Labour Flexibility and productivity: an Inquiry into the Thai Labour Regime

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Introduction.

Knowledge is presented as the new driving force of competitiveness. It is usually defined as including formal innovation such as R&D and all forms of learning opportunities occurring during economic activities like work and relations with suppliers and customers. Our communication will focus on knowledge, labour markets and work in the context of Thailand. Thailand is an interesting case because it is representative of second-tier high-growth Asian economies, and most of all, because it is a full-employment economy. This means that if workers are not satisfied with their job, they can easily change their employer. If the company wants to retain them, they have to offer something in exchange: higher wages, bonus, and welfare allowances. This has consequences for the diffusion of knowledge. When workers' mobility is high and employment tenure low, workers are the conduits through which knowledge is transferred across firms, leading to possible increases in productivity. When firms prefer to create an internal labour market in order to retain their workers and accumulate knowledge internally, the diffusion of knowledge relies on linkages between firms and their customers. Our objective is to assess the viability of these scenarios in Thailand. We start with a short analysis of the state of science, technology and education in Thailand (section 1). The conclusion is that formal knowledge is lagging behind and that improvements will take time. The diffusion of knowledge through workers' mobility does not seem viable at this stage and the accumulation of knowledge in internal labour market is a better option. Because internal labour markets involve high employment tenure, we then turn to the analysis of mobility and employment tenure (section 2). The objective is to see if there is any tendency towards the strengthening of internal labour markets. We use an in-depth field survey realised by the Centre for Education and Labour Studies (Chiang Mai University, Thailand). This is the first nation-wide survey on these topics. A questionnaire has been applied to interview 1543 industrial workers, staff employees and engineers in 85 private and state companies and to 1567 self-employed and 454 employees of the informal sector. Data on education, workers mobility, employment tenure, wages, bonuses and welfare have been collected and are analysed in the paper. The results show that several elements characteristics of internal labour markets are present in big companies with higher than average technological intensity.

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International comparisons show that average employment tenure in Thailand is intermediate, inferior to the European and Japanese levels but close to the US level, and much higher than in Latin American countries. We conclude that Thailand has the potential to improve its competitiveness by upgrading the level and the quality of education and by strengthening internal labour markets. Competitiveness could be based on the accumulation of knowledge with a positive impact on productivity rather than cheap labour.

1. Knowledge-based developing economies?

According to the OECD, "knowledge is now recognised as the driver of productivity and economic growth leading to a new focus on the role of information, technology and learning in economic performance" (OECD, 1996) [(2)]. In synthesis, knowledge encompasses scientific research and its transformation into technology and all opportunities to learn something during the realisation of economic activities. This means that the creation of new knowledge can be deliberate such as R&D, or partially deliberate such as learning by doing at work, interactions between companies and their customers or suppliers. In a way, the concept of knowledge is nothing but the extension of the old concept of learning by doing which has been observed and theorised since the 1950-1960's in industrial production mainly (K. Arrow, 1962) to the whole range of economic activities. This is the reason why there is an on going-debate about the real novelty of the role of knowledge in economy. After all, knowledge has always been important in human and economic life. One of the major arguments of the advocates of the "knowledge-based" economy is that information and communication technologies combined with globalisation have given a new importance to knowledge. R&D is even more subordinated to the economic logic and learning during economic activities has acquired a new importance. In other terms, late capitalism is trying to rationalise further not only scientific research, which is a multi secular phenomenon, but also learning while buying, selling and working as new sources of competitiveness.

"Knowledge-based economies" are characterised by three aspects: a trend to a growing codification of knowledge and its diffusion through computer networks give rise to an "information society". The need for better-educated workers who continuously adapt their skills underlies the "learning economy". The key role of "National Innovation Systems" (NIS) in knowledge production, transmission and transfer.

On these three aspects developing countries are at disadvantage. The growing codification of knowledge through computer networks is a much contested issue and can only be partial (B. Johnson, B.A. Lundvall, 2001). But it represents a new development of the multi-secular trend of the work rationalisation process that most firms from developing countries will have difficulties to follow. Improving education and skills is already a critical issue for the majority of developing countries, even for the most advanced. Not only the general access to primary, secondary and superior education is at stake, but also an improvement of the quality of education. If now the objective is not only initial formation but also "life-long learning", one can expect that this new hurdle will be difficult to overcome for developing countries. The absence or the weakness of national innovation system is a third obstacle. The majority of developing countries have

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2) The concept of "knowledge" is regarded as critical for the future of economies and firms since the beginning of the 1990's (R. Reich 1992, P. Drucker, 1993). It is rooted in theories of the firm and organisational learning (C. Argyris, D.A. Schön, 1978), theories of innovation (B.A. Lundvall, B. Johnson, 1994), theories of growth and now theories of development. Some institutions like the World Bank (1999) have developed an apologetic interpretation of "knowledge" presented as a new fairy's wand that could resolve at once all problems related to development. This has introduced more confusion than clarification to the debate.

usually difficulties in creating a NIS because many institutions necessary to innovation do not exist and have to appear in the process of development. Capital accumulation is usually the main contribution to technical progress through import of foreign technology rather than accumulation of intangible assets such as knowledge and learning. Thailand falls into this situation. In what follows we first review briefly the state of scientific and technological system and then the education system.

1.1 Technological knowledge development in Thailand.

Capital accumulation has been the major factor of economic growth and productivity in Thailand (A. Chandrachai et.al. 2004, P. Warr, 2005) incorporating technical progress through imports and FDI (J. Rattsø, H.E. Stokke, 2003) while endogenous technical progress has been weak.

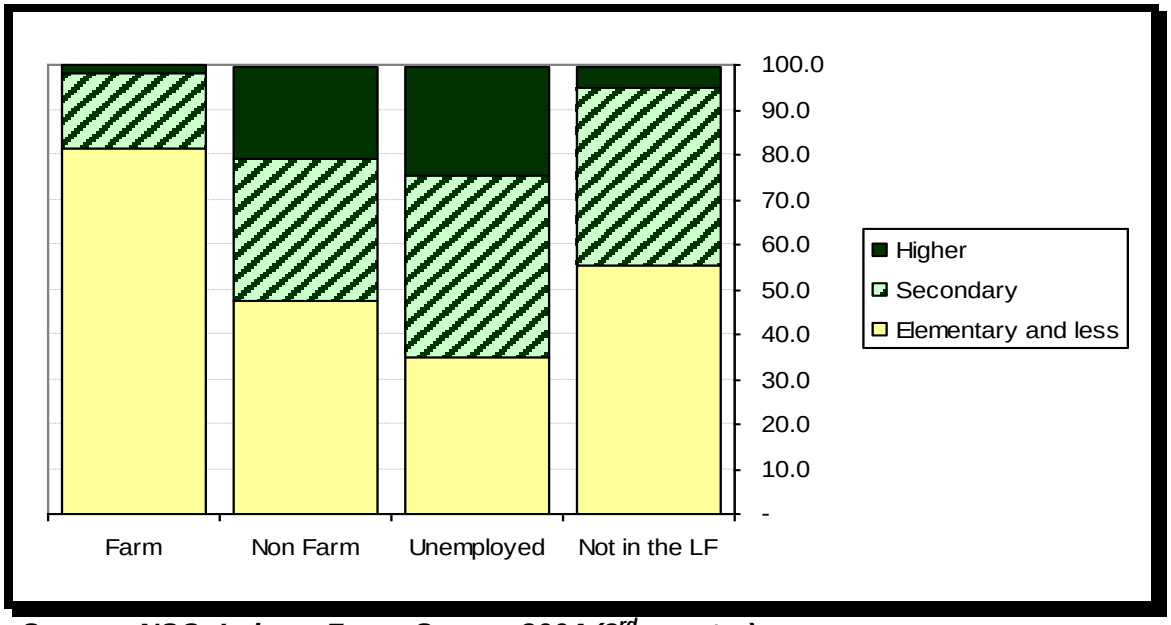
Thai economic development has not led to endogenous technological capabilities deepening and technological learning has been very slow and passive. In particular, Thai firms have not enough invested in design and engineering activities "missing out important source of enhanced productivity growth and other forms of competitiveness" (S. Dhanani, P. Scholtès, 2002, p 49). Research and development is confined in state agencies without strong links with private firms. According to P. Intarakamnerd et. al. (2004), the NIS in Thailand remains weak and fragmented and does not link to its economic structural development level. One may hypothesise the existence of a mismatch between its economical development and its socio-technological development that is lagging behind. The share of agriculture in GDP has decrease from 40% in the 1960s to approximately 10% in the late 1990s while that of the industrial sector experienced exactly the reverse situation. Manufactured exports now account for more than two thirds of total exports. But most of their technologically sophisticated and high-value-added components are imported meaning that local assembly in labour-intensive plants is still dominant. Only a small minority (15%) of large subsidiaries of multinational firms and large domestic firms have capability in R&D. Beyond formal R&D, 20% performs innovations activities in a more informal way. "Most Thai firms, even large corporations, have a deep rooted attitude of not develop their own indigenous technological capabilities" and "… want to rely on off-the-shelf imported technology mostly in the forms of machinery, and turn-key technology transfer from abroad or joint venture with foreign partners".

This situation is not sustainable on the long-term and one way or another, Thailand will have to improve its performance in terms of scientific research and technological capabilities. Not only are there neighbour countries with lower labour costs, lower taxes and good infrastructures, but the import of increasingly complex foreign technologies means that national scientific capacity absorption has to be continuously upgraded by improving the education and scientific level.

1.2. Education.

The problem is that education starts from a very low level, (see figure 1). In 2004, more than 80% of farm workers had only complete or incomplete elementary education. 50% of non farm workers were in the same situation, with only 30% with secondary education and 20% with higher education.

Figure 1: Distribution of active and non active by education in 2004.



Source: NSO, Labour Force Survey 2004 (3rd quarter).

Figure 2: Labour force by level of education.

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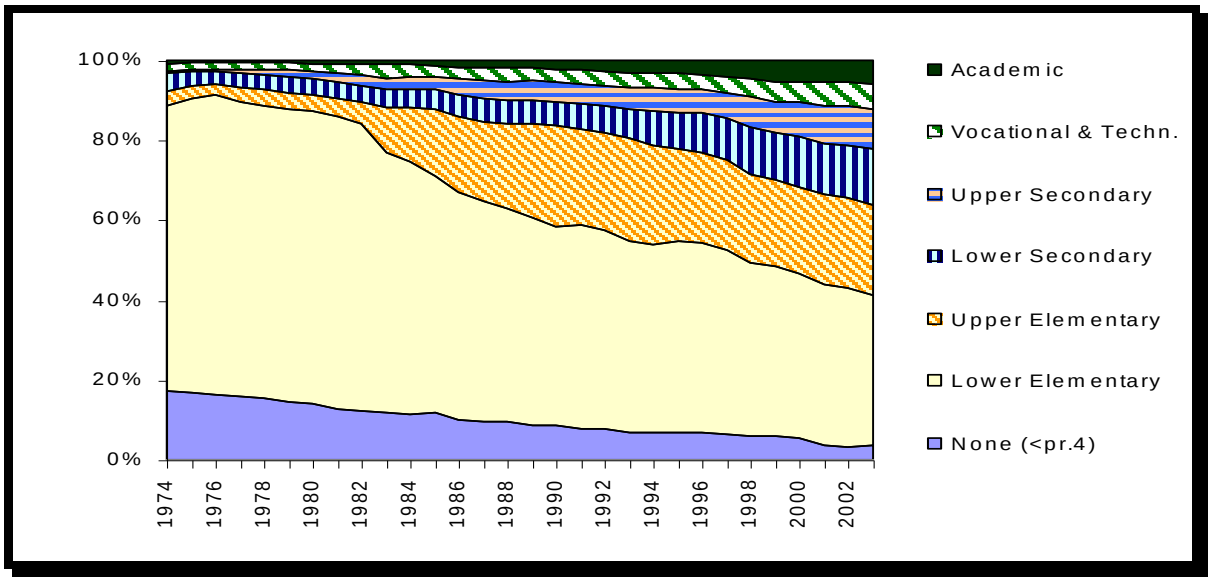

Source: CELS database (from Labour Force Surveys, NSO).

