare in Indonesia and Asia. While she has been especially concerned with these relationships in the agricultural sector, Anne would be the first to acknowledge that some of the key relationships cut across sectors. Further, the benefits from agricultural reforms can only be broadly realized in terms of poverty reduction if better jobs are available for agricultural workers to move into in manufacturing and services as countries develop. This article takes up some of the productivity and employment relationships outside agriculture that are critical to poverty alleviation, focusing especially on labour regulations, contracts and management systems. It thus touches indirectly on a subject that has been a focus of many of Anne Booth's writings on Indonesia since the 1980s.

Keywords: Labour productivity, Labour regulations, Job creation, Manufacturing,

INTRODUCTION

Improvements in productivity and creation of better jobs are at the heart of an improvement of living standards. One of the big challenges of development is to achieve both improved productivity and employment at the same time. This is especially important in manufacturing that plays a central role in absorbing low-productivity workers in the early stages of economic growth.

1 Analysis of the data on which this article is based was undertaken jointly with Raden Purnagunawan and was supported by the USAID SEADI Project in 2012-13. I gratefully acknowledge Raden Purnagunawan's contribution and also thank Tim Buehrer and Peter McCawley for support in developing ideas expressed in this article.

In Indonesia, sluggish growth in productivity and job creation in manufacturing was particularly disappointing in the first decade of the 2000s. Unlike several neighbouring countries, in particular China, India and Vietnam, slower GDP growth has been a major factor contributing to less impressive productivity growth after the Asian financial crisis of 1997/98. Manufacturing was below par compared with services, and this is a problem shared by several Southeast Asian countries.

Anne Booth has grappled with the nexus between productivity, employment and welfare in Indonesia and Asia for most of her professional life. While she has been especially concerned with these relationships in the agricultural sector, Anne would be the first to acknowledge that some of the key relationships cut across sectors. Further, the benefits from agricultural reforms can only be broadly realized in terms of poverty reduction if better jobs are available for agricultural workers to move into in manufacturing and services as countries develop. This article takes up some of the productivity and employment relationships outside agriculture that are critical to poverty alleviation, focusing especially on labour regulations, contracts and management systems. It thus touches indirectly on a subject that has been a focus of many of Anne Booth's writings on Indonesia since the 1980s.

In the second last year of Yudhoyono government (2013) the level of minimum wages and the nature of labour contracts appropriate for Indonesia were both being hotly debated in the public arena. These issues have tended to be discussed mainly from the standpoint of labour welfare and protection. There has been surprisingly little reference to labour productivity. Economic theory teaches us that productivity not only determines market wages in a competitive environment in the short term but also should be a major determinant of employment, better jobs and living standards in the longer term.

After a general discussion of some the key relationships, the article compares Indonesia with several other East Asian countries with a focus on labour productivity and employment. Here it is found that employment growth was very slow in Indonesia in the 2000s at a time of moderate productivity gains, a pattern common among several Southeast Asian countries.

The links between productivity, employment and labour management systems are then examined through the case study of a small sample of manufacturing enterprises in Bandung region, West Java. The latter highlights two sets of issues. First, the relationship between labour management systems and productivity, and the potential impact of changes in the regulatory environment for labour productivity. Second, the analysis highlights variations by scale of firm and between industries in labour management systems that impact on labour productivity and employment. We contrast management in more capital-intensive firms in metals and machinery industries (M&M) with that of firms in textiles, clothing and footwear industries (TCF).

It is suggested that a medium-term strategy might encourage an environment that guarantees firms greater flexibility in setting the wages of blue-collar workers. Given political constraints, a short-term strategy might focus on distinguishing between different kinds of industries in setting some of the basic labour standards.

GROWTH, LABOUR PRODUCTIVITY AND EMPLOYMENT: WHAT DO WE KNOW?

What are the main factors that have influenced labour productivity in developed and developing countries in recent years, and what are the implications for employment, with special reference to the manufacturing sector? Labour productivity growth is driven by two factors: first, the quantity and quality of labour (as the denominator in dY/dL); second, capital accumulation and innovation. In the early stages of growth capital accumulation plays the major role in raising output growth in a 'labour surplus' country like Indonesia. The rate of employment growth (*d*L) can be quite high owing to rapid growth of the labour force and the deployment of 'surplus' labour from the agricultural and informal sectors in the modern sector. This tends to counterbalance the positive impact of capital accumulation on labour productivity.

As capital becomes more abundant, however, countries depend much more on total factor productivity (TFP) growth, and on the quality rather than the quantity of labour inputs. Labour productivity thus tends to rise more steeply.

Four interrelated factors have been closely associated with both productivity and employment growth in manufacturing (Tybout 2000). First, export orientation has associated with higher labour productivity and TFP growth in many contexts. Exports facilitate the purchase of imported capital equipment and raw materials required for industrial growth. Dynamism at the micro level appears to partly depend on the capacity of firms to access new technology embodied in imports (Davis & Haltiwanger 1992).

