

# **New Economy, Underemployment, and Inadequate Employment**

**Shu-Fen Tseng**

**Yu-Ching You**

**Chin-Chang Ho**

Graduate School of Social Informatics, Yuan Ze University,  
Taiwan

[gssftseng@saturn.yzu.edu.tw](mailto:gssftseng@saturn.yzu.edu.tw)

## **Abstract**

This paper will first review existing literatures and empirical results from national statistics on employment transformation, underemployment and gender effects on occupational restructuring. Then, we further examine the relation between unemployment and underemployment by conducting an empirical survey.

From the national statistics, we found that the employment structure by industry in Taiwan is more toward the industrial production model that categorizes a high percentage of industrial employment. However, if we examined the employment structure by occupation, then a similarity toward the US model, which characterizes an increasing and high proportion of professional workers was found.

From the trends of industrial and occupational structures in Taiwan, we argue that neither the increasing unemployment rates in manufacturing sectors nor the newly cost-disease problem in services, but the phenomenon of underemployment will significantly represent the problem of occupational transformation in Taiwan. A gender effect of

underemployment is found in distributive services, women in distributive services suffer more on the income-related inadequate while men reveal a high proportion of educational mismatch.

The exploratory study reported the problem of long-term unemployment is an important issue in the unemployed. In particular, female, elder, and less educated respondent show a higher risk of long-term unemployment. More than one third of current employed work changed from manufacture to services. An industrial crowd out effect of aged, less educated and previously manufacturing labors toward low skill and low pay personal service sectors was found. For aged and less educated workers, not only the risk of unemployed is high, even they found the jobs, they were suffered the high propensity of working in the less skill and low pay service sectors. They were more likely to become the reserved army of labor who might become the disposable and cheaper labors.

**Keywords: underemployment, mismatch, structural unemployment, reserved army of labor (RAL)**

[收稿]2002/6/15; [初審]2002/6/20; [接受刊登]2002/7/3

For decades, the world economy has entered a period of pronounced transformation that characterizes a transition from a manufacture-based to service-based economy. Beginning in the 1970s, most of the OECD countries were experienced a decline of manufacturing and an expansion of service employment. As the post-industrialism declared that we are now living in a post-industrial society which the economic activities shifted from goods production to services delivery. A fast increase of managerial, professional, and technical occupations will constitute the core of a new employment structure. Therefore, the process of economic restructuring significantly shaped employment structure.

Most of the OECD countries had experienced a decline of manufacturing employment and a growth of service employment since the 1970s. It has claimed that global economy has turned into the service-based economy. However, the feature of employment restructuring was diverse within different national and social contexts. Castells (1996, 2000) suggested that at least there were two different models of economic and employment structure. The first one was identified as the services economy models, represented by the Angle-Saxon countries It's characterized by a decline in the proportion of manufacturing employment, an expansion in various services sector and pacing toward informational structure. The second was the industrial production model, Japan and Germany were the representatives of this kind. This model characterized jobs in manufacturing sector were reduced slowly and kept in a relatively high level in employment structure, and the increase of producer services was linked to manufacturing firms.

Empirically, the change of industry and employment structure was not a productive and linear process as the post-industrialist predicted. There were dilemmas of new production paradigm. First of all, the "jobless growth" phenomenon was accelerated by technology revolution. Ironically, not only job losses in manufacturing sector, but jobs were also

disappeared in the service sectors. Secondly, as lean production of enterprises emerged as the global competitiveness has intensified, the labor market becomes more flexible. There was a substantial growth of non-standard forms of employment, such as temporary and part-time jobs. Thus, the rising structural unemployment, the mismatch and inadequate employment are recognized as the new forms of social risks, and a consequence of shifting production paradigm. This paper will first review existing literatures and empirical results from national statistics on employment transformation, underemployment and gender effects on occupational restructuring. Then, we further examine the relation between unemployment and underemployment by conducting an empirical survey.

## **The Transformation of Employment Structure**

In the late 20<sup>th</sup> century, the post-industrialists suggested that the advanced technologies have transformed the industrial society into a service-based economy. It is characterized that employment is restructuring from manufacture to service sectors and the restructuring process would be a homogeneous pattern, which the American society has led the way.

