

6

**COMPARATIVE CAPABILITIES,
INCOME, SOCIAL CAPITAL,
SUFFICIENCY AND HAPPINESS OF
CHINESE AND THAI HOUSEHOLDS
IN CHIANG MAI PROVINCE,
THAILAND**

COMPARATIVE CAPABILITIES, INCOME, SOCIAL CAPITAL, SUFFICIENCY AND HAPPINESS OF CHINESE AND THAI HOUSEHOLDS IN CHIANG MAI PROVINCE, THAILAND

Guo Jiajie¹

Daniel Schoch²

Peter H. Calkins³

บทคัดย่อ

จุดมุ่งหมายของการศึกษาค้นคว้าครั้งนี้เพื่อต้องการที่จะวัดและเปรียบเทียบ ระดับความสามารถ รายได้ ต้นทุนทางสังคม ความพอเพียง ความพอใจในชีวิต และความสุข ของ ประชากรในระดับครัวเรือนของ ประชากรไทย และประชากรจีน ที่ย้ายถิ่นฐานมาพำนักในจังหวัดเชียงใหม่ โดยมีการจัดทำและแจกแบบสอบถามให้แก่ ประชากรไทย 100 คน และ ประชากรจีน 100 คน เพื่อที่จะทดสอบนัยยะความแตกต่างทางสถิติ โดยคำนึงถึง ศาสนา การย้ายถิ่นฐาน และลักษณะทางสังคม-ประชากรศาสตร์ ผลการวิจัยที่ออกมาได้สนับสนุนสมมุติฐานที่ว่า ประชากรไทยและจีนส่วนใหญ่นั้น ย้ายถิ่นฐานมาอยู่เชียงใหม่เนื่องจาก จุดมุ่งหมายทางด้านอาชีพการงาน โดยที่ไม่มีนัยยะความแตกต่างในเรื่องของรายได้ ระดับความสามารถ ต้นทุนทางสังคมต่อหัว การศึกษา ความร่ำรวย ความพึงพอใจในชีวิต หรือความสุขระหว่าง กลุ่มชาติพันธุ์สองกลุ่ม อย่างไรก็ตาม ในด้านความไม่เท่าเทียมกันและ ต้นทุนทางสังคม ยังคงมีอยู่ในระดับที่มากในกลุ่มประชากรครัวเรือนจีน ในขณะที่ในด้านสาธารณสุข ภาวะกรมานทำและโอกาสในด้านอื่นๆ นั้น ยังมีอยู่ในระดับที่สูง ในกลุ่มของประชากรครัวเรือนไทย งานวิจัยชิ้นนี้จึงมีศักยภาพเพียงพอเพื่อนำไปใช้ในงานวิจัยในระดับการนำไปใช้จริงสำหรับรัฐบาล สังคมชุมชน กลุ่มคนที่มีศักยภาพและผู้ย้ายถิ่นฐานในปัจจุบัน

¹ This article is a partial fulfillment of thesis in Master of Economics, Faculty of Economics, Chiang Mai University

² Professor of Faculty of Economics, University of Nottingham-Malaysia, Kuala Lumpur, Malaysia

³ Professor of Faculty of Economics, Chiang Mai University, Chiang Mai, Thailand

ABSTRACT

The goal of this study is to measure and compare the capabilities, income, social capital, sufficiency, life satisfaction and happiness of Thai and Chinese households who have immigrated to Chiang Mai. An original survey of 100 Thai and 100 Chinese households in Chiang Mai was conducted to test for statistically significant differences with respect to religion, migration and socio-demographic characteristics. The results confirmed the hypothesis that the majority of Thai and Chinese migrants came to Chiang Mai for occupational motives. There is no significant difference in terms of income, capabilities, social capital per capita, education, wealth, life satisfaction or happiness between the two ethnic groups. However, inequality and social capital are greater in Chinese households; while health, employment and other opportunities are significantly greater in Thai households. This research has actionable implications for governments, civil society, and potential and current migrants.

Keywords: Capabilities, income, social capital, sufficiency, life satisfaction, happiness, Chinese and Thai households, Chiang Mai

1. INTRODUCTION

Thailand and China have maintained positive diplomatic relations for several centuries, with the result that today, a large number of ethnic Chinese reside in Thailand. Official statistics show that 141,600 people in 2000 or about 0.23% of Thailand's population claim to be of Chinese ethnicity.

Under the traditional mindset of Chinese people, no one leaves his or her hometown with the intention never to return. One's hope is always to come back rich, to die and be buried alongside one's ancestors. After accumulating a certain amount of wealth, the wanderer eagerly looks forward to coming back to the homeland. Chinese culture thus focuses on a concept of welfare that goes beyond monetary income or wealth. This said, some naturalized Chinese in Thailand may have lost some of their intention to go back to China. They may have established stable settlements and social relations and consider themselves native Thais.

Historically as well, many Chinese arrived in Thailand with skills or crafts that they could immediately utilize, or with commercial experience that gave a sound basis for active participation in the business life of the Chinese community. Thai Chinese are well-represented in all levels of Thai society and play a leading, visible role in business.

The goals of this research are to contribute quantitatively to the understanding of the capabilities, income, social capital, sufficiency, life satisfaction and happiness of Thai and Chinese immigrant households in Chiang Mai; and to compare Chinese households in Chiang Mai with their native Thai counterparts. The degree of inter-household income inequality within each ethnic group will also be calculated and compared.

From the results of this research, in the government's desire to attract investment and avoid the loss of resources (labor, economy and intelligence), could use the results as a guide for introducing a number of economic policy measures and/or upgrading the investment environment. Thai and Chinese governments also want to compare Chinese in Thailand with native Thai people, not only in terms of their role in income generation but also in terms of their capabilities, happiness and social capital. The present research should also inform government as to Chinese people's non-pecuniary needs.

2. LITERATURE

110 /

Chinese migration has a long history. During the Qing dynasty (1644–1911), for example, the Chinese state banned immigration. With the Japanese invasion and civil war of the 1930s and 1940s, large numbers of migrants appeared in southeast China. Until Liberation in 1949, a substantial number of male migrants left China in Southeast Asia or Indonesia. During the ensuing 30 years, return visits were not encouraged and the connection between overseas Chinese and their hometowns was cut off. Nowadays, overseas Chinese play an important role in the economy and in financial development, especially in Southeast Asia. Indeed, from the early 1980s, the Chinese government has subsidized a lot of projects to improve and solidify relations between China and other countries.