Second, foreign direct investment (FDI) has also been identified as a positive factor in many multivariate studies of productivity growth. The direct effects from more open policies towards FDI on growth and employment are well documented (Moran, Graham & Blomström 2005). Although uneven, indirect effects through spillovers to domestic firms have also been observed as significant determinants of labour productivity and TFP growth (Sjöholm & Lipsey 2004; Liu, 2008).

Third, firm size is often positively correlated with productivity and hence the dynamics of firm growth is relevant. In more dynamic competitive systems there are many opportunities for entry and progression to larger-sized establishments, and also exits as older firms face difficulties in competing with newcomers (Davis & Haltiwanger 1992). Smaller firms enter, and some grow bringing new technology and processes, even if many exit.[2]

As seems to be the case in Indonesia, there is a twist: the 'missing middle'. In some environments, small firms often prosper as do larger firms, but those in the middle do not. There is now a growing literature on the problems faced by middle-sized firms with anything from 50-250 workers, which do not graduate, and either exit altogether or slip back to a much smaller scale. Invasive regulations, including tax and labour laws, hurt these middle-sized firms most and prevent them from moving up the ladder (Richmond & Klapper 2010). Such burdens are either 'absorbed' by scale effects (including a greater capacity to pay bribes) enjoyed by large firms, which are in a better position to defray the costs of regulation. Larger firms can also adopt various strategies (such as outsourcing) to minimize the fixed costs associated with appointment of regular employees. At the other extreme, costs are avoided by more nimble, smaller firms choosing to remain under the regulators' radar screen.

Finally (and partly related to the above), the institutional environment in general, and specifically with regard to labour institutions, can play an important part in trends and patterns of productivity and employment. Thus more competitive, export-oriented performance in East Asian countries has often been attributed to less regulation, and more flexible labour markets

2 Scale effects are often but certainly not always important for productivity (Tybout 2000).

compared with many countries in Latin America (Fields & Wan 1998; Posso 2008). Similarly, the OECD has compared labour market adjustments in the United States with those in several of the more regulated European economies.

INDONESIAN AND SOUTHEAST ASIAN MANUFACTURING AFTER THE CRISIS

In the decade after the Asian financial crisis Indonesian manufacturing output, employment and productivity growth had all been quite slow. Unit labour costs rose quite steeply (Aswicahyono, Hill & Narjoko 2010; Aswicahyono & Manning 2011). At a high-level meeting with representatives of the business community (KADIN), the Indonesian Vice President identified slow growth in total factor productivity (TFP) and labour productivity as a major national challenge (*Kompas* 16 May 2012). Professor Boediono drew attention to the need for further empirical analysis to support a sharper policy focus. He noted that a better mix of policies focusing on improving productivity can be expected to contribute to higher rates investment and technical change, as well as to the expansion of employment, better wages and living standards.

These issues need to be viewed in the context of several key patterns of change in the 2000s: a struggling manufacturing sector and jobless growth; a diminished role for FDI and exports; struggling labour-intensive exports; and finally, changes in the institutional and regulatory environment.

Manufacturing output growth slows and jobless growth emerges as a problem in Indonesia and some other Southeast Asian economies. Output and investment never really recovered in Indonesia after the Asian financial crisis, following a general pattern experienced by several of the more established Southeast Asian economies. In contrast to robust growth in China, India and Vietnam, output growth halved in manufacturing in Thailand and Malaysia in the first half of the 2000s (Figure 1). However, slow output growth is only part of the poor employment record. It has been observed that 'jobless growth' (a lower output-employment elasticity) was also a feature of manufacturing development in Indonesia as well as in several neighbouring countries in this period (Aswicahyono, Hill & Ardiyanto 2011).

Exports and FDI are no longer drivers of both output and employment growth. The slow growth in manufacturing output has been attributed partly to slower growth in exports and FDI. Exports slowed and contributed only around 20-25 per cent of total growth in Indonesia. The policy focus turned away from encouraging exports to industry policies that support domestic sources of growth in services, and more capital and resource-intensive products.[3]

Labour-Intensive exports have floundered. Not only have exports slowed but exports of labour-intensive products never recovered after a short period of growth in the immediate post-crisis period.[4] In addition to uncertainty, tight labour regulations and supply constraints after the Asian financial crisis, discouraged private sector investment. FDI turned to China, Vietnam and to a lesser extent Cambodia and Bangladesh.

Changes in institutional arrangements and the regulatory environment and the *'missing middle'*. Indonesia liberalized in a number of sectors after the crisis, while extending regulations in the field of labour. The new Labour Law (No. 13, 2003) made the management and deployment of regular workers more costly. However, while all firms were affected the impact seems to have been felt differently across the three main enterprise-size groupings.