Unemployed have a higher level of education, and this certainly corresponds to frictional unemployment. Workers with higher than average education have better opportunities to find a better job and take the risk to be unemployed for a short period before getting a new one job.

Figure 2 shows that education is improving, but slowly. The average level of education of the labour force was extremely low in 1975; with less than 10% of the labour force having a level of education over primary. Now, those who enter the labour market have almost completed secondary. But the level of education of the labour force remains low, because it takes time to replace older generations. Figure 2 shows that members of the labour force with general upper secondary were less than 10% in 2003, with the same for those with general academic level. This is clearly insufficient for a country like Thailand which has reached an intermediate level in industrial development and in technical content of its exports.

Another problem lies in the quality of education. According to UNESCO's report "Education For All Global Monitoring" (UNESCO, 2005), more than three million Thais (8% of Thailand's adult population aged 15 and above) have no basic reading and writing skills and another one million students are left out of the school system. Although government figures put the adult literacy rate at 92.6%, an assessment by the OCDE found that 37% of 15-year-old students were performing at a level indicative of very low reading abilities. In mathematics, the OECD report found that only 40% of the 15-year-old student population had basic maths skills. The quality of education issue is not new (E. Danskin 1979), and not specific to Thailand (D. W Chapman, D. Adams 1998). It is in part explained by the necessity to dedicate most education spending in the construction of schools, recruitment of teachers in order to guarantee a universal access to primary and secondary school. Only 2.3% of the educational expenditure goes toward educational development and quality improvement (G. Numnak, 2006). But the quality issue goes beyond budgetary problem. A comprehensive reform of education rejuvenating the whole philosophy of education is necessary, giving less importance to learning by rote and conservative values and more importance to critical mind and creative learning.

A final problem of education is the insufficient number of graduates and PhDs in science and technology. According to the UNIDO report of 2005, "beyond the variety of successful catching-up experiences of the past, ... one common feature is a rapid increase in the level of education and on emphasis on higher education in science and engineering", among other factors. The historical evolution of Thailand reveals a real process of catching-up since 1950's (figure 3). But the process seems to slow down since the 1990's. Our explanation is that the extensive growth regime on which Thailand relied previously has reached the limit of its potential and that the pursuit of growth involves the shift to an intensive growth regime based on higher productivity proceeding from the accumulation of knowledge. In the pure field of higher education in science and engineering, Thailand score is intermediate. A cross-country comparison shows that relative to its economic development measured by the GDP per capita, Thailand does not fare too bad [3] (see figure 4). But to keep on catching-up with successful first-tier emerging countries (South Korea, Taiwan, Singapore) and China, Thailand will have to make a leap forward in science and engineering which depends on an overall improvement of the education system.

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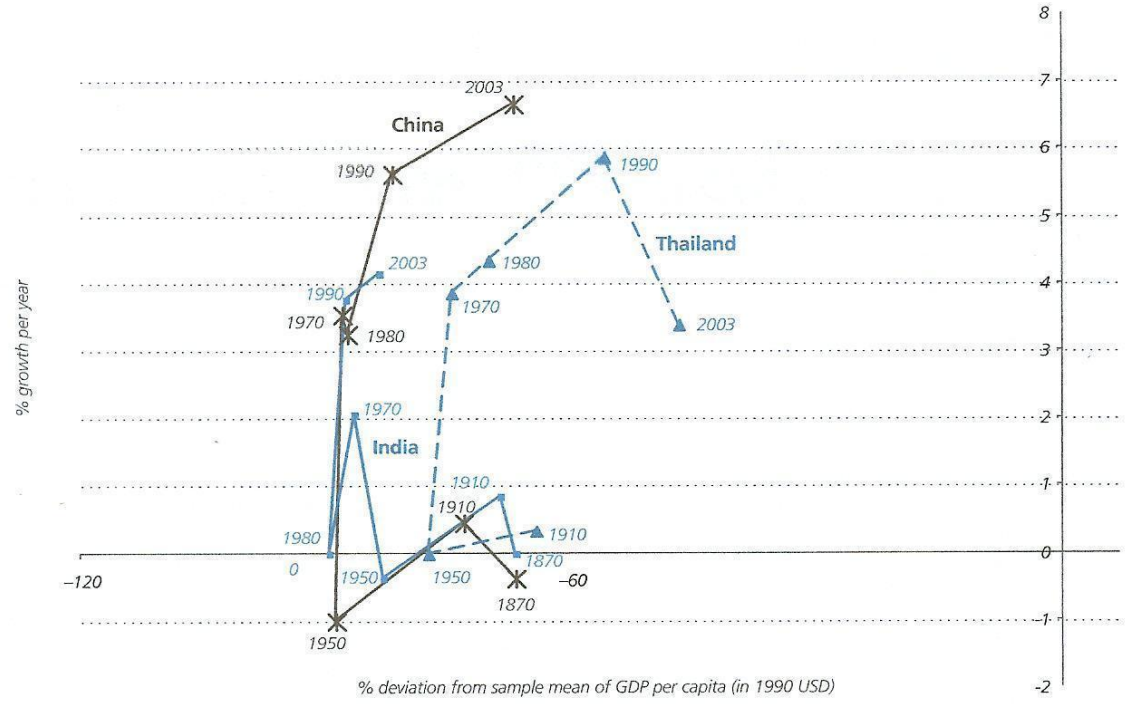
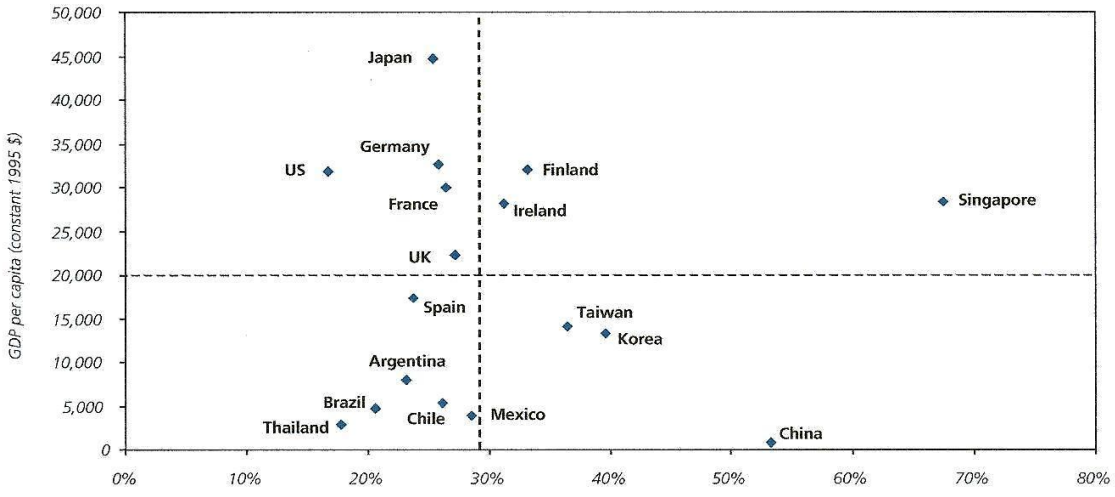
3 There is a downward bias for Thailand, because data includes only Natural Sciences (physical, biological, earth, atmosphere and ocean sciences) and engineering but does not include data on mathematical/computer sciences and agriculture sciences, which are not available (see UNIDO, 2005, p 45). If these last are included, the share of degrees for all sciences is 21% on average between 1994-1997 (UNDP, 2004, p 176-179).

Figure 3: On the road to catching up?



Source: Maddison, 2003 and GGDC, 2005. **UNIDO, 2005, p 39.**

Figure 4 : GDP per capita vs. share of natural science and engineering degrees in total first degrees (2000 or most recent years



Source: **UNIDO, 2004** NSF, 2004 and World Development Indicators, 2003.

The problem is that this quantitative and qualitative leap forward in education takes time, and cannot be a short-term solution for accumulation of knowledge and improvements in competitiveness. It has to be accompanied by measures improving the accumulation and the diffusion of knowledge through the labour market.

1.3. Knowledge and labour flexibility

According to A. Lam (2000), "... labour market and the nature of employment relationship influence the knowledge base and the learning capabilities of firms in three ways. First, they determine whether skills are determined inside or outside the firm, hence the relative importance of formal education and training vis-à-vis employers. Second, they determine career mobility and incentives for workers and the possibility for firms to acquire and accumulate different types of knowledge. And third, they shape the individual's career and social identity and define the boundary of knowledge".

When external labour markets[4] and short-term employment relationship are linked, the knowledge base of the firm and its learning capabilities are mostly determined from outside by the education system. Explicit and embrained knowledge plays a major role, at least initially. It is enriched by the experience that workers acquire during the time they spent in one firm. Knowledge is more inter-firm than intra-firm. This is especially the case when professional labour markets exist. A professional labour market is defined by occupational standards for at least skilled blue-collar workers, technicians, management and supervisors that match more or less the curriculum and diplomas delivered by the education system. These occupational standards enable workers to change from one firm to another. Knowledge is embedded in the individual and the mobility of workers between firms leads to the diffusion of knowledge throughout the economy. Another variant is when the economic environment is more unstable. In this case, occupational standards are more broadly defined and education certification less important. Tacit knowledge is then more important. Peer group recognition plays a more important role for employment mobility. Whatever the precise situation, external flexibility of labour under the form of mobility from one firm to another, is decisive for the diffusion of knowledge. Two conditions are necessary to make this scenario possible. The first is full employment. In this case, employment mobility is high and "job hoping" is frequent. The second is when some categories of skilled workers possess a relatively scarce knowledge that enable them to job hop even when unemployment is high. These two conditions can be combined. Full employment is often accompanied by labour shortage for determined skills. But structural high unemployment makes employment mobility nearly impossible for the vast majority of workers so that the diffusion of knowledge through this way is not viable.

When internal labour market[5] and long-term employment relationships prevail, knowledge and learning are intra-firm oriented and mostly generated through firm-specific On-the Job Training (OJT). Formal knowledge acquired through education is important but serves only as a basis upon which work-related skills are built within the firm. The characteristics of OJT and its effectiveness as a mechanism of learning are closely connected with the pattern of work organisation and the extent to which practical experience is valued and constitutes a basis for career progression. Some companies

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4 External labour markets imply that workers move somewhat fluidly between firms and wages are determined by some aggregate process where firms do not have significant discretion over wage setting.

5 Internal labour markets are those where workers are hired into entry level jobs and higher levels are filled from within. Wages are determined internally and may be quite free of market pressure. Usually, workers make their entire career in the same company and progress through a series of interconnected job through the hierarchy.

are explicitly organised to systematically exploit and accumulate the tacit knowledge generated by learning by doing. Knowledge is embedded in firms and relies on employment stability and organisational memory. Knowledge can diffuse throughout the economy thanks to interlinkages between firms, in particular between firms and their suppliers. Internal or functional flexibility is privileged and benefits from this stability. But even if the firm is less dependent on the external labour market, it is not immune from its influences. In case of full employment, internal labour market and functional flexibility is more costly because firms must offer significant incentives to retain its core workers, those that possess and diffuse their knowledge in the firm. An efficiency wage system must be in place. When there is a structural high unemployment, the incentives are less costly, because the fear of losing a good job operates as disciplinary device.

We now turn to the case of Thailand to apply this theoretical grid and deduct some hypotheses.

There are presently two obstacles to the development of occupational labour markets in Thailand. The first is that, as we have seen, the education level is still very low. The second obstacle is the inexistence of a national occupational standards defined by the state or through collective bargaining. Instead, private companies define their own standards which are more or less different from one company to another. And they do take into account the education level of new applicants and their diplomas. But one cannot say that the education system knows in advance most job characteristics and prepare student to occupy well-defined jobs. This is an obstacle to mobility because workers are less sure to find the same kind of job if they change they employer.

