

Graduate Employability in Malaysia: Unpacking the Concept, Policy and Practices

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Abstract

This paper examined the issue of graduate employability in Malaysia by exploring its theoretical underpinnings, defining key concepts, analysing the levels of employability, and investigating the underlying socio-political-economic aspects of the issue. Other than the Malaysian context, the study also drew insights from international perspectives on the employed theoretical framework, comprising the theories of job market signalling, human capital, and neoliberalism, in order to provide a comprehensive understanding of graduate employability. Then, the study highlights the distinction between employability and employment, while emphasizing the long-term ability of graduates to obtain jobs aligned with their skill sets. It critically analysed the current Graduate Tracer Study (GTS) framework in Malaysia, which primarily focuses on employment status and unable to capture the broader concept of employability, particularly long-term employability. Suggestions were put forward to expand the GTS framework by including industrial insights, addressing the horizontal mismatch of employment and long-term employability. Socio-political-economic issues related to graduate employability, such as minimum wages, income inequalities, and gig work arrangements, were also examined. This was followed by the discussions on the role of the state governments in managing employment and employability issues, along with policy initiatives that are aimed at enhancing job quality and long-term employability. Overall, this paper presents a way forward for improving graduate employability in Malaysia. From the perspective of socio-political-economics, this paper has highlighted the challenges faced by gig workers, including job security and unstable income. In line with these, necessary recommendations were proposed, including graduates' learning skills development, the expansion of existing employability programs, the enhancement of the GTS, improvements in the gig-worker sector, collaboration between academia and industries, as well as promotions of entrepreneurship and innovation.

Keywords: *Graduate employability, job market signalling, human capital, neoliberalism, Graduate Tracer Study*

INTRODUCTION

Graduate employability is an important concept that connects higher education (HE) and the labor market. Although this connection has arguably existed for centuries since the initial establishment of universities, the notion of employability confronting the discussion in the current discourse is far more complex, relational, and multi-dimensional, due to the significant changes to HE and the labor market (Nilsson, 2017).

On one hand, HE is no longer provided as an elitist privilege reserved for the selected few in our societies. Universities are also no longer ivory towers hidden from the scrutiny of societies which are left for people to do as they wish (Collini, 2012). Instead, HE has now become a common passage for the masses and acts as a transitional point between high schools and the world of work. Universities are considered as critical engines of growth in an era of a knowledge-driven economy, and the perceived socio-economic importance associated with these institutions of higher learning and training have justified the need for policy interventions to ensure their economic potentials are fully unleashed (Boud & Lee, 2009).

On the other hand, the labor market and the world of work have also changed considerably. Since the first Industrial Revolution in Europe in the 18th century, the world of work has transformed from cottages to factories, and from local to multinational and globalized. Subsequent changes across three centuries, through what are commonly known as the second, third, and fourth Industrial Revolutions (with electricity, computing, and disruptive technologies, respectively), have further shaped the labor market and nature of jobs (Schwab, 2012; 2016; Susskind & Susskind, 2015). For instance, with the rise of automation, the Internet of Things (IoT) and artificial intelligence (AI), it is estimated that machines and robots may replace 75 million jobs by the Fourth Industrial Revolution. At the same time, however, approximately 133 million new jobs may be created due to this technological advancement (Seet et al., 2019). Hence, the role of a human being in the world of work has changed considerably nowadays, which in turn, has vast implications on the individual's education and training in preparation towards participating in the labor market.

The changes in HE and the labor market are concurrently occurring worldwide, albeit at varying degrees and paces across developed and developing economies. These changes have significant implications on graduate employability, as the evolving landscape requires today's graduates to possess relevant skills and knowledge to meet the market demands. In light of these transformations, it is essential to explore the discourse of graduate employability and examine how the changes in HE and the labor market are shaping the opportunities and challenges faced by graduates in their transition to the workforce.

Adding to the complexity, relational, and multi-dimensional aspects, the concept of graduate employability is also context-specific. This paper critically analyses the concept of graduate employability in Malaysia, delving into the intricacies of policies, initiatives, and socio-political-economic factors. By examining the aspect from the context of a diverse, multi-ethnic, and multi-lingual society, as well as within the upper-middle-income developing economy, this study sheds light on the multifaceted concept of employability from the policy perspectives of graduate employability, its measuring method, as well as socio-political-economic aspects.

THEORETICAL UNDERPINNINGS OF GRADUATE EMPLOYABILITY

It is crucial to firstly clarify one important point in the discourse of graduate employability which is seen as a relatively recent phenomenon. This point is in fact not accurate, as the initial establishment of universities since the medieval period has been closely related to the employability aspect of the graduates. The University of Oxford is recognized as the oldest university in the Anglo-speaking world and the third oldest university established in Europe, after the Universities of Bologna and Paris. The first school or subject taught in the university was theology. Other than acting as the centre of knowledge for theology, divinity and philosophy, the university also played an important role in training and preparing clergymen for the church. This also underlined the role of vocational preparation and employability of its students after completing their study at the university. Moving forward to the 16th century, this university continued to have a strong underpinning for the students to fulfil vocational training and employability purposes. Although many of its students undertook philosophy, law, economics and politics, the university was also the main feeder of bureaucrats and administrators of the British Empire. Many of the graduates went on to hold important administrative positions in Britain and throughout the empire worldwide. This short narrative was to clarify that the concept of graduate employability is not recent and has long existed since the initial university's establishment. Yet, what has changed in our current discourse is the contexts of the labor market and HE.