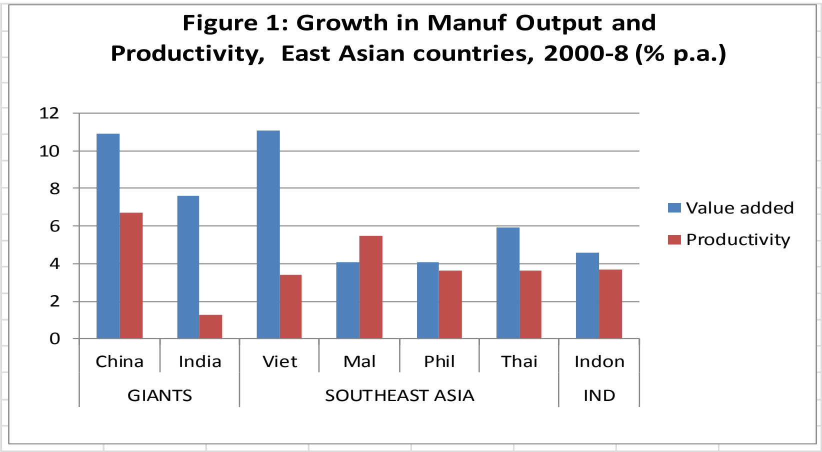
The regulations are likely to have been most binding on larger firms. However, enterprises in this group were more likely to find ways of conserving on jobs by adopting new technology, outsourcing jobs or employing workers on short-term contracts, rather than retaining regular workers.[5] In contrast, small firms were least likely to comply because there were mostly below the radar screen of regulators. It was the medium scale firms that appear to have suffered most. They were caught in no-man's land: unable to 'hide' from the regulators, yet not large enough to be able to develop strategies that conserve labour costs in the new regulatory environment (see below).

[3] Indonesia is an outlier among middle income East Asian countries (even the Philippines) in that it has participated only to a limited extent in global production networks in the 2000s, which link to China as the main assembler and producer of final goods destined for Europe and the USA (Athukorala, 2006a, 2006b, 2009).

[4] See especially Basri & Hill 2008; Aswicahyono, Brooks & Manning 2011. Basri & Hill (2008: 1406) report that the key labour-intensive manufacturing segment collapsed, from annual growth rates of 25 per cent in 1990/96 to 7 per cent in 2000/06.

[5] See Manning 2012 for data on the expansion of casual work in several sectors, including manufacturing, which the author attributes partly to the tight labour regulations.

Figure 1
Growth in manufacturing output and productivity in East Asia, 2000-2008 (per cent per year).



Source: APO 2011.

Labour Productivity

What about the more favourable (relative) changes in labour productivity compared with output shown for Indonesia and neighbours in Figure 1. The earlier stages of growth when employment expanded rapidly (reflecting a high output-employment elasticity) and hence labour productivity grew slowly inevitably gave way to a period of less robust sluggish labour supply in response to production increases. This second stage contributed to more rapid increases in labour productivity in much of East Asia, as countries adjusted technology and institutions to cope with a less elastic supply of unskilled labour.[6] However, in contrast to the more advanced countries in East Asia (Korea and Taiwan) innovation and TFP has growth has been less important for labour productivity growth in Indonesia, Thailand, Malaysia and the Philippines in the 2000s (APO 2011: 66).

Figure 1 clearly shows that Indonesia is not an outlier in East Asia, neither in terms of the growth in labour productivity or its determinants in relation

[6] Vietnam and Cambodia, both of which joined the WTO and introduced a raft of reforms in the early 2000s, were an exception to patterns experienced by the more established capitalist economies of Southeast Asia.

to its level of per capital income. But it does face some major challenges. As indicated by data assembled by the Asian Productivity Institute (2011), average levels of productivity in Indonesia still remain very low compared with Japan and Singapore, and even the middle-income countries of Southeast Asia such as Malaysia and Thailand.[7]

At a macro level, Indonesia appears to have followed the experience of other countries in the region in relation to productivity growth. Before the financial crisis, physical and human capital accumulation and to a lesser extent growth in employment were the dominant factors contributing to of output growth, and TFP effects were estimated to be quite small (Alisjahbana 2009; Van der Eng 2010).[8]

Labour productivity in manufacturing has long been very low and variable across sectors compared with more developed countries (Szirmai 1994). Labour productivity growth (3.4 per cent) was on a par with Thailand, Cambodia and Vietnam, although slower than in Korea, Taiwan and Malaysia during the first decade of the 2000s (APO 2011: 87). This appears to have been due to the higher productivity of new entrants rather than a progression to higher levels of productivity among existing firms (Wengel & Rodriguez 2006). However, before the Asian financial crisis, entry was more common and contributed to higher rates of productivity growth than after the crisis, when fewer new firms entered into manufacturing (Aswicahyono, Hill & Narjoko 2010).

Among the determinants of productivity, foreign firm participation has tended to have a positive impact on productivity and also for spillovers to domestic firms (Takii & Ramstetter 2005; Takii, 2005). The missing middle seems to be strongly felt in Indonesian manufacturing; this has been associated with 'burdensome regulations and imperfect financial markets', justifying more support for dynamic 'start-ups' to help solve this problem (World Bank 2011).

