Integration and Enabling: Macao's Social Policy Shift during Post-Pandemic Era

Jierong Hu¹, Yanchong Peng² and Ka U Lao³

Abstract

The COVID-19 epidemic has had a great impact on the economies of various countries, and social policies are also facing a period of major adjustment opportunities. According to people's expectations, it is necessary to re-examine the supply mechanism of social welfare through social policy innovation. As a result of the epidemic, Macao's economic fluctuations are exacerbated and the government's fiscal revenue has declined. This has led to a certain degree of vulnerability in the social welfare system dominated by government financial investment, which directly affects the stability and sustainability of Macao's social policy system. Based on the challenges and countermeasures of the epidemic in Macao, this paper proposes that it is necessary to further integrate existing social policies, build a social safety net, strengthen investment in human capital, enhance residents' ability to resist social risks in pursuit of welfare, promote economic development through social policy adjustment to balance government-market-individual welfare responsibilities, establish sustainable social policies, and push for high-quality social development.

Keywords: New Social Risks, Positive Social Policy, Integration and Enabling, Sustainable Development, Macao

INTRODUCTION

Since the global pandemic of COVID-19, it has been an unprecedented challenge for countries around the world that are deeply involved in the global financial crisis. Most countries have had to adopt travel restrictions and blockade policies, which seriously affect economic activities under globalization and greatly change people's lifestyles (World Bank, 2020). Under the impact of the epidemic, social policies are facing a significant period of adjustment opportunities. It is necessary to re-examine the supply mechanism of social welfare and respond to people's expectations of social welfare during the epidemic through innovation in social policies (Mok, Ku & Yud, 2021). Although Macao has received less attention in the study of the productivist social welfare regimes in East Asia, Macao has established a relatively high level of welfare society and the residents' happiness index has significantly improved (Zeng & Zhang, 2010; Macao Economy Association, 2014). Faced with the challenge of new social risks such as COVID-19, Macao's social welfare system, which focuses on government financial input, is vulnerable to some extent. In particular, the epidemic has led to increased economic fluctuations and unstable government revenue, which directly affects the stability and sustainability of Macao's social policy system. How to maintain a high level of social welfare for Macao? This article analyzes the response strategies during the epidemic in Macao and argues that it is necessary to shift towards active social policies to promote economic development, improve the ability of residents to resist social risks and balance the welfare responsibility of the government, market, and individuals.

RESEARCH METHODS

This study attempts to analyze the impact of the COVID-19 epidemic on Macao's social policies and the government's response measures. Our analysis explains the fragility of government fiscal welfare, which affects social policy sustainability. We examine policy responses to the economic downturn during the COVID-19 pandemic, primarily by collecting government open data, with a focus on government open data statistics and government stimulus measures. Publicly available statistics show changes in Macao's economy, especially the economic downturn affecting government fiscal expenditures and space for economic policy adjustments. During the epidemic, the Macao government adopted three rounds of economic stimulus measures to stabilize...
social and economic development, ensure that the social welfare of residents remains at the level before the epidemic, and at the same time adopt a series of new measures to stabilize the employment and life of vulnerable groups. Therefore, we will analyze the response measures during the epidemic, especially the measures related to employment and social welfare to analyze the shift of Macao's social policies in the post-pandemic era.

COVID-19 Epidemic and Countermeasures in Macao

Macao is a tourist city primarily focused on gaming which has become known worldwide as the "Gaming capital of the world" or "Monte Carlo of the Orient" (VOA, 2007; BBC, 2015). In 2019, the number of tourists entering Macao reached 39.4 million, setting a record for tourists. From 2015 to 2019, the number of tourists remained above 30 million, which has driven the rapid development of the gaming industry in Macao, and the gaming tax and the government's fiscal revenue have increased significantly (Figure 1). In 2018 and 2019, Macao's per capita GDP reached US $80000, ranking third in the world (World Bank, 2018, 2019).

