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Contouring the Migrating IT Industry - The Challenges and Strategies of Taiwanese Businessmen in China

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Contouring the Migrating IT Industry —

The Challenges and Strategies of Taiwanese Businessmen in China

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Abstract

The IT industry of Taiwan has been migrating westward to the coastal provinces of China since 1980s. The second wave of migration to further west and inland regions of China is going on. Based on the analysis of Global Production Network, the essay looked into the driving forces behind the movements, i.e., production factors, cluster effects, labor shortage and regulations, and government policy, and discussed the challenges ahead of the migration. Industry upgrading and technology advancing, turning to domestic market, another migration, and turning home are the possible strategies. While each option offers opportunities, none of them are easy or certain to the Taiwanese industry.

Key words: Global Production Network (GPN), Cluster Effects, Smiling Curve, Industry Migration.

I. Taiwan IT Industry in the Context of Global Production Networks

In a conventional sense, market access and utilization of international factor cost differentials such as labors have been the major motivations of international production (Dunning, 1981), and which commonly tags cost reduction higher priority in the selection of offshore production. Facing the ever-fierce global competition, especially in IT industry, the networks for global production have been evolving to fulfill needs like global logistics, flexible production and speed-to-market. In the networks, the flagships integrate the supply, knowledge, and customer bases that scattered regionally or globally (Ernst, 2002a). To seek complementary quick and low-cost access to resources, capabilities and knowledge, they segmented the value chain into a variety of discrete functions and locate them per the best efficiency and the importance of market (Ernst and Kim, 2002), which allows the flagships to concentrate on their core competencies while cutting off low-margin manufacturing and low-end fabrication. Therefore, the build-up of global production networks (GPN) makes cost reduction, production differentiation and time-to-market possible, especially to IT industry.

Ernst and Kim (Ibid) indicated the driving forces that shift the industrial organization to GPN in the discussion on knowledge diffusion and local capacity formation in the networks. First of all, the institutional change through liberalization has considerably reduced the cost and risks of international transactions and increased international liquidity. In addition, as information technology is growing further capital-intensive, soaring R&D spending lead to the inclination of outsourcing to alleviate financial pressure and the requirement of a corresponding expansion of sales to maintain profitability since any single market is hardly large enough to amortize huge R&D expenses. However, in a broader geographic scope of competition where the complexity of competition mounts, no firm can generate all the different capabilities internally and thus outsourcing becomes a must. With the development of IT, the friction of time and space to either markets or production can be shrunk and it "fosters the development of leaner, meaner and more agile production systems that cut across firm boundaries and national borders".

The flourishing development of dedicated semiconductor foundry business model can be served as the example of how the capital-intensive character of IT industry affects GPN. The investment of semiconductor dedicated IC foundry skyrockets with each generation, from average one billion US dollars for constructing an eight-inch wafer foundry to nearly four billion for the latest twelve-inch one. Since few company can reach the economic scale alone and meet the production capacity of a foundry, contracting-out appeals to be a much rational choice for IC design firms and IC suppliers. This not only resulted in the production networks of semiconductors, but also gave birth to dedicated semiconductor foundries in Taiwan, such as the first of kind, TSMC (Taiwan Semiconductor Manufacturing Company), and UMC (United Microelectronics Corporation).

Taiwan IT industry is noted for its quick and flexible manufacture and fabrication, which is complementary to flagships in GPN and find itself a seat in the context of GPN since its evolving in the 1990s. The high value-added segments of production, such as R&D or marketing, nonetheless, are still kept internally at flagships. The development basically corresponds to the argument of Rappaport and Halevi (1991) that the computer companies (flagships) in the US should concentrate on creating persistent value in computing rather than on building computers, i.e., defining how computers are used, not how they are manufactured.

Figure 1 illustrates different value-adding potentials of respective components in the value chain. In the graph the Y-axis stands for value-added and the X-axis represents for value chain (stage of production). A smiling curve is formed as both ends of the value chain command higher values added to the product than the middle part of the value chain. The concept was first proposed in 1992 by the founder Acer, a world-class IT company in Taiwan (Chen, Xiuqi, 2011), after devoting to and observing personal computer industry for decades. He then suggested that Taiwanese IT forms should strive for moving upward from the bottom of the value chain to either or both end of the Smiling Curve. Whereas low value-added is parallel to low margins, to survive, the IT firms at lower-tier are constantly forced to look for cheaper factors such as labor and land, which results in an interesting "migrating phenomena".

