IMPACT OF THE GLOBAL ECONOMIC CRISIS ON THE PEARL RIVER AND YANGTZE RIVER DELTA REGIONS

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Executive Summary

1. The global economic crisis has hit China the hardest in what have been ranked as the country’s most open and developed economic regions: the Pearl River Delta (PRD) and the Yangtze River Delta (YRD). Both regions are suffering greatly from the sharp fall in foreign trade and economic growth.

2. Battered by the decline in external demand and capital inflow, these two regions may cede much of their glory as engines of economic growth to inland regions in China.

3. Both regions are putting more emphasis on domestic investment and consumption, as the economic crisis has pushed for a transition from a development model that is over dependent on trade and inward foreign investment.

4. The global crisis has highlighted the importance of rebalancing economic growth by focusing on domestic demand in the long run. It may open new avenues to a more self-reliant and sustainable developmental pattern for these two deltas.

5. Both regions are promoting the development of high value-added industries, as the crisis has effectively exposed the vulnerability of labour-intensive and low value-added manufacturing activities.

6. Particularly, in PRD, industries are dominated by low-end processing activities. The economy of this region is widely known as the ‘global manufacturing factory’.

7. The Guangdong government has identified the changing industrial structure in the PRD as the leitmotif of crisis management. The ability to move up the production value chain and thus to ride on the wave of the next phase of economic development in China have been singled out for this purpose.
8. However, for the PRD region, the goal of industrial restructuring set by the local government is difficult to achieve. The existing structure may create serious obstacles to the transformation.

9. The shortage of both skilled human capital and public Research & Development expenditure in the PRD region is another main roadblock for the development of advanced manufacturing industries.

10. As a top priority, certain key measures need to be adopted by the local government in the PRD to promote industrial upgrading and economic restructuring: tax incentives, state capital subsidies and manpower training.

11. Historically, the regional integration of YRD has been weak. This may put severe constraints on the effectiveness of the collective response to the crisis as the lack of industrial cooperation within this region may result in duplicated development and cut-throat style competition. Therefore, the YRD region focuses more on regional coordination.

12. Due to administrative divisions and diverging economic interests, regional competition among Shanghai, Jiangsu and Zhejiang in areas such as foreign investment and infrastructure construction has been intense since 1978.

13. In the YRD region, the local government may need to adopt certain key measures to promote regional coordination and economic cooperation, such as a mechanism for coordination and regular meetings to link Shanghai, Jiangsu and Zhejiang in discussions on industrial cooperation and regional transportation construction.
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Two Deltas caught up in the Global Economic Crisis

1.1 Over the last decade, the Pearl River Delta (PRD) and the Yangtze River Delta (YRD) regions have been the major engines of foreign trade and emblems of economic development for China. These two regions jointly accounted for around 27.8% of China’s Gross Domestic Product (GDP) in 2008. The shares of exports in China contributed by the YRD and PRD regions were around 35% and 27% respectively in 2008. These two regions are also the leading destinations for foreign capital inflow. (Table 1)

1.2 However, as the ratios of export to GDP in the YRD and PRD regions were very high, around 63% and 74% in 2008 respectively, the two deltas were naturally confronted with a contraction in their total economic activities as orders from overseas markets and foreign direct investment (FDI) plunged. Indeed, the global economic crisis has hit China the hardest in what have been ranked as the country’s most open and developed economic regions: the PRD and the YRD.

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1 The PRD includes the nine municipalities of Guangzhou, Shenzhen, Zhuhai, Foshan, Huizhou, Dongguan, Zhongshan, Jiangmen and Zhaoqing, and covers Guangdong province.

2 The territorial boundaries of YRD include 16 municipalities of Hangzhou, Ningbo, Jiaxing, Huzhou, Shaoxing, Zhoushan, Taizhou, Nanjing, Wuxi, Changzhou, Suzhou, Nantong, Yangzhou, Zhenjiang, Taizhou and Shanghai, and cover Jiangsu, Zhejiang and Shanghai, two provinces and a centrally-administrated municipality respectively.