![Figure 1: Comparative chart of tourist, gaming tax and revenue trends.](image)

**Figure 1:** Comparative chart of tourist, gaming tax and revenue trends.


Since the first case of COVID-19 infection occurred on January 22, 2020, Macao has adopted different levels of prevention and control measures to fight back the spread of the epidemic in the community, including 14-day quarantine medical observation for immigrants, mask orders, social distance restrictions, vaccinations, nucleic acid testing, suspending the schools and work, shutting down the entertainment venues such as casinos, and relatively static social management to restrict the flow of people when the epidemic is severe. The number of tourists in Macao has decreased sharply, which has a greater impact on Macao's economy. From January 8, 2023, following the adjustment of the COVID-19 prevention and control measures in mainland China, Macao canceled some epidemic prevention and control measures and gradually returned to normal life order.

The epidemic has had a profound and far-reaching impact on the social and economic development of Macao, mainly in the following aspects:

Macao's economy has been severely affected. Under the impact of COVID-19, Macao's GDP in 2020 was 204.4 billion patacas, a real contraction of 54% compared with 434.6 billion patacas in 2019. In 2021, it was 239.4 billion patacas. The first three quarters of 2022 were 177.2 billion patacas, and Macao's economy contracted by 26% in real terms on an annual basis (DSEC, 2021, 2022). The deepening of the decline was mainly due to the widespread epidemic in communities and the adoption of relatively static social management measures in June 2021, which further weakened overall demand and exacerbated the impact of the epidemic on Macao's economy.

The gaming industry's revenue has declined. The gaming industry is the pillar industry in Macao (Sheng & Gu, 2018; Hao, Sheng & Pan, 2017). Since the opening of the gaming license in 2002, Macao's economy has developed rapidly, with a significant increase in gross gaming revenue. The gaming revenue was 23.496 billion patacas in 2002, and in 2013, it reached a peak of 361.866 billion patacas. Before the outbreak of the epidemic, the number of tourists in 2019 was 293.312 billion. However, after the outbreak, the number of tourists sharply decreased to 5.8968 million in 2020, and the gross gaming income rapidly decreased to 61.047 billion patacas. In 2021, it was 86.8 billion patacas, and in 2022, it was 42.2 billion patacas, a decrease of 51.4% (Gaming Inspection and Corporation Bureau, 2020, 2021, 2022). The decline in gaming revenue directly affects the government's fiscal revenue, and the disadvantages of a single-pillar industrial structure have emerged.
The government's fiscal deficit. 90% of the government's fiscal revenue comes from gaming tax, and the accumulation of fiscal reserves is tied to gaming revenue. Before the flood of the epidemic, the total government financial reserves reached 579.4 billion patacas at the end of 2019, of which basic reserves reached 148.9 billion patacas and excess reserves reached 430.5 billion patacas. At the end of 2021, the total amount of fiscal reserve capital was 643.2 billion patacas which includes the basic reserve of 139.1 billion patacas and the excess reserve of 504.1 billion patacas (Macao Monetary Authority, AMCM,2020,2021,2022). To deal with the epidemic the budget for fiscal deficits in 2020 and 2021 reached 88.7 billion patacas, 30.3 billion patacas in 2022, and 35.6 billion patacas in 2023. The fiscal deficit gap will be filled by fiscal reserves.

Residents' lives have been severely affected. Small and medium-sized enterprises are facing difficulties in operation. Some tourism industries have closed down. The gaming industry has also experienced layoffs. The majority of residents are under great pressure in employment and life, and the unemployment rate of residents has risen. The unemployment rate of residents is around 2.3% in 2019, rising to 3.6% in 2020, 3.9% in 2021, and 5% in 2022. The median monthly employment earnings of residents have declined from 20,000 patacas before 2020 to 17,000 patacas in the third quarter of 2022 (DSEC, 2020, 2021, 2022).

