

# Chinese Immigrant Entrepreneurs in New England Area

By

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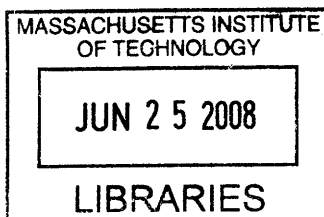
Submitted to the MIT Sloan School of Management in Partial Fulfillment of the  
Requirements for the Degree of  
Master of Business Administration  
at the  
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**ARCHIVES**

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## **ABSTRACT**

More and more Chinese immigrants came to the U.S. to start a whole new life. Some of them became entrepreneurs. This study focused on Chinese new immigrant entrepreneurs in New England area, and analyzed what factors have the most effective impact of the Chinese new immigrants to become an entrepreneur.

This is first survey to study the career choice and entrepreneurship experience of Chinese immigrants in the New England area. From 190 complete responses, 66 of them are entrepreneurs.

In this survey study, we have gained valuable information of the well-educated Chinese immigrants in the New England area. Also, we studied the specific characteristics of these Chinese entrepreneurs, and tried to identify some features that are helpful to becoming a successful entrepreneur. Based on the survey result, (1) working in a small company, (2) having responsibilities relating to greater China, (3) holding a position in general management or sales and marketing, and (4) attending social activity at least once per month are positive factors contributing to Chinese immigrant entrepreneurs.

Thesis Supervisor: Edward Roberts  
Title: David Sarnoff Professor, Management of Technology, MIT Sloan School  
of Management

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- ◆ 128 Chinese Union of Technology Enterprises (128CUTE)  
(<http://www.128cute.com/>)
- ◆ Overseas Chinese-American Entrepreneurs Association (OCEAN)  
(<http://www.ocean-usa.org/home/>)
- ◆ New England Chinese Information and Networking Association (NECINA)  
(<http://www.necina.org/>)
- ◆ My Chinese community friends

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# Content

<b>BACKGROUND</b> .....	<b>5</b>
<b>First Wave (1800s to 1949)</b>	
<b>Second Wave (1949 to the 1978)</b>	
<b>Third Wave (1978 to today)</b>	
<b>METHODS</b> .....	<b>6</b>
<b>Study Setting and Participants</b>	
<b>Measures</b>	
Section I: demographic information, social activity, and career information.	
Section II: entrepreneurial experience.	
<b>Data Collection</b>	
<b>Statistical Analysis</b>	
<b>RESULTS</b> .....	<b>9</b>
<b>Survey Response Rate</b>	
<b>Participants</b>	
I. <b>Characteristics</b>	
II. <b>Career Choice</b>	
III. <b>Social Activity and Language Skills</b>	
<b>Entrepreneurs</b>	
I. <b>Differences Between Entrepreneurs and Non-entrepreneurs</b>	
II. <b>Similarities Between Entrepreneurs (66 people) and Want-to-be-entrepreneurs (41 people)</b>	
III. <b>Other Characteristics of Entrepreneurs</b>	
IV. <b>Linear Regression Model</b>	
<b>DISCUSSION</b> .....	<b>24</b>
<b>APPENDIX (The Survey)</b> .....	<b>26</b>

## **BACKGROUND**

The average GDP growth of China's economy was about 10% annually for the past 30 years. More and more Chinese immigrants in the United States want to start their own business after years of working experience. This study is focused on the entrepreneurship of the Chinese immigrants in New England area.

First let us take a look at the Chinese immigrant history. There are 3 immigration waves from China to the United State.

### **First Wave (1800s to 1949)**

During the 1849 California Gold Rush period, about 40,400 Chinese arrived from 1851 – 1860. Then later the Central Pacific Railroad recruited large Chinese labor contractors to build its portion of the Transcontinental Railroad in the 1860s. In the decade 1861-70 64,301 are recorded as arriving, followed by 123,201 in 1871-80 and 61,711 in 1881-1890. The Chinese Exclusion Act of 1882 stopped the Chinese immigration flow till 1943 when the act was repealed by the Magnuson Act. At the end of 1949, there were 150,005 Chinese immigrants in the United State occupied 0.10% of the American population.