Before moving to the discussion of the current context, it is essential to unpack two major schools of thought underpinning the concept of graduate employability. The first one is the assumption of the role of education as a form of signalling. Spence (1973) introduced the job market signalling theory, in which education is posited as a form of investment by an individual to signal his or her potential in the job market. An important assumption in this theory is that, employers in the labor market do not have complete information on the workers and who should be hired. Rather, Spence (1973) equates hiring as a form of lottery. Hence, education and training become a signal that differentiates candidates with qualifications and credentials accrued from the time they spent as an investment for the job, as opposed to those without such requirements. In other words, as posited by this theory, university education is the signal that differentiates and increases the perceived values of graduates in the labor market over those without such level of education. An example of the operationalization of this theory is in terms of the salary scheme of the civil service in Malaysia, whereby the salary scale is determined and differentiated solely by their academic qualification.

The second major school of thought related to graduate employability is the human capital theory. The basis of this theory originated from the seminal work of Adam Smith published in *The Wealth of Nations* (1776). It was then popularized by Gary Becker, which led to the latter being awarded the Economic Nobel Prize in 1992. This theory posits the human being as a form of capital. Education is one of the many forms of people's investments to enhance this capital, such as improving health and raising earnings in the labor market (Becker, 1993). One way to empirically demonstrate how this theory works is by tabulating investments into education in terms of cost and time spent, and the returns in wage differentials (Fitzsimons, 2017).

Yet, it is important to note that the human capital theory was built upon the assumptions of neoclassical economic theory which posits that individuals act rationally to maximize their utilities. Importantly, this assumption has disregarded the influences of other non-economic factors, such as politics, culture, education, and personal motivation. The human capital theory has also narrowly casted and framed education and training in purely economic terms. Furthermore, it has also been criticized as narrow even within the economic domain, whereby investment and returns on education and training advocated by this theory have not accommodated the different economic circumstances and contexts (Gillies, 2017). These include the labor market of a developed economy, as opposed to a developing one.

Despite its narrow focus on economic terms and disregards of other essential factors, the human capital theory is seen as the most influential economic theory in driving education and training policies over the last five decades, and arguably the key factor in determining economic performance, technological change, research, and innovation, as well as competitiveness (Fitzsimons, 2017). A brief example of its influence is evidenced based on the rationale for expanding HE as the engine of growth in a knowledge-driven economy.

Apart from the aforementioned two economic theories, another ideological underpinning to graduate employability is neoliberalism. As previously discussed, graduate employability is not a recent concept, rather it has re-emerged into the discourse of HE alongside the ideology of neoliberalism. As Harvey (2005) defined, neoliberalism is a political-economic theory that implies “human wellbeing can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets, and free trade” (p. 2). Essentially, while redefining the economic structures, neoliberalism has pedagogical and ideological powers to shift the focus onto markets and individuals. HE is also not exempted from its influence, whereby universities are being reconsidered as businesses with corporate power and values as well as individualistic focuses on self-interest, consumption, and commodification (Giroux, 2014). ‘Marketability of knowledge’, ‘adaptability to the market’, and ‘efficiency’ have become the nomenclatures of the universities, and accordingly, student debts have increased and knowledge and research are commodified (Bok, 2004). Furthermore, as argued by Pring et al. (2009), learning and education in a holistic dimension of a human development have also been replaced with the concept of ‘delivering’ contents in training for a specific job. Neoliberalism has also reshaped universities into training-focused, profit-driven, and imbued with strong corporate culture and values. With the new ideological lens of neoliberalism, the concept of graduate employability has been brought back into the policy discourses, and consequently contributes in redefining the relationship between HE and the labor market.

DEFINITIONS OF GRADUATE EMPLOYABILITY AND RELATED CONCEPTS: EMPLOYABILITY VS. EMPLOYMENT

Existing definitions of employability can be categorized broadly into three main groups. The first group focuses on the capabilities and intrinsic characteristics of individuals, such as skills, understandings, and personal attributes; it is seen as the absolute dimension of employability (Cheng et al., 2022).

The second group, which is the relative dimension of employability, contradicts the aforementioned individual-centric definitions, arguing that employability is primarily influenced by the labor market and external factors, such as social, institutional, and economic factors (Sin & Amaral, 2017). This perspective highlights how broader social structures, such as gender, race, social class, and disability, can intersect with labor market opportunities and thus affect employability (McGinn & Oh, 2017).

Finally, the third group emphasizes the ‘duality of employability’ which acknowledges the need to understand both absolute and relative dimensions of employability (Williams et al., 2019). These definitions recognize the importance of individuals' personal characteristics and skills, while also acknowledging the influences of external factors on employability opportunities within a social context (Delva et al., 2021). Therefore, skills and competencies are essential and must be acquired by the graduates for their employability.