The main migration pressure of China was caused by the high growth rate of the working-age populace, unemployment, and a “floating” population⁴. More than one million Chinese entered other Pacific Asian countries in the period 1980–2000. The relatively steady society in Thailand gathered more Chinese immigrants compared to other Southeast Asian countries. For example, the number of Chinese migrants to Thailand was 226,000 in 1998, far greater than the 137,000 to the Philippines in 2000. Partly as a result, the cultures of China and Thailand impacted each other in an unusually strong way⁵.

Early researchers subdivided ethnic Chinese living in Thailand into three distinct categories: 1) migrated from China to Thailand before and after the Second World War; 2) Thai-born of two Chinese parents, or 3) local-born Sino-Thai raised in a Sino-Thai family. Today, in contrast to the theory of Skinner (1957), recent researchers have argued that descendants of Chinese immigrants continue to regard themselves as Chinese and implicitly accept Chinese culture. This phenomenon has given rise to a new concept—“alternative to assimilation.” Although Chinese in Thailand have adopted many Thai cultural and family practices, these practices were mostly combined with Chinese elements.

The cultures of both China and Thailand are also compatible with Western practices and ideas—modernization, development and industrialization. From the research on the social capital of overseas Chinese who migrated from villages in Guangdong⁶, the native village or hometown was viewed as the base of a strong emotional connection. Reinforcing traditional Buddhist notions of gift-giving, overseas Chinese are expected to donate to their native villages. Indeed, there is a phenomenon in China termed loving “face” (*ai mianzi*), because giving gifts and money shows that the migrant has achieved a better life and earned more money in other places than in the hometown. Paradoxically, this practice may actually have prevented some Chinese from returning to their hometown, either because they could not afford the expected amount, or because they considered it a waste of money.

⁴ International migration in South-East Asia: the role of China, Jean Louis Rallu, 2002.

⁵ Religion and family of the Chinese and Thai in Thailand and influences, Liang Chua Morita, 2007.

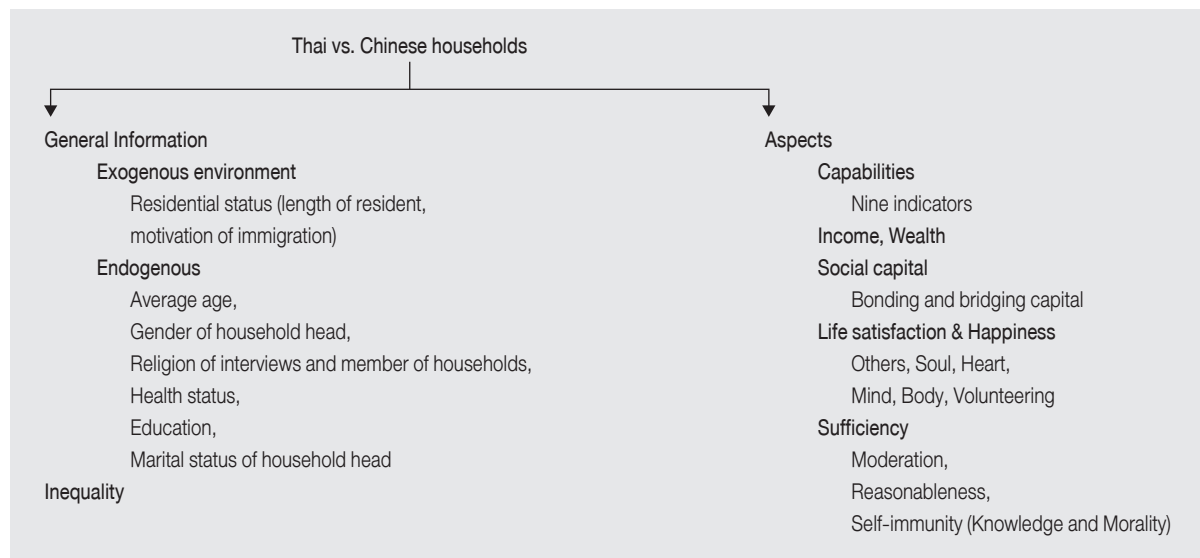
⁶ Imaginary homecomings: Chinese villagers, their overseas relations, and social capital, Ellen Oxfeld, 2001.

3. METHODOLOGY

For the present study, original survey data were collected from 100 Chinese and 100 Thai immigrant household heads in Chiang Mai--the second largest city in Thailand after Bangkok--in January and February 2011. Secondary data from government were also consulted and integrated where appropriate. Thai migrants to Chiang Mai came from other provinces like Bangkok and Chiang Rai. The 100 Chinese households consisted mainly of ethnic Chinese still living in Chinese society, as in Yunnan village in Chiang Mai. Such villagers live together and share labour, growing crops and selling what they harvest. They tend to maintain their Chinese characteristics.

The quantitative data were analyzed statistically through Gini and Theil estimations of inequality of the income distribution, as well as t-tests of significant differences in means or in variances. Both subjective and objective measurements of well being were used to investigate basic family information, income, capabilities, social capital, sufficiency, life satisfaction and happiness through our survey design. The theoretical relationships among these variables are summarized in the conceptual framework of Figure 1.

Figure 1. Conceptual framework



3.1 CAPABILITIES

Capabilities refer to what people are free to do, such as the ability to live to old age, feel satisfied with life, engage in economic transactions, or participate in political activities. The theory applies welfare research to evaluate subjective well-being data. Nussbaum (2000) provides a series of statistical indicators to measuring capabilities. Capabilities in the present research involve nine domains defined as follows:

- a. Bodily health—the health limitation of households;
- b. Bodily integrity—the security of households;
- c. Senses imagination and thought—usage and freedom of imagination and thought in work and life;
- d. Emotions—feeling of friendships, support, love, anger and strain;
- e. Practical reason—the capacity of judging and controlling life;
- f. Affiliation—being able to living with others and the importance for other people and respect to other objects and self-respect;
- g. Other species—concern for plants, animals and the world of nature;
- h. Play—leisure activities;
- i. Control over one's environment—respect to and importance of other people in work.

3.2 INCOME INEQUALITY

Income, as a personal attribute, is suitable for quantitative measurement of inequality. It may be seen as the household's relative command over resources during a given time period, and can thus serve as an index to represent a household's general well-being in society. The "inequality" of individuals or households relates to the unequal distribution of total household's income.

