

Basic Understanding of the Class Structure of the Macao Society

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I. Introduction

In his first policy address after taking office, Fernando Chui Sai On stated, “Policies that address the aspirations of the middle class will be launched following scientific research.” In May 2011, he again asserted that improving the living standard and the development of Macao’s middle class would be his focus for the near future. The definition of the middle class and housing, upward mobility, training, preferential measures and social security for the middle class in Macao are issues of concern and areas of study for the Government of the Macao Special Administrative Region (SAR). Macao politicians and academics have begun to attach great importance to the study of the middle class. This happening more than a decade after the return of Macao is all but very timely. First, politically, the effective practice of the “One Country, Two Systems” policy upon the return of Macao to the motherland has provided effective guarantee to the steady development of Macao. Second, the booming development of Macao’s gaming industry following its liberalization pushed Macao to the forefront in Asia in per capita GDP ranking. Third, Macao has achieved steady social progress and higher living standard in an era of unprecedented stability and exponential growth, and its class structure has reached a new level of maturity.

Macao’s class stratification has been greatly influenced by its economic structure both in the past and at the present. First, Macao’s economy was not well developed in the past and it had in fact moved into the post-industrial era without going through the proper process of industrialization. Gaming as a service industry generates high-value returns. However, most of its workforce in low ranking jobs are engaged in low-tech occupations and have little control over their work, different from those in modern high-end services sectors such as finance, law, research and development in knowledge-based economy that require well-educated professional and technical personnel. Given the low level of economic development in Macao prior to its return, the education level of Macao residents or its workforce in general was not high. So was their competitiveness on the job market. In order to protect employment of Macao residents and under pressure from trade unions and grassroots opposition to bringing in temporary foreign workers, the Macao Government has adopted a relatively conservative stance on allowing foreign workers into Macao. For instance, the job category of casino dealers has been open strictly to Macao residents only. This has pushed up their salary level and resulted in unusual incompatibility between compensation and job skills. The casino dealers fall into the category of middle class of ambiguous identity.¹

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II. Economic and Class Structures in Post-industrial Society

2.1 The notion of post-industrial society

The concept of "post-industrial society" was first proposed by Daniel Bell in his 1973 book *The Coming of Post-Industrial Society: a Venture in Social Forecasting*. He believed that the concept is broadly indicative of five emerging themes: a) the economy transitioning from the production of goods to the provision of services; b) in occupational structure, professional and technical workers becoming the central part of workforce; c) knowledge becoming the central axis and the driving force for social innovation and new procedures and policies; d) processes of automation and validation of technologies as future direction; e) policies for information sciences creating new "intelligent technologies."²

Colin Clark in his *Conditions of Economic Progress* proposed to divide the economy of a society into three sectors: a) agriculture; b) manufacturing or industry; and c) services. Bell pointed out, "In accordance with this classification, the first simple feature of the post-industrial society is that majority of the workforce are no longer engaged in agriculture and manufacturing, but in the service industries such as trade, finance, healthcare, entertainment, research, education and management."³ Bell stressed, "In the post-industrial society, a different set of service industries will be highlighted. If we divide service industries into a) personal services (retail shops, laundry and dry cleaning, auto repairs and barbershops), b) corporate services (banking, real estate, insurance); c) transportation, communications and public utilities; d) health, education and management, the growth of the last segment has decisive significance on the post-industrial society. This means the continuous expansion of a new knowledge-based segment of universities, research institutions, as well as a variety of professional and management entities." He believed that at the time the United States was the world's first and only service-oriented national economy with most of its population engaged in neither agriculture nor industrial production.⁴

2.2 Industrial restructuring and the advent of post-industrial society

2.2.1 Taiwan

The 1960s saw the rise of Taiwan's export-oriented processing industry, chiefly comprising of textile and electronics industries in the initial phase, which was followed by footwear, umbrella and other labor-intensive manufacturing. In 1986, Taiwan began its economic transformation with liberalization, globalization and process-driven themes. The trend of outsourcing labor-intensive manufacturing, mostly to the Mainland China, began. Meanwhile, electronic, high-tech and high value-adding industrial manufacturing, chiefly of semiconductors, computer peripherals and communications equipment, began to rise and became the engine of its economic growth. The rise of high-tech industries enabled Taiwan to rise in the industrial value chain and brought about the gradual change of its industrial structure into one that is based on a high-tech and technology-intensive model. In the process, Taiwan's class structure also underwent a major change. The export-oriented industrialization resulted in the ascendance of professional and managerial class and the rise of small and medium sized enterprises. New disciplines and departments at institutions of higher education and new government research entities came into being, which contributed to ascendance of the middle class consisting of scientific and technology professionals.⁵