### **Second Wave (1949 to the 1978)**

The People's Republic China was founded in 1949; a second wave of Chinese immigration began mostly from Hong Kong, Macao, and Taiwan.

### **Third Wave (1978 to today)**

Mainland China began to allow for emigration in 1977. Since then, there was an increase in immigration of professionals from Mainland China. Those immigrants did not stay in urban Chinatowns. They finally settled down wherever they worked.

Today, while Chinese Americans are more and more engaged in all different aspects of American life, such as politics, economic development, military, academia, and sports, etc, they still keep their Chinese heritage, which is not only celebrated by most Chinese Americans, but also mainstream America, like Chinese New Year celebration.

By the end of 2004, Chinese immigrants were about 3.3 millions, 1.17% of American population.

# METHODS

## Study Setting and Participants

The study is focusing on the entrepreneurial and professional experience of Chinese immigrants in the New England area. We surveyed Chinese immigrants, especially successful entrepreneurs, by either face-to-face interview, distributing questionnaire at the annual meeting of local Chinese professional associations, such as 128 Chinese Union of Technology Enterprises (128CUTE), Overseas Chinese-American Entrepreneurs Association (OCEAN), and New England Chinese Information and Networking Association (NECINA). An electronic online survey was also sent to the association members through their email list, as well as through my Chinese community networks via emails. The survey is carried out in English.

Most participants are well-educated Chinese immigrants with several years of working experience. They are entrepreneurs or professionals working in different areas in New England, such as financial institutes, universities, pharmaceutical companies, business consulting firms, manufacturing industry, high-tech companies, non-profit organizations, hospitals, etc. They are business owners, CEO, CFO, CTO, engineers, managers, doctors, nurses, faculty or staff members in the universities, scientist, consultants, and technical professionals in the industries.

I will share the study results with survey participants. Since this is first such survey conducted among Chinese immigrants in New England, many participants are very interested in knowing information in terms of the education background, career choice, entrepreneur experience, and how most Chinese immigrant do socially. Most participants think the survey will provide suggestive advice to their future career development as well.

## Measures

The survey is designed to cover two sections:

### **Section I: demographic information, social activity, and career information.**

1. In what type of city did you grow up?
2. Your present age is in the\_\_?
3. From which college did you graduate?
4. What was your college major field of study?
5. How was your academic performance?
6. Were you a student leader?
7. Do you have any patents?
8. Why did you come to the U.S.? Please check.
9. How many firms have you worked for in the U.S.?

10. Type of most recent job? Please check.
11. Most of the time, you worked for? Please check.
12. How often do you attend social activities?
13. Among your friends, what percentage is non-Chinese?
14. How do you rate your English language skill, such as listening/writing/speaking?
15. Do you plan to set up a business in China?
16. Is your most recent job related to greater China?
17. Have you ever set up a start up firm independently or jointly with others?

**Section II: entrepreneurial experience.**

18. Are you already or do you want to become an entrepreneur?  
If you answered “No”, please skip to Question 26. If “Yes”, please continue!
19. Why do/did you want to become an entrepreneur? Please check all that apply.
20. Where did you get the initial funding for your recent start-up? Please check all that apply
21. How many co-founders do you have?
22. Among the co-founders, how many are non-Chinese?
23. How do you evaluate your firm’s performance from economic point of view?
24. Regardless of the economic performance, how do you feel about your experience as an entrepreneur?
25. Please draw 3 lessons that you’d like to share with future Chinese immigrant entrepreneurs
26. Thank you very much for your participation. I would really appreciate it if you can provide your contact information so that I can share the survey results with you later.