The Gini coefficient was first introduced by Corrado Gini in the paper "Variability and Mutability" (1912) and has now become the most commonly used measure of inequality. The definitions of the Gini-welfare measure g and the Gini-coefficient G for a distribution R_n are as follows:

$$g(\vec{x}) = \sum_{i=1}^n (n+1-i) \cdot \vec{x}[i], \quad (1)$$

$$G(\vec{x}) = \frac{1}{n} \left(n+1 - 2 \cdot \frac{g(\vec{x})}{\sum_{i=1}^n \vec{x}_i} \right) \quad (2)$$

Here, i is the rank order of i th individual; x is income of individual; $\vec{x} = (\vec{x}[1], \vec{x}[2], \dots, \vec{x}[n])$ is the rank-ordered permutation of $\vec{x}$ with $\vec{x}[1] \leq \vec{x}[2] \leq \dots \leq \vec{x}[n]$; n is the number of observations; $\sum \vec{x}$ is total income.

The Theil index, another indicator to measure inequality, is defined by

$$T1 = \frac{1}{N} \sum_{i=1}^N \left(\frac{x_i}{\bar{x}} \bullet \ln \frac{x_i}{\bar{x}} \right) \quad (3)$$

where N = the number of individuals or households, x_i = the income of i th individual or household, $\bar{x} = \frac{1}{N} \sum_{i=1}^N x_i$ is the average income. The advantage of the Theil index is that it considers the weighted average of inequality within and among subgroups. Suppose that the population is divided into m subgroups; the total Theil index is decomposed as / **113**

$$T2 = \sum_{k=1}^m s_k T_k + \sum_{k=1}^m s_k \ln \frac{\bar{x}_k}{\bar{x}} \quad (4)$$

where s_k is the income share of group k , and T_k is the Theil index for subgroup k , $\bar{x}_k$ = the average income in group k .

3.3 SOCIAL CAPITAL

Social capital, as discussed by Putnam (1993), is the network of horizontal connections (whereby members relate to each other on an equal basis) which leads to mutual commitment and trust and enables people and their institutions to function effectively. Coleman (1988) has argued that social capital can include vertical associations as well, characterized by hierarchical relationships and unequal power distribution among members. Social capital in the present research includes both bonding capital—the network of members on an equal basis, and bridging capital—the network of members at different levels or has unequal power.

3.4 HAPPINESS

Veenhoven (2000) focused on life-satisfaction, defined as “the overall appreciation of one’s life-as-a-whole”. Survey questions set in the form of 7- or 10-point Likert scale choices between the extreme values (highly dissatisfied and highly satisfied) have been used to survey the happiness of the general population in many countries. Respondents are asked optional questions like “how satisfied or dissatisfied are you currently with your life as whole?” In the present research, “life satisfaction” tests for the level of satisfaction with respect to economic status, living and working conditions, interpersonal relations, community environment, children’s education and leisure life. Happiness is defined as the average happiness with respect to other people, soul, heart, mind, body and volunteering. The definition of each of these domains is:

- a. Physical happiness—attitude in face of difficulty;
- b. Mental happiness—freedom and peace in mind and the control of mind in life;
- c. Emotional happiness—life attitude, the feeling of shame, guilt and blame;
- d. Altruistic happiness—the feeling of others’ activities and loving to share with others;
- e. Spiritual happiness—peace in soul and accept others’ different beliefs;
- f. Happiness of volunteering—feeling toward non-profit activities.

3.5 SUFFICIENCY ECONOMY

In Thailand, the sufficiency economy philosophy (SEP) was developed by His Majesty King Bhumibol Adulyadej. SEP stresses appropriate conduct and ways of life while incorporating moderation, due consideration in all modes of conduct, and the need for sufficient protection from internal and external shocks (Piboolsravut, 2004). The sufficiency economy philosophy entails three components—moderation, reasonableness, and a

requisite self-immunity system; and two underlying conditions—knowledge and morality (i.e. honesty and integrity). The sufficiency economy philosophy can be applied to all sectors of an economy. The aim is to boost positive creative force of the individual, household, business, government office, or community in order to achieve unity and a balanced and sustainable development.

4. RESULTS AND DISCUSSION

4.1 BASIC INFORMATION OF SAMPLE

Our survey of 100 Thai and 100 Chinese households first investigated the religion of interviewees and members of family. The results showed that 84% of interviewees and 85.5% families are Buddhist. Buddhism as the wide base of religion both in Thailand and China is inherited and passed forward to succeeding generations.

Demographically, in the 100 Thai households, 14% household heads are female; as compared to 12% in 100 Chinese households. The percentage of married household heads is 83.5%, separated 4.0%, widowed 3.5% and divorced 1.0%. The average age of family members ranges from 13.33 to 65.50 years old. Some of the sample households have young parents and small children. The number of family members is usually small in this kind of households.

Time in Chiang Mai of the sample varies from 0.5 to 66 years. The distribution of length of stay in Chiang Mai of Chinese and Thai households is shown in Figure 2.

