

# **A Study of Shanghai's Development Strategy to 2020**

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**Abstract:** Shanghai is the largest economic city in China. The dynamism of change in China has brought new opportunities and challenges to Shanghai. Its rapid emergence as a post-industrial metropolis is causing fundamental shifts in the city's economy and social system, and therefore in its linkages with the wider Yangtze Delta Region which has become China's main engine of economic growth. The development circumstances and trends of Chinese economy need Shanghai to become a global metropolis which having five global functions as: 1) global financial center; 2) global trade and logistics center; 3) global center for innovation-based manufacturing; 4) a creative metropolis; and 5) a well-functioning metropolis. Clearly, these five global roles are integrated, and that to become a truly global metropolis, each of these five roles needs to be developed in tandem. This paper firstly presents Shanghai's development strategy to 2020 – establishing five global centers; then this paper analyzes some key issues facing Shanghai; and last, this paper puts forward some policy recommendations.

**Key word:** Shanghai      Yangtze Delta Region      development strategy      global metropolis

## **1. Introduction**

The dynamism of change in China has brought new opportunities and challenges to Shanghai. Its rapid emergence as a post-industrial metropolis is causing fundamental shifts in the city's economy and social system, and therefore in its linkages with the wider Yangtze Delta Region(YDR) which has become China's main engine of economic growth.

Shanghai is located in the east of Asian continent and the west coast of the Pacific,

along the Yangtze River Delta front, in the north side of the estuary of the Yangtze River. As China's central coast, Shanghai has convenient transportation, vast hinterland, and superior geographical position (Fig.1 and Fig.2).



Source: [www.59edu.com](http://www.59edu.com)

Figure 1: Shanghai geographical position



Source: [www.shanghai.gov.cn](http://www.shanghai.gov.cn)

Figure2: Shanghai city

Given its geographic attributes and internal migrations, the Yangtze Delta has had the highest population and settlement densities in China. It has been a distinct economic region in China for centuries during which functional boundaries have periodically expanded and contracted in response to political and natural calamities, and to far-reaching economic and technological changes. Annual GDP growth for the YDR as a whole averaged 13% from 1997 to 2010, and Shanghai's growth was at 12%, making the region one of the fastest growing regional economies in Chinese history. These initiatives are critical given the growing role that the YDR is playing in China's economy.

The development of China's economy has produced a great of flows and stocks nearly 20 years. This requires China must have an international hub to absorb, storage, digest, and divert these flows and stocks. Shanghai is the best candidate of international hub in China. The development circumstances and trends of Chinese economy need Shanghai to become a global metropolis which having five global functions as: 1) global financial center; 2) global trade and logistics center; 3) global center for innovation-based manufacturing; 4) a creative metropolis; and 5) a well-functioning metropolis. Shanghai also wishes itself to review and fine-tune its long term development strategy of becoming a global metropolitan region in light of these changes. Clearly, these five global roles are integrated, and that to become a truly global metropolis, each of these five roles needs to be developed in tandem. There are a lot study in describing the characteristics of global metropolis (Center for an Urban Future, 2005; Chreod, 2008; City of London, 2009; Freire and Mario, 2003; Fujita and Tomoya, 2005; Greater London Authority, 2009; Kennedy, Chris *et a*, 2009; Leman, 2005; Price Waterhouse Coopers, 2007; Taylor, 2005; Yusuf and Kaoru, 2006). These literatures have provided rich knowledge and experience on global metropolis. This study firstly presents Shanghai's development strategy to 2020 – establishing five global centers; then analyzes some key issues facing Shanghai; and last, this paper puts forward some policy recommendations.

## **2. Shanghai's Vision to 2020**

The reality requires Shanghai to become a how international hub, let us to describe here. Shanghai has formed the economic core of the YDR. The vision to 2020 is for closer cooperation with YDR governments to foster more integrated regional development.

