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## Comparing the role of Diaspora in expansion of *marketed* healthcare in China and India: 1950s to present

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## **About the Author**

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## **Comparing the role of Diaspora in expansion of *marketed* healthcare in China and India: 1950s to present**

### **INTRODUCTION**

The period from the 1980s marks a major epoch in the history of developing countries - when most nations, either willingly or unwillingly suddenly turned rightwards – a right defined by the developed nations and international organizations like World Bank and International Monetary Fund (IMF), through the adoption of structural reform. The imposition of new economic reforms were based on the dominant argument of inefficiency of public health systems, which was imagined to be alleviated through a decisive role of the market – to enhance both equity and efficiency. Economists offered the argument that – “*structural reform*” is essentially a market based response at overcoming constraints which earlier structuralists thought could not be overcome except through much longer term developmental processes”. (Ahluwalia, 1994)

China and India both opened their economies around the same time - China in 1978 adopting a model of market socialism, and India in the mid-1980s – removing all barriers for free trade. Since then, the phenomenal GDP growth achieved by China and India is considered as evidence for justifying new economic reforms, with economists declaring the two nations as strong economies – garnering high investor confidence. The Chinese economy has outperformed all developed and developing nations with its startling growth rates. Studies looking at these trends have attributed rise of Chinese economy to the role played by its Diaspora – as a source of Foreign Direct Investment (FDI) in key sectors. The Indian Diaspora has also given back as remittances, which have been highest among all receiving nations. However, the greater contribution of Chinese and Indian Diaspora has been in transfer of modern technology and scientific knowledge – that has allowed adoption of the Western lifestyle and a domination of capitalist ideologies in the larger planning processes and decision making. The transition of both these nations into a market led health care system has thus been greatly facilitated by their Diaspora – whose presence is scattered across all continents of the world.

The following paper delves into the role of the two diaspora’s in the expansion of market healthcare in both contexts – of China and India. The paper looks at both the pre-reform and post-reform period, and compares how the diaspora contributed to the development of marketed healthcare delivery systems in each context. A lot of academic works that exists implies to the

positive gains made by China and India owing to the enthusiastic involvement of its Diaspora in a general sense; however it is difficult to specifically look at contribution of Diaspora for healthcare, since research has been very limited in this area. Much of the literature deploys the terminology “science and technology” which subsumes medicine, and hence it is difficult to disaggregate. The difference is particularly crucial because both Indian and Chinese diaspora engaged in Information Technology (IT) industry have made significant contributions to the IT revolution in their homeland, after the phenomenal success in Silicon Valley. The paper thus uses specific cases or success stories of the involvement of Diasporic entrepreneurs in medical care. The paper finally analyses the changes which these Diaspora interventions have ushered in, and poses the question whether these developments fulfill the goals of an equitable and comprehensive healthcare for all.

### **The China Story**

The overseas Chinese or the Chinese Diaspora constitutes one of the largest Diaspora groups in the world. Estimates point out to strength of 35 million Chinese residing in the many regions of the world, outside their homeland<sup>1</sup>. *“The Chinese migration – a resultant of wars, revolution, political and social instabilities, finds a large proportion of its diaspora in Asia itself. More than four out of five overseas Chinese – 24 million – live in Southeast Asia, most of them in Indonesia, Thailand, and Malaysia, where they control wealth and capital far out of proportion to their population. Chinese in Indonesia, for instance, are just 2.5 percent of the total population, yet they control 73 percent of all wealth in the country. The modern émigré however have preferred developed nations of the West. Today, some 2.5 million Chinese live in the United States, where their numbers are growing faster than in any other region, and a million more live in Canada.”* (Young & Shih, 2003)

The Chinese diaspora has been credited for having contributed substantially to the rise of China as an economic power. The Report on Indian Diaspora highlights that *“since 1995, overseas Chinese based in Tiger economies of Asia have accounted for over 70 percent of average FDI inflows of*

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<sup>1</sup> Significant outmigration from China can be dated back to the fall of Ming dynasty in 1644, with the regions of Guangdong and Fujian witnessing maximum outmigration from China. In the 19<sup>th</sup> century, severe internal conditions and political instability drove out a large number of people in search of better habitat to S. E. Asia, North America, Africa and even Australia. Between 1801 and 1925, 3-6 million contract labourers were often forcibly shipped out of China. (Mu & Heng, 2010) The Chinese migrants engaged in a wide array of economic activity – in railway and construction projects, to work for traders, and as plantation workers in colonies of Britain and US. However, in the 20<sup>th</sup> century, the migrants were skilled and better educated Chinese – who went to US, Canada and Australia following the repeal of discriminatory laws. China also relaxed emigration controls to qualify for most favored nation trade status. However, illegal migration of Chinese has continued, guided by underground smuggling networks through dangerous routes. (High-Level-Committee-On-Indian-Diaspora, 2001)

*US\$40 billion into China.*” (High-Level-Committee-On-Indian-Diaspora, 2001) This group has been a valuable resource for China, whose commitment to the development of its homeland has been unrelented. However, the cohort of Chinese Diaspora includes more participants, than simply overseas Chinese. The Chinese term for “Overseas Chinese” is huaqiao<sup>2</sup>, or “Chinese sojourner,” suggesting a state of transience. (Barabantseva, 2005)

An important role was played by the Chinese student community – who went out for higher education and returned back to China – in order to contribute to their nation’s development. This cohort is referred as ‘*haigui*’ in Chinese terminology, and was very crucial for transferring scientific knowledge and technology from the developed world to China. In fact, FDI monies into mainland China came very late, only since 1990s. Until then, it was the *haigui* scholars – who made significant contributions to the technological advancements in China, and prepared the Chinese economy, to accept and undertake new economic reforms.

### **The Pre-Reform Era**

Maoist China inherited a public health system that had a strong Western influence - set up by the Missionaries from America and Britain. Although highly critical of capitalist nations, Mao Zedong held a strong desire to make China a technologically supreme nation. His failed experiment of the Great Leap Forward is also evidence of how strongly he aimed to develop appropriate technology for China’s fast development. But, owing to closed door policy of Mao, they did not have open access to the technological miracles being experiences in the West. As a consequence, the crucial role of technology transfer was fulfilled by the *haigui*. Migrants of preceding years and scholars who went to Russia and Europe in later years became the source of modern scientific knowledge and access to innovations being made in West. This strategy was not new for China – interestingly the Chinese rulers had very early developed interest in the innovations of the West.

