The cross-Strait Economic relations after the Global Financial Crisis

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1. Historical Pattern

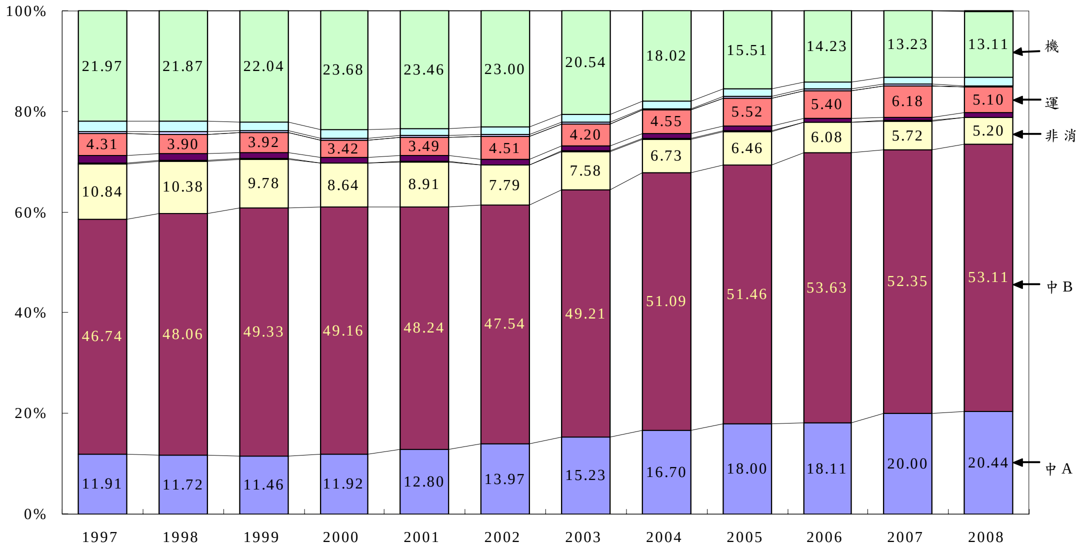
China-Taiwan trade relations during late 90s to mid 00s have basically followed the pattern of vertical division of labor. During this period of time, the basic features characterizing the Cross-strait trade relation included one-sided trade and investment flow from Taiwan to China, significant trade surplus accumulated by Taiwan from China, and highly heterogeneous composition of traded goods and export destinations.

Without a doubt, Taiwanese firms built the micro foundation inside of these characteristics. Massive investment in terms of number of firms and investment volume were made by Taiwanese manufacturer firms during this period in search for cost reduction, especially for downstream small and medium firms with price sensitivity. Nevertheless, Taiwan's upper stream industries were able to absorb production resources released by downstream industries and vastly developed with the assistance from Taiwanese government. Hence, although the investment flow between China-Taiwan was one-sided, the supply chain fragmentation and vertical division of labor across the strait had also led to boosted investment in Taiwan during the period. Investments between China and Taiwan are basically complements.

This vertical division of labor in searching for production efficiency was able to create and secure global competitiveness for Taiwanese firms to some extent, when global economy is still in the expansion. Hence, with the vast expansion of up-stream industries in investment, production and exports, manufacturing sector in Taiwan was able to enjoy a neat economic performance at the moment. However, some side effects steamed from the cross-Strait division of labor had also been accumulated at the time.

The first side-effect often mentioned is about the industrial “hollowing-out”. However, this is misleading to some extent since the overall investment in Taiwan has not decreased and the cross-Strait investments have been more like complements instead of substitutes. Therefore, the “hollowing-out issue” would be more precisely redefined as the issue of losing potential opportunity to reform domestic downstream industries toward a branding and service oriented industries. In turn, the hollowing-out issue has led industrial structure in Taiwan become more concentrated on certain up-stream industries and become more vulnerable in face of global economic fluctuation.