Apart from the theoretical and ideological dimensions that underscore the contemporary discourse of graduate employability, it is pertinent to differentiate between employment and employability as two practical concepts. As noted by Tomlinson (2017), while these two terms are two sides of the same coin, they are not entirely the same. Employment relates to the formal outcome of getting a job. It relates to the tangibles, such as the salary and what is entailed in the specific job in terms of the title, tasks and responsibilities. On the other hand, employability is focused on the process of transiting from education to the outcome of getting formal employment. This social process draws out “the relationships individuals develop with the job market and how this is played over time” (Tomlinson, 2017, p. 14).

The distinction between employment and employability is crucial as it relates to what can be done by universities and individuals, and what should be measured and used as performance indicators to illustrate the educational processes and quality. As a tangible outcome, employment is commonly used as a measurement and indicator of graduates' success by the HE stakeholders, including policymakers, universities, parents, graduates, as well as the community. Hence, universities and the programs offered are evaluated based on the graduates' success rate in securing employment. Among the measurement tools that can be used for this purpose are Destination of Leavers from Higher Education in the UK and the Graduate Tracer Study (GTS) by the Department of Higher Education in Malaysia.

Importantly, the discourse surrounding graduate employability often overlooks its comprehensive nature. While existing measures are commonly used to assess employment outcomes, the concept of employability encompasses a broader scope that extends beyond economic factors. It encompasses the functions of HE as a public good, which is aimed at achieving success beyond purely economic considerations. Therefore, the assessment of graduate employability should reflect these

broader dimensions, and at the same time, acknowledge the multifaceted goals of HE. The process should highlight the importance of considering graduate employability within a holistic framework that encompasses both economic and non-economic aspects (e.g., job security, job mismatch, and employment term).

Since employability is defined as a process, it is difficult to capture the term by any measure adequately. Furthermore, this process is highly individualistic, as every instance in a relationship between an individual and the job market is unique and accumulated across many relationships. Moreover, employment is also influenced by the time factor, in which securing employment can be on either short-term or long-term process. For instance, getting a job immediately after graduation is considerably a short-term outcome for an individual, since the person does not necessarily have the capabilities to sustain or progress into long-term employment. Hence, this form of capability should be considered as employability. However, the way employability is defined and operationalized in the policy discourse and practice does not necessarily reflect the long-term employment capability.

Another major concept that requires further explanation is the notion of employers: Who are these employers who demand and hire workers in the economy? In policy discourse, 'employers' tend to be characterized as homogenous and representative of the economy (Gleeson & Keep, 2004). Such characterization can be potentially misleading, whereby policymakers, who are usually the conduit representing the employers, tend to give the impression that when the term 'employers' is used, it is a fair representation of the views and perspectives of different types of employers in the labor market (Gleeson & Keep, 2004; Pring et al., 2009).

It is important to unpack the notion of 'employers' and its underlying connection to graduate employability, as different employers may have different interests in the graduates and their capabilities (Keep, 2009). This perspective aligns with Spence's job market signalling theory, in which education acts as a signal to employers, indicating the quality and capabilities of individuals. However, it is important to critically examine the non-homogeneity of employers and their expectations of graduates as potential pool of workforce in unpacking the many issues related to the availability of job opportunities that match graduates' credentials and skill sets.

The implications of non-homogeneous employer expectations are significant for policy and practice. Policymakers must consider this diversity and develop flexible education systems that equip graduates with a range of skills and competencies. Collaboration between educational institutions and industries has become essential to bridge the gap between academia and the workplace.

The non-homogeneity of employer expectations also emphasizes the need for a comprehensive understanding of employability. It extends beyond academic qualifications for identifying individuals' practical skills, critical thinking, problem-solving abilities, and effective communication. Such a well-rounded skill set enables graduates to meet the diverse demands of different industries.

In light of the above considerations, this paper highlights the need for an inclusive and multidimensional approach to graduate employability. It emphasizes the importance of understanding and addressing the varied expectations of employers, while fostering collaboration between academia and industries, and equipping graduates with a broad skill set. By adopting such approach,

policymakers can enhance graduates' ability to navigate the job market successfully and contribute meaningfully to the economy. This perspective aligns with the broader aim of viewing education as a public good that extends beyond economic outcomes.

UNPACKING THE LEVELS OF GRADUATE EMPLOYABILITY ANALYSIS

By unpacking the concept and theoretical underpinnings of graduate employability, it becomes evident that, on one hand, there are two sides of the concept pertaining to what economists termed as demand and supply. On the other hand, the demand and supply of employability also exist across multiple levels. Tomlinson (2017) outlined three levels to which graduate employability can be discussed, namely macro, meso, and micro. However, for a more comprehensive discussion, this section will examine the concept of demand and supply at five levels: macro, sub-macro, meso, sub-meso, and micro. Each level is discussed below.

Macro level: At this level, employability is mainly about the supply of workers for the national economy. The demand for workers typically refers to industries and businesses requiring and hiring workers. Thus, graduate employability is more narrowly defined as the supply and demand of workers with tertiary and HE qualifications. The discourse at this level is policy-driven, involving economics, education, and training, with direct and vast implications for the socio-politics of education, training, and employment (Healy et al., 2022).

Sub-macro level: At this level, employability is a subset of the macro-level discussion. It refers to employability within the geographical setting, whereby demand is the needs of businesses and industries, while supply is the availability of workers who have the knowledge, skills, and capabilities (Pigden & Moore, 2019). This level is crucial for discussing the employability concept involving workers are not fully mobile, even at the macro level. In Malaysia, the sub-macro level refers to the demand and supply of workers in states like Sabah and Sarawak which have their own immigration and labor regulations, unlike other states in the country.