## **2.1 To become a global financial center**

Shanghai is China's principal financial center. During the past 30 years, Shanghai has succeeded in establishing a strong financial sector characterized by large scale financial markets, clustering of financial institutions, and agglomeration of skilled talents. Institutions such as Shanghai Stock Exchange, Shanghai Futures Exchange, and Shanghai Gold Exchange constitute the foundation on which Shanghai will pursue the role of international financial center. Now, over 50% of fund companies and asset management companies in China are based in Shanghai. Shanghai has attracted China Union Pay, Foreign Exchange Trade system, and the Interbank Market. Shanghai also is China's leading city in attracting foreign financial institutions due to its geographical superiority and the best living and infrastructure conditions in China.

Aimed at building an international financial center, efforts will be made to improve financial institutions, financial markets, financial services and the financial regulatory system in Shanghai. Pursuant to the principle of steady and prudent progress, Shanghai will actively seek for effective solutions for comprehensive financial operations, upgrade and integrate the local financial institutions, introduce and establish new type financial institutions, and further bring together financial institutions with various circles of talents. Proactive measures will be taken to promote the development of financial derivatives, insurance and reinsurance, off-shore finance, and bonds and other emerging businesses, to push forward the construction of a financial product innovation center, and to support and improve the development of capital, currency, foreign exchange, futures, gold and equity markets. The construction of financial market infrastructure including trusteeship, transaction, clearance and settlement will be strengthened in order to promote interconnections and interaction between different financial markets. The shareholding structure reform to merge tradable and non-tradable shares will be completed and the quality of listed companies will be improved. More efforts will be made to enhance the credit reporting system, improve financial risk prevention and treatment, and continue to build up a financial security zone.

Shanghai may set out the following objectives to support this goal: become an international financial center by 2020 in equity market with the largest trading volume in Asia; become an international financial center by 2020 in the foreign exchange market with the largest trading volume in Asia; become an international financial center by 2020 in project financing with the largest number of project financings in Asia; become an

international financial center by 2020 in the bond issuance market; become an international financial center by 2020 in the futures market.

## **2.2 To become a global center for trade and logistics**

The Yangtze Delta has clearly become China's most important region for the handling of both imports and exports. From handling 18.6% of imports and exports in 1995, the YDR now accounts for 37.2% of the value of China's international trade. The reasons for this huge increase in trade volume are principally: 1) the higher value-added manufacturing that has developed in the YDR over the last twenty years; 2) the opening up of central and western regions along the Yangtze River; and 3) improved transport connections along the Yangtze River Basin that facilitate the movement of goods to and from the principal ports of Shanghai and Ningbo.

The rapid growth of the YDR as China's trade hub could not have occurred without massive investments in world-class transport infrastructure. The development of the Yanshan Port and improvements to Waigaoqiao Port in Shanghai, and to deepwater ports in Ningbo, have enabled the YDR to accommodate a huge increase in container traffic. This extended accessibility has considerably widened locational choices for industries in the YDR, enabling both domestic and foreign firms to benefit from larger industrial sites at far lower land costs.

In concert with the development of container ports, massive investments were made in expressways across the YDR. Over 2,300 kms of expressways were constructed in the YDR between 1990 and 2010. These expressway investments considerably improved accessibility of the YDR to new and expanded container ports at Waigaoqiao, Yanshan, and Ningbo. The new port at Yangshan, accessed from Luchaogang, covers all of Shanghai within a two-hour drive-time, and extends as far west as Jiaxing in Zhejiang Province.

Based on the campaign to build an international shipping center together with its facilities such as the deepwater port, airports, railway and road networks, Shanghai will strengthen the development of international transshipment logistics, and extend the shipping service industry chain. Efforts will be made to foster a modern logistics service market, and build up a modern logistics system that integrates port, manufacturing, and urban delivery logistics. The service functionalities of logistics bases in the city, such as the Deepwater Port, Waigaoqiao, Pudong International Airport, and the Northwest

comprehensive logistics park, will be improved, and measures will be taken to further the standardization of logistics technology and the application of logistics informationalization.

Shanghai may set out the following objectives to support this goal: YDR will become China's principal trade hub, YDR's logistics infrastructure to be capable of handling 40% of China's trade by 2020; Shanghai's role in global logistics will be as East Asia's principal logistics node in the global supply chain; Shanghai to be major logistics hub to support YDR export processing for inter-regional trade between NE and SE Asia.