*Name:* \_\_\_\_\_

*Email Address:* \_\_\_\_\_

*Phone Number:* \_\_\_\_\_

There are 26 questions in total, average time to finish it is about 5 to 10 minutes. Most questions are single selection, such as type of most recent job, patent ownership; some questions ask the participant to rate their answers, such as from excellent to poor in English language skills; from more to less in terms of social activities; from big city to rural area about place grow up. We use age groups, such as age in 20s, 30s, 40s, 50s+ to measure participant age, in order to reduce data variability, but also to make participant feel more comfortable when putting their age information into age groups. Some questions are open-ended, in order to capture information that is not listed in the choice selections, such as experience sharing.

We measure career choice by asking type of recent job, size of the company, whether job is related to China; the factors we think might be related to career choice are city grow up in, age, college graduated from, academic performance, leadership

self-evaluation, patent ownership, reason to come to the U.S., job changing frequency, frequency of social activity, non-Chinese friends in personal network, and English language skill.

Entrepreneurial experience is recorded by asking the motivation of setting-up own business, funding sources, information of co-founders and business performance. A skip-pattern is setup in the survey when participants did not have entrepreneur experience.

## **Data Collection**

The survey collection varied by different distribution channels. When we interviewed business owners, we filled out the paper copy of the survey during the interview. When paper surveys were distributed at the meetings of the Chinese professional associations, their members have the choice to answer the survey or not, then turned in the paper copies before exiting. The data are entered into database manually.

We have designed an online survey with is exactly the same to paper copy. The web link was attached in the email sent to members of the Chinese professional associations, as well as my personal Chinese network. When participants filled the survey, the data is automatically saved into electronic database.

Every response was assigned a unique study ID. The data entry is verified.

## **Statistical Analysis**

We used descriptive statistics of all outcome measures for participants, entrepreneurs, and want-to-be-entrepreneurs. Then we use linear regression and correlation to analyze what might help to be an entrepreneur, as well what could be associated with a successful entrepreneurship. We did the analysis using monkeysurvey.com and SAS®9.1.



# RESULTS

## Survey Response Rate





The survey were emailed or given to around 800 Chinese immigrants in the New England area. 190 complete responses were collected. The response rate is 24%. The IP-address is automatically detected to prevent possible duplicated surveys sent out from the same computer by the same person. Thus members in the same household will need to fill out the online survey from different computers, which might reduce the response rate since it might not be convenient for them to locate another computer for various reasons.

The participants have option to leave their contact information at the end of the survey. 95.1% of the participants who put their contact information down provided their names, 87.5% put their contact emails. Thus we have much confidence to trust the survey results. And given 190 complete surveys, we are able to provide reliable results regarding the career choice and entrepreneurs' experience in Chinese immigrants in New England.

## Participants

### I. Characteristics

The 190 participants are included in the analysis. Here are some histograms of participants' characteristics. All of them are graduated from colleges with very good reputation either in China or in the U.S.

1. In what type of city did you grow up?		Response Percent	Response Count
Big city		46.3%	88
Medium city		20.0%	38
Small city		22.6%	43
Rural area		11.1%	21
		<i>answered question</i>	190
		<i>skipped question</i>	1





About 46.3% (88) and 42.6%(81) participants grew up in big cities, medium or small cities, 11.1% from rural area, which shows people from cities have a better chance to get educated and came to the U.S.

2. You present age is in the __?		
	Response Percent	Response Count
20s	4.2%	8
30s	33.2%	63
40s	51.1%	97
Above 50	11.6%	22
<i>answered question</i>		190
<i>skipped question</i>		1

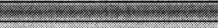

84.3% (160) participants are in their 30s to 40s, which makes us think that most of them would have years of working experience and are settled down financially, and might be looking for chance to start their own adventure by starting their own business or looking for new challenge in their career.