Meso level: The demand for workers at this level refers to the sectoral labor market, such as the labor market in specific industries like medical sciences, science and engineering, retail, and manufacturing. Supply, on the contrary, refers to the institutions that prepare these workers. More specifically, the supply side of graduate employability may be referring to the HE institutions such as universities, colleges, and training institutes (Alam, 2021).

Sub-meso level: Within the meso level, there are also sub-levels in both demand and supply in the discourse about employability, i.e. the sub-meso level. At this level, demand refers to the intra-sector labor market or specific businesses within a particular industry (Izumi et al., 2023). Meanwhile, supply refers to the specific academic disciplines or levels of education and training (Bezler & Sedlarski, 2022). An example of sub-meso level of demand and supply can be observed from professional and specialized workers like chartered accountants, professional engineers, and specialist surgeons.

Micro level: This is the most basic level for discussing the supply and demand of employability. Supply refers to the individual person, while demand is the individual's firm and company (Smith, 2023).

The supply and demand of graduate workers can be accumulated across these five levels. Cumulative individuals at the micro level will make up the sub-meso or meso level, and then extend toward the sub-macro and/or macro level. Similarly, demand can also be accumulated across different levels.

Importantly, the exploration of these five levels, although rather descriptive, aimed to provide a framework for the appropriate discourse of supply and demand of graduate employability at parallel levels. These levels also outline the actors who determine demand and supply at each level, as well as the means and levers that each person can take to address employability. Without such framework, the mismatch of employability, which theoretically means differences between supply and demand, may not be discussed meaningfully at the right level.

MALAYSIA AS A CASE STUDY

This section focuses on Malaysia as the case study country to critically examine the graduate employability concept. Malaysia provides an interesting context for this study due to its unique socio-economic landscape and significant transformations in recent decades. It is an upper middle-income economy that has successfully transitioned from an agriculture-based economy to the one driven by manufacturing and services. With the aspiration of becoming a developed nation and a high-income economy, Malaysia has experienced substantial growth in its education and training sector over the past three decades. Reportedly, a gross enrolment ratio of 45% was recorded for tertiary education in 2018, which is a significant increase from 11% only in 1995 (UNESCO Institute of Statistics, 2020)

Geographically, Malaysia is located in Southeast Asia which consists a peninsular region connected to the Asian continent and half of the Borneo Island. In this multi-ethnic country, Malays and indigenous *Bumiputera* form the majority of the population, followed by Chinese and Indians. Malaysia is also a multi-religious society. While Islam is the official religion, freedom of religion for other faiths is also practiced in this country. Apart from the national language, i.e. *Bahasa Malaysia*, English, various Chinese dialects, and Tamil are also widely used in this country.

In general, the Malaysian education system reflects its diverse society, with the national language serves as the official medium of instruction in schools. Additionally, there are vernacular national-type primary schools that deliver *Mandarin* or *Tamil*, with *Bahasa Malaysia* as a compulsory subject. At higher education level, Malaysia implements a dual-sector system comprising both public and private HE institutions, with similar enrolment sizes in each sector. Table 1 illustrates the types of institutions in each sector, the number of institutions, as well as student enrolment.

Table 1
Number of HE Enrolment and Institutions in 2018

Status	Type of Institutions	Total Enrolment	Number of Institutions
Public (total students: 675,141)	University	552,702	20
	Polytechnic	96,370	36
	Community College	26,069	99
Private (total students: 668,689)	University	332,843	48
	University College	89,512	33
	International Branch Campus	218,768	345
	College	27,566	10

Source: DOHE (2019) and MOE (2019)

In recent years, Malaysia has aimed to position itself as an international education hub that attracts students from other countries around the world. This effort has been formally recognized, as Malaysia was ranked 12th in terms of preferred education destinations among international students, according to the survey conducted by UNESCO in 2014.

By examining graduate employability within the specific context of Malaysia, this paper seeks to uncover the challenges and opportunities faced by the Malaysian graduates in their transition from HE to the labor market. Through an analysis of the policies, initiatives, and socio-political-economic factors, this study aims to contribute to a deeper understanding of the graduate employability concept from the Malaysian perspectives, based on current policies and assessment of graduate employability in this country.

GRADUATE EMPLOYABILITY IN MALAYSIA

Generally, as total enrolment in HE increases, the number of graduates will also increase. Hence, the notion of graduate employability requires an examination of the trajectories of these graduates. As reported by the Malaysian Department of Statistics (DOSM), a large majority of HE graduates were employed, where the percentage ranged between 3.99 million and 4.57 million from 2017 to 2021 (see Table 2).

Apart from those employed, there are two other categories of HE graduates, i.e. those outside the labor force and those who remained unemployed. Graduates who moved on to further their education or fully commit to family duties were among those who were left out of the labor force. As a result, the individuals do not have any desire or motivation to enter the labor market. This group of graduates will be categorized as graduates outside the labor force.