### **2.3 To become a global center for innovation-based manufacturing**

Since the 1950s, Shanghai has been the most developed city in China from the perspective of manufacturing product. In the early 1990's, Shanghai economy experienced rapid growth because the opening-up and development of Pudong New District attracted large amounts of foreign capital. To sustain this growth, policy innovation is vital. Since the factor price in Shanghai will remain high and perhaps higher, future growth will depend on an economic transition to innovation-based manufacturing and services. Thus, innovation behavior, in both technical and managerial areas, will be the economic growth power in Shanghai. The proportion of industry to GDP in 2010 is 43%, decreased sharply from 55% in 2001. We project that the ratio of manufacturing product, comprising most of the industry product, will continue to steadily decline to around 30% in 2020. To maintain employment levels and purchasing power, Shanghai must continue to have a highly productive manufacturing sector.

With improving the capacity for independent innovation as a core goal, efforts will be made to develop large-scale industries, undertake large projects and build large bases on the one hand, and adopt new technologies, new facilities and new processes on the other hand, in order to upgrade the manufacturing sector, promote the formation of industrial clusters, and bring about a strategic shift from adjustment in the course of development to upgrading amid development. To be specific, Shanghai will: make intense efforts to upgrade the core competitiveness of the automotive and equipment manufacturing sectors. Take proactive measures to develop the strategic sectors of bio-medicine, new energies, new materials, shipbuilding, aviation and aerospace. For the bio-technology and medicine sectors, efforts will be made to accelerate the application of bio-technology in agriculture, environmental protection, energy and materials development. In the new energy and new materials sector, efforts will focus on

surmounting main obstacles in the development of photovoltaic industry and wind power facilities and materials, promoting the development of hydrogen energy, and developing semiconductor lighting materials, energy-efficient construction materials. For the shipbuilding sector, particular efforts will be made to overcome the technological bottlenecks in building LNG vessels and offshore floating oil storage facilities. For the aviation and aerospace sector, strong efforts will be made to push forward the development of new regional aircrafts.

Shanghai may set out the following objectives to support this goal: develop globally-important capacities in innovation-based industry in equipment manufacturing and advanced materials; become Asia's principal center for scientific and technological innovation and marketization; localize manufacturing of imported high value added and technology-intensive components; relocate most production in medium- and high value added manufacturing to other centers in the YDR, leaving R+D and services as principal focus in Shanghai.

#### **2.4 To become a global center for creativity and culture**

The past thirty years (1980-2010) saw rapid evolution of Shanghai into an artistic and cultural creativity hub, a promising development path in the regional specialization process. The fast development of Shanghai as a creative hub extends the possibility of the city to upgrade its cultural infrastructure, to shift from the old model of economic growth and to reshape the urban functions in wider geographic space. This success depends largely on the mass of creative people who agglomerate in the metropolis, and on environments which foster the creativity. Main environmental variables include new media technology infrastructure and applications, accumulation of private wealth, and public recognition and respect for cultural and artistic works.

Shanghai has some advantageous conditions to become a global center for creativity and culture such as: geographically surrounded by a wealthy YDR; traditional recognition of "culture of Shanghai" in the YDR; spillover effect of Expo 2010; substantial real economy of YDR to support creativity specialization; shift of economic growth model in Shanghai; cultural diversity and tolerance; infrastructure; financing facility; agglomeration of creative talents; and, emergence of creative precincts as creativity organization model.

Efforts will be made to build a relatively comprehensive and refined cultural

industry and market system, promote integrated development of the technological, creative and cultural sectors, intensify the program of opening up and innovation, and especially promote the development of culture, leisure and entertainment, creative business and fashion, printing and packaging, and other related businesses. Taking network-based cartoon, film, television and the mass media as key entry points, Shanghai will build a number of digital cultural content industry bases and parks with distinctive features, and stimulate the emergence of cultural functional zones and core industrial bases.

