Unemployed Graduates: Pre and Post 1997 Crisis

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Abstract

This paper attempts to study the phenomenon of unemployed graduates during pre and post 1997 crisis and its relations to labour market climate. Basic economic indicators such as economic growth measured by real gross domestic product (GDP) and unemployment rate will be analyzed to see the type of signals transmitted on labour market conditions. How factors such as supply of graduates into the labour market and employment growth that aggravates further the unemployment situation of graduates will also be analyzed. The labour market indicators used in the analysis include number of graduates from public institutions of the Ministry of Education, active registrants and vacancies of Department of Labour, Ministry of Human Resources, employment growth by sector and industry as reported in various issues of the Economic Report and the Annual Manufacturing Survey Report of the Department of Statistics Malaysia.

1. Introduction

From 1980 to 2002, Malaysia has experienced five economic downturns i.e. November 1982, January 1985 to November 1986, January 1992 to January 1993, March 1996 to November 1998 and August 2000 to February 2002. The downturns were the side effects of business cycles as defined by Arthur F. Burns and Wesley C. Mitchell[1] as follows:

> **"Business Cycles are a type of fluctuation found in the aggregate economic activity of nations that organize their work mainly in business enterprises: a cycle consists of expansions occurring at about the same time in many economic activities, followed by similarly general recessions, contractions and revivals which merge into the expansion phase of the next cycle; this sequence of changes is recurrent but not periodic; in duration, business cycles vary from more than one year up to ten to twenty years…"**

Theoretically, industrial economies are cyclically sensitive as such when it expands, factors including **employment**, sales, prices and profits will rise. However, when it contracts, downturns are inevitable and significant. This paper will only focus on the impact of the economic downturn amongst the unemployed graduates particularly the first labour market entrants during the periods 1996 to 2003. The term graduate refers to a person holding the qualification of diploma and above.

2. Literature review

Thomas Malthus is the first scholar to distinguish unemployment and to offer a theory on unemployment[2]. The modern definition defines a person as unemployed if he or she is looking for work and willing to work at the prevailing wage but is unable to find a job. Unemployment, on the other hand, refers to the condition of being unemployed or the number of unemployed people in the working population.

[1] Department of Statistics, Malaysia, Leading, Coincident and Lagging Indices, May 2003
[2] Dr. Roger M. Cain, Recession, Unemployment, Inflation and Stagnation

Basic economic theory says unemployment refers to a situation where supply of labour exceeds demand and having unemployment rate of four per cent and below indicates that the economy is operating in full employment condition. There are two views of unemployment. The Keynesian view states that unemployment is an excess supply of labour resulting from a failure of coordination in the market economy whilst the Classical view states that unemployment is a job search e.g. people engaged in the productive work of looking for a better match between worker and employer.

There are three categories of unemployment, which are as follows:

a. Frictional unemployment refers to people who are in between jobs.
b. Cyclical unemployment refers to a situation of excess supply of labour. The decline in production is associated with the decline in demand of labour and thus, would lead to increase in unemployment.
c. Structural unemployment refers to unemployment problems that arise due to mismatch between the needs of employers and the skills and training of the labour force.

We will see later in the paper that the unemployment situation of graduates is not only the result of cyclical business situation but also macro economic policy. Thus, this leads to graduates being structurally unemployed.

A study on unemployment among youth in India – level, nature and policy implications commissioned by the International Labour Organisation (ILO) was undertaken in 1998 by Pravin Visaria of Institute of Economic Growth, University of New Delhi. The objectives of the study were to: (i) raise awareness amongst constituents concerning the problems associated with the labour market entry of young people; (ii) to improve their understanding of the advantages and disadvantages of the principal policy and programme options for tackling the problem of youth unemployment; and thus, (iii) enhance the capacity of member states to design and implement policies and programmes for promoting youth employment. As a result of prolonged unemployment, the study found that the higher educated has the following characteristics:

a. Higher educated job seekers seemed to have compromised on their aspirations and expectations and adjusted to the labour market by accepting available work;
b. The proportion of self-employed amongst the higher educated group has increased to almost 58 percent as evidenced from the 1993-94 survey;
c. Lack of training for work where the young job seekers inexperience is a disadvantage to the requirement of experienced workers by the employers;
d. Expansion of the education system led to higher number of graduates seeking for suitable work opportunities;
e. Slow economic growth contributed partly to the unemployment problem; and
f. Issue on the quality of education and employability of the educated is also highlighted, where the young unemployed have lower qualifications and little aptitude or the capacity for the type of work they aspire for. Employability is considered a more serious issue and constitutes a major challenge to the educational system and the content of the curricula and the theoretical emphasis as distinguished from applied training.