4. What is your major?		
	Response Percent	Response Count
Liberal arts	7.9%	15
Science	44.2%	84
Engineering	35.8%	68
Other (please specify)	12.1%	23
<i>answered question</i>		190
<i>skipped question</i>		1




About 80% (152) of participants are in science or engineering majors. These are the areas where it is easier for immigrants to obtain scholarships and a job after graduation. 7.9% (15) participants are in liberal arts majors. In the 12.1% (23) participants in the “Other” major, some of them are in business, medicine, pharmacy, economics, and music.

5. How was your academic performance?			Response Percent	Response Count
Top 10%			59.5%	113
Above average			31.1%	59
Average			7.9%	15
Blow average			1.6%	3
<i>answered question</i>				190
<i>skipped question</i>				1

Very impressively, nearly 60% (113) of the participants say that they were in the top10% academically. 39.0% (74) are average or above average, but below top 10%, which end up about 98.4% of participants claim they have done very well (average and above) in their academic study. These shows Chinese immigrants in the past 10 to 20 years to the US are very talented people. They have been an outstanding contributing source to the U.S. economy development.

6. Were you a student leader?			Response Percent	Response Count
Yes			44.2%	84
No			55.8%	106
<i>answered question</i>				190
<i>skipped question</i>				1

Either the experience being a student leader (44.2%, 84 people) or not (55.8%, 106 people) in the college have been too dominant among the participants.

7. Do you have any patents?			Response Percent	Response Count
Yes, related to my own business			11.6%	22
Yes, related to my employer			15.3%	29
No			73.2%	139
<i>answered question</i>				190
<i>skipped question</i>				1

A strong majority (73.2%, 139 people) of the participants do not have patents. But

11.6% (22) of the participants actually applied their patents to their own business.

8. Why did you come to the U.S.? Please check all that apply.			Response Percent	Response Count
Did not think about it seriously at that moment, followed the majority to go abroad			23.2%	44
For advanced education, management/science/technology			67.9%	129
For preparing my own future business			7.4%	14
Other (please specify)			17.9%	34
			<i>answered question</i>	190
			<i>skipped question</i>	1







Most participants (67.9%, 129 people) immigrated to the U.S. because of American advanced education, management, and technology environment. But only 7.4% (14) have an explicit goal of preparing their own future business. In the 17.9% of participants with ‘other’ reasons, most of them are for family reunion reasons, getting to know western culture, job transfer, and a better living environment. The participants who came to the U.S. without a specific reason, or went with majority to come the U.S. is about 23.2% (44).

## II. Career Choice





9. How many firms have you worked for in the U.S.?			Response Percent	Response Count
1			24.7%	47
2			24.2%	46
3			21.1%	40
4			14.2%	27
More than 4			15.8%	30
			<i>answered question</i>	190
			<i>skipped question</i>	1

Looking at how many jobs participants have ever taken, there is not much difference between the number of participants who have worked only at one firm (24.7%, 47 people), 2 firms (24.2%, 46 people), or 3 firms (21.1%, 40 people). But 30% (57)

participants have worked at 4 or more forms. Even though job changing could be considered as looking for a better challenge in career or better benefit, it would be interesting to see whether there is any association between job changing to entrepreneurship in the future.

10. Type of most recent job?			
		Response Percent	Response Count
R&D		47.4%	90
General management		15.3%	29
Technical management		13.7%	26
Sales and marketing		5.3%	10
Finance		4.7%	9
Other (please specify)		13.7%	26
<i>answered question</i>			190
<i>skipped question</i>			1

It is not very surprising to see almost half (47.4%, 90 people) of the participants are in R&D area as their most recent job due to, as reported earlier, 80% (152) participants majored in Science and Engineering. But it is very interesting to see more than 1/3 (34.3%, 65 people) of participants are in sales and marketing, technical management, and general management. It tells us that more and more Chinese immigrants are moving into sales and marketing, which is a traditional job market for English-native speaker; also we can see more Chinese immigrants are getting into managerial role.