7 Hourly rates of productivity across all sectors were estimated to be $3.40 in 2008, one-tenth of Japan ($32.60), one quarter of Malaysia ($13.30) and 60 per cent of Thailand ($5.80) (APO 2011: 52). The differences were smaller but still marked in manufacturing.

8 Van der Eng 2010 shows a repeated pattern of quite high rates of productivity improvement after periods of slower economic growth, stagnation or sharp economic downturns. Alisjahbana 2009 estimates the effect of improved human capital.

The impact of the regulatory environment has not been examined closely in the Indonesian case, except for minimum wages. In regard to minimum wages, some studies have found a negative impact on more vulnerable sections of the work force (younger, less educated and female workers) while others have found the effects to be quite small.[9] The subject of labour outsourcing received strong media attention as a result of a Constitutional Court ruling in January 2012 that required all labour-outsourcing companies to pay wages and benefits similar to those mandated by law for regular workers. Subsequently, during 2012 the trade union movement mounted a campaign to ban all labour outsourcing outside five non-core and service related activities: catering, cleaning, security, transport of workers to the office and recruitment of workers for mining operations.[10]

The labour law does not ban fixed term contracts or outsourcing. The spirit of the law encourages a shift from these arrangements to regular employment contracts. There are loopholes however. It appears that many firms especially in labour-intensive industries have taken advantage of these.[11]

To sum up, a close relationship between productivity on the one hand and wages and employment on the other is to be expected, and this will vary partly in relation to the stage of development and partly to the regulatory regime and its implementation. In the Indonesian case, three issues deserve special attention: (1) the regulation of labour contracts in the labour law; (2) the tendency for some firms to develop management systems which circumvent the law; and (3) strong union opposition to fixed term contracts and outsourcing of employment contracts to third parties.

Below we look at to some findings of a field study throw some more light on these matters.

9 See especially Suryahadi *et al.* 2003; Alatas and Cameron 2008; Purnagunawan 2011.

10 The restriction of outsourcing of labour recruitment to these activities and tighter control over the process was subsequently introduced in a Ministerial Regulation from the Department of Manpower and Transmigration issued in December 2012.

11 Other studies have found outsourcing (and fixed term contracts) to be widespread in other industries as well. For example, field surveys by AKATIGA Foundation in collaboration with the Metal Workers Union found that the majority of firms in the industry performed some form of outsourcing in what might be defined as core business activities. (Tjandraningsih, Herawati & Suhadmadi, 2010).

A CASE STUDY OF TWO INDUSTRIES IN BANDUNG REGION

We now turn to a report on regulations, productivity and labour contracts in a small sample of firms in two industries in the Bandung region.[12] The two industries were intentionally selected to represent different segments of manufacturing: an unskilled, labour-intensive group (textile, clothing and footwear or the TCF industry) and a group which fits more into the group of the footloose, capital-intensive group of industries identified by Aswicahyono, Hill & Ardiyanto in 2010 (metals and machinery and related industries, or M&M). To some extent these two industries represent two extremes in regard to the main variables of interest: growth of employment and labour productivity in the post-crisis period.

We report first on firm characteristics relevant to productivity, second in regard to firms' assessment of trends in productivity and key determining factors, and third on labour contracts, wages and turnover that are relevant to labour productivity. In this case study we also survey the expectations of private enterprise in regard to future labour regulations and their management response in order to maintain competitiveness.

Firm characteristics and productivity

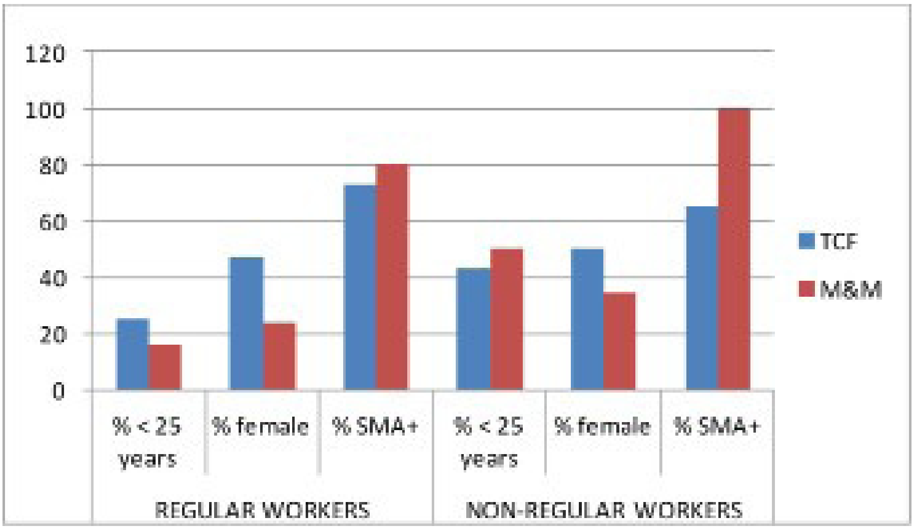
Consistent with data at the national level, the sample firms in the TCF industries tended to have been established more recently they were also smaller and a much larger number of among these firms experienced a fall in output in the recent past compared with the M&M firms. Relevant to productivity, socio-demographic characteristics of employees also differed quite significantly across the two industries. The proportion of females and less educated blue collar workers was larger in the TCF firms than in the more capital-intensive M&M enterprises among both regular and non-regular employees (Figure 2). A large majority of the regular workers were aged above 25 in both industries, whereas this was not true for non-regular employees.