ILO has also commissioned an earlier study on The Challenge of Youth Unemployment undertaken by Mr. Niall O'Higgins and the report was first published in 1997. O'Higgins summarized observations from the study as follows:

a. In general, training and employment programmes for youths have had a small positive impact on the employment prospects and a variable effect on the incomes of participants;
b. The effectiveness of such programmes depends on the state of economy and whether adequate employment opportunities exist at the end of the programme. The role of programmes varies with the state of labour market. The training programmes may be useful in resolving skill mismatches and the like when the economy is buoyant whilst during recession and little prospect of job opportunities, the programmes will only serve as temporary employment subsidies so as to maintain labour market attachment;
c. Targeting is important to ensure success and also the groups likely to be affected by long term unemployment;
d. Tri-partite involvement i.e. government, employers and workers organizations in designing the programme enhanced effectiveness of the programmes. An example is the German experience;
e. Effectiveness of interventions appears to increase when schemes are voluntary. (Fay 1996)

One interesting issue highlighted by O'Higgins is that the aim of programmes/policy should also look at the quality of work rather than employing youth only.

The Malaysian government has commissioned various studies to identify the profile of the unemployed graduates and also to ascertain feedback from participants of the specific programmes for graduates. One that is recently published is The Study of Unemployment Situation in Malaysia[3]. Results of the studies were used to evaluate and fine tune the specific programmes identified for the unemployed graduates.

3. Sources of data

In this paper, economic growth as measured by real gross domestic product (GDP) and unemployment rate will be used to measure economic performance and labour market condition. In analyzing labour market condition, other labour market indicators such as the followings were used: number of graduates from public institutions of the Ministry of Education, active registrants and vacancies of Department of Labour, Ministry of Human Resources, employment growth by sector and industry as reported in various issues of Economic Report and the Annual Manufacturing Survey Report of the Department of Statistics Malaysia. To supplement this, other related reports such as the White Paper published by the Economic Planning Unit was also used.

4. Economic growth and unemployed graduates

During the period preceding the crisis from 1991 to 1997, Malaysia experienced several years of rapid economic growth with the real gross domestic product (GDP) growth of 8.5 per cent and unemployment rate at record low of below three per cent. The financial crisis that started in mid 1997 has affected the Malaysian economy. The impact was evident with the economic growth measured in real GDP began to slow down and registered the first negative growth since 1985 of –7.4 per cent in 1998. Table 1 depicts real GDP growth, labour force and unemployment from 1996 –2003.

[3] In 2002, the National Economy Advisory Council (NEAC) commissioned UKM Juru Perunding to undertake the study.

Table 1: Real GDP growth, labour force, employment, unemployment, labour force participation rates, 1996-2003

	1996	1997	1998	1999	2000	2001	2002	2003
Real GDP Growth (%)	8.6	7.3	-7.4	5.8	8.5	0.3	4.1	4.5
Labour Force ('000)	8641.4	9038.2	8848.8	9177.8	9572.5	9892.5	10198.8	10514.9
Employment ('000)	8426.5	8818.8	8571.8	8869.6	9271.2	9532.5	9840.0	10150.0
Unemployment Rate (%)	2.5	2.4	3.1	3.4	3.1	3.6	3.5	3.5
Labour Force Participation Rate (%)	65.8	67.0	64.7	64.4	65.7	66.1	66.3	66.9

Source: Economic Report, Ministry of Finance

Prior to the financial crisis, with double-digit growth, the manufacturing sector was the engine of growth and the main contributor towards employment creation. After the financial crisis, however, as noted in the White Paper of the Economic Planning Unit, the manufacturing sector contracted sharply to –10.2 per cent in 1999. Other sectors also experienced negative growth with the exception of services sector that recorded a marginal increase of 1.5 per cent growth

The contraction in real GDP affected the labour market resulting in slower employment growth, increased in the unemployment rate and also retrenchment. Labour force registered negative growth of 2.1 per cent and employment declined by 2.8 per cent in 1998 compared to a positive growth of 4.9 and 4.6 per cent in 1996 and 1997, respectively. In the same year, unemployment, on the other hand, experienced a slight increase standing at 3.1 per cent. Retrenchment soared to 83,865 workers in 1998 compared to approximately 19,000 in 1997.