For all these reasons, the development of internal labour market where workers accumulate knowledge thanks to a combination of training in specific skills and learning by doing appears as the most viable and fastest solution. In this case, knowledge does not diffuse throughout the economy but concentrate in sectors where companies, in general big ones, have decided to create such internal labour markets. This does not mean that it is easy in a country where the institutional and political framework is not conducive to such an evolution. But for companies competing internationally, not only on price but also on quality, it may be the only option. In a full employment economy, such as Thailand, it is the only solution to retain skilled workers and improve productivity. This would have also the advantage to reinforce the consumption and the domestic market.

Occupational and internal labour markets are mutually exclusive but only to a certain degree. In reality, both external and internal labour markets co-exist in most countries, and except in extreme cases, internal labour markets are not totally closed entities without any relationships with external labour markets. Both types of markets would benefit from an initial increase in the level and quality of education, but the occupational labour market is more dependent on the improvement of education than internal labour markets which, to a certain extent, compensate the insufficiency in education by internal training. And, as seen before, they do not involve the same kind of knowledge and do not suppose the same temporality. Developing internal labour markets would have a more immediate positive effect on productivity, paving the way to the transition to an intensive growth regime.

1.4. Internal labour market, tenure and productivity.

It is not easy to assess the emergence and importance of internal labour markets because they depend on the existence of micro and macro institutions that are difficult to evaluate quantitatively. One way to resolve this difficulty is to study the pattern of workers' mobility or alternatively their stability in employment or in other terms their employment tenure.

“Because workers eventually tend to settle down and remain with a particular employer for a significant fraction of their careers, the pattern of early mobility, coupled with later stability, may reflect the importance of internal labour markets, where workers are hired into ‘‘ports-of-entry’’ and higher level positions are filled from within”. (E.P. Lazear, P. Oyer, 2004).

Employment tenure can be defined as the length of time that workers remain in their present jobs or as self-employed. It is determined by a variety of factors affecting supply and demand in labour markets. In most developed countries, and less frequently in developing countries, such factors can be markets conditions but also institutional factors like collective bargaining agreements or employment protection legislation, which are influenced by the respective bargaining power of the bargaining partners. For these reasons, employment job tenure can be interpreted as an indicator of numerical flexibility or stability in the labour market (P. Auer, S. Cazes, 2003). In Thailand, market factors are marked by full employment since a long time, and as for institutional factors, by the great weakness of the labour movement and the nearly absence of protection legislation, resulting in very few collective bargaining. In this sense, employment tenure in Thailand reflects more market factors than institutional ones: Workers shift from one firm to another when they are not satisfied, and employers have to offer specific incentives if they want to retain them: An attracting wage, increasing by seniority or according to performance evaluation, bonuses and other advantages such as transportation, dwelling, and welfare for the employee and sometimes his family. When all theses incentives make system, we are in the presence of an internal labour market.

In exchange, the company expects that workers will accumulate experience and skills with a positive impact on productivity, reactivity and sometimes the ability to handle different tasks. In summary, there should be a positive relation between average duration of employment and productivity, among other things. P. Auer et. ali. (2004) give evidence of a positive relationship between increases in the average tenure level in an economy and the rate of labour productivity growth for 13 European countries for six sectors between 1992 and 2002. They assume that in the short-term, “only firm-specific skills (training) will affect labour productivity, since the other variables that affect labour productivity, ability and general education are long-term variables” (op cit p 7). A one percent increase in the average rate of tenure will increase productivity by 0.16%. This positive but small effect is relates to all sectors and not just manufacturing where the effect is higher. Another interesting result is that increasing the share of workers with very short tenure (less than one year) or long tenure (more than 10 years) will have a negative effect on productivity. For instance, doubling the share of workers with more than 10 years will reduce the productivity by 1.8%, while doubling the share of those with more than 20 years will reduce productivity by 9.2%. At the other extreme, a one percent increase in the share of workers with less than one year tenure decreases productivity by 4.2%. Their conclusion is that there seems to be a life-cycle of tenure-productivity, in which “medium tenure, between one year and 10 years, but particularly between 5 and 10 years seems most optimal for productivity growth” (op cit p 8). After 13.6 years productivity begins to decline but average productivity of workers remains greater than their wage until tenure reached 27.3 years, so that companies from the sector still benefit.

It is of course not our purpose to transfer this estimation based on European economies during 1992 to 2002 to Thailand or other countries. But the idea that there is a life-cycle of tenure-productivity and that productivity increases mostly during medium tenure (1 to 10 years) can be maintained as a reference to broadly assess the situation of a particular country such as Thailand.

2. The case of Thailand.

In this second part we will focus on the case of Thailand. National household surveys conducted in Thailand, mostly by the National Statistical Office (NSO) and the Ministry of Labour do not address the questions that are of interest for our study. For instance, there has been no data at the national level on labour mobility, job tenure, labour income at the global or sector level. It is precisely to fill this lack of information, among other objectives, that the Centre for Education and Labour Studies (CELS)[6] has engaged in a research program on "employment, skills and education: in search for a labour regime geared toward an independent and self-sustained development"[7], with the financial support of the National Research Council of Thailand (NRCT).

2.1 Methodology.

Two field surveys were conducted during the years 2004-2006. One on industrial workers and one on self-employed and employees working in micro-firms that we defined as the informal economy[8]. Data has been collected through the use of a questionnaire among industrial employees (1543 individuals), self-employed (1567 individuals) and "informal employees" (454 individuals), the last two representing the informal sector (2021 individuals). Workers were interviewed by Thai research assistants during visits to companies. 20 to 50 workers were interviewed in each company according to possibility. Research assistants filled themselves the questionnaire with answers supplied by workers. The advantage of this method is that it reduces the possibility of errors in answers because interviewers were able to dialogue with workers. The questionnaire had several objectives. First, collecting data on the personal characteristics of the worker (his/her age, place of birth, where he/she lived, family, marital status, children, where he/she lives, what kind of housing,..). Second, to establish the worker's education trajectory (level of education, when and where, in house-training...). Third, to establish the worker's professional trajectory (age of entry in working life, where he/she has worked before, how many companies, what kind of jobs, promotion, wage, bonuses, working hours, etc..)[9].

Our sample of 3564 individuals is important and makes possible to establish some facts and draw significant lessons. But it is not representative of the whole labour force of Thailand. The first limitation is that due to the refusal of many companies to collaborate, we had to abandon the project to build a representative sample, although we had chosen initially firms at random among all regions and sectors of Thailand. The second reason is that the sample is biased on a geographical point of view. Workers from the north are over-represented (40.1%), especially industrial workers (56.8%), to the expense of the Bangkok area (8.4%, and only 4.8% in industry). And third, there is an over-representation of female workers. Their share is 55% in our sample against 45.2% in the Thai labour force in 2005. This is due to the huge presence of women in our sample in the self-employed category (61.4%) and "informal employees" category (59.5%) while they are only 47.2% in the industrial workers category. But the sample has

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6 The CELS is linked to the Faculty of Education, Chiang Mai University, Thailand. More on CELS, please consult its website: http://cels.edu.cmu.ac.th/

7 The program was divided into two "Employment Forms and Labour Mobilization". And "Relationships Between Education, Skills and Competencies".

8 See below more precise definitions and justification of choices.

9 We do not make an exhaustive presentation of the questionnaire and its results, because it is not the object of the paper. The questionnaire is available in English upon request. Future CELS publications will publicise the results. In this paper, we will focus on job tenure and income and select the relevant data.

also some good points. The median age of the sample is 36 years, close to the median age of the Thai labour force, 37years. Despite these limitations, there are some interesting lessons that we can draw from our field survey. We will first summarise the general characteristic of the Thai labour force before turning to the main results of the survey.

2.2. General characteristics of the Thai labour force.

During the last fifty years, the population of Thailand has more than doubled from 29 million in 1960 to 62 in 2000 and 64.2 million in 2005 (CELS database base on the US bureau of Census). The rate of growth has declined rapidly and is now below 1% since 1990. The demographic transition has been achieved recently and quickly. This has important economic and social consequences.

An ageing labour force.

The population is ageing. The under 20 who reached 56% of the population in 1970 now constitute only 33% while the 25 to 59 grew from 31% in 1970 to half of the population now. The 60 years old and over increased from 5% to 10%, still under the 15% reached in Japan and Europe but growing steadily. The Thai labour force[10] follows this general trend. It has increased from 16 million in 1970 to 35.6 million in 2003. During this period, the labour force aged 15 to 24 reached a peak of 8.8 million people in 1990 and then returns to its 1970 level, around 5 million, i.e. 15% of the labour force. Those aged 25 to 39 grew steadily from 5.7 million to 15 million in 2003, with a share of 42.1%. The labour force aged 40 to 59 grew from 4.1 million to 12.9 million and represents 36.2% of total labour force. Old workers from 60 years and over, increased from 0.8 million to 2.4 million and has a share of 6.7%. As a consequence, the median age of the labour force has increase quickly from 30 years in 1970 to 37.5 years in 2003. This puts Thailand above the USA which has a median age of 35 years and in par with European countries like the UK and France. The mean age is also close to 37 both for male and female workers.

Farm employment is shrinking in favour of services more than manufacturing.

Wage labour is still a minority of the labour force although it has increased considerably, from 13% in 1970 to 45% in 2005 and should keep on increasing slowly but regularly in the future. This is due to the fact that farm employment that accounted for 79% of the labour force in 1970 has remained dominant until the late nineties. But in 2005, its share was down to 42.6%. Non-farm employment which now represents 57.4% of the labour force is distributed among commerce (14.6%), construction (5.1%), manufacturing, electricity and mining[11] (15.1%), services (19.6%), transport and communication (3%). Manufacturing is a minor part of the labour force and is in competition for attracting workers mainly with commerce and services that together represents 34.2% of the labour force. Services have grown at a quick space especially in the late period with a rate of growth of 60% from 1997 to 2005, to be compared with 25% for manufacturing and 17% in commerce. Although manufacturing is very important for Thai exports, and the concentration of industrial workers from Bangkok to Rayong is very impressive, manufacturing is not the most attractive employment that every Thai is naturally looking for.

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10 Since 2001, the population of working age is defined in Thailand as the population aged between 15 and 59 years. It is not legally allowed to work under the age of 15, because children are supposed to be at school. Data used come from the CELS data base which contains corrected series on labour drawn from the Labour Force Survey of the National Statistical Office.

11 For the sake of simplicity we will say manufacturing hereafter, knowing that mining is a small sector in Thailand.

The importance of female employment.

A significant element of non farm labour is the feminisation of the labour force. In services, they are more than 55% which can be considered as a typical feature that can be encountered in other countries. More specific is the fact that Thai women now accounts for more than 50% in manufacturing. They are more numerous than men among industrial wage-workers and are especially numerous in assembly work which is typical of the electronic industry, one of the first employers, and the first exporter of Thailand.

Labour shortage?

But one can wonder whether this trend is sustainable for the future. Not only the demographic trend is slowing the labour supply, but the labour force participation rate is also decreasing while full employment is already achieved. Male participation rate has decreased from 90% in 1970 to 81% in 2003, while female participation rate has decreased dramatically from 75% in 1970 to 65% in 2003. This phenomenon is explained by the delayed entry of young generations on the labour market that prefer to stay longer than before at school.

Unemployment has never been a problem. It has remained around 2% from 1970 onwards with the exception of the 1997-1998 crises when it reached 4%. Only the young have experienced some difficulties when entering the labour market. But on the long period it can be said that Thailand has enjoyed full employment and even labour shortage in some labour intensive activities that pay too low wages. Up to now, Thai employers have preferred to recruit legal and illegal migrant workers rather than increasing wages. This can alleviate labour shortages at the sector level, but it is not sure that it can be a solution at the macro level for political reasons. Thailand does not seem ready to accept massive immigration like European countries or the USA. But there are de facto numerous illegal immigrants so that it remains an open question.