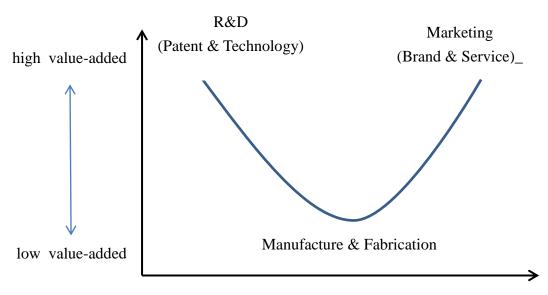


Fig. 1. Value-adding potentials of components in the value chain Revised from Smiling Curve (施振榮, 1996)

II. The Migrating-Westward Phenomena

(I) Relocation of Taiwanese IT Industry

Follow the flourishing agriculture development, the economy of Taiwan took off in the 1970s based on labor-intensive industries. The advantages of high-quality but low salary human resources, cheap land, and the lack of complete regulation on environmental protection attracted foreign investments and cultivated local industry. With the upgrade of income level and living standard, the requirement for wage, land acquisition, and clean environment raised. Consequently, foreign investments began to transfer the location of production out of the island and the local IT industry followed in the 1980s except those firms transformed to capital or technology intensive ones.

Considering the competence of production factors and convenience of language, since 1991 China has been the focal point of Taiwanese investment abroad and stood 60 percent of the overall amount in average through 2010. The percentage even rose to near 85 percent in the first eight months of year 2011 (see table 1).

Table 1 Taiwan Approved Outward Investment by Country (Area)

Unit: US\$ million %

Period	1991-2010			JanAug. 2011			Cumulation		
Area	Cases	Amount	Percentage by Amount	Cases	Amount	Percentage by Amount	Cases	Amount	Percentage by Amount
Mainland China	38,685	97,320.92	60.89	607	10,421.36	84.67	39,292	107,742.28	62.59
British C. America	2,002	22,826.15	14.28	35	409.43	3.33	2,037	23,235.58	13.50
USA	4,738	10,979.74	6.87	27	257.82	2.09	4,765	11,237.56	6.53
Singapore	428	5,438.53	3.40	10	108.03	0.88	438	5,546.56	3.22
H.K.	1,069	3,495.99	2.19	38	214.18	1.74	1,107	3,710.17	2.16
Vietnam	406	3,014.58	1.89	14	196.03	1.59	420	3,210.61	1.87
Thailand	286	1,736.90	1.09	1	3.73	0.03	287	1,740.63	1.01
Japan	492	1,316.50	0.82	14	246.32	2.00	506	1,562.82	0.91
Panama	64	1,270.70	0.79	3	119.91	0.97	67	1,390.61	0.81
Philippines	129	537.27	0.34	0	19.17	0.16	129	556.44	0.32
Korea	143	499.01	0.31	4	17.55	0.14	147	516.56	0.30
Germany	141	167.09	0.10	3	2.35	0.02	144	169.44	0.10
Others	2,078	11,238.07	7.03	58	292.92	2.38	2,136	11,530.98	6.70
Total	50,661	159,841.44	100.00	814	12,308.81	100.00	51,475	172,150.25	100.00

Note: The figures are not added up to the total due to rounding up.

Source: Investment Commission, MOEA, ROC.

http://www.mac.gov.tw/lp.asp?ctNode=5934&CtUnit=4152&BaseDSD=7&mp=3

It is worth noting that to balance the over-leaning of economy gravity westward on China and to disperse the risks and national security concerns, Taiwanese government promoted the "Go-South Policy" in the decade between 1990s to early 2000. To begin with, the Lee Teng-Hui administration launched the national and party enterprises investment to Southeast Asian counties as the pilot program in 1994(Xiangming Chen, 1996). Seizing the occasion of Asian financial crisis in 1997 when many SEA countries were suffering from the run-off of capital, under high pressure of foreign debt, and desperate for the inflow of capital, the second wave of Go-South followed via offering financial support to the Taiwanese civil enterprises and encouraging

southward investments. It was also expected that a substantial economic and political relation could be further developed along. When the pro-independence president Chen Shui-Bian came in power and facing a very stringent Between-Straits Relation with China, the third Go-South operation was propelled in 2002 (梁銘華, 2003).