Table 2 shows the number of workers involved in retrenchment, voluntary separation scheme (VSS), temporary lay-off and pay-cut from 1997 – 2003 as documented by the Department of Labour, Ministry of Human Resources. Both retrenchment and VSS represent the number of job losses in the economy whilst temporary lay-off and pay-cut refer to jobs that can be retained throughout the crisis. The total number shows that the numbers are about equal e.g. 331,938 job losses compared to 332,342 that managed to be retained. It will take the economy quite some time to regain the job lost during the crisis.

Table 2: Retrenchment, VSS, temporary lay-off and pay-cut, 1997 – 2003

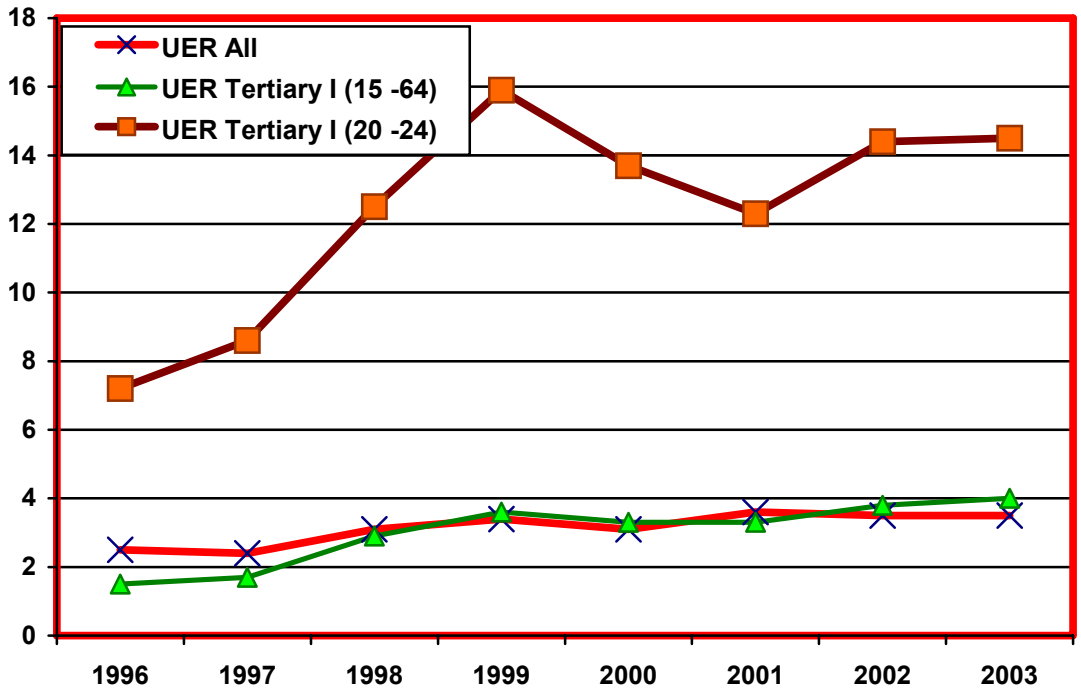
Year	Retrenchment	VSS	Temporary	Pay-Cut
1997	18,863	-	-	-
1998	83,865	6,074	10,633	22,719
1999	37,357	10,538	3,157	15,252
2000	25,236	6,646	2,271	814
2001	38,116	27,705	91,915	36,291
2002	26,452	21,486	61,959	17,425
2003	21,206	8,394	56,409	15,766

Source: Department of Labour, Ministry of Human Resources

Note:
Starting August 1998, employers are required to report VSS, temporary lay-off and pay-cut.

Unemployment rate amongst the graduates (Tertiary 1) in the 15-64 age cohort did not defer much from the overall unemployment, which stood at 2.9 per cent in 1998, 3.6 per cent in 1999 and 3.3 per cent in 2000. Although having the same trend as unemployment rate of the former, the unemployment rate for those between the age 21 to 24 years were significantly higher at 12.5 per cent in 1998, 15.9 percent in 1999 and 12.7 per cent in 2001. Thus, the new graduates in this age group were significantly affected by the crisis. **Figure 1** shows the unemployment rates between the periods 1996 to 2003.

Figure 1: Unemployment rate 1996 – 2003



Source: Labour Force Surveys, Department of Statistics
Note:
Tertiary 1 refers to tertiary excluding form six

5. Characteristics of the unemployed graduates

For both tertiary and tertiary 1 level, a majority of the unemployed graduates was those in the 20 – 24 age cohort. As noted in the Study of the Unemployment Situation in Malaysia, the number of female unemployed exceeded the number of male unemployed graduate. These females' unemployed can be found in the rural area.