From these figures we can see that Thailand can no longer base its future on the existence of an abundant young labour force which can supply the industry with large cohorts of workers in full possession of physical strength. The electronic industry for instance, which is representative of the sweatshop model, is extremely dependant on young female workers who assemble tiny components. If their absolute numbers decrease or if young female prefer to stay longer at school, or if they find a better job, these companies will have either to pay higher wages or cope with labour shortage with higher automation or off-shoring. In terms of human resource management, the ageing workforce poses new problems. It exerts a pressure, at least for those companies which want to retain their skilled employees, to create professional career ladders and seniority promotion with a positive impact on wages.

2.3. Mobility and job tenure in Thailand.

Mobility from one job to another is one aspect of external labour flexibility. In a full employment society, one can expect that mobility takes the form of job hoping: workers exploit the opportunity to find a better job with higher wage or other advantages. In case of skill workers, they enrich knowledge base of the new firm where they go working. In Thailand, because wage labour is still not dominant, labour mobility has to be studied first in the broad sense. From farm labour to non farm labour, and inside non-farm labour, from independent labour to wage labour. Finally there are also movements from one job to another inside wage labour.

In fact, there has been no massive migration from farmers to industrial jobs. As we have seen above, farm employment remained the dominant form of employment until the late 1990s and decreased slowly when most farmers' children opted for industrial or

service jobs when leaving schools. One or two would remain in agriculture while other children would look for non-farm jobs. Mobility between non-farm and farm labour is only seasonal, when farm labour requires all family members. The same is probably true for mobility between other kinds of jobs. Once completed their education, young workers decide whether they choose to work on their own account or enter wage labour. But once they have decided, few shift from self-employment to wage labour. Overall evaluations of the transitions[12] from one form of job to another confirm this assessment (CELS, 2007). There are 6093 transitions or 2.5 per individual on average. In general transitions between different kinds of jobs are not numerous. For instance, transitions from self-employment to private sector wage employment represent only 2.4% of the total. Transitions from wage earner to employer, when managers and supervisors become the head of the company or create their own company, account for 5.5%. Mobility from wage labour to self-owned business is more frequent because it is usually the dream of most Thai workers. But dreams are not always fulfilled, and when they are, it is rather after many years in wage labour, when workers have managed to save enough money to start their own business. This kind of transition represents only 13% of the total. Transitions from own account to own account represent 13%. But internal mobility inside wage labour is in fact higher than transitions between different forms of labour. 53% of total transitions were from one wage job to another (CELS, 2007). Mobility inside wage labour is higher than in other form of job, probably because there are more opportunities and these are probably better known due to the usually high geographic concentration of industrial companies.

We now analyse mobility in more details by calculating the number of jobs that workers have experienced according to the nature of their jobs. Workers are divided between “formal” and “informal” workers. Wage earners working in private companies (industry and services) with more than 20 employees plus those working for the state are defined as working for the “formal” or “modern” economy, although we are aware of the arbitrariness of such a category and qualification. In 1997, “formal” jobs amounted to 9.230 million of jobs, or 53.7% of the non-farm labour market. Besides, there were two million employees working in companies with less than 20 employees or 12.2% of the non-farm labour market. These are usually workers with no labour contracts and no social protection and may be considered as “informal employees” although this category is not rigorous[13]. These “informal employees” plus self-employed constitute what we call the “informal sector”. They were 5.5 million in 1997 or 33.4% of non-farm labour.

On the whole, the results (see figure 5) show that workers in “formal” companies[14] are less mobile than “informal” workers, (divided here into two categories by level of education)[15]. Among “formal” workers, managers or supervisors are the less mobile: one third had only one job (the present one); one third had two; one third three or more jobs. Skilled workers are a bit more mobile, but surprisingly not much: 30% of

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12 A transition is defined as shift from one form of job (government worker, private sector wage worker, own account worker, family helper, employer) to another form of job. It is then possible to evaluate the transition between different form of job, or between the same one. For the sake of simplicity, employees from small and big companies are grouped inside the private wage earner form of labour.

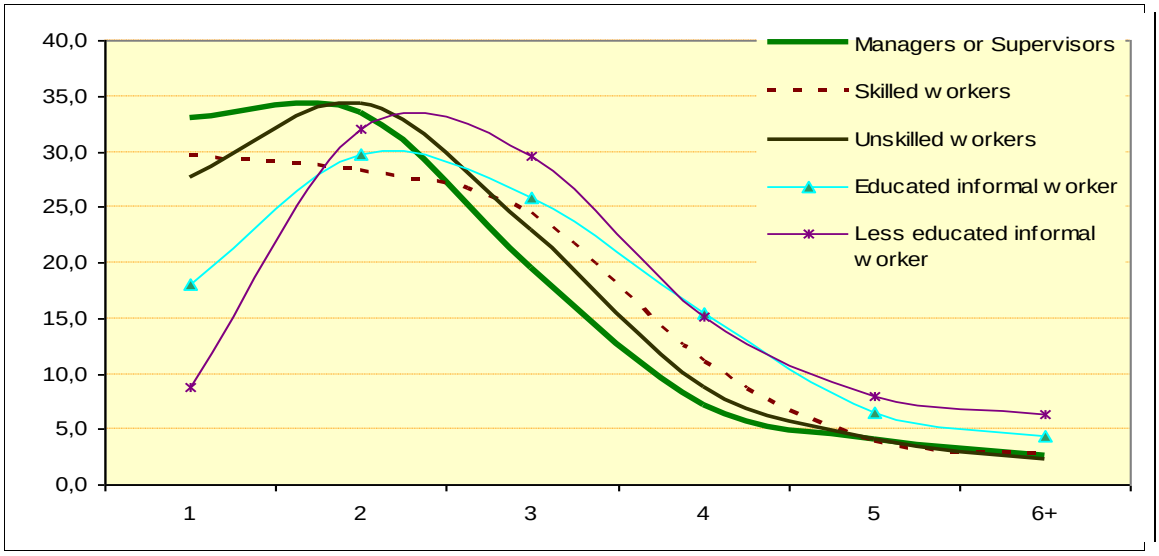
13 In the previous evaluation of “transitions”, the informal employees thus defined were included in the wage sector. They are now regrouped with self-employed to form the “informal” sector.

14 Workers in “modern” companies include managers and supervisors, skilled workers and unskilled workers.

15 Occupation is a broad indicator of qualification which is used to classify the workforce by skill. We have used the classification of the National Statistical Office of Thailand of 2001 which follows ILO standards. In this classification, the categories “legislator, senior officials and managers”, “professionals”, “technicians and associate professionals” are associated with “higher education”. The others as considered “less educated”.

skilled workers had only one job (their present one), 28% had two jobs, and 25% had three. So, 58% of "formal" skilled workers had experienced one or two jobs only, which is not much. Unskilled "formal" workers are initially more mobile than skilled workers (34% had two jobs) and then follow the same pattern as skilled workers. On the contrary, "informal" workers (self-employed and employees) had generally two or three jobs in their working life, and one out of four had four jobs or more. In summary, higher educated "formal" workers tend to stick to their jobs, after an initial rather short search period that lead them to experience one or two jobs, while "informal" workers and especially the less educated have more difficulties in finding what they may consider a good job.

Figure 5: Number of jobs by form of labour and position (% of each category)



Source: CELS database.

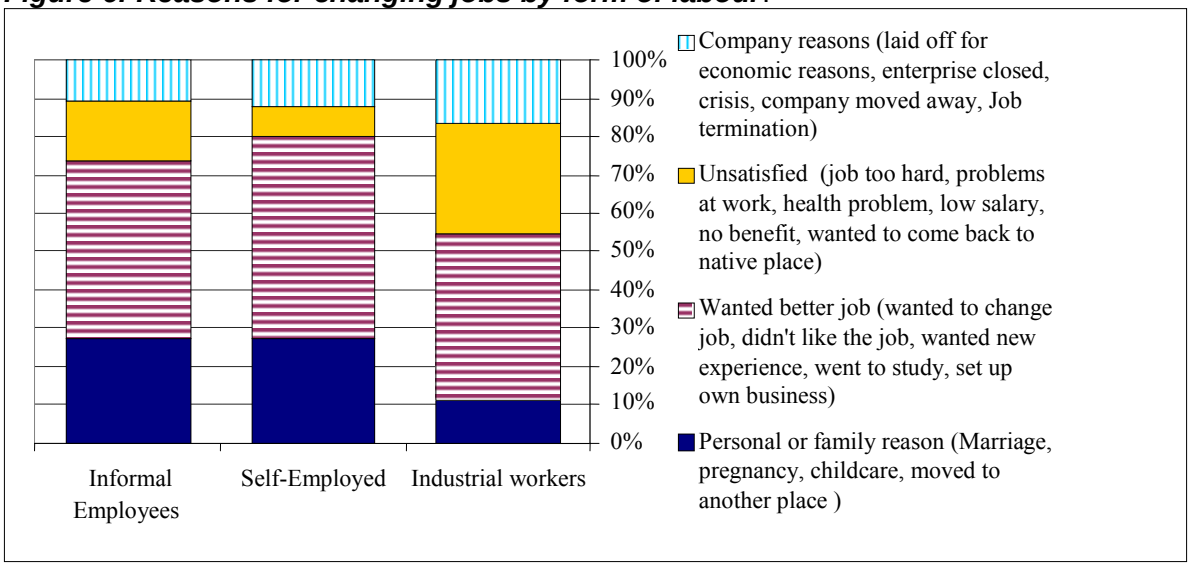
Figure 6 gives the main reasons for leaving the last job according to the form of the previous job. Cautious is needed in the interpreting of these answers because several different motivations which share a global common sense were grouped inside broad categories[16].

For industrial workers, "getting a better job" and "dissatisfaction with the last job" were the two main reasons. "Company" and "personal reasons" are not the major reasons. This is clearly characteristic of a situation of full employment where industrial workers have opportunities to change their job to benefit from better employment opportunities or can take the risk to quit when they are not satisfied for different reasons. For self-employed and "informal" workers, personal reasons and the search for a better job are the two main reasons for changing, with a higher proportion for dissatisfaction for

16 For instance, the wish to have better job groups different motivations: "I wanted to change my job", "I didn't like my job", "I wanted new experience", "I went to study", "I wanted to set up my own business". Non-satisfaction can be directly linked to the job - "job too hard"- or indirectly – "wanted to come back to my native place" which may be linked to personal or family reason - "childcare" or "marriage". The grouping was necessary to have statistical relevance because the answers were much dispersed.

"informal" employees. In all three cases, company reasons play a minor role which is again coherent with the situation of a full employment economy.

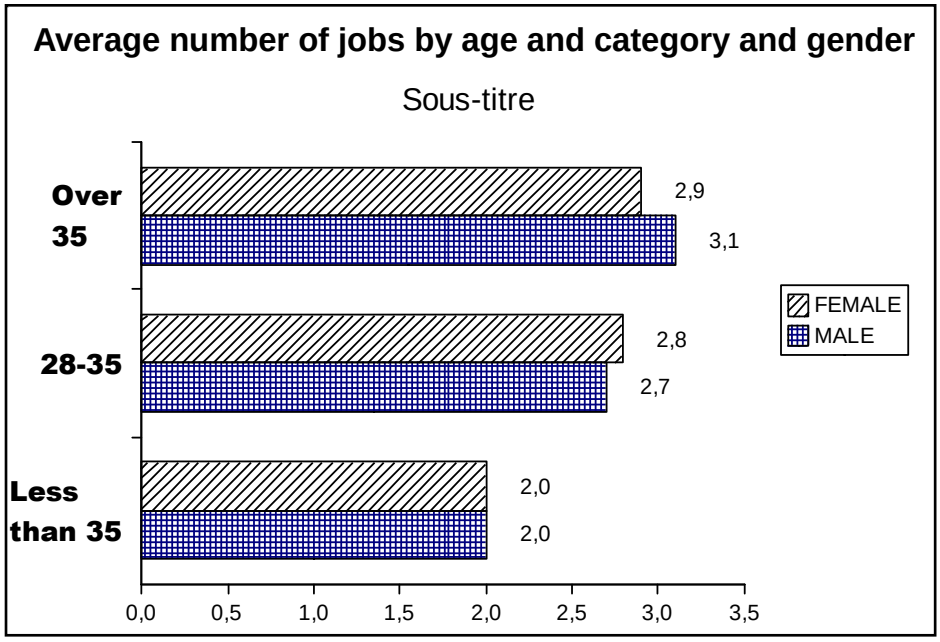
Figure 6: Reasons for changing jobs by form of labour.