As the labor force in the job market experiences instability, there has been a noticeable fluctuation in the number of graduates outside the labor force. A surging trend can be observed from 2017 to 2019, which indicates an increasing proportion of graduates who were unable to secure employment. However, in 2020, there was a slight decrease, suggesting a potential improvement in graduate employability. Unfortunately, this downward trend was short-lived, as the number increased again in 2021, thus indicating renewed challenges for graduates seeking suitable employment opportunities.

According to the human capital theory, the presence of graduates who are not actively participating in the labor force can lead to adverse effects on the nation's economy. This theory posits that knowledge and skilled labor are crucial resources that contribute to a country's economic growth and productivity. When a significant portion of graduates with valuable knowledge and skills are not utilized effectively in the labor force, the country's resources will be mismanaged, leading to suboptimal functioning of the economy.

As highlighted by Man et al. (2022), labor force participation in the labor market has become increasingly vital for Malaysia's economic development. By incorporating the human capital theory, useful insights can be obtained on the significance of mobilizing and leveraging the knowledge and skills possessed by graduates in order to maximize their contributions to the overall economy. This theory emphasizes the importance of aligning human capital with productive employment opportunities to enhance economic efficiency and growth.

As seen from Table 2, the percentages of unemployed graduates between 2017 and 2021 ranged between 154,900 and 197,400. It is interesting to note that 2020 had the highest number of unemployed graduates, given the disruption caused by the COVID-19 pandemic. Due to the enforcement of movement control order in that year, some companies faced difficulties to pay their worker's salaries. Consequently, this had led to retrenchment of workers and hiring freeze by the companies in order to minimize operational costs. Around 60 per cent of Malaysian graduates remain unemployed after one-year graduation period (Abd Rahman et al., 2020).

Table 2*Number of Graduates in Malaysia*

Year	Number of Graduates (million)	Number of Employed Graduates (million)	Number of Unemployed Graduates	Graduates Outside Labor Force
2017	4.61 mils	3.99 mils	154,900	769,100
2018	4.96 mils	3.69 mils	162,000	811,800
2019	5.29 mils	4.25 mils	170,300	869,800
2020	5.36 mils	4.35 mils	202,400	800,900
2021	5.61 mils	4.57 mils	197,400	851,300

Source: Department of Statistics Malaysia (DOSM), 2017 – 2021

According to the DOSM (2021), employed graduates are students who have completed their education and are currently working in their respective job position. On the other hand, unemployed graduates are students who have completed their education and are ready to enter the labor force, but still in the stage of finding work.

Based on the data comparison by the three categories (Table 2), it is evidenced that with the increasing number of graduates yearly, the number of employed graduates also increases. These increases, arguably, indicate a healthy economic growth. Due to the significance of workforce's education level in the Malaysian context, the wage for a labor force is higher for a higher education level, and consequently lead to the benefits of the nation (Arshad & Ghani, 2015).

However, the number of unemployed graduates that increased simultaneously implies the otherwise. According to the data in Table 2, the number of unemployed graduates is generally increasing yearly, despite the drop in 2021. This highlights that while the country is producing more graduates from year to year, at the same time, the unemployment issue is still critically needed to be addressed, based on the increasing trend observed in the unemployment rate.

POLICIES ON GRADUATE EMPLOYABILITY

For the issue of unemployment, it is about the demand and supply in the labor market. Graduates are on the supply side of the labor market, whereas industry is on the demand side. Here is where government policy should come into play, as government can be the middleman to take the initiative to host the discussion between the supply and demand sides of the labor market and make policies that can feed both sides. As mentioned in Malaysia's Graduate Employability Blueprint 2012 - 2017, there is the non-existence of a single authority responsible for collecting, assessing, analysing, and

forecasting the actual number of jobs available or required by the current and future workforce market, either in the public or private sector (MOHE, 2012).

The blueprint has four charters to support the role of HE in building Malaysia's human capital stock, providing dream career opportunities for graduates, achieving sustainable employability for university graduates and structuring university curriculum for employability. To achieve these four aims, the blueprint summarizes what graduates need to attribute in terms of academics, personality management, exploration and connectivity.

Furthermore, the blueprint mentioned about monitoring the changing business needs and trends, functions, business focus, and alignment with the higher education institute's curriculum (MOHE, 2012). The blueprint hoped that the university could produce graduates based on market demand. As stated in the preceding section, this concept has the potential to reduce the nation's unemployment rate. However, the blueprint is capable in playing a bigger role in addressing the issue of short-term employability, which are to enhance graduates to secure the job in the long run, and subsequently attend to the issue of horizontal mismatch. The horizontal mismatch is defined as a graduate who is not obtaining a job position that matches his or her educational qualification.

To address the issue of horizontal mismatch, we should return to a fundamental question, which is attending university just to gain a career connected to the study field. But what if the graduates' chosen field of study is not available in the market? Or have grads discovered a new passion after graduating? This should be addressed in the blueprint, given the blueprint aspires to place 75% of graduates in relevant sectors. Similar to the theory of theology as described in the early part of the article, the purpose of the university is supposed to supply the graduate who will be continuing to contribute in that particular area they chose, or else the mismatch of demand and supply will happen (Adenuga, 2020).