Shanghai may set out the following objectives to support this goal: Shanghai to become Asia's principal center for the performing and visual arts and culture, competing with Tokyo and Seoul; Shanghai to become Asia's principal center for design with a focus on architecture and engineering, interactive media, and exhibition design, based on currently competitive segments; Shanghai to become China's principal center for industrial design, advertising, fashion design; Shanghai to extend beyond YDR to become one of China's principal centers for literature, publishing, TV, film, music.

## **2.5 To become a well-functioning metropolis**

Global research has found that economic benefits can be generated in agglomerations with large populations. The population of Shanghai municipality reaches almost 20 million in 2010, 24.5 million in 2025, and 27 million by 2030 (Chreod, 2008). In terms of economic growth, Price Waterhouse Coopers (PWC) conducted a study in 2007 that projects the size of the economies of the world's largest metropolitan regions to 2020 (PWC, 2007). In 2005, Shanghai is ranked 32<sup>nd</sup> in the world in terms of the size of its metropolitan economy. By 2020, Shanghai's rank improves to 16<sup>th</sup>. When comparing cities globally at the scale of metropolitan regions, Shanghai is the fourth largest in population size in 2010, and will likely slightly overtake Mumbai to become third largest by 2020 (Chreod, 2008).

Expo 2010 in Shanghai is successful, including major expansion of the subway network and airport, construction of a new raw water supply intake on the Yangtze River, and the complete redevelopment of large areas along the Huangpu Riverfront. These 'hard' initiatives will have a significant impact on the quality of life of Shanghai's residents. Wanting to become a well-functioning metropolitan, Shanghai must continue to require: comprehensive and balanced planning; the mobilization and application of



huge capital and recurrent investments; major upgrading of institutional capacities in strategic planning, monitoring, control, and coordination; and sustained cooperation among municipal and district governments.

Shanghai may set out the following objectives to support this goal: achieve balanced growth across the metropolitan region by 2020; infrastructure services across the metropolitan region will be on par with major cities in East Asia; environmental quality across the metropolitan region is equal to major cities in East Asia; metropolitan management conducted to highest standards in East Asia.

### **3. Key issues facing Shanghai**

There are many problems and difficult with Shanghai's aspiration to become a global center. Here, we analyze some key issues as follows.

#### **3.1 Key issues for a global financial center**

With its rapid economic emergence, Asia has the potential to accommodate a global financial center comparable to London or New York. However, the competition is fierce between several candidates: Tokyo, Hong Kong, Singapore, Sydney and Seoul. All these financial centers need to break through beyond their current capability to fulfill the ambition of global financial center. For Shanghai, the main problems are as follows.

(1) Weak regulatory power in Shanghai. The Chinese main financial regulatory bodies are all based in Beijing. This has at least two negative influences on Shanghai's ambitions: the distance between regulations and operations creates a gap between policy and the real world, and many institutions have set up branches in Beijing instead of Shanghai for access to regulators.

(2) Skilled people. Domestically, Shanghai has many more financial professionals and talents than any other cities in China. However, compared with London, New York, or Tokyo, it lacks many advanced skilled and professional people.

(3) Unclear role of local regulatory and administrative bodies. Functions of local government and local offices of regulatory bodies are not clear, which is confusing for foreign institutions.

(4) Regulatory Environment. Shanghai is inactive in financial innovation due to very restrictive regulation.

(5) Taxation. Shanghai is unable to compete with some offshore financial centers such as Hong Kong and Singapore in taxation, because taxes are set by the central government.

(6) Decision making. Shanghai is not qualified to be an international financial center based on RMB. If these major establishments are not relocated to Shanghai, the decision making center will always be in Beijing.

### **3.2 Key issues for a global trade and logistics centre**

To become a global trade and logistics centre, Shanghai and the YDR need to reach levels in developed economies of 5-10% of GDP. While there is little doubt that the volumes of trade with and through the YDR will continue to grow in global terms, without improvements to the three components of logistics – transportation, inventory storage, and logistics management – growing volumes will increase bottlenecks, increase costs to producers, and erode the global competitiveness of the region as a whole. The key issues for Shanghai becoming a global trade and logistics centre are as follows.