During the period of 1996-1999, as Taiwan moved toward a post-industrial society, the percentage of agriculture, mining, manufacturing and public utilities output in total output of all industries continued to drop, while that of construction, shipping and storage, telecommunications, commerce and financial services had increased. Output of IT products and electronic components registered the most prominent rise in the manufacturing sector, while that of traditional products such as food, textile, plastics, metal and non-metallic mineral products, home appliances, etc. was

in decline, which points to the structural shift toward services and electronic/information industries. At the same time, occupational structure also underwent changes. The number of menial operators and assistants declined while the demand for specialized professionals increased rapidly. However, there were still a large number of assembly workers in manufacturing and most of the workers employed in commercial, financial and other services were assistants. Thus, there was still a prevalence of assistants and menial operators in the workforce. However, the trend of a changing structure in the workforce was already discernable.⁶

Into the 21st century, Taiwan attached great importance to the development of knowledge-based economy. In 2000, Taiwan's Council for Economic Planning and Development of the Executive Yuan adopted a "Plan to Develop Knowledge-based Economy in Taiwan" and "President" Chen Shui-bian designated 2001 as the launch year for the program to promote "knowledge-based economy and society". Taiwan's definition for knowledge-based economy is "an economy that is directly based on inspiration, dissemination and application of knowledge and information. The capability for, and efficiency in, knowledge creation and application, prevailing over traditional means of production such as land and capital, becomes the driving force of continuous economic growth."⁷

In 2012, Taiwan's Ministry of Economic Affairs published *A Strategy for Industrial Development 2020*, with a central theme of "comprehensive upgrading of traditional industries," "accelerated development of emerging industries", and "promoting a service-oriented manufacturing industry, an internationalized and high-tech services industry." Key sectors of industrial development include a) metallurgy and machinery industries including automobile (e.g. intelligent electric vehicles), mechanical equipment (e.g. intelligent robots) and basic metallurgy (e.g. high value-added metal materials); b) information and electronics industries including green energy, photovoltaic, and telecommunications equipment; c) chemical industry, e.g. photovoltaic materials and biotechnology; d) consumer goods industry including food processing (e.g. organic foods) and textiles (e.g. organic fabrics). The growth of all these industries will be dependent on science, research and innovation. In 2011, nearly 80% of Taiwan's workforce has high school or vocational school diplomas and nearly 40% has college diplomas or higher qualifications.⁸ In the process of upgrading traditional industries by adopting high and new technologies, it can be expected that there will bound to be an increase in the number of workers with higher qualifications and skills in Taiwan.

2.2.2 Hong Kong

Manufacturing in Hong Kong began to shift to the Mainland after the start of the latter's reform and opening up, given its advantages in low cost labor and land. By the mid-1990s, most of Hong Kong's manufacturing had moved to the Pearl River Delta and other Mainland regions. The enormous profits due to reduced cost of manufacturing on the Mainland were repatriated to Hong Kong. Because of a lack of opportunities for investment into new manufacturing and technology sectors in Hong Kong, most of these funds, together with capital inflows from the Mainland, were poured into service industries catering for Hong Kong's local consumption (chiefly real estate and financial services such as stock trading). In order to support expanded manufacturing now relocated to the Pearl River Delta, manufacturing support services grew in Hong Kong, resulting in incredible growth of its services industries and widening gap in the growth rates of manufacturing and service sectors.