Similar trends exist for both tertiary and tertiary 1 level in terms of reasons for not looking for job, which include still schooling, just finished school, housewives and temporary unemployed. Between just finished schools and being housewives, quarterly data from 1998 to 2003 showed consistency in terms of their distribution. The third highest reason, temporary unemployed, was also found consistent throughout the quarters from 1998 to 2003. This group is basically in between jobs and can be classified as experiencing frictional unemployment.

Underemployment of tertiary 1 in the age group of 20 –24 is a concern during the period 1996 to 2003. This refers to those who are working less than 30 hours and willing to accept additional work. Immediately after the crisis, the proportion of this group increased markedly to 83.3 per cent in 1998 from 50 per cent in 1996. The proportion later declined to 73 per cent in 2000, but went up to 81.8 per cent in 2001 as a result of the world economic slowdown and the September 11 2001 incident. This shows that the proportion of underemployed graduate moves with the cycle of the economy e.g. increase during economic and vice versa. In 2003, the proportion went up to the crisis level at 83.6 percent and it is an indicator to watch for.

6. Other labour market indicators

Besides real GDP growth and unemployment, it is interesting to see the type of signals transmitted by the other labour market indicators to the policy makers. An important statistics that provides insights of the supply side is the **output of graduate** from public and private institutions. The Educational Statistics of the Ministry of Higher Education shows that the graduates with diploma and above from public institutions continued to increase from 19,208 graduates in 1996 to 75,630 graduates in 2003. Those graduating with bachelor degree from public institutions represent 55.3 to 66.4 percent of total output during the period 1996 to 2003.

In terms of the field of study, the proportion of arts graduates in all levels is larger compared to science and technical graduates. In 2001, two schemes were introduced by the government, which provides the facility for graduates to further study in the form of allowance or loan. In line with these special schemes, the proportion of master graduates particularly in arts increased from 61.7 percent in 1997 and reached its peak at 70.3 percent in 2002. The distribution of enrolment and output of graduates by field is shown in the following table:

Table 3 : Percentage distribution of enrolment and output of graduates by fields, 1997 - 2003

Fields	1997		1998		1999		2000		2001		2002		2003	
	Enrolment	Output	Enrolment	Output	Enrolment	Output	Enrolment	Output	Enrolment	Output	Enrolment	Output	Enrolment	Output
DIPLOMA	100	100	100	100	100	100	100	100	100	100	100	100	100	100
ART	54.3	56.9	55.4	47.9	41.8	45.9	45.6	39.6	55.8	49.0	55.6	59.6	56.4	64.2
SCIENCE	16.3	17.4	16.9	16.6	25.9	22.9	23.7	27.9	24.9	33.3	17.9	17.4	23.8	23.0
TECHNICAL	29.4	25.6	27.7	35.6	32.3	31.2	30.7	32.5	19.2	17.7	26.5	23.0	19.8	12.8
	30.1	**33.4**	**29.0**	**29.1**	**26.0**	**29.8**	**26.6**	**33.1**	**30.5**	**32.1**	**24.1**	**23.6**	**23.5**	**21.6**
BACHELOR	100	100	100	100	100	100	100	100	100	100	100	100	100	100
ART	56.0	62.7	53.0	66.4	49.4	57.8	48.0	59.7	47.9	57.1	45.8	59.1	47.3	58.5
SCIENCE	25.3	24.7	27.2	21.3	27.9	24.0	29.0	25.5	31.8	28.1	35.6	29.7	33.9	33.2
TECHNICAL	18.7	12.6	19.8	12.3	22.7	18.2	23.0	14.8	20.3	14.8	18.6	11.2	18.8	8.3
	63.2	**60.8**	**64.9**	**62.5**	**63.8**	**63.4**	**63.3**	**58.0**	**60.0**	**56.7**	**65.5**	**64.1**	**65.4**	**66.4**
MASTER	100	100	100	100	100	100	100	100	100	100	100	100	100	100
ART	60.6	61.7	60.6	66.8	57.7	67.2	57.6	68.1	56.3	69.3	55.4	70.3	56.7	52.6
SCIENCE	29.6	30.7	26.9	21.2	28.7	21.7	29.3	20.6	30.9	20.8	31.6	19.0	32.9	42.1
TECHNICAL	9.8	7.6	12.5	12.0	13.6	11.1	13.0	11.3	12.9	9.9	13.0	10.7	10.4	5.4
	5.8	**5.5**	**5.3**	**8.1**	**8.8**	**6.4**	**8.9**	**8.2**	**8.2**	**10.3**	**9.1**	**11.3**	**9.3**	**11.2**
DOCTORATE	100	100	100	100	100	100	100	100	100	100	100	100	100	100
ART	52.0	50.4	50.9	55.1	48.1	60.6	48.7	43.7	49.2	40.9	50.9	46.7	49.6	45.3
SCIENCE	32.2	45.1	31.6	35.6	34.4	31.6	34.5	28.3	34.5	32.7	37.8	26.3	40.1	31.3
TECHNICAL	15.8	4.4	17.5	9.3	17.4	7.8	16.8	28.0	16.3	26.3	11.3	27.0	10.3	23.4
	1.0	**0.4**	**0.9**	**0.3**	**1.3**	**0.4**	**1.2**	**0.8**	**1.3**	**0.9**	**1.4**	**0.9**	**1.7**	**0.8**

