

WORLD EMPLOYMENT PROGRAMME RESEARCH

Working Paper

LABOUR MARKET ANALYSIS

AND EMPLOYMENT PLANNING

Working Paper No. 35

THE GROWTH OF EXTERNAL LABOUR FLEXIBILITY
IN A NASCENT NIC:
MALAYSIAN LABOUR FLEXIBILITY SURVEY (MLFS)

by

Guy Standing



35697

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November 1989

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ISBN 92-2-107331-9

First published 1989

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PREFACE

Labour has long been regarded by many labour economists as a quasi-fixed factor of production. In other words, it is immobile in the short term, often because of institutional arrangements, collective bargains, behavioural inertia or inadequate labour market signals. In recent years attention has focused on alleged labour market rigidities preventing or slowing labour adjustments in response to cyclical or longer-term economic change. All over the world this has led to calls to make labour and employment relations less fixed, more flexible and, for the workers at least, less secure.

The following paper is part of a large study of labour market changes in the manufacturing sector of peninsular Malaysia, a rapidly industrialising country, where a deep economic recession in the mid-1980s has been followed by a period of adjustment and accelerated export-led industrialisation. It examines how firms responded to the internationally transmitted recession, increased uncertainty and revived labour surplus conditions. It examines to what extent the manufacturing sector increased what is commonly described as "external" labour flexibility. The latter term refers to the ease or difficulty with which firms can modify the size and composition of the workforce and the mechanisms used for that purpose.

The study is based on a large establishment-level survey - the Malaysian Labour Flexibility Survey (henceforth, the MLFS) - a two-part sample survey of nearly 3,000 manufacturing firms, carried out in mid-1988. The methodology was a complex one, and is outlined in Appendix I. It was conceived as part of our research programme on labour flexibility and as a contribution to a "Human Resources Development" project in Malaysia.

Behind the specifics of the MLFS lay three general concerns that motivated the development of the methodology of the survey, one of the larger and more ambitious of its kind. The first was a long-standing interest in the Malaysian labour market; in 1982-83 I carried out three surveys - a labour absorption and mobility survey in the Federal Territory (the area in and around the capital, Kuala Lumpur), a household survey focusing on labour migration from and to rural kampongs of Kelantan, a northern state, and a small establishment-level survey in the Klang Valley. By the late 1980s it was clear that the Malaysian labour market was undergoing some profound changes and it seemed that in many respects its experiences were mirroring those in various other parts of the world. But because it is a rapidly industrialising economy undergoing a recession and structural adjustment process, Malaysia represented a very appropriate country for a labour flexibility survey in many respects, not least because it is perceived as one of a handful of "Pacific Basin" or South-East Asian countries relatively successfully industrialising and gaining a growing share of world trade in manufacturing goods, as well as of other goods and services. It might have lagged behind its neighbour, Singapore, as well as the Republic of Korea, Hong Kong and Taiwan Province; it might also have had lower economic growth in recent years than its other neighbours, Thailand and Indonesia. However, by world standards its economic performance has been very impressive indeed, even though its Prime Minister in 1989 was adamant that there should be no talk of Malaysia becoming a "NIC".

The second motivating factor was more general. Ever since the early 1970s it has seemed that the analysis of the micro-foundations of labour processes has been badly hampered by a poorly developed "demand-side" perspective. Correspondingly, the establishment-level database has remained weak, certainly very much so compared with the household-level database. There have been some pioneering empirical studies of enterprise-employment

practices, but the number has been tiny compared with the proliferation of household-based studies, many of which have gone over very well-tilled soil. One senses that this unbalanced development has had something to do with the relative methodological difficulties of collecting data - anyone who has conducted household and establishment surveys knows that the former are much easier in practical terms, in questionnaire, survey and sample design and in the subsequent analysis of the data. It also has something to do with Duesenberry's famous quip that economics is all about what choices people have to make, whereas sociology is all about how individuals cannot make choices. Most of the issues that crop up in analyses of labour "within the factory" are not easily handled by the box of tools supplied with the conventional economics textbooks, in which many of the most intriguing questions are blocked off altogether. That is changing, but only very slowly.

The third motivation for the development and application of a labour flexibility survey was more immediate. There are reasons to suppose that globally, in industrialised market economies, in developing-industrialising economies and even in "centrally planned" economies, there has been a trend towards more flexible employment patterns and labour markets. This owes a great deal to the international upheavals of the 1970s, to the new technological possibilities and imperatives that have emerged in recent years and to reactions to the developments of welfare states.¹ It is hypothesised that there has been a set of parallel developments. The first of these is that there has been a growth of employment or "external" labour flexibility, which is concerned primarily with relations of production and employment mobility, or the costs and speed with which workforce size can be adjusted. The second is a growth of "functional" or "internal" labour flexibility, which is concerned with the structure of jobs and work organisation, the view being that various developments have made it more feasible and necessary for work structures to adjust more extensively and more rapidly. And the third is a search for greater wage or payment system flexibility. Some would argue that there have been no trends internationally, only temporary changes in response to crisis, recession, structural upheaval and mass unemployment. The debate is far from concluded, although there seem to be ample reasons for expecting most forms of labour flexibility to continue to grow in the longer term. Again, one of the fundamental problems is that our database, and the methodology for collecting and analysing such data, is still rudimentary.

Underlying that third motivation is the basic concern over the types of employment and income security associated with labour flexibility. Concern over the proper role of labour regulations and the distributional properties of more flexible labour procedures become acute in that context, posing a whole series of policy debates for the 1990s.

The following is essentially a "chapter" of a large-scale study, and as such should be regarded as preliminary. In its preparation, I would like to thank Richard Anker and Loretta de Luca for comments, Mrs. Italicci and her colleagues in DACTYL for their excellent retyping, and those in Malaysia who helped in so many ways, as mentioned in Appendix I; most notably Tham ah Fun, A'Ida Bt Abdul Rahman, Siva Alagandram, Wan Abdul Aziz bin Wan Abdullah and Kwok Kwan Kit. Of course, the usual caveat about responsibility applies.

Guy Standing

¹ For an analysis, see G. Standing, Labour flexibility: Towards a research agenda, WEP Working Paper No. 3 (Geneva, ILO, April 1986).

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THE GROWTH OF EXTERNAL LABOUR FLEXIBILITY

1. Introduction

According to long-standing conventional wisdom, industrialisation and economic development are accompanied by a steady formalisation of employment and the labour market, including a trend towards larger proportions of the workforce in regular, secure or protected employment. This trend, and even its desirability, is now in question.

In recent years there has been a fierce debate internationally on the links between employment security and the level and growth of overall employment. Many neoclassical economists in particular have argued that employment protection regulations and practices hinder employment growth, because employers are reluctant to hire for fear of being burdened with quasi-fixed labour costs, especially in recessionary or unstable times. They argue that non-wage labour costs result in lower levels of employment not only by raising the direct cost of labour but by raising the cost of hiring, firing and replacing workers.

By contrast, it is a basic hypothesis of this study that faced with business uncertainty and the need to create a high degree of labour flexibility enterprises in Malaysia and elsewhere respond by trying to bypass (not evade) regulations such as employment protection and social security contributions as well as other institutional "rigidities" such as collective agreements. Thus enterprises find ways of containing wage and non-wage labour costs, while the regulations and "rigidities" act not so much on the level of employment by raising costs but on the nature of employment. It will be instructive to see if we can identify those ways and the extent to which they have been adopted.

2. Malaysian industrialisation: Crisis and adjustment

Malaysia may be one of those countries in which there is successful industrialisation without there ever being a period in which manufacturing accounted for anything like a majority of total employment. Policy-makers and social scientists in the 1990s may also look back on the growth of labour flexibility in the manufacturing labour market of the late 1980s as not just a response to the international economic crisis of the early and mid-1980s but as a critical phase in the emergence of a modern society and economic structure.

This is not to suggest that the phase is desirable in itself, or even necessary. It does, however, pose considerable dilemmas for those who will have to shape labour market policy in the era following the end of the New Economic Policy in 1990.¹ A more flexible labour market will place a far greater onus on labour policy to provide protection against abuse and insecurity and to ensure an environment in which the interests of equity and efficiency are jointly served.

¹ The NEP was launched after racial riots in 1969, and was designed to eradicate poverty and in the memorable words "eliminate the identification of race with economic function", by "restructuring" the economy in favour of the majority group, the Malays or "Bumiputras", by 1990.

This paper is based on a survey of over 2,600 manufacturing establishments across Peninsular Malaysia carried out in mid-1988. The context of the study was particularly intriguing, for the 1988 Manufacturing Labour Flexibility Survey (MLFS) came at the mid-point between the end of a major recessionary crisis that hit the economy in 1985-86 and the beginning of the post-NEP era. In a sense, the survey was designed to tell a story about what had happened, was happening and what was likely to happen between 1985 and 1990. The story may be deficient in details and unclear in some respects, but it has been hoped that the MLFS would establish a national benchmark for economists and policy-makers inside and outside Malaysia to examine subsequent labour market changes in an era of structural adjustment and accelerated industrialisation.

Any study of the manufacturing labour market in Malaysia has to be placed very firmly in the historical context of the objectives and evolution of the NEP and the underlying development goals of successive governments since Merdeka, the name given for independence, in 1957.

Malaysian manufacturing and industrial policy has passed through four distinctive phases. The first was one of import substitution, which lasted from independence in 1957 until about 1968; the second was what might be called selective export-led industrialisation, from 1968 until the early 1980s; the third was a phase of heavy industry development, from 1983 until 1986; and the fourth could be described as liberalised export-led industrialisation, which began in late 1986 and has continued through the period covered by the study.

From 1958 until 1968 the most symbolic policy instrument for manufacturing investment and employment was the Pioneer Industries Ordinance, which provided fiscal incentives to production rather than tariff protection; this was supplemented by the Tariff Advisory Board, set up to promote "infant industries" through the granting of selective protection. It was a decade in which capital-intensive industries flourished, partly because tax exemptions were linked to capital expenditure. Total manufacturing employment grew, but only slowly.

In 1968, there was a marked shift to export-led industrialisation with the introduction of the Investment Incentives Act, drafted in the face of chronically high unemployment and growing racial tensions. The latter were associated with the labour market stagnation and growing inequalities that had accompanied the pattern of economic development. The Investment Incentives Act boosted export-oriented industrialisation by providing tax relief for export-oriented firms, investment tax credits, accelerated depreciation allowances, export incentives, tariff protection for new manufacturing establishments and exemption from import duty and surtax. These were complemented by the establishment in July 1971 of the Labour Utilisation Relief, which granted tax relief to companies based on the number of workers employed, and by the abolition of the 2 per cent payroll tax so as to encourage labour-intensive industries. But this second phase of export-led industrialisation was also marked by the strong direct involvement of Government, in that industrial growth was made dependent on the restructuring objectives of the NEP. Public enterprises spread, as did public investment in private industrial enterprises, while government regulations played an important role in shaping the emerging pattern of employment.

From then until the early 1980s the growth of manufacturing output, exports and employment was spectacular, far faster than the equivalent for the whole economy. Between 1970 and 1980 the value of manufacturing exports nearly quadrupled in real terms, and as a share of total exports rose from under 11 per cent to 27 per cent. In the case of employment, the

manufacturing growth rate was double that of the whole economy, while its share of total employment rose from 9 per cent in 1970 to 15.7 per cent in 1980. Most of that growth came in export-oriented sectors and most of that in the free trade zones. Most spectacular of all was the expansion of the electrical components and electronics sector, mainly through electronic component assembly.¹ Overall, manufacturing employment more than quadrupled between 1968 and 1980, its annual growth peaking in 1981 at nearly 50,000.² By the early 1980s it was not just the estate and construction industries that were complaining of labour shortage, for by then there was a tight labour market in many parts of the country.

In 1981 the international recession and the collapse of commodity prices began to bite. Shortly afterwards, the Malaysian Government launched a heavy industrialisation programme with the grandiose objective of turning the country into a leading industrial nation by 2000. The Heavy Industries Corporation of Malaysia (HICOM) launched an investment programme in steel, cars and cement, plants financed by yen loans. "Look east" became a catch-phrase. For a while total manufacturing employment stabilised, with falls in key export sectors such as textiles and rubber products. Then in 1985-86 a severe recession - the worst since independence - shook manufacturing, obliging managements to focus on their labour policy and resulting in widespread retrenchments in wood products, electrical goods, electronics, textiles and many other industries. To a certain extent it was the responses to this upheaval - which in later times may be seen as a hiccough in the country's industrialisation - that formed the context of the MLFS.

One can identify 1986 as the beginning of a fourth distinctive phase, that of liberalised export-led industrialisation. Its key features have been a relaxation of the NEP in the interest of boosting industrial investment, exports and employment, with the intention of attracting more foreign investment, coupled with a reversal of the policy of promoting industrialisation - notably heavy industries - through investment in publicly owned enterprises. In particular, there has been a drive to create "Malaysia Inc." via privatisation. There has been the much-discussed Industrial Master Plan 1986-95, which inter alia identified 12 industrial sectors for special expansionary treatment in the early 1990s. More immediately, the 30 per cent foreign equity restriction on foreign investment was dropped; since 1986 foreign investors have been able to hold up to 100 per cent of the equity as long as the company exported at least 80 per cent of its production, and could hold up to 51 per cent if more than 51 per cent of its production was exported or if the output consisted of high-technology products. New investment applications received from October 1986 until 1990 were allowed to have any level of foreign equity as long as the company agreed to export more than 50 per cent of its product or if it employed more than 350 Malaysians.