In response to the impact of the epidemic on the social economy and the daily life of residents, the Macao government has adopted three rounds of economic assistance measures under the policy goal of "protecting employment, stabilizing the economy, and caring for people's livelihood". In February 2020, a special fund for anti-epidemic assistance of 10 billion patacas was passed to expand assistance to residents, employees, and enterprises. The measures include: reducing taxes and fees to mitigate the burden on enterprises, and residents; promoting assistance and interest for small, and medium-sized enterprises subsidies to support the survival of enterprises; strengthening livelihood measures to support vulnerable families; improving skills training and implementing work-for-relief to ensure the jobs of wage earners; issuing electronic consumption benefits plan for residents to speed up the economic recovery (Macao Ten Billion Anti-epidemic Assistance Fund Plan, 2020). The second round of measures was announced on April 8, 2020. The assistance measures undertaken by the 10 billion anti-epidemic assistance fund include the aid payment plan for employees, freelancers, and business operators, the bank loan interest subsidy plan for freelancers, and the vocational training program with subsidy, the local tourism project "Starting from Heart-Visiting Macao" and the promotion plan of "Expanding Tourists-Invigorating the Economy", the second consumption benefits plan for enterprises and freelancer providing comprehensive supports (Macao's Second Round of Ten Billion Anti-epidemic Assistance Fund Plan, 2020). In response to the widespread of the epidemic in the community in June 2022, the government once again launched a new round of 10 billion anti-epidemic funds, covering a total of 9 measures in 5 aspects, including a new round of assistance funds for employees, freelancers, and business operators, optimized the vocational training program with subsidy, refund of house tax for industrial and commercial premises, exemption of tourism tax for all places, exemption or refund of administrative license fees, refund of the vehicle license tax for business vehicles, special interest subsidy plan for corporate bank loans, temporary subsidies for the taxi industry and city-wide consumer carnival, etc. (Macao Ten Billion Anti-epidemic Assistance Fund Plan, 2022).

The response measures taken by Macao during the epidemic have had three effects: Firstly, ensuring that the social welfare of residents is not reduced. Under the influence of the epidemic, residents are concerned that the government will reduce the supply of welfare after the economic recession, and they hold high expectations for social welfare. Under the call of residents, to boost the economy and restore social confidence, the government used the fiscal reserve fund for the first time. While maintaining the existing social welfare programs, the government increased economic assistance to employees, freelancers, and small and medium-sized enterprises affected by the epidemic through special fund for epidemic prevention. Secondly, the countermeasures stabilize the economy. To fight back against the epidemic, the government has taken many measures to stimulate the economy, such as the small and medium-sized enterprise assistance plan, increasing support for small and medium-sized enterprises, and providing direct economic assistance to operators. In the case of a decrease in
tourists, consumption subsidies are distributed to residents separately, benefiting various industries to varying
degrees, which directly gives impetus to the operation of small and medium-sized enterprises and merchants,
and achieves the goal of “promoting domestic demand, promoting consumption, protecting enterprises,
ensuring employment, and solving people's difficulties”. Finally, the employment of residents is guaranteed.
The government has increased subsidies for economic aid, unemployment benefits, etc., to assist families in
financial difficulties suffering from the epidemic. Launch a skills enhancement and vocational training program
for the unemployed, tour guides, taxi drivers, tour bus drivers, and exhibition industry practitioners, and expand
it to the groups such as fresh college graduates and working people to enrich employment skills through training
courses. In addition, the government urges and encourages large-scale enterprises to undertake social
responsibilities, ensuring priority and sustained employment for local employees, and increasing employment
opportunities through multiple large-scale infrastructure projects and work as the strategy of providing relief to
stabilize the employment of grassroots workers. At the same time, the government adds fuel to employment
services, providing employment matching for residents affected by the epidemic to lift their employability.

FINDINGS AND DISCUSSION

Vulnerability: The Challenge of Social Policy in Macao

Vulnerability research has become a hot issue and an important analytical tool in the study of global change
and sustainable development, to explore whether the response to fluctuations, pressures, and other
environments will become stronger or weaker (Chambers, 1989; Adger, 2006; Devereux, 2011). Macao's social
policies, which mainly focus on fiscal expenditure, are facing the issues of vulnerability to the new social risk
such as COVID-19.

During the epidemic, some countries and regions have adopted financial support measures to stimulate
economic recovery, including various fiscal strategies such as tax relief, direct benefits, and loan guarantees (Shi,
Chen & Park, 2022). Researches on the impact of COVID-19 show that governments have largely responded
within the frameworks of their existing systems and institutions (Cook & Ulriksen, 2021). With the policy goal
of "protecting employment, stabilizing the economy, and caring for people's livelihood", the Macao government
has adopted proactive fiscal measures to ensure that the social welfare of residents remains at the level before
the epidemic. At the same time, it increases financial support for residents affected by the epidemic, especially
vulnerable groups such as the elderly and children as well as informal employment. Those fiscal strategies are
useful to strive for the alleviated impact of the epidemic on the economy, society, and families, to maintain
basic social stability, and to build social confidence.