Source : Ministry of Higher Education

Private institutions also contribute in producing graduates. However, the information on the number of graduates from the private institutions is not readily available. With the flourishing of private institutions, the number of graduates from private institutions cannot be ignored particularly those graduating with diploma.

The distribution of **employment by category of occupation** indicates the source of employment for graduates in terms of category**.** According to the Labour Force Surveys, the professional, technical and related category and administrative and managerial categories did not grow as much to accommodate the increase of graduates flocking the labour market. The percentage share of the said categories recorded an increase of 0.7 per cent in 1997 and later recorded a smaller increase of only 0.3 per cent in 1998. From 1998 to 2000, the percentage share was hovering between 14.5 and 14.6 per cent. New classification of occupations was used in the Labour Force Surveys from 2001 onwards to suit the changes in the economy, technology and development of the nation. In line with the economic recovery, the percentage share for equivalent categories increased by 1.5 per cent from 24.3 per cent in 2001 to 25.8 per cent in 2002. Nonetheless, the increase in job opportunities was still not enough to cushion the number of graduates entering the labour market.

Employment growth by sector, on the other hand, will indicate the sector that generates employment opportunities**.** As a result of the 1997 financial crisis, overall employment did not show marked decrease. However, immediately after the crisis, employment growth of the manufacturing sector recorded a negative growth of 0.6 per cent in 1998. The manufacturing sector has made a come back in 2000 with a 9.2 per cent growth but later recorded a slight decrease of 0.1 per cent in 2001.

Bulk of the employment in the manufacturing sector is contributed by the electrical and electronic industries that contributed around 30 to 40 per cent of total employment. Within electrical and electronics industry, semiconductor devices, electronic valves and tubes and printed circuit boards and television and associated goods formed a large portion of the employment e.g. approximately 60 per cent of employment in 2002 The slow down of the electrical and electronic industry in 2001 pulled the growth of employment to the negative side, registering a negative 0.1 per cent growth.

Towards the end of 2001, the electrical and electronic industry started to recover. As a result, the manufacturing sector recorded 4.9 per cent growth in 2002 and 5.0 per cent growth in 2003.

Though affected by the economic slow down, the services sector still records positive growth. In 2001, the services sector reached its peak in terms of growth standing at 26.3 per cent.

The Labour Department, Ministry of Human Resources provides free employment services to job seekers and employers and registration is voluntary The **employment register** maintained by the Labour Department represents only a small portion of the labour market actors namely the active job seekers and registered vacancies of participating employers. Nonetheless, it provides signals of the labour market situation. In the register, graduate registrants refer to jobs seeker holding diploma and above whilst graduate vacancies refer to jobs requiring graduate having diploma and above qualification.

Prior to the crisis in 1996, graduate active registrants represent 6.3 per cent of total registrants. Proportion of graduate active registrants increased from 9.3 per cent in 1997 and peaked at 21.2 per cent in 2001. The proportion of graduate active registrants showed a declining trend representing 15 per cent and 9.8 per cent of the total registrants in 2002 and 2003, respectively.

The number of registered vacancies for graduates, however, fluctuated between 1.6 – 2.4 per cent of total vacancies reported to the Labour Department. The supply data represented by number of graduate job seekers were much higher compared to the demand data as depicted by the number of vacancies. The widest gap was in 2001 with 7,242 active graduate registrants compared to 1,911 vacancies for graduates. The distribution of active registrants and vacancies registered with the Labour Department from 1996 to 2003 is shown in Table 4.