¹ One is tempted to call this phase assembly-led industrialisation, so prominent was this aspect of the process.

² Department of Statistics, Industrial Surveys (Kuala Lumpur, Department of Statistics, Government of Malaysia, various years).

This fourth phase has involved a macro-economic policy shift within the NEP, away from restructuring and towards boosting economic growth, primarily through its focus on market liberalisation. This is not to suggest that policy-makers abandoned the one or had formerly given the other no attention, merely that there has been a perceptible reorientation. It seems, for example, that there has been a shift from income redistribution, via the expansion of public non-financial enterprises, the public sector and tax-financed subsidies to Bumiputra interests, to capital redistribution, via privatisation and a more concerted policy of subsidising export-oriented enterprises. Almost inevitably, the emphasis on market liberalisation means that micro-level policies will have to bear more responsibility for social restructuring, not just in the conventional Malaysian sense under the NEP but in terms of protecting all vulnerable groups in the labour market.¹

Although unemployment rose to over 10 per cent in 1987 and 1988, by then industrial expansion was once again impressive. The ideas of supply-side structural adjustment were being promoted in an international atmosphere favouring labour and capital market "deregulation", including the wholesale privatisation of economic and social activities. Industrial policy has shifted towards a more market-oriented, outward-oriented strategy that favours large, multinational capital and multinational management control of their establishments. By 1988, with privatisation in full swing, the industrial structure seemed to be in for a period of profound change.

That reorientation made it important to take stock of how manufacturing firms had responded to the shocks of the mid-1980s and to obtain an impression of how the further influx of foreign and export-oriented firms could be expected to tilt subsequent labour market developments.

Our core hypotheses can be stated quite clearly. In the second half of the 1980s a more sharply defined industrial dualism has been emerging: large establishments have been growing and strengthening their position relative to small ones, while within establishments of almost all sizes and in all industries a labour flexibilisation process has been gaining strength, involving a shift away from employment security and a shift of employment risk from companies to workers.

If these trends were supported by the data, then policy-makers might be advised to address both questions with some urgency in the post-NEP era, particularly as the most disadvantaged groups tend to be crowded into more precarious forms of employment. It would be in nobody's interest for industrial fragmentation to undermine the considerable social achievements of the past two decades. Yet it will be argued that certain long-term trends in the labour market that were expected to accompany industrialisation, including the "formalisation" of employment, have been checked if not reversed. This partly reflects adoption of trends from highly industrialised economies and partly arises because manufacturing enterprises in Malaysia have realised the advantages of alternative employment relations.

¹ In an earlier survey done for the Government in 1982, we showed how upward socio-economic mobility in the labour market - a critical aspect of the NEP - had been achieved predominantly through public-sector employment. G. Standing, Migration in Peninsular Malaysia (Kuala Lumpur and Geneva, EPU-ILO, 1982).

3. The Malaysian Labour Flexibility Survey (MLFS)

The MLFS was launched in the context of the post-recession, adjustment phase of Malaysia's industrialisation, at a time of high unemployment and widespread concern over labour market developments. It involved a two-round survey of 3,100 manufacturing establishments. The methodology is described elsewhere and briefly in Appendix I. In essence it was nearly a census of manufacturing in Peninsular Malaysia, with a completed sample of 2,682 establishments, with representative sub-samples of all the main sectors and size categories, with some under-representation of very small-scale units. It focused on a wide cross-section of labour and employment issues covered by the debates on labour flexibility and adjustment. The following deals with one set of topics, the security and adjustability of employment.

MALAYSIA: SOME KEY FACTS, 1988

GDP per capita	US\$ 2,000
Real GDP growth 1988	8.1%
1987	4.7%
1978-88	5.7% per annum
Inflation	2.5%
Current account balance	+US\$1.9 billion
Main exports include: (% of total)	
Electronics components	15.7%
Petrol	11.0%
Main imports: (% of total)	
Manuf. inputs	34.9%
Debt service ratio	27.9%
Currency: Malaysian \$ (ringgit) = US\$0.38	
Source: <u>Financial Times</u> , 28 September 1989.	

4. Surplus labour and retrenchment

The need for more flexible employment practices was brought home to Malaysian manufacturing by the deep recession of the mid-1980s. By mid-1988 there had been a recovery - albeit patchy - with some growth in employment and a considerably more dynamic recovery in output growth.¹ Even so, at the time a majority of firms had no job vacancies, according to the survey data, although a large majority of export-oriented firms, notably in the electronics and textiles industries, did have some vacancies.

¹ G. Standing, Labour flexibility and structural adjustment: Post-NEP dilemmas, Paper presented to the Malaysian Economics Association Conference, 7-9 August 1989. The growth rate in 1988-89 was remarkable and unprecedented.

The economic crunch had come much earlier, and nearly one in every five establishments reported that they had suffered from surplus labour - that is, excess to requirements - in one or more of the previous three years 1986-88 (table 1). This was positively related to establishment size (table 2) and weakly inversely related to export orientation.

Table 1. Manufacturing establishments with surplus labour, 1986-88, by industry (% of establishments in industry)

Industry	% with surplus labour
Food, etc.	14.1
Textiles, etc.	13.2
Wood products	14.0
Paper products	16.4
Chemicals, etc.	18.0
Non-metal. min.	31.5
Basic metals	32.9
Fabricated metal	23.5
Electronics	29.3
Other manufacturing	15.4
Total	18.6

Note: These data refer to labour in excess to requirements in one or more of the preceding three years.

Table 2. Per cent of establishments with surplus labour, 1986-88, by employment size

	Employment size							
	1-4	5-20	21-50	51-100	101-250	251-500	501-1000	1001+
% with surplus labour	7.9	11.8	15.6	21.6	23.2	23.0	23.9	26.6

Those reporting that they had experienced surplus labour conditions were asked to identify their main and second main responses. They had been far more inclined to cut working time than wages, most notably by cutting overtime and pushing for voluntary resignations (table 3). However, in addition to such measures, about 11 per cent of all establishments had retrenched some workers in the 1986-88 period, with over 20 per cent in the non-metal mineral

products and basic metals industrial sectors, and 19 per cent in electronics.¹ It would be a mistake to conclude from this that those companies exposed directly to the vagaries of international trade were the most likely to have retrenched, for in fact the most export-oriented establishments had the lowest probability of having retrenched workers. If anything, it seems the two extremes of export orientation had the least likelihood of doing so (table 4).

Table 3. Measures reducing labour input in response to surplus labour 1986-88, besides/instead of retrenchment, by industry

Measure	Industry								
	Food, etc.	Tex-tiles, etc.	Wood prod.	Paper prod.	Chem., etc.	Non-metal min.	Basic metals	Fab. metal	Electronics
None	3.4	8.6	12.1	20.6	5.1	-	-	4.8	-
Cut hours	16.1	14.3	25.9	8.8	5.1	15.1	15.4	17.6	17.8
Ext. vac.	2.3	-	3.4	-	3.8	1.9	-	2.4	-
+ cut wage	1.1	-	1.7	-	-	-	-	-	-
Early ret.	-	-	1.7	2.9	1.3	-	-	-	-
Cut overtime	13.8	14.3	8.6	17.6	24.4	17.0	23.1	15.2	11.8
+ cut hrs.	1.1	2.9	-	2.9	-	-	3.8	4.8	-
+ ext. vac.	-	-	-	-	1.3	-	-	-	-
+ early ret.	-	-	-	5.9	-	-	-	-	-
Cut wages	4.6	5.7	3.4	2.9	1.3	3.8	-	-	-
+ early ret.	-	-	-	-	-	1.9	-	-	-
+ cut over.	-	2.9	-	-	-	1.9	-	0.8	-
Vol. Resign.	19.5	11.4	15.5	8.8	16.7	17.0	23.1	20.8	17.6
+ cut hrs.	1.1	-	-	-	2.6	-	-	0.8	-
+ ext. vac.	-	-	-	-	1.3	-	-	-	-
+ early ret.	-	-	-	-	-	1.9	-	-	-
+ cut over.	1.1	2.9	1.7	-	-	-	-	3.2	5.9
Other	9.2	8.6	6.9	5.9	9.0	15.1	15.4	9.6	35.3
Do not know	25.3	28.6	19.0	23.5	28.2	24.5	15.4	19.2	17.6

As for the regional distribution, establishments in the industrial heartland of Selangor and Kuala Lumpur had been far more likely to retrench than elsewhere; about 18 per cent of all manufacturing establishments in Selangor had made retrenchments whereas less than 7 per cent had done so in the southern State of Johore.

¹ According to unpublished Ministry of Labour data, in 1988 57.3 per cent of all workers retrenched were in manufacturing industries.

Table 4. Per cent with surplus labour, 1986-88, by per cent of output exported

	% of output exported					
	0	1-10	11-25	26-50	51-75	76+
% with surplus labour	16.7	25.9	23.8	19.9	19.5	15.5

Clearly, the extent of retrenchment was substantial in the 1985-88 period and the figures are indicative not only of the intensity of the recession and adjustment process but of both the ease and willingness of firms in Malaysia to adjust the size of their workforces.

As for the costs of retrenchment, most establishments reported that as a rule they did pay benefits to workers losing their jobs, although fewer than two-thirds of textiles firms paid out benefits (table 5). In general, foreign firms were far more likely to pay compensation. Those losing their jobs in foreign companies were also likely to receive the most. And as can be seen from table 6 workers retrenched in small-scale concerns were comparatively unlikely to receive anything, which can be regarded as one aspect of their relative precariousness. If they obtained anything, they typically received much less than those retrenched from larger-scale establishments.

Table 5. Per cent of establishments paying benefits to retrenched workers, 1986-88, by industry

Industry	% paying benefits	Average amount paid (\$m)			
		\$<1000	\$1001-3000	\$3001-6000	\$6001+
Food, etc.	75.6	21.9	21.9	18.7	37.5
Textiles, etc.	63.6	38.5	7.7	15.4	38.5
Wood products	66.7	21.0	31.6	21.0	26.3
Paper products	85.0	17.6	35.3	23.5	23.5
Chemicals, etc.	83.3	20.0	17.5	27.5	35.0
Non-metal. min.	83.3	25.7	28.6	17.1	28.6
Basic metals	88.9	37.5	12.5	18.7	31.2
Fabricated metal	93.4	17.6	22.1	23.5	36.8
Electronics	100.0	30.0	20.0	30.0	20.0

Note: For comparison, production workers were earning on average about \$500 per month.

Table 6. Per cent of establishments paying benefits to retrenched workers, 1986-88, by employment size of establishment

	Employment size					
	5-20	21-50	51-100	101-250	251-500	501+
% Paying benefits	64.5	78.2	75.9	90.7	93.9	93.3
<u>Average amount:</u>						
\$1-1000	31.6	34.9	31.0	13.5	6.4	22.2
\$1001-3000	26.3	18.6	29.3	24.3	22.6	11.1
\$3001-6000	15.8	23.3	13.8	27.0	25.8	18.5
\$6001+	26.3	23.3	25.9	35.1	45.2	48.1

So, not only had many manufacturing companies found it necessary to retrench but they had done so at what must be construed as modest financial cost. To the extent that most of the workers affected received benefits, there was employment protection, but that was hardly very effective in protecting them from job loss. Even so, there was clearly a cost incentive for employers to avoid such costs if they could. The question is: How could firms avoid such costs most effectively?

At this point we can identify one way by which manufacturing firms achieved a degree of external labour flexibility, and no doubt wage flexibility as well. No less than 18 per cent of all companies that had retrenched workers rehired at least some of them shortly afterwards, and 39 per cent of all electronics companies did so. One reason for this must have been the pick-up in demand for the product. But a further incentive to pursue this course is that workers retrenched and rehired would have lost the employment protection that comes with having been in continuous employment for two years or more. Perhaps even more importantly, such workers would have lost their annual wage increment entitlements. That aside, over two in every five establishments that re-engaged retrenched workers reported that they then paid them lower wage rates; in the fabricated metal products sector nearly two-thirds of the firms did that.

5. Flexible work statuses: An evolving pattern

This leads to a more general consideration of the available methods of achieving a high degree of employment flexibility. In principle, such methods could be designed to reduce (i) direct wage costs, (ii) potential wage costs (weakening the potential for effective pressure for higher wages, for instance), (iii) direct, or fixed, non-wage labour costs, and (iv) indirect non-wage labour costs (supervision, training, motivation costs, potential disemployment costs, etc.).¹ Employers naturally wish to minimise all such costs consistent with high and rising productivity.

¹ For an analysis of types of labour cost, see G. Standing, Labour flexibility: Towards a research agenda, WEP Working Paper No. 3 (Geneva, ILO, Apr. 1986), pp. 16-21.