Figure 2. The distribution of length of stay in Chiang Mai of sample

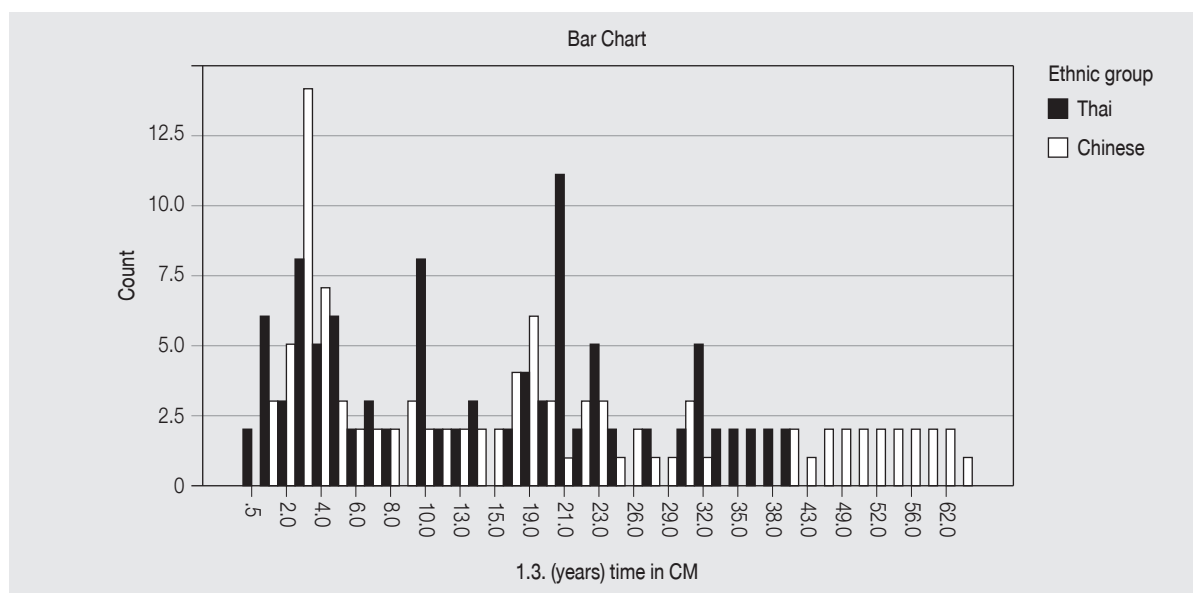
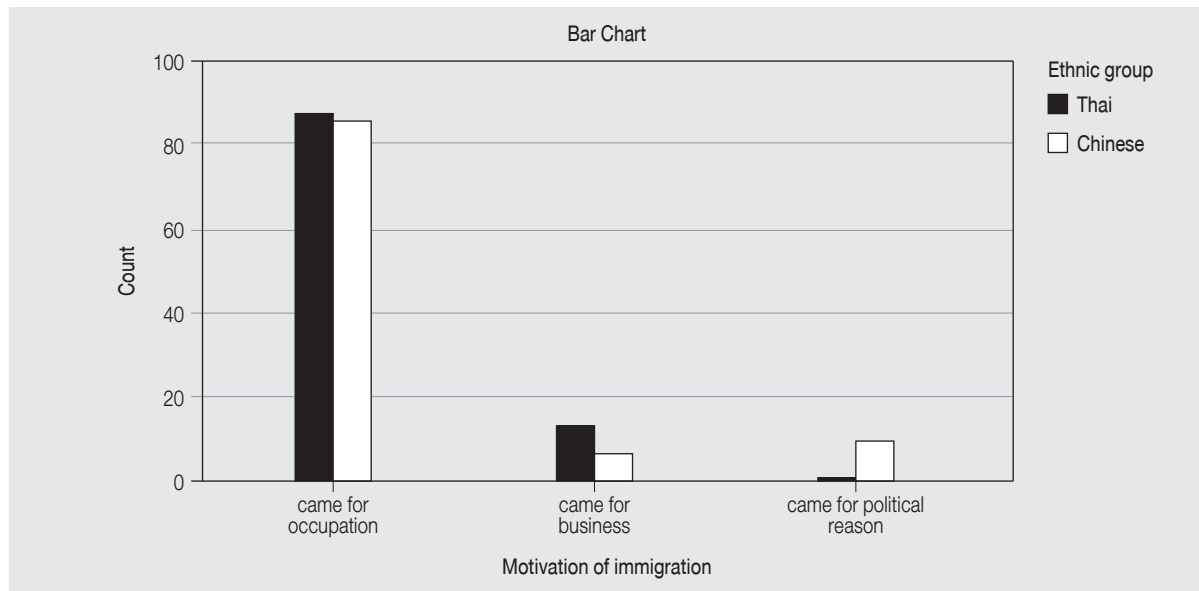


Figure 3. Comparative immigration motivation of in Chinese and Thai households

We can see that most Thai and Chinese people reside in Chiang Mai for 3 (14%) and 21 (11%) years respectively. The range of time in Chiang Mai for Thai and Chinese groups is different. Thai residents came to Chiang Mai during the period 1971 to 2010 (staying for 0.5–40 years); while Chinese migrants came to Chiang Mai during the period 1945 to 2010 (stay for 1–66 years). Most Thai people came to Chiang Mai in 1990 and most Chinese people living in Chiang Mai from 2008 in the research sample.

Three types of motivation for immigration were distinguished in this research: migrate for occupation, for business and for political reasons. From Figure 3, it is clear that occupation is the biggest reason for migration for both Thai (87%) and Chinese (85%) households. The appeal of business is smallest for the Chinese but the second biggest for Thai people. No Thai people came to Chiang Mai for political reasons, but politics is the second biggest reason of immigration for Chinese households.

The Goodman and Kruskaltau significance of the dependent concept motivation for immigration is 0.069, while the Pearson Chi-square and Goodman and Kruskaltau significance of the dependent concept ethnic group are 0.003. Both values are less than the required significance threshold of 0.10.

4.2 ANALYSIS OF CAPABILITIES

In order to research the differences in the nine types of capabilities between the Thai and Chinese group, the definition of each variable and the results of t-tests are reported in Table 7.a. The value of every capability score is calculated by the average of related indicators extracted from the relevant questions in the survey questionnaire. Thus, the t-test is performed on the related indicators (whose Likert values range from 1 to 7) to analyze the reasons of significantly different capability scores between the two ethnic groups. The differences of related indicators are summarized by ethnic group (Table 7.a).

It is apparent that the mean for the Thai group is significantly higher in bodily health, practical reason and play; while the Chinese group enjoys significantly greater levels of sense imagination and thought and control over one's environment.

More specifically, for Thai migrants,

- a. Thai households have higher health limitation compared with most people of their age: the mean level of health limitation in Thai households is 6.62; while the mean in Chinese households is 6.32, significant at the 0.0653 level.
- b. The idea of a good life is more based on their own judgment: the mean in Thai households is 5.79 as compared to the mean in Chinese households of 5.38 (significance = 0.0448).
- c. Thai migrants derive more joy from their recreational activities (6.08 vs 5.44, significant at 0.0007).

Meanwhile, for Chinese residents:

- a. Chinese households use more imagination and reasoning in day-to-day life ($5.56 > 4.62$), and have better work and associational life ($5.61 > 4.57$). Both differences are highly significant (0.0000).
- b. Chinese people feel they use more skills and talents at work (5.79 vs. 5.48, significance = 0.0900).
- c. Chinese workers feel they are playing a useful part in things ($5.77 > 5.08$), significant at the 0.0006 level.

4.3 ANALYSIS OF INCOME

4.3.1 The difference of income

The Thai and Chinese immigrant household samples used in this research were each stratified into 12 income groups: less than 5,000 Baht, 5,000–7,500 Baht, 7,500–10,000 Baht, 10,000–15,000 Baht, 15,000–25,000 Baht, 25,000–50,000 Baht, 50,000–75,000 Baht, 75,000–100,000 Baht, 100,000–150,000 Baht, 150,000–200,000 Baht, 200,000–250,000 Baht and more than 250,000 Baht. The results of t-tests for total income and income per capita are displayed in Table 1.

