

# The Public Policy Research on "Cross-border Elderly Care" in the Social Security Cooperation and Governance of the Guangdong-Hong Kong-Macao Greater Bay Area

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**Abstract:** The research focuses on the cross-border pension cooperation governance in the Guangdong-Hong Kong-Macao Greater Bay Area (GBA), analyzing the public policy aspects of "cross-border pension" as a model of social security cooperation. Given the unique demographic and economic context of the GBA, this paper examines the policy framework, challenges, and opportunities of implementing a cross-border pension system to enhance social security benefits for residents moving across the region. The study provides insights into how such a system can be developed, the potential policy measures required, and the impacts it could have on improving the welfare of GBA residents.

## 1. Introduction

### 1.1 Research Background and Significance

The Guangdong-Hong Kong-Macao Greater Bay Area (GBA) stands as one of the most dynamic and economically integrated regions in China [1]. Its unique demographic and economic features, such as high levels of cross-border mobility for work, education, retirement, and family purposes, present significant challenges in the provision of social security. Residents in this region frequently move between the three territories—Guangdong, Chinese Hong Kong, and Chinese Macao—where different social security systems operate under distinct regulatory frameworks. This fragmentation often leads to difficulties in accessing and maintaining adequate pension coverage as individuals relocate, which traditional national social security systems may not be designed to address. The emergence of the concept of "cross-border pension" represents a possible solution to these gaps, offering a unified and seamless pension system for residents in the GBA. Such a system would enhance the mobility of workers, reduce uncertainty for retirees, and promote a more integrated social security system. This study seeks to explore the necessity and significance of implementing a cross-border pension scheme in the GBA, with an emphasis on improving the quality of life for cross-border residents and fostering greater regional cooperation.

### 1.2 Research Objectives and Scope

The primary objective of this research is to critically assess the feasibility of establishing a cross-border pension system within the GBA and to examine its potential implications for the region's social security landscape. The scope of the research will encompass several key areas: first, an analysis of the current social security frameworks in Guangdong, Chinese Kong, and Chinese Macao, including their eligibility criteria, pension benefits, and limitations; second, the identification of challenges related to pension portability—such as the transfer of pension entitlements and contributions across borders; and third, the exploration of potential policy solutions aimed at facilitating the development of a cohesive and efficient cross-border pension system. Additionally, the research will investigate the broader social and economic impacts of such a system, particularly concerning the aging

populations and highly mobile workforce within the GBA. By addressing these issues, the research aims to provide valuable insights into how the GBA can create a more sustainable and inclusive pension system for its residents.

### **1.3 Methodology**

This study adopts a qualitative research methodology, which combines an extensive review of existing literature on social security systems, pension models, and regional cooperation mechanisms, along with primary data collection through interviews. The literature review will focus on international and regional examples of cross-border pension systems, providing a theoretical foundation for understanding the challenges and potential solutions. In-depth interviews will be conducted with a diverse group of stakeholders, including policymakers, experts in social security and pensions, as well as residents of the GBA who are directly affected by the current system's limitations. These interviews will provide practical insights into the real-world challenges and expectations regarding the implementation of a cross-border pension system. This combined approach will allow for a comprehensive understanding of the feasibility and implications of such a system in the GBA context.

## **2. Social Security Systems in the GBA**

### **2.1 Current Frameworks in Guangdong, Hong Kong, and Macao**

Each region within the Guangdong-Hong Kong-Macao Greater Bay Area (GBA) operates its own distinct social security and pension system, shaped by its unique political, economic, and historical contexts. In Guangdong, the social security system is governed by the national framework established by mainland China <sup>[2]</sup>. This includes mandatory participation in a comprehensive social insurance system that encompasses pensions, healthcare, unemployment benefits, and work-related injury insurance. These contributions are typically made through a centralized system, with benefits being based on employment history and income levels. On the other hand, Chinese Hong Kong follows a different model with the implementation of the Mandatory Provident Fund (MPF) <sup>[3]</sup>. The MPF is a market-driven system that focuses on individual retirement savings, with contributions made by both employees and employers. While the MPF system is compulsory for employees, it only applies to formal sector workers, leaving a gap for those employed in informal or part-time work. Macao's system is a hybrid of both public and private models. For government workers, a public pension scheme exists, which provides a basic level of retirement benefits. However, for the private sector, pension contributions are voluntary, with individuals encouraged to set aside savings in retirement plans but without a legal obligation to do so. These differences in pension systems create significant challenges when attempting to integrate social security and pension frameworks across the GBA, especially in terms of portability, eligibility, and uniformity of benefits.