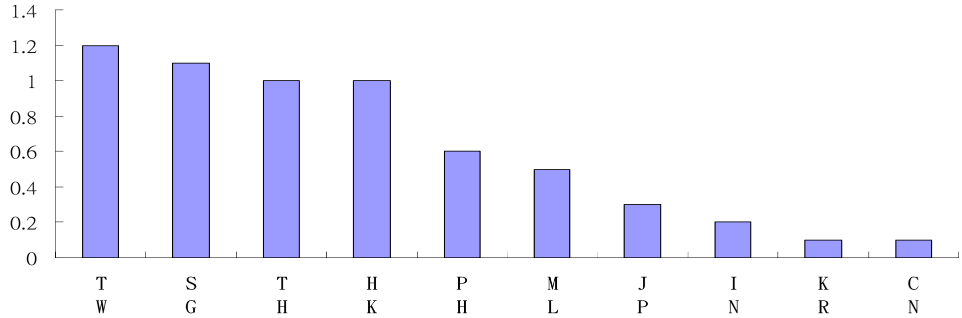
Chart 1 Export structure of Taiwan by Usage



Source: TIER

The second side-effect also often mentioned is about the high degree of trade dependence on China. However, this is also somewhat misleading in the sense that this trade dependence could easily be changed when most Taiwanese firms relocate their production bases to other emerging economies. In fact, during the late 2007 to the first half of 2008 when Chinese government initiated new policies to reduce privileges in taxes granted to foreign firms, the trade volume between Taiwan and Vietnam increased significantly because many overseas Taiwanese firms started to relocate their production bases to Vietnam.

Chart 2 Elasticity of U.S GDP Growth to GDP growth in Asian Countries



Source: IMF,Regional Economic Outlook Asia and Pacific , April 2008

According to IMF (2008), 1% GDP growth of the U.S could contribute 1.2% GDP growth to Taiwan through the linkage of external market. This indicates, among other Asian economies, Taiwan is still considered to have high trade dependence on the U.S market. On the other hand, after the cross-Strait trade relations have developed for more than two decades, most exports from Taiwan to China still belong to inter-industry trade due to production fragmentation. In terms of final good exports, Taiwanese firms still face tremendous entry barriers in Chinese domestic markets, and therefore the end markets for Taiwanese firms have never changed from western economies to emerging economies, such as China.

Hence, one important issue underneath the current cross-Strait trade relations is about the high concentration of investment on China, instead of high trade dependence on Chinese domestic market. Even though Taiwanese firms have been seeking other production locations besides China, and the cross-Strait investments have been basically complements under vertical division of labor so far, however, China's industrial policies which emphasize on vertical integration have upgraded its industrial structure toward more Taiwan alike. After the global financial crisis, there are concerns about whether Chinese government will impose additional trade restrictions and policies aiming on import substitution. Hence, from Taiwan's viewpoint, we are interested in finding out whether the cross-Strait trade relations have become more toward horizontal division of labor and whether Taiwanese firms' investments in Taiwan and China have become more like substitutes instead of complements.

2. During the global financial crisis: What has been changing?

In general, changes in industrial structure are determined by various long-term factors. However, global economic shocks may also play an important short-term factor in the sense that it forces government to introduce certain trade and industrial policies to remedy potential economic impacts. Those policies, alone with changes in global market conditions, in turn create different conditions and environments for long-term change.

This is particularly true for emerging economies with sound fiscal conditions and high saving rates. During late 2007, China has been proposing a series of macroeconomic policies aiming on putting a brake on the overheating export industries with high pollution, high energy and resource demand. These industries are being targeted for their low added value and high trade disputes due to overcapacity in production and low price dumping, respectively. Hence, Chinese industrial policies after the 11^{th} 5 years plan, have been trying to alter its industrial structure toward more up-stream, capital and technology intensive industries.