*“Motivated by the wealth and resources of the Chinese living abroad in 1909, the Qing adopted a national law containing the principles of ‘jus sanguines’ to legitimate its claim to these subjects. ‘Jus sanguines’ which translates into ‘right of blood’ made every ethnic Chinese, regardless of*

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<sup>2</sup> The term dates from the late 19th century Qing and its usage is still employed today to describe all Chinese abroad. Two other terms are in usage to describe the ethnic Chinese; huaren (Chinese person) and huayi (Chinese descent). These three terms—huaqia, huaren, and huayi—connote a degree of ambiguity in the status of these groups and their relation to China. However, in the PRC’s policy-making realm these distinctions are rarely drawn. Most of the Chinese literature uses the generic term huaqiao huaren, signifying that both groups fall within the scope of the PRC overseas Chinese policy. (Shaio, 2008)

*place of birth or residence, Qing subjects. This nationality law was later adopted by the nationalist government and inherited by the People's Republic of China". (Koehn & Yin, 2002)*

Early migration of scholars to developed nations was actively promoted – *"Japan attracted more than 90 percent of all overseas Chinese students from 1900 to 1910. Educated Chinese emigres enjoyed special treatment by US. By the 1930's most of the senior officials in Chiang Kai Shek's government had been educated in America. Between 1909 and 1945, and estimated 3000-4000 Chinese students went to US – through scholarship from Boxer Indemnity Fund."* (Young & Shih, 2003) Other countries, where students were sent in certain periods, for scholarship programmes were - Russia, European nations, and South East Asia. However, these initiatives were never continuous.

Since 1950, technology for development was the sought after goal for PRC government. The massive migration from China in preceding years meant a huge cohort of diaspora – especially those in South East Asia, who were business tycoons. *"One of the earliest diaspora initiatives includes the railroad - Zhan Tianyou was responsible for building China's first railroad".* The development of education system was also facilitated by the diaspora. *"Scholars Tang Shaoyi, Yan Fu, Cai Shaoji, and Tang Guoan helped to establish Fudan, Peking, Beiyang, and Tsinghua universities respectively".* (Mu & Heng, 2010)

While migration to Western nations was disrupted in certain periods, especially during the Great Leap Forward, but *haigui* programmes continued, except that destinations changed depending upon the political situation. *"Communist China remained closed off to US from 1949-1979, and most of the 20,000 slots were taken by Chinese immigrating from Taiwan. But with the recognition of the People's Republic in 1979, another 20,000 slots were created for immigrants from the mainland. Today, along with a new quota of 5,000 Hong Kong Chinese, some 45,000 Chinese legally immigrate to the U.S. every year. The actual numbers are larger since many people of Chinese descent enter the U.S. through quotas dedicated to Southeast Asian countries".* (Young & Shih, 2003)

During this time (1960s), China's healthcare was showing a revolution – with community centered efforts of barefoot doctors leading to eradication of diseases, lowering infant mortality rates, maternal mortality rates, and increasing child survivability. 'However, Mao had raised his opposition to the Soviet model which was being emulated, that was causing urban centered development and elitist orientation of medical facilities in China.' (Sidel, 1973) The revolution did



halt the pace of urbanization, and brought specific changes in organization of medical education in China, however, it produced no significant effect to the technological advancements which most of China's top end medical universities had achieved. The Peking Union Medical College (PUMC) stands testimony to this, as it remained untouched by much of the political and social instabilities encountered in China.

Historian Mary Brown Bullock claims that even the barefoot doctors model of Mao's health revolution was conceived by Chinese *haigui*. She writes – “C. C. Chen might well be called the father of China's rural healthcare delivery system. A native of Szechwan, Chen specialized in public health and graduated from PUMC in 1929. Returning to China after receiving his MPH from Harvard University, Chen elected to go down to the countryside. He became director for public health for Jimmy Yen's Mass Education Movement in Ting Hsien.” In her opinion *haigui* like C.C. Chen – who were educated in highly elite medical institutions, were still grounded to the peculiar realities of homeland. She writes – “*Pioneers in adapting Western Medicine, they were a part of a small coterie of progressive Chinese medical leaders who challenged the blind transfer of the American structure of medical practice – private practitioners, standardized medical degrees, professional nurses – to China... imposing Western pattern of private practice upon the millions of people whose social and economic patterns were entirely different from the West.* ” (Bullock, 1980) The details of health plan which she describes as being designed by C.C. Chen for experiment in Ting Hsien bears high similarity to the three tier primary healthcare system which China eventually developed with its barefoot doctors. While the revolution opposed elitism in healthcare, however, it could not shed away the desire for modern technology, and thus always compromised with Chinese scholars and migrants in developed nations - who had access to modern developments of the West.

Author Victor Sidel makes the assertion that it was a combination of forces that led to continuation of urban centred development despite the Cultural Revolution. He writes - “*Political leaders like Mao felt that the centre of revolution had shifted to the cities, the Soviets pushed for an urban bias; urban political leaders wanted to build their cities first; trade unionists wanted to win benefits for their workers; efficiency demanded concentration of curative facilities in urban areas; and medical professionals dominating the Weishengpu felt that expansion and restoration of existing facilities was the first priority*”. (Sidel, 1973) It was this conflict of ideas and opinions that led to the continuation of urban centred technological development of medical care.



## **China – post reforms**

In the period since the 1970s, when the Chinese economy opened up, we find the Chinese government openly and as per policy, engaging with its Diaspora for speeding the development process, and Deng Xiaoping institutionalizing formal mechanisms for their involvement, and better addressing issues pertaining to their security and citizenship. The Diaspora was invited back to China through all means – by offering them rewards and concessional benefits to start afresh in China, creating schools and universities for their children, offered concessional property rates in top cities, positions of high ranks in top institutions and most importantly, playing with nationalist sentiments to tap knowledge and access they have to latest technology and innovations in developed nations.