To tackle the issue of graduates that are working for a short-term contract, the government has offered grants such as *PenjanaKerjaya 2.0* program to facilitate employers to hire fresh graduates on permanent or contract basis. The government have offered so much of a grant to encourage the employer to hire fresh graduates regardless of whether they are permanent or contract, as stated in the FAQ document of *PenjanaKerjaya 2.0*. However, this will create a problem where the employer might dismiss the employee after the contract ends. The blueprint should have long-term and short-term goals to achieve employability. The short-term goal should focus on the preparation of graduates for finding job after graduation while the long-term goal is to develop graduates' capacity and ability to learn new skills in this unpredictable world.

The short-term goal of preparing graduates for employment after graduation aligns with the principles of human capital theory. According to human capital theory, individuals' investments in education and skills development contribute to their productivity and economic value in the labor market. By equipping graduates with relevant knowledge and skills, the aim is to enhance their employability and increase their chances of securing suitable employment (Becker, 1964). However, the policy should also focus on how the university can develop a graduate that is equipped with the skill of life-long learning and ultimately ensuring the security in a long-term job yet irreplaceable by technology.

Therefore, the emphasis on developing graduates' capacity and ability to learn new skills is crucial and it reflects the influence of neoliberalism theory. Neoliberalism emphasizes the market-oriented approach in education and views individuals as rational actors responsible for their own success in the labor market. In this context, graduates are expected to possess the adaptability and flexibility to continuously acquire and update their skills to meet the changing demands of the job market (Harvey, 2005).

With that being said, this paper recognizes both short-term goal of immediate employability and the long-term goal of building graduates' human capital to navigate a dynamic and unpredictable world, which aligns with the principles of human capital theory and the neoliberalism perspective on individual responsibility and adaptability.

The theory of job market signaling provides valuable insights for addressing the challenges mentioned. Job market signaling theory suggests that the signaling of skills and qualifications by job seekers can help in overcoming information asymmetry between employers and graduates (Spence, 1973). In the context of graduate employability, policies should consider the signaling mechanisms that effectively communicate graduates' skills, capabilities, and potential to prospective employers. By focusing on signaling, policymakers can enhance the match between the skills possessed by graduates and the demands of the labor market, reducing the risk of graduate unemployment and horizontal mismatch. Therefore, future policies on graduate employability should aim to bridge the gap between the supply and demand sides of the labor market by incorporating the principles of job market signaling theory.

Furthermore, policymakers should focus on developing student ability to learn. It is hard to predict what comes in the future that will affect the change in the world of work. Therefore, instead of focusing towards the needs of employers, universities can prepare the student's capability and ability to learn. This will allow the student to be able to survive no matter how the working world changes. Developing students' capacity and disposition to learn is the best way of equipping them for jobs in a future that is unpredictable and grows more unpredictable as the planning horizon extends into the more distant future (Bourner et al., 2012).

Another issue to be addressed is the triggering aspect from the supply-side, which is comparable to how policy should look at what type of quality in graduate that should be pushed into market, not only looking at the job demand but also taking present university programs into account. It is crucial to encourage the industry to accept graduates from a variety of fields. Conjunctionally, universities must ensure that the graduates they created are well-rounded and equipped with the skills necessary to succeed in the market. This may reduce, or even better, eliminate horizontal mismatch as the programs are capable in providing graduates with an expansive range of knowledge. As a result, despite the fact that graduates are working in a different field from their study, they are apt to feel content with their job and are able to make a good pay, and the most important thing is that they would never regret choosing the program that they enrolled in. These are the virtuous values that should be instilled in graduates that eventually will lead them to become individuals who can contribute to the public good in terms of economic, social, and cultural.

The approach taken by the Malaysian government in managing graduate employability can be described as a combination of active and responsive strategies. An active strategy refers to an

approach in which the government takes proactive measures and initiatives to actively manage and shape the labor market and graduate employability outcomes. It involves the government playing an active role in identifying labor market needs, promoting job creation, and implementing policies and programs to enhance graduate employability (Clarke, 2018). This can include initiatives such as targeted skills training programs, job placement services, industry collaborations, and incentives for employers to hire graduates (Borah et al., 2019).

On the other hand, a responsive strategy refers to an approach where the government reacts and adapts to the demands and dynamics of the labor market. In a responsive strategy, the government takes a more hands-off approach and allows the market forces to determine the demand and supply of labor. The government's role focuses more on providing support and resources to facilitate the matching of graduates with available job opportunities (Lent & Brown, 2020). This can include measures such as career counselling, job fairs, and information dissemination about market trends and opportunities.

The government takes an active role by hosting discussions and formulating policies that align the supply and demand sides of the labor market. Through initiatives like the Graduate Employability Blueprint and other programs such as *PenjanaKerjaya*, *Protege*, and *MySIP+*, the government actively encourages the hiring of graduates and provides support to bridge the gap between education and industry needs. However, it also adopts a responsive approach by monitoring changing business needs and trends, ensuring alignment with higher education institute curriculum (MOHE, 2012). This adaptive approach acknowledges the dynamic nature of the job market and the need to equip graduates with the necessary skills and knowledge to navigate a rapidly evolving labor landscape.