(1) The current structure of the logistics industry in Shanghai precludes economies of scale and scope, especially for domestic providers. Logistics – especially by third parties – is a relatively new business sector in the YDR. Large, state-owned corporations and foreign MNCs (with state-of-the-art technologies and management systems) control the third parties logistics market in the Delta. Small and medium size enterprises, largely domestically owned, operate only in specific parts of the logistics supply chain. They generally have limited knowledge of state-of-the-art technologies and management systems, and of specialized characteristics of regional and global market demands.

(2) There is weak domestic capacity in post-industrial logistics compared to foreign providers. The disaggregated structure of the domestic supply market, and the attendant diseconomies in scale, limit the scope of services that providers can offer. Even Shanghai's large domestic providers have very limited understanding of advanced, post-industrial logistics services.

(3) Strategic planning of logistics infrastructure in the YDR generally under-estimates market demands. Major transport infrastructure – ports, airports, railways, and expressways – takes several years to plan, design, and build, making demand assessments critical. A major difficulty for planners is lack of information on the origins, destinations, and characteristics of transport movements in the YDR.

(4) Insufficient information on origin, destination, and types of goods movement in the YDR. Insufficient coordination in planning of regional logistics infrastructure is compounded by competition between municipalities and the underlying governance structure of ‘self sufficiency’ at the city level. The situation is leading to misallocated investment and system inefficiencies that carry long-term economic costs.

(5) Insufficient regional coordination in planning and provision of logistics services leading to inefficiencies and resulting higher costs to firms. Foreign firms exhibit higher cost-efficiencies and service effectiveness than their domestic counterparts, which increases competitive pressures on local firms.

(6) Administrative interference and business culture of State-owned firms constrains independent and market-responsive management. Foreign firms have a strong competitive advantage in their access to international networks of key players in global supply chains. Domestic firms, including large State-owned companies, are not yet part of these global networks and consequently cannot offer the range of services of their foreign competitors.

### **3.3 Key issues for an innovation-based manufacturing center**

To become a global innovative manufacturing center, Shanghai needs to exhibit two key characteristics: balanced industrial development and developing with the YDR. In 2008, the tertiary sector accounted for 60% of GDP, the proportion of industry to GDP decreased to 38%. The endowments of Shanghai include geographical advantage, which could support future economic growth in Shanghai. In other words, Shanghai needs to cooperate cohesively with other parts of YDR for industrial structure transition. This transition includes not only the transfer of industries and service outsourcing but also industrial integration through corporate merger and acquisition or business cooperation and connection, in a bid for higher competitiveness. The key issues for Shanghai becoming an innovation-based manufacturing center are as follows:

(1) Enhance innovation capability. For developing countries, process innovations are required among almost all of the sectors, while scientific & technical innovations should be pursued for some strategic purposes, such as new energy, nano technology, life sciences and etc. In Shanghai up to 2020, the emphasis should be on process innovations. Shanghai has promoted the expansion of IT application and its acceleration function in industrialization. Process innovation should be the basic motivation in manufacturing innovation. To encourage this kind of innovation in companies, especially those in

components production sectors, to give greater emphasis on process innovations is a major challenge. Scientific & technical innovation is supported by large-scale capital input with long-term investment cycles. Thus, large-scale enterprises should take the lead of this kind of innovation, and effective preferential policies by government are necessary. There are many high level research institutes and large-scale backbone enterprises in Shanghai. Between them, a steady cooperative relationship will be very helpful to innovation. But how to set up the cooperative mechanism needs further consideration.

(2) Issues for complex intermediate goods (parts & components) manufacturing. The excess of exports over imports appears significantly in China's technology intensive manufacturing. However, this result does not mean China has core competence in these areas. The export surplus results from the remarkable import surplus in R&D intensive intermediate goods (including middle level technology goods). This shows that China's manufacturing sector still is low added value with only basic technology, whose added value and technical level is even lower than intermediate goods with middle level technology, in the international industry chains. Shanghai should support main areas for R&D according to the characteristics of the key links (materials, production engineering and processing quality) for intermediate goods production.