### **2.2 Challenges of Social Security Coordination**

Coordinating social security and pensions across the GBA is fraught with challenges due to the wide variations in eligibility criteria, contribution rates, and benefit calculation methods. In Guangdong, the national social insurance system requires compulsory participation in pensions, healthcare, and unemployment insurance, which is not universally applicable across all sectors. In contrast, Chinese Hong Kong's MPF system only covers formal sector employees and operates under a contribution-based model, where individuals are required to make regular contributions into personal retirement accounts. This creates significant disparities in coverage between regions, particularly for mobile workers who may shift between the regions for work. Furthermore, the contribution rates differ between Guangdong and Chinese Hong Kong, and Chinese Macao's voluntary contributions in the private sector only further complicate coordination. The method of benefit calculation also varies, with Guangdong's benefits based on average income and years of contribution, while Chinese Hong Kong's MPF depends on individual contributions and investment returns. These discrepancies create gaps in coverage and hinder the portability of pension rights.

Additionally, the legal and administrative frameworks of each region are not aligned, further complicating the transfer of pension rights across borders. As a result, individuals who work in multiple regions may face difficulties in consolidating their pension rights or receiving benefits consistent with their contribution history, highlighting the need for comprehensive reforms.

### **2.3 Cross-Border Social Security Cooperation Models**

While the GBA faces specific challenges in cross-border social security coordination, there are successful international models that offer valuable lessons. The European Union (EU), for example, has developed a sophisticated system for coordinating social security benefits across member states, ensuring that workers can aggregate their contribution periods from multiple countries to qualify for pensions and avoid double contributions <sup>[4]</sup>. The EU's approach involves harmonizing basic principles of social security while allowing for flexibility within individual member states. Similarly, the United States and Canada have an agreement that allows workers to combine their pension credits from both countries, ensuring that individuals who work in either country can benefit from a full pension without being penalized for the cross-border nature of their employment. These international examples demonstrate the feasibility of coordinating social security systems across borders and highlight strategies that could be adapted to the GBA. For example, one potential solution for the GBA is to create a system where contributions from different regions are aggregated, ensuring that individuals are credited for their work in each region. Additionally, the creation of a centralized management system to oversee cross-border pension rights could streamline the administrative process, making it easier to track and transfer benefits between regions. These models provide important insights into how the GBA can move towards a unified cross-border pension system that enhances portability and ensures fairness for all workers in the region.

## **3. The Need for a Cross-Border Pension System**

### **3.1 Demographic Trends in the GBA**

The Guangdong-Hong Kong-Macao Greater Bay Area (GBA) is experiencing significant demographic shifts, particularly an aging population. This trend is most pronounced in Chinese Hong Kong and Chinese Macao, where the proportion of elderly individuals is growing rapidly due to lower birth rates and longer life expectancy <sup>[5]</sup>. Meanwhile, Guangdong also faces a demographic transition, albeit at a slower pace, with an increasing number of elderly residents, particularly in urban areas. Concurrently, the GBA is characterized by high mobility, with people moving between the three regions for work, retirement, and family reasons. Many individuals from Guangdong move to Chinese Hong Kong or Chinese Macao for higher-paying job opportunities, while retirees often relocate within the region for access to better healthcare or family support. These demographic trends underscore the need for a unified cross-border pension system that can effectively meet the needs of both mobile workers and retirees. Without such a system, individuals who work in multiple regions may face gaps in their pension coverage, and retirees could struggle to access their benefits across different territories. This section explores how the aging population and mobility patterns in the GBA create a compelling case for a cross-border pension system.

### **3.2 Economic Integration and Mobility**

The GBA is a model of economic integration, with industries, businesses, and labor markets becoming increasingly interconnected. This integration fosters a dynamic environment where individuals are likely to work in one region while living in another. For instance, many residents of Chinese Hong Kong and Chinese Macao work in Guangdong's manufacturing and service sectors, while workers from Guangdong increasingly migrate to Chinese Hong Kong and Chinese Macao for employment in finance, healthcare, and high-tech industries. As regional economic integration deepens, it is expected that mobility will continue to rise, making it necessary to establish a pension system that supports workers regardless of where they reside or work. A cross-border pension system would enhance financial security for these mobile workers by ensuring that their contributions and

entitlements are recognized across regions. Additionally, it would encourage talent retention and attract skilled professionals to the region, thus supporting continued economic growth and fostering a competitive labor market. By enabling workers to seamlessly transfer their pension rights, the system would reduce barriers to employment mobility, contributing to a more dynamic and integrated regional economy.