Although it is difficult to obtain a good analytical grip on these issues in a large survey, there may be enough in the MLFS to tell what seems to be an unravelling story. The key is the extent to which firms rely on regular, full-time wage labour. For that category one could expect wages and salaries and most non-wage labour costs to appear to be relatively high to enterprises, particularly in an era of labour surplus and structural adjustment, when business uncertainty means that firms could face a high risk of suddenly finding that they themselves had surplus labour and when mass unemployment would ensure ample alternative workers. We will therefore focus on the extent to which firms have resorted to "non-regular" forms of labour.

A. Non-wage labour

In most respects, though certainly not all, the least costly could be expected to be non-wage, family labour. It is worth merely noting that in Malaysia nowadays most of the manufacturing sector - except in a certain milieu of small-scale businesses - has only a very small percentage of family non-wage labour, as table 7 indicates. Perhaps it is significant that there was a small shift to the use of more non-wage labour compared with wage employment between 1986 and 1988 (table 8). Of the various reasons cited for having done so the most widely reported was cost (39 per cent of all establishments having increased gave that reason), followed by lower supervision (11 per cent) and a perceived shortage of suitable alternative workers. But for the great majority of establishments that route to employment flexibility was not followed and was almost certainly not feasible on any large scale.

Table 7. Employment of non-wage family workers, by employment size of establishment, 1988

Employment size	% non-wage family workers				
	0	0.01-10	10.01-25	25.01-50	50.01+
1-4	36.1	-	13.9	30.6	19.4
5-20	64.8	8.5	16.4	7.4	2.9
21-50	87.1	9.9	2.4	0.5	0.7
51-100	96.9	3.1	-	-	-
101-250	98.7	1.3	-	-	-
251+	100.0	-	-	-	-

Table 8. Change in employment of non-wage family workers 1986-88, by employment size of establishment, 1988

Employment size	Change in % non-wage family workers			
	Increased	Decreased	No change	None
1-4	2.8	-	47.2	50.0
5-20	1.7	0.4	22.3	75.6
21-50	1.3	0.5	5.8	92.5
51-100	-	-	1.6	98.4
101-250	0.2	-	0.9	98.9
251+	-	-	-	100.0

B. Temporary labour

More analytically significant is the fact that a great many manufacturing establishments employed casual and temporary labour, even though this is not a formally recognised category in Malaysian labour legislation. Temporary workers were defined as those employed without contracts of employment (casual) or for short, specified periods (temporary).¹ Questions were asked about the number of different types of workers in mid-1985 and mid-1988 and whether the firm had employed labour in such work statuses at any time during the past two years. The results showed that many more firms had used temporary or casual workers at some time than had them on their books either in June 1985 or June 1988. As table 9 shows, the electronics and the basic metals' industries were the most likely to have some of their workforce as temporary workers.² And as table 10 shows, the larger establishments were most likely to have at least some temporaries. It is also notable that foreign firms were relatively inclined to employ them.

¹ Except where specified, the two categories were grouped together, and the terms used interchangeably.

² The high proportion in basic metals might be attributable to the sluggish recovery that industry was experiencing in 1988, and the effects of international competition, particularly in the production of steel rods.

Table 9. Employment of temporary/casual workers, by industry, 1988

Industry	% temporary of total employment				
	0	0.1-10	10.1-20	20.1+	% employed in past two yrs.
Food, etc.	84.2	4.5	4.7	6.6	22.3
Textiles, etc.	87.1	6.7	2.9	3.3	23.6
Wood products	88.9	2.5	3.6	5.0	12.6
Paper products	78.2	10.9	6.1	4.8	30.5
Chemicals, etc.	83.0	7.5	5.4	4.1	23.0
Non-metal. min.	85.7	4.2	4.8	5.4	23.5
Basic metals	77.2	8.9	6.3	7.6	30.4
Fabricated metal	86.6	6.1	2.2	5.1	21.1
Electronics	75.9	15.5	3.4	5.2	31.0
Other manufacturing	86.5	9.6	1.9	1.9	15.7

Table 10. Employment of temporary/casual workers, by employment size, 1988

Employment	% temporary of total employment				
	0	0.1-10	10.01-25	25.01-50	50.01+
1-4	93.2	-	4.5	2.3	-
5-20	86.1	2.0	6.8	3.1	1.9
21-50	89.0	4.5	3.7	2.2	0.6
51-100	86.6	4.5	5.6	2.9	0.4
101-250	82.3	8.1	6.1	2.2	1.3
251-500	76.8	15.1	5.9	1.1	1.1
500-1000	75.3	15.7	3.4	5.6	-
1001+	74.3	17.1	8.6	-	-

Table 11. Employment of temporary/casual workers in past two years, by employment size, 1988

	Employment size							
	1-4	5-20	21-50	51-100	101-250	251-500	501-1000	1001+
% employing temporaries	21.1	17.6	15.9	19.7	26.7	31.0	31.8	52.4

If large, export-oriented firms, which have been growing relative to other establishments, have been the most inclined to hire casual labour, that in itself would point to a probable increase. But more significant is the fact that in every industrial sector the overall proportion of the workforce that were casual or temporary labour increased between 1985 and 1988, as tables 12 and 13 bring out quite clearly. The shift was particularly striking in large-scale establishments. It is also notable that the share of temporary and casual labour tended to rise more in establishments that had expanded their total employment in the previous three years, suggesting that such firms were avoiding fixed employment costs (table 14).

Table 12. Change in employment of temporary/casual workers in past two years, by industry, 1988

Industry	Change in % temporary		
	Decreased	No change	Increased
Food, etc.	8.0	82.7	9.2
Textiles, etc.	5.5	86.0	8.5
Wood products	3.6	88.8	7.6
Paper products	8.0	76.7	15.3
Chemicals, etc.	6.3	80.5	13.2
Non-metal. min.	7.3	83.6	9.1
Basic metals	3.9	72.4	23.7
Fabricated metal	4.6	84.7	10.6
Electronics	1.7	75.9	22.4
Other manufacturing	-	88.2	11.8

Table 13. Change in employment of temporary/casual workers in past two years, by employment size, 1988

% temporary/casual	Employment size					
	1-20	21-50	51-100	101-250	251-500	501+
Decreased	7.3	4.8	5.1	5.8	7.2	4.6
No change	85.6	87.1	85.7	80.2	75.0	70.9
Increased	7.1	8.1	9.2	14.0	17.8	24.5

Table 14. Change in employment of temporary/casual workers, by employment change, 1985-88

Change in % temporary	Change in total employment						
	Decreased			No change	Increased		
	25.1+	10.1-25	0.1-10		0.1-10	10.1-25	25.1+
Decreased	9.7	8.5	6.7	1.7	6.0	6.6	4.1
No change	78.0	82.4	83.5	95.5	77.8	80.9	82.8
Increased	12.3	9.1	9.8	2.8	16.2	12.5	13.1

According to employers, the main reason for having temporary or casual labour was to counter fluctuating demand, although in the wood products' industry the main reason was lower wage costs (table 15). It was hard to explain the high percentage reporting that labour shortage had prompted the turn to temporary workers, but perhaps it had something to do with taking underqualified or in some other respects inappropriate workers on a temporary basis until preferred workers could be found. Another widespread motivation was the desire to have a stable labour force, perhaps evidence of the existence of the concept of core and peripheral workforces, whereby temporaries lack the employment security of the regular workers. Finally, it is worth noting that labour laws were not perceived as a main or "second main" reason for any casualisation of employment.

To reiterate: In principle, there is no such category as temporary worker in Malaysian labour law. Its prevalence reflects labour market reality and the non-enforcement of the Labour Laws in circumstances where, as the respondents claimed, the major reason for hiring temporary and casual labour was either fluctuating demand or market uncertainty, followed by labour shortage and the ability to pay lower wages. If the authorities are seriously concerned with the threat of widespread casualisation and if it is accepted that casual workers need employment protection by enforcement of the Labour Laws, then it is important to know where in the country and in what types of establishment casual forms of employment have been spreading. This is particularly important given the very limited number of labour law officers employed by the Ministry of Labour - some 200 in Peninsular Malaysia and about 250 in the whole country.

Labour inspectors might be advised to concentrate on firms in two States - Selangor and Kedah - where, as tables 17 and 18 show, the growth of such employment has been most conspicuous and where, with Kelantan, firms with temporary and casual workers are most common.

Table 15. Main and second main reasons for hiring temporary/casual labour, 1988, by industry

	Industry								
	Food, etc.	Tex-tiles, etc.	Wood prod.	Paper prod.	Chem., etc.	Non-metal min.	Basic metals	Fabri-cated metal	Elect-ronics
<u>Main reason</u>									
Lower costs:									
- Supervision	3.0	1.7	4.3	3.8	5.2	5.1	4.2	2.8	-
- Training	-	-	-	-	1.0	-	-	1.9	-
- Wages	13.6	5.3	32.6	5.8	5.2	12.8	4.2	13.2	5.6
- Clerical	-	-	-	-	-	-	-	1.9	-
Specialised skills	0.8	3.5	4.3	5.8	3.1	5.1	12.5	4.7	-
Labour shortage	12.9	15.8	10.9	13.5	14.6	12.8	8.3	11.3	16.7
Fluctuating demand	23.5	36.8	30.4	40.4	29.2	33.3	29.2	32.1	22.2
Market uncertainty	8.3	10.5	6.5	7.7	11.5	7.7	16.7	9.4	11.1
Preserving stable workforce	6.8	3.5	2.2	1.9	6.2	15.4	8.3	2.8	22.2
Other	31.1	22.8	8.7	19.2	22.9	7.7	16.7	29.8	22.2
<u>Second main reason</u>									
Lower costs:									
- Supervision	3.0	3.6	6.5	5.9	-	-	4.2	-	*
- Training	6.1	-	-	-	-	-	4.2	-	*
- Wages	9.1	8.7	7.8	6.3	-	-	-	5.6	*
- Clerical	-	-	-	-	-	-	-	-	*
Specialised skills	0.8	3.6	2.2	-	-	-	4.2	2.4	*
Labour shortage	4.5	10.9	6.5	3.9	3.2	7.7	8.3	4.0	*
Fluctuating demand	10.6	7.3	6.5	3.9	14.7	12.8	12.5	4.8	*
Market uncertainty	9.1	10.9	10.9	5.9	14.7	17.9	20.8	15.3	*
Preserving stable workforce	6.1	7.3	15.2	11.8	10.5	2.6	4.2	7.3	*
Labour laws	-	-	-	-	-	-	-	0.8	*
Fewer holidays	1.5	-	-	-	-	-	-	-	*
Other	6.1	7.3	13.0	3.9	8.4	7.7	8.3	7.3	*
<u>No second main</u>	52.3	43.6	30.4	58.8	42.1	51.3	33.3	52.4	*

* Too few observations to justify estimates. See Appendix III.

Note: "Other" does not include any reason specified above and in the questionnaire; therefore, it does not include "labour laws" or "fewer" holidays under main reason.

Table 16. Main and second main reasons for hiring temporary/casual labour, 1988, by employment size

Main reason	Employment size						
	1-4	5-20	21-50	51-100	101-250	251-500	501+
Lower costs:							
- Supervision	-	3.2	3.0	2.8	4.8	6.9	-
- Training	-	1.1	-	0.9	0.7	-	-
- Wages	-	24.2	17.2	11.9	2.8	5.2	9.8
- Clerical	(11.1)	-	1.0	-	-	-	-
Specialised skills	(11.1)	5.3	7.1	1.8	2.8	1.7	3.3
Labour shortage	(33.3)	15.8	13.1	15.6	13.1	5.2	6.6
Fluctuating demand	(22.2)	24.2	26.3	33.0	33.1	36.2	34.4
Market uncertainty	(22.2)	9.5	8.1	9.2	10.3	8.6	9.8
Preserving stable workforce	-	3.2	10.1	4.6	5.5	3.4	9.8
Other	-	13.7	14.1	20.2	26.9	32.8	26.2

Note: Figures in parentheses indicate fewer than ten observations. See Appendix III.

Table 17. Temporary employment, by state, 1988
(average % share in state)

State	% temporary			
	0	0.1<10	10-20	Over 20
Johore	90.8	3.0	3.5	2.8
Kedah	79.5	9.4	5.1	6.0
Kelantan	81.7	3.3	5.0	10.0
Malacca	81.4	8.1	5.8	4.6
Negri Sembilan	86.2	5.7	4.6	3.4
Pahang	89.4	3.8	1.9	4.8
Penang	87.2	5.8	3.6	3.3
Perak	88.7	4.2	3.1	4.0
Selangor	76.9	10.5	5.2	7.4
Trengganu	85.4	7.3	1.8	5.5
Kuala Lumpur	82.7	5.9	5.7	5.7

Table 18. Change in per cent temporary employment, 1985-88, by state

State	Change in % temporary/casual		
	Decreased	No change	Increased
Johore	3.5	89.5	7.0
Kedah	7.2	77.5	15.3
Kelantan	3.4	86.4	10.2
Malacca	10.6	77.6	11.8
Negri Sembilan	4.6	83.9	11.5
Pahang	9.6	84.6	5.8
Penang	3.7	87.7	8.6
Perak	3.4	90.1	6.5
Selangor	8.0	73.6	18.4
Trengganu	7.4	83.3	9.3
Kuala Lumpur	6.6	80.7	12.6

All this begs a number of questions, of course. In what respects is temporary, casual employment precarious for the workers concerned, putting them in need of legislative and administrative protection? The lack of employment security is one major characteristic, but even there one finds wide variation. Some temporary workers have the most precarious contractual relationship with the establishment, that is, a casual work status involving an oral understanding that can be modified from day to day or week to week. Others have a specified, written contract for some short-term period, such as three months or a month. As it is, in mid-1988 it is notable that temporary workers in small-scale establishments tended to be in the most precarious, casual relationship (table 19).