Table 1 T-test of income between Thai and Chinese households

	Group Statistics				Independent Samples Test			
	Ethnic group	Mean	Std. Deviation	Var.	F	Sig.	t	Sig.
Total income	Thai	5.4600	1.8555	0.3398	3.3579	0.0684*	0.1380	0.8903
	Chinese	5.4200	2.2256	0.4106				
Income per capita	Thai	3.0300	1.8172	0.5997	0.7832	0.3772	-0.1121	0.9108
	Chinese	3.0600	1.9634	0.6416				

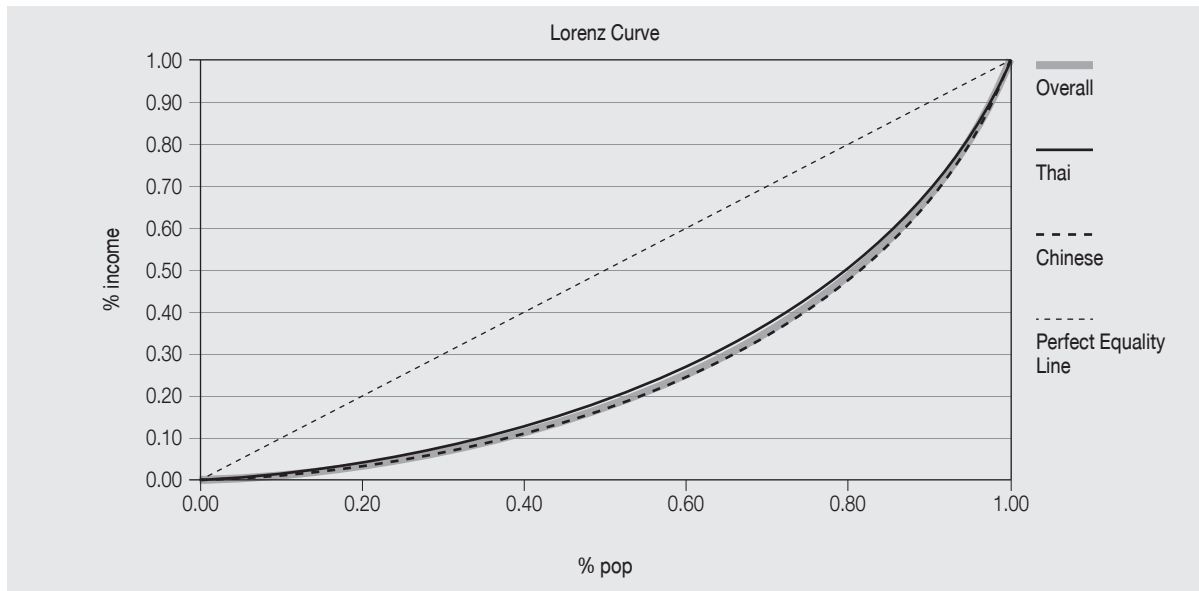
We can see from the Table 1 that the significance (2-tailed) of total income per month and income per capita of households are all much bigger than 0.1, so the difference in income between two ethnic groups is not significant. The mean level of total income for each ethnic group lies between 15,000 to 25,000 Baht, while the mean per capita income of every household is in the range of 7,500 to 10,000 Baht.

4.3.2 Inequality—Gini coefficient, Lorenz Curve and Theil index of income per capita

To analyze the inequality of the two ethnic subsamples, Lorenz curves of income per capita were generated (Figure 4).

/ 117

Figure 4. Comparative Lorenz Curve of the percentual income per capita



There is little difference between the Thai and Chinese curves. The curves in both groups are almost the same at the origin. At the higher classes, however, the Lorenz curve of the Thai group is steeper than that of the Chinese group. In other words, the distance between the perfect equality line and the Chinese Lorenz curve is greater than the distance between the perfect equality line and the Thai Lorenz curve. The impression of greater inequality of income per capita in the Chinese group is confirmed by the calculation of Gini coefficients and Theil index (Table 2). Both the Gini coefficient and Theil indices of the Chinese group are higher than those of the Thai group. The effect of inequality in Chinese group is bigger than in Thai group.

Table 2 Comparative Gini coefficient and Theil index

Method	Total sample	Thai group	Chinese group
Gini coefficient	0.47	0.45	0.49
Theil index	0.38	0.34	0.42

The question remains however: is this greater inequality in per capita (and total household) income for the Chinese group really significant? From the results of the t-test of income per capita in Table 1, we note that variances (and means) of income per capita do not differ significantly between the two ethnic groups. Thus the difference in inequality of income per capita between Thai and Chinese groups is not significant. In contrast, variances in total household income are significantly greater for Chinese households than for

Thai households. This suggests that the total household income is less equal among the Chinese households than in Thai households, as suggested by the Lorenz curves.

118 /

4.4 ANALYSIS OF SOCIAL CAPITAL

The variables for social capital are separated into horizontal (bonding capital) and vertical (bridging capital) indicators. The definitions, values and t test statistics of the specific indicators and are shown in Table 7.b. The differences in bonding capital and social capital per capita between Chinese and Thai are not significant. This said, bridging capital and average overall social capital of Chinese immigrant households are significantly higher.

After analyzing the related indicators of significantly different scores, we note that the Chinese group has higher bridging capital because

a. They value and have better relationships with government: the mean of this score in Chinese households is 5.15 out of 7.00, vs. 4.53 for Thai households. The difference is significant at the 0.0074 level.

b. The frequency of interaction with other ethnic people in Chiang Mai is higher in the Chinese group (5.09 vs. 4.40, significant at 0.0042).

c. Chinese participation in formal associational life is significantly (at the 0.0002 level) greater: 5.34/7.00 vs. 4.40.

d. Chinese migrants do not think they were more active and or participated more in associational life in their hometown than in Chiang Mai. The mean scores of Thai and Chinese households are 5.02 and 5.47, respectively (significance = 0.0485).

e. Chinese migrants have more colleagues of different ethnicity: 5.61 vs. 4.40, at a very high level of significance.

f. Chinese people have greater professional (5.08 > 4.62) and social/associational (5.19 > 4.35) relationships with other Chinese of a much higher social status than in their hometown. On the other hand, the mean number of organizations participated in⁷ by the Thai group is more than twice that of the Chinese group. Thai migrants participate are more actively in night school, church or activities in the Chiang Mai community.

4.5 ANALYSIS OF WEALTH

Wealth encapsulates the long-term belongings of the household: assets, benefits and savings. Table 3 reports the t-test for significant differences in means and variances between the two ethnic groups.

Except for the fact that Chinese households have significantly higher incidence of savings, none of the indices of wealth in this research differ significantly between Chinese and Thai households.

However, Chinese in Chiang Mai do have significantly more savings than native Thais only when the level of income lies between 25,000 and 50,000 Baht (Table 4) per month, equivalent to 450,000 Baht $([25,000+50,000])/2 \times 12$ per year. Chinese immigrant households in Chiang Mai save 28% of their annual income, while Thai household save just 9%.