By contrasting with the statements of post-industrialists, Castells (1996, 2000) argued with a different point of view. After analyzing the transformation of employment structure in the G-7 countries between 1970-1990, Castells (1988,1996,2000) reported that there is a general trend in these countries, which recognized an expanding service and a shrinking manufacturing sectors. However, he further identified two different models of economic and occupational structures. The first is the service economy model, represented by the United States, the United Kingdom, and Canada. It is characterized by a decline in the share of employment structure in manufacturing sector, an expansion in various

services sector and a path toward informationalism. A new employment structure characterizes the differentiation among various service activities becomes the key element to analyze social structure. This model emphasizes capital management services over producer services, and keeps expanding the social service sector because of a dramatic rise in health-care jobs and, to a lesser extent, in education employment.

The second model named the industrial production model that is clearly represented by Japan and Germany. The manufacturing employment is reducing, however, the share continues to keep at a relatively high level. The increase of producer services seemed to be more directly linked to manufacturing firms. Besides, while financial services are indeed important and have increase their share in both countries, increase jobs are concentrated in services to companies, and in social services.

In terms of the service sectors, it can be observed that the jobs of the top and bottom in service employment increased simultaneously. On the one hand, jobs increased in the high-technical or skilled-intensive services such as producer services. On the other hand, jobs also increased in the low-technical, labor-intensive, or personal service activities, such as personal services and distribution services (Castells, 1996, 2000 ; Esping-Andersen, 1999).

Castells (1996, 2000) evaluated each category in services and consider the trends of evolution of employment in these services. Producer services and social services are linked to the skilled job. The former is strategically crucial in advanced countries and its employment grows explosively. The social service is slightly increased due to the expansion of welfare state in the 1950-1970 period. Distributive services and Personal services are both relatively labor-intensive and their productivity are both lower than producer services. Personal service is called the “eating and drinking places” jobs that expanded significantly in the past two decades. Most jobs in personal services are low-pay and

part-time jobs. Therefore, the patterns of employment structure between manufacture and services are different. Even within the same service sector, the transitions of employment among different services are varied.

In the globally integrated developing countries like Taiwan, the problems of changing employment structure were also revealed. Based on the government-sponsored national statistics, “Manpower Survey Statistics, Taiwan Area, Republic of China 1990-2000”, we adopted the six sectors suggested by Singelmenn (1978) to examine the employment trend in Taiwan, it is showed that the trends changed smoothly from 1993 to 2000. The proportion of Extractive, Transformative, Distributive services, Producer services, Social services, and Personal services sectors are 14.4%, 39.3%, 18.7%, 67%, 11.0% and 9.8% in 1993. In 2000, the proportion changed to 10.3%, 36.3%, 20.9%, 8.7%, 12.9%, and 10.7% (Table 1). Examining the change rates in Table 1, it is suggested that the proportion of Extractive sector and Transformative sectors are declining, the rates show 28.5% and 7.4% less compared to the levels in 1993. Oppositely, the Services sectors are expanding, especially in producer services and social services, the change rates obviously increase 29.9% and 17.3% compared to the levels in 1993. The distributive and the personal services also show increase rates at 11.8% and 9.2% respectively.

Although the share of manufacturing employment is decreasing, the proportion still keeps around 36.4%. It does not reveal a rapid shrinkage in manufacturing sector as the patterns of services economy model suggested. In services sectors, the employment in producer services and social services are increasing. However, the percentage is only 8.7% and 12.9% and they are much lower than the percentage in the United States (14.0% and 25.5%). The employment in distributive services and personal services are growing slightly from 18.7% to 20.9% and 9.8% to 10.7%. Their shares in services sectors are similar to the Japan's model. Based on the national data, we find that the pattern of employment

structure in Taiwan is more toward the industrial production model that categorizes a slow increase of service sectors and a high percentage of industrial employment (Table 1).