As generally conceived, the three waves of Go-South policy barely achieved their targets either economically or politically. The figures in table 1 clearly illustrate how limited the effect of the political maneuver was when encountering the invisible hand. On the other hand, responding to varying production factors and changing environment, the investment distribution of Taiwanese manufacturers within the boundary of China is in a dynamic process rather than in a static condition. The sight of shifting gravity of IT industry investment along with others from the initial Pearl River Delta and later Yangtze River Delta to other previously untouched areas in the last decade is one of the obvious cases (Wang, 2007). The Deltas have geographically covered over 70 percent of the total Taiwanese investment in China. The absolute amount keeps growing, though, the proportion they represent has been stepping down from the peak and changes are emerging in the regional distribution pattern of manufacturers and investments.

In 2005 Taiwanese investment in all but five provinces declined according to Taiwan's Ministry of Economic Affairs. By contrary, the inflows into Shandong, however, jumped 98 per cent year-on-year, albeit from a low base. Other regions registering increases were the northeast, Hebei in northern China, Sichuan in the far west, and Hainan Island (Financial Times, 2005). In other words, the highly geographic concentration of Taiwan industry dispersion in China is shifting, which is unveiled by the movement of investments from the two coastal Deltas to the inland Western Delta, the northern and the very southern cities. The motives behind the subtle transition are divergent, while they can be sorted as production factors, cluster effects, contracting regulations, and the redirection of policy from central to local governments.



Fig. 2. Westward Migration of Investments from Taiwan

Table 2 Taiwan Approved Investment in Mainland China by Area

Unit: US\$ million %

Period	1991-2010			JanAug. 2011			Cumulation		
Area	Cases	Amount	Percentage by Amount	Cases	Amount	Percentage by Amount	Cases	Amount	Percentage by Amount
Kiangsu	6,164	33,382.31	34.30	155	3,135.28	30.09	6,319	36,517.59	33.89
Canton	12,316	22,041.95	22.65	136	1,723.55	16.54	12,452	23,765.50	22.06
Shanghai	5,365	14,144.91	14.53	66	1,723.78	16.54	5,431	15,868.69	14.73
Fukien	5,383	6,743.87	6.93	49	577.29	5.54	5,432	7,321.16	6.80
Chekiang	2,024	6,434.01	6.61	33	606.36	5.82	2,057	7,040.37	6.53
Tientsin	910	1,849.16	1.90	5	74.94	0.72	915	1,924.10	1.79
Beijing	1,181	1,682.45	1.73	23	112.79	1.08	1,204	1,795.24	1.67
Shantung	969	1,936.93	1.99	10	285.02	2.73	979	2,221.95	2.06
Chongqing	209	1,281.40	1.32	23	280.90	2.70	232	1,562.30	1.45
Hupei	538	1,087.48	1.12	9	103.29	0.99	547	1,190.76	1.11
Others	3,626	6,736.45	6.92	98	1,798.15	17.25	3,724	8,534.60	7.92
Total	38,685	97,320.92	100.00	607	10,421.36	100.00	39,292	107,742.28	100.00

Note:

- 1. Figures include lagged reports and approvals.
- 2. The figures are not added up to the total due to rounding up.

Source: Investment Commission, MOEA, ROC, 2012.

http://www.mac.gov.tw/lp.asp?ctNode=5934&CtUnit=4152&BaseDSD=7&mp=3

(II) Driving Factors of Industry Migration

Resemblance to herding sheep, for the past three decades Taiwan IT industry has been moving from the island to the coastal provinces of China firstly with an episode drifting to Southeast Asian, and is now on the second stage extending or migrating to other regions. While the Yangtze River Delta remains a competitive area for attracting investment, the "Western Delta" of Chongqing, Chengdu, and Xian has become increasingly competitive.

Production Factors

Pursuing production factors always has something to do with the industrial migration. Competitive advantages in factors have been drawing the industry to an

unexploited or less exploited region and hence expand or transfer the branches of GPN. Contributing to subsequent upgrade of local standards of wages, land procurement and environment protection and thus dilute the competitive advantages of the region, the industry will in turn be forced to look for another pasture if fabrication and manufacture remain at the center of the business. The lifecycle repeated in both of the migrating stages of Taiwan IT industry. Only a few extraordinary firms successfully climbed up to the higher ends of the smiling curve and stand a chance getting rid of the fate as nomads after cheap labors and lands.