Source: CELS database.

These first results have yet to be refined by considering age and gender. Figure 7 shows that gender is not an important discriminator of mobility although males and females are not evenly distributed in our sample by age and activities. The impact of age is more important. Usually, young workers tend to experience fewer jobs unless they are faced with more difficulty to enter the labour market and have to cumulate precarious jobs. This is not the case in Thailand. Figure 7 shows that young female and male workers under 28 years had only two jobs during their work life. When workers grow older up to their mid-thirties, their mobility increase a little, and stabilise over 35 years.

Figure 7: Average number of jobs by age category and gender.



Source: CELS database.

On average, these older workers have worked previously in three companies when they are interviewed. Inter-firm mobility is thus concentrated in the group of workers under their 40's.When they turn 40, they are more stable, either because they are satisfied with their job (see below), or because they have a family and it is more risky to change for another job once more.

To explain these results, it is necessary to take age into account and the level of education. Figure 8 below presents the average number of jobs per age category and forms[17]. If we make the assumptions that young generation workers (before 30) will have the same behaviour than the older generations (40 and more), then figure 8 presents a kind of mobility life cycle. It confirms that the average number of jobs increases for all categories until the age 30 to 39 and then stabilises. It is in general higher and stays high for low educated, educated self-employed and informal employees, and lower for wage earners in modern companies, even for unskilled workers. Mobility is higher in the informal sector because jobs are probably not good enough.

Figure 8: Average number of jobs by age category and position.

Source: CELS Database.

The effect of education and skills is significant. The mobility of managers and supervisors keep on increasing during their forties and fifties. It increases and stays above 3 for educated informal workers, and even skilled workers in their forties have a slightly higher mobility than those in their thirties. As a consequence, the average job tenure in the last position is logically much longer for older workers than for the younger

17 Workers were asked to explain in how many firms they had employed previously, when and for how long, among other questions.

(see figure 9)[18].Under 19, the average tenure is 1.4 years, which is logically small and not relevant[19]. The category 20-29 years is more representative of the entry in the labour market of young Thai workers. They represent 26.3% of the sample and their average tenure on their last job (which is often the first) is 2.9 years on average. Again, we note that low educated young informal employees have higher job tenure (4.9 years) due to their earlier entry in the working life. Workers in their thirties, the most numerous (39.1% of the sample), have on average a job tenure of 6.5 years. This category of workers of our sample is a reasonable guess-estimate of the average job tenure of the Thai labour force since the median age of our sample (36 years) is close to the median age of the Thai labour force (37 years). It is slightly higher for managers and supervisor (6.7 years) and skilled workers (6.9 years) and, on the other extreme, low-educated informal (7.1 years). Workers in their forties (24.6% of the sample) have an average job tenure of 11.3 years when all categories are considered jointly, with higher job tenure for both extremes, managers and supervisors on one side (13.4 years) and lower educated informal employees on the other (12.9 years). Workers in their fifties (11% of the sample) have logically a higher average tenure (17.6 years), especially for managers and supervisors (21.4 years) and skilled workers (23.5 years) but not for unskilled workers and educated informal which have a lower than average job tenure.

The two first categories have a shorter working life because they have studied more years. Managers and those who turned managers owe their position in part because they are better educated and in part because they have stayed for a long time in the company and were promoted. Once they got their position, they tend to stay in the firm because they are well paid. Skilled workers have a broad similar story and have the highest average job tenure of the sample. They are those who have some education and have accumulated a long professional experience.

Figure 10 shows the average employment tenure in the last company. Workers may have been promoted or shifted from one position to another inside the same company where they still work when they are interviewed. In this case, their tenure in the company is higher than their tenure in the last position. This applies only for industrial workers since self-employed have no promotion, while “informal” employees working in small companies are seldom promoted, although this may not be impossible. When we compare figure 4 and 5, we note that workers in their thirties, forties and fifties have indeed a higher tenure. For skilled workers, for instance, the difference is respectively 2.2, 3.2 and 4.3 more years. The same phenomenon is true for managers and supervisors and even unskilled workers who gain around two years of tenure. This is indicative of promotion that workers can get when they stay longer in the company.

We now turn to the core group of workers which corresponds to the medium tenure identified by P. Auer et. ali. (2004) that seems most optimal for productivity growth. For the whole sample, employment tenure up to 1 year represents 21.1%, which is rather high, without significant difference between female and male workers. At the other extreme, workers with tenure of 10 years and more amount to 28.4% of the sample which is rather low. So we can say that medium tenure, between 1 to 10 years represents 50.5% of the sample. Focusing on industrial workers only, which are more relevant for the effect on productivity, we find the same proportion (20.8%) for short

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18 Average job tenure in the last position is the time that workers have spent in the position (or job) they are occupying in the present company at the date of the interview. Workers may have held different positions in the same company (in case of promotion, for instance) or just one.

19 Workers aged fewer than 19 are only 61 out a total of 3613 workers. 70.5% are “low educated informal workers” and 18% informal self-employed.

tenure, but a lower proportion for long tenure (21.7%), so that medium tenure now amounts to 57.5%[20].

Figure 9: Average job tenure by age and level of qualification in the last position.

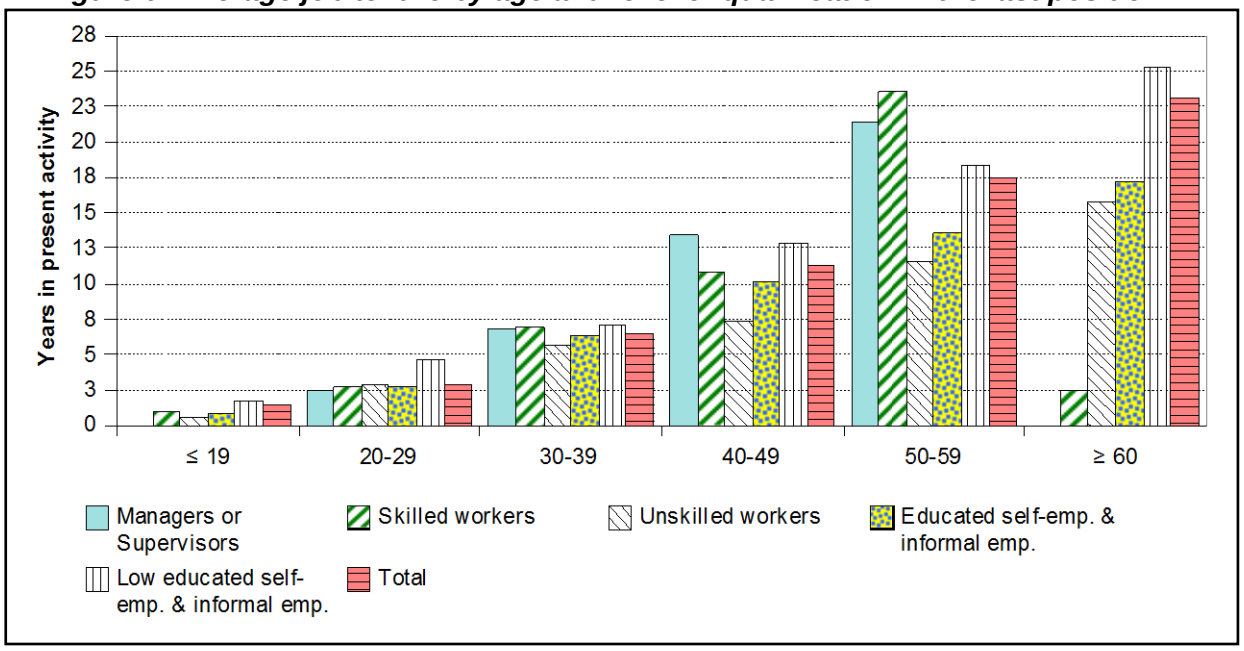
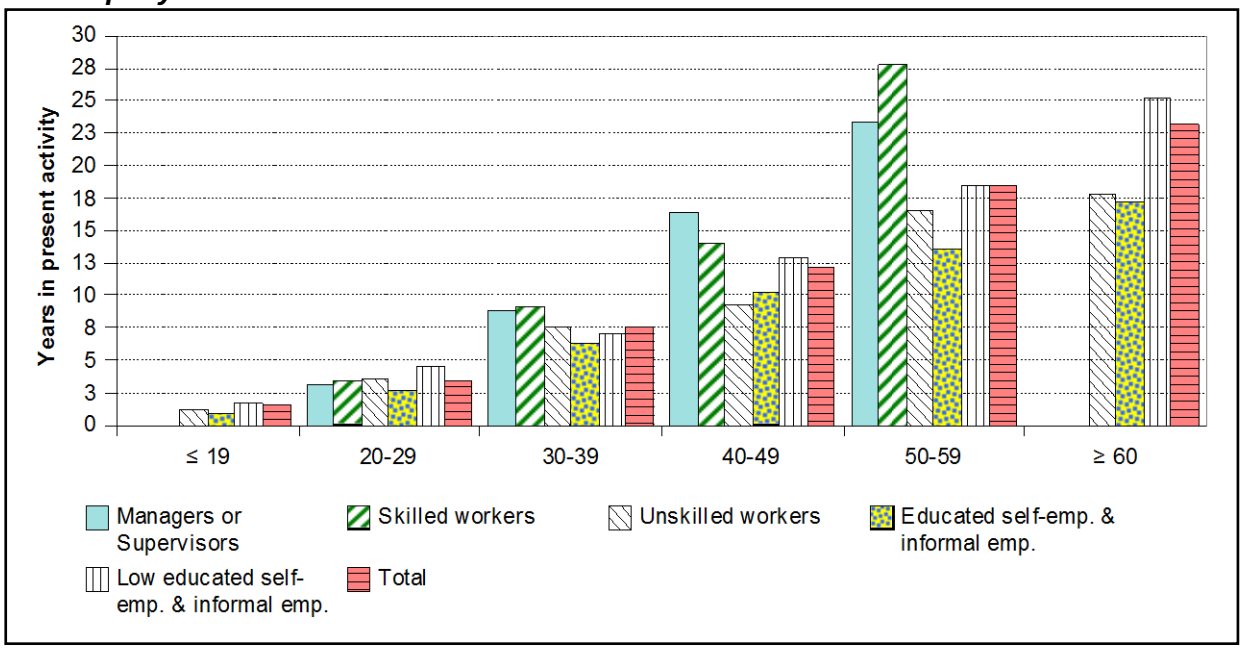


Figure 10: Average job tenure by age and level of qualification in the last company.



Source: CELS database.

20 Concretely, this means that 915 industrial workers out of a total of 1592 have tenure superior to one year and inferior to 10 years.

More than half of industrial workers, mostly aged between 20 and 39, are in a position where they can increase significantly industrial productivity[21]. This is good news for the Thai industry providing that employers are able to motivate these workers with the right incentives. This is what we study in the next section.

2.4. Labour management and labour incomes.

We first start by analysing the whole sample because labour income varies greatly according to forms of labour status.

Overall view.

For independent workers, i.e. employer or own-account worker, labour income is generally the net profit of the firm, shared with other owners or family helpers22. For wage-earners, income from labour is constituted of wage and of benefits. As we shall see, benefits are important and play a great role in remunerating skills, seniority, competencies and rarity on the market.