As for the patterns of occupational structure, if we regroup managers, professionals, and technicians into the occupation of “professionals”, the percentage increasing from 21.6% in 1993 to 24.7% in 2000. The sales and clerical workers are also growing from 24.5% to 28.5%. The trends of professionals and the sales and clerical workers are expanding smoothly. On the contrary, the crafts, operators and semi-skilled workers are decreasing from 39.6% to 36.7%, but it still remains one-third proportion of employment in Taiwan (Table 2).

Comparing with the occupational structure in the United State and in Japan, the percentage of the professionals is very different between these two models. While the percentage of professionals reached 29.7% in the United State, but there is only 14.9% of professional workers in Japan. The employment structure by occupational category in Taiwan suggests a similarity toward the US model, which the professional workers are increasing and the percentage of professionals is higher than 25%. The proportion of the crafts, operators, and semi-skilled workers are declining slightly in Taiwan, however, the percentage remained over one-third of the employment.

## **The Changing of Occupational Structure and Inadequate Employment**

As promoted notably by Bell (1973), post-industrial theory predicts that while the employment turn into a service-based structure, the society is becoming a post-industrial society. Post-industrial theorists basically assume that there will be an increase of professional and technical jobs, and an upgrading skill requirement is a norm across occupational structures. The human capital theory has been largely used to explain the

education-employment relation. It suggests the more an individual invests in learning activities or skills, the more social economic benefits that the person will reward. The logic goes if a person invested a higher level of formal education or job training, then he/she will possess a higher professional capability, thus he/she will be rewarded by better occupations and higher income (Becker, 1975).

Consequently, people are encouraged and devoted to learn new knowledge and skills than ever before. But as this aggregate knowledge increases, the opportunities to apply it in paid workplaces have not pace (Livingstone, 2000). Usually, the labor market could not absorb so many high-educated laborers. Therefore, they were forced to take jobs that require lower skills than they have had. Furthermore, this situation will crowd out the lower-educated labor and force them into unemployment. For this reason, the underemployment in contemporary society is a growing and a very significant problem.

The empirical evidence in the US suggested that only a slight proportion of technical skill upgrading happened in the employment structure during the period of 1960s. The claims of upgrading thesis in the post-industrial theory are criticized and treated as an exaggerated unrealistic vision (Livingstone, 2000). Although there has been the decline of manufacturing sectors and relative growth of personal, financial and social services employment, evidences showed that there had been a rapidly increasing of part-time and temporary jobs in labor market and most of them were low-skill and low-paid jobs.

As a consequence, during the process of employment restructuring, the increases of unemployment and mismatch employment were found in manufacturing labor force. Inadequate employment and structural unemployment become the side effects of economic restructuring process. The OECD statistics have shown that most countries suffered a high unemployment rate and a great amount of long-term unemployment population.



Based on the data of “Manpower Survey Statistics” in Taiwan, the percentage of unemployment is slightly increases from 1.6% in 1990 to 2.3% in 2000. However, the phenomena of underemployment seem to be serious in Taiwan. The percentage of underemployment is around 30% in the 1990s. Further, if we examine these forms of underemployment in detail, it can be observed that the share of underemployment by educational mismatch is the highest. The proportion of underemployment by low-income is fluctuated between 7.6% to 7.7% in the decade. The underemployment by low income and underemployment by low hours show a similar rate.

. Specifically, in manufacturing sectors, the underemployment comes from educational mismatch and time-related inadequate employment. As for service sectors, it shows that the underemployment is combined with educational mismatch and income-related inadequate employment in distributive services. A significant trend of educational mismatch in both producer services and social services is found. Those who worked in personal services suffer from the time-related and income-related inadequate employment.

## **Gender and the Employment Restructuring**

In the process of transition from manufacturing to services economy, there is a fact of growing participation of female labor force. According to the OECD report, in 1988 to 1998, female labor force is growing from 67.1% to 71.3% in the United State, from 63.7% to 67.2% in the United Kingdom, 55.4% to 63.1% in Germany, and 58.4% to 63.9% in Japan. It is largely because the expansion of service industry creates a great proportion of jobs which are suitable for female, such as caring, clerk, personal services (Hochschild, 1983). However, the increasing of female participation in labor market do not mean that women can get better working conditions. In fact, women have been used as a cheaper

alternative to male labor. The reserved army of labor (RAL) thesis indicated that following the introduction of information technology and the deskilling of skilled occupations, women may move into new areas of work formerly done by men and might serve as a source of disposable, flexible, and cheaper labor.