Cluster Effects

The network of cluster plays a critical role in catalyzing the movement. Contrast to the typical South Korean industrial model of vertical integration in which chaebols included most of the components of value chain internally, suppliers in Taiwan normally form a virtual "horizontal integration" relation with the fabricators or the flagships. In the network, operations of respective suppliers are formally independent while they share the benefit or motivation of clustering.

The grouping of firms in close geographic proximity to one another enhances the performance of affiliated firms by providing access to complementary resources (Liao, 2010). Based on the idea of competitive advantages created by a cluster collaboration network for component procurement, Taiwanese firms can concentrate on specific product, design, assembly, or branding as its core competence (Yung, Lee, and Lai, 2009). Furthermore, interorganizational trust, resources, and the mechanisms of system dependence with clustering among Taiwanese manufacturers also benefit firm performance. Due to cluster network, when the upstream companies and the OEM/ODM manufactures relocate, the downstream suppliers are compelled to move accordingly, and which explains the intensive concentration of IT industry in location.

Labor Shortage and Regulations

With regard to the second stage of industry movement from coastal to inland, labor issue matters especially much. The cheap labors refilled from inland provinces and particularly rural areas seemed to be inexhaustible. The rapid development of manufacturing industry is made possible by the extremely low salaries of workers

(Jing Men, 2007). However, they become less willing to continue in such underpaid jobs due to the high cost in the cities and the low quality of lives. In these years the problem of shortage of labors is getting worse. It is generally reported that deficient working force has become constant to manufactures in coastal provinces.

When the Labor Standards Act came into force in Taiwan that considerably advanced the comprehensive welfare of labors in minimum salary, maximum working hour, insurance and such in 1994, the scope of outward migrating of industries expanded even rapidly. As if a mirror, when the Law on Employment Contracts took effect in China from year 2008, labor intensive manufactures including fabrication are seriously suffered from leaping cost. The average raise of minimum wage was over 30% in year 2011 and in some provinces it even grew to 60%. A 20% raise of the minimum salary level annually at the coastal area has become a suffering routine. Even if the wage level is already the highest nationwide, manufacturer in the two coastal Deltas still have problem recruiting enough workers. Therefore migrating to the west and other provinces become more and more desirable and in fact inevitable to the manufacturers.

Shift of Government Policy

The distinct treatments between coastal-province governments and western ones also propel the movement of the industries. Facing the saturated labor market and land supply, a number of local governments no longer offer undiscriminating courteous reception. Low value added, high labor intensive, and high pollutant manufactures are not welcome anymore. Not only the tax, tariff, and financial preferences can be diminished or even withdrawn with short prior notice, environmental regulations are utilized by local governments from time to time to kick out the "obsolete" industries. On the other hand, certain ambitious local governments such as Chongqing are very active and ambitious in luring investments with a variety of favorable policies as the coastal cities were. In addition, under the western development policy, Beijing exerts great efforts on the infrastructure and industrial development of the western provinces, which has encouraged evermore Taiwanese enterprises to join in the development drive.

As a consequence, the government slogan of "going west" is gradually substantiated rather than a hollow talk. The concern of being cut off from other parts of the value chain when moving inland has also been alleviated these years. The evidence revealed the tendency of investment, either from Taiwanese businessmen or other foreigner investors, to move inland. Ever maturing infrastructure in the mid and west area, especially the great improvement of outward traffic, also serves as a strong motivation to the inland flow. To date, freight transportation from Chongqing to Europe via the combination of railway and sea-lane only takes 27 days, one day shorter than the shipment from Yangtze River Delta (Yang, 2011). The vantage is turning this city into the export gateway to Europe market.

Taking advantage of the transformation, Intel announced to construct a semiconductor assembly and test facility in Chengdu separately in 2003 and 2005 while the facility in Shanghai was close; in 2009; Foxconn is expected to further expand the handset plant in Chengchow in 2012 either in size or investment with one billion us dollar and recruiting another 100 thousand workers to make it the biggest smartphone factory worldwide, while the Shenzhen plant in the Pearl River Delta will be downsized from 400 thousand worker to 100 thousand thereafter. These gigantic investments reflect the shift of either political or economic environments, and denote the migration of IT industry in China.