⁷ The number of organizations participated in is not directly involved in the measurement of social capital, but it does reflect another aspect of social capital.

Table 3 T-test of wealth between Thai and Chinese households in Chiang Mai

Group Statistics				Independent Samples Test			
Variable name	Ethnic group	Mean	Std. Deviation	F	Sig.	t	Sig.
1. Benefits:							
benefits(B)	Thai	11892.00	77753.0910	7.8465	0.0056	1.4179	0.1578
	Chinese	841.82	5310.1445				
2. Assets:							
other cash income(B)	Thai	21000.00	91177.4549	7.1531	0.0081	-1.2841	0.2006
	Chinese	77309.56	428919.3078				
3. Savings:							
have savings or not	Thai	0.48	0.5021	54.8136	0.0000	-4.9749	0.0000***
	Chinese	0.80	0.4020				
amount of savings(B)	Thai	2368861.70	14557372.1308	5.9684	0.0160	1.2858	0.2009
	Chinese	277700.00	712619.9371				
saving purpose	Thai	1.1702	1.0069	0.6386	0.4257	-0.6281	0.5311
	Chinese	1.2875	1.0212				

Table 4 T-test of savings between Thai and Chinese households in Chiang Mai

Group Statistics						Independent Samples Test			
Income category by ethnic group	N	savings (B)	Annual income ('000 B)	Savings rate	Std. Deviation	F	Sig.	t	Sig.
Thai 25-50 thousand	10	41350.0	450.00	.09	29465.66	9.008	0.006	-2.019	0.060*
Chinese 25-50 thousand	16	126187.5	450.00	.28	163921.21				

4.6 ANALYSIS OF LIFE SATISFACTION AND HAPPINESS

Life satisfaction and happiness cannot be measured by physical indicators such as weight or blood pressure. As with the other questions in the survey, responses were entered on a 1 to 7 Likert scale to quantify (at least ordinally) subjective life satisfaction and happiness. We found no significant differences in happiness or satisfaction between Thai and Chinese migrants in Chiang Mai (Table 7.c). Nonetheless, Chinese households have higher work satisfaction (3.74 > 3.42, significant at 0.0204.) and living conditions (3.93 vs. 3.70, sign. = 0.0680.).

Within overall happiness, however, average altruistic, spiritual, and emotional happiness did differ significantly by ethnic subgroup. The t-tests suggest that Thai households have significantly higher altruistic happiness because

a. Thai residents prefer to share with other people: the mean of this score in Thai households is 5.60, while in Chinese households is 5.19, and the significance is 0.0509;

b. They feel less disgust for others: the mean of Thai and Chinese households are 5.98 and 5.57, respectively, at a significance level of 0.0408;

c. They are more tolerant of what other people may think of them: the mean in Thai households is 5.32, vs. 4.93 in Chinese households, significant at the 0.0653 level.

Thai households also enjoy have higher spiritual happiness, because they feel greater peace in their soul (5.74 vs. 5.43, significance = 0.0591).

In contrast, the Chinese group has higher emotional happiness because

a. A greater proportion of Chinese people consider themselves slow to anger: $4.60 > 3.29$, significant at the 0.0000 level;

b. Their control of the feelings of guilt ($4.94 > 4.32$) and blame ($4.86 > 3.12$) are much greater.

4.7 T-TEST FOR OTHER INDICATORS

Finally, to investigate such other variables as ethnic nostalgia, demand for life overseas, sufficiency, education, health, pressure resistance, political power, contact with hometown, security, and leisure, further t-tests were conducted (Table 5).

Table 5 T-test of other indicators between Thai and Chinese households

Group Statistics				Independent Samples Test			
Variable name	Ethnic group	Mean	Std. Deviation	F	Sig.	t	Sig.
1. Score of missing living within a completely Chinese society:							
Average missing living with ethnicity score	Thai	5.0314	0.8037	3.2354	0.0736	-2.4456	0.0154**
	Chinese	5.3329	0.9345				
2. Demand of life overseas:							
perceived income(B)	Thai	261100.0000	1400250.6233	5.1019	0.0250	1.0909	0.2767
	Chinese	107100.0000	179726.4757				
3. Sufficiency:							
heard about SEP	Thai	0.9800	0.1407	1001.4242	0.0000	8.2785	0.0000***
	Chinese	0.5500	0.5000				
Average of overall sufficiency	Thai	5.4067	0.6012	6.5936	0.0110	1.2161	0.2254
	Chinese	5.2822	0.8281				
level of understanding of SEP	Thai	5.1020	1.3508	4.7569	0.0307	0.4876	0.6265
	Chinese	5.0000	1.0184				
4. Education:							
Education of household head	Thai	3.2300	1.2622	14.7352	0.0002	2.9025	0.0042***
	Chinese	2.6200	1.6804				
Highest education	Thai	4.0900	0.6977	0.0009	0.9761	1.5246	0.1290
	Chinese	3.9400	0.6937				
Average education	Thai	3.3400	1.0938	4.2887	0.0397	-0.1409	0.8881
	Chinese	3.3600	0.9048				
5. Health:							
Average of bodily health	Thai	6.6200	1.0326	10.7250	0.0012	1.8536	0.0653*
	Chinese	6.3200	1.2462				
6. Pressure resistance:							
pressure resistance	Thai	5.6000	1.4355	0.0826	0.7741	1.3865	0.1672
	Chinese	5.3200	1.4205				

Table 5 T-test of other indicators between Thai and Chinese households

Group Statistics				Independent Samples Test			
Variable name	Ethnic group	Mean	Std. Deviation	F	Sig.	t	Sig.
7. Political power:							
political power	Thai	5.8400	1.7565	1.4875	0.2240	0.7755	0.4390
	Chinese	5.6400	1.8884				
8. Contact with hometown:							
visit home	Thai	5.7400	1.8943	0.6455	0.4227	4.1550	0.0000***
	Chinese	4.6000	1.9848				
9. Security:							
safety(day)	Thai	6.3000	1.0684	1.0206	0.3136	0.8534	0.3945
	Chinese	6.1600	1.2449				
safety(night)	Thai	5.5900	1.5380	0.2590	0.6114	-0.2657	0.7908
	Chinese	5.6500	1.6537				
10. Leisure:							
Average of play	Thai	5.8150	1.0557	8.4798	0.0040	4.2002	0.0000***
	Chinese	5.0650	1.4401				
satisfaction of leisure life	Thai	3.8700	0.9063	0.0551	0.8147	-0.8566	0.3927
	Chinese	3.9800	0.9099				

The average ethnic nostalgia score is defined as the mean frequency of visiting home, interactions with the same ethnic group in one's hometown and Chiang Mai, and the associational life with ethnicity. This is one of the capability scores that differ significantly by ethnic group. From the analysis of related indicators, Chinese households have significantly higher frequency of interaction with other people of their ethnicity in Chiang Mai ($5.09 > 4.40$, significant at 0.0042.)