3 National Bureau of Statistics of China, 2009
TABLE 1 GENERAL DEVELOPMENT OF THE PEARL RIVER AND YANGTZE RIVER DELTA REGIONS, 2007

<table>
<thead>
<tr>
<th>Indicator</th>
<th>PRD</th>
<th>YRD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative areas</td>
<td>Guangdong</td>
<td>Shanghai, Jiangsu, Zhejiang</td>
</tr>
<tr>
<td>Land area (square kilometres)</td>
<td>24,437</td>
<td>99,600</td>
</tr>
<tr>
<td>Population (million)</td>
<td>42.8</td>
<td>75.0</td>
</tr>
<tr>
<td>Share of land area in China (%)</td>
<td>2.5</td>
<td>10.3</td>
</tr>
<tr>
<td>Share of population in China (%)</td>
<td>3.2</td>
<td>5.6</td>
</tr>
<tr>
<td>Average per capita GDP (yuan)</td>
<td>48,682</td>
<td>44,787</td>
</tr>
<tr>
<td>Exports (US$ billion)</td>
<td>369.2</td>
<td>475.9</td>
</tr>
<tr>
<td>Foreign direct investment (US$ billion)</td>
<td>17.1</td>
<td>40.1</td>
</tr>
<tr>
<td>Shares in China’s total exports (%)</td>
<td>30.3</td>
<td>39.0</td>
</tr>
<tr>
<td>Shares in total foreign investment to China (%)</td>
<td>22.9</td>
<td>53.5</td>
</tr>
<tr>
<td>Shares of high-tech manufacturing in total industrial output (%)</td>
<td>26.5</td>
<td>31.5</td>
</tr>
<tr>
<td>Contribution of service sector to GDP (%)</td>
<td>41.1</td>
<td>36.7</td>
</tr>
</tbody>
</table>

Sources:
2. Statistical Yearbooks of various provinces, 2008

1.3 Both regions are suffering greatly from the sharp fall in foreign trade and economic growth. The total value of foreign trade in the YRD region fell sharply to US$150.4 billion in the first quarter of 2009 from US$251.1 billion in the third quarter of 2008. For the PRD region,\(^4\) the corresponding figure decreased to US$115.4 billion in the first quarter of 2009 from US$192.4 billion in the third quarter of 2008.

1.4 In the first quarter of 2009, economic growth in the PRD and YRD regions decreased considerably. Indeed, compared to the corresponding figures in the previous year, several municipalities in the PRD region, such as Dongguan, Zhuhai and Zhaoqing, even recorded negative growth, at -3.5%, -6.9% and -0.4% respectively. Economic growth was also disappointing in the YRD region. Although some places achieved decent growth, municipalities such as Shanghai, Hangzhou and Ningbo recorded very low year-on-year GDP growth (Table 2).

\(^4\) The PRD region’s foreign trade has accounted for the majority of Guangdong’s foreign trade over the last decade. In 2008, according to statistics, its share reached 95.8%. Therefore, the data of Guangdong were used in the calculation of foreign trade in the PRD region.
TABLE 2  ECONOMIC GROWTH IN THE PEARL RIVER AND YANGTZE RIVER DELTA REGIONS IN 2008 AND THE FIRST QUARTER OF 2009