Furthermore, Esping-Andersen (1999) also indicated that services created a large number of low-skilled, low-income, or labor-intensive jobs in personal services. Nevertheless, women and the youth who were low-skilled, less experiences, or low-wage level will be easily to be the main labor force in the service based employment structure (Webster, 1995 ; Esping-Andersen, 1999). Besides, comparing the productivity between manufactures and services, the productivity lag within many labor-intensive services reinforced the ‘cost-disease’ problem that will result in lower pay in related service works in compared to manufacture jobs. To sum up, in addition to compare differences across industries, gender effects within each industry should be considered in the change of employment structure.

Detailed analysis of the “Manpower Survey Statistics” in Taiwan, we found in manufacturing sectors, the percentage of male educational mismatch and time-related inadequate are higher than other types of underemployment. It is clear that underemployment in manufacturing mainly comes from male underemployment. In distributive services, the two significant characteristics of underemployment are income-related inadequate in female and educational mismatch in male. In contrast with the general underemployment pattern in distributive services, it is considered that the general income-related inadequate comes from the female’s underemployment, on the contrary, the general educational mismatch is originated from male’s underemployment. There is a clear gender effect on underemployment in the distributive sector.

In producer and social services, there are similar patterns of underemployment that both male and female educational mismatch are

more observable than other forms of underemployment. Male educational mismatch is higher than female educational mismatch in both services. In personal services, the underemployment basically comes from income-related and time-related inadequate of female workers.

## **Unemployment and Underemployment— An Exploratory Study**

While review literatures we found that there is a lack of study on the relations between unemployment and underemployment. The question needs to be asked is that after the episode of unemployment, will a person take whatever jobs are available and thus at the risks of underemployment and inadequate employment? That is, to explore the relation between unemployment and underemployment, we have to follow up the sequent job episodes of the unemployed to examine their risks of underemployment and inadequate employment. We conducted an exploratory telephone survey of unemployed insurance applicants to explore their current employment status and job episodes. The sampling frame of telephone survey came from the list of 11,075 unemployment benefit applicants in 1999, which maintained by the Bureau of Labor Insurance, Taiwan. For the 95% confidence level and 3% sampling error, a random sample of 1,067 was selected and answered questionnaire. This survey explored the risk of underemployment and inadequate employment for the unemployed.

The results show that about 59.9% of respondents are female. There are 41.8% of respondents aged 41 to 50 years old, 23.7% of them aged 51 or above, 26.7% of them aged from 31 to 40 years old, and 7.8% of them aged 30 or younger. In the educational level, 35.6% of respondents had a junior high school, 34.3% had a senior high school or occupational school degree, and 30.1% had college degree or graduated from a university or graduate school. About 53.1% of respondents are

employment currently, 13.9% were once employed but now unemployed, and 33% of them are persisted unemployed over 2 years. It revealed that the problem of long-term unemployment is serious and a common scenario among the unemployed.

In general, female, elder, and less educated respondent show a higher risk of long-term unemployment (Table 3). Female unemployed suffers long-term unemployment at the percentage of 39.7% compare to the male unemployed (23.1%). The elder respondents who aged over 51 years show a high rate of 54.9% long-term unemployment compare to 14.5% of those aged under 30 years old. Respondents who received a junior high school diploma or less are at the highest risk of long-term employment (48.0%), followed by those senior high graduates (30.9%) and those who graduated from college (18.5%). In general, the current employment status of respondents didn't vary by their former job sector and their occupational skill level.

In terms of respondent's former jobs, those who were elder and less educated were more likely to work in transformative sector and personal services. Those who are younger and with higher education were more likely worked in distributive, producer and social services. Males, who were younger and higher educated respondents were also more likely to work as managers, professionals and technicians. Females and respondents were younger and highly educated were more likely to employ as sales and clerical workers in their previous jobs. The elder and less educated were more likely to be crafts, operators and semi-skilled service workers (Table 4).