On the other hand, Thai immigrants have clearly heard significantly more about King Bhumibol's Sufficiency Economy Philosophy (SEP) than their Chinese counterparts. But the average sufficiency score of the Chinese group is not significantly lower than that of the Thai group. This means that the Chinese who have heard about the King's Philosophy understand and practice it at the same or even higher levels than Thai people. Considering the three components and the two underlying conditions of the sufficiency economy philosophy, Thai people are more preoccupied with the consequences of their action (5.59 vs. 5.27, significance = 0.0437) and prefer to seek and value knowledge in life ($5.63 > 5.31$, significant at the 0.0788 level). In contrast, Chinese migrants have significantly stronger ability to cope with shocks from internal changes ($5.35 > 5.08$, at the 0.0961 sing. level). There is no significant difference in moderation, self-immunity or morality between Thai and Chinese households in Chiang Mai.

The education variable is captured by three separate indicators: education of household head, highest education of any member of the household, and average years of schooling across all household members. Among these, only education of the household head differed significantly between the two ethnic groups. Chinese household heads have lower education overall because of their low level of primary education ($0.08 < 0.19$).

For the purposes of this analysis, the levels of education were divided into three stages: 1. low stage—illiterate and literate but without formal schooling; 2. middle stage: primary and secondary level; 3. high stage: university and professional degree. From the t test of stages in every indicator, we found that Chinese household heads had significantly higher educational level in the low stage, but that the differences were not significant for the middle and high tags.

Beside the above variables, the demand for life overseas, pressure resistance, political power and security do not differ significantly between Chinese and Thai households. But Thai households have significantly higher average levels of health, home visits, and play.

The analysis t-tests reported in Table 6 indicates that such opportunities are significantly lower in the Chinese group. This disadvantage is perhaps attributable to linguistic or political factors beyond the scope of the present research.

Table 6 T-test of employment and opportunity between Thai and Chinese households

One-Sample Statistics			One-Sample Test		
Variable name	Mean	Std. Deviation	t	Sig. (2-tailed)	Mean Difference
Employment(Thai)	0.1600	0.3675	5.3318	0.0000***	0.1250
Employment(Chinese)	0.1250	0.3315			
Opportunity (Thai)	0.4300	0.4963	9.0156	0.0000***	0.2900
Opportunity (Chinese)	0.2900	0.4549			

Table 7 T-test of tested variables

Group Statistics					Independent Samples Test			
Variable name	Involved Questions	Ethnic group	Mean	Std. Deviation	F	Sig.	t	Sig.
a. T-test of Capabilities between Thai and Chinese Households in Chiang Mai								
Average of play	Travel for pleasure, Enjoy recreational activities	Thai	5.8150	1.0557	8.4798	0.0040	4.2002	0.0000***
		Chinese	5.0650	1.4401				
Average of control over one's environment	Importance at work, Treated with respect at work	Thai	5.4367	0.9706	1.2555	0.2639	-1.9222	0.0560*
		Chinese	5.7067	1.0153				
Average of senses imagination and thought	Usage of imagination in life and work, Freedom of political views and religion, Enjoy life, Skills at work	Thai	5.4333	0.8199	4.5715	0.0337	-1.8593	0.0645*
		Chinese	5.6650	0.9382				
Average of bodily health	Level of health limitation of family	Thai	6.6200	1.0326	10.7250	0.0012	1.8536	0.0653*
		Chinese	6.3200	1.2462				
Average of practical reason	Pressure resistance, Life judgment/plan/evaluation	Thai	5.5725	0.9390	0.0579	0.8102	1.8337	0.0682*
		Chinese	5.3300	0.9313				
Average of emotions	Friendship at/outside work, Love in family, Feeling of gratitude/anger	Thai	5.6757	0.7739	4.4016	0.0372	1.6519	0.1001
		Chinese	5.4786	0.9084				
Average of other species	Value the world of nature	Thai	5.8600	1.3485	7.0986	0.0084	-1.4095	0.1603
		Chinese	6.1000	1.0396				
Average overall capability score	The average of all scores of capabilities	Thai	5.8890	0.5458	7.8205	0.0057	1.1178	0.2650
		Chinese	5.7900	0.6971				
Average of bodily integrity	Freedom of move from place to place, Security	Thai	5.6400	0.8860	2.3486	0.1270	1.0419	0.2987
		Chinese	5.4967	1.0525				
Average of affiliation	Importance in family, Respect people, Discrimination	Thai	6.0367	0.9319	0.1111	0.7393	-0.2727	0.7854
		Chinese	6.0733	0.9693				

Table 7 T-test of tested variables

Group Statistics					Independent Samples Test			
Variable name	Involved Questions	Ethnic group	Mean	Std. Deviation	F	Sig.	t	Sig.
b. T-test of Social Capital between Thai and Chinese Households								
Average bridging capital	Correlation with government, people and ethnicity in Chiang Mai, Trust colleagues, Participation in formal associational life, Compatible with colleagues, Activity, Colleagues are ethnicity, Relationship with higher social status	Thai	4.7027	0.7039	5.8278	0.0167	-4.7430	0.0000***
		Chinese	5.2355	0.8752				
Average overall social capital	Average overall scores of social capital per household	Thai	4.9424	0.6338	4.3187	0.0390	-3.3314	0.0010***
		Chinese	5.2767	0.7779				
no. of organizations	Number of organizations that the households participate	Thai	0.5000	1.0000	9.2108	0.0027	2.1320	0.0344**
		Chinese	0.2400	0.6980				
Average bonding capital	Visit home, Correlation with ethnicity in hometown, Trust families and friends, Participation in informal associational life and decision making, Compatible with families and friends, Sense of responsibility in associational life, Association are ethnicity	Thai	5.2060	0.7003	0.0382	0.8453	-1.1166	0.2655
		Chinese	5.3220	0.7673				
social capital per capita	Per capita social capital	Thai	1.4184	0.6372	10.4913	0.0014	-0.5203	0.6034
		Chinese	1.4887	1.1909				
c. T-test of Life Satisfaction and Happiness between Thai and Chinese Households in Chiang Mai								
1. Life Satisfaction:								
Average satisfaction	Family life, Economic conditions, Interpersonal relations, Living conditions, Working conditions, Community environment, Children's education, Leisure life	Thai	4.3492	0.5724	6.8633	0.0095	-0.0081	0.1599
		Chinese	4.4733	0.6684				
2. Happiness:								
Average happiness of heart	The life is bright, Never angry, Feel self-disgust or gratitude, No shame, guilt or blame	Thai	4.6657	0.6871	3.2227	0.0741	-3.6549	0.0003***
		Chinese	5.0643	0.8468				
Average happiness of others	Feeling of others' activities, Make other people happy, Share with others, Harmony with others, Disgust for others, Others' think may bother me	Thai	5.3950	0.8242	2.8350	0.0938	2.2715	0.0242**
		Chinese	5.1500	0.6957				
Average happiness of soul	Peace in soul, Accept others have different beliefs	Thai	5.7800	0.8857	1.9824	0.1607	1.8800	0.0616*
		Chinese	5.5300	0.9919				
Average happiness of mind	Others' think is more important than my freedom or joy, Easily calm down, Challenge mind, Peace in mind	Thai	4.9925	0.7542	2.1659	0.1427	-1.4593	0.1461
		Chinese	5.1625	0.8879				
Average volunteering	Devote to civic, charitable, or non-profit activities	Thai	5.1800	1.5267	0.5381	0.4641	-1.0047	0.3163
		Chinese	5.3800	1.2775				
Average happiness of body	Laugh even in difficulty	Thai	4.9400	1.7397	1.4846	0.2245	-0.8696	0.3856
		Chinese	5.1400	1.5043				
Average overall happiness	Average overall scores of happiness	Thai	5.1589	0.6620	0.0343	0.8532	-0.8406	0.4016
		Chinese	5.2378	0.6661				