<table>
<thead>
<tr>
<th>Region</th>
<th>Growth Rate, 2008 (%)</th>
<th>Growth Rate, Q1 2009 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>9.0</td>
<td>6.1</td>
</tr>
<tr>
<td>Pearl River Delta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guangzhou</td>
<td>12.3</td>
<td>5.2</td>
</tr>
<tr>
<td>Shenzhen</td>
<td>12.1</td>
<td>5.3</td>
</tr>
<tr>
<td>Foshan</td>
<td>15.4</td>
<td>7.5</td>
</tr>
<tr>
<td>Dongguan</td>
<td>14.0</td>
<td>-3.5</td>
</tr>
<tr>
<td>Zhongshan</td>
<td>11.1</td>
<td>3.5</td>
</tr>
<tr>
<td>Jiangmen</td>
<td>10.8</td>
<td>4.0</td>
</tr>
<tr>
<td>Huizhou</td>
<td>11.5</td>
<td>5.1</td>
</tr>
<tr>
<td>Zhuhai</td>
<td>9.0</td>
<td>-6.9</td>
</tr>
<tr>
<td>Zhaoqing</td>
<td>14.2</td>
<td>-0.4</td>
</tr>
<tr>
<td>Yangtze River Delta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shanghai</td>
<td>9.7</td>
<td>3.1</td>
</tr>
<tr>
<td>Hangzhou</td>
<td>11.0</td>
<td>3.4</td>
</tr>
<tr>
<td>Ningbo</td>
<td>10.1</td>
<td>1.0</td>
</tr>
<tr>
<td>Jiaxing</td>
<td>10.7</td>
<td>4.6</td>
</tr>
<tr>
<td>Huzhou</td>
<td>10.6</td>
<td>5.3</td>
</tr>
<tr>
<td>Shaoxing</td>
<td>9.0</td>
<td>4.3</td>
</tr>
<tr>
<td>Zhoushan</td>
<td>14.5</td>
<td>11.8</td>
</tr>
<tr>
<td>Taizhou</td>
<td>9.6</td>
<td>2.0</td>
</tr>
<tr>
<td>Nanjing</td>
<td>12.1</td>
<td>9.3</td>
</tr>
<tr>
<td>Wuxi</td>
<td>12.4</td>
<td>9.7</td>
</tr>
<tr>
<td>Changzhou</td>
<td>12.4</td>
<td>10.0</td>
</tr>
<tr>
<td>Suzhou</td>
<td>13.0</td>
<td>9.5</td>
</tr>
<tr>
<td>Nantong</td>
<td>13.3</td>
<td>13.2</td>
</tr>
<tr>
<td>Yangzhou</td>
<td>13.4</td>
<td>13.1</td>
</tr>
<tr>
<td>Zhenjiang</td>
<td>12.8</td>
<td>12.6</td>
</tr>
<tr>
<td>Taizhou</td>
<td>9.6</td>
<td>12.9</td>
</tr>
</tbody>
</table>

Sources:
1. Statistics Bureau of the relevant provinces in the YRD and PRD regions, 2009

1.5 Battered by the decline in external demand and capital inflow, these two regions may cede much of their glory as engines of economic growth to inland regions in China. The economic problems faced by both the PRD and YRD regions require drastic measures from their governments. The governments of both regions are taking prompt measures to prevent a freefall in the economies. These include increasing government spending on public works and boosting consumer spending to stimulate the local economy.
1.6 The provincial governments of Guangdong, Jiangsu and Zhejiang have, in 2009, successively announced ambitious stimulus packages of 303 billion,\(^5\) 300 billion\(^6\) and 300 billion\(^7\) yuan investment respectively, and in sectors like transportation infrastructure, energy and modern industries. Both regions are putting more emphasis on domestic investment and consumption, as the economic crisis has pushed for a transition from a development model that is over dependent on trade and inward foreign investment.

1.7 While the agendas for both regions bear certain similarities, there were different priorities on anti-crisis policies. In the PRD, the global financial crisis has forced many of the region’s low-end manufacturing firms out of the market,\(^8\) and it is now vital for the government to play a decisive role in shaping the economic fortune of the region. Hence the provincial government of Guangdong is assigning top priority to upgrading the industrial structure.

1.8 In contrast, the YRD region focuses more on regional coordination. It is likely to suffer from its innate lack of regional integration and coordination since it comes under three different administrative jurisdictions. This may put severe constraints on the effectiveness of the collective response to the crisis as the lack of industrial cooperation within this region may result in duplicated development and cut-throat style competition. It also limits the development of an integrated domestic market, which is badly needed in the aftermath of a sharp fall in external demands.