Table 4: Proportion of active registrants and vacancies registred with the Labour Department 1996 - 2003

	1996		1997		1998		1999		2000		2001		2002		2003	
	Active Registrants	Vacancies	Active Registrants	Vacancies	Active Registrants	Vacancies	Active Registrants	Vacancies	Active Registrants	Vacancies	Active Registrants	Vacancies	Active Registrants	Vacancies	Active Registrants	Vacancies
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.1%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Graduate	6.3%	2.3%	9.3%	2.4%	13.8%	2.0%	16.9%	1.6%	18.0%	1.7%	21.2%	1.5%	15.0%	2.2%	9.8%	1.6%
Non Graduate	93.7%	97.7%	90.7%	97.6%	86.2%	98.0%	83.1%	98.4%	82.0%	98.3%	78.8%	98.5%	85.0%	97.8%	90.2%	98.4%

Source: Labour Department, Ministry of Human Resources

The number of emplacement for graduates is relatively very low[4] compared to the available active registrants. Nonetheless, to a certain extent, it can be attributed to the mismatch between job seekers qualifications and requirements of the industry. In tandem with economic situation, the emplacement rate will move accordingly. For example, the emplacement rate dropped to 10.5 and 9.4 percent in 1998 and 1999 respectively from 18 percent in 1997

It should also be noted that a few **other indicators** also influence to a certain extent the unemployment situation of graduate. The White Paper highlighted three concerns of the government of which two were related to graduate unemployment. The first concerned was economic growth exceeding potential output whereby since 1991, the economy has consistently grew above its potential output as reflected by investment persistently exceeding savings, **increasing demand for foreign labour**, widening current account deficit of the balance of payment and wage increases exceeding productivity gains. Even during the period of economic growth, most of the jobs created were lower skilled or unskilled jobs as evidenced by the high demand of foreign labour.

The second concern was the declining trend of total factor productivity (TFP) as a benchmark of efficiency level. Its contribution to real GDP dropped to 19.5 per cent during 1996-1997 from 28.7 per cent during 1991-1995. The White Paper noted that the decline is associated with the transition of the economy to high technology and knowledge-based industries, which in the initial stage requires rapid capital formation. This means not as many jobs are created at this stage of formation.

7. Highlight on measures undertaken by government to address unemployment amongst graduates

In steering the nation out of the financial crisis, the National Economic Action Council (NEAC) has outlined six objectives that include stabilizing the Ringgit; restoring market confidence; maintaining financial stability; strengthening economic fundamentals; continuing the equity and socio economic agenda; and restoring adversely affected sectors. As for measures undertaken to address graduate unemployment, it falls under the fifth objective of reinforcing the government's equity and socio-economic agenda.

The following programmes were specifically tailored for graduates:

October 2001

a. Training Scheme for Graduates in ICT and Languages – Fees paid
b. Attachment and Training Scheme for Unemployed Graduates
    i. Further Study Scheme – provide loans
    ii. Attachment and Training Scheme (SSL) – 6 months in government agencies
c. Attachment as Assistant Lecturers – Allowance and Loans facility for further study.
d. Attachment Scheme For Conducting Study – 6 months in government office.
e. Commercial Agricultural Entrepreneur Attachment Scheme – Attached to successful commercial agricultural producers.

[4] It should also be noted that the reporting of emplacement either by the employers or the job seekers is voluntary.

f. Private Attachment Scheme – 6 months in private companies especially in engineering architectural and surveyor.
g. Attachment Programme to Upgrade Small Medium Enterprise (EKS) Ability in ICT.

2002

a. Retraining Fund of RM100 million for New Graduates selected fields such as ICT and Accountancy.

b. Training Scheme of 1 – 2 years with Government Owned Companies.

Generally, the programmes tend to address the cyclical nature of unemployment and slightly attempt to address structural unemployment. By providing, some basic skills of language, communication and additional skills i.e. computer, it is hoped that the unemployed graduates are ready to be absorbed within a short period provided the economy also showing signs of recovery. Entrants of the fresh graduates into the labour market were basically delayed for about six months.

Since the economy was still unable to create enough jobs, the graduates have to accept whatever job is available and thus, the structural unemployment continues. To the public, the graduate is still unemployed.

Through the entrepreneur schemes, it is hoped that this would create entrepreneurs and later be job creators themselves.