(III) Challenges Posted Ahead

The IT industry had experienced roughly two decades of golden age of development during the 30 years moving from Taiwan to the coastal provinces of China. However, evolving challenges in the recent years have again diverted the production cluster. Whether another migration from the coast to the inland will bring the industry another two decades of prosperity, however, is under question.

China's business climate has become less favorable to Taiwanese businessmen as well as other foreign manufacturers with the initiatives ushered in by the provincial and local governments in order to achieve the objectives of industrial upgrading, sustainable environment and regional balanced development (Liao and Chan, 2009). The introduction of new economic policies, including the cancellation of an export

tariff rebate, implementation of a new labor contract act and business income tax law has brought in fatal challenges to the low value-added and labor intensive manufacturers in the two coastal deltas as mentioned, while they will not be the case only limited to the areas. The upgrade in wage, living standard, and industry is a common target pursued nationwide in China's twelfth Five-year Plan from 2011 to 2015. The new round of scheme aims to develop modern industrial system on the basis of enhancing industrial competitiveness, scientific and technological development, and high value-added industry. Those industries only seek to exploit factors and remained at low value-added business will soon find themselves losing ground even in the inner territory of China.

For small and medium sized enterprises (SME), nonetheless, the condition is even tougher as they are usually less favored by the benefit and policy support from local governments such as transportation and recruitment subsidies, compared to those prestigious and large ones as Foxconn. Therefore except those SME investing in service industry targeting at the domestic consumption market, to overcome obstacles such as extra logistics and transportation cost and broken promises of local governments, lies another problem to manufactures when moving inland. Nevertheless, suppliers within the cluster of GPN, especially the lower-tier ones, virtually have few choices but to follow the steps of the flagships and upper-stream fabricator. For them, without high-end R&D or own brand, to prolong the last gasp further inland is anything but a cure. But it is still better than quick putout in the deteriorating business environment in the coastal areas.

The shortage of working force has been the main reason of moving westward, ironically the manufactures soon find themselves situating at the same plight in the new territory. Though the high concentration of clustering brings about the positive effects and benefits mentioned above, it also incurs certain side effects in the acquisition of production factors. With the flooding in of manufacturers, the labor markets soon come to ceiling. The condition of lacking workers remains inland or coastally, and it is not likely to be solved since the demographic dividend is vanishing alongside the one-child policy that young working force is thinking rapidly (see Figure 3). On top of that, the cost of land and power supply today went almost double

compared to year 2000. These challenges put heavy pressure on the manufacturers, and are urging them to find the other ways out.

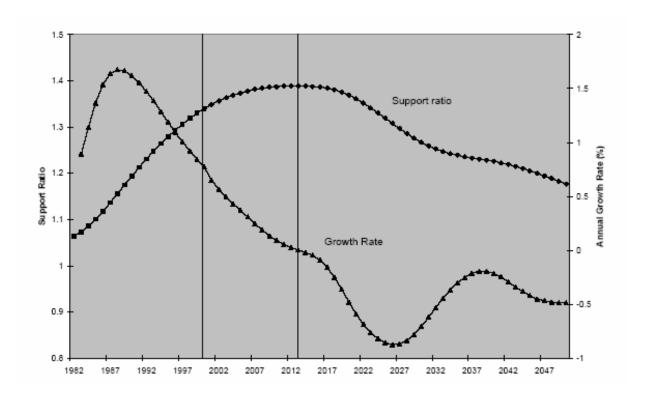


Fig. 3. Estimation of Demographic Dividend, China, 1982-2050

Source: UN expert group meeting on social and economic implications of changing population age structures http://www.un.org/esa/population/meetings/EGMPopAge/EGMPopAge_5_FWang_text.pdf

III. Strategies of Taiwanese Businessmen in China

It's argued that GPN could catalyze local capability formation and diffuse important knowledge to local suppliers in low-cost locations, though not automatically (Ernst and Kim, ibid). Lower-tier network suppliers should strive to exploit new opportunities for international knowledge diffusion that these networks have created. Taiwan IT industry has indeed nurtured and developed in GPN, however, there are few cases that the local IT firms advanced themselves to the status of flagships in the networks. Compare to Samsung, the Korean IT and consumer electronics giant that has quickly transformed itself from a supplier and local brand to one of the most competitive and influential global flagships after the financial crisis in year 1997, the

majority of the firms in Taiwan IT industry still can't come off the roles as fabricators and part suppliers striving for extremely low margins.