With this, the government wished to overcome the issues that have been existing all this while, namely the high percentage of Graduates Outside the Labor Force. According to Lopez (2023), the deficit of the labor force has made a breakthrough of 40% of the overall labor force. However, in view of this paper, it is no different from the programs that have been introduced such as *Protege* by the Ministry of Entrepreneur and Cooperatives Development, National Structured Internship Programme (*MySIP+*) by Talentcorp, and *PenjanaKerjaya* by PERKESO due to the fact that all of these programs are corrective approaches and only good to overcome the issue of short-term employment. The government should focus on building graduates who are not just able to land a short-term job but also ensure the graduates are able to sustain their job in the long run. Furthermore, to measure the effectiveness of these programs, the government should measure it continuously in the long run to obtain clearer views on graduates' ability to secure a job even after a period of time, and the relevancy of the values that are instilled in graduates during their program enrolment that are applicable throughout their lives.

MEASURING GRADUATE EMPLOYABILITY IN MALAYSIA: THE USE OF GRADUATE TRACER STUDY (GTS)

The GTS is a valuable tool for gathering data and statistics from higher education stakeholders, providing insights into graduate employability. Developed by the MOHE in 2002, the GTS serves as an annual exit survey for graduates from private and public higher education institutions (Abdul Wahab, 2017). However, the current GTS framework in Malaysia primarily focuses on university elements such as lecturers' competency, teaching facilities, and student support, without adequately considering the perspectives of other stakeholders, such as policy and industry.

The GTS, influenced by the job market signalling theory, acknowledges the importance of signalling credentials and qualifications to potential employers. It provides valuable information for assessing graduates' locations and job performance, thus serving as a signalling mechanism for employers (Cuadra et al., 2019). However, it is essential to recognize the distinction between employment and employability. While employment refers to the immediate job status, employability, as emphasized by the human capital theory, reflects the long-term ability of graduates to obtain jobs aligned with their skill sets (MOHE, 2012). The current GTS, focusing solely on employment status, fails to capture the long-term value that years of education can provide to graduates.

Moreover, the influence of neoliberalism theory on HE is apparent in the GTS framework. Neoliberalism emphasizes the market-oriented approach, treating the universities as businesses and placing emphasis on individualistic interests, marketability of knowledge, and efficiency (Giroux, 2014). In line with this ideology, the GTS framework predominantly revolves around university-related elements. However, to address the issue of unemployment comprehensively, it is necessary to extend the GTS framework by collaborating with private sectors. By doing so, the GTS can incorporate industry perspectives, aligning education with the demands of the job market (Aina, 2017).

One of the limitations of the GTS lies in its survey items, which mainly focus on employment status and satisfaction with university facilities and teaching quality (Malaysian GTS framework). This narrow focus fails to capture the broader concept of employability and does not address noteworthy issues such as horizontal mismatch employment. Horizontal mismatch refers to situations where graduates find themselves in low-skilled or low-paying jobs that do not utilize their acquired skills. The GTS should expand its questionnaire to include a comprehensive assessment of graduates' employability, considering their skill sets and the alignment of their jobs with their qualifications.

Furthermore, the GTS administration presents challenges in terms of data collection and reporting. Currently, graduates are required to complete the GTS before graduation, and their employment status is not updated unless they voluntarily report it. However, employability is a long-term endeavour, and regular reporting is necessary to track the impact of education on graduates' lives (Cuadra et al., 2019). Without a voluntary reporting mechanism, universities risk losing the ability to assess their track record of employability in the future.

To address these limitations and provide a more comprehensive understanding of graduate employability, the GTS should consider the job market signalling theory, human capital theory, and neoliberalism theory. By expanding the survey items to encompass employability factors, engaging multiple stakeholders including industry representatives, and aligning education with the demands of

the job market, the GTS is capable in recommending policy interventions one step ahead and consecutively facilitate in more competent graduate outcomes.

Overall, the GTS is influenced by the job market signalling theory, human capital theory, and neoliberalism theory, requires adjustments in its survey items, administration, and stakeholder involvement. By adopting a more holistic approach that recognizes employability beyond immediate employment status, incorporating longitudinal data collection, and involving multiple stakeholders, the GTS can provide a comprehensive assessment of graduate employability in Malaysia and assist in more effective policy interventions.

THE SOCIO-POLITICAL-ECONOMIC ASPECT OF GRADUATE EMPLOYABILITY

The socio-political-economic aspect of graduate employability in Malaysia encompasses various critical issues, including minimum wages, income inequalities, job stability, and security in the context of contractual or gig work arrangements. These concerns are deeply intertwined with the sociopolitical contexts and existing measures taken by the state to manage employment and employability issues in the country.

In Malaysia, income inequalities have been a persistent challenge (Amar & Pratama, 2020). Efforts to bridge this gap and enhance graduate employability are part of the broader socio-political agenda to promote equitable economic growth. The state has recognized the need to create an inclusive and sustainable economy where all individuals, including graduates, have access to fair employment opportunities and receive just remuneration for their work.

In order to address the issue of income inequalities, the implementation of minimum wages is introduced. Ensuring fair compensation for graduates is essential for reducing disparities within the labor market. Minimum wage policies aim to establish a baseline income level that allows workers, including graduates, to meet their basic needs and achieve a decent standard of living (Dube, 2019). By setting a minimum wage, the state seeks to uplift the economic well-being of workers and address income inequalities that may exist within the employment landscape.