8. Alternative method of analysis

Is current measures and analysis of unemployment sufficient? The following two methods offer alternative ways in looking at unemployed graduates: Employment Ratio and Population at Risk (PAR) Method.

William J. Boyes in the Dynamics of Theory and Policy (1984) suggested the use of employment ratio as indicators of labour market conditions. He defines employment rate as the proportion of non-institutionalized population that is employed and therefore, independent of the labour force participation rate. He further argued that changes in the labour force participation rate affect the unemployment rate but do not affect the employment ratio. Unemployment rate does not provide good measure of an index of hardship for workers who are willing to work, but unable to find jobs.

Calculation of unemployment rate includes individuals that have done any work as paid employee during the survey week. Thus, the rate does not distinguish between full and part time work. Boyes also stated that no consideration was given to under employment problem where worker is employed but for skills for a higher-level job. Again, this is an understatement of the amount of hardships.

Table 5: Ratio of employment, 1996 – 2003

Year	E/P	PT/LF	LFPR	UE/LF	UE/P
1996	0.3968	0.0052	66.3	2.5	0.01020
1997	0.3955	0.0051	65.6	2.4	0.00990
1998	0.3877	0.0043	64.3	3.2	0.01280
1999	0.3891	0.0041	64.2	3.4	0.01380
2000	0.4005	0.0039	65.5	3.1	0.01260
2001	0.4000	0.0037	65.3	3.6	0.01500
2002	0.3891	0.0037	64.4	3.5	0.01400
2003	0.4052	-	66.9	3.5	0.01470

Note:
1.Sources of figures for calculations extracted from various issues of Economic Reports and Labour Force Surveys
2. E =Employment; P=Population; LF=Labour Force; PT=Part Time Employment; LFPR=Labour Force Participation Rate; UE=Unemployment Rate

From 1996 to 2003, employment continued to increase from 8.3 million to 10.2 million in 2003. Labour force participation rate (LFPR), on the other hand, recorded declines in 1998, 1999 and 2001. According to Boyes, the employment ratio reflects the labour market conditions more correctly if both LFPR and employment are rising. This is not the case for Malaysia during the period 1996 to 2003. Therefore, unemployment rate is a better measure and it shows the impact of financial and economic crisis on labour market condition.

Employment figures, on the other hand, seemed to be growing faster than LFPR and at the same time, unemployment is increasing. This shows that more people are seeking jobs in the labour market yet not many jobs are available. Part time employment ratio to population showed consistent declining trend from 0.52 percent in 1998 to 0.37 percent in 2002 and this indicates not many part time work is available either.

Ray Thomas (2004) introduced the **Population At Risk (PAR) Method.** In his article, he indicated that the conventional unemployment statistics have two dimensions – size and date and therefore provides a measure of stock. PAR, on the other hand, adds a third dimension – time and thus, provides a measure of flow and gives a more accurate and comprehensive picture and provide new insights into old problems such as indicating the importance of statistics of entrants in helping to explain geographical variation in employment.

The usual measure of long-term unemployment (LAPU) is the percentage of those unemployed for a year or more over total unemployment. According to Ray Thomas (2004), at turning points in the economy, LAPU gives contrary indications because the denominator rather than the numerator governs it. The problems of LAPU are well recognized by the International Labour Office and the Royal Statistical Society. PAR provides the solutions where the PAR rate for year or more unemployment refers to the proportion of those who were unemployed a year ago that is still unemployed. Table 6 shows the PAR rate for year or more of unemployed graduate:

Table 6: PAR rate for year or more unemployed graduate in 20 –24 age cohort

Year	PAR Rate (%)
1997	4.6
1998	3.4
1999	1.6
2000	2.1
2001	4.3
2002	7.4
2003	5.2

Source: Labour Force Surveys, Department of Statistics Malaysia
Note:
PAR Unemployment Rate = (Number of Unemployed $_t$ / Total of Unemployed $_{t-1}$) x 100

Between 1997-2003, the low PAR unemployment rates indicate that long-term unemployment situation amongst the unemployed graduate aged 20 –24 in tertiary 1 is not significant. PAR year or more Exit Rate refers to the proportion of those who were unemployed a year that has left unemployment. The above figures showed that PAR year or More Exit Rate of unemployed graduate is high year ranging from 92.6 percent to 98.4 percent.