### **3.3 Improved Quality of Life for Residents**

A well-designed cross-border pension system would significantly improve the quality of life for residents of the GBA, particularly retirees and those nearing retirement age. By ensuring consistent social security benefits, such a system would provide financial stability and reduce the anxiety that often accompanies cross-border living <sup>[6]</sup>. For retirees, having the ability to access their pension benefits regardless of their place of residence would eliminate the current complexity and uncertainty around pension portability. Many retirees in the GBA today face challenges in receiving full benefits due to the fragmented pension systems across the three regions. A unified pension system would also foster social cohesion by ensuring equitable access to social welfare programs for all residents, whether they live in Guangdong, Chinese Hong Kong, or Chinese Macao. Moreover, it could reduce economic disparities between regions, as workers would no longer be penalized for moving between the territories for employment. This section explores how such a system would not only enhance the financial security of individuals but also improve their overall well-being by providing greater stability and peace of mind regarding their retirement futures.

## **4. Policy Measures for Cross-Border Pension Cooperation**

### **4.1 Regulatory Harmonization**

One of the fundamental challenges in implementing a cross-border pension system within the Guangdong-Hong Kong-Macao Greater Bay Area (GBA) is achieving regulatory harmonization <sup>[7]</sup>. The three regions currently operate under distinct legal and regulatory frameworks, with different pension systems, tax laws, and social security regulations. To create a cohesive framework that allows for the seamless transfer of pension benefits across borders, significant legal and regulatory changes would be required. This could involve aligning pension eligibility criteria, standardizing contribution rates, and addressing discrepancies in the way benefits are calculated and distributed. Additionally, legal reforms would be necessary to ensure that pension rights are portable and transferable without barriers. Regulatory cooperation between Guangdong, Chinese Hong Kong, and Chinese Macao would be essential for creating common standards that ensure the smooth operation of a cross-border pension system. This section explores the specific regulatory hurdles that must be overcome and the legal frameworks that need to be adjusted to facilitate pension portability and ensure uniformity across the three regions.

### **4.2 Pension Portability and Coordination Mechanisms**

The success of a cross-border pension system in the GBA hinges on the development of effective pension portability mechanisms. Without such mechanisms, workers who move between regions would face challenges in transferring their pension rights and maintaining continuous benefits. One potential solution is the establishment of a unified pension registry, which would serve as a central platform to track workers' contributions and pension entitlements across the three regions. This registry would allow for the accurate recording of contributions, even if workers change employers or regions, ensuring that pension rights are preserved and transferred seamlessly. Additionally, a joint management system could be implemented, where a single regulatory body oversees the administration of pensions across the GBA, coordinating between the pension authorities of Guangdong, Chinese Hong Kong, and Chinese Macao. This system would also provide workers with clear and accessible information about their pension status and benefits. This section explores various coordination mechanisms, such as the use of technology and data-sharing systems, that would help create a unified approach to pension management and portability.

### **4.3 Incentives for Employers and Employees**

For a cross-border pension system to be effective, both employers and employees must be incentivized to participate. This requires developing financial and policy incentives that make participation in the system attractive to all stakeholders. For employers, tax benefits or credits could be offered for contributions to the cross-border pension system, which would offset some of the administrative costs involved in managing cross-border pensions. Contribution matching programs, where employers match employee contributions to the pension system, could also be introduced to encourage greater participation. On the employee side, the system could offer individual tax deductions or tax credits for contributions made to the pension fund, increasing the incentive for workers to contribute regularly. Moreover, portable benefits and the security of having a unified pension system would encourage workers to remain in the system, even if they move across borders for work. This section examines the potential financial and policy incentives that could be implemented to encourage widespread participation and the sustainability of the cross-border pension system.

## **5. Challenges and Obstacles**

### **5.1 Political and Administrative Barriers**

The political and administrative differences between Guangdong, Chinese Hong Kong, and Chinese Macao could present significant barriers to the establishment of a cross-border pension system. These regions operate under distinct political and legal systems, with Hong Kong and Macao maintaining separate governance frameworks from the mainland. Chinese Hong Kong and Chinese Macao have autonomy in their administrative policies, including social security and pension regulations, which complicates efforts to harmonize pension systems across the GBA<sup>[8]</sup>. National policies set by the central government in mainland China may conflict with regional policies in Chinese Hong Kong and Chinese Macao, leading to inconsistencies in pension eligibility, contribution rates, and benefit payouts. Furthermore, administrative systems in each region are operated by different agencies, making coordination and data sharing challenging. To overcome these barriers, there would need to be political agreements and collaborative efforts at the highest levels of government, both at the central and regional levels. Solutions might include the establishment of a joint governance framework, where representatives from each region work together to align pension policies and administrative procedures. This section explores how the political and administrative differences between the regions could impede the development of a unified system and identifies potential solutions for overcoming these challenges.