The median income for the whole sample is 8000 baht (US$ 222) per month[23]. It has to be compared with the minimum wage which is officially around 5000 baht (US$ 139). It is higher for wage-workers in companies if they are skilled (11500 baht or US$ 320) and of course for managers and supervisors (22400 baht or = US$ 622 per month) (see figure 11). The median income of educated self-employed is lower around 8000 baht. This shows that they cannot be considered as poor even if some of them are, while other compare with skilled industrial workers. The median income of unskilled workers, low educated self-employed and informal employees is around 5000 baht, which means that 50% of these categories do not receive the minimum wage. It explains also why a lot of unskilled industrial workers would like to become self-employed with the expectation to earn more.

The income also varies by industry (see figure 12). For industrial workers (including managers), differences in median income by industry is mostly explained by the relative share of skilled and unskilled workers. In chemical and non-metallic industries for instance, where the median wage is 17781 baht (US$ 494), low skilled workers are not many as compared with the textile, wood and furniture industries (4567 baht, US$ 127). The metallic and electronic industries, which include the automobile and electronic industries, the two main employers and exporters of the Thai economy, ranked second with a median average of 13020 baht (US$ 362). Being employed in these two industries make the difference in term of income with not only the other industries but also with being self-employed and of course informal employees. This explains why many workers are eager to work in these industries.

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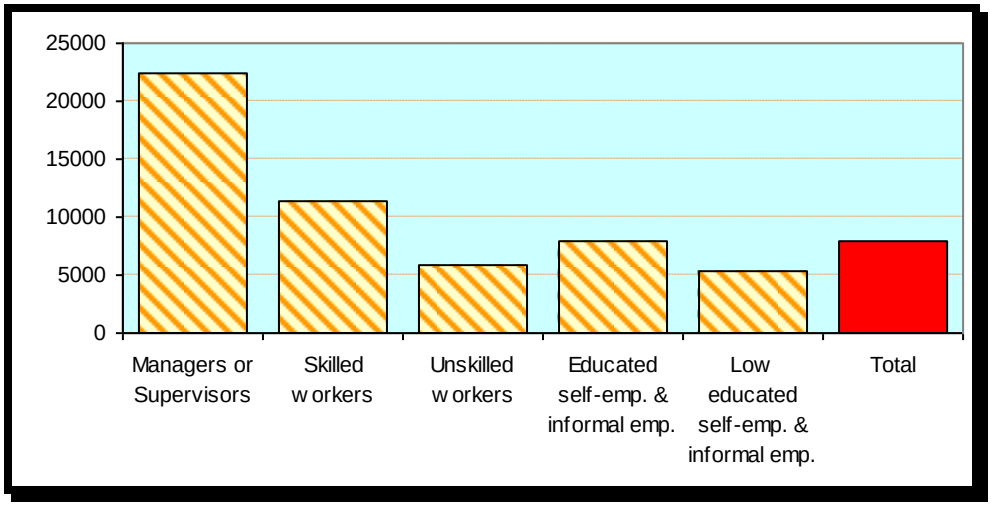
21 Medium tenure is almost the same for managers (55.2%), skilled workers (57.7%) and unskilled workers (58.4%).

22 A special effort has been done to capture their income. Questions on sales or turnover were asked, then questions on profit. For those who had no idea of these figures, they were proposed to select an income or profit range in which they thought they would be. Besides, questions on income for different work experiences during working life were asked, including for their present job, in another part of the questionnaire. The result is that we have some information on income for all respondents, but this information has to be treated cautiously. It is usable for broad statistics, such as median income per different category of workers. It is impossible however to make analysis based on individual information using incomes.

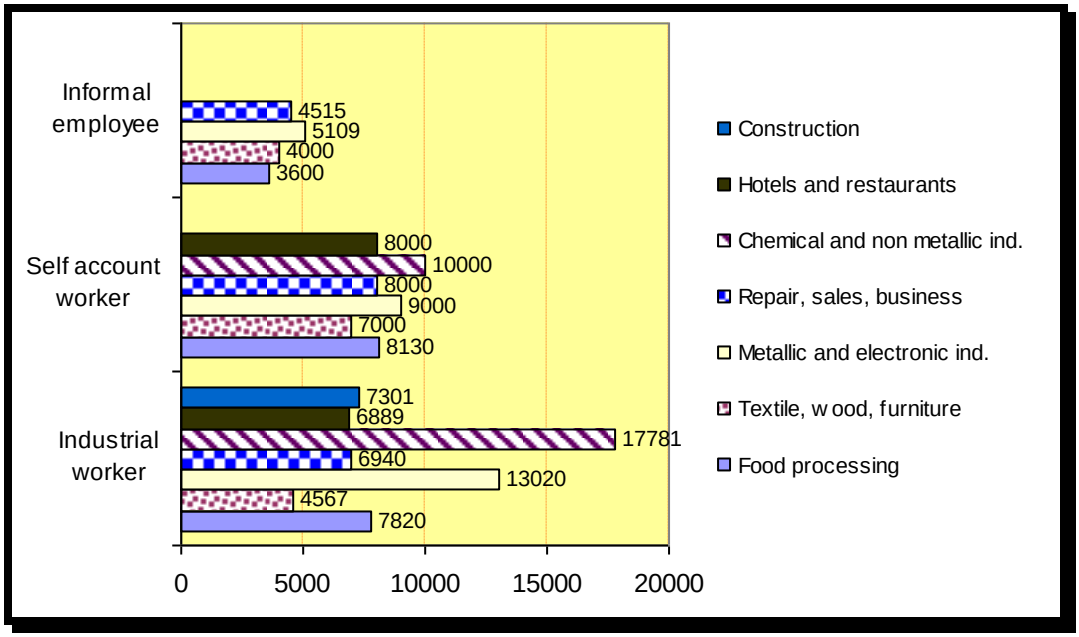
23 US$ 1= 36 baths.

Figure 11: Median labour income (baht per month) by form of labour and by position.



Source: CELS (2004).

Figure 12: Labour income by sector and by position.



Source: CELS (2007).

Labour income of industrial workers.

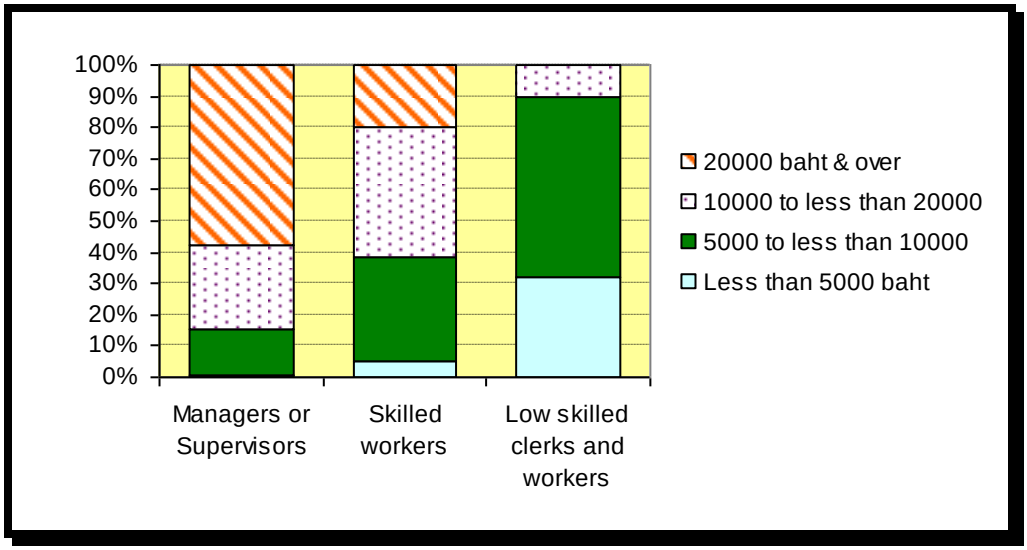
Labour income is constituted by the regular wage plus benefits. For industrial workers we have detailed information about the regular wage, overtime remuneration and the different kind of benefits. With this information, we can check if the income structure is coherent with the logic of internal labour markets. We first analyse the amount and the relative importance of regular wage and benefits before going into more details in the study of benefits.

Wage and benefits levels.

The amount of wage and benefits depends of course of the position or occupation of workers in the company (figure 13). Other factors, such as experience, seniority, competencies also play a role.

Among the first category, managers or supervisors, we have many different types of occupations and ranks. Nearly 60% of them earn more than 20000 baht (US$ 556), and 15% more than 50000 baht (US$ 1389). However, there are supervisors in small companies who have low income. Among skilled workers, 20% earn more than 20000 baht, but most of them are between 5000 (US$ 139) and 20000 baht per month, while low skilled workers have quite less income, with 90% of them under 10000 baht (US$ 278), and one third under 5000.

Figure 13: Distribution of workers by position and category of income

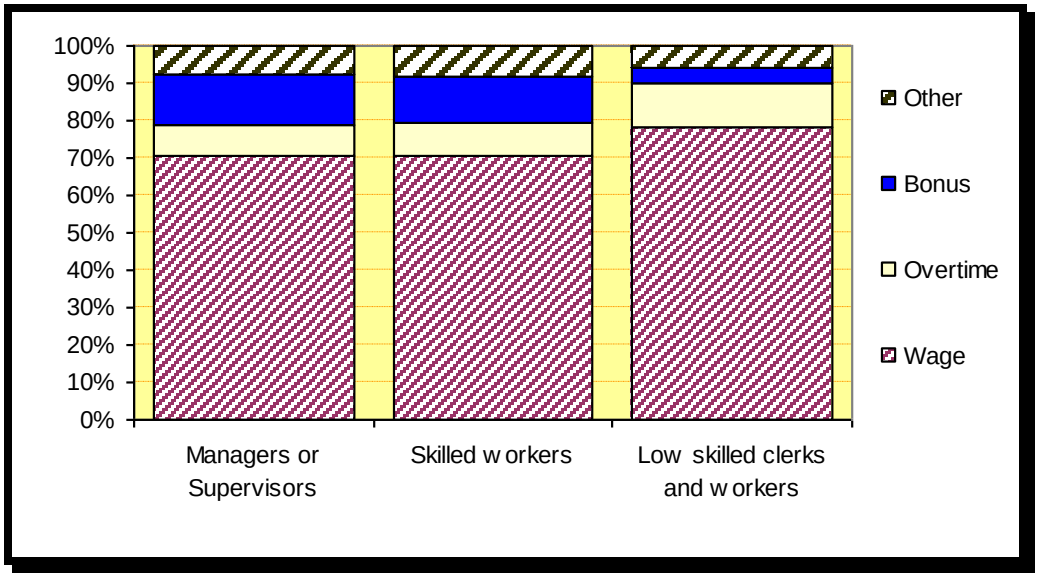


Source: CELS (2007).

The average wage of managers and supervisors is 18000 baht per month (US$ 500), 11000 baht (US$ 305) for skilled workers, and a bit more than 5000 baht (US$ 139) for unskilled workers. Figure 14 shows that these wages constitute 70% of the total income for managers and supervisors as well as for skilled workers, while it constitutes nearly 80% for unskilled workers. So the two first categories, which receive higher wages, are also those who have more benefits.

This is in direct line with the logic of internal labour market where benefits are used to attract and retain the core workers, i.e. managers and supervisors and skilled workers. Unskilled workers rely more on overtime to increase their income. It represents 22% of their income against 10% for skilled workers and 8% for managers and supervisors. Overtime is not a benefit in itself, because workers have to work more to earn them, but they play the same role. Because wages are low, workers are eager to do overtime and if a company does not make enough overtime, they are disappointed. So, overtime is also a way for companies to retain unskilled workers.