5. CONCLUSION

The results of our t-tests have confirmed that there is no significant difference in terms of income, capabilities, social capital per capita, education, wealth, sufficiency, life satisfaction or happiness between Thai and Chinese households in Chiang Mai. However, income inequality, bridging capital and ethnic nostalgia scores were significantly greater in Chinese households; while health, employment, opportunities, leisure, and contact with hometown were greater in Thai households.

Most Thai and Chinese people living in Chiang Mai migrated for occupational motives in 1990 and 2008, respectively. Although Thai household heads achieve higher educational levels; the highest educational attainment of any household member and the average education across all household members are indistinguishable for the two ethnic groups.

5.1 POLICY IMPLICATION

The capabilities, income, sufficiency, life satisfaction and happiness of households affect the development of migrants. From the results of this research, Thai government could practice more policy and provide a better environment to promote the level of education, create employment and job opportunities, and estimate health care system for Chinese migrants in Chiang Mai. And the inequality in Chinese households should also be improved. For example, the government could deduct or exempt the tuition fee and medical expenses of Chinese in Chiang Mai whose family is poor. The health inspection agency in community and the job which need skilled or unskilled worked should be instituted. For Thai migrants, the government or non-government organization should encourage them to increase their bridging capital by the linking of people who are not at the same level of base. And also, the government should develop the psychological counseling to increase the happiness of others and soul for Chinese migrants, and the happiness of heart for Thai migrants. The knowledge of happiness should be introduced to migrants.

5.2 SUGGESTION FOR FUTURE STUDY

The advantage of capabilities, income, sufficiency, life satisfaction and happiness for Chinese households in Chiang Mai are not significant in this study. For the civil society, especially the business communities, the research also has importance. After a period of economic accumulation, they should know the economic status will not be better than the other ethnic groups, and people do not live better. They should spend more time and energy on improving their employment, opportunities, sufficiency, education, health status, frequency of visiting home and the leisure in life.

There is no difference in capabilities, income, sufficiency, life satisfaction and happiness between Thai and Chinese households in Chiang Mai in this study. Thai households have higher education of household head, health, employment, opportunities, leisure and the contact with hometown compared with Chinese households. Thus the current migrants should improve their living standards through migration by this scientific evidence. This will help migrants to make the choice of immigration.

REFERENCES

- Aaberge, Rolf. (2008) **Ranking intersecting Lorenz Curves**. Forschungsinstitut zur Zukunft der Arbeit Institute for the Study of Labor (IZA).
- Amartya, Sen. (1979) **Equality of What?** Tanner Lecture delivered at Stanford University.
- Amartya, Sen. (1985) **Commodities and Capabilities**. London: Oxford University.
- Anand, P, Hunter, G, Carter, I, Dowding, K, Guala, F & Van Hees, M. (2009) The development of capability indicators. **Journal of Human Development and Capabilities**, 10(1), 125-152.
- Bergson, A. (1938). A reformulation of certain aspects of welfare economics. **Quarterly Journal of Economics**, 52(2), 310-334.
- Bruno S., Frey & Alois, Stutzer. (1999) Happiness, economy and institutions. **The Economic Journal**, 110(46), 918-938.
- Coleman, James. (1988) Social capital in the creation of human capital. **American Journal of Sociology Supplement**, 94, S95-S120.
- Corrado, Gini. (1912) Variability and mutability. **Journal of the Royal Statistical Society**, 76(3), 326-327.
- Cowell & Frank, Alan. (1977) **Measuring inequality-techniques for the social sciences**. n.p: Halsted Press.
- Jevons, William Stanley. (1888) **The theory of political economy**. London: Macmillan.
- Luenberger, David G. (1995) **Microeconomic Theory**. New York: McGraw-Hill.
- McEachern, William A. (1994) **Microeconomics: a contemporary introduction**. 3rd ed. New York: NeywSouth-Western.
- Nussbaum, Martha C. (2000) **Women and human development: the capabilities approach**. Cambridge: Cambridge University.
- Perloff, Jeffrey M. (2004) **Microeconomics**. 3rd ed. New York: Pearson Addison Wesley.
- Piboolsravut, Priyanut. (2004) Sufficiency economy. **ASEAN Economic Bulletin**, 21(1), 127-134.
- Putnam, R. D. (1993) **Making democracy work: civic traditions in modern Italy**. Princeton: Princeton University.
- Schoch, D. (1994) An axiomatic basis for distributional equality in utilitarianism. **Erkenntnis**, 40(121), 121-132.
- Veenhoven, Ruut. (2010) Capability and happiness: conceptual difference and reality links. **Journal of Socio-Economics**, 39, 344-350.
- Veenhoven, Ruut. (2004) "Happiness as an aim in public policy: the greatest happiness principle" In Seligman, Martin E.P., Linley, Alex P. & P. Alex, Linley. **Positive Psychology in Practice**. New York: Wiley & Sons.
- Veenhoven, Ruut. (2000) The four qualities of life. **Journal of Happiness Studies**, 1(1), 1-39.