11. Most of the time, you worked for?			
		Response Percent	Response Count
Big company		34.2%	65
Medium-sized company		28.4%	54
Small company		27.4%	52
Other (please specify)		10.0%	19
<i>answered question</i>			190
<i>skipped question</i>			1

Over 1/3 participants work at big company most of the time, over 1/4 participants work in the medium or small company, respectively. Many of “other” workplaces are non-profit organization, universities, or business owners.

15. Do you plan to set up a business in China?			Response Percent	Response Count
Yes, I have already			13.7%	26
Yes, I will			35.3%	67
No			51.1%	97
			<i>answered question</i>	190
			<i>skipped question</i>	1



China's economy is still booming; we have seen more and more Chinese immigrants are going back to China. In the New England area, we've seen 13.7% (26) participants have their own business in China already. Very large proportion of participants (35.3%, 67 people) have expressed their willingness to start their own business in China. Yet half (51.1%, 97 people) of the participants do not plan to have business in China.

16. Is your most recent job related to greater China?			Response Percent	Response Count
Yes, most of the time			15.8%	30
Yes, sometime.			20.5%	39
No			63.7%	121
			<i>answered question</i>	190
			<i>skipped question</i>	1

36.3% (69) participants have job related to China. This is a surprising number! More than I thought. It does indicate China's development has attracted lots of experience immigrants to go back.





17. Have you ever set up a start up firm independently or jointly with others?			Response Percent	Response Count
Yes, in China			5.8%	11
Yes, in USA			32.6%	62
No			61.6%	117
			<i>answered question</i>	190
			<i>skipped question</i>	1

Nearly 38.4% (73) participants have setup firms either independently or jointly. If this question provided participants multiple choices, we would be able to better capture percentage of participants who started business in the U.S, since some of them have businesses both in China and the U.S,





18. Are you already or do you want to become an entrepreneur?			Response Percent	Response Count
Yes, please continue with the questionnaire			58.8%	107
No, please skip to Question 26			41.2%	75
			<i>answered question</i>	182
			<i>skipped question</i>	9

Since 73 participants (in Question 17) mentioned that they are entrepreneurs, we calculated that in the 107 who answered ‘yes’ in Question 18, there are 34 participants are willing to become entrepreneurs. 8 out of 190 participants skipped the question.





### III. Social Activity and Language Skills

12. How often do you attend social activity?			Response Percent	Response Count
More than 2 times per month			44.7%	85
Once per month			28.9%	55
Seldom			25.8%	49
Never			0.5%	1
			<i>answered question</i>	190
			<i>skipped question</i>	1

Near half (44.7%, 85 people) participants are socially active. They attend the social gathering at least 2 times a month. Half participants attend social activity once per month, or very seldom. This shows that Chinese immigrants might need to be more actively involved in social activities, in order to be connected to society and look for more opportunities in career or personal development.

13. Among you friends, what percentage are non-Chinese?			
		Response Percent	Response Count
Less than 10%		43.2%	82
10%-30%		30.5%	58
30%-50%		16.8%	32
More than 50%		9.5%	18
<i>answered question</i>			190
<i>skipped question</i>			1

26.3% (50) participants have more than 30% friends who are non-Chinese. 30.5% (58) have 10-30% friends who are non-Chinese. But the biggest (43.2%, 82 people) group of participants has less than 10% non-Chinese friends.

14. How do you rate your English language skill, such as listening/writing/speaking?			
		Response Percent	Response Count
Excellent		30.5%	58
Good		50.5%	96
OK		17.4%	33
Poor		1.6%	3
<i>answered question</i>			190
<i>skipped question</i>			1

Around 81% (154) participants rate their own English language skills (listening/writing/speaking) to be good or excellent. This has been a significant change from the past, when most Chinese immigrants are less-educated people, not quite fluent in English, and often limited to some service type of career, such as working in Chinese restaurants or Chinatown.