(3) Regional industrial integration. Through international investment and out-sourcing for non-core business, multinational corporations integrate global resources based on global production networks to increase their competitiveness. In the next ten years, key manufacturing companies should place emphasis on R&D activities, which are vital to support an industrial structure with focus on equipment manufacturing in Shanghai. Several concerns should be taken into consideration as follows during the integration: 1) enterprise development strategy is needed to create the core competence in different stages. 2) the essential competence can be measured by the brand, thus, brand building needs attention throughout the long-term strategy.

### **3.4 Key issues for a creative metropolis**

To be a hub of cultural creativity, Shanghai needs to exhibit several key characteristics: clustering of creative people and creative communities; information and communication technology infrastructure; accumulation of wealth and emergence of middle class; strong cultural industries and cultural undertakings; and cultural environment of tolerance and diversity; Brand of "created in Shanghai". The key issues

for Shanghai becoming a creative metropolis are as follows:

(1) Protection of IP. IP protection in China is not satisfactory; this problem will not be resolved in the near future or only locally in Shanghai. It represents a real dilemma for China.

(2) Educational and training system. The current education system is restrictive on creative motivation and capability, and precludes divergent thinking. Education reform will be a very long term project.

(3) Cultural regulations. The lack of consistency in regulating cultural production and the opaque mechanism of cultural supervision will surely constrain creative motivation, and make the creativity environment repressive.

(4) Industrial policies at the cost of competition environment of SMEs. Shanghai traditionally favors State-owned enterprises or multinationals due to their contribution to local GDP. The related business policies will harm the competition environment of creative enterprises, which are principally SMEs. These enterprises are the most vigorous in creative market, and they need fair and transparent environment.

(5) Branding of the city. The cultural positioning of Shanghai metropolis is fuzzy, and the effort of branding is not up to the international standard.

### **3.5 Key issues for a well functioning metropolis**

Despite Shanghai's large and growing population and economy – it is still not achieving all the benefits of agglomeration inherent to its size. For human, social, and economic development to occur sustainably in metropolitan regions, urban and suburban areas need to function with most of the following key characteristics: Land; Transport; Housing and real estate; Environmental quality; Infrastructure; Safety; Public services; Culture and recreation; Metropolitan management. According to these characteristics, the key issues for Shanghai becoming a well functioning metropolis are as follows:

(1) Pattern of metropolitan growth is leading to agglomeration diseconomies that could constrain Shanghai's economic development. Shanghai's spatial structure is characterized by very high densities that are extremely concentrated. The metropolitan core is by far the most dominant center in the region – Shanghai has a comparatively small outer core, and proportionately small suburban satellite towns at far lower densities. If recent urban development trends continue, densities in Shanghai will still be very high in the metropolitan core.

(2) Inappropriate spatial structure for a rapidly-growing post industrial metropolitan region. Shanghai's unbalanced pattern of development is exacerbated by a disconnect between land development and the provision of infrastructure, especially transport networks and services. Traditional urban planning and transport planning approaches followed by Shanghai Municipal Government (SMG) are becoming ineffectual.

(3) Insufficient integration of land use planning, land development, transportation planning, and transport services. SMG is planning huge investments to 2020 in extending the public rail transit network into suburban areas. However, the lines are designed to further reinforce scattered suburban development. Analysing the commuter rail plan with the projected distribution of Shanghai's population shows that, by 2020, only half of Shanghai's residents will be served, and only 24% of suburban residents will have access to commuter rail that would fully integrate them into the metropolitan economy, especially its labour market.

(4) Insufficient provision of public transport services in suburban areas. Shanghai's housing costs are a major concern to its residents. Office and industrial rents are also considerably higher than in most other cities in China; this affects the city's competitiveness in attracting knowledge-based services firms and innovation-based manufacturers.

(5) Insufficient supply of built facilities meeting market standards. Shanghai's efforts to clean up its water systems over the last 20 years have been formidable and are a global model of commitment to environmental improvement. But – despite these efforts and huge investments – water quality is not being improved obviously. 30% of the city's urban water supply will continue to be served by the Daqiao intake along the Huangpu, and most suburban areas will continue to rely on self-supply through extraction of surface and groundwater. Water quality along the Huangpu has been steadily deteriorating for more than a decade.