For those who are currently employed, females are more likely to be employed in sales and clerical jobs while males more likely to occupy crafts, operators, and semi-skilled jobs (Table 5). Those who are younger and higher educated are more likely to employ in sales and clerical jobs in current employment, more likely to work as managers, professionals, or technicians. The elder and less educated respondents

are more likely to employ currently as crafts, operators, and semi-skilled workers.

For those who currently employed, 41.9% of them still stayed in the manufacturing sectors, 24.9% of them found the current job in the same service sector, and 28.3% of them who were previous employed in manufacture are currently worked in service sector (Table 6). Particularly, those who aged elderly, less educated, and who had lower income in previous job are more likely to change their jobs from manufacture to service. Those who were younger, higher educated, and a better salary in previous job are more likely to change their jobs within service sectors.

Table 7 reveals the inadequate employment by industry for those who currently employed. Generally, income for current job was lower compared to the previous one. In manufacturing, respondents who were aged, less educated, and with higher skill were paid less compared to their previous jobs, while aged, less educated and semi-skilled respondents were worse off compared to the national baseline. In service sector, male, less educated and low skilled worker were paid less than their previous jobs. Interestingly, male, aged, higher educated, and who currently worked as high skill professionals suffered a great loss of income level compared to the national baseline.

## **Discussion**

From the national statistics, we found that the employment structure by industry in Taiwan is more toward the industrial production model that categorizes a high percentage of industrial employment. However, if we examined the employment structure by occupation, then a similarity toward the US model, which characterizes an increasing and high proportion of professional workers was found. Although the direction of declining manufacturing and increasing service sectors is generally

revealed, neither the proportion, nor the speed of employment structure was dramatically changed.

From the trends of industrial and occupational structures in Taiwan, we argue that neither the increasing unemployment rates in manufacturing sectors nor the newly cost-disease problem in services, but the phenomenon of underemployment will significantly represent the problem of occupational transformation in Taiwan. With a high proportion of skilled labor forces, the problem of underemployment is an urgent and important issue in Taiwan. Educational mismatch shows an obviously proportion in underemployment which verified the deskilling hypothesis. In manufacturing sectors, the underemployment comes from educational mismatch and time-related inadequate employment. While there is educational mismatch in both producer services and social services, the time-related and income-related inadequate employment is widespread in personal service. Obviously, the facts of low pay and flexible time employed in the low skill service sectors that might result from the cost-disease phenomenon were revealed in the study.

In manufacturing sectors, the percentage of male educational mismatch and time-related inadequate are higher than others. A gender effect of underemployment is found in distributive services, women in distributive services suffer more on the income-related inadequate while men reveal a high proportion of educational mismatch. In producer and social services, educational mismatch is found in both men and women. The income- and time-related underemployment in personal service mainly comes from female workers. For the high skill service jobs, the risk of educational mismatch is significant, while cheap labor and flextimer are the characteristics of the low skill service jobs. Moreover, the results suggest the occupational gender segregation still exist in the changing occupational structure, while more male concentrates in the producer jobs, female shows high proportion in the sales and clerical jobs.

The exploratory study reported the problem of long-term unemployment is an important issue in the unemployed. In particular, female, elder, and less educated respondent show a higher risk of long-term unemployment. Those who were younger and higher educated respondents were more likely to become managers, professionals, sales and clerical workers, while the elder and less educated were more likely to become crafts, operators and semi-skilled service workers. More than one third of current employed work changed from manufacture to services. An industrial crowd out effect of aged, less educated and previously manufacturing labors toward low skill and low pay personal service sectors was found. For aged and less educated workers, not only the risk of unemployed is high, even they found the jobs, they were suffered the high propensity of working in the less skill and low pay service sectors. They were more likely to become the reserved army of labor who might become the disposable and cheaper labors.