Somewhat surprisingly, quite a high proportion of these younger non-regular workers educated had a senior high school degree or more, and did not differ significantly in this respect from their older counterparts who were

[12] The survey was conducted over the period October-November 2012 in the City and Kabupaten of Bandung. While the sample was stratified by size and industry, the selection of individual firms to be interviewed depended heavily on contacts and chance factors.

employed on more permanent employment contracts.[13] Average levels of labour productivity were much lower in the TCF firms. Even among the larger TCF firms, output per worker was only slightly above Rp. 100 million per year, compared with nearly 200 million in the smaller M&M firms. However, scale effects were not so marked when it came to output per worker: for example, several small scale firms recorded higher levels of output per worker than medium scale firms, although output per worker was less than the large firms.

Figure 2
Characteristics of workers in the TCF and M&M industries in the Bandung region in 2012 (percentages).



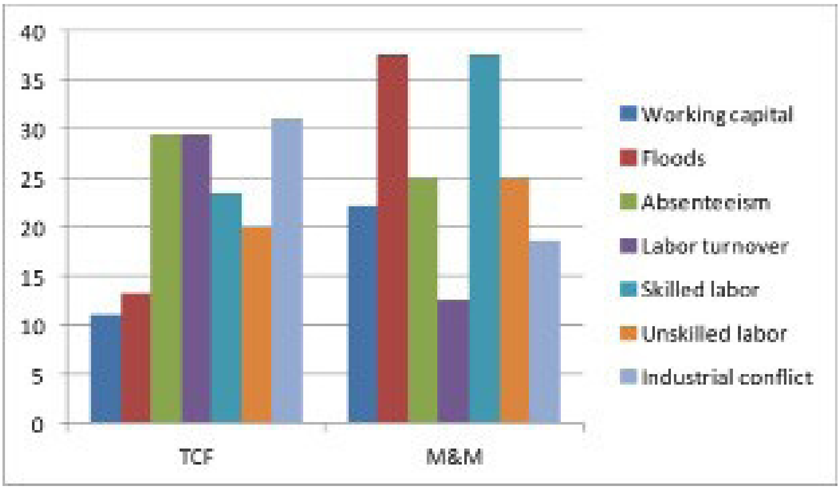
Source: Employment and Productivity Survey, Bandung 2012.

Firms were asked to record various factors that influence productivity. In this case, the contrast between the TCF firms and M&M firms was quite marked. High levels of absenteeism, labour turnover and industrial conflict (including strikes) stood out in the answers given by the TCF managers, whereas more generic factors such as working capital and floods, as well as shortages of

13 It is worth noting that scale effects were not obvious among firms within industries in terms of the characteristics of workers. For example, younger people and better educated workers were prevalent in both small and large firms in both industries.

skilled labour were rated more highly as problems among the M&M firms (Figure 3). These differences were understandable given the high proportion of non-permanent workers in the TCF firms. In addition, the fact that industrial conflict is more prevalent in the TCF firms may be related to the much greater use of fixed term contracts and lower wages than in the M&M firms (see below).

Figure 3
Problems that had a negative impact on productivity in the Bandung region (percentage of firms).



Source: Employment and Productivity Survey, Bandung 2012.

Thus while rising demand for skilled labour was a general problem experienced in both industries, it was more likely to be an issue among the M&M firms. The latter reported significant increases in the need to recruit more skilled manpower. Firms in these industries were concerned about the shortage of skilled blue-collar workers in particular. TCF firms had experienced less change in demand for skilled manpower, and many did not feel that the quality had improved much.

In addition, fewer TCF firms provided formal training for blue-collar workers, and more offered training through apprenticeship. This was especially true among the smaller firms (most of them in TCF), where apprenticeship systems were much more common.

Jobs, Labour Contracts and Turnover

The two industries provided a stark contrast in the stability of employment, worker experience and the nature of contracts for production workers. In part, the differences appear to be associated with the different levels of technology. They also reflect some of the contrasts in the characteristics of the industries discussed above and have direct implications for productivity.

Consistent with our expectation, both outsourcing and fixed-term contracts are used by labour-intensive firms in textiles, footwear and clothing to a much greater extent than in the more capital-intensive firms in MM industries (Figure

4). The share of regular workers declines, moreover, with size of firm. This implies that both fixed term contracts and outsourcing were especially common among larger-scale firms (Figure 5). Outsourcing was not so prevalent among small scale firms. In many of these (with around 20 workers or less), there were only informal contracts.[14]

In interviews with larger employers, managers explained that the shift away from regular wage to fixed term contracts was motivated by concerns over the potentially high costs of severance when workers are made redundant, as introduced in the Labour Law in 2003 (which is mandated for all regular workers but not workers on fixed term contracts).