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Rapid Growth in both Deltas

2.1 Both regions have been the most important centres for export-oriented manufacturing industries in China over the last decade. The large export-process production bases in Shenzhen and Dongguan serve as flagships in the PRD region: the shares of exports from the PRD region contributed by these two municipalities were 44.4% and 16.2% respectively in 2008. For the YRD, Shanghai and Suzhou, where large numbers of export-oriented and high-value added factories conglomerate, are leading the region’s industrial development. In 2008, the shares of exports from the YRD region contributed by these two municipalities were 33.8% and 26.3% respectively.9

2.2 The PRD and YRD regions spearheaded the economic opening up and reform on a scale unprecedented in China. Since the establishment of Shenzhen as a Special Economic Zone (SEZ) in 1980 and the development of Pudong New District in 1992, these two regions have based their development on trade and foreign capital after low-end export-oriented industries began to shift from the more industrialised economies of Asia into regions with abundant supplies of cheap labour, land and other factors of production.

2.3 Foreign trade in the two regions has developed rapidly since 1990. In 2008, total value of foreign trade in the YRD region was more than 3.2 times higher than the corresponding figure in 2003. In the PRD region, foreign trade reached US$683.2 billion in 2008 from US$283.5 billion in 2003, an increase of 2.4 times (Table 3).

TABLE 3 INDICES OF TRADE GROWTH IN THE YANGTZE RIVER AND PEARL RIVER DELTA REGIONS, 2003 – 2008

<table>
<thead>
<tr>
<th>Region</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>YRD</td>
<td>100</td>
<td>145</td>
<td>182</td>
<td>226</td>
<td>282</td>
<td>322</td>
</tr>
<tr>
<td>PRD</td>
<td>100</td>
<td>126</td>
<td>151</td>
<td>186</td>
<td>224</td>
<td>241</td>
</tr>
</tbody>
</table>

Note: The YRD region includes Shanghai, Jiangsu and Zhejiang; the PRD region covers Guangdong
Sources:

9 Guangdong Statistics Bureau, 2009 and Shanghai Statistics Bureau, 2009
2.4 Thanks to the increases in trade and FDI, both regions have achieved a high annual growth rate of around 15 percent since 1992.\textsuperscript{10} Compared to the 2000 figure of 19.6%, the share of China’s GDP contributed by the YRD region had grown by 2008 to 21.7%. For the PRD region, its share of GDP in China increased to 11.9% in 2008 from 9.7% in 2000 (Table 4).

\begin{table}
\centering
\caption{Share of China’s GDP Contributed by the Yangtze River and Pearl River Delta Regions (\%)}
\begin{tabular}{|c|c|c|c|c|}
\hline
\hline
YRD  & 19.6 & 20.9 & 22.5 & 23.0 & 21.7 \\
PRD  & 9.7 & 10.0 & 12.2 & 12.2 & 11.9 \\
\hline
\end{tabular}
\end{table}

Note: The YRD region includes Shanghai, Jiangsu and Zhejiang; the PRD region covers Guangdong

Sources:

2.5 Although the YRD region is on the path of export-oriented development with heavy reliance on foreign capital, it is also technologically more advanced. The share of low-end manufacturing products in total exports in the YRD region was only 46.6% in 2007, compared to 66.6% in the PRD region (Figure 1).

\begin{figure}
\centering
\caption{Share of Low-End Manufacturing Products in Exports from the Yangtze River and Pearl River Deltas}
\includegraphics[width=\textwidth]{figure1.png}
\end{figure}

Source: Statistics Yearbooks for various provinces, 2008

\textsuperscript{10} China Statistical Yearbook, 2008
2.6 The PRD region has experienced a different pattern of industrial development from that of the YRD region over the last decade. In the PRD, industries such as electric machinery and equipment are dominated by low-end processing activities, rather than high-end advanced manufacturing and technological research. The economy of the PRD region is widely known as the ‘global manufacturing factory’. This relative weakness is exemplified by the fact that in 2007, the average ratios of high-tech industries to total industrial output value were 26.5% in the PRD region compared to 31.5% in the YRD region.