The risk of the epidemic poses serious challenges to the development of social policies in Macao, mainly
reflected in the sustainable development of social policies. Since returning to the motherland, Macao has
established a relatively complete social welfare system, implemented a welfare supply mechanism in which the
government bears the main financial responsibility, and embodied the characteristics of the productivist welfare
regimes in East Asia, such as government-led, economic development priority, social welfare attached to
economic development goals, etc. (Midgley, 1986; Holliday, 2000; Ku & Finer, 2007). Taking the social security
system as an example. The fiscal revenue of Macao's social security system mainly comes from the fixed
contributions of beneficiaries (employees, employers, and arbitrariness system contributors), shared revenue
(1% of the total recurrent revenue of the government budget), and gaming revenue allocations. In addition, to
maintain the operation of the pension fund, an additional 37 billion patacas was injected into the pension fund
from 2013 to 2016. At the same time, the government increases the proportion of funds allocated to the social
security fund from 60% to 75% of the annual 3% gross revenue from gaming operations. In 2019, a permanent
appropriation mechanism was established by law, and 3% of the balance of budget implementation after the
end of each fiscal year will be allocated to the pension fund as the annual income of the fund's budget to ensure
its continuous operation (Social Security Fund, 2020, 2021). From the perspective of the income ratio of the
social security system, the government's financial investment accounts for the vast majority, and has remained
stable at around 90% in the past decade, with a relatively small proportion of contribution income. The Macao
government's financial expenditure in the field of social welfare accounts for over 30% of the total government
expenditure. In areas such as education, healthcare, and social housing, the overall proportion of government
financial investment is also relatively high (Figure 2). The government undertakes the main fiscal responsibility for residents’ social welfare.

![Figure 2: Macao government fiscal expenditure 2021.](image)

Data Source : Statistical Yearbook 2021, Macao Statistics and Census Service (DSEC).

Moreover, the impact of the COVID-19 epidemic on the social economy has seriously affected the sustainability of social welfare dominated by government finance. The economic downturn has brought about a falloff in fiscal revenue, resulting in significant pressure on the government's welfare finance. The supply capacity of social welfare has significantly decreased, and the coordination between economic development and social welfare has become more prominent and urgent. Residents are living more difficult under the epidemic, with higher expectations for social welfare, resulting in greater welfare tension. In this context, the social security system that addresses various social risks to ensure income security highlights the importance of its safety net. New social risks such as aging, changes in family structure, non-standard and unstable employment structures, international economic linkage brought about by globalization, and public health have brought new challenges to the transformation and adjustment of social welfare policies in modern society (Mishra, 1981; Bonoli, 2005).

Although the multi-level social policies formed in Macao after the reunification have improved the level of social welfare coverage, social policies lack integrity and tend to be fragmented. For example, in the social security system, besides the basic pension, the income level of the elderly is also ensured through systems such as subsidy for senior citizens and wealth partaking scheme. Over the years, there have been many explanations of social welfare policy projects in government policy speeches, which have blossomed in many aspects and did not form a comprehensive social policy (Jam et al., 2019). For the welfare needs of residents, it is inevitable to form a situation where headaches and feet are treated, and the scattered society policies bring administrative costs and efficiency issues, which affect the overall effect of social welfare policies. In the face of major social risks such as the COVID-19 epidemic, when there is a lack of sufficient overall social support, residents are less able to resist social risks, and deeply feel the pressure of life.

Maintaining a high level of social welfare requires increasing financial support. Faced with economic fluctuations caused by new social risks and unstable fiscal revenue, the government’s financial responsibility for social welfare faces fragility and unsustainability. Macao’s social policies have exposed some profound problems under the test of COVID-19, which requires the adjustment of social policies to achieve sustainable development.