Such economic development and attendant change in social structure prompted the rise of the Hong Kong's middle class. The formerly labor-intensive industries in Hong Kong had begun to be replaced by capital- and information-intensive industries roughly in the 1970s. Meanwhile, tourism, financial services and logistics industry quickly advanced. On top of these, government began to play an active role in the provision of education, housing, health care, social benefits and other areas, resulting in rapid expansion in the occupations of professional, technical and administrative

personnel, social workers, doctors and lawyers.⁹

In 2012, the output of modern service industries accounted for 93% of Hong Kong's GDP. In the move toward a post-industrial society, Hong Kong's economy became more service-oriented, with a continuous decline in relative share by manufacturing. In his 2009-2010 policy address, Hong Kong's Chief Executive proposed that given the priority of economic development, "Hong Kong must constantly enhance its competitiveness and continue to evolve into a high value-added, knowledge-based economy to maintain its leading edge over global competitors and create more quality jobs." He defined four traditional pillar industries, namely financial services, tourism, trading and logistics, and professional services. He also called for development of "six industries where Hong Kong will have clear advantages". They are education services, medical services, testing and certification, environmental industries, innovation and technology, and cultural and creative industries.¹⁰ According to 2011 statistics, 32.68% of Hong Kong's workforce received vocational diplomas or higher qualifications, 32.85% senior high school diplomas, 17.22% junior high school diplomas, and 17.18% primary schooling or no education. The education level of the workforce as a whole was slightly lower than that in Taiwan. The six industries that Hong Kong aims to focus are all professional services and high and new technology sectors such as education, medical services and environmental industries, which are what Bell stressed as decisive sectors, demanding increasingly larger numbers of high-caliber talents.

2.2.3 Education level of Taiwan and Hong Kong workforce

The industrial structures of Taiwan and Hong Kong determined their respective structures of workforce participation. Given the focus on developing information-intensive, capital-intensive and technology-intensive industries, high-tech and service industry jobs are prevalent in the employment profile of the two regions. The higher requirements for technical competencies of these jobs have also led to an overall, relatively higher level of education attainment of their workforce. According to 2011 statistics published by the "National Statistics of the Republic of China" website, workforce in highly professional and skilled occupations tended to have higher educational attainment. In educational services, 86.96% of the workforce attained college diplomas or higher; in information and telecommunications, 84.86% attained the same, and in financial and insurance services, healthcare and social work, and professional, scientific and technical services, more than 75% attained the same.¹¹ As these industries require a high level of professional or technical competencies, there is naturally a prevalence of employees with higher educational attainment. For agriculture, forestry, fishing and animal husbandry, most of the employees have a relatively low level of educational attainment with high school diplomas or lower qualifications. For goods-producing industries, given Taiwan's focus on high-end manufacturing, the percentage of employees with college diplomas or higher qualifications reached a notable 37.8%.¹²

According to 2011 Census results released by the Hong Kong Census and Statistics Department, in the labor force participation structure, there is a concentration of people with high educational attainment in sectors such as education (73.43%), professional, scientific and technical services (67.02%), information and communications (66.62%), and financial and insurance services (64.24%). The figures indicated that >70% of workforce in education attained college diplomas or higher qualifications, and >60% in the remaining three sectors attained the same.¹³

Over the past few decades, both Hong Kong and Taiwan experienced the rise of their manufacturing industries and then the major shift in industrial structure following outbound relocation of their manufacturing base. Today, Hong Kong and Taiwan exhibit typical features of a post-industrial society, with large parts of their labor forces moving into high and new technology industries following structural shift and upgrading. In their respective restructuring processes, Taiwan focused more on high-end manufacturing and high-tech industries whereas Hong Kong on financial and other modern services industries. Both high-end manufacturing and modern services industries require highly qualified professional workforces, with mandatory requirements for

educational degrees, diplomas, accreditation, licensing, and professional competencies. Therefore, the average levels of educational attainment of their workforces are high. Gearing toward the future, governments of the two regions are committed to further promoting the high-tech and professional services industries, attracting highly educated professionals. Supported by appropriate industrial policies and talent development strategies, the average educational attainment of the workforces of the two regions will continue to rise.