Besides, there exist major problems such as: increasing untreated discharges of pollutants upstream from Jiangsu and Zhejiang Provinces; continuing untreated discharges and runoffs from suburban areas of Shanghai; metropolitan-wide functional responsibilities and revenue and expenditure assignments not fully resolved or codified, insufficient cross-border coordination of urban development and infrastructure services, environmental protection, and so on.

#### **4. Strategic Recommendations**

Wanting to become a global metropolis, Shanghai is facing many strategic obstacles. Shanghai should consider and make strategic policy to eliminate these obstacles and unfavorable factors. Based on above analysis, we propose some strategic recommendations as follows in order to achieve these goals and objective.

##### **4.1 Recommendations for a global financial center**

We propose the following recommendations for Shanghai becoming a global financial center: 1) promote finance innovation; 2) cultivate a transparent and fair legal environment; 3) create proper environment for direct financing development; 4) attract city commercial banks' headquarters; 5) establish a free environment for intellectuals.

##### **4.2 Recommendations for a global trade and logistics centre**

We propose the following recommendations for Shanghai becoming a global trade and logistics center: 1) organize, prepare, and implement a YDR Freight Logistics Action Plan to the highest international standard; 2) convene a Trade and Logistics Advisory Group comprised of domestic and foreign logistics experts to advise on the preparation of the YDR Freight Logistics Action Plan; 3) conduct a thorough regulatory review in the trade and logistics sector; (4) strengthen Freight Transport and Logistics Business Associations; 5) design and implement a Logistics Human Resources Development Program.

##### **4.3 Recommendations for an innovation-based manufacturing center**

We propose the following recommendations for Shanghai becoming an innovation-based manufacturing center: 1) establish a more efficient innovation incentive system; 2) promote the innovative culture and social atmosphere, focusing and advocating "Communication and Cooperation"; 3) form an efficient "Industry-Academia Research" system.

##### **4.4 Recommendations for a global center for creativity and culture**

We propose the following recommendations for Shanghai becoming a global creative and culture center: 1) establish coordination mechanism within municipal government; 2) brand the city; 3) further separate cultural industries and undertakings; 4) provide support to creative infrastructure

##### **4.5 Recommendations for a well functioning metropolis**

We propose the following recommendations for Shanghai becoming a well functioning metropolis: 1) prepare and implement a comprehensive metropolitan

development strategy to 2030 to highest international standards; 2) prepare and implement a Metropolitan Management Action Plan; 3) prepare and implement a YDR-wide Climate Change Adaptation Plan.

## **5. Conclusion**

China is the second largest country in GDP today, but still has no any a global metropolis. The development trend of Chinese economy needs to have a global metropolis on its own internal. Shanghai is a best candidate city in China. Shanghai has many favorable conditions and factors, however, also has many unfavorable conditions and factors for becoming a global metropolis. This study puts forward Shanghai's development direction to 2020. Shanghai want to become a global metropolis, should have five global functions as: 1) global financial center; 2) global trade and logistics center; 3) global center for innovation-based manufacturing; 4) a creative metropolis; and 5) a well-functioning metropolis.

This study also definitely set out Shanghai's development objectives to support these five goals to 2020, and analyzes some unfavorable conditions and factors which obstacle Shanghai's development. At last, this study puts forward some policy recommendations in order to eliminate these unfavorable conditions and factors. The recommendations made in this study are the actions that we believe should be implemented for Shanghai to become a global metropolitan region by 2020. The main contents of recommendations include: promote finance innovation; organize, prepare, and implement a YDR Freight Logistics Action Plan to the highest international standard; establish a more efficient innovation incentive system; establish coordination mechanism within municipal government in the YDR; and, prepare and implement a Metropolitan Management Action Plan, and so on.

Implementation of these recommendations will require a strong willingness to innovate, test, evaluate critically, and learn. Shanghai has demonstrated over the last twenty years such willingness in many ways, especially in industry and infrastructure. To become a global metropolitan region, Shanghai must extend that willingness to wide-ranging institutional, organizational, and procedural reforms.



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