The case of iPhone serves as an illustration of how large the gap can be among the components of a value chain. With the extraordinary R&D, design, and marketing competence, each sell of the handset generates nearly 60% of profit margin for Apple¹, and which contributes to the ongoing record-breaking share price of the flagship. On the other hand, it is estimated that Foxconn, the principal fabricator of Apple products, makes 11 to 15 dollars or less than 2% gross profit from each unit of iPhone, and even worse, 2 to 5 dollars from every iPad². The stock price of Foxconn, as a contrast, constantly reaches record-low after the giant of manufacture got used to lying under the shade of the apple tree.

Witnessing such luring remuneration at the high end of GPN, why does the Taiwan IT industry keep standing still? What are the causes of the absence of further upgrade and pursuing higher value-added in GPN? From the perspective of industry structure, small and medium enterprises, the traditional backbones of Taiwan industries, in nature can hardly afford capital consuming and financially risky R&D and innovation, or the cultivation of international brands except a few successful cases. Moreover, the 23-million population is barely a supportive domestic market. Thus an export-oriented OEM approach appears to be an easier approach. Even today the SMEs have grown up in scale and the next door China market may serve as a comparatively easier training field, the complacent and conservative mindset prevails. As a mirror, South Korean Chaebols, leaving aside the shortcomings, are much more sustainable to long-term and costly R&D and marketing strategies in essence, let alone the backup of the domestic market of 50 million patriotic population and the all-around support of the government.

Jasper Jackson, "iPhone profit margin close to 60%, says analyst", StrategyEye, 2010/3/4 http://digitalmedia.strategyeye.com/article/cNH4M9fOLww/2010/03/04/iphone_profit_margin_close_to_60_says_analyst/

² Industry analysis report, *JihSun Securities Investment Consulting*, 2011/10/7.

Though dedicating to the low value-added fabrication and manufacture, the proficiency of squeezing meaner margin out of it has become a barrier to followers and actually one of the niches to Taiwan IT industry. Rugman and D'Cruz (2000) argued that the strategy of the flagship company directly affects the growth, the strategy direction and network position of lower-end participants, while the latter in turn "have no reciprocal influence over the flagship strategy". The argument is not totally accountable today as the low-end network participants have already developed expertise and become critical and indispensable to the flagships in the competitive IT industry. To be competitive, flagships need the lower cost, quick to market, flexible production service offered. It's not uncommon that even the conservative Japanese flagships have to outsource or depend on the OEM/ ODM from Taiwan IT industry due to the pressure that their competitors have done so and thus standing at advantageous position in price and speed.

Even so, when the upstream R&D and core technology and the downstream brand and marketing in the value chain are dominated by flagships, the manufacturers are very vulnerable to their disposal. When Blackberry unexpectedly slashed the order of its newly launched tablet PC-- Playbook in 2011, the ODM firm Quanta was forced to lay off the 2,000 newly recruited employees in Taiwan and aroused the attention of the Council of Labor Affairs. Consequently, upgrading from the bottom of the smiling curve to the both sides of the high end is critical not only to the survival of the firms, but also to the economy of Taiwan.

Industry Upgrading and Technology Advancing

In China, facing the plight in soaring production cost, some coastal Taiwanese manufactures are turning to industrial upgrade and expecting to balance rising cost through pursuing higher rent. Foxconn has declared in early 2012 to adopt a million robots in assisting production within three years and hence greatly reduce the demand on work force. Other manufactures are seeking to advance technology for higher value-added products. Nevertheless, most labor-intensive manufacturers moved to China are originally less competitive. If industrial upgrading is an easily access, the businessmen wouldn't have to move out from Taiwan in the first place. It is emerging recently that one of the feasible solutions is through the exchange of the highly

complementary advantages in manufacture and flexibility with the competence in technology and branding of foreign firsm.

Facing the fierce competition from Korean opponent and enormous loss in TV/LCD market as well as the influence of soaring Japanese Yen and the unprecedented earthquake in the homeland in 2011, Sharp, a proud and storied Japanese technology company which has been a pioneer in technologies as TVs, solar cells, calculators and LCD displays, formally announce a joint venture program with Foxconn in the spring of 2012 with the latter investing \$1.6 billion US dollar into Sharp. The finalization of the conspicuous cooperation, however, is suffering from the wide gaps between the concepts of business operation, the arrangements of association, and enterprise cultures. There is no doubt that obstacles and challenges will lie in the way. Nevertheless, if the pioneer model of cooperation works out, future cases will be optimistic.