David Zweig, who has written extensively on migration and Diaspora, asserts that technology became the link between overseas Chinese and their homeland. The Chinese government created incentives for its diaspora to invest back in key sectors where they were lacking, and people saw these as opportunities to become catalysts in the development of their nation. *“Nationalist sentiments were the basis of these endeavours, and overseas Chinese were readily motivated”*. This was complemented by the favourable market environment – an unexploited market and an abundant availability of cheap labour. He writes *“technology appears to be bringing people back to China, because people overseas believe that possessing technology unavailable in China is the road to riches in the domestic market.”* (Zweig, Fung, & Vanhonacker, 2005)

The learning's from the period of Great Leap Forward - the failings on both agricultural and industry counts, brought the realisation that indigenous efforts could only go in a limited way. Thus, under Deng Xiaoping we see the economy being opened up, under the new model of market socialism. While guidelines for foreign investment in China remained uniform, it was the Foreign Chinese residents who were making heavy investments in the economy's emerging market, and providing the latest technology available in the developed world, in which the Chinese emerged dominant provider owing to its cheap labour costs. The Chinese government thus very carefully, toyed with 'transnationalism' as a tool to tap the economic potential possessed by its diaspora, and bring technology from West to China. The South East Asian regions, namely Hong Kong, Macao, Taiwan, Indonesia and Thailand, comprised of highly successful Chinese entrepreneurs, who

command over much of the business in the region. (High-Level-Committee-On-Indian-Diaspora, 2001)

For health sector, this entailed investments in the larger health industry – in modern medical technology and the pharmaceutical sector. China emerged leaders in manufacture of modern medical equipments, and owing to its low production costs, it gained substantial control on the global export market. However, the import of medical technology involved a crucial role played by the *haigui*. The role of *Haigui*, which had weakened temporarily during the Cultural Revolution, resumed with much greater vigour since 1978. Deng Xiaoping expanded international scholarship programmes for Chinese students to learn newer technologies from the developed world. *Between 1985 and 1990, the total number of Chinese students who went overseas jumped from 7872 to 27316.* (Mu & Heng, 2010). These were seen as short term investments made by the Chinese government to bridge between the latest technologies in the developed world and China.

The following case is an illustration of how *haigui* transferred medical technology to China - *“Wang Tao studied interventionist medical technology used for cardiovascular disorders, a domain which according to a report “was a blank in China.” With China spending US\$100 million/year to buy catheters and stents, Wang Tao had a terrific “import substitution” technology. So, he studied for a Ph.D. in this field, and then worked as a researcher in the Laser Catheter Laboratory of Wayne State University “where he had mastered what is currently the world’s most advanced technology and information for researching and manufacturing catheters.” He returned to China in late 1995 and in spring 1996 established his own company and factory which manufactured catheters and stents.* (Zweig, Fung, & Vanhonacker, 2005)

This is precisely what the Chinese government was promoting – inspiring and rewarding its students to bring back any technology new for China. The main attraction of the *haigui* was the short duration of their academic stay, and a higher prospect of returning back. This cohort played a key role in developing China’s high tech sector. As documented – *“Many leading Chinese institutes prefer to hire haigui scholars and are competing with institutes all over the world to retain their services as these haigui could provide highly advanced technological transfer to help increase China’s R and D capacity. In fact haigui made up about 85 percent of the scientists in the Chinese Academy of Sciences.”* (Mu & Heng, 2010)

The universities also initiated incentive programmes for its *haigui* to return back. Talent acquisition programmes offering rewards to medical scientists possessing new technology was a

rigorously pursued strategy. The Chinese Academy of Science offered top positions to its overseas scholar in lieu of any technology that was new for China. Zweig documents how – “to get positions at the Chinese Academy of Sciences one needs new technology; to get good funding in academic or scientific institutions, one needs good methodologies or technology; and, for successful business performance, one needs foreign technology. Not Cassarino’s failures, these reverse migrants engage in what Cerase calls a “calculated strategy” of seeking a technology or skill that can bring them significant benefits in their country of origin” (Zweig, Fung, & Vanhonacker, 2005)

A compilation from the Bulletin of the Chinese Academy of Sciences, talks of the medical advancements made by China during 1980s and 1990s. These technologies came to China through collaboration with an American Company, mediated by Chinese *haigui* scholars sent as part of the collaboration made by CAS.

*ASU – 01C Color Doppler Ultrasound Imaging technology System - In 1986, Kejian and Co. of the Chinese Academy of Science and Analogic Inc. of the US established a joint venture called Analogic Scientific Inc. The company envisioned a potential in developing ultrasound technology and committed their energies to this goal. In 1987, Analogic Scientific Inc. sent technicians to be trained in Analogic Inc. in the USA. In august 1988, Analogic Scientific Inc. formally established an ultrasound system. The development of this product by the Chinese, at much lower rates, opened opportunities for earning foreign exchange for the country, if international markets were opened. (Dajun & Li, 1991)*

The same collaboration also brought the diagnostic technology **Magnetic Resonance Imaging** to China. In 1980, MRI was one of the most recent and significant advances in the medical diagnostic imaging technique, which was first put on the market in the 1980s. 16 sets were imported from 1985 to the end of 1989, with the average price of each set on the international market around 1.5 million UD dollars. The joint venture company Analogic Scientific Inc. (of China’s Kejian Co.) and the Analogic Co. of the US developed its own MRI.

During the same period, the Chinese medical scientists mastered the laser technology of Lithotripsy – for treatment of kidney stones, which had innovated in Germany. (Dajun & Li, 1991) However, it is not clear whether America aided the Chinese in this also. All these technological advancements were readily infused within the Chinese healthcare system - even lowest level public institutions were equipped with modern medical facilities, something which differed from Indian

public institutions – that became all the more resource constrained after reforms were undertaken. Although it is also important to remember that these medical technologies in China became the means of making money for these public institutions – after they were put on revenue generation mode.

The *haigui* also developed technological parks, which boast of the technological advancements made through *haigui* and other foreign collaborations. “*Shanghai’s technological park Zhangjiangyuan is well known as a China’s bio-pharmaceutical and telecommunication base. It houses more than 90 bio-pharmaceutical enterprises and national level R and D institutes including the institute of Materia medica of the Chinese Academy of sciences and the National Human Genome Centre.*” (Mu & Heng, 2010) A lot of investment in the pharma industry has also been aided by the diaporic community. Prominent bio start-up like Bei Gene, Hua Medicine and Ascletris were all founded by returnees in the recent past.