Table 19. Main form of temporary work arrangement, by employment size of establishment, 1988

	Employment size						
	1-4	5-20	21-50	51-100	101-250	251-500	501+
Short-term, specific:							
- Written contract	-	10.5	23.5	40.2	66.4	81.0	72.1
- Oral contract	(66.7)	52.6	55.1	29.5	20.3	10.3	13.1
Continuing, casual	(11.1)	33.7	19.4	23.2	12.6	8.6	11.5
Other	(22.2)	3.2	2.0	3.6	0.7	-	3.3

One cannot help but feel that the authorities in the Ministry of Labour should be enabled to ensure that temporary workers be given the minimal protection of written contracts of employment. Labour Inspectors could perhaps concentrate their limited time on small-scale establishments, because

it is there that temporary workers have been most vulnerable to the absence of a protective contract. That policy conclusion follows unless, perhaps, those who favour labour market deregulation could show realistically that such protection would harm the employment prospects of the workers involved. On the face of it, that seems most unlikely.

Moreover, even if labour inspection was rather ineffectual for medium and small-scale firms, it could have a positive demonstration effect, encouraging workers to realise that they do have legalised rights and employers to adhere more to normal good practice. It is simply too facile to dismiss regulations on the grounds that they are hard to apply or only partially effective.

Table 20. Main form of temporary work arrangement, 1988, by industry

Industry	Main form of temporary arrangement			
	Short-term, specific		Continuing, casual	Other
	Written	Oral		
Food, etc.	46.6	32.8	19.8	0.8
Textiles, etc.	32.1	44.6	17.9	5.4
Wood products	21.7	39.1	30.4	8.7
Paper products	41.2	33.3	17.6	7.8
Chemicals, etc.	46.9	29.2	22.9	1.0
Non-metal. min.	48.7	30.8	20.5	-
Basic metals	66.7	16.7	16.7	-
Fabricated metal, electronics	57.7	30.1	12.2	-
Other manufacturing	(50.0)	(37.5)	-	(37.5)

Casual labour is all the more insecure if the workers have little prospect of moving from temporary status to more secure employment. Evidently that prospect has been dim. A majority of small firms normally terminated the employment of temporary workers at the end of their short-term contract, if that term could be applied to their condition. By contrast, in medium-sized firms the most common practice was renewal as temporary labour, thus perpetuating their dependent insecurity. Only in large firms did a large proportion normally transfer to regular employment (table 21). Thus we have a situation in which there has been a general erosion of employment security but which has been worse in small-scale establishments.

Table 21. Whether or not temporary workers given new contracts, by employment size, 1988

Employment size	New, temporary contract	Regular contract	No new Contract
1-4	(22.2)	-	(77.8)
5-20	30.9	9.6	59.6
21-50	38.1	13.4	48.5
51-100	47.7	17.8	34.6
101-250	47.9	18.7	33.3
251-500	46.6	25.9	27.6
501-1000	32.1	28.6	39.3
1001+	27.3	39.4	33.3

The situation of temporary labour was all the worse because over three-quarters of firms used such workers mainly for unskilled, manual labour, as table 22 indicates. The vast majority of those workers were trapped in such jobs, with neither employment security nor adequate income nor the opportunity for skill acquisition.¹ It is also notable that when asked whether they hired temporary and casual labour a majority said that they hired them for limited-duration tasks and as "stop-gap labour"; only a minority responded that they had hired them as substitutes for regular wage labour (table 23). However, it must be presumed that there would be some blurring of the distinctions, particularly between the latter two categories.

Table 22. Main type of work of temporary/casual labour, by industry, 1988 (per cent distribution within industry group)

Industry	Main type of work of temporary workers (%):			
	Unskilled	Semi-skilled	Skilled	Other
Food, etc.	89.4	3.0	5.3	2.3
Textiles, etc.	75.4	8.8	12.3	3.5
Wood products	73.9	4.3	13.0	8.7
Paper products	80.4	7.8	7.8	3.9
Chemicals, etc.	80.0	4.2	1.0	14.7
Non-metal. min.	71.8	10.3	7.7	10.3
Basic metals	83.3	8.3	8.3	0.0
Fabricated metal	65.1	15.1	12.3	7.5
Electronics	33.3	22.2	11.1	33.3
Other manufacturing	87.5	0.0	0.0	12.5
Total	76.7	7.8	7.8	7.6

¹ The analysis of the MLFS data on "functional" labour flexibility shows the very limited mobility potential of such workers. This is presented elsewhere.

Table 23. Per cent of establishments hiring temporary/casual labour for specific purposes, by employment size, 1988

Employment size	% of establishments hiring temporary for:		
	Limited-duration projects	Stop-gap labour	Substitute for regular workers
1-4	77.8	55.6	0.0
5-20	63.8	71.3	12.8
21-50	66.0	71.1	22.2
51-100	67.6	75.0	15.9
101-250	66.0	73.6	22.2
251-500	70.7	75.9	17.5
501+	66.7	78.7	13.1

Note: These data refer to those establishments which had employed temporary labour in the past two years. The first column refers to projects known to have limited duration; the second column refers to work "as stop-gap labour to cover for unusual workloads, temporary absences, etc."; the third refers to employment "as substitutes for previous regular workers". It is to be expected that there was some overlap, particularly between the latter two categories. Of course, the three are not mutually exclusive.

As for their income security, the general tendency was for temporary workers to receive either the same or lower rates of pay as regular workers, and here too temporaries in small-scale establishments were especially disadvantaged. They had a high probability of earning lower wages than other workers (table 24). Moreover, not only were temporary workers often receiving lower wage rates than other workers doing similar work but most were relegated to the lowest-status unskilled jobs. In over three-quarters of all establishments the main type of work performed by temporary labour was classified as unskilled.

Table 24. Wage rates of temporary workers relative to regular workers, by employment size, 1988

Employment size	Relative wage rates			
	Same	Lower	Higher	No comp.*
1-4	(37.5)	(12.5)	(12.5)	(37.5)
5-20	31.9	40.4	17.0	10.6
21-50	50.0	30.6	12.2	7.1
51-100	48.6	36.4	13.1	1.9
101-250	63.0	21.2	9.6	6.2
251-500	50.8	32.2	10.2	6.8
501+	69.5	20.3	8.5	1.7

* No comparable workers in that establishment.

Finally, even receiving the same wage rate as a regular worker meant that most temporary workers would have received much lower full incomes than other workers doing similar work. Considering the range of fringe benefits to which workers are supposed to be entitled under the law or under commonly accepted practices or union collective agreements, it was clear from the survey that casual and temporary workers were disadvantaged.

As table 25 shows rather starkly, temporary workers were less likely to receive any of a wide range of benefits. It is worth highlighting several aspects of this pattern. The lack of entitlement to retrenchment benefits is striking, if unsurprising, and even the figure of 16.6 per cent reporting that they were entitled to them can only be attributed to the likelihood that some temporary workers would have been employed for more than a year and thus have reached the entitlement stage. One may guess that in some companies many regular workers would not have served for the year qualifying period. Among other striking differences in treatment, one can suppose that women casual workers were particularly disadvantaged compared with their regular worker counterparts, rarely having access to maternity leave or paid leave of any other kind. In short, the lot of a temporary worker is not an enviable one.

Table 25. Percentage of workers entitled to benefits, by work status

Benefit	Worker status			
	Clerical	Regular workers		Temporary/ casual
		Skilled	Semi/unskilled	
Meals/allowance	31.9	39.7	37.1	31.8
Paid leave	96.6	94.0	91.4	35.8
Sick leave	98.8	97.1	95.6	59.6
Maternity leave	96.9	86.1	86.9	28.6
Pension	4.1	3.7	3.2	2.0
Retirement pay/EPF	97.3	96.4	94.9	54.6
Retrenchment benefit	75.4	73.8	72.3	16.6
Loan subsidies, etc.	17.8	15.5	12.5	3.8
Transport/allowance	26.3	31.0	28.9	18.8

C. Labour subcontracting

Another way by which enterprises could increase employment flexibility is by contracting out employment. They could do this by two means. They could contract out certain activities to other establishments or individuals or they could use contract labour, which is really self-employed piece-rate labour.

Nearly a quarter of all manufacturing establishments contracted out part of their production process to other establishments, and nearly one-third of all electronics and textiles and apparel companies did so (table 26).

Table 26. Per cent of establishments contracting out employment, by industry, 1988

Industry	% contracting out
Food, etc.	16.5
Textiles, etc.	33.6
Wood products	23.9
Paper products	23.3
Chemicals, etc.	18.9
Non-metal. min.	23.2
Basic metals	17.7
Fabricated metal	27.2
Electronics	37.9
Other manufacturing	31.4
Total	23.2

Not surprisingly, the larger the establishment the more likely it was to contract out some part of the production process. No less than 44 per cent of large establishments with over 500 workers did so (table 27). This varied considerably by sector, with the greatest proportion being in the textile and apparel industry (table 28). The larger the establishment in terms of paid-up capital or annual sales, the more likely they were to contract out part of their activities (tables 29 and 30). The propensity to contract out seemed unrelated to whether establishments had expanded or contracted in the past three years, but did seem to be particularly characteristic of Japanese-owned companies, which were twice as likely to contract out employment as other firms, whereas Malaysian, Singaporean, British and Australian-owned firms were the least likely to do so.

Table 27. Per cent contracting out employment to other establishments, by employment size, 1988

Size	% contracting out
1-20	13.2
21-50	18.9
51-100	24.5
101-250	27.6
251-500	34.2
501+	44.0

Table 28. Per cent of establishments contracting out employment, by employment size of establishment, by industry, 1988

Size	1-20	21-50	51-100	101-250	251-500	501+	Total
Food, etc.	2.1	15.1	22.8	33.6	27.3	9.1	16.5
Textiles, etc.	12.9	24.0	30.5	40.0	41.9	60.0	33.6
Wood products	20.8	30.1	17.7	18.4	44.0	41.7	23.9
Paper products	11.8	19.6	31.8	21.9	20.0	50.0	23.3
Chemicals	8.7	15.1	15.9	19.8	34.2	43.7	18.9
Non-metal. min.	24.2	15.5	20.0	32.0	31.2	50.0	23.2
Basic metals	8.0	11.8	16.7	33.3	*	*	17.7
Fabricated metal	22.9	18.9	36.4	31.8	43.5	38.0	27.2
Electronics	-	*	(28.6)	(20.0)	(0.0)	48.7	37.9
Other manufacturing	27.8	18.2	(20.0)	41.7	*	*	31.4

* Too few observations for reliable estimates.

Table 29. Per cent of establishments contracting out employment, by size of establishment in terms of paid-up capital, 1988 (paid-up capital in thousand dollars)

	Paid-up capital (\$M thousands)					
	<10	10-99	100-349	350-999	1000-4999	5000+
% contracting out	23.7	14.4	17.1	20.0	26.4	33.5

Table 30. Contracting out employment, 1988, by annual sales, 1987 (annual sales in thousand dollars)

	Annual sales (\$M thousands)				
	<100	100-349	350-999	1000-4999	5000+
% contracting out	14.3	16.0	16.9	21.0	30.5

The main activity contracted out was "component production", followed by maintenance work (table 31); Japanese-owned firms were the most likely to be contracting out component production as their main form of subcontracting; about 44 per cent of the contract work was done on the premises, 42 per cent elsewhere and 14 per cent partly on the establishment and partly elsewhere, although this depended very much on the industry, with 78 per cent of contracted work in textiles being done off the premises, compared to less than a quarter in wood products, for example. It is perhaps significant that establishments with high labour cost shares in 1987 were comparatively likely to be contracting out component production as their main form of subcontracting (table 32). But there was no evident relationship between export orientation and the contracting out of component production. As for the reasons for contracting out such work, the most common motives were acquisition of specialist skills, which were presumably not required on a regular, full-time basis, and "lower supervision costs", followed by "lower wage costs" and then the desire to avoid fixed employment costs in the context of fluctuating demand. Among smaller firms the wage and specialist skill factors, particularly the latter, were more often cited as the main reasons. But overall there was no clear relationship between wage pressures and subcontracting, unless one wished to interpret the fact that firms in which wage rates had risen less than other costs of production in the past two years were also somewhat more likely to be contracting out some labour functions as reflecting the effect on the latter of the former.