The change in preferential policies from down-stream to up-stream industries has shown its impacts in various aspects. In terms of export structure, the proportions of both durable and non-durable good to the total exports have gone down in China during 2003 to 2008. However, the proportion of intermediate good, machinery and transportation equipment to total exports have instead increased at the same time. Some capital and non-durable goods even accounted for larger export proportion during the period of the global financial crisis.

Table 1 Export Structure of Taiwan and China by Usage

	台灣				中國大陸			
	2003	2008	2008 1-9	2008 10-12	2003	2008	2008 1-9	2008 10-12
Agriculture, Forestry, Livestock and Hunting Products	0.35	0.26	0.25	0.31	1.58	0.64	0.62	0.69
Processed Food	1.08	0.79	0.76	1.00	2.94	1.87	1.82	2.00
Beverages and Tobacco	0.06	0.05	0.05	0.06	0.25	0.20	0.21	0.18
Energy and Minerals	0.03	0.11	0.11	0.06	1.72	1.19	1.25	1.03
Construction Materials	0.14	0.14	0.14	0.17	0.60	0.73	0.73	0.72
Intermediate products A	15.23	20.50	20.87	18.81	6.89	10.26	10.95	8.17
Intermediate products B	49.21	53.32	53.28	52.45	26.62	28.13	28.53	26.92
Consumer Nondurable goods	7.58	5.10	4.99	5.98	27.29	20.13	19.54	21.92
ConsumerDurable goods	4.20	5.17	5.31	4.32	9.35	8.57	8.38	9.12
Machineries	20.54	12.93	12.62	14.96	21.09	25.31	25.01	26.21
Transportation Equipment	1.59	1.63	1.60	1.90	1.69	2.98	2.96	3.03

Source: Custom Data

The increasing proportion of China's exports in capital, intermediate goods imply that China's new industrial policies have led to a higher degree of homogeneity in industrial structure across the strait. Among many driving forces behind the change in China's industrial structure, firms and investors from Taiwan continue to play an important role. According to MOEA, FDI outflow from Taiwan to China continue to increase in recent years, moreover, the average size of investment for one applied case has increased significantly. This reflects the fact that the recent investments are made mostly from up-stream, capital and technology intensive industries. The motivation of these up-stream firms is no longer only to seek cheaper production resources, but also to continue their service network which is gradually agglomerating in China.

Table 2 Approved Investment to Mainland China by Year

	Total	
Year	Case	Amount
1991 ~ 2003	31,151	34,308,569
2004	2,004	6,940,663
2005	1,297	6,006,953
2006	1,090	7,642,335
2007	996	9,970,545
2008	643	10,691,390

Source: MOEA

According to "Report on Foreign Investment Strategies of the Manufactures 2008", the selected Taiwanese overseas firms showed a decreasing proportion of intermediate goods imported from Taiwan, instead, proportion from local suppliers have increased. This trend of industrial agglomeration in overseas production bases, especially in China, has gradually altered the pattern of cross-Strait trade relations from vertical division of labor to horizontal division of labor. Furthermore, the investments across the strait are more toward substitutes than complements.

Table 3 Proportion of Input from Local Suppliers in China

Industry Year	2005	2006
Information & Electronic Industry	**39.34%**	**43.00%**
Computers, Electronic & Optical Products	37.55%	40.45%
Electronic Parts & Components	35.53%	40.86%
Electrical Equipment	47.56%	51.62%