The degree of seriousness associated by the Chinese state with its goal of seeking technology for its development can be assessed by the following news report – that drew strong reactions from the west. The article showed how the Chinese government was using ‘nationalism’ and ‘nation pride’ to make its researchers in the West bring back the advanced technology to China. It reads – “*illustrating the grip which Communist Party and government try to maintain on overseas Chinese students, researchers and businesspeople, an exchange of letters between President Xi Jinping and Chinese students in Germany has produced passionate promises from the students to serve the motherland — and deliver “advanced technology” back to China*”. The exchange of notes saw inspired students reiterating their dreams of a stronger Chinese nation, and promising their indefinite support. This news, which drew strong reactions, especially from US scientific communities, saw it as “*a textbook exercise in ensuring a steady flow of science and technology back to China from educational institutions and companies in the West.*” (Tatlow, 2014)

However, technology transfer from West to China has taken yet another shape – that of espionage. Newspaper reports, time and again, have recorded how “*not all the cutting edge developments may be the result of indigenous innovation*”. (Wong & Tatlow, 2013) American prosecutors charged three scientists at the New York University School of Medicine, for taking bribes to share research findings with a Shenzhen institute and a separate Shanghai medical technology company. The news article makes mention of the book - “*Chinese Industrial Espionage,*” which expresses how “*technology transfer is an official policy at all levels of the Communist Party and the state. It often*

*takes place in a legal gray area, since laws governing technology transfer can be vague or non-existent.*” They contend that the scale of China’s efforts to gather overseas technology is so immense that the National Counterintelligence Executive, a federal agency, has considered issuing separate annual reports each year: one for China and one for the rest of the world. (Tatlow, 2014)

While *haigui* interventions were one strategy, a new development in recent years finds top scientists in the United States leaving their highly prestigious posts and joining science institutes in China. A 2010 New York Times new report reveals how Shi Yigong, a micro biologist, who was awarded the prestigious Howard Hughes Medical Institute in Maryland - a \$10 million research grant, left the positions to become the dean of life sciences at Tsinghua University in Beijing. The news came as a shock to most US researchers. It is a reflection of how aggressively the Chinese are pursuing efforts to bridge the technological gap. *“China’s spending on research and development has steadily increased for a decade and now amounts to 1.5 percent of gross domestic product. The United States devotes 2.7 percent of its G.D.P. to research and development, but China’s share is far higher than that of most other developing countries.”* (LaFraniere, 2010)

Besides transferring scientific knowledge and technology, the *haigui* have aided the reform process in yet another way, by introducing new management principles that allowed achieving efficiency in China’s State enterprises. As the authors note – *“Not only did they bring in new technology and other advanced production methods to improve the efficiency of these companies, Haigui also introduced corporate and management skills adopted by MNCs. Infact many state enterprises hired Haigui managers to improve their organizational governance.”* (Mu & Heng, 2010). But a bigger accomplishment of the *haigui* was in finding their way into Chinese politics and ranks in state machinery. This change was reflective of larger ideological shift in Chinese politics. Many authors contend that the change in the perspective of Chinese Communists towards liberal economics was significantly influenced by these *haigui*, who readily advocated and embraced liberal ideas. Authors Mu and Heng note that a significant development occurred when *“in April and June 2007, the Chinese government broke its political tradition by appointing two notably non CCP members Wan Gang and Chen Zhu as Minister of Science and Technology and Minister of Health respectively. Both are typical Haigui [...] Chen Zhu did his doctorate in hospital Saint Louis, University Paris VII in France and has worked as a scientist in Europe before his current appointment.”* (Mu & Heng, 2010)

This, thus, offers a glimpse of how the diaspora has contributed to the healthcare industry, and continues to do so. Entrepreneurs and public health scholars have been the backbone of this transformation, and they are still being encouraged to invest in key areas. Since healthcare remained a restricted category in the China's Foreign investment catalogue, marketization was rather curtailed, and visible more in informal health sector – which is plagued by a vast cohort of traditional and unqualified medical practitioners – whose business has prospered since the demolition of the commune system. However, with the 2011 revision of Foreign Investment Catalogue by China's National Development and Reform Commission, healthcare was given a green signal. What this entails is removal of restrictions on shareholding percentage by foreign investors in healthcare, although approvals will still be regulated.

### **The Story of Indian Diaspora**

The Indian Diaspora, like the Chinese, is also credited to have increasingly contributed to the rise of Indian economy. The Report on Indian diaspora makes the assessment that “*Indians have done brilliantly in the United States, only recently established themselves in the global economic world. Unlike the Chinese in S.E. Asia and East Asia, these Indians have achieved success purely on individual merit in the highly competitive structures of modern multinationals, without the help of family networks, guanxi (connections) and historically accumulated private capital. The other section of the Indian Diaspora that has made significant contribution to India is concentrated in the Gulf, from where they sent the bulk of private remittances received by India. According to RBI, US\$ 2.3 billion, or 25 percent of debt creating inflows (deposits) into India in 2000-01 were from NRIs.*” (High-Level-Committee-On-Indian-Diaspora, 2001)

The Indian healthcare Diaspora has made significant contributions to strengthening public health in India, and engaged enthusiastically with the newly emerging corporate healthcare model – diffusing the Western values of managed care and efficiency in management processes. The out migration of doctors from India began even before 1947, and this trend has only strengthened since then. In their initial years, Indian Diaspora doctors had to wage a struggle to get respect and equal opportunities in the West. Scholars like Aneez Ismail (2007) and Robinson and Carey (2000) document the discrimination and struggle of Indian doctors while working in the UK's NHS.<sup>3</sup>

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<sup>3</sup> Ismail, A. (2007). Asian doctors in the NHS: Service and betrayal. *British Journal of General Practice*, October - 57, 827-831.



However over time, Indian doctors are now regarded as one of the finest physicians in the world, and have attained top ranks in best medical institutions. In the past few decades, migration of nurses to Europe and the Arab World has also increased, where there is a high demand for nurses, and work conditions and pays have been more favorable.

A look at the composition of international medical graduates employed within the US healthcare system shows that Indians form the biggest group of IMGs, constituting 20 percent of the US physician workforce. In comparison, China ranks ninth and constitutes a mere 2.2 percent of US physician workforce. (American-Medical-Association, 2010) This clearly establishes the stronghold of Indian doctors in professional medical practice. However, it must also be borne in mind that the above numbers exclude those Indian and Chinese doctors, who have been naturalized. The numbers of such doctors is difficult to garner – since neither the census nor reports of naturalized Indian and Chinese give a profession wise data. The reason for the low number of Chinese scholars in US hospitals has been attributed to the lack of recognition to Chinese medical degree for a long time. This is elaborated later.

**Top 20 countries of medical education for IMG physicians**  
 % of total IMG population (number of physicians)

Country	Total	Percentage
India	51,447	20.7%
Philippines	20,601	8.3%
Mexico	13,834	5.6%
Pakistan	12,111	4.9%
Dominican Republic	7,979	3.2%
Grenada	6,749	2.7%
USSR	6,450	2.6%
Dominica	5,854	2.4%
China	5,375	2.2%
Egypt	5,266	2.1%
Iran	4,940	2.0%
South Korea	4,845	2.0%
Italy	4,732	1.9%
Spain	4,343	1.8%

Source: American Medical Association (2010)

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Robinson, V., & Carey, M. (2000). Peopling Skilled International Migration: Indian Doctors in the UK. *International Migration Vol 38 (I)*, 89-103.