III. An Analysis of the Current Class Structure of the Macao Society

3.1 The important role of the gaming industry

The gaming industry occupies a very important position in Macao's economic structure. According to 2009 statistics concerning its industrial structure, the output of Macao's secondary industry accounted for 11.04% and the tertiary industry 88.96% of total output while that of the primary industry was negligible and not separately reported. The gaming industry has made great contributions to the local economy with gross revenues reaching MOP269.06 billion in 2011, accounting for 92.1% of the local GDP, and paying a total of MOP99.66 billion in gaming taxes, accounting for 81% of government revenues.¹⁴

According to data from the Macao Statistics Bureau, over the period of 2000-2011, total employment in Macao registered continuous year-on-year growth. The size of total employment in 2011 was twice as large as that in 2000 when Macao was yet to recover from its economic slump. In keeping with economic indicators of post-industrial society, there has been a shift in Macao workforce from goods-producing to services-producing industries, and from manufacturing to service sectors. Over the same period, the size of workforce in manufacturing shrank by more than half while that in other industries registered growth, with the most notable growth in entertainment, gaming and other services. The total number of employees in these sectors rose from 21,500 in 2000 to 82,000 in 2011, which was a positive result of rapid expansion of the gaming industry clearly benefiting from the policy adopted in 2002 for liberalizing gaming concessions. Starting from 2004, new gaming establishments that were granted casino operating concessions opened in succession, resulting in a sharp upward curve in employment growth of the sector. Employment statistics for the gaming sector began to be available from 2004 onward. Over the eight-year period of 2004-2011, the number of people employed in the gaming industry more than tripled (rising sharply from 22,900 to 70,100). Boosted by the buoyant gaming industry, Macao's tourism, entertainment and commerce also enjoyed a boom. For the past decade or so, the number of people employed in hotel and restaurant businesses more than doubled (rising from 21,100 to 46,100), with the most significant rise starting in 2004. Related industries that experienced considerable employment growth include construction (rising from 16,200 to 28,200), and wholesale and retail (from 30,100 to 43,400), because of increased construction and inbound tourism due to expansion of the gaming industry.¹⁵

3.2 Impact of the gaming industry on Macao class structure

In the early years after return of Macao, gaming was already Macao's most important industry, which began vigorous growth after adoption of the policy in 2002 for liberalizing gaming concessions, which was supported by the launch of Individual Visitor Scheme for mainlanders travelling to Hong Kong and Macao resulting in a huge jump in the number of inbound tourists. Over the past decade, the flourishing gaming industry has become a dominant player in Macao economy and a major provider of employment.

By comparing workforce educational attainment in Taiwan, Hong Kong and Macao, we may find that the level of educational attainment of employed population in Macao is relatively lower

than that in Taiwan and Hong Kong. There are fewer people with college diplomas or higher qualifications, and more with primary school or less education, in Macao than in Taiwan and Hong Kong. This was caused by the differences in economic, political and cultural development in the three regions over time. In Macao, people with higher qualifications are mostly in education (72.58% having post-secondary qualifications) and healthcare and social welfare sectors (62.35% having post-secondary qualifications), whereas in other sectors only less than 6% of employees have post-secondary qualifications.¹⁶

It is worth noting that Macao's economic takeoff over the recent years was driven by the liberalization of gaming industry that propelled the post-industrial shift in Macao. Unlike in Taiwan, Hong Kong and other places where the development of information, capital and technology-intensive industries in the post-industrial society required better-trained employees, the gaming industry in Macao created mostly semi-professional jobs that do not require high technical competencies. In Taiwan, 27.54% of the employed population work in the manufacturing industry, 42.66% of whom have college or higher degrees, as Taiwan's manufacturing industry has become technology-intensive. In Hong Kong, 22.7% of all employed persons are in import and export trade and wholesale and retail sectors, which employ the most people of whom 29.59% have college or higher degrees, whereas in Macao, only 18.29% of all employed persons in the entertainment, gaming and other services sectors, which also employ the most people, have college diplomas or higher qualifications.