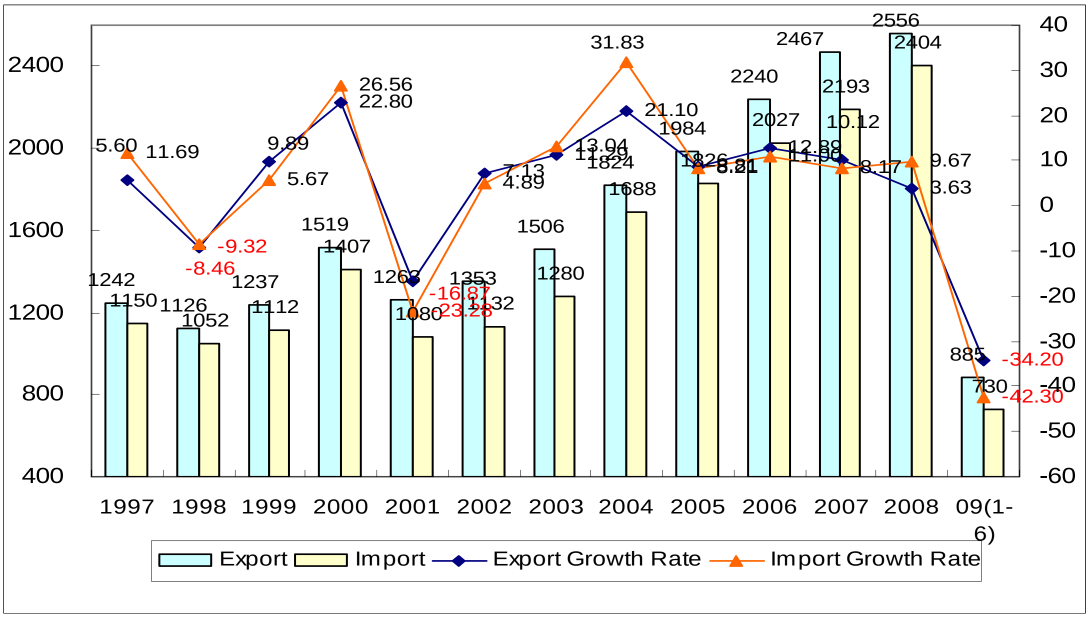
Source: Report on Foreign Investment Strategies of the Manufactures 2008, MOEA

Hence, Taiwan's high concentration of trade and investment on the United States and China respectively, has been gradually putting Taiwanese economy in great risk. Indeed, when global financial crisis leads to significant decreases in final demand in the U.S and local agglomeration effects lead to decreases in derived demand from China, Taiwanese economy has been suffering serious impact though external markets.

In the first half of 2009, Taiwan has suffered a 34.2% decrease in exports. In terms of market structure, the proportion of exports to China (including Hong Kong) has also gone down to 38.0% in 2008. It indicates that Taiwan has suffered even greater decrease in exports to China.

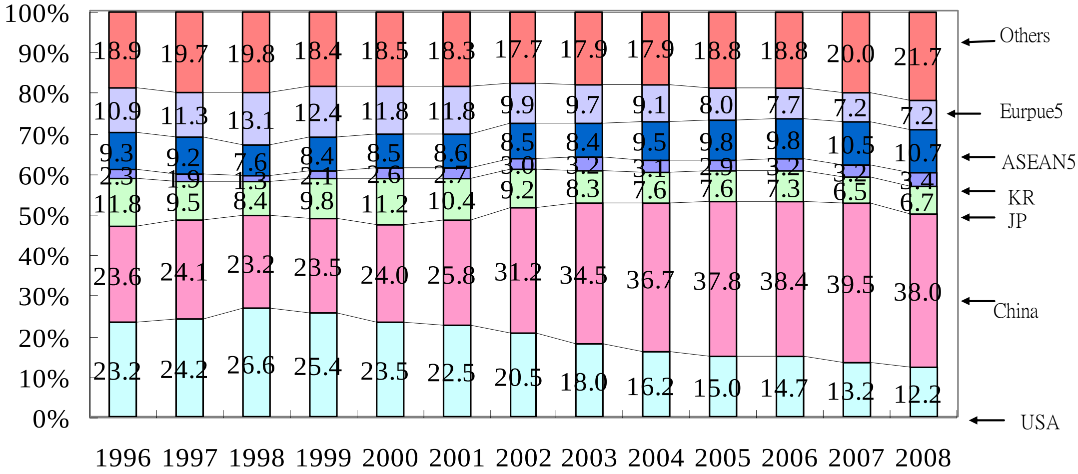
Chart 3 Export and Import performance of Taiwan (1997 to 2009Q2)

Unit:100 million USD ; %



Source: MOEA

Chart 4 Share of Export by Key Trading Partners



Source: MOEA

Although China' industrial policies toward up-stream development has undermined Taiwan's exporting activities and economy, however the local agglomeration does necessarily happen to every country with significant investment position in China.