Table 31. Main activity contracted out, by industry, 1988

Industry	Main activity contracted out			
	Maintenance	Transport of employees	Component production	Other
Food, etc.	39.2	5.1	8.2	47.4
Textiles, etc.	11.0	8.5	39.0	41.5
Wood products	18.4	2.3	50.6	28.7
Paper products	15.4	2.6	35.9	46.1
Chemicals	25.3	7.6	35.4	31.6
Non-metal. min.	26.3	2.6	26.3	44.7
Basic metals	23.1	-	38.5	38.5
Fabricated metal	20.3	2.2	51.4	26.1
Electronics	25.0	29.2	41.7	4.2
Other manufacturing	18.7	6.2	31.2	43.7
Total	22.7	5.4	37.0	34.9

Table 32. Main activity contracted out, 1988, by labour cost share, 1987

Main activity	Labour cost share %				
	<10	11-20	21-30	31-50	51+
Maintenance	27.0	24.7	17.6	20.2	14.3
Transport of employees	8.2	4.5	5.9	2.5	3.6
Component production	34.6	39.4	34.6	41.8	46.4
Other	30.2	31.3	41.9	35.4	35.7

There was also a net expectation that subcontracting employment would increase in the near future (the next two years was the period specified in the question). Firms in the wood products, textiles and apparel and electronics sectors were most inclined to be planning to increase subcontracting (table 33), and the largest establishments were generally most likely to be thinking that way (table 34). Above all, firms with high labour cost shares of total production costs were much more likely to be planning to increase it (table 35). This suggests that a principal motivation is cost-cutting rather than "capacity" or "specialty", as have been observed elsewhere as major causes of growth of subcontracting.¹ As for ownership differences, Japanese-owned firms were particularly intent on boosting subcontracting; over one in five planned to do so. This accords with the familiar pattern of gradually creating a diversified group of domestic subsidiaries, seen by many industrial organisation experts as a core phenomenon of "late industrialisation".²

¹ J. Holmes, "The organisation and locational structure of production subcontracting", in A. Scott and M. Storper (eds.), Production, work, territory (Boston, Allen and Unwin, 1986). However, in the United Kingdom cost-cutting appears to have been the major reason for the growth of subcontracting. M. Gross, A study of contracting out of maintenance services in UK industry (London, City University Business School, mimeo., 1989).

² A. Amsden, Asia's next giant: South Korea and late industrialisation (New York and Oxford, Oxford University Press, 1989).

Table 33. Plan to contract out in next two years, by industry, 1988
(per cent distribution within industry group)

Industry	Increase	Decrease	No change	Do not know	Number
Food, beverage, etc.	3.0	0.5	87.7	8.7	594
Textiles, etc.	12.4	3.7	73.4	10.4	241
Wood products	13.8	1.4	76.7	10.2	363
Paper products	4.8	1.8	86.1	7.2	166
Chemicals, etc.	4.4	2.4	82.3	10.9	412
Non-metal. min.	5.4	0.6	80.4	13.7	168
Basic metals	6.3	1.3	86.1	6.3	79
Fabricated metal	8.9	3.9	77.1	10.1	507
Electronics	10.3	1.7	77.6	10.3	58
Other manufacturing	14.0	-	74.0	12.0	50

Table 34. Plan to contract out in next two years, by employment size, 1988
(per cent of establishments of size category)

Employment size	Increase	Decrease	No change	Do not know
1-20	4.9	1.0	83.5	10.6
21-50	8.3	1.3	79.9	10.5
51-100	7.6	1.8	80.5	10.1
101-250	7.3	3.1	79.8	9.7
251-500	9.6	2.1	81.8	6.4
501+	10.7	5.3	74.7	9.3

Table 35. Plan to contract out in next two years, by labour cost share, 1988
(per cent of establishments)

Labour cost share (%)	Increase	Decrease	No change	Do not know
<10	5.0	1.3	82.8	10.8
11-20	6.6	2.1	82.4	8.9
21-30	8.8	2.1	80.2	8.8
31-50	9.9	3.5	75.1	11.5
51+	14.8	2.0	72.3	10.9

What emerges from these data is a picture of many firms contracting out part of their employment function and that there is a small but definite trend towards increased subcontracting. This will have cut direct employment and provided an increased degree of production flexibility, but whether that is

conducive to longer-term productivity growth is a matter that should be considered more critically by government policy-makers and management. It has, no doubt, been a response to crises and uncertainty. But its longer-term role is less easy to discern.

D. Contract labour

A related form of employment flexibility is reliance on contract labour, whereby the worker is essentially self-employed or employed by a labour-only subcontractor and paid on a piece-rate basis. In the Malaysian case, such workers would not be covered by social security regulations (under EPF). In mid-1988, the MLFS showed that contract labour was particularly common in the wood products sector, where this has been a traditional form of employment. In over half of all those establishments contract labour accounted for over 20 per cent of total employment, and in fact in many of those it comprised a considerable majority of the workforce. It was also widespread in the non-metallic mineral products industry (table 36). Contract labour was apparently more prevalent in medium-sized establishments than in either small or very large concerns (table 37), and was far more common in establishments owned by Chinese Malaysians than in others.

Table 36. Contract worker share of total employment of establishment, by industry, 1988

Industry	% contract labour			
	0	0.1-10	10.1-20	20.1+
Food, etc.	78.8	6.7	2.5	11.9
Textiles, etc.	75.4	7.9	4.2	12.5
Wood products	32.6	5.5	4.1	57.7
Paper products	89.7	5.4	1.8	3.0
Chemicals, etc.	83.7	6.3	3.2	6.8
Non-metal. min.	48.8	5.9	4.2	41.1
Basic metals	70.9	8.9	7.6	12.7
Fabricated metal	78.1	4.1	3.6	14.2
Electronics	93.1	3.4	3.4	-
Other manufacturing	80.8	7.7	1.9	9.6

Table 37. Contract worker share of total employment of establishment, by employment size, 1988

Employment size	% contract labour					
	0	0.1-10	10.1-25	25.1-50	50.1-75	75.1+
1-4	88.6	-	-	2.3	9.1	-
5-20	79.7	1.7	4.8	5.5	5.2	3.1
21-50	68.6	3.3	7.0	8.9	7.6	4.5
51-100	66.0	8.3	3.8	8.9	8.5	4.5
101-250	70.2	7.9	4.8	6.8	7.0	3.3
251-500	70.3	13.0	4.9	6.5	4.3	1.1
501-1000	76.4	13.5	5.6	-	1.1	3.4
1001+	91.4	7.1	1.4	-	-	-

There are many reasons for resorting to contract labour. It is hypothesised that the technological and related structural characteristics of certain industries incline firms in those sectors to utilise that form of labour. It is also hypothesised that larger firms would turn to contract labour as a means of securing employment flexibility. To take account of cultural-historical influences, it was expected to be related to ownership, and it was hypothesised that it would be greater in export-oriented firms subject to international competitive pressures and market fluctuations. It was also expected that, as women were less likely to have the accumulated work experience and skills, the degree of feminisation of employment would be inversely related to the contract labour share. And finally, it was hypothesised that if the production workers in the plant were unionised, there would be reluctance to accept contract labour, even though the causal relationship would run both ways in that a widespread use of contract labour would make unionisation unlikely.

These hypotheses imply a function of the following type, which was estimated by means of an ordinary least squares multiple regression:

$$\% \text{ CNT} = \alpha + \beta_1 \sum \text{IND} + \beta_2 \sum \text{E} + \beta_3 \sum \text{R} + \beta_4 \sum \text{O} + \beta_5 \text{X} + \beta_6 \text{U} + e$$

The terms on the right-hand side are defined as follows: $\sum \text{IND}$ is a set of binary variables, with values of 1 or 0, for each manufacturing industry, with the omitted category being food processing, tobacco and beverages.

$\sum \text{E}$ is a set of employment size binary variables (1, 0), the omitted category being the smallest size category of 1-20 workers.

$\sum \text{R}$ is a set of state binaries (1, 0), to capture local labour market conditions and traditions, the omitted category being Kuala Lumpur, the capital.

$\sum \text{O}$ is a set of binaries for ownership, defined as foreign and Chinese-owned, the control variable being non-Chinese Malaysian.

X is the percentage of total output exported, the relationship being assumed to be linear.

F is the percentage share of total employment comprising women workers, again assumed to be linearly related.

U is a binary (1, 0) for whether or not the production workers were unionised.

e is the error term.

The function was estimated by linear regression and the results are reported in figure 1 and show the predicted strong positive relationship with establishment size. Contract labour was highest in the wood products, non-metallic mineral products, textiles and apparel and fabricated metals sectors. In the latter, this reflected the prevalence of small-scale jobbers. Controlling for the effect of industry, one can also see that where the workforce was predominantly female, contract labour was less likely. This was probably indicative of the type of tasks performed by contract labour, and the tendency for the workers involved to be skilled artisans and/or immigrant workers.

While there was no apparent relationship between export orientation or foreign ownership and reliance on contract labour, it was clear that Chinese-owned establishments were more likely to utilise such indirect labour. Not surprisingly, unionised plants were the most unlikely to have extensive contract labour, although one must presume that the causal relationship runs both ways. Finally, by comparison with the omitted areas, Kuala Lumpur and Penang, it is evident that contract labour was particularly common in firms in Kelantan, Perak and Pahang.

As with temporary employment, there has been a marked growth of contract labour compared to regular employment. In all the main industry groups contract labour rose as a proportion of total employment in more firms than where it fell, the rise being particularly notable in the wood products' industry and in the fabricated metals sector (table 38). Contract labour grew in all size categories of establishment, but most of all in medium-sized units (table 39).

Table 38. Change in contract workers, 1985-88, by industry
(change in percentage share of employment)

Industry	Change in % contract labour:		
	Decreased	No change	Increased
Food, etc.	7.5	79.8	12.6
Textiles, etc.	10.2	73.7	16.2
Wood products	25.5	36.4	38.1
Paper products	2.4	90.2	7.3
Chemicals, etc.	6.3	82.9	10.7
Non-metal. min.	20.6	54.5	24.8
Basic metals	10.5	72.4	17.1
Fabricated metal	6.8	78.3	14.9
Electronics	1.7	91.4	6.9
Other manufacturing	11.8	80.4	7.8

Figure 1. Per cent contract labour: Regression results

	Coefficients	t-ratio
Intercept	3.009	2.039
<u>Employment size</u>		
21-50	7.353	6.305***
51-100	8.863	7.072***
101-250	9.642	7.137***
251-500	9.324	4.939***
501-1000	8.175	3.175***
1001+	8.605	2.821***
<u>Industry</u>		
Textiles, etc.	3.674	2.185**
Wood products	24.335	17.339***
Paper products	-3.999	-2.302**
Chemicals, etc.	-0.579	-0.447
Non-metal. min.	19.764	11.478***
Basic metals	2.941	1.238
Fabricated metal	2.824	2.320**
Electronics	-0.172	-0.056
Other manufacturing	2.254	0.763
Foreign	-1.881	-1.394
Chinese-owned	3.033	3.024***
% exported	-0.013	-0.970
% female	-0.096	-5.306***
Unionised	-7.859	-7.475***
<u>State</u>		
Selangor	-2.827	-2.592***
Johore	-0.722	-0.620
Kedah	-0.164	-0.083
Kelantan	10.306	3.839***
Malacca	-3.173	-1.407
Negri Sembilan	-1.160	-0.530
Pahang	4.741	2.291**
Perak	3.637	2.918***
R ² = 0.29		
F = 36.84		
N = 2,510		
<u>Note:</u> Three, two or one asterisks indicate that the coefficient was statistically significant at the 1%, 5% or 10% level, respectively.		

Table 39. Change in contract workers, 1985-88, by employment size, 1988
(change in percentage share of employment)

% contract labour	Employment size				
	1-20	21-50	51-100	101-500	501+
Decreased	8.6	11.5	12.6	10.0	8.1
No change	82.2	70.9	65.6	70.5	79.1
Increased	9.2	17.6	21.9	19.5	12.8

To explore the determinants more systematically, we estimated a multivariate regression in which the dependent variable was the change in the percentage share of total employment consisting of contract labour between 1985 and 1988. This was expected to be related to employment size of establishment, industry, area of location and ownership. It was also possible that export-oriented firms, faced by competitive pressures in cut labour costs, would have tended to shift more to indirect forms of labour, and that those firms relying more on female labour would be less likely to do so because labour costs of women would have been lower. Finally, it was expected that unionised plants would have been less likely to shift to contract labour.

The results, reported in figure 2, show that controlling for other influences medium-to-large size firms were the most likely to have shifted more to contract labour. Also, as expected, wood products and fabricated metals establishments were more likely than others to have increased contract labour. It was also clearly most likely to have grown in the Klang Valley, the traditional industrial heartland of the country. The only other result of statistical significance was that unionisation was negatively associated with contract labour growth, presumably reflecting a resistance to such indirect labour, but also possibly reflecting an association rather than a direct causal relationship: plants that are likely to unionise are likely to rely mainly on regular wage labour.

In some crucial respects contract labour is less precarious than casual or temporary labour. First, a far higher proportion of contract workers do regular, skilled work, with more than half the firms in wood products, textiles and fabricated metal products industries using contract labour mainly for skilled manual work. This tendency was particularly strong in small-scale establishments (table 40).

Second, although in some establishments contract labour in some types of work was so prevalent that it was impracticable to compare their wage rates with those paid to regular employees, only in a minority of firms did contract workers receive lower pay than regular workers doing similar jobs (tables 41 and 42), and in many more cases they received more, suggesting that in effect they were being compensated for the insecurity and lack of non-wage benefits. Incidentally, contract workers' pay was far more likely to be lower than that of other workers in establishments where the percentage of contract labour employment was low.