The gaming industry has had a tremendous positive impact on employment in Macao. Before the reunification, Macao's economy was in a dire situation with unemployment rate being as high as 6.3% in 1999. With liberalization and subsequent expansion of the gaming industry, the unemployment rate came all the way down, to as low as 2.1% in the second quarter of 2012, indicating almost full employment of the working population. The development of Macao's gaming industry transported Macao into a new stage of development. However, we must also recognize that post-industrial development in Macao heralded by the gaming industry is still rather rudimentary in the strict sense of the post-industrial concept. In modes of production, Macao has transitioned from a goods-producing economy to a service-rendering one. However, in occupational structure, the class of professional and technical workers is still not dominant. According to statistics for the second quarter of 2012, professionals, technicians and associate professionals accounted for only 14.67% of the employed population.¹⁷ Of all employed persons in the gaming industry, 36.13% have high school diplomas, 31.42% only junior high school diplomas and fewer than 2% have college diplomas or higher qualifications. Of all job vacancies in the gaming industry listed in the second quarter of 2012, 62.3% required only junior high school or lower education qualifications and only 16.6% required higher education qualifications.¹⁸

Given the relatively low educational attainment of employed persons in Macao, vs. those in other regions, which has made them relatively disadvantaged in competition for jobs, the government has always acted with a mindset for protecting local employment, fully acknowledging such disadvantage. It has never budged on the restriction regarding job positions of casino dealers and bus drivers, which are open only to local residents, despite workforce shortage resulting from gaming industry expansion. The positive impact of the gaming industry in Macao which has provided jobs, though semi-professional or semi-skilled, for local workers who do not have high academic qualifications or professional skills, thus improving their standard of living and creating near full employment for the populace, is worthy of due recognition.

IV. Some Thoughts on the Study of the Macao's Middle Class

4.1 An attempt at understanding of Macao's middle class

For positions that are impacted by workforce shortage such as that of casino dealer, the government has never relaxed its requirement for recruiting local residents only. Such measure of exclusion has given rise to economic rent, pushing up wage levels.¹⁹ Because of such rent factor, those without high educational attainment and employed in jobs that do not require high professional competencies, and give them little control over work and work prestige, can enjoy relatively generous compensation. According to statistics for the second quarter of 2012, the average monthly wage of full-time employees in the gaming industry was MOP17,740 and that of dealers MOP15,810²⁰, while the medium monthly income of employed population at the same time was MOP11,000.²¹ In other words, the average income of full-time employees in gaming industry was 60% higher, and that of casino dealers more than 40% higher, than the median income of employed population.

At the end of 2011, the Center for Macao Development Strategy Research released a *Report Exploring the Current Status of Macao's Middle Class*, proposing that the definition of Macao's middle class should be based on local realities with primary consideration given to economic factors. It further suggested MOP10,000 as the minimum monthly income of a middle class individual, putting the percentage of middle class in total population at about 42.8%. It also proposed subdivisions for old, new and marginal middle classes.²² However, the report's views were not widely accepted and it even received quite a few negative reviews.²³ Some scholars pointed out that income should not be the only denominator of the middle class and more criteria should be considered.²⁴ Given such discussions, Ieong Wan Chong and other scholars proposed a "5-factors criterion" (income, profession, education, civic consciousness and way of like) and "8-factors criterion" (property, income, profession, education, civic consciousness, expense, feedback to society and affirmation by public)²⁵ in an attempt to arrive at more accurate descriptions of Macao's middle-class.

Because of the gap between income on the one hand and qualification requirements, working condition and occupational nature on the other, many Macao residents whose income levels meet the MOP10,000 criterion do not think that they belong to the middle class. According to a survey conducted by the Union of Macao Scholars in 2012, the largest group of respondents (19.83%) believed that threshold of middle class income should be between MOP10,000-15,000, which was followed by the next group (17.31%) who chose a higher range of MOP15,001-20,000. In other words, more than 30% of Macao residents regarded the income of casino dealers as that of the middle class, and 28.53% of respondents thought casino dealers belong to the middle class. However, only 10.81% of casino dealers regarded themselves as belonging to the middle or upper middle class and 89.19% thought they were lower middle class or at the bottom of the society.²⁶

The discrepancy between occupational prestige and income is not uncommon. Take a study in the United States for example. Federal government ministers enjoy much prestige, but their salaries are lower than civil engineers and accountants who however have lower occupational prestige by comparison.²⁷ Thus, the gap between income and occupational prestige is not peculiar to Macao. The notion of class can be laden with complex implications and give rise to varying interpretations. It is often riddled with ambiguity in colloquial or academic use. The broad masses as members of a society tend to disagree with groupings imposed on them by academics, out of self-perception and consciousness, which is not strange.²⁸ Because of complexity of human society, the study of social class can be rife with difficulties, which, however, should not lead us to conclude that the time is not right for discussing Macao's middle class. We can arrive at a more appropriate understanding of class stratification in Macao through comprehensive analysis of economic and social aspects of life of Macao residents.