Impacts of the Global Economic Crisis

3.1 The global economic crisis, triggered by the American sub-prime mortgage crisis in April 2007, has hit the export-oriented PRD and YRD regions hard. Both regions witnessed a rapid decline in foreign trade and investment, rising unemployment\(^{11}\) and a slowdown in economic growth.

3.2 Figure 2 shows that the total value of foreign trade in the YRD region fell sharply to US$150.4 billion in the first quarter of 2009 from US$203.4 billion in the first quarter of 2008. Likewise, the PRD region registered a fall to US$115.4 billion in the first quarter of 2009 from US$149.9 billion in the first quarter of 2008.

3.3 Due to their overdependence on foreign trade and investment, these two regions are the hardest hit in this global economic slowdown. The global economic crisis has heightened the risk of both the PRD and YRD regions losing out to China’s inland regions in terms of pace of development and transfer of capital and technology.

\(^{11}\) “China’s worst nightmare: unemployment”, *Times*, <http://www.time.com/time/world/article/0,8599,1855400,00.html> [7 Jun. 2009].
3.4 The problem of an over-reliance on trade and foreign capital is most seriously felt in the PRD region. A recent survey indicates that many Hong Kong-based factories in PRD have been considering shifting their production facilities to inland regions since the onset of the crisis; 90% recognise that upgrading their industries is the ultimate solution to their predicament. While similar challenges also apply to the YRD region, the risk of such a capital outflow from the region is lower, thanks to its better positioning in the value chain.

**Government Efforts to Fight the Crisis in the two Deltas**

**Similarities in Anti-crisis Policies**

4.1 The first similarity concerns measures to boost domestic spending and stimulate domestic economy. Both regions have placed emphasis on boosting

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13 "Hong Kong businessmen at PRD: Transformation as the key solution for crisis", *Mingpao*, 21 Apr. 2009.
domestic investment, thus, departing from a development model that depends too much on foreign investment and trade.

4.2 The global crisis has highlighted the importance of rebalancing economic growth by focusing on domestic demand in the long run. It may open new avenues to a more self-reliant and sustainable developmental pattern for these two deltas.

4.3 The second is in the announcement of key policies by both the PRD and YRD region to upgrade their backward industrial structures by focusing on the development of more advanced manufacturing industries in order to turn the crisis into an opportunity for industrial upgrading and economic restructuring.

4.4 In the PRD region, the Reform and Development Outline 2008-2020 (henceforth the Outline) was unveiled in January 2009, outlining key policies to help cope with the global economic crisis and resolve problems of the existing industrial and economic structure. Various preferential policies such as tax cuts and funds to support technological advances are expected to be provided for the upgrading of the region’s manufacturing industries.

4.5 For the YRD region, government policies are specifically directed towards the developing of advanced manufacturing industries such as equipment manufacturing and automobile in Shanghai, and electronic information, energy-conservation equipment and medicines in Jiangsu. The traditional industries such as textile and garments in Zhejiang will also be reformed and updated. The provincial government has given priorities to the development of high-technology and modern equipment manufacturing.

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The PRD and YRD regions are promoting the development of high value-added industries, as the crisis has effectively exposed the vulnerability of labour-intensive and low value-added manufacturing activities. Both regions hope to steadily become advanced manufacturing bases. Meanwhile, low value-added economic activities will be gradually transferred to the inland regions.

**Difference in Anti-crisis Policies**

The PRD region assigns top priority to the task of implementing industrial upgrading. The Party Secretary of Guangdong, Wang Yang, has expounded the idea of “double transformation of industries and labour force” (known also as the so-called “empty the cage to change the bird” policy), which lays out the need to upgrade the value-added and technological level of the PRD’s industries while transferring the low value-added industrial sectors out of the PRD region. The idea was later endorsed by President Hu Jintao during the People’s Congress yearly session in early March, 2009.17

The Guangdong government has identified the changing industrial structure as the leitmotif of crisis management. The ability to move up the production value chain and thus to ride on the wave of the next phase of economic development in China have been singled out for this purpose.