India remained a closed economy until the 1980s when the new economic reforms were imposed. The period prior to reforms showed little economic ties with the outside world, however, there was a constant inflow of Western ideas and thoughts through the Indian Diaspora, and a strong influence of Western Foundations and bilateral and multilateral agencies, who played a dominant role in designing health interventions and prioritizing health needs for the planning process.

Indian public health system was conceived out of British NHS model, and thus since its initiation had an inbuilt Western bias. Similarly, Indian medical education is a continuation of the colonial medical education course doctored by the British – for their own needs. The Indian doctors study a medical curriculum which was ill suited to Indian public health needs, and thus found a low coherence with actual medical practice. It was this dichotomy that sowed the seeds of high medical brain drain, witnessed during the 1960s and 1970s. The problem was compounded by elitism of doctors - who belonged largely to the upper Indian castes and class, and always harboured the desire of going abroad, particularly UK. The excessive outmigration of physicians, nurses and other health professionals which happened - was viewed by academicians as a problem of brain drain causing shortages in doctors in India, and wasting public money spent on their education. Due to the lack of consonance between Indian medicine (with a Western bias) and practical Indian needs doctors were unable to utilize their skills fully, and were thus constantly looking for avenues where they could access higher medical specializations. (Jeffery, 1976, p. 502)

In context of healthcare, we thus find a significant role being played by Indian health professionals, who in awe of the Western model of medicine, were migrating outside. The role of medical students – who were described as *haigui* in China, also seen to play a significant role for India, since it was this cohort that had higher chances of returning back to India – in contrast to others who settled permanently. The significant departure of the India's experience from the Chinese is in the latter's conceptualization of the Diaspora as a resource which will contribute. Indian leadership took a very long time to realize that the diaspora had a potential for speeding up nation's development process. The Chinese just after liberation had identified the potential of this resource – however, owing to ideological constraints, there were periods when such engagement was curtailed. Despite these, their fascination for technology led to a constant engagement of Chinese Diaspora. Thus the general conception of China being closed off from rest of the world is problematic, as their Diaspora allowed Western ideas and modern knowledge to continually flow

into their country. Also highlighted earlier, the Chinese leadership itself was made of *haigui* scholars, which only intensified in later years.

The quest for new technical know-how did exist in India also, and it was this need that compelled the interaction of Indian scholars with universities in US and UK, in order to learn new knowledge. Top Indian medical universities continually sent its students for short term and long term educational programmes to West, and this became a way of transferring modern medical practices and knowledge to India. The cost of these educational programmes was borne by Indian government. For a large part, a majority of these scholars did not return back, especially medical graduates – leading the problem of brain drain. As pointed out – *“physicians who worked for UK’s National Health Service - their absence was temporary, and they were likely to return with augmented human capital. In other cases such as migration to the United States, return rates are much lower.”* (High-Level-Committee-On-Indian-Diaspora, 2001)

Other scholars also document - *“Nearly 60000 Indian physicians (more than 10 percent of the stock in India) practice abroad, and by all indications these come from the upper tail of physician quality. Since there are additional Indian medical workers (especially nurses in the Middle East), the actual numbers would be considerably higher. The majority of Indian doctors in the US (approx. 40000), about 90 percent of these were trained in public institutions. In part this reflects vintage effects, since the majority of Indian trained doctors in US came in the period when most Indian colleges were state supported. In recent years, the majority of doctors coming to the US from India are from the private sector, reflecting changes in the supply of medical education in India.* (Kapur, 2010, p. 121)

The Indian public health system thus remained shadowed by the western orientation of medicine. There was constant focus on new technology and higher medical specialization, which worked detrimental to the development of a strong primary healthcare system in India. It is important to note that private healthcare, until 1980 remained an underdeveloped area. Owing to non performing primary health system, a wide range of semi qualified private practitioners emerged in the scenario, and catered to the unmet needs of the populous. However, it was public health services which founded the backbone of service system, and tertiary level public hospitals housed the state of art technology. Doctors remained concentrated in urban hospitals, and a large number of primary health centres lacked the necessary personnel.

Physician migration to the West was aided by immigration policies of receiving nations, where the dearth of health manpower was filled by this influx. So, constant change in immigration policies is noted which aimed at allowing the migration of few specialized cadre of professionals and disallowing other migrants. Works of Roger Jeffery and other scholars, who assume a political economy perspective, document how developed nations prospered upon the fruits of developing nations. More critical here was outflow of India's best doctors – *“while migration rates for doctors was about 3 percent during..., it was 56 percent for graduates of AIIMS – India's most prestigious medical training institution – between 1956 and 1980, and 49 percent in the 1990s. (Binod Khadria 1999 work - referred in Kevesh Kapur, pp 69)*

In 2005, about one-fifth of all doctors in the US who had received their first medical degree abroad (more than 40000 doctors) were trained in India. Their contribution to the Indian economy has been modest, although it appears to be growing. Till 1970s, doctors who returned back joined either government hospitals, or opened small clinics in the private domain. It is important to note the role of informal professional network among Indian physicians that aided in their outmigration. A doctor who was able to establish his position in a US or UK healthcare institution became the bridge aiding the migration of other aspiring doctors.

### **India Post Reforms**

The opening up of the Indian economy in late 1980s laid the foundation for the establishment of a huge and vibrant private health sector market. The private sector is noted to have grown at an unprecedented scale, outnumbering the beds in public institutions. Not just in numbers, but also it grew at different levels of care. Small nursing homes and polyclinics, coupled with a proliferation of investigative laboratories – which house the state of art medical equipment, which became easily available with weakening of trade barriers and protection to small scale business. The most significant development is the rise of corporate health sector in India. The role of Indian health diaspora is seen to increase tremendously – who become catalysts in the expansion of marketed healthcare in India. All these development were closely aided by the Indian diapsora.

The most significant contribution of the Indian Diaspora was the opening up of Apollo and Escorts – India's first corporate hospitals opened by Non Resident Indians. These institutions offered altogether another level of care, which was hitherto unseen in India –was based on Western principles of managed care; it housed the state of art technology, provided the highest quality of

services, and efficiency in services was the basic rule. Often referred as five star hospitals, these corporate hospitals catered to a miniscule elite population, who could afford the exorbitant rates of services.