4.2 Optimizing industrial structure and achieving optimization of class structure

Like Taiwan and Hong Kong, Macao is also going through the post-industrial process. At the present, however, jobs in Macao's gaming industry mostly require low educational qualifications and technical skills, which is rather in keeping with Macao's workforce composition with the majority having low educational attainment anyway. The industry has helped greatly reducing the unemployment rate. In order to enhance the quality and educational attainment of the population, Macao government and different community organizations have made a number of recommendations. In 2011, the Macao SAR Government gave out an allowance MOP5,000 for continuing education to each Macao resident. In 2012, the Government gave MOP2,000 to each college student in Macao to buy stationeries, in a gesture of concern and care for students pursuing higher education. In August 2012, the Legislative Assembly adopted an act for *Conditions for Entry into, Staying and Gambling in Casinos*, banning people under 21 of age from entering and working in casinos. All these government measures were designed to enhance overall quality of Macao residents. However, educational attainment of the population cannot be easily raised within a short period of time. While those with only high school diplomas remain the mainstay of Macao's workforce over the short term, the regime for protecting employment of local residents should not be simply relinquished.

Class structure of a society corresponds to its industrial structure. From a long-term perspective, optimizing industrial structure of Macao is the only viable path to continuous optimization of class structure of the Macao society. Government's task is therefore to ascertain direction for structural optimization, propose clearly formulated industrial development plans, design an implementation roadmap and ensure implementation, after rigorous research and scientific evaluation of options. It is also necessary to adopt targeted educational policies and train relevant personnel for designing and eventually spearheading the structural optimization of Macao's economy.

In addition to providing a large of number of semi-technical jobs for casino dealers, attendants and drivers, the gaming industry also require many professionals in management, accounting, administration, IT, engineering, actuary, etc. Well-planned training for local talents to match these professional positions will also support structural optimization of the Macao economy. Gaming as a modern service industry is at the one end of industrial value chain with impact on many high and new tech sectors. In line with the Hengqin development strategy, Macao will "foster a cluster of high-tech firms focused on developing application technologies and major products with technological innovation at their core." Given needs of casino operations, there is development potential in Macao for the manufacturing and maintenance of large-scale monitoring systems, monitoring devices, gaming equipment, and electronic gaming equipment. The gaming industry can enable development of high-end manufacturing and high-tech industry in Macao. In sum, the gaming industry encompasses gambling, tourism, recreation, entertainment, etc., which can not only boost services industries such as conferences, trade shows, retail, hotels, manufacturing, etc., but also provide leverage for development in other sectors, altogether contributing to continuous optimization of the industrial and class structure of the Macao society.

In addition, there is also a need to focus on improving career advancement opportunities for local employees. In the early stages of its development, the gaming industry hired most of the middle and senior management personnel from outside Macao, due to the limitations in level of local development and talent pool. Thus, foreign employees have long held most middle and senior management positions. It has been 10 years since the liberalization of the gaming industry with many local employees acquiring a certain level of experience and professional competencies. However, a study has shown that foreign managers who formed the mainstay of middle and senior management of gambling establishments have hindered promotion of locals.²⁹ Many enterprises have long hired expatriate managers for middle and senior level management positions, and rarely

promoted local employees, entrenching the notion that local employees are not as capable as professionals brought in from outside Macao.³⁰ In order to allow upward mobility of local residents employed in the gaming industry without hindrance, the government must ensure that they have equal opportunities for employment and career advancement. It is necessary to enhance supervision and the level of control over promotion of local talents by casinos, which in turn should seriously fulfill their social responsibility, make good on their promise for promoting local talents and add more local management. This will ensure that local residents can also share the fruits of economic development, one of them being elevated social status, and help achieve optimization of class structure of the Macao society.