Furthermore, gig work, characterized by short-term contracts and freelance engagements, has gained popularity in recent years. The rise of gig work and non-traditional employment arrangements has introduced new dynamics in the labor market, warranting attention in the context of graduate employability. However, gig workers often face challenges related to job stability and security (Hunt, et al., 2019). The unpredictable nature of gig work may result in fluctuating income streams and limited access to social protection benefits typically enjoyed by traditional employees.

The socio-political contexts of Malaysia play a crucial role in shaping the measures taken to manage employment and employability issues. Recognizing the importance of providing adequate support for gig workers, the government have to introduce policies and initiatives to address the concerns arising from these non-traditional work arrangements. These measures aim to strike a balance between promoting flexibility and protecting the rights and well-being of gig workers. Policy such as the enforcement of social insurance for gig-worker will be encouraged to ensure the job security.

For instance, the state has implemented regulations to govern gig work platforms, ensuring that workers are afforded certain rights and protections (Aloisi & Gramano, 2019). These regulations may encompass provisions related to fair remuneration, access to social security benefits, and avenues for dispute resolution. By introducing such measures, the government seeks to enhance job quality and safeguard the interests of gig workers, including graduates who may engage in gig work as a means of employment.

Additionally, the state's commitment in managing employment and employability issues is evident through various policy initiatives (Paterson, 2019). These initiatives emphasize the creation of an enabling environment for graduate employability. They encompass strategies to promote skills development, enhance industry-academia collaboration, and support entrepreneurship. In Budget 2022, the Malaysian government has allocated RM50 million to bolster the gig economy. This funding will be utilised to provide training and upskilling programs for gig workers, as well as to develop a comprehensive regulatory framework for the gig economy (Manimaran, 2023). Radzi et al. (2022) also suggested that the authority should protect gig workers' interests including social insurance, and benefits (wages, annual leave, sick leave, maternity leave, and other benefits) in Malaysia through registered association under The Societies Act 1966 due to the fact that The Employment Act 1955 does not provide protections to a gig worker.

By focusing on skills development, the state aims to equip graduates with the necessary competencies to thrive in an evolving job market. Collaborative efforts between universities and industries enable graduates to gain practical experience and industry-relevant skills, enhancing their employability prospects (Jackson & Dean, 2023). Entrepreneurship support programs encourage graduates to explore entrepreneurial ventures, fostering innovation and job creation.

In conclusion, the socio-political-economic aspect of graduate employability in Malaysia is multifaceted and interconnected. Issues such as minimum wages, income inequalities, job stability, and security in gig work arrangements are closely linked to the sociopolitical contexts of the country. The state plays a crucial role in managing these challenges through the implementation of policies and initiatives aimed at enhancing employment opportunities, improving job quality, and providing support for gig workers. By addressing these issues and creating an enabling environment for graduate employability, Malaysia endeavours to foster inclusive economic growth and create sustainable employment pathways for its graduates.

WAY FORWARD

Overall, the issue of graduate employability in Malaysia remains a significant concern for the country's economic development. While the number of employed graduates is increasing each year, this growth can be attributed to the rising number of graduates enrolling in higher education institutions. By merely looking at the number of graduates who secure employment does not provide a comprehensive assessment of graduate employability. To address this issue, it is crucial to focus on enhancing graduates' ability to learn.

By prioritizing the development of graduates' ability to learn, employers and the market can become more receptive to graduates from various fields of study, thereby overcoming the problem of horizontal mismatch. This approach advocates that graduates should possess transferable skills and to be adaptable to different industries and roles. Policymakers should emphasize programs and initiatives that enhance graduates' employability, such as the Capital Market Graduate Programme (CMGP), MySIP+, and PenjanaKerjaya 2.0. However, it is essential for policymakers to also consider the element of long-term employability, as current initiatives primarily focus on short-term employment.

Measuring long-term employability remains unclear in Malaysia, as the current GTS primarily captures short-term employment status. To enhance the employability of the nation's graduates, policymakers should expand the role of the GTS to include other HE stakeholders, such as industries, universities, and the community. This expansion would enable a more comprehensive assessment and provide constructive feedback to policymakers when formulating policies to enhance graduate employability. As highlighted earlier in this article, it is essential to re-examine the conceptual distinctions between measuring employment and employability. Moreover, there is a necessity to redefine the operational definition of employability to encompass a broader range of factors when evaluating graduate employability, particularly in the administration GTS.

In the larger economic context, policymakers should also pay attention to the gig-worker sector. Gig-workers are facing three main challenges: job security, job stability, and unstable income. To address these issues, specific measures can be implemented. Firstly, policymakers can enforce social insurance to provide job security for gig-workers. Secondly, they can offer diverse upskilling programs to ensure that gig-workers remain relevant and adaptable to the changing demands of the market, allowing them to return to the industry whenever necessary. Lastly, policymakers can introduce policies such as minimum wages for gig-workers to mitigate the issue of unstable income.

By addressing these challenges and implementing proactive measures, policymakers can create a more conducive environment for graduate employability in Malaysia. It requires a comprehensive approach that focuses on developing graduates' learning abilities, improving long-term employability measurement, and addressing the specific concerns of gig-workers. These efforts will contribute to a more sustainable and prosperous economy, where graduates can effectively contribute their knowledge and skills to drive economic growth and productivity.

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