Thus a form of contract 'switching' occurred. Firms laid off some or all of regular workers, and reappointed many on fixed term contracts of two years in duration. It was argued that it was quite easy to recruit and provide training to new employees.[15] Labour outsourcing also proliferated in the TCF industries in the Bandung region after the passing of the Labour Law in 2003, especially in small textile towns outside the city and away from the watchful eye of more active unions.[16] Outsourcing companies specialized in recruiting and training workers in an industry in which skills were quite homogenous. The

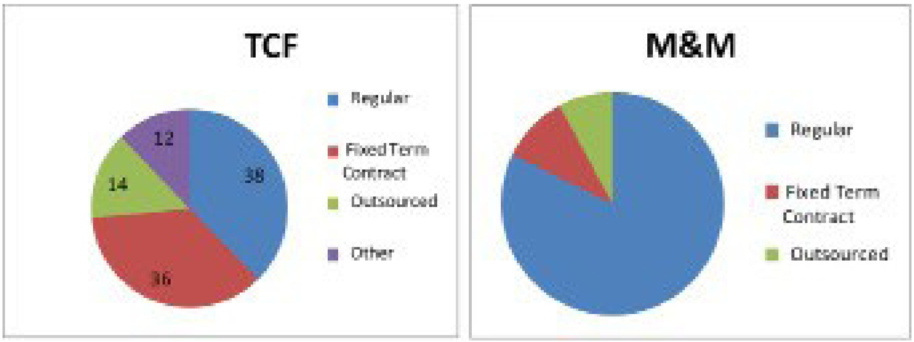
14 The IFLS survey reports that around half of all wage workers had no formal contract, either regular or fixed term (World Bank 2011).

15 This was not universal however; some the metal and machinery firms depended on blue-collar worker skills that were more firm-specific and required considerable learning on-the-job.

16 Information is based on an interview with one outsourcing company on the outskirts of Bandung in early November 2012. Out-sourcing was not unknown among the metal producing firms. One company reported that it adopted a dual labor management system, with a different approach to relatively unskilled workers (recruitment outsourced) compared with more skilled, blue collar workers (employed as regular workers).

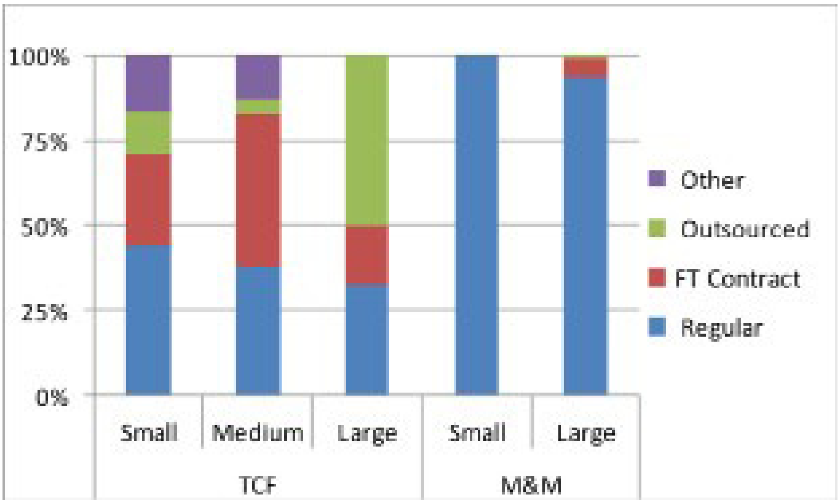
outsourcing companies profited from a fee charged to the TCF company, often passing on this fee on to the workers in the form of lower wages; in some cases this meant that take-home pay was below the legal minimum wage.

Figure 4
Labour contracts in TCF firms (left) and M&M firms (right) in the Bandung region, 2012 (percentage of firms)