Devesh Kapur writes about the contribution of the Diaspora – *“There have also been other efforts ranging from philanthropy of individual doctors, returning non resident Indians (NRIs) doctors starting private hospitals (the Apollo chain of hospitals being a prominent example), to programmes whereby visiting NRI doctors conduct refresher courses. The overseas Indian medical community is also playing a role in outsourcing some segments of laboratory and diagnostic testing. In general Indian laboratories are 70 – 80 percent less expensive than the US ones. The business is likely to come mainly from the United Kingdom and the United States, as well as the Middle East – the regions with the largest number of overseas Indian doctors.* (Kapur, 2010)

This initiation marked the beginning of corporatization of healthcare, after which many foreign players have made huge investments within the new economic weather. Private investments were promoted through concessions and subsidies given to business houses, and tax rebates. The opening up of these High tech corporate hospitals in return acted as an avenue that has attracted Diaspora doctors to return back and contribute to the nation. Many Indian doctors returned back to joining the vibrant corporate sector – that offered services at par with US and UK health systems, and follow similar processes and profess the same values of managed care, which the hospitals of West upheld. Owing to their foreign affiliations, these returnee doctors were also held in high esteem and given immense respect within professional circles – something which they lacked in US or the UK.

The surge in medical tourism has also been aided by this rise in corporate and private healthcare. The marketization of ayurveda and other traditional systems of medicine as business avenues has given a new life to these traditional systems – that were never given importance in public health system, and only recently allowed inclusion under NRHM. A large number of patients from the developed world are coming to India to access Western quality of care at highly affordable rates. Ayurveda ashrams constructed at scenic sites have attracted foreign patients for dual comforts of getting care and enjoying a holiday. Many such ventures have been facilitated through agreements between foreign and Indian hospitals by the Diasporic physicians. Surrogacy has been another business avenue in India – which is offering services at one tenth the rates in developed world. Indian Diaspora doctors have acted as referrals to surrogacy clinics in India. Additionally diaspora

doctors have continued establishing dispensaries in ancestral towns, facilitating eye camps, donating medical equipment, books and journals for use in India, which they were doing even in pre-reform era.

However there is another important role that the influential Diaspora has assumed. The wealthy and strong Diaspora doctors and entrepreneurs have entered the arena of health policy making. Many of these entrepreneur doctors are serving as policy advisers, and act as an influential pressure group in health planning meetings. In such a capacity, these diaspora members are able to influence key decisions on health financing and prioritization in health plans. The Indian government, learning from the Chinese, has also institutionalized its policy on diaspora, where health professionals are a separate target group.

### **Indian Diaspora policy for Health**

The report on ‘Health Sector Development: The Role of NRIs and PIOs’ divulges the detailed strategy of the Indian government to enhance the engagement of its Diaspora in healthcare. It clearly states – *“tertiary healthcare is highly resource intensive, requiring state of art equipment and diagnostic facilities. Neither the domestic private sector nor the public sector is in a position to address this deficiency on its own. It is in this context that NRIs and PIOs could play a significant role...”* (High-Level-Committee-On-Indian-Diaspora, 2001) Assessing the achievements of past, out of a total 17919 approvals by the government for FDI and technical collaborations during 1999-2000, only 87 were for hospitals and diagnostic centres, representing a mere 0.28 percent. This is noted as highly unsatisfactory.

The key players who can play a pivotal role along with Diaspora are identified as – Medical professionals, Professional Medical Organizations, Indian Corporate sector, Indian Financial Institutions, Voluntary sector, and the Indian Government. It is envisaged that since NRI doctors are skilled in hospital based practice, their expertise could be utilized in developing guidelines for hospital practice, and they could be linked with district and sub-district hospitals to improve quality of services and care. Collaborations between medical associations in India, with Associations of NRI/PIO doctors is also conceived for organizing workshops, training and improving medical research in India. Sponsorship for Indian students to receive hands on training abroad is also highlighted. Collaboration between the Indian Corporate sector and NRI/PIO physicians for manufacturing latest medical products, based on foreign technology is also

highlighted - since foreign technology has an obsolescence rate of 5 years, it needs to be continually replenished. Collaboration between Corporate sector and NRI/PIO physicians is also seen beneficial for setting up super specialty hospitals and diagnostic facilities. Even small but modern facilities in backward places are planned, from where corporate can derive tax benefits. The role of lending institutes is promoted - to collaborate with medical Diaspora and provide them investment support in India. Infact, the status of healthcare is changed from Industry to infrastructure to give boost NRI investment. (High-Level-Committee-On-Indian-Diaspora, 2001)

### **Discussion – implications for health care systems**

In the period before reforms were initiated, we find the Chinese had already recognized the potential of its overseas citizens for nation building. Despite being referred as a closed economy, its migrants were providing inputs from different parts of the advanced world – US, Russia, Japan in particular. The significant hold of Chinese natives within South East Asian markets gave them a definite leverage over India. A large part of diasporic investments in China came from Taiwan and Hong Kong, which were strong economies. The communist China found it easy to garner the confidence of its nationals, even while business communities from other nations remained wary of the communist ideology.

Two basic divergences between the Indian and Chinese Diaspora need to be highlighted at the outset. First, the Indian government never recognized the diaspora as a resource pool which could be exploited for national development. Second, the nature of Indian diaspora differed significantly from the Chinese. Indians have largely formed a professional group, or as labourers. The Chinese diaspora includes a strong business community, professionals, and labouring class. This also shapes the manner in which their respective diaspora has contributed back within healthcare – the Chinese business community invested heavily in the market for medical equipment and pharmaceuticals industry, making China the highest recipient of FDI (includes FDI in all sectors). The Indian professionals and labourers have given back in the form of remittances. In 2012, India topped the global remittances list - received \$69 billion, ahead of China.

The efforts of Chinese diaspora in healthcare are seen in the shape of massive investments by its business community in healthcare industry. This is in sharp contrast to Indian experience, where a large number of doctors have joined the US medical services, and as statistics show - fewer from the Chinese physician community. This has a context. Many Chinese doctors who migrated to the

US or other Western nations found it difficult to join practice because of the non- recognition of the Chinese degrees. This was a severe drawback for most Chinese professionals along with language barriers – since medical education in majority of Chinese Universities was in the native language, and not English. As a consequence, these professionals had to work in other capacities, and wasted their talents. The following case is interesting.