From the experience of the development of the Welfare state, in the face of cyclical economic crisis, high welfare is often considered to be an important factor hindering economic development. Whenever an economic crisis breaks out, the Welfare state introduces the market mechanism in the process of reviewing the existing social welfare policies and the social policy adaptation will be characterized by mechanisms of political exchange, compromise, and cross-class alliances (Bonoli, 2005). At the same time, social policies shift to require individuals to actively participate in market activities, lift personal responsibility through work welfare, eliminate individuals' dependence on national welfare, and reduce the pressure on government financial expenditure. Welfare-to-work policies are based on assumptions about how benefit recipients and employment advisers are motivated and make decisions (Wright, 2012). It has become an important trend of social policy innovations how to maintain the sustainable development of the economy while not reducing social welfare.
Under the new social risks, some researchers advocate that the government, the market, and civil society should complement each other, and establish a multiple model of welfare supply to meet the public welfare needs. Evers pointed out that the triangular model of the social welfare supply mechanism includes the government-market-individual (Evers, 1988; Gross, 1993). The theory of the "Third Way" advocates positive social policies, moving from a Welfare state to a social investment country, paying attention to human capital investment to achieve the goal of preventing social risks, and viewing social policies as a social investment behavior, which not only comprehensively improves the quality of labor force, but also pushes forward the sustainable development of society (Giddens, 2000). In dealing with the relationship between economic and social policies, researchers argue that social policies are no longer seen as economic vassals or drag on the economy, but rather focused on improving human capital, enhancing workers' skills and employability, and implementing social policy projects that promote economic development (Midgley, 2017). On the one hand, it can encourage individuals to take responsibility for social welfare; On the other hand, it achieves coordination between social policies and economic development. In short, active social policies provide a new theoretical perspective for the innovative development of social policies in Macao and provide a reference for the reform and improvement of Macao’s social policy in the post-epidemic era.

Integration: Constructing The Cornerstone of Sustainable Development of Macao’s Social Policies

Despite the high level of social welfare in Macao, the new social risk of COVID-19 shows that residents are still vulnerable to social risks in the face of social development. To be sure, income protection for wage earners remains a key function of our social protection systems (Bonoli, 2005). Therefore, income-based assistance feedback on people's basic social needs for survival, and the income-based social security system mainly reflects its cornerstone position in the social policy system (Abdoul-Azize & Gamil, 2021). The long-term mechanism of social policy in Macao aims to establish a stable and income-based social security system by integrating existing dispersed social policy projects with income security as the core to form a systematic social policy system. The social policies shift to intensify the income maintenance function of the social security system and underpin the social safety net.

Improving the social insurance system with pensions as the core. The trend of aging has become an urgent issue in Macao. The 2021 census data shows that the proportion of the elderly population in Macao has jumped from 7.2% in 2011 to 12.1%. From the perspective of Macao’s social security system, under the assumptions such as the population model used in the relevant calculations and the income estimation data of the pension fund, it will start to record negative growth in 2041 at the earliest, and the total asset value will be negative in 2059. Therefore, consolidating the pension system in the social insurance system is an important issue to ensure the sustainable development of social policies in Macao. According to the insurance principle of risk responsibility sharing, social policy should balance the responsibilities of the government, market, and individuals in the social insurance mechanism, appropriately increase the pension contribution level of individuals and employers while improving pension, hedge the risks brought by the instability strip of government financial allocation, and effectively support the sustainability of social fund operation. At present, the maximum monthly pension in Macao is 3740 patacas, but the monthly contribution amount is only 90 patacas. If the monthly pension amount needs to be raised to the minimum subsistence index of 4350 patacas, the contribution amount needs to be correspondingly raised to 763 patacas per month to maintain the sustainable development of the system and reflect the reasonable shared responsibility of the holders. The government pointed out that it is necessary to obtain social consensus for such a large amount of contribution adjustment. Although it is difficult to achieve an increase in contributions during the process of economic recovery, increasing contributions should be an inevitable choice to ensure the sustainability of its system in the long run, just like the constant adjustment mechanism of financial allocation and payment. Gradually establish a constant adjustment mechanism for contributions, while improving pension benefits, appropriately increase the level of individual and employer pension contributions, expand individual and social responsibility, and reflect the principle of risk sharing that social insurance itself should have to achieve the sustainability of the bottom-up function of the social insurance mechanism.
Actively promoting the coverage of the Non-Mandatory Central Provident Fund (NMCPF) system and playing its supplementary role in Macao. From the experience of other countries or regions, the provident fund system is also an important pillar of pension security. For example, most OECD countries adopt the three-pillar pension model of public pension, occupational pension, and individual voluntary participation pension to reasonably share the pension responsibilities of the state, employers, and individuals. In 2021, the average replacement rate of pension funds in OECD countries reached 57.5% (OECD, 2021). Calculated based on the median monthly income of Macao residents in 2021 of 20000 patacas and a pension of 3740 patacas, the basic pension replacement rate is only 18.7%. According to the monthly income of the elderly in 2021 of 5600 patacas (including basic pension, subsidy for senior citizens, and wealth partaking scheme), the replacement rate is about 28%. On October 29, 2021, the review report of Macao's NMCPF pointed out that, taking into account the factors of COVID-19, it was suggested that the government could implement the mandatory central provident fund system in 2026 or 2028 depending on the economic recovery. Why Macao's NMCPF has changed into a mandatory one? The reason lies in the fragility of the foundation of the double-layer social security system. Given the low proportion of employees and employers in the NMCPF system at present, individuals and employers can be encouraged to join the NMCPF through government financial support, tax relief, and other measures to improve the coverage of the system, reinforce the residents' employability and level of pension security, and further balance the responsibilities of the government, market, and individuals in the social security system.