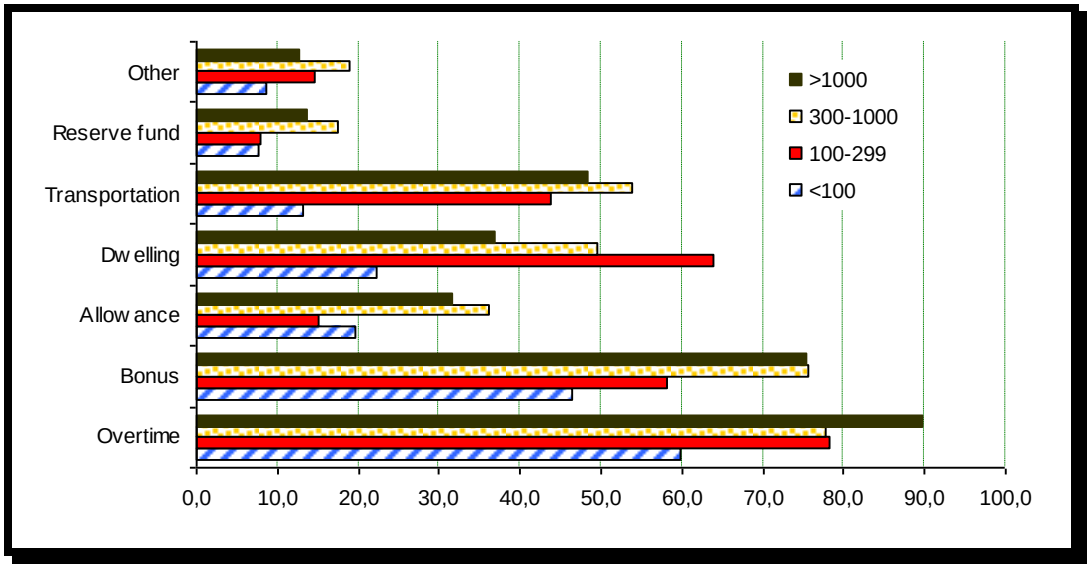
Figure 14: Composition of labour income, in %.



Source: CELS (2007).

By size of establishment: it can be seen that small establishment (under 100 workers) generally offer less overtime and benefits of all kind to their workers (figure 15). In particular, dwelling and transportation are much less frequent than in bigger establishments. In big establishments, overtime is generalised.

Figure 15: Percentage of workers having overtime and fringe benefits by size of establishment



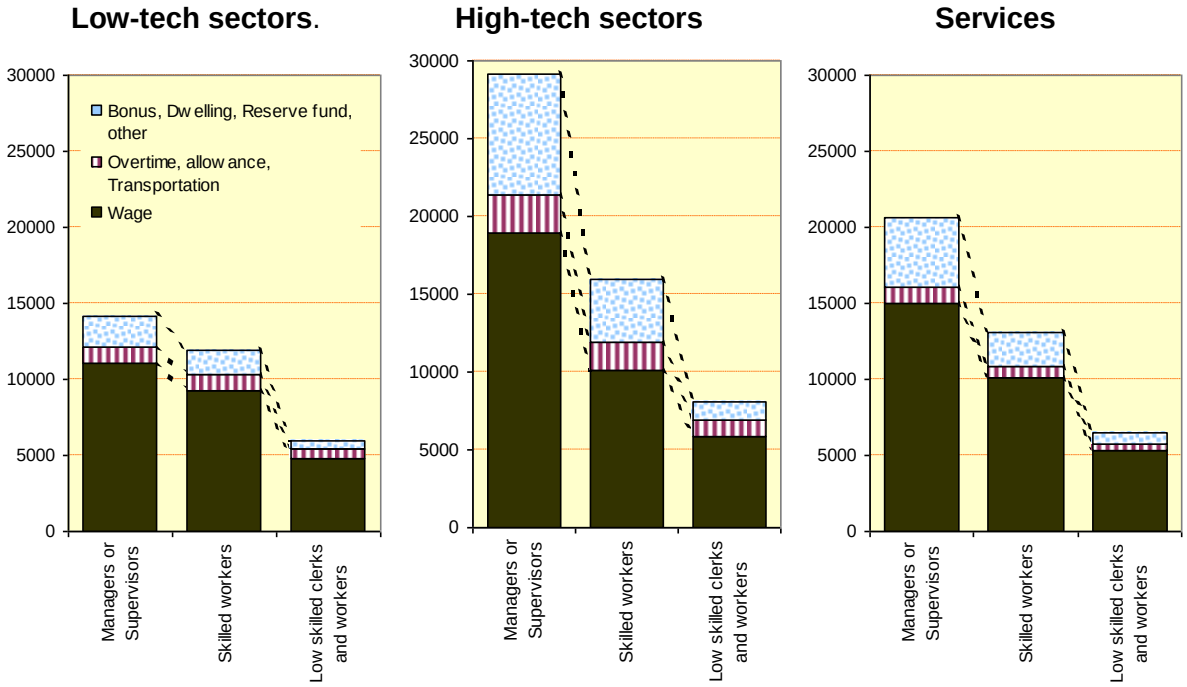
Source: CELS (2007).

Bonus is nearly systematic in big establishments where internal labour markets are mostly encountered. It can be considered as a complement to the regular wage that

is not automatic, because it varies according to the financial results of the company. It clearly plays the role of an incentive to increase productivity. This is obviously needed to retain the skilled workforce. The role of transportation is slightly different. Transport is necessary to bring the workers at the production site because big establishments tend to be in industrial zone, or quite far from cities. It is necessary to go and fetch workers where they live. Without free transport, there would not be enough workers able to go working. Another option is to offer dwelling (more common in medium size establishments), but this generally is easier when workers are young and unmarried.

Wages are more equally distributed between sectors than benefits whose amount and share in income vary more among sectors[24]. This is striking for skilled and unskilled workers (see figure 16). Their wages are almost the same in low- tech, high-tech and service sectors, but benefits are much higher in high-tech and services sectors.

Figure 16: Wages and benefits by position and broad sectors.



Source: CELS 2007, (does not include electricity)

This shows that in high tech industries benefits play the role of an efficiency wage that remunerate productivity gains. It also compensates the low rate of the minimum wage for low skilled workers.

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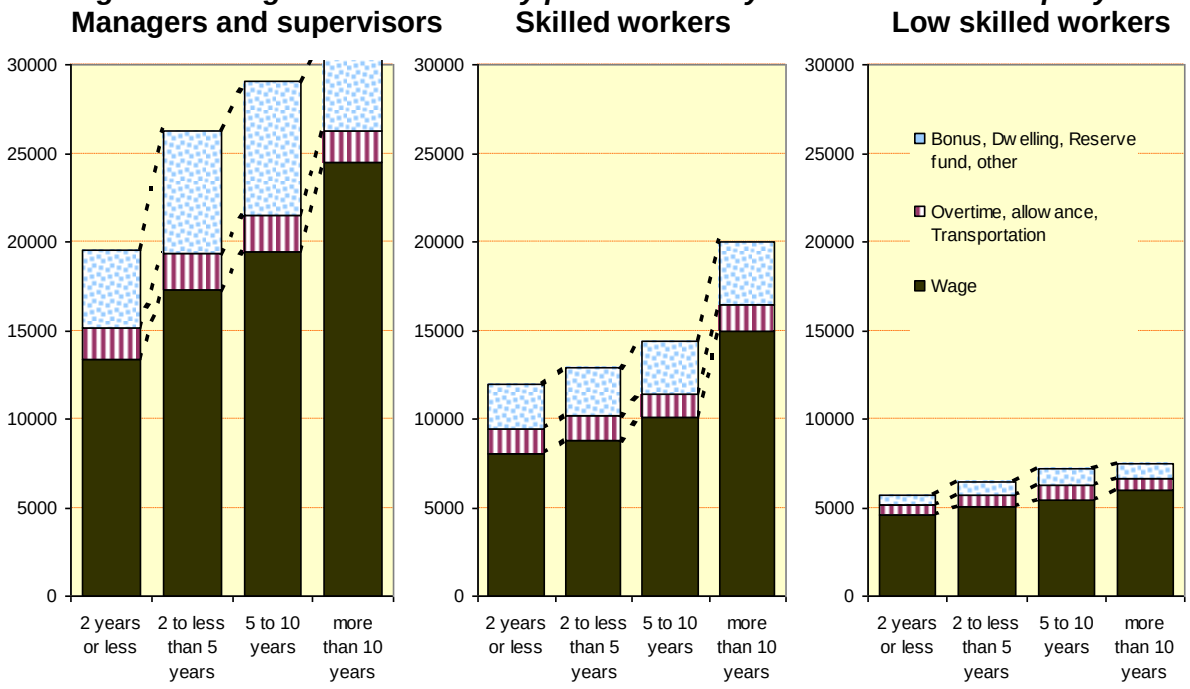
24 Low-tech sectors are defined as: "textile, wood and furniture", "construction" and "food processing". High-tech as "electricity production and supply", "metallic (automobile) and electronic industries", and "chemical and non-metallic industries". Services as, "hotels and restaurants", "repair, sales and business".

Figure 17 presents important insights on the impact of employment tenure on income. Overtime, allowance and transportation are not related with tenure, but bonuses are, although it has not the same effect on the different categories of workers. For managers, there is a substantial rise in wages as in bonus soon after 2 years of seniority. Hereafter their income keeps on increasing during their whole professional career thanks to wage increases while benefits tend to remain constant. For skilled workers, tenure brings significant income increases only after 10 years of seniority in the company. Up to 10 years, both wages and benefit rise, but at a slow pace. Skilled workers have to wait a long time before beginning to be rewarded. For low skilled workers, tenure brings little rise in wages and bonuses. Long tenure in the company is not particularly rewarded.

This again confirms the existence of internal labour markets for managers, supervisors and skilled workers in services and especially high-tech sectors.

Figure 17: Wages and benefits by position and by duration in the company

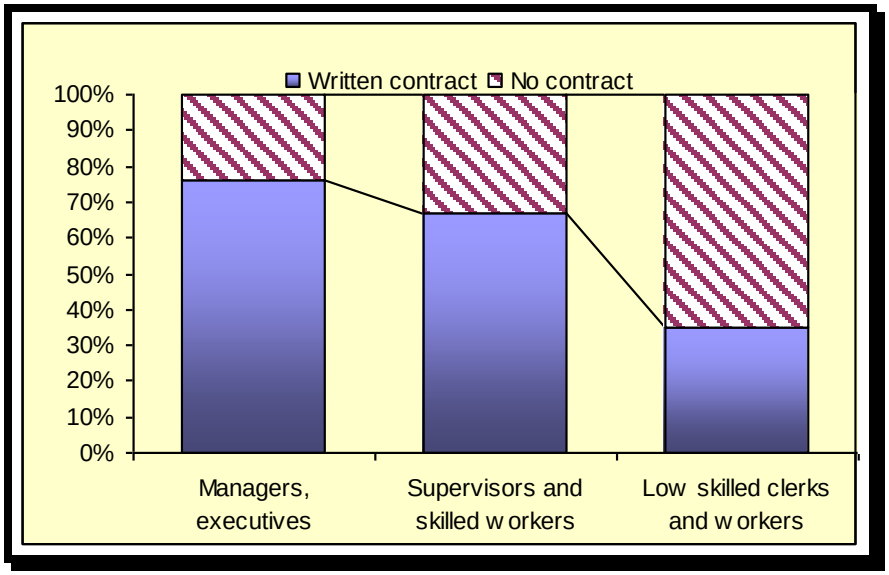


Source: CELS (2007); baht per month.

Labour contracts.

About half the workers have signed a contract. But it differs by position. While nearly 80% of managers and supervisors have signed a contract, they are less than 40% among low skilled workers (figure 18).