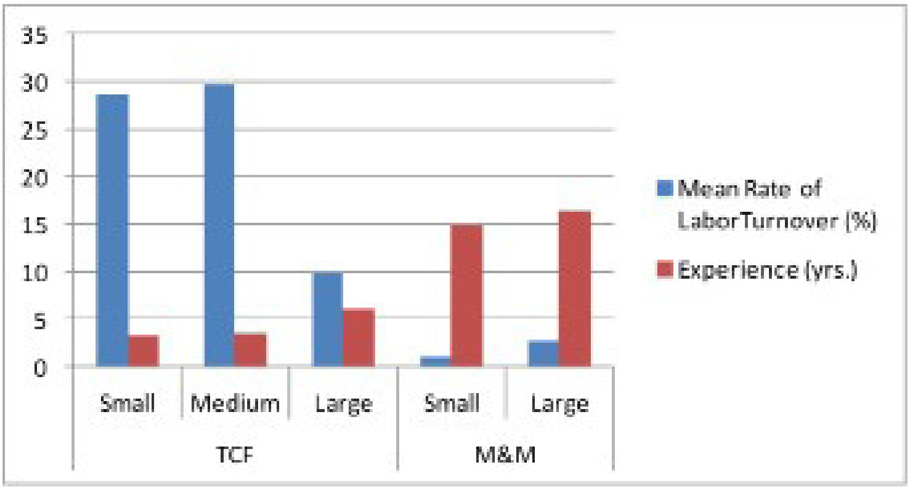
Short-term contracts and outsourcing contributed to extremely high rates of labour turnover (average of 27 per cent per year) and lower wages in the labour-intensive TCF firms, in contrast to more conventional rates of turnover that were closer to 2-3 per cent in the M&M companies. In the TCF industry, large companies recorded much lower turnover compared with medium and small firms (close to 30 per cent). Perhaps this reflects both unstable output in the smaller firms, as well as less formal employment relationships (Figure 6). Therefore it is no surprise that average wages among production workers were about 40 per cent lower in the TCF industries; they were barely above the minimum wage in *kotamadya* and *kabupaten* Bandung in 2012.

Figure 5
Labour contract systems adopted by TCF and M&M firms in the Band- ung region, 2012 (percentage of employees)



Source: Employment and Productivity Survey, Bandung 2012.
Note: Small=<100 employees; medium=100-449; large=500+; For M&M, there is only one medium-scale firm (322 employees) which is included in the large group.

Figure 6
Mean rate of turnover and years of experience in TCF and M&M indus- tries in the Bandung region, 2012



Source: Employment and Productivity Survey, Bandung 2012.

To what extent can we explain the differences in wages between the two industries in terms of institutional arrangements, such as greater unionization and engagement of unions in collective labour agreements. There does not seem to have been a major difference between TCF and M&M firms in the rate of unionization or signing of labour agreements (Table 1). In fact, firms in the latter industries were less unionized and fewer had concluded collective labour agreements than in firms in the TCF industries.[17] It appears that many firms are happier (especially the smaller ones) to allow employer associations such as APINDO to negotiate wages on their behalf rather than settle them through collective agreements.

Table 1
Trade union representation and participation by industry and size group

	TCF	M&M	All Firms			
			Small	Medium	Large	All sizes
% firms unionized	67	40	40	75	80	61
% firms with multiple unions	33	60	60	25	20	39
Among unionized enterprises (% of firms)						
> 50% of workers in a union	67	100	100	50	75	71
Unions engaged in wage negotiations	75	50	100	50	75	71

Source: Employment and Productivity Survey, Bandung 2013.

Future prospects and policies

We have argued that labour management systems adopted by the sample firms examined in our case study do not always support higher levels of productivity. This is in part because of a regulatory environment that does not encourage efficient use of labour. In part, it also reflects the absence of a tradition of

[17] Only around two-thirds of larger firms had concluded collective labour agreements in the TCF group.

collective bargaining which links the level of wages and payment systems to the productivity of blue collar workers.

Public debate about the impact of minimum wages on employment in Indonesia in October-November 2012 drew attention to the potentially large impact of higher wages on employment in small firms and in labour-intensive industries. We found that distinctions across different industries appear to have been more important than by scale of firm. The higher proportion of unskilled workers, lower level of wages, and a greater tendency to employ labour on short-term contract in the TCF industries is a reflection of a greater focus on minimizing labour costs rather than encouraging high levels of skill and productivity than in the more capital-intensive M&M firms. The TCF firms had also been struggling more in a highly competitive environment in recent years, even though they still accounted for around 30 per cent of all employment in large and medium firms in manufacturing in 2010. Designing policies that are consistent with keeping jobs and promoting competitiveness in this industry makes good sense for social as well as for economic reasons.

Thus TCF firms in our sample were more worried about the threat of tighter regulation of outsourcing and a significant increase in the MW in 2012 (Table 2).[18] On both counts, TCF firms were already likely to be more vulnerable to changes in government policy, owing to the quite widespread adoption of outsourcing arrangements and the offer of entry level wages that were much closer to the minimum wage. In contrast, the M&M firms were mostly not worried by changes to outsourcing arrangements. Only 20 per cent were concerned that rises in minimum wages would significantly affect the firm's operations.

In relation to scale of firm, large firms were generally less concerned about restrictions on outsourcing, perhaps because they had already chosen shorter-term contracts for many of their production workers. However, there was apprehension among firms of all sizes, mostly in the TCF industries, about the effect of increases in minimum wages on firm profitability.