Integrating Macao's dispersed social policy projects into the pension fund. Macao has developed many social welfare programs in the form of cash assistance such as subsidy for senior citizens, wealth partaking scheme, and the special allocation from budget surplus into pension accounts, embodying the cash assistance functions of such policies. The essence of such policy projects is to safeguard and maintain people's income levels. Through integrating the dispersed social policies based on cash assistance, administrative costs and efficiency can be reduced, while effectively solidifying the pension security of pension accounts.

Reinforcing the integration of financial welfare. Implicit social policy widely exists in the social welfare system (Mann, 2005). Due to the multiple goals of some public policies, it can indirectly improve the effectiveness of social welfare while achieving other policy goals. According to Titmuss, social welfare is just the tip of the iceberg exposed in financial welfare, and many social welfare are achieved through financial welfare (Titmuss, 1974). Based on this perspective, the water and electricity charges subsidy scheme and various tax incentives implemented by the Macao government are important financial welfare for residents. For example, the professional tax refund scheme includes certain tax incentives and exemptions for employers who hire disabled individuals and those over 65 years old. These financial welfare are linked to residents' work and employment, which can implicitly increase residents' income, stimulate employment, and cut down welfare dependence. Therefore, through the integration of social policy projects, it will integrate decentralized financial welfare into the social security system, further consolidate and intensify the basic functions of Macao's social security system, reasonably share the responsibilities of the government, market, and individuals, alleviate the instability of government financial investment under economic fluctuations, and ensure the sustainable operation of the Pension fund.

Empowerment: Enabling Residents for Social Welfare

In active social policies, whether it is a social investment or development-oriented social policies, the fundamental goal is to reinforce the ability of individuals in the market to resist social risks and obtain social capital to meet survival and development needs through their abilities. In this process, the government still plays a leading and guiding role, encouraging and creating opportunities for people to participate in market competition and assume corresponding social welfare responsibilities. Empowerment means that the focus of social policies is on improving the development ability of individuals and families in the market, promoting residents to rely on growing their abilities to improve their quality of life through participating in social processes, reducing dependence on government welfare, and enhancing their ability to resist risks and access social resources.
Although Macao has developed comprehensive social policies since its return, these are generally based on income, which means more financial subsidies are provided to residents from the perspective of income. Most social welfare projects cannot do without direct government benefits or economic assistance. Those assistances are generally provided through cash remedial measures after the occurrence of social risks to maintain an appropriate standard of living for residents. However, with the improvement of Macao's social development level and the goal of building a world tourism and leisure center, livable international cities focus on improving the quality of life for residents. Therefore, the direction of social policy in Macao should be based on the concept of social investment to consolidate capacity, bolster the ability of individuals to participate in society, contribute to the coordinated development of social policy and economy, and achieve high-quality development of society as a whole. In 2010, the Macao government launched a continuing education development plan to encourage residents to lifelong learning and improve their professional ability. Measures such as the stipend training program launched during the epidemic provide skills training for residents with relatively low employability, helping them acquire skills, and re-employ, which also reflects the government's social policy shifting to an active employment policy.