## References

- Becker, G. S. (1975) *Human Capital*, New York: National Bureau of Economic Research.
- Bell, Daniel (1973) *The Coming of Post-Industrial Society*, New York: Basic Books.
- Castells, Manuel (1988) *The Informational City: Information Technology, Economic Restructuring, and the Urban-Regional Process*, Cambridge, MA: Blackwell.
- Castells, Manuel (1996) *The Rise of the Network Society*, Malden, MA: Blackwell.
- Castells, Manuel (2000) *The Rise of the Network Society*, second edition, Malden, MA: Blackwell.
- Esping-Andersen, G. (1999) *Social Foundations of Postindustrial Economies*. London: Oxford University Press.
- Hochschild, A. (1983) *The Managed Heart*. Berkeley: University of California Press.
- ILO (1990) "International Standard Classification of occupations," (<http://www.ilo.org/public/english/bureau/stat/class/isco.htm>)
- Livingstone, D. S. (2000) "Beyond Human Capital Theory: The Underemployment Problem," ([http://www.oise.utoronto.ca/~dlivingstone/beyondhc/.](http://www.oise.utoronto.ca/~dlivingstone/beyondhc/))
- OECD (2000) *OECD in Figures, Statistics on the Member Countries*, Paris: OECD.
- Webster, Frank (1995) *The Theories of the Information Society*, New York: Routledge.
- Yeh, H. J. (2001) "Underemployment Trends and Labor Force Structure in Taiwan: 1979-1999", Paper presented at the International Conference on Social Stratification and Mobility: Expanding Markets, Welfare State Retrenchment and Their Impact on Social Stratification. ISA Research Committee on Social Stratification (RC28), MZES, Mannheim, Germany.



**Table 1: The trend of employment by industrial sectors in Taiwan, 1993-2000**

(%)	1993	1994	1995	1996	1997	1998	1999	2000	93-00%
Extractive Sector	14.4	14.6	13.3	12.6	12.1	11.3	11.1	10.3	-28.5
Transformative Sector	39.3	39.6	38.6	37.2	37.7	37.8	37.0	36.4	-7.4
Distributive Services Sector	18.7	18.6	18.9	20.0	20.0	20.3	20.5	20.9	11.8
Producer Service Sector	6.7	6.4	7.0	7.4	7.6	8.0	8.4	8.7	29.9
Social Service Sector	11.0	10.9	11.8	12.4	12.6	12.6	12.2	12.9	17.3
Personal Service Sector	9.8	9.8	10.3	10.5	10.0	10.1	10.8	10.7	9.2

**Table 2: The trend of employment by occupation in Taiwan, 1993-2000**

(%)	1993	1994	1995	1996	1997	1998	1999	2000	93-00(%)
Managers, Professionals, and Technicians	21.6	20.5	22.0	23.3	23.5	24.4	24.1	24.7	14.4
Sales and Clerical workers	24.5	24.2	25.4	26.6	26.8	27.2	28.1	28.5	16.3
Crafts, operators, and semi-skilled service workers	39.9	41.1	39.6	37.8	37.9	37.5	37.0	36.7	-8.0
Farm works and managers	14.0	14.2	13.0	12.3	11.8	11.0	10.8	10.0	-28.6

**Table 3: Employment status by socio-demographic variables**

(%)		Long-term unemployment (352,33.1%)	Current unemployment (148,13.9%)	Current employment (565,53.1%)
Gender N=1065	Male	23.1	14.5	62.4***
	Female	39.7	13.5	46.8
Age N=1065	30 year	14.5	15.7	69.9***
	31-40 year	20.1	13.8	66.1
	41-50 year	32.3	11.7	56.1
	51 year	54.9	17.4	27.7
Education N=1057	Junior high school	48.0	14.4	37.6***
	Senior high & occupational College & University)	30.9	14.6	54.5
		18.5	12.9	68.7
Former job in industry sector N=1047	Manufacture Sector	34.5	13.7	51.9
	Service Sector	30.4	13.3	56.3
Former job in industry sector N=998	Transformative Sector	34.2	13.9	51.9
	Distributive Services Sector	28.3	12.3	59.4
	Producer Service Sector	19.0	14.3	66.7
	Social Service Sector	34.8	13.5	51.7
	Personal Service Sector	35.7	14.3	50.0
Former job in occupation N=1052	Managers, Prof., and Technicians	19.0	20.9	60.1
	Sales and Clerical workers	28.8	10.4	60.8
	Crafts, operators, and semi-skilled service workers	39.7	13.9	46.4