Figure 2. Change in per cent contract labour: Regression analysis

	Coefficient
Intercept	0.343
<u>Size</u>	
21-50	2.267***
51-100	1.923***
101-250	2.272***
251-500	3.385***
501-1000	1.823
1001+	1.920
<u>Industry</u>	
Textiles, etc.	0.039
Wood products	3.348***
Paper products	-0.698
Chemicals, etc.	-0.008
Non-metal. min.	0.445
Basic metals	0.463
Fabricated metal	1.800***
Electronics	-0.106
Other manufacturing	0.011
<u>State</u>	
Selangor	-0.800
Johore	-0.572
Kedah	-3.792***
Kelantan	-2.247
Malacca	-2.643**
Negri Sembilan	-2.981**
Pahang	-1.993*
Perak	-1.161*
Foreign	-0.309
Chinese	-0.289
% exported	-0.004
% female	-1.149***
Unionised	-0.006
R ² = 0.03	
N = 2,538	

Table 40. Main type of work by contract labour, by industry, 1988
(percentage distribution of main types)

<u>Industry</u>	<u>Type of work</u>			
	<u>Regular work:</u>			<u>Other</u>
	<u>Unskilled</u>	<u>Semi-skilled</u>	<u>Skilled</u>	
Food, etc.	64.0	11.0	16.2	8.8
Textiles, etc.	20.3	16.9	55.9	6.8
Wood products	13.7	19.8	62.1	4.4
Paper products	38.5	7.7	46.1	7.7
Chemicals, etc.	59.4	14.5	23.2	2.9
Non-metal. min.	37.1	22.5	36.0	4.5
Basic metals	44.0	16.0	36.0	4.0
Fabricated metal	15.1	12.7	65.9	6.3
Electronics	(20.0)	(0.0)	(60.0)	(20.0)
Other manufacturing	20.0	40.0	40.0	0.0
Total	31.4	16.5	46.4	5.6
<u>Size</u>				
1-20	17.1	16.4	58.6	7.9
21-50	29.0	12.9	53.8	4.3
51-100	26.1	21.7	47.8	4.4
101-250	43.9	16.2	34.7	5.2
251-500	45.1	17.6	31.4	5.9
501+	53.8	11.5	19.2	15.4

Table 41. Pay rates for contract labour compared to regular workers, by industry, 1988 (percentage distribution of pay compared to others doing similar work)

<u>Industry</u>	<u>Same</u>	<u>Higher</u>	<u>Lower</u>	<u>Not applicable</u>
Food, etc.	29.7	26.8	13.8	29.7
Textiles, etc.	49.1	28.1	7.0	15.8
Wood products	26.1	43.8	4.4	25.7
Paper products	23.1	15.4	30.8	30.8
Chemicals, etc.	27.9	20.6	25.0	26.5
Non-metal. min.	21.1	28.9	13.3	36.7
Basic metals	24.0	60.0	4.0	12.0
Fabricated metal	30.5	46.9	4.7	18.0
Electronics	(40.0)	(40.0)	(0.0)	(20.0)
Other manufacturing	20.0	20.0	30.0	30.0
Total	28.6	36.1	9.8	25.4

Table 42. Pay rates of contract workers compared to regular workers, by employment size, 1988

Size	Same	Higher	Lower	Not applicable
1-20	27.9	32.1	3.6	36.4
21-50	21.3	41.7	9.5	27.5
51-100	35.5	35.0	6.6	22.9
101-250	32.6	32.6	16.3	18.6
251-500	27.4	41.2	7.8	23.5
501+	19.2	34.6	30.8	15.4

As for employers' reasons for employing contract rather than regular wage labour, the main reason cited was lower supervision costs, followed by their preference for such workers for specialised tasks.¹

It is interesting that the supervision cost issue was most prominent among medium-sized firms, in which presumably supervisory staff would be a relatively important cost item. Indeed, among those not citing the supervisory cost as the main reason, far more gave it as the second main factor than anything else, such that nearly two-thirds of the wood products' establishments cited this as a main or second reason. It is also important to stress that an insignificant number of establishments reported labour laws as a major reason.²

E. Part-time employment

Another category of irregular or marginal labour is part-time employment, which we defined as working normally fewer than 30 hours a week. There is little tradition of this in Malaysian manufacturing, although many temporary and contract workers also probably work short work-weeks or intermittently. Not only did it account for a tiny proportion of manufacturing employment, but

¹ Almost certainly one "reason" for employing contract labour and casual-status workers was that many of the workers concerned were illegal immigrants. This issue was not pursued in the MLFS, although several questions were used experimentally in the pre-pilot factory visits. It was felt that to include such questions would have jeopardised response rates, because of their sensitivity. For a review of some of the recent trends in the extensive reliance on (illegal) immigrant labour in Malaysia, see Lin Lim Lean, International Migration (Kuala Lumpur, EPU-ILO, 1989).

² As an aside, 3.3 per cent of all firms had employed contract labour but had discontinued their use, comprising 4.4 per cent of all firms not currently employing contract labour. There was no outstanding reason cited for their discontinuing the practice.

as table 43 indicates, in most industries it only rose by a small amount in the three post-recession years.¹ Given the conventional relationship between female and part-time employment, it is perhaps notable that although in most establishments there had been no change in part-time working, there was a stronger tendency for growth in "female-oriented" establishments (table 44).

Table 43. Change in per cent part time, 1985-88, by industry
(change in share of total employment)

Industry	Change in % part time		
	Decreased	No change	Increased
Food, etc.	3.6	92.1	4.3
Textiles, etc.	2.1	94.1	3.8
Wood products	5.3	91.0	3.6
Paper products	1.8	93.9	4.3
Chemicals, etc.	2.7	96.3	1.0
Non-metal. min.	3.0	92.1	4.9
Basic metals	1.3	96.0	2.6
Fabricated metal	2.2	95.2	2.6
Electronics	-	100.0	-
Other manufacturing	3.9	92.2	3.9

Table 44. Change in per cent part time, 1985-88,
by female per cent of total employment, 1988

	% female				
	0	.01<10	10-20	20.01-50	50.01+
<u>Change in %</u> <u>part time</u>					
Decreased	2.0	3.0	3.5	2.9	2.9
No change	97.0	94.4	93.7	93.7	93.0
Increased	1.0	2.5	2.7	3.3	4.0

¹ This contrasts sharply with recent patterns in many industrialised countries. In the United Kingdom, for instance, a recent survey showed that over two-thirds of manufacturing firms employed some part-timers. Advisory, Conciliation and Arbitration Service, Labour flexibility in Britain: The 1987 ACAS Survey (London, 1988; mimeo.), p. 7.

The relative lack of part-time working should be seen in the context of what are by international standards long working weeks put in by industrial workers in Malaysia, a majority of whom work over 48 hours a week, as will be seen in a companion paper. Finally, there was only a very small net expectation that part-time employment would increase in the next two years (table 45). In sum, part-time employment has yet to become a phenomenon of much significance in Malaysian manufacturing.

Table 45. Expected change in part-time employment in next two years, 1988-90, by industry

Industry	Planned/expected change in part-time employment			
	Increase	Decrease	No change	No part-time employment
Food, etc.	0.8	0.5	7.1	91.6
Textiles, etc.	1.3	-	2.9	95.8
Wood products	0.5	0.5	5.2	93.7
Paper products	-	1.8	4.8	93.4
Chemicals, etc.	0.5	-	2.4	97.1
Non-metal. min.	-	-	6.5	93.4
Basic metals	2.5	-	5.1	92.4
Fabricated metal	1.0	0.2	3.2	95.6
Electronics	-	-	-	100.0
Other manufacturing	2.0	-	2.0	96.1

F. Non-regular employment overall

If we now group all non-regular workers - that is, non-wage, part-time, contract, temporary and casual labour - we find that while in some industries as much as two-thirds of all establishments relied only on regular, full-time wage labour, in others large proportions had over 50 per cent of all their workforce in non-regular categories (table 46), and it was in the small-scale firms that there were the highest proportions (table 47), once again highlighting the need to focus employment policy and the implementation of labour laws on those concerns where precarious employment is most prevalent and likely.

Table 46. Per cent non-regular employment, 1988, by industry
(per cent distribution in industry)

Industry	% non-regular					
	0	0.01-10	10.01-25	25.01-50	50.01-75	75.01+
Food, etc.	50.3	13.3	13.8	10.9	6.2	5.4
Textiles, etc.	56.7	17.1	10.4	8.3	4.6	2.9
Wood products	21.5	8.0	10.5	19.1	26.0	14.9
Paper products	64.8	18.2	10.3	5.4	-	1.2
Chemicals, etc.	67.4	12.9	10.5	5.6	2.7	1.0
Non-metal. min.	39.9	7.1	7.7	10.1	13.1	22.0
Basic metals	43.0	16.5	17.7	12.7	8.9	1.3
Fabric. metal	55.7	13.0	11.3	10.3	6.5	3.2
Electronics	69.0	19.0	10.3	1.7	-	-
Other manufacturing	59.6	15.4	3.8	11.5	3.8	5.8

Table 47. Per cent non-regular employment, 1988, by size of establishment
(per cent distribution for each size category)

Employment size	% non-regular					
	0	0.01-10	10.01-25	25.01-50	50.01-75	75.01+
1-4	25.0	-	8.3	27.8	16.7	22.2
5-20	42.4	7.6	18.4	13.8	8.9	8.9
21-50	51.0	13.4	9.7	10.9	8.5	6.5
51-100	53.7	13.1	8.0	10.0	9.4	5.8
101-250	56.3	13.4	9.8	8.1	8.5	3.9
251-500	53.7	20.2	11.2	7.4	5.8	1.6
501-1000	54.1	24.7	9.4	7.1	1.2	3.5
1001+	68.7	20.3	10.9	-	-	-

Table 48. Per cent non-regular employment, 1988, by main ownership
(per cent distribution for each ownership category)

Ownership	% non-regular					
	0	0.1-<5	5-<10	10-<15	15-<20	20+
Chinese Malaysian	44.8	6.0	5.3	4.8	3.4	35.7
Other Malaysian	57.0	7.1	6.7	5.1	1.5	22.6
Foreign	68.5	11.2	5.5	4.2	3.4	7.3

Another feature worth noting is that there was no relationship between reliance on one type of non-regular worker type and employment of other types. Thus, as table 49 shows, 70 per cent of establishments with no temporary or casual worker also had no contract labour; in fact, 59 per cent of all establishments had neither temporary nor contract workers.

Table 49. Per cent temporary by per cent contract labour of total employment, 1988

% contract	% temporary				
	0	0.01<10	10-20	20.01-50	50.01+
0	70.3	73.5	73.4	75.7	84.6
0.01<10	5.8	11.4	3.5	2.8	11.5
10-20	3.5	4.8	5.3	3.7	-
20.01-50	8.9	5.4	12.4	12.1	3.8
50.01+	11.5	4.8	5.3	5.6	-
Total	100.0	100.0	100.0	100.0	100.0

Non-regular employment was more widespread in labour-intensive establishments, presumably reflecting the need in such concerns to maintain greater employment flexibility. Thus establishments with over 20 per cent of their employment in non-regular statuses tended to have higher labour cost shares of production costs (table 50). Perhaps less surprising was the suggestion of an inverse relationship between the proportion non-regular and the proportion of the workforce retrenched in 1986-88 (table 51), supporting the repeatedly stated view from respondents during the pilot survey that firms with casual or contract labour did not need to retrench because they merely told the workers not to turn up any more.

Table 50. Per cent non-regular employment, 1988, by labour cost share of production costs

% non-regular	% labour cost share			
	1-10	11-20	21-30	31+
0	33.3	37.3	20.5	13.9
<5	33.1	29.3	22.8	14.7
<10	26.0	37.3	19.3	17.3
<15	31.2	29.6	24.0	15.2
<20	26.7	38.7	17.3	17.3
20+	21.7	34.3	24.5	19.5

Table 51. Per cent retrenched, 1986-88, by per cent non-regular, 1985

% non-regular	% retrenched		
	0	0.1-10	11+
0	87.5	2.5	9.9
<10	84.9	5.9	9.2
10-20	87.3	5.0	7.7
20-50	91.0	3.3	5.7
50.01+	91.1	3.4	5.4

We now come to a critical point, which is that taking all such non-regular, relatively insecure forms of employment together there had been a strong shift away from regular employment between 1985 and 1988, in all industries and in all size categories of establishment (tables 52 and 53).