Broadening investment in human capital and upgrading the education level of residents. Everyone knows that education has an impact on income, but what is the specific impact? The social rate of return to education is an important indicator that measures the percentage of income increase for each additional year or stage of education. Joshua D. Angrist, the Nobel Memorial Prize in economic sciences in 2021, found in his research that, having an extra year of education itself has a positive impact on a person's future income level, which is not caused by other factors, but purely by the returns brought by education. People who receive 12 years of education have a 12% increase in income compared to those who receive 11 years of education, and those who receive 16 years of education have a 65% increase in income compared to those who receive 11 years of education (Acemoglu & Angrist, 2000). Their research shows the importance of education in improving human capital. In terms of the education status of Macao residents, 30.9% of the local population aged 15 and above had higher education qualifications in 2021. According to the statistics of major subjects in higher education, the subjects that the most people study are business and administration, accounting for 30.5%. The other subjects are humanities and language, as well as tourism, hotel, and catering service courses, accounting for 9.0% and 8.4% respectively (DSEC, 2021). It can be seen that the education level of residents is relatively low, and their majors are concentrated in humanities and business. The economic structure of Macao is mainly based on gaming industry. The education level of gaming industry employees is relatively low, but their salary level remains at a moderate level, which has a certain attraction for the employment of residents. The drawbacks of a single-pillar economic structure in Macao under the epidemic indicate that moderately diversified economic development is an inevitable trend. The industries where residents are employed will cover more emerging or high-tech industries, requiring a more diverse reserve of knowledge and skills. In the process of economic restructuring, it is necessary to further hoist the resident's education level, increase investment in education welfare, and guide residents to upgrade their educational level according to the needs of social development. At present, Macao residents have a relatively high level of educational welfare through 15 years of free education and various educational subsidies. However, the government should take more powerful incentive measures in residents' higher education to encourage and support residents to improve their academic qualifications. Whether they receive higher education in Macao or overseas universities, or whether they return to Macao for employment after completing their studies, they can receive government educational subsidies. Further incentive measures can also be taken to attract talent to return to Macao, truly reflecting investment in the human capital of residents and cultivating more talents for the diversified development of Macao's economy.

Implementing active employment policies. From the experience of OECD countries, active employment policies are beneficial to work welfare, encourage people to actively participate in the labor market, elevate their responsibilities, and obtain social welfare (OECD, 2020). After the epidemic, Macao should adopt an active employment policy, advocate investment in human capital, encourage lifelong learning, give a boost to employment training for residents for nourishing work skills, lift residents' competitiveness and employability in the labor market, and lessen welfare dependence to improve the government's financial pressure in the field of social welfare through regular training with subsidy and continuous learning development plans.
Give new energy to invest in children. Active social policies emphasize the concept of social investment, and social welfare resources are mainly used to reinforce human capital and competitiveness. Social policies for investing in children ensure fair growth opportunities for children, providing them with fair education, nutritional health, and friendly family support, which is conducive to cultivating high-quality successors for the working population. The Child Development Account is a common measure for the concept of building children’s assets (Sherraden, 1991). Currently, major OECD countries implement child savings accounts. For example, the UK established the Child Trust Fund (CTF) in 2003, and since April 2005, the government has provided accounts for newborn children with at least £250 in open deposits, allowing parents to make additional deposits. The account funds are used for children’s college tuition fees or purchasing houses when they reach adulthood (CTF, 2003). It can be seen that the Children's Development Account aims to build assets and accumulate assets for important needs in the process of children's development through the Children's Savings Account to combat the risks faced by children's growth. According to the experience of these countries and regions, it is a helpful policy for the Macao government to establish personal development accounts for children. Through government matching funding, parents are encouraged to inject funds into the children's accounts. The funds accumulated in the accounts are used for children's education, entrepreneurship, housing purchase, and other needs as adults. Conforming to the local population statistics of Macao, there are approximately 120000 people under the age of 18. Based on the government's annual quota of 5000 patacas per year for each child account, the government has invested approximately 600 million patacas every year. The accumulated funds in children's accounts can reach 180000 patacas by the age of 18, and with the addition of the wealth partaking scheme of 10000 patacas per year, the total amount of personal accounts can reach up to 360,000 patacas at the current level. This not only avoids the interruption of education due to economic reasons during children's growth but also greatly improves children's asset capacity after adulthood, ensuring their asset disposal rights after adulthood, empowering children with more choices and opportunities to develop their careers in adulthood lays a solid foundation for addressing the challenges and crises they face in their future lives.