The YRD region, on the other hand, focuses more on regional integration and coordination.18 This is quite understandable since the PRD region is under the single administration of one province, while the YRD region falls under the administration of two provinces and one centrally-administrated municipality. Historically, the regional integration of YRD has been weak, and the municipalities within this region, such as Shanghai, are quite independent. The

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various local governments have implemented different development policies to achieve local socio-economic growth.

4.10 In March 2009, during the 9th Economic Coordination Meeting within the YRD, it was agreed among local leaders that the YRD region needs concerted efforts to improve its economic competitiveness and resistance to the crisis. Since the lack of coordination and integration directly limits the much needed development of the regional market, the panel of local leaders has expressed the same urgency for measures to improve internal links, accelerate cooperation in fields such as environmental protection, and increase healthcare and financial integration.19

**Different Challenges Ahead for the two Deltas**

5.1 The governments in both regions are facing different long-term challenges in coping with the global economic slowdown and sustaining regional competitiveness. Fulfillment of the potential of the YRD region through coordinated development of an integrated domestic market is a challenging task for the local government. The lack of coordination and integration may result in duplicated development and ‘cut-throat’ style competition in areas such as modern equipment manufacturing.

5.2 Due to administrative divisions and diverging economic interests, regional competition among Shanghai, Jiangsu and Zhejiang in areas such as foreign investment and construction of infrastructure has been intense since 1978. It is evident in the construction of Shanghai’s Yangshan Deep Port and the transfer of Hongqiao International Airport. Moreover, within the YRD region, various

local governments have established administrative barriers which hamper inter-regional cooperation.  

5.3 In the YRD region, the local governments may need to adopt certain key measures to promote regional coordination and economic cooperation, such as a mechanism for coordination, holding regular meetings to link Shanghai, Jiangsu and Zhejiang in discussions on industrial cooperation and regional transportation construction, and formulating common development plans and environmental protection measures.

5.4 For the PRD region, the goal of industrial restructuring set by the local government is indeed ambitious and very difficult to achieve. Moreover, the existing structure may create serious obstacles to the transformation. The shortage of both skilled human capital and the government’s Research & Development (R&D) expenditure is another main roadblock for the development of advanced manufacturing industries.

5.5 In the training of skilled personnel, the PRD region has been lagging far behind that of the YRD region over the last decade. The total number of professionally qualified workers in the YRD region was more than twice as high as the corresponding number in the PRD region during the period between 2000 and 2007.  

5.6 The YRD region has shown stronger capability in industrial modernisation and economic restructuring than the PRD region. More was spent on R&D, which is essential for industrial upgrading and development of an innovation-based economy. In 2007, government expenditure on R&D in Guangdong amounted to 1.3% of its GDP, considerably lower than those for Shanghai (2.52%), Jiangsu (1.68%) and Zhejiang (1.52%) in the YRD region (Figure 3).

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21 National Bureau of Statistics, China, 2009
5.7 It is unclear if the local government in the PRD region is making efforts to develop human capital and increase R&D expenditure. There is also a lack of specific measures for upgrading the industrial structure and developing high-tech enterprises in this region.

5.8 In the PRD region, as a top priority, certain key measures need to be adopted by the local government to promote industrial upgrading and economic restructuring: tax incentives, state capital subsidies and manpower training. Tax incentives are an effective means to encouraging investment in advanced manufacturing, high-technology industries and R&D activities.

5.9 The local governments in the PRD region may also need to include publicly funded manpower training and research in training centres and research institutes to ensure plentiful supply of trained and skilled labour. A user-friendly and effective infrastructure for developing human resources is thus necessary.
APPENDIX I  LOCATION AND JURISDICTIONS OF THE YANGTZE RIVER DELTA


APPENDIX 2  LOCATION AND JURISDICTIONS OF THE PEARL RIVER DELTA