*“Mr. Ling was trained as a doctor and his wife as a nurse in China. After they arrived in San Francisco, they found it difficult to practice medicine due to their lack of proper medical degrees. However, when he was in China, Mr. Ling received some training in acupuncture. Later he continued to take courses and was licensed to practice in Chinatown. As it turns out, this business is quite competitive: there are many Chinese acupuncturists in the Chinatown community. (Wong B. , 1998)*

In this regard, the Western bias in Indian medical education proved fortunate for Indian doctors, who got readily absorbed in both UK and US healthcare system.

The role of Chinese Government can be seen as going back and forth towards the treatment of diaspora. The ideological barriers curtailed collaboration with west, however, it is well noted that their contact with the outside world persisted, irrespective of the political situation in China. Their continued quest for modern knowledge and technology found them again and again pushing its diaspora or students to transfer technology from the developed world. The similarities for India and China in this were their recognition that they needed to learn western technology in order to advance. Promoting science students to go for short term learning programmes was a strategy that both nations had enacted much before their economies opened up. The Chinese went much ahead and banned all social science programmes, forcing students to pursue engineering, astronomy, medicine, mathematics, rocket sciences, etc.

The Chinese institutionalized the role of its overseas citizens for economic development much before India. The reason lies in the recognition of the diaspora as a resource. The Indians emulated other nations in this regard. As Dr Els van Dongen assesses - *“the institutionalization of the Indian diaspora policy in the context of economic reforms only goes back to the beginning of the twenty-first century, which means it is a very young policy, whereas the institutionalization of China’s diaspora policy since its economic reforms goes back to the late 1970s, which implies the policy has had more time to grow.”* (Dongen, 2012)



Both India and China offered very similar incentives for the diaspora to return and invest back. The Chinese were very vocal about their demands – any scholar with a new technology could get a top position in a research institute. The passionate exchange of letters between Chinese President and Chinese scholars show their open resolve to bring China at top position in possessing highest technology. The Indians also gave their foreign investors high concessional rates for purchasing land and benefits in tax, and actively promoted FDI – relaxing all barriers.

In both China and India, the Diaspora is also seen as being the cohort that has created demand for private healthcare services. Families whose members migrated outside were the earliest to have developed a desire for foreign products and advocated their service delivery model. The recent return of Diaspora is now seen in actively accessing healthcare from services that have Western model. China and India now have a huge private sector, where a large number of private practitioners are working. The returnees have found it easy to adapt to the services – where the values are same as in the West. It is also important to note here that Indian public institutions do not allow rejoining by employees who have once left state services. Whereas, this is permitted in China.

We also need to examine – ‘who’ have comprised the diaspora from both nations, while analysing the nature of their contribution back to the homeland. The migrants from India have largely been professionals – who have also worked in the service sector of the receiving country. In sharp contrast, a significant proportion of migrants from mainland China have huge businesses in Hong Kong, Macao, Thailand and Indonesia. Hence the engagement of the Chinese diaspora with mainland has taken the form of business investments in key sectors, contrasted by Indian Diaspora that gave back only in form of remittances and philanthropy, and less FDI.

There is another important dynamic which is learnt from Devesh Kapur’s questioning of real benefit of diasporic intervention. He says *“The flight of physicians from India, trained largely at public expense has been a considerable brain drain for the health sector in India. Here I want to emphasize that the human capital of this professional group, as well as those who return, is likely to be centered around cutting edge technologies. Ideas flowing home from this group could well amplify the tertiary bias in India’s health system, which is not unimportant in a country where the health system is already weakest in primary, preventive and public health care.... Ideas after all, need not have unambiguously positive effects. There are good reasons to question whether some of these ideas are necessarily beneficial for India. To the extent that diasporas have a greater*

*knowledge of their countries of origin, are the technologies transferred appropriate?” (Kapur, 2010, p. 160)*

This is true for both the Chinese and Indian contexts. Health sector reforms in both contexts have led to the withdrawal of state support to public services, and the imposition of user fees for managing costs. In China, the commune health system was abolished as the state could no longer afford the costs of a wide health service structure. This led to sudden withdrawal of social insurance which most rural populous enjoyed, who now had to bear the complete costs of health seeking. In India, a large ambit of services in public sector became paid, and only a miniscule package of services were free, available to a restricted section of targeted vulnerable sections. Thus, the comprehensive nature of health services was lost. A growing private sector filled this void, where much of middle and upper sections had shifted. The competition between a resource constrained public sector, and protection laden private sector, saw private sector emerging as the dominant health service provider. While health priorities in India were always criticized for having an elitist urban orientation, but the corporatization of health services and a vast private sector that developed as a consequence has worsened the inequality in service provisioning.

In China, while the private sector was not permitted, a plethora of informal healthcare providers have flourished in the non-formal sector – since a significant population lost protection and state services became out of reach. The tertiary public hospitals are run on profit generation mode, in competition with each other – much like the private sector in India. The bias in favour of tertiary care has only heightened, which is a major departure for Chinese – who placed a high emphasis on primary care and prevention. Since hospitals have to manage their own funding, they deploy malpractices like over diagnosis, over prescription to generate revenue. The large manpower that was developed to work at the grassroots level was left out, majority of whom along with traditional practitioners have started private practice, without effective regulation. Today, the inequality and contrast between rural and urban China is stark. The following quote from Devesh Kapur, made for Indian context sums up the situation for both China and India -

*“...the principal health needs in India are in the realm of public health (i.e., vaccinations, pre and post natal care), access to clean water and sanitation, maternal and infant mortality, and child nutrition. In anything, the skill sets of Indian diaspora health community have amplified the bias toward tertiary and curative health care, and away from preventive and primary care”.* (Kapur, 2010, p. 98)