CONCLUSION

Under the influence of COVID-19, Macao, a treasure land of Lotus, cannot be isolated. As a micro-economy, Macao's social and economic development is greatly influenced by external factors. Facing the new social risks, how to alleviate the financial pressure of the government's social welfare responsibilities? And how to achieve coordination between social and economic policies to ensure the sustainable development of social policies? These are the key problems that Macao's social policy adjustment needs to face and solve in the post-pandemic era. Understanding the turn of social policies of the Welfare state will help us reflect on the new problems, new features, and new directions of social policies, and also help us think about the development path of Macao's social policies. Positive social policies tend to the issue of people themselves, taking them as the ultimate force and goal of economic and social development. The core is to upgrade personal development ability, prevent and reduce social risks, and ultimately solve the problem of human survival and development. In response to the challenges and risks brought by the epidemic to society, a long-term mechanism for social policies in Macao has been established following the concept of positive social policies. This article proposes two strategic directions of integration and empowerment. By adjusting, optimizing, and reforming existing social policies in Macao, the innovation of social policies should move to implement the concept of positive social policies, turn to the direction of social investment in social policies for improving residents' human capital, achieve mutual promotion between social and economic policies, and smooth the way for social development sustainably.

The first is to give full play to the leveling function of social policies. Under the influence of the epidemic, the life of the bottom-level residents has been greatly impacted, and there is a greater risk of income security, which shows that there is a large income gap between social classes in Macao. The social security projects maintain the basic income security of residents, meet their basic living needs, and ensure social bottom-line fairness. By integrating the existing and scattered income-based social security policies, we can make up for the shortcomings of social security policies, build up the bottom-line function of social security policies, narrow the gap between the rich and the poor, and ensure that all residents maintain a certain level of quality of life.
The second is to carry out the nudging function of social policies. Nudge is not a retreat of government responsibility, but to stimulate individual and social vitality through the guidance of policies (Thaler & Sunstein, 2009). The triangular model of social welfare shows that the supply mechanism of social welfare plays the role of the government, the market, and individuals, rather than relying solely on the government's welfare finances. Guided by social investment, the government's social policy reinforces the boosting function of the policy, heightens the responsibilities of the market and individuals, and forms a cooperative relationship of social welfare supply mechanisms. From Neil Gilbert's point of view, modern social policy has shifted to the government-enabling (Enabling State) model, from directly providing welfare to guiding and supporting private welfare responsibilities (Gilbert, 2005). Therefore, the government is no longer just playing the role of unilateral financial support. The government can do more and better, such as using social policies to mobilize different welfare supply systems to play a role together, mobilizing the power of society and individuals to provide social welfare, and improving people's living ability and resistance. The ability to reduce risks can calm residents' dependence on the government's provision of social welfare, diminish the government's financial pressure on social welfare, balance the responsibilities of the welfare triangle, and achieve sustainable development of social welfare.

The third is to leverage the development function of social policies. The transformation of modern social policies emerged in response to the challenges posed to the welfare state by globalization and aging, especially to find a way to solve the plight of the welfare state's excessive financial burden and impaired economic competitiveness. After Macao entered an aging society, social welfare should not only be seen as meeting residents’ material needs but also reflect the comprehensive development of residents. The human element is the most active factor in social and economic activities. The government’s social welfare projects play a boosting role, which can not only improve the personal abilities of residents, but also realize the coordinated development of social policies and the economy, keep on the high-level social welfare, and move forward the high-quality development of society as a whole.

Declaration Of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research is supported by Macao Polytechnic University, RP/FCHS-04/2022.

REFERENCES

Integration and Enabling: Macao's Social Policy Shift during Post-Pandemic Era

Midgley, James. (1986). Industrialization and Welfare: The case of the Four Little Tigers, Social Policy and Administration, (3)225-238