9. Some synthesis

Nature of the unemployment situation of graduates has to be understood. The main indicator, the unemployment rate, and other labour market signals that include active registrants, number of vacancies reported, employment growth by sector, industry and occupational category showed that graduates are affected by the financial and economic crisis. Expansion of the education system leads to increase in output of graduates and therefore, worsened the impact of the crisis on graduates. Even though the PAR unemployment rates of the unemployed graduate aged 20 – 24 were low, the proportion of the said group who were underemployed rose to more than 80 percent during the crisis. This means that graduates are in employment but not really in the jobs fitting to them.

Declining total factor productivity (TFP), the marginal increase in proportion of the professional and technical related and administrative and managerial category, faster employment growth compared to LFPR, decreasing numbers of part time employment amongst others reaffirmed that the economy is not yet capable in creating sufficient jobs for graduates. Thus, leaving the graduates with not much choice but to get whatever jobs that is available first. Mismatch between skills and requirement of existing jobs are inevitable. Again, to the general public, the graduate is still unemployed. In this scenario, unemployed graduate is basically being structurally unemployed. To this end, unemployment is assessed in a longer time period versus current measure of unemployment that refers to at least one hour of work in the reference week.

The scenario confirms to a certain extent Melberg's opinion**.** Melberg (1992) in his paper, Unemployment: Micro and Macro Economic Theories, argued that creativity of a capitalist free market economy is one of the factors that create unemployment. New

inventions, new technologies, changing preferences and external shocks are constantly changing the structure of the market. As a result, there will always be a permanent mismatch of skills in the labour market. He further argued that the dynamics of rapid change (which is the characteristic of capitalism) would always produce a mismatch of skills, which will result in unemployment. To a certain extent, the problem could be reduced provided that training is easy, but unfortunately this is not so.

Besides hard skills, the industry is also looking for certain attributes or the soft skills in graduates. Communication skills, attitude and mastering of the English Language were repeatedly highlighted being the elements lacking in graduates especially from local institutions. These factors were reaffirmed by some employers and recruiter i.e. Kelly Services, Pricewaterhouse Coopers, Nestle (M) Berhad and Future Step (How Graduates Can Land in Jobs, New Straits Time, April 28, 2004). With the present job market, graduates are advised to secure jobs including temporary and contract jobs that are closest to the career in order to be marketable in the future.

The Minister of Higher Education has recently suggested that double majors be introduced to address graduate unemployment. It is also pertinent to consider inculcating and forging the soft skills into existing curricula. The short courses introduced for graduates in response to the crisis help in introducing them but how far it is successfully nurtured and instilled is another matter.

10. Conclusion

In the previous economic crisis, graduate unemployment was gradually overcome as economy recovers and enough jobs were created. The impact of the financial crisis in 1997 on unemployed graduates worsened with imbalances of demand and supply i.e. flooding of output of graduates and slow creation of suitable jobs to a certain extent due to the early stage of implementation K-economy and productivity based economic growth and also economic slowdown in 2001. Graduates have no choice but to accept available jobs. Inability to fulfill additional requirements of employers on soft skills further worsened the chance of being employed. Graduate unemployment will persist unless specific measures were undertaken to address it.

Soft skills can be taught, nurtured and instilled. Therefore, a fresh look into the educational system is worthwhile. It is also learned from the crisis that additional measures that is more of medium to long term need to be identified to alleviate unemployment of graduate. Furthermore, both macro and micro economic theories favour micro intervention instead of large fiscal aggregate demand stimulus.

Graduates have to accept the fact that they have to have strategy in finding jobs and shaping their career prospects. Unlike their predecessors, jobs no longer await them. Maybe they should be the job creator themselves.

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References

Annual Manufacturing Survey (Various Issues), Department of Statistics Malaysia

Economic Report (Various Issues), Ministry of Finance

Labour Force Surveys (Various Issues), Department of Statistics

Melberg, Hans O.(1992), *Unemployment: Micro – Macro -Theories*, http:www.geocities.com/hmelberg/papers/921120.htm

Samuel Bassey Okposin, Abdul Halim Abdul Hamid and Ong Hway Boon (1999), *The Changing Phases of Malaysian Economy*, Asean Academic Press, London

The White Paper: Economic Status of Malaysia (1999), Economic Planning Unit, Percetakan Nasional Malaysia Berhad

Thomas, Ray (2004), *A Timely Measure of Unemployment*, Significance, Volume 1 Issue 2, Royal Statistical Society

UKM Juru Perunding (2002), *The Study on Unemployment Situation in Malaysia*, National Economic Advisory Council

Zainal Abidin, Mahani (2002), *Rewriting the Rules: The Malaysian Management Crisis Model*, Pearson Malaysia