\*p&lt;.05 \*\*p&lt;.01 \*\*\*p&lt;.001

Table 4: Former jobs by industrial sector and occupation

	Former job in industry sector						Former job in occupation			
	Extractive Sector	Transformative Sector	Distributive Services Sector	Producer Service Sector	Social Service Sector	Personal Service Sector	Managers, Professionals, and Technicians	Sales and Clerical workers	Crafts, operators, semi-skilled service workers	Farm works and managers
Gender	N=1057						N=1062			
Male	6.6	66.0	9.5	4.3	7.1	6.6	26.4	22.6	50.6	0.5***
Female	4.6	67.4	10.1	3.8	9.3	4.4	8.0	38.0	53.1	0.9
Age	N=1057						N=1062			
<30 year	3.7	50.0	28.0	4.9	7.3	6.1***	15.7	56.6	27.7	-.***
31-40 year	3.2	61.3	13.5	6.4	9.9	5.7	21.6	42.0	36.0	0.4
41-50 year	6.6	69.9	7.0	2.7	9.5	4.3	15.1	30.2	54.1	0.7
>51 year	6.4	72.9	6.0	3.2	5.2	6.4	8.7	15.1	74.6	1.6
Edu	N=1049						N=1054			
Junior high school	7.5	78.1	4.3	1.1	3.5	5.6***	1.1	13.6	84.0	1.3***
Senior high & occupational	4.7	64.2	12.6	3.4	8.7	6.4	10.2	38.2	50.7	0.8
College & University	3.8	56.5	14.2	7.9	13.9	3.8	37.9	46.7	15.5	--

\*p&lt;.05 \*\*p&lt;.01 \*\*\*p&lt;.001 |

Table 5: Current jobs by industrial sector and occupation

	Current employment in industry sector					Current employment in occupation				
	Extractive Sector	Transformative Sector	Distributive Services Sector	Producer Service Sector	Social Service Sector	Personal Service Sector	Managers, Professionals, and Technicians	Sales and Clerical workers	Crafts, operators, & semi-skilled service workers	Farm works and managers
<b>Gender</b>	N=667					N=673				
Male	2.6	44.6	16.7	5.9	12.1	18.0	23.8	28.0	46.3	1.9**
Female	4.4	43.1	16.3	5.8	11.9	18.5	17.1	45.6	36.2	1.1
<b>Age</b>	N=667					N=673				
<30 year	3.0	43.3	22.4	7.5	10.4	13.4△	20.9	41.8	37.3	--***
31-40 year	3.7	44.7	18.3	8.7	11.9	12.8	28.1	43.0	28.5	0.5
41-50 year	4.2	44.8	14.0	4.2	13.3	19.6	15.6	34.4	47.6	2.4
>51 year	2.1	38.9	15.8	3.2	9.5	30.5	15.5	30.9	51.5	2.1
<b>Edu.</b>	N=660					N=666				
Junior high school	5.7	50.0	12.5	0.6	7.4	23.9**	5.1	24.4	67.0	3.4***
Senior high & occupational	3.9	42.7	18.1	3.9	10.8	20.7	9.7	40.1	48.9	1.3
College & University	1.6	39.7	18.3	11.1	16.7	12.7	40.3	44.7	15.0	--