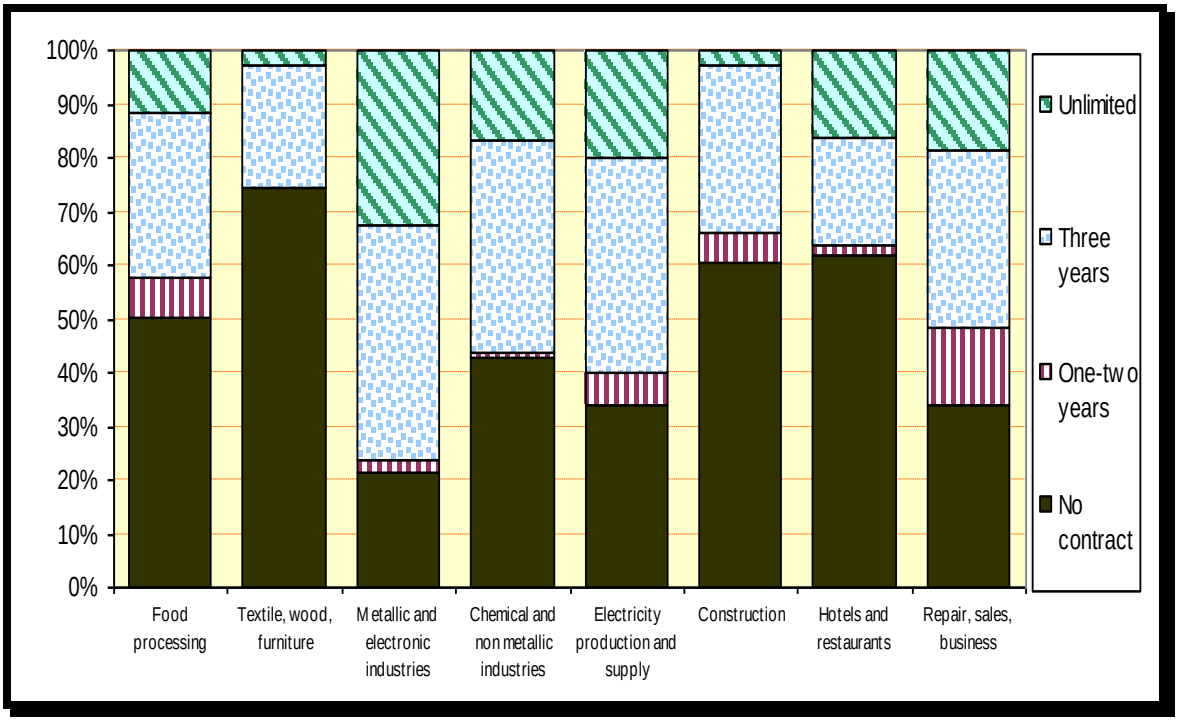
Figure 18: Percentage having a written contract by position.



Source: CELS (2007)

Contract are more common in high-tech sectors (figure 19), such as automobile, but many contract are for a limited duration (three years generally). Unlimited contract do not exist in garment industries or in construction, or just a few cases. In these low-tech industries, up to 70% of the workforce has no contract at all.

Figure 19: Percentage having a written contract by sector



Source: CELS (2007).

This proves that precariousness is still the rule for many workers. Even in high-tech industries and services, short-term contracts prevail for workers. Knowing that there are no constraints to dismissals in the labour law, and that the labour contract ensures few protections for the workers, this means that companies enjoy quite an unlimited numerical flexibility. They can adjust employment to the volume of production when needed. In ordinary times, temporary workers are the ones that bear this adjustment. They represent 10% to 30% of the ordinary workforce. But when companies are expanding and recruiting, the first step of every recruit is the status of temporary worker which work as a screening device. In these phases of expansion, (construction of a new plant for instance), the share of temporary workers can increase to 50% [25]. After one year or two years, those who have stayed in the company can expect to be recruited as "regular" workers, which means in high-tech companies signing a fixed-term contract of one to two years first, then a three years contract. But only if they have demonstrated their efficiency and acceptance of basic conditions: low wage increasing slowly and long hours of work due to overtime.

2.5. International comparisons.

International comparisons in employment tenure is difficult because there may be some problem in data homogeneity and mostly because a variety of factors accounts for differences. A good point is that whatever these factors are, there is a strong stability in employment tenure in developed countries. Employment tenure in the USA and the European Union remains the same today as 15 years ago and this reflects how deeply rooted tenure is in national characteristics of labour markets. Although there are reasons to believe that employment tenure may be less stable in developing countries, in particular in the volatile Latin America economies, it is still useful to have a broad idea of the hierarchy of countries. Table 1 compares our results for Thailand with developed and Latin American countries.

We can observe that Thailand belongs to the category of countries with rather low average employment tenure, below Japan and European countries. Japan, whose productive model based on internal labour markets has been presented during the 1980's and nineties as the one best way to follow in terms of efficiency, has among the highest average tenure, 12.2 years, with the lowest share of short tenure workers (8.3% of the labour force) and among the highest share of long tenure (43.2%). On average European Union countries have not only an average tenure equal or superior to 10 years, but short-tenure workers are only 15% of the labour force while long tenure workers are numerous with 41.5% of the labour force. Thailand is peculiar in the sense that its average tenure is close to the USA, the benchmark in terms of neoliberals politics and deregulated labour markets, and Argentina and Peru. The difference is that Thailand has a smaller share of short tenure workers and a smaller share of long tenure workers too. It is the country with the highest share of medium tenure (between 1 and 10 years) which potentially makes it the best positioned country to maximise productivity.

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25 That's what we have observed during field research in big private companies.

Table 1. Average tenure and tenure distribution, selected OECD and Latin American countries, various years

	Average tenure (years)	Workers with < 1 year tenure (%)	Workers with > 10 years tenure (%)
Greece	13.6	9.8	52.1
Japan	12.2	8.3	43.2
Italy	12.2	10.8	49.3
France	11.2	15.3	44.2
EU-14*	10.6	14.8	41.5
Germany	10.6	14.3	41.7
Denmark	8.3	20.9	31.5
United Kingdom	8.2	19.1	32.1
Thailand	**6.9**	**20.8**	**21.7**
Argentina	6.7	27.5	21.2
United States	6.6	24.5	26.2
Peru	6.3	29.0	20.1
Chile	5.5	34.5	18.8
Brazil	5.3	37.2	16.4
Honduras	3.9	51.4	10.1

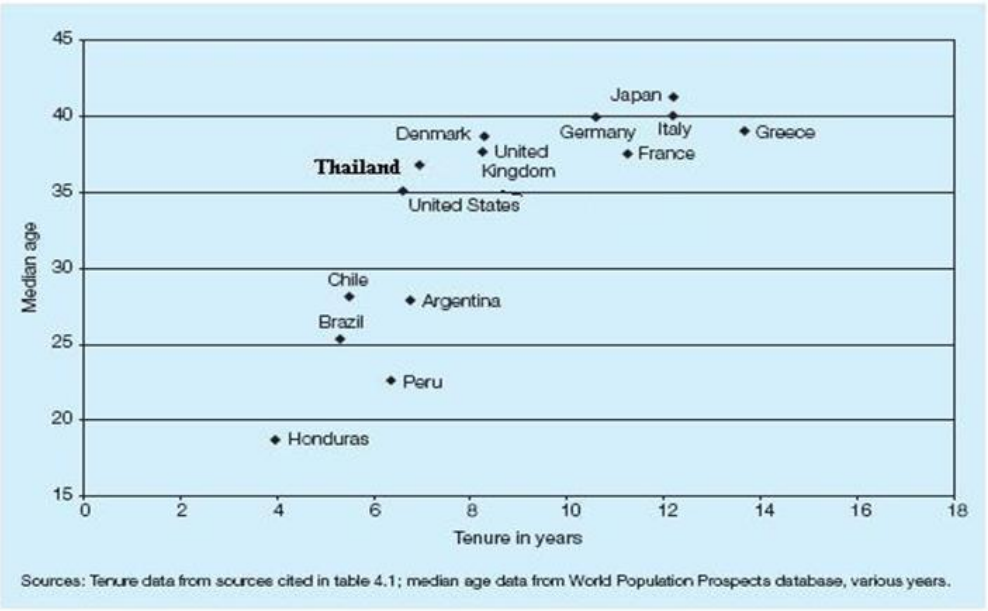
*Excludes Austria.

Sources: Data for Europe from 2002 based on Eurostat; US data from 1998 based on national sources; Latin American data from IADB (2004) based on household surveys of the late 1990s and 2000s.

Source: ILO, 2004, p 191.

One must not over-interpret these results because, as stated previously, a wide array of cultural, economic, and social factors explain differences in tenure. Demography is one these important factors in the sense that the younger a country's population, the lower its average tenure will be. On this aspect, figure 20 shows that Latin American countries have a young (less than 30 years), and sometimes very young labour force (less than 25 years, Peru or even 20 years, Honduras). This is certainly one of the major reasons these countries have a high share of short tenure workers (51.4 years for Honduras). Thailand, whose labour force has a median age of 37 years (36 years in our sample), is again very similar with the USA, and to a lesser extent, the UK and Denmark.

Figure 20 **Average tenure vs. median age, selected European and Latin American countries, Japan and the United States, late 1990s and early 2000s**



Sources: Tenure data from sources cited in table 4.1; median age data from World Population Prospects database, various years.

Source: ILO, 2004, p 192.

Differences in GDP growth influence also tenure. A regular and rather high rate of growth creates jobs and means that new entrants are joining the workforce. As a consequence, tenure tends to decrease. This factor is probably one of the reasons of low tenure in the USA and Thailand where full employment prevails. On the contrary, euro zone countries which suffer structural slow growth, and where workers feel very insecure, have a high tenure because there are fewer entries in the workforce and because workers are so afraid of unemployment that they stick to their jobs. This proves that data on employment tenure does not recover the same reality regarding the dynamism of an economy. Low tenure US and Thai context is not a bad news but reflects a period of learning for the new entrants that will potentially strengthen productivity in the future.

Conclusion.

Thailand is confronted to the necessity to change its growth and labour regime. It cannot base its future on the existence of an unlimited supply of cheap labour that no longer exists. That is not the case of new competitors like China and Vietnam who still enjoy an abundance of cheap labour. In Thailand, labour productivity has grown faster than real wages during the pre-boom years (1981-86) and during the first years (1986-1989) of the boom years. But from 1989 until 1998, much before the financial crisis of 1997-98, real wages have grown faster than productivity leading to a fall in the growth of the profit rate. With the impact of the crisis, real wages growth have fallen again under the productivity growth rate restabilising the profit rate (P. Pholphirul, 2005). But this is purely circumstantial and Thailand cannot bet on long-term real wages stagnation in a

full employment society. Thailand is compelled to shift from an extensive growth regime to an intensive growth regime relying on higher structural productivity as its driving force. There are two possibilities to do it that are not exclusive but complementary.

The long-term one is to improve significantly the level and the quality of education so that new recruits in companies start their professional career with a much higher level of knowledge. This means reaching as fast as possible the generalisation of secondary education among young workers and increasing significantly the proportion of workers with a superior education degree. The problem is not purely quantitative but also qualitative. Improving the quality of education is as important as its quantity. But one can only expects slow improvements on the long-run on these two interrelated aspects with progressive and delayed effects on the efficiency of the economy. True, there is no direct and automatic effect between the level and the quality of education and productivity and growth. Education improves the initial knowledge base of workers but the capacity to exploit this potential depends on the economy as a whole and companies' profit strategies.

Precisely, private companies have the capacity to improve productivity on the short and medium term if they invest time and money in the creation of internal labour markets that would makes possible learning by doing and enables the accumulation of knowledge inside companies. Our paper shows that some companies are doing it in Thailand. They try to retain their workers with opportunities to earn more. The best among them, usually multinational companies or joint-venture have implicitly bargained better than average income and efficiency wage against higher productivity in exchange. This shows that at least other big companies could do it. This would have a quicker impact on productivity and would enlarge more broadly companies' knowledge base.

The Thai government has a special responsibility in building the institutional framework conducive to the extension of internal labour markets. Not only because he has the responsibility of the education system and can take the right measures to improve it, but also by taking the right decisions to improve the labour regime: establishing an official job classification so that education requirements and skills are better identified and recognised as such; by according better protections to workers by law beginning with the generalisation of labour contracts, and by making collective bargaining possible.

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