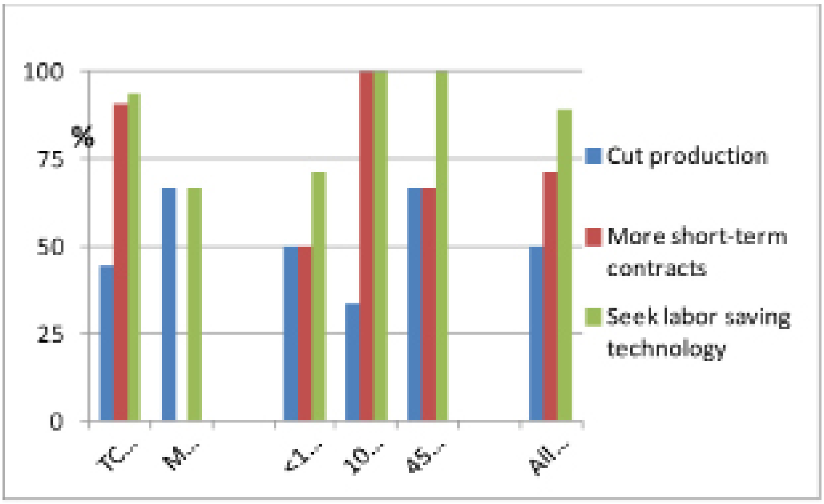
[18] The questions were asked in November 2012 when the unions in the Greater Jakarta in particular were pressing for an end to all outsourcing arrangements and also substantial increases (50-100 per cent) in the minimum wage.

Table 2
Percentage of firms reporting a significant impact of current policies, Bandung
2012

	Limitation of Out-sourcing	Rapid rise in the MW
TCF firms	35	82
M&M firms	0	20
<100 employees	22	56
100-449	50	88
450+	0	60
All sizes	29	68

Source: Employment and Productivity Survey, Bandung 2013.

Figure 7
Strategies planned to deal with rising minimum wages, Bandung 2012 (percentage of firms).



Source: Employment and Productivity Survey, Bandung 2013.

For most firms in the sample, the big policy issue in 2012 was the prospect of a sharp increase in minimum wages.[19] Firms in the two industries tended to give different responses to how they would react to this prospect. In the TCF industry, a higher proportion of firms reported that they would seek to place workers on short-term contracts or seek new technology in an effort to reduce the number of workers and wage costs (Figure 7). No firm in the M&M industry reported that it would seek to place more workers on short-term contracts; some would respond by cutting output and dismissing workers, and others by adopting new technology.

CONCLUSION

Improving productivity is critical for achieving high rates of economic growth, creating jobs and reducing poverty. Indonesia has made significant strides forward on all these fronts over the past thirty years. Capital accumulation accompanied by more opportunities to export and an more open policy for foreign investment have contributed both to more jobs in manufacturing and rising productivity in new, more capital and resource-intensive industries. This is exemplified the findings of our survey of Metals and Machinery (M&M) firms in Bandung which found greater use of skilled labour and a focus on raising labour productivity, partly evidenced by lower rates of labour turnover compared with the TCF firms covered in the survey.

At the same time, Indonesia along with several other countries has struggled in manufacturing in the 2000s and this is reflected in the slow rate of employment growth. A slowdown in FDI (reversed in 2010-12) and in exports of labour-intensive goods after the crisis were two factors that contributed to this slowdown. Productivity has continued to rise but still remains very low compared with many of Indonesia's neighbours. Like in many other countries, the missing middle appears to be a major challenge for manufacturing, as firms struggle against obstacles that would enable them to graduate into higher size brackets and reap more economies of scale.

[19] By the end of November when the survey finished, the West Java Governor had already approved an increase in the minimum wage of 21 per cent for the City of Bandung (up to Rp. 1.54 million) for 2013, but a much smaller increase of only 9 per cent for the City of Cimahi (part of the Greater Bandung region) and 9 per cent for the district of Bandung.

Some of these problems were illustrated in the results of our small survey of textile, clothing and footwear (TCF) firms in the Bandung region. The survey focused in particular on the way in which tight labour regulations and an aggressive minimum wage policy supported by the government have contributed to labour management systems that threaten improvements in labour productivity in the medium term in these industries.

Many commentators agree that some of the Labour Law clauses, especially in regard to severance pay, need to be set more in line with international practice. The level of minimum wages should eventually represent a genuine safety, in relation to existing market wages, allowing firms to adjust wages in relation to productivity. But given political sensitivities it seems unlikely that such reforms will be introduced for some years in Indonesia.[20] Thus, in the short term, it is worth considering special treatment for labour-intensive industries. As a first step, minimum wages could be set at a lower level (perhaps by a margin of 20 per cent) in these industries, and take on more of a function as a social safety net. This would also enable more labour-intensive firms to remain internationally competitive, and ensure that the gap in labour standards between the unregulated informal sector and the formal sector does not become too wide. As Anne Booth has so often reminded us, diversification of jobs into non-agricultural sectors that offer better prospects for the rural population is an essential intermediate step in raising living standards and eliminating poverty.

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[20] The government initiated steps to revise the 2003 Labour Law in 2005-6 and again in 2010 but quickly backed down on both occasions in response to relatively mild opposition (by international standards) from trade unions.

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