Table 52. Change in per cent non-regular of total employment, 1985-88, by industry

Industry	Change in % non-regular					
	%	Decreased		No change	Increased	
		5.1+	0.01-5		0.01-5	5.1+
Food, etc.	9.2	9.0	56.0	13.0	12.7	
Textiles, etc.	8.9	8.0	56.5	11.8	14.7	
Wood products	12.3	17.6	27.1	18.7	24.2	
Paper products	5.5	6.7	63.4	11.0	13.4	
Chemicals, etc.	5.8	6.5	64.8	9.2	13.5	
Non-metal. min.	11.6	11.6	46.9	15.2	14.7	
Basic metals	4.0	8.0	45.3	14.7	28.0	
Fabricated metal	7.0	6.0	58.0	9.6	19.2	
Electronics	-	1.7	69.0	17.2	12.0	
Other Manufacturing	4.0	8.0	66.0	6.0	16.0	

We can assess the determinants of changes in non-regular labour by estimating an OLS regression in which the dependent variable is the change in the percentage share of total employment being non-regular. One can see from figure 3 that non-regular forms of labour displaced regular wage employment in medium-sized firms, and most particularly in wood products' and fabricated metal products' sectors. They were also more likely to have grown the more "female" the industry (despite the non-association of female labour with contract labour, as suggested earlier, by figure 2) and the higher the average earnings of regular workers in the establishment. The links between wages and levels and types of employment will be considered in a later paper, but the data suggest that high wages act as a strong push to irregular employment. Finally, although the coefficient was not statistically significant, the

negative relationship suggested between unionisation and the per cent non-regular labour may reflect both a resistance by unions to contract labour and the effect of employers who, by keeping the percentage high, reduce the probability of workers becoming unionised. Indirect forms of labour surely dilute the potential strength of trade unions.

Table 53. Change in per cent non-regular of total employment, 1985-88,
by employment size, 1985

Employment size	Change in % non-regular					
	Decreased		No change	Increased		
	%:	5.1+		0.01-5	0.01-5	5.1+
1-20		14.0	5.4	55.2	6.9	19.4
21-50		7.5	10.6	51.3	11.7	18.9
51-100		6.3	12.2	52.6	14.5	14.4
101-250		6.0	7.5	57.7	14.8	13.9
251-500		5.6	8.4	51.4	17.9	16.7
501-1000		5.2	11.7	55.8	14.3	13.0
1001+		1.9	5.7	62.3	20.7	9.5

The survey data also allow us to consider whether this shift to employment flexibility had been a short-term adjustment phenomenon only or was also part of a longer-term trend. Establishments were asked about their plans or expectations about reliance on different types of non-regular labour relative to regular, full-time wage employment. In each case, they were asked whether they expected or planned to use more, fewer or the same number of the non-regular category relative to regular workers in the next two years, that is, in 1990 compared to 1988.

As table 54 shows, the number of manufacturing establishments that planned to increase their employment of contract labour was far greater than the number that expected reliance on that category to decline. The expected rise was by far the greatest in the wood products sector, which was already the industry in which contract labour was most prevalent. In all size categories of firm except those with over 500 workers the shift was expected to continue, and that implies that the degree of precarity of employment in small and medium-sized firms could be expected to continue to grow accordingly. Moreover, the rise in contract labour was more often expected in establishments that were expecting or planning to expand total employment than in those expecting it to fall (table 55). This suggests that even among establishments that admitted that they expected to cut total employment, twice as many expected or planned to increase their employment of contract labour as the number that expected to reduce it.

Figure 3. Change in per cent non-regular, 1985-88: Regression results

	Change in % non-regular
	Coefficient
Intercept	-1.970
<u>Size</u>	
21-50	1.519**
51-100	1.931**
101-250	2.608***
251-500	2.897**
501-1000	2.354
1001+	2.081
<u>Industry</u>	
Textiles, etc.	-1.672
Wood products	3.394***
Paper products	-0.516
Chemicals, etc.	-0.054
Non-metal. min.	0.236
Basic metals	2.369
Fabricated metal	2.645***
Electronics	0.164
Other	0.809
Foreign	-0.657
% export	-0.013
% employment growth	
% female	0.030**
Unionised	-1.048
Penang	
Selangor	
Average earnings	0.003**
R ²	0.02
F	2.91
N	2 518

Table 54. Expected/intended change in contract labour in next two years, 1988-90, by industry and by employment size, 1988 (per cent of industries/ size category expecting contract labour change)

	Expected change in per cent contract labour				
	Increase	Decrease	No change	No contract labour	Do not know
<u>Industry</u>					
Food, etc.	5.9	1.0	15.3	73.9	3.9
Textiles, etc.	11.2	-	12.9	69.7	6.2
Wood products	21.4	1.6	39.6	27.7	9.6
Paper products	2.4	-	5.9	86.9	4.8
Chemicals, etc.	2.9	2.2	10.6	78.9	5.3
Non-metal. min.	12.6	2.4	28.1	44.9	12.0
Basic metals	2.5	3.8	22.8	62.0	8.9
Fabricated metal	8.3	3.2	10.5	70.7	7.3
Electronics	1.7	3.4	3.4	89.7	1.7
Other manufacturing	7.8	2.0	13.7	68.6	7.8
Total	8.6	1.8	16.9	66.2	6.5
<u>Employment size</u>					
1-20	8.3	1.9	13.7	68.6	7.5
21-50	9.4	1.9	20.0	61.7	7.0
51-100	7.6	1.6	20.0	63.9	6.9
101-250	10.3	1.6	17.0	65.6	5.5
251-500	9.6	0.5	15.0	68.4	6.4
501+	2.0	3.4	7.4	83.9	3.4

Table 55. Expected change in per cent contract labour, by planned/expected overall employment change in next two years (per cent of establishments with expected employment change)

Expected employment change	Expected change in % contract labour				
	Increase	Decrease	No change	No contract labour	Do not know
Increase	13.0	2.6	12.4	67.7	4.3
Decrease	9.2	4.6	7.7	70.8	7.7
No change	6.6	1.3	19.7	65.6	6.8
Do not know	6.8	2.3	16.7	59.8	14.4

Furthermore, those establishments already having large proportions of contract labour were relatively more likely to expect to continue to increase the proportion, implying that from the employers' point of view the shift had been successful. The main reason cited for planning to rely more on contract labour was lower supervision costs and the likelihood of fluctuating demand for the product.

As for casual and temporary labour, the picture was somewhat more mixed, with slightly more establishments in most industries expecting to increase their reliance on them. Only in small-scale establishments of up to 50 workers was there an expectation that temporary employment would increase, although only among the largest companies was there a net expected fall (table 56). What is worth stressing is the apparent fluidity in the situation in that respect, reflected in the high proportions unable to say one way or the other. However, it was fairly clear that firms expecting to expand total employment were more likely to expect to increase temporary labour, whereas those expecting to cut overall employment were more likely to expect to reduce temporary employment (table 57).

Table 56. Expected change in temporary workers, 1988-90, by employment size, 1988 (change in percentage share of total employment)

Employment size	Expected change in % temporary employment				
	Increase	Decrease	No change	No temporary employment	Do not know
1-4	2.9	-	11.4	74.3	11.4
5-20	3.5	0.9	8.5	81.1	5.9
21-50	2.4	1.3	6.9	82.6	6.9
51-100	1.3	2.2	8.0	79.8	8.7
101-250	3.3	4.0	7.7	75.1	9.8
251-500	4.8	4.8	12.8	69.7	8.0
501+	4.7	6.0	17.3	63.3	8.7

Table 57. Expected change in temporary labour, by expected change in total employment, 1988-90

	Expected overall employment change			
	Increase	Decrease	No change	Do not know
<u>Temporary labour</u>				
Increase	5.0	3.1	1.7	3.1
Decrease	4.1	9.2	1.4	3.1
No change	9.6	12.3	8.5	4.6
No temporary labour	74.0	70.8	81.0	69.2
Do not know	7.3	4.6	7.5	20.0
TOTAL	100.0	100.0	100.0	100.0

Finally, as table 58 shows, there was a slight tendency for establishments to expect to employ more part-time workers in the near future, but in that case, as we saw earlier, very few firms were employing such workers in 1988. If there was an upward trend, it was a very modest one.

Table 58. Expected change in part-time employment, 1988-90, by industry, 1988

Industry	Planned/expected change in part-time share			
	Increase	Decrease	No change	No part-time employment
Food, etc.	0.8	0.5	7.1	91.6
Textiles, etc.	1.2	-	2.9	95.8
Wood products	0.5	0.5	5.2	93.7
Paper products	0.6	3.5	4.7	91.1
Chemicals, etc.	0.5	-	2.4	97.1
Non-metal. min.	-	-	6.5	93.4
Basic metals	2.5	-	5.1	92.4
Fabricated metal	1.0	0.4	3.2	95.5
Electronics	-	-	-	100.0
Other manufacturing	1.9	-	1.9	96.1

However, overall the MLFS provided ample evidence to conclude that employment flexibility in terms of work status had increased in Malaysian manufacturing and was expected to continue to increase.

G. Probationary employment

Before concluding this analysis one should take account of one other route by which firms could have increased employment flexibility. Most manufacturing firms in Malaysia use probationary periods for workers before they are transferred to the regular payroll. As of mid-1988 the most typical period of probation was three months (table 59), although a quarter of all establishments used longer periods, with somewhat higher proportions of large-scale establishments doing so (table 60).

Probationary workers have no security of employment, and there have been stories in the newspapers and elsewhere of workers being laid off once their probationary period of employment has come to an end, for no apparent or valid reason, other than the fact that the workers could be dismissed without notice or compensation as long as they were not on the regular payroll. That is not to suggest that a large number of employers have used the probationary system for that purpose, but it could be used that way. In effect, probationary employment is temporary labour without the name. The interesting development is that there has been a movement to longer probation periods, as shown in table 61, which may have been only a small change in 1985-88 but which has to be seen in the context of the general growth of employment flexibility.

Table 59. Months between transfer from probationary to permanent status, 1988, by industry (per cent distribution of establishments in industry)

Industry	Months of probation			
	1-2	3	4-6	7+
Food, etc.	8.4	56.0	32.6	2.9
Textiles, etc.	11.0	75.4	12.6	1.0
Wood products	8.8	68.1	22.1	1.0
Paper products	3.4	71.9	20.5	4.1
Chemicals, etc.	5.4	72.2	20.3	2.0
Non-metal. min.	9.5	47.6	37.1	5.7
Basic metals	10.0	58.3	31.7	-
Fabricated metal	5.4	68.1	25.7	0.7
Electronics	1.7	72.4	25.9	-
Other manufacturing	2.4	80.9	14.3	2.4
Total	7.0	66.2	24.7	2.0

Table 60. Months between transfer from probationary to permanent status, by employment size, 1988

Employment size	Months of probation			
	1-2	3	4-6	7+
1-20	15.5	69.6	13.9	1.0
21-50	7.6	70.4	19.9	2.1
51-100	8.7	61.7	26.9	2.7
101-250	2.7	66.2	28.7	2.3
251-500	2.3	61.6	35.6	0.6
501+	2.1	67.1	29.5	1.4

Table 61. Change in length of probationary period in past two years, by industry, 1988 (percentage of establishments operating probationary periods)

Industry	Duration of probation		
	Reduced	Lengthened	No Change
Food, etc.	2.2	3.4	93.5
Textiles, etc.	2.0	2.5	94.9
Wood products	1.5	6.9	91.1
Paper products	1.4	4.9	93.7
Chemicals, etc.	2.3	2.6	94.8
Non-metal. min.	1.9	2.9	94.3
Basic metals	1.7	3.3	93.3
Fabricated metal	3.2	3.5	93.3
Electronics	3.5	3.5	89.5
Other manufacturing	-	-	100.0
Total manufacturing	2.2	3.5	93.7

Again the wood products industry stands out, with 7 per cent of firms in that sector having increased the normal probation period. The data are such that one can only conclude that the issue deserves more careful scrutiny by labour policy-makers. While on that subject they may also be advised to consider the related practice of maintaining trainees as such for prolonged periods. Such trainees also lack employment security, and their number could be inflated unduly in enough cases to warrant concern or the period of "training" be lengthened so that the period of insecure employment is correspondingly lengthened. Again, one does not wish to say that this is a widespread practice, merely that the labour market is such that it could be.

6. The impact of the Employment Act

Finally, let us return to the role of labour regulations in the growth of employment flexibility. It will be recalled that very, very few firms mentioned labour laws in response to the questions on the main and second reasons for utilising non-regular forms of labour or for changing or planning to change work status practices. But to capture any effect, at the end of the survey respondents were asked directly:

In what ways, if any, have the provisions of the Employment Act on termination of services (on notice, etc.) affected the establishment's employment policy?

The Employment Act is the most important piece of labour legislation in the country, and this question referred to the Termination and Lay-Off Benefits Regulation of 1980, under which workers became entitled to termination or lay-off benefits if their contracts of employment were terminated without any infringement of contract by the workers, if they were laid-off having been employed continuously by the firm for more than 12 months. Some economists and others have criticised this type of regulation, in Malaysia and elsewhere, on the grounds that it imposes non-wage labour costs and deters the hiring of workers. Supposedly, employers would fear that if they had to lay off such

workers they would have to bear the cost and would thus not expand employment. On the other hand, defenders of such regulations would argue that it is unjust for the workers to have to bear the risk of investment decisions affecting their jobs and that, more significantly, the possibility of such costs would encourage more rational employment policy by the firms and a more steady pattern of employment.

The arguments for and against such a rule make the empirical investigation of its actual effect more important, and it is therefore pertinent that the vast majority of firms responded that this provision had made no difference to their employment policy. As table 62 highlights, only a little over 2 per cent said that it had an effect on employment, and 1.6 per cent said that it had encouraged them to resort more to contract labour.