V. Conclusion

In the development of post-industrial society, the increase of middle and high-level technical personnel can occur alongside the expansion of the lowly paid workforce with low technical skills. This was what happened in the United States in the 1980s when a large number of low-wage, low-skill service jobs were created alongside enhancement of overall technical competencies of American workers.³¹ In Macao, the services industries, with gaming as the dominant player, saw parallel increases in the numbers of highly professional, high-skill jobs and low-skill jobs requiring low professional qualifications, which was made possible by allowing immigration and bringing in non-resident workers.

A post-industrial society does not rule out the possibility of such divisive class gap: increasing income disparity between workers possessing technical assets and non-skilled workers. The attention given by various parties to the study of Macao's middle class, as the "class in between", has been prompted by the public concern for their declining quality of life, degradation of their social status and widening gap between the rich and poor, amidst soaring inflation and skyrocketing property prices. To tackle this potential quagmire, it is necessary to proceed from a holistic consideration. The government should aim to create diverse job opportunities, reduce barriers to upward mobility of local residents, and optimize economic structure through restructuring. In addition, this holistic approach should also be closely linked with other policies covering population, labor, social security, education, etc. Fortunately, the Macao SAR Government, given its sufficient understanding of the importance of these issues, has put on its agenda issues including appropriate diversification of economic structure, study of the middle class and double-tier social security. Understanding of the class structure of the Macao society and condition of the middle class is only a means while enhancing the overall wellbeing of all Macao residents should be the goal. The author is convinced that the optimization of both economic and class structures of the Macao society can be achieved in not too distant future, given serious studies and unremitting efforts by the Macao SAR government and various sectors of the Macao society.

Notes:

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 - ³ *Ibid.*
 - ⁴ *Ibid.*, 15.
 - ⁵ Hsu Cheng-Kuang (1989). Political Economy of the Rise of the Middle Class. In Hsin-huang Michael Hsiao (Ed.)

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- ⁷ See posting on the website of Taiwan's Council for Economic Planning and Development of the Executive Yuan: <http://www.cepd.gov.tw/m1.aspx?sNo=0001546>. 16th September 2012.
- ⁸ For educational attainment and age data for Taiwan's workforce, see the website of National Statistics of Republic of China (Taiwan): http://www.dgbas.gov.tw/dgbas04/bc4/manpower/year/year_t23-t70.asp?table=26&yearb=100&yearc=100. 14th September 2012.
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- ¹² *Ibid.*
- ¹³ See census results in website of the Hong Kong Census and Statistics Department: <http://www.census2011.gov.hk/tc/main-table/C131.html>. 16th September 2012.
- ¹⁴ Data based on Statistics and Census Bureau of the Macao SAR (2012). *Macao Economic Bulletin* (Q1, 2012). (provisional data).
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- ¹⁷ *Ibid.*
- ¹⁸ Statistics and Census Bureau of the Macao SAR (2012). *Survey on Manpower Needs and Wages - Gaming Industry (Q2, 2012)*. Macao: Statistics and Census Bureau of the Macao SAR.
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- ²⁵ Jeong Wan Chong, Leong Sok Man, Chan Wai Ta and et al. (2012) *Social Structure Optimization and Accelerated Rise of the Middle Class*. Macao: Union of Macau Scholars. Chapter 6.
- ²⁶ *Ibid.*, data in appendixes.
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- ²⁹ See the article "Study Shows Middle and Senior Expatriate Management Blocking Promotion Opportunities of Local Employees" in the website of Federação das Associações dos Operários de Macau, <http://www.faom.org.mo/web/?action-viewnews-itemid-8621>. 11th October 2012.
- ³⁰ Author (2012). Total Number of Foreign Workers Expected to Rise above 110,000; Efforts to Quell Emotions against Foreign Workers. *Macao Daily News*. 5th September 2012. A10.

- ³¹ Block, F. (1990). *Postindustrial Possibilities: A Critique of Economic Discourse*. Berkeley: University of California Press. Berkeley. Quoted in Lin Thung-hong (2009). Post-industrializing Taiwan: Class Structure and Income Inequality, 1992-2007. *Taiwanese Journal of Sociology*. Number 43.