### **5.2 Cultural and Societal Factors**

Cultural attitudes towards social security and retirement savings vary significantly across the GBA, which could influence the effectiveness of a cross-border pension system. In mainland China, the concept of social security is relatively new, with many individuals relying on family support in old age, especially in rural areas. Conversely, in Chinese Hong Kong and Chinese Macao, retirement savings are often seen as an individual responsibility, with systems like the Mandatory Provident Fund (MPF) in Hong Kong encouraging personal retirement savings through mandatory contributions. These cultural differences may affect public receptivity to the idea of a cross-border pension system, especially if individuals are not accustomed to the idea of pooling pension resources across borders<sup>[9]</sup>. To address these challenges, public education and awareness campaigns would be essential to foster a culture of cooperation and participation in the cross-border pension system. These campaigns could focus on the long-term benefits of a unified system, such as improved financial security for mobile workers and retirees. Additionally, efforts to educate the public about the importance of pension portability and the benefits of a unified system could help shift attitudes and promote participation. This section explores the role of cultural and societal factors in shaping attitudes towards the cross-border pension system and the importance of public outreach efforts to build awareness and trust.

### 5.3 Financial Sustainability

The financial sustainability of a cross-border pension system is a crucial concern, particularly in the context of the diverse economic conditions in Guangdong, Chinese Hong Kong, and Chinese Macao. While Guangdong is a major economic hub with a rapidly growing workforce, Chinese Hong Kong has a more mature, service-oriented economy, and Macao's economy is heavily dependent on tourism and gaming <sup>[10]</sup>. These economic differences could affect the contribution levels and the financial health of a unified pension system. For instance, a larger and younger workforce in Guangdong may contribute more to the system, while an aging population in Chinese Hong Kong and Chinese Macao could place greater strain on pension payouts. To ensure the long-term financial stability of the system, it would be essential to develop funding mechanisms that account for these regional differences. One potential solution is to establish a risk-sharing arrangement where regions with higher economic growth or more contributors help to subsidize those with higher pension liabilities due to aging populations. Additionally, investing pension funds in diversified portfolios and implementing policies that encourage higher contribution rates could help ensure the system remains financially viable. This section discusses strategies for maintaining the financial sustainability of the cross-border pension system, including funding mechanisms, risk-sharing arrangements, and investment strategies.

## 6. Conclusion

The establishment of a cross-border pension system in the Guangdong-Hong Kong-Macao Greater Bay Area holds significant potential to enhance the social security benefits of residents, especially as economic integration and mobility continue to grow. However, the implementation of such a system requires overcoming a series of challenges, including regulatory differences, political barriers, and financial sustainability concerns. By learning from international models and designing a system tailored to the unique needs of the GBA, policymakers can create a robust framework that benefits workers, retirees, and the broader region. This study underscores the importance of cross-border cooperation in social security and lays the groundwork for further research and policy development in this area.

## References

- [1] Shi Y, Xiao J H .Collaborative Effect of Innovation System in Guangdong-Hong Kong-Macao Greater Bay Area and Jiangmen Countermeasures[J].Proceedings of the Fourth International Conference on Economic and Business Management (FEBM 2019), 2019.DOI:10.2991/femb-19.2019.66.
- [2] Shengjun W, Junhua T .The Regional Cooperation Innovation Pattern of Guangdong, Hong Kong and Macao[J].Economy and Management, 2012.
- [3] Siu,Alan.HONG KONG'S MANDATORY PROVIDENT FUND.[J].Cato Journal, 2002.
- [4] Lepik,Katri-Liis. EUROREGIONS AS MECHANISMS FOR STRENGTHENING CROSS-BORDER COOPERATION IN THE BALTIC SEA REGION.[J].Trames A Journal of the Humanities & Social Sciences, 2009.
- [5] Cherlin A J .Demographic Trends in the United States: A Review of Research in the 2000s[J].Journal of Marriage and Family, 2010, 72(3):403-419.DOI:10.1111/j.1741-3737.2010.00710.x.
- [6] Rogers J A. Standardized assessments, care planning, and improved quality of life for residents of adult family homes[D]. Minneapolis, MN: Walden University, 2016.
- [7] Chang L. A study of the cross-border regional innovation in the Guangdong-Hong Kong-Macau Greater Bay Area[D]. Pokfulam, Hong Kong: The University of Hong Kong, 2024.
- [8] Painter M , Yee W H .Agencies and policy in an administrative state: The case of Hong Kong[J].Policy and Society, 2012.DOI:10.1016/j.polsoc.2012.07.004.
- [9] De Silva B, Dharmasiri K S, Dissanayake D M P V. The Cultural and Societal Factors

Contributing to Domestic Violence in Asia[J]. *Gnosi: An Interdisciplinary Journal of Human Theory & Praxis*, 2023, 6(2).

[10] Kao-Yi, Shen. Compromise between Short- and Long-Term Financial Sustainability: A Hybrid Model for Supporting R&D Decisions[J]. *Sustainability*, 2017, 9(3).DOI:10.3390/su9030375.