Domestic Market

Other than technical upgrade, transferring focus from export-orientation to local-domestic market is another possible resolution in which the negative views on rising wage are turned to positive thinking. As the income level and living standard of the massive labors in China are improving, the growing domestic market is getting more attractive than the shrinking cheap labor force. It is also a valuable opportunity for the manufacturers to develop own brand and marketing.

Tingyi Holding Corporation, specializes in the production and distribution of instant noodles, beverages, baked goods and soft drinks, successfully developed from a small factory in Taiwan founded in 1991 to the largest instant noodle producer in China. Its brand name, Master Kong, was ranked the second most valued brand in China by a market research institute in year 2011.³ Other than the food firms, Taiwan IT firms also have the chance to stand on the stage and share the domestic market rather than keeping behind the scene as sheer fabricators and manufactures.

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³ Alexandra Wexler, "Noodles and Electronics: Asia's Most Valued", *The Wall Street Journal*, 2011/7/4 http://blogs.wsj.com/scene/2011/07/04/noodles-and-electronics-asias-most-valued/

Another Wave of Migration

For those sticking to the core competence of manufacture and fabrication, relocated from China to other populous countries as Indonesia, Bangladesh, and Myanmar is an alternative. In recent years many Taiwanese businessmen have moved out from China due to labor shortage both in the coastal and inland area. When looking for alternative production bases for cheaper labor and land, South East Asia and Africa are usually under consideration. For instance, the production capacity of Pou Chen Group, a top footwear maker worldwide from Taiwan, is now greater in Indonesia and Vietnam than in China. And the company plans to make Bangladesh the new overseas production center.⁴

However, after shining for a few years, the dimming star Vietnam is no longer the top 10 hotspots because of a host of issues including cultural and language differences, strikes, official corruption and poor infrastructure. These common setbacks in SEA countries result in higher barriers and risk to investors, let alone similar issue of degrading favorable investment environment as in China. In addition, although Africa is a plausible option for labor-intensive industries with increasing political and social stabilization and growing economy, it requires exceptional courage and entrepreneurship for Taiwanese businessmen to migrate to such a remote and unfamiliar continent. Considering the risk and uncertainty in the foreign land and the limited support and assistance that Taiwan government can offer, most investors only leave the option aside.

Turning Home

The other option is returning to Taiwan. As China's business climate has become less favorable to them, Minister of Economic Affairs Shih Yen-shiang urged Taiwanese businessmen operating in Chinese coastal areas to relocate if they want to avoid rising labor costs in China (*BBC Monitoring Asia Pacific*, 2010). The minister appealed on the one hand that the low-end industries, which are usually labor-intensive, should move towards Southeast Asia, and called upon high-end industries on the other to return to Taiwan to concentrate on designing and marketing their products around the

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⁴ NTD TV, 2011, "China's Labor Shortage", April 12, http://ap.ntdtv.com/b5/20110412/video/58199.html

world. Owing to the considering that the much stable and reliable investment environment might overweigh higher production cost, the number of Taiwanese businessmen operating in China returning home is increasing since year 2007. They intend to launch new ventures and have applied for government assistance in land acquisition and technological upgrading. However, transformation in business model and the breakthrough in R&D are not achievable in one step. How the manufacturers will survive the long struggle remains uncertain.

IV. Conclusion

The essay argues that another wave of migration is initiating these years after the first two since 1980s and 2000s respectively, and this trend as well as distribution of migration is illustrated through the official figures of outward investment. Although GPN still severs as the major driving factors as to the prior moves, a number of domestic policies and issues of China also matters a lot. The earlier migrations brought Taiwan two decades of golden age, while it is in doubt whether the new move will continue the prosperity as challenges like soaring cost, shortage of work force and energy supply, and unstable policies are emerging to be overcome.

More than ever, Taiwanese businessmen are standing at the crossroad to make critical decisions to last the building. Stagnating at the low value-added stage of GPN, i.e., low-end manufacture and fabrication would be a familiar yet dimming route to choose from. On the other hand, to upgrade in the network, diverting focus to the end of developing patent and technology as well as brand and service, is highly difficult and uncertain. The serious setbacks of ACER and HTC separately in PC and smartphone markets from year 2011 are the cases. Even so, the trials offer opportunity and remain promising but none is easy. For small and medium size enterprises the options are even limited.