△ p<.1 \*p<.05 \*\*p<.01 \*\*\*p<.001

**Table 6: The job mobility within and between industries**

%	(N,%)	Transition within manufacture (273,41.9%)	Transition from service to manufacture (32,4.9%)	Transition from manufacture to service (184,28.3%)	Transition within service (162,24.9%)
Gender		N=651			
	Male	41.6	4.7	29.2	24.5
	Female	42.2	5.1	27.5	25.2
Age		N=651			
	<30 year	40.3	6.0	14.9	38.8***
	31-40 year	42.1	6.0	22.2	26.6
	41-50 year	45.1	3.2	31.8	19.9
	>51 year	33.0	6.6	41.8	18.7
Education		N=645			
	Junior high school	50.9	3.6	35.3	10.2***
	Senior high & occupational	41.4	4.8	27.8	26.0
	College & University	36.3	5.2	24.3	34.3
Former Income		N=532			
	<\$20,000	39.3	5.1	34.2	21.4
	\$20,001~\$40,000	40.8	4.8	25.2	29.1
	\$40,001~\$60,000	55.0	5.0	20.0	20.0
	>\$60,001	50.0	-	22.7	27.3

\*p&lt;.05 \*\*p&lt;.01 \*\*\*p&lt;.001

**Table 7: Inadequate employment by industry for those who currently employed**

		National Survey 1999	Former Job	Current Job
Manufacture	Male	35,291	40,665	38,370
	Female	20,943	23,712	23,579
	<30 year	25,746	27,750	29,554
	31-40 year	31,565	30,913	29,704
	41-50 year	34,412	33,685	32,005
	>51 year	34,972	27,714	24,886
	Junior high school	27,867	25,742	22,579
	Senior high & occupational School	29,953	29,095	27,386
	College & University	40,485	38,774	37,551
	Managers, Professionals, and Technicians	45,803	47,304	46,019
	Sales and Clerical workers	23,890	31,655	28,224
	Crafts, operators, and semi-skilled service workers	27,495	26,938	24,836
	Services	Male	40,154	40,172
Female		25,222	26,516	25,232
<30 year		25,760	26,944	27,576
31-40 year		35,869	32,770	32,813
41-50 year		38,354	33,973	26,739
>51 year		36,621	33,545	25,061
Junior high school		26,966	26,763	21,944
Senior high & occupational School		29,798	26,652	23,515
College & University		43,831	38,452	35,404
Managers, Professionals, and Technicians		44,927	39,824	38,542
Sales and Clerical workers		27,222	29,693	25,070
Crafts, operators, and semi-skilled service workers		29,381	31,761	25,615

# 新經濟結構下的低度就業與未適當就業

曾淑芬、游玉卿、何錦昌

元智大學資訊社會學研究所

## 摘要

本文首先引用國家統計資料回顧台灣在就業結構轉型過程中低度就業、與職業結構重組的現象。進一步以電話訪問的問卷調查法以探討失業與低度就業兩者間的關係。

從「台灣地區人力運用調查」資料中顯示，國內就業結構在行業轉變上，較類似 Castells 所說之德國、日本之「工業化生產模式」，即製造業的就業仍佔一定的比例。但在職業結構的轉變上，則發現國內專業性的職業實佔相當的比例，此與美國的職業結構較為類似。然而，本文進一步發現，台灣在就業結構轉變過程中，重要的並非製造業裡結構性失業問題，亦非服務業中的「成本弊病」問題，而是嚴重的「低度就業」問題。進一步探究各行業的低度就業情況後發現，在分配服務業(distributive services)中，性別因素有其不同影響力(gender effect)，即女性在分配服務業中主要承受「低薪資」的未適當就業情況；男性則有較高的比例於「教育與職業不相稱」之低度就業種類。

最後，本文進一步研究失業與低度就業間的關係，針對國內領取失業給付者，其後來的就業情形進行電話訪問，研究結果指出「長期性失業」(long-term unemployment)將會是未來研究國內失業問題時一個重要議題，尤其是女性、年紀較大者、與教育程度較低者，其落入長期性失業的比率較高。而經歷失業之後能再度就業者，有超過三分之一的受訪者是從製造業轉到服務業就業；其次，年紀較大、教育程度較低者、與前職在製造業的受訪者，將有較大的比例進到低技術、低薪資的個人服務業就業。因此，年齡較高、教育程度較低的勞工，不僅有較高的失業機率，就算能再度就業，其所獲得的工作也多為低技術、低薪資的服務業工作，而成為取代性高、便宜的「產業後備軍」角色。

**關鍵字：**低度就業、不相稱就業、結構性失業、產業後備軍