Table 4 shows the export performance in Chinese market for some major industries in Taiwan and Korea. The data indicates that Korea suffered less impact than Taiwan in overall manufacturing exports to Chinese market. In terms of major exporting industries such as electronic components, basic metal and chemicals, the outcome of comparison remains the same. What are the possible facts that cause the difference between Taiwan and Korea in Chinese market during the global financial crisis?

Table 4 Exports from Taiwan and Korea to China before and after the crisis

	Taiwan				Korea			
Industry	100 millions (USD)		Weight（%）		100 millions (USD)		Weight（%）	
	07.10-08.06	08.10-09.06	07.10-08.06	08.10-09.06	07.10-08.06	08.10-09.06	07.10-08.06	08.10-09.06
Manufacturing	832.22	535.90	99.76	99.73	848.84	665.34	99.59	99.60
Petroleum and Coal Products	22.36	6.45	2.69	1.20	65.52	34.57	7.72	5.20
Chemical Material	122.43	82.44	14.71	15.38	136.92	110.91	16.13	16.67
Basic Metal	48.85	31.16	5.87	5.81	47.00	40.27	5.54	6.05
Fabricated Metal Products	19.06	11.92	2.29	2.22	28.34	23.93	3.34	3.60
Electronic Parts and Components	459.04	288.63	55.16	53.86	344.07	259.79	40.53	39.05
Computers, Electronic and Optical Products	32.13	23.04	3.86	4.30	60.73	52.34	7.15	7.87
Electrical Equipment	21.84	14.91	2.62	2.78	38.31	33.48	4.51	5.03
Machinery and Equipment	33.58	20.05	4.04	3.74	36.94	29.56	4.35	4.44

Source: Custom data of China

One possible factor could be the supply-chain protectionism within the multinational corporation. This is supported by recent business news indicating that many large Korean corporations in China have changed their up-stream suppliers from outsiders to own subsidiaries. Since Taiwanese firms are mostly independent and small in size, supply-chain protectionism is relatively hard to be formed between them.

Another long-term factor could stem from differences in business models and strategies. Overseas Korean firms, especially for multinational corporations such as Samsung or LG, tend to offer their best products to global market but to keep their cutting-edge components in Korea. Once their branding and marketing strategies succeeded in overseas markets, as they usually do, the derived demand for key components from those markets will become a driving force for Korean economy. However, for Taiwanese firms which manufacture OEM products with mature technology and no product differentiation, these firms are less capable of competing with their market rivals and usually have to seek cheaper up-stream inputs to manage costs and maintain competitiveness. Hence, differences in business models and strategies between Korean and Taiwanese firms could lead to significant differences in supply-chain relations with China when market conditions changed.

3. Challenges and Opportunities

It seems clear to us that Taiwanese economy should lower its systematic risk through increasing diversity on final and derived demand markets. Not surprisingly, this goal could hardly be reached if the cross-Strait economic relations stay the current weakened trend. In policy perspectives, Chinese market should definitely be redefined in many aspects.

Firstly, Taiwanese firms should focus more on Chinese domestic markets to diversify market destinations after the U.S consumption has been deeply hit by the global financial crisis. According to World Bank (2009), asset value of American households has decreased 14.7% or 1.13 trillions during the fourth quarter of 2007 to the fourth quarter of 2008. Moreover, during December 2007 to July 2009, non-Agricultural unemployment has increased 6.7 millions. This massive loss in wealth and income will certainly change consumption and saving behavior for American households. Although Obama administration has tried to stimulate economy by supporting automobile and other new industries such as alternative energy, there is still disbelief that these policies will effectively create jobs and improve the situation of unemployment and household income. Hence, the high dependence of Taiwanese economy on the western markets could not continue to be the model in the near future. Market diversification becomes the first challenge to the policy makers.