Table 62. Impact of Employment Act Termination Rules on employment policy, and by ownership, 1988

Effect	Total		Ownership		
	%	Number	Foreign	Chinese Malaysian	Other Malaysian
None	93.6	2 473	93.5	93.4	94.1
Lower employment	2.2	58	1.6	2.5	1.9
More contract work	1.6	43	0.8	2.1	1.1
Automation	0.6	17	0.8	0.5	0.8
More temporary labour	0.5	12	1.0	0.3	0.5
Other	1.5	39	2.3	1.2	1.5

Table 63. Impact of the Employment Act, by industry, 1988
(per cent of establishments in industry)

Industry	Employment Effect					
	None	Lower employment	More temporary labour	More contract labour	Auto-mation	Other
Food, etc.	95.3	1.7	0.2	0.7	0.8	1.3
Textiles, etc.	95.9	1.6	-	0.4	0.8	1.2
Wood products	90.7	1.9	0.3	4.9	-	2.2
Paper products	94.7	1.2	1.7	-	-	2.3
Chemicals, etc.	94.9	2.4	0.5	0.7	0.7	0.7
Non-metal. min.	92.3	1.8	0.6	3.6	0.6	1.2
Basic metals	88.6	7.6	-	1.3	-	2.5
Fabricated metal	92.7	2.2	0.8	1.8	1.0	1.6
Electronics	94.8	1.7	-	1.7	-	1.7
Other manufacturing	90.4	7.7	-	-	1.9	-

There are two striking points of table 63. The first is that only in the basic metals sector did many employers perceive that the Act had any effect on the level of their employment. It may be significant that at the time of the survey firms in that industry had not recovered from the earlier recession, and many observers believed that the sector was having severe difficulty with international competition; particularly in the production of steel rods, it has been argued that it is a high-cost industry for Malaysia, despite being heavily subsidised. The second striking feature of table 63 is that many wood products establishments tended to see the Act as encouraging what was already a strong preference for contract workers. This issue is brought out further in table 64, in which it is seen that among firms with a high proportion of non-regular workers there were a fair number which reported that the Employment Act provisions had encouraged them to employ more contract labour.

Table 64. Employment effect of the Employment Act, by per cent non-regular employment, 1988

Effect	% non-regular					
	0	0.1-10	10.1-25	25.1-50	50.1-75	75.1+
None	95.0	95.3	92.3	91.5	88.5	91.0
Lower employment	2.2	2.3	3.0	1.8	2.3	0.6
More temporary labour	0.1	0.3	1.3	1.1	0.9	0.6
More contract labour	0.2	0.3	0.3	4.4	7.8	5.8
Automation	0.8	0.6	1.0	0.4	-	-
Other	1.7	1.2	2.0	0.7	0.5	1.9

Presumably, even in those cases where the Act was cited as having an effect on employment policy it would have been only one of a number of factors pushing in the direction chosen. A further difficulty with interpreting the figures in tables 62 and 63 is that most firms would have long adjusted to the 1980 Act, which in any case amended the 1955 Act. As such they would have institutionalised their adjustments long ago. One cannot help believing that the Act would have conditioned behaviour, and that where necessary employers would have found ways of legally bypassing those regulations that they had found potentially or actually onerous. Nevertheless, the fact remains that employers all over the country saw little need to "deregulate" the employment law. With the growing employment flexibility, there did not seem to be any need. It is not labour regulations that dictate employment levels but market influences such as cyclical fluctuations in demand, structures of production, technological options and the need for a flexible low-cost labour force. There is no evidence that labour regulations have affected those issues, so that one can conclude that there is no prima facie case for weakening the existing regulations. Conversely, one might also be inclined to conclude that strengthening them or strengthening their implementation would have little effect on employment per se but would have a beneficial effect in encouraging good employment practices. In general, in the 1990s for both welfare and dynamic efficiency reasons, policy-makers may be concerned to see that labour flexibility is achieved within a context of growing labour market and employment security, not the reverse.

7. Concluding points

The data in this paper have pointed to a certain degree to "casualisation" of labour. Some would relate this to the unskilled and semi-skilled nature of Malaysia's industrialisation process and the relative absence of indigenous industries built up on the basis of linked firms in contractual chains. This is unconvincing. It may well be that the international recession that hit the Malaysian economy so hard in the mid-1980s caused employers to make fundamental adjustments in their labour strategy, not so much because of the actual costs of retrenchment benefits and related expenses of displacing workers but because of the widespread nervousness associated with having quasi-fixed labour forces. The costs of restructuring may not have been fully identified in the MLFS, or anywhere else, but the effects on the industrial workforce were quite visible and far-reaching. As Malaysian industries approached the post-NEP 1990s, the extent and growth of external labour flexibility were so extensive that the design and implementation of labour regulations deserved to be reconsidered very carefully indeed.

Casualisation and informalisation may reduce immediate labour costs and the costs of adjustment to economic fluctuations. But is that not likely to be at the cost of skill formation and long-term productivity growth?

APPENDIX I

THE 1988 MALAYSIAN LABOUR FLEXIBILITY
SURVEY (MLFS): METHODOLOGY

This paper deals with one particular set of issues covered by the MLFS. There are complementary papers on functional labour flexibility, working time changes, payment flexibility, technological changes and employment effects, and the changing pattern of labour stratification. To put the present paper in context, it might be useful to describe briefly the methodology and processes involved in the conduct of the Malaysian Labour Flexibility Survey.

Before doing so, it is nice to acknowledge the kindness and encouragement given by officials in the Human Resources Section of the Economic Planning Unit of the Prime Minister's Department in Kuala Lumpur, in the Department of Statistics - whose team of enumerators and supervisory staff entered the exercise with a professionalism and enthusiasm that made it feasible - and friends in the Ministry of Labour. None of them should be blamed for errors, but they know my gratitude. It was some of them who persuaded me to do this work and to return to Malaysia five years after having conducted two large surveys in the early 1980s, in the Federal Territory and PJ and in Kelantan. Therefore, I would like to take the opportunity to thank those who helped and encouraged me during this survey, most notably Tham ah Fun, A'Ida Bt Abdul Rahman, Siva Alagandram and Wan Abdul Aziz bin Wan Abdullah.

The decision to carry out the MLFS was reached at the end of 1987. Initially we intended to select a few industries in three major urban-industrial areas of the country, because of the essentially experimental nature of the survey. However, the early work was sufficiently encouraging that it was decided to make it a representative survey of the whole manufacturing sector in Peninsular Malaysia, with a few minor omissions that had previously caused difficulty for the Department of Statistics' sampling frame, which we updated to draw the sample. Clearly a national survey was preferable, although of course the increased scale and scope created a great deal of additional work. It was only feasible because we were able to mobilise a large national team of experienced enumerators drawn from the Department of Statistics' staff, and because of the background help and encouragement of Kwok Kwan Kit. Ideally, it would have been better still to have included the construction and service sectors, but this was ruled out on practical grounds.

From the survey frame we drew a sample of 3,100 manufacturing establishments from all states in Peninsular Malaysia. In the early months of 1988, while preparing the listing and selecting the enumerator team, the questionnaire design was finalised through a necessarily protracted process, which included numerous meetings, a seminar in the Bureau of Statistics in the ILO and a "pre-pilot", in which we visited about 50 companies in Kuala Lumpur and Selangor, in each case using the draft questionnaires to structure interviews with senior personnel officers or senior management or the owner of the business.

In March-April 1988 we organised two pilot surveys in and around the Free Trade Zone in Penang and Butterworth. This was a vital and enjoyable part of the project and its success owed a great deal to Mr. Lau and the small team of 20 enumerators mobilised for the exercise. After a training phase, in which we discussed the concepts, questions and objectives of the survey, each member of the team visited several factories to carry out pre-arranged interviews. On the following day we assembled in the office to review the "labour story" of the various firms. We then repeated the process, and so on. This helped in

the refinement of the questionnaires and the draft instruction manual, which we were preparing for the main survey.¹ It was a procedure that is highly recommended for future surveys. Then, drawing lessons from the first "pilot", we refined the questionnaires and with the same team carried out a second-round pilot survey, again following each day of fieldwork with a "story-telling" round-up.

In May-June 1988 the questionnaires and the by now long instruction manual were finalised, the questionnaires and manual were printed in English and Bahasa, and the 90 supervisors and enumerators were appointed. In July there was a two-stage training process, the first week of which was devoted to the training of the supervisors and heads of local DOS offices, the second to training at the local level in all the states of Peninsular Malaysia. Finally, the fieldwork was launched in the second half of July and lasted until the end of August. Data were checked at the local level and then validated in Kuala Lumpur over the next few months. Analysis of the data started in early 1989.

The contents of the survey could be classified in various ways, none of which would be ideal. Very approximately, the principal topics covered were as follows:

- Employment structure 1985-88.
- Expected employment changes 1988-90.
- Wages, earnings, benefits, etc.
- External labour flexibility - work statuses, etc.
- Recruitment practices.
- Training and retraining.
- Internal labour flexibility - mobility, job structures, etc.
- Labour turnover.
- Working practices.
- Technological change influencing employment.
- Labour regulations.
- Labour surplus, retrenchment, etc.
- Labour shortages and responses.

Not all these general topics were covered in the same detail - or with the same degree of adequacy or success - but a considerable amount of information was gathered. The data were collected by means of a two-part questionnaire and a two-stage process. First, accompanied by a letter of introduction explaining the broad objectives of the survey, Section One of the questionnaire was delivered to the management of the establishment, with

¹ I would like to acknowledge the considerable help given by Karen Taswell of the ILO's Bureau of Statistics, in the preparation of that manual during that phase of the project.

instructions that it should be completed and signed by a senior representative of management dealing with employment and personnel matters. Section One covered all the basic statistical data on employment, vacancies, working practices, earnings, payment system, working time, capital, sales, ownership, exports, etc. Then, a week or so later, the enumerator visited the establishment for a pre-arranged interview with the owner, manager or personnel officer. The interview itself was preceded by a check that Section One had been completed and correctly understood. The enumerator then proceeded with an oral interview based on Section Two of the questionnaire, which contained a mix of factual and attitudinal questions, most of which had sets of precoded responses. Later, a proportion of the establishments were revisited or checked to verify for the accuracy of the data.

One should stress these basic methodological issues, however dull they may be to the economist reader, because too many surveys are reported with unstated methodology. They can often be very slap-happy, undeserving of the seriousness with which the results and analysis are subsequently treated. Postal questionnaire surveys of the sort of issues covered by the MLFS are worth practically nothing unless one can guarantee a very high and representative response rate and that the respondent is senior enough and in an appropriate position to give valid, honest answers to questions that he or she has understood. I am not for a moment claiming that we overcame all such problems in this survey, far from it. But the pre-pilots, the pilots, the detailed training, the type of fieldwork and the validation procedures gave us a reasonable chance of obtaining reasonable data. It had been expected that we would attain a response rate of 50 per cent or less, given the sensitive nature of the issues, the type of respondents, the length of the questionnaires and the wide geographical coverage. It was a tribute to the team that we achieved a response rate of over 80 per cent; in only one state did we fail to secure a reasonable response rate, where fortunately there are very few manufacturing establishments. By any standards, with such a large sample and survey, the response rate was satisfactory.

In sum, the MLFS was both ambitious and fairly comprehensive - albeit only intended to be impressionistic on certain issues. It seems to have provided data of good quality for such a large establishment-level survey. Some parts were less successful, which will be noted in the course of the analysis. But overall the information generated should provide a sound basis for policy debates and for follow-up work that should further the analysis of the Malaysian labour market. Indeed, it has been hoped that the full value of the MLFS will only be realised when subsequent surveys are conducted so that trends and changes can be identified. It is also hoped that the methodology will be utilised and refined for application in other developing countries and that a "demand-side" database will begin to emerge to help answer many of the questions raised by the general concern with labour flexibility and structural adjustment.

APPENDIX II

CLASSIFICATION OF INDUSTRIES

The MLFS relied on the international classification of manufacturing industries, and in the tabulations the following groupings were used:

<u>Major group numbers</u>	<u>Description</u>	<u>Abbreviation</u>
311-314	Food, beverage and tobacco	Food, etc.
321-324	Textiles, apparel, leather and footwear	Textiles, etc.
331-332	Wood products, furniture (excl. metal)	Wood products
341-342	Paper, paper products, printing	Paper products
351-356	Chemicals, petrol refineries, rubber and plastic products	Chemicals, etc.
361-369	Pottery, china, glass, non-metallic mineral products	Non-metal. min.
371-372	Basic metal industries	Basic metals
381, 382, 384	Fabricated metal, machinery and transport equipment	Fabricated metal
383, 385	Electrical machinery, electronics	Electronics
390	Other manufacturing industries	Other manufacturing

APPENDIX III

DATA PRESENTATION: NOTES ON TABLES

In most of the tables resulting from the MLFS abbreviations have been used, for practical-presentational reasons. The industrial classification abbreviations are given in Appendix II. The occupational and skill concepts are described elsewhere.

Within all tables an asterisk indicates that there were too few observations to warrant an estimate ($n < 5$); figures in parentheses signify that the percentages should be treated with particular reservation because there were between six and ten observations.

In some tables "other manufacturing" figures are not reported, which signifies that there were too few observations on that particular issue to justify inclusion.

In regressions, three, two and one asterisks indicate that the coefficients were statistically significant at the 1 per cent, 5 per cent or 10 per cent level, respectively.

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