## Works Cited

- Ahluwalia, M. S. (1994). *Structural Adjustment and Reform in Developing Countries*. Retrieved February 14, 2014, from Paper presented at the Conference sponsored by G-24 on the occasion of the Fiftieth Anniversary of the Bretton Woods Conference at Cartagena, Columbia, April 1994: [planningcommission.gov.in/aboutus/speech/spemsa/msa013.pdf](http://planningcommission.gov.in/aboutus/speech/spemsa/msa013.pdf)
- American-Medical-Association. (2010). *International Medical Graduates in American Medicine - Contemporary Challenges and Opportunities*. Chicago.
- Barabantseva, E. (2005, August). *The Party-State's Transnational Outreach: Overseas Chinese Policies of the PRC's Central Government*. Retrieved February 3, 2014, from Institute of Chinese and Korean Studies, University of Tuebingen: <http://www.uni-tuebingen.de/uploads/media/2.pdf>
- Baru, R. (2005). Commercialization and the Public Sector in India. In M. Mackintosh, & M. Koivusalo, *Commercialization of Health Care: Global and Local Dynamics and policy Responses* (pp. 101-116). Hampshire: Palgrave Macmillan.
- Bullock, M. B. (1980). *An American Transplant: The Rockefeller Foundation and Peking Union Medical College*. Berkeley: University of California Press.
- Clifford, J. (1994). Diasporas. *Cultural Anthropology, Vol. 9, No. 3, Further Inflections: Toward Ethnographies of the Future*, 302-338.
- Dajun, S., & Li, Y. (1991). *Science and Technology in China, Volume 5*. Beijing: Science Press.
- Dongen, D. E. (2012, December 22). The potential of Indian culture is largely unexploited in India's Diaspora Policy - Discussion. - Accessed at <http://grfdd.com/InterviewDetails.aspx?TabId=8>, on 12th January 2014. (GRFDD, Interviewer)
- Goutu, Z., & wangbo, W. (2010). Migration and Trade: The role of Overseas Chinese in Economic Relations between China and Southeast Asia. *International Journal of Chinese Studies, Vol. 1, No. 1*, 174-193.
- High-Level-Committee-On-Indian-Diaspora. (2001). *Report of High Level Committee On Indian Diaspora*. New Delhi: Ministry of External Affairs.
- Jeffery, R. (1976). Migration of Doctors from India. *Economic and Political Weekly, Vol. 11, No. 13 (Mar. 27, 1976)*, 502-507.
- Kapur, D. (2010). *Diaspora, Development and Democracy*. New Delhi: Oxford University Press.
- Khadria, B. (2010). *The Future of Health Worker Migration (World Migration Report)*. Geneva: International Organization for Migration.

Koehn, P. H., & Yin, X.-h. (2002). *The Expanding Roles of Chinese Americans in U.S.-China Relations: Transnational Networks and Trans Pacific Interactions*. New York: M.E. Sharpe, Inc.

LaFraniere, S. (2010, January 6). *Fighting Trend, China Is Luring Scientists Home*. Retrieved December 10, 2013, from New York Times:

[http://www.nytimes.com/2010/01/07/world/asia/07scholar.html?pagewanted=all&\\_r=0](http://www.nytimes.com/2010/01/07/world/asia/07scholar.html?pagewanted=all&_r=0)

Maureen Mackintosh, Meri Koivusalo. (2005). Health systems and Commercialization: In search of good sense. In *Commercialization of Health Care: Global and Local Dynamics and Policy Responses* (pp. 3-21). New York: Macmillan.

Mu, Y., & Heng, T. S. (2010). A Pivot for Change: The potential role of the Haigui in addressing China's Social Problems. In Z. Litao, & L. T. Seng, *China's New Social Policy: Initiatives for a harmonious Society* (pp. 211-224). World Scientific Publishing Co. Pvt. Ltd.

*Reforms urged to attract overseas Chinese*. (2012, March 11). Retrieved December 20, 2013, from China.org.cn: [http://www.china.org.cn/china/NPC\\_CPPCC\\_2012/2012-03/11/content\\_24865428.htm](http://www.china.org.cn/china/NPC_CPPCC_2012/2012-03/11/content_24865428.htm)

Report-BMJ. (1960, December 24). *Medicine in China*. Retrieved December 19, 2013, from British Medical Journal, Vol. 2, No. 5216, pp. 1875-1876: <http://www.jstor.org/stable/20351633> .

Shaio, Z. (2008, June). *The PRC's Overseas Chinese Policy - Thesis*. Retrieved February 3, 2014, from Naval Postgraduate School - Monterey: <http://www.dtic.mil/dtic/tr/fulltext/u2/a483586.pdf>

Sidel, V. W. (1973, March). *Medicine and Public Health*. Retrieved December 19, 2013, from JSTOR-Proceedings of the Academy of Political Science, Vol. 31, No. 1, China's Developmental Experience: <http://www.jstor.org/stable/1173489>

Smart, A., & Hsu, J.-Y. (2004). The Chinese Diaspora, Foreign Investment and Economic Development in China. *The Review of International Affairs, Vol.3, No.4* , 544 – 566.

Tan, E. K. (2003). Re-Engaging Chineseness: Political, Economic and Cultural Imperatives of Nation-Building in Singapore. *The China Quarterly, No. 175 (Sep., 2003)* , 751-774.

Tatlow, D. K. (2014, January 10). *From Chinese Students in Germany, a Technology Promise to the Motherland*. Retrieved January 12, 2014, from New York Times: <http://sinosphere.blogs.nytimes.com/2014/01/20/from-chinese-students-in-germany-a-technology-promise-to-motherland/?module=BlogPost-ReadMore&version=BlogMain&action=Click&contentCollection=World&pgtype=Blogs&region=Body#more-5406>

Thuno, M. (2001). Reaching out and Incorporating Chinese Overseas: The Trans-Territorial Scope of the PRC by the End of the 20th Century. *The China Quarterly, No. 168 (Dec., 2001)* , 910-929.

Wei, S.-J. (1996). Foreign Direct Investment in China: Sources and Consequences. In T. Ito, & A. O. Krueger, *Financial Deregulation and Integration in East Asia, NBER-EASE Vol 5* (pp. 77 - 105). University of Chicago Press.

Wong, B. (1998). *Ethnicity and Entrepreneurship: The New Chinese Immigrants in the San Francisco Bay Area*. Massachusetts: Allyn & Bacon .

Wong, E., & Tatlow, D. K. (2013, June 5). *China Seen in Push to Gain Technology Insights*. Retrieved February 13, 2014, from New York Times:  
[http://www.nytimes.com/2013/06/06/world/asia/wide-china-push-is-seen-to-obtain-industry-secrets.html?pagewanted=all&\\_r=0](http://www.nytimes.com/2013/06/06/world/asia/wide-china-push-is-seen-to-obtain-industry-secrets.html?pagewanted=all&_r=0)

Young, N., & Shih, J. (2003). *The Chinese Diaspora and Philanthropy*. Cambridge: Harvard University - Global Equity Initiative for a workshop on Diaspora Philanthropy to China and India.

Zweig, D., Fung, C. S., & Vanhonacker, W. (2005, October ). *Rewards of Technology: Explaining China's Reverse Migration (Working Paper)*. Retrieved December 12, 2013, from Centre for China's Transnational Relations - The Hong Kong University of Science and Technology:  
[www.cctr.ust.hk/materials/working\\_papers/WorkingPaper11\\_v2.pdf](http://www.cctr.ust.hk/materials/working_papers/WorkingPaper11_v2.pdf)

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