Chinese domestic market although enjoys a significant growth in recent years, it is still being highly protected by many entry barriers. According to our simple survey, many Taiwanese firms point out that Chinese market and custom regulations are still subject to issues of inconsistence and transparency. Moreover, some important logistic processes are still under the control of Chinese state enterprises. Chinese market is usually considered by Taiwanese firms to be a market with high risk but low profit margin. Hence, it is believed that lower the level of inconsistence and improve transparency in Chinese regulations will be one of most important issues that policy makers in Taiwan should try to convince their Chinese counterpart in the future. With system maturity and barrier reduction being the fundamental, the preferential trade talk across the strait could really take effects on promoting mutual trade and realize market diversification for Taiwanese economy.

Secondly, Taiwanese firms should change business model to rebuild sound supply-chain relations across the strait. This could be done by various business strategies. As we mentioned above, the Korean model is to send their best multinational branding corporations to seize Chinese market but to deploy their core logistics such as R&D and key component manufacturing in Korea. In other words, if Taiwanese industries consider China as the next major external market, what they should do is to establish resources integrators like Samsung or LG in China. For some industries with no competitive branding corporations in Taiwan, our firms in up-stream industries should try to build close R&D and supply-chain relations with their major domestic branding corporations.

However, to utilize Taiwan's comparative advantage in R&D and management and also to prevent technology spillover and local agglomeration in China is strategy intensive for Taiwanese firm when they consider cooperating with Chinese partners. One possible strategy is to encourage Chinese enterprises to invest high quality manufacturing in Taiwan. This is particularly viable for some industries where Taiwan has better reputation in product quality and better technology and facilities to meet international standards. For instance, manufacturing a watch in China and in Switzerland can lead to totally different added value in the global market. Hence, for some emerging industries such as smart automobile or electronic medical equipment where Taiwan has better test facilities and better linkage and reputation with global technological leaders, encouraging Chinese enterprises to invest new product development is a worth-trying strategy to keep these industrial activities in Taiwan.

Another possible strategy is to create a new vertical division of labor across the strait by making Taiwan focus on value-added services such as customized solution providers and making the Chinese partner do the production side. For example, to develop advanced medical or health management services in Chinese market, we can produce mature medical equipment in China but provide medical services with tourism in Taiwan though our high quality medical professionals and advanced facilities. Since the quality of medical service relies highly on network support and medical professionals, these factors could not be easily replicated in the short time and therefore the whole industry is more likely to remain in Taiwan.

4. Final Remarks

The global financial crisis although deeply impacts Taiwanese economy in 2008 and years to come, it does indeed provide Taiwan an opportunity to rebalance its economic ties with the rest of the world. No matter in market destinations or in industry and product structure, rebalance and renewal will be the core for both industrial and trade policies in Taiwan. What we mean by “rebalance and renewal” is not to dramatically lean forward to emerging markets and move our attention away from the western economies, but to foster new products and service development for new markets at the same time through policy instruments.

Taiwan’s strategies in the past were to heavily invest in emerging economies but to sell in the western markets. Technological spillover and local agglomeration gradually weakened economic ties and strengthened competition across the strait. However, since rebound of the global economy relies on both new industry development in advanced economies and new market expansion in emerging economies, Taiwan should put more emphasis on investing in advanced countries seeking for strategic R&D partners and on developing domestic markets in emerging countries. Especially for new industries that integrate both products and services, Taiwan should selectively devote its policy resources to these new hopes so as to maintain the sound role in the cross-Strait division of labor and differentiate from China in the western markets.

Reference

IMF (2008), “Regional Economic Outlook Asia and Pacific”, April 2008

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