In the past three decades, the taxation of the profit of the businessmen mostly went to China and the gigantic plants settled in the Deltas contribute little to alleviate the unemployment in Taiwan. In 2011, the income of the three major Taiwan ICT producers (Foxconn, Quanta, and Compal) totaled 181.2 billion US dollar, which was

equivalent to 43.67% of the GDP of Taiwan while nearly all of their products were manufactured in China. As a result, there is no way the economy and society of the island a strait away can be refrained from the fluctuation of the tremendous investment in China. The failure of the Taiwanese manufacturers will also be a plight to Taiwan.

Consequently, other than the self-reliant measures of the businessmen, it's expected that Taiwanese government won't leave the investors behind. In fact, there are several measures exercised to upgrade the manufacturers and to provide better institutional arrangements via political negotiation. After the pro-China president Ma won the reelection in January 14th, 2012, it's anticipated that great progress in the investment guarantee concord cross the strait will be achieved in the same year. In addition, the signature of "Taiwan-Japan Bilateral Investment Arrangement (BIA)" in September 2012 has also smoothed the way for further cooperation between industries of both sides. How the government will devise effective assistance and in turn boost the economy of the island, and how the manufacturers will work out the most suitable solutions for the next step is worth further research.

References

- BBC Monitoring Asia Pacific 2010, "Taiwan minister tells China-based businesses to relocate", 8 June, http://www.bbc.co.uk/news/world/asia/
- Chen Xiangming, 1996, "Taiwan Investments in China and Southeast Asia: "Go West, but Also Go South", *Asian Survey* 36 (5) 447-467
- Chen, Xiuqi, 2011, "Study on Core Competence Promotion of Private Enterprises

 Based on Smiling Curve Theory", *Journal of Hubei University of Economics*, 9

 (5) 86-91
- Dunning, J., 1981, *International Production and the Multinational Enterprise*, George Allen & Unwn, London.
- Ernst, D., 2002, "The Economics of Electronics Industry: Competitive Dynamics and Industrial Organization", In: Warner, M., Lazonick, W. (Eds.), *The International Encyclopedia of Business and Management (IEBM)*, International Thomson Business Press, London, in press.
- Ernst, D., and L. Kim, 2002, "Global production networks, knowledge diffusion, and local capability formation", *Research Policy*, 31 (8-9) 1417-1429.
- Financial Times, 2005, "Taiwanese interest shifts to Shandong Relocation: A desire to exploit a huge domestic market is prompting companies to move operations to less developed regions", December 14, http://www.ft.com
- Men, Jing, 2007, "The Construction of the China–ASEAN Free Trade Area: A Study of China's Active Involvement," *Global Society*, 21(1), April, 249-248
- Liao, T.J., 2010, "Cluster and performance in foreign firms: The role of resources, knowledge, and trust" *Industrial Marketing Management* 39 (1) 161-169
- Liao, F.H.F., Chan, R.C.K., 2009, "Industrial relocation of Hong Kong manufacturing firms: towards an expanding industrial space beyond the Pearl river delta", *GeoJournal* 76(6) 623-639
- Rugman, A.M., D'Cruz, J.R., 2000, *Multinationals as Flagship Firms, Regional Business Networks*. Oxford University Press, Oxford.
- Rappaport, A.S. & S. Halevi, 1991," The Computerless Computer Company", *Harvard Business Review*, July-August, pp.69-80.
- Wang J.H., 2007, "Contesting Rescaling Taiwan's ICT Industry and the State in the Age of Globalization" *Journal of Geographical Science* 49 39-54

- Yang, S.F., 2011, "Taiwanese Businessmen in Migration", *Economic Outlook Bimonthly* 138 66-71
- Yung, I.S., Lee, H.W., Lai, M.H., 2009, "Competitive advantages created by a cluster collaboration network for supplier management in notebook PC production" Total Quality Management & Business Excellence 20 (7) 763-775
- 施振榮,《再造宏碁》,天下文化出版,1996。
- 梁銘華,〈台灣南向政策的政治與經濟關係〉。收錄於蕭新煌主編,《台灣與東南亞:南向政策與越南新娘》。台北:中央研究院亞太區域研究專題中心,2003。