## Entrepreneurs

We identified 66 entrepreneurs among participants by the following criteria:

- If answered 'Yes, in China' or 'Yes, in USA' to Q17: Have you ever set up a start up firm independently or jointly with others?  
AND
- If answered 'Yes' to Q18: Are you already or do you want to become an entrepreneur?



By looking at the histograms of questions answered by 66 entrepreneurs, it is very interesting to see some differences and similarities comparing entrepreneurs and non-entrepreneurs. The remaining 124 are defined as non-entrepreneurs.

In Q18, 107 participants answered 'yes' that they are already or want to be an entrepreneur. Since 66 are entrepreneurs, 41 people who want to be entrepreneurs.

Next we will look at the difference and similarities of entrepreneurs' vs. non-entrepreneurs', also compare the entrepreneurs vs. want-to-be-entrepreneurs.

### I. Differences Between Entrepreneurs and Non-entrepreneurs

Q6: Were you a student leader?		
	non-entrepreneurs	entrepreneurs
Yes	38.7%	54.5%
No	61.3%	45.5%

Over half of entrepreneurs had been student leaders in the college.

Q10: Type of most recent job?		
	non-entrepreneurs(124)	Entrepreneurs(66)
R&D	56.5%	30.3%
General Management	6.5%	31.8%
Technical Management	14.5%	12.1%
Sales and marketing	2.4%	10.6%
Finance	3.2%	7.6%
Other	16.9%	7.6%

1/3 of entrepreneurs are doing R&D-related work, 1/3 are doing general management. About 18.2% are doing finance or sales and marketing work. While 56.5%, more than half of non-entrepreneurs are doing R&D type of work. And 12.6% more (5.6% for non-entrepreneurs vs. 18.2% for entrepreneurs) entrepreneurs are in the finance, sales and marketing work.

Q11: Most of the time, you worked for?		
	non-entrepreneurs(124)	Entrepreneurs(66)
Big company	39.5%	24.2%
Medium-size company	30.6%	24.2%
Small company	20.2%	40.9%
Other	9.7%	7.6%

Entrepreneurs have more experience to work in a smaller company (40.9%), while most non-entrepreneurs (39.5%) are working in big company.

Q12: How often do you attend social activity?		
	non-entrepreneurs(124)	Entrepreneurs(66)
Once per month or more	68.5%	83.3%
Seldom	30.6%	16.7%
Never	0.8%	0%

83.3% of entrepreneurs attend social activities once a month or more, while there are about 68.5% of non-entrepreneurs doing so. Entrepreneurs are more active (15% more) than non-entrepreneurs in social networking.

Q13: Among your friends, what percentage is non-Chinese?		
	non-entrepreneurs(124)	Entrepreneurs(66)
Less than 30%	77.4%	66.7%
More than 30%	22.6%	33.3%

More entrepreneurs have claimed (22.6% in non-entrepreneurs vs. 33.3% in entrepreneurs) they have non-Chinese friends. From Q12 and Q13, entrepreneurs have more connections and larger network than non-entrepreneurs, including non-Chinese networking.

## II. Similarities Between Entrepreneurs (66 people) and Want-to-be-entrepreneurs (41 people)

Q19: Why do/did you want to become entrepreneurs? (multiple choices)		
	Want-to-be-entrepreneurs(41)	Entrepreneurs(66)
Enjoy life as an entrepreneurs	39%	64.6%
Independent	65.9%	56.9%
High financial return	48.8%	40.0%
Other	9.8%	21.5%

It is very impressive to see both entrepreneurs and Want-to-be-entrepreneurs put life quality and independency as top reasons to be entrepreneurs, and financial return came after these two thoughts. But entrepreneurs seem to be less emphatic on financial returns than Want-to-be-entrepreneurs (40% vs. 48.8%). So, the Chinese immigrants in the New England area claim to value life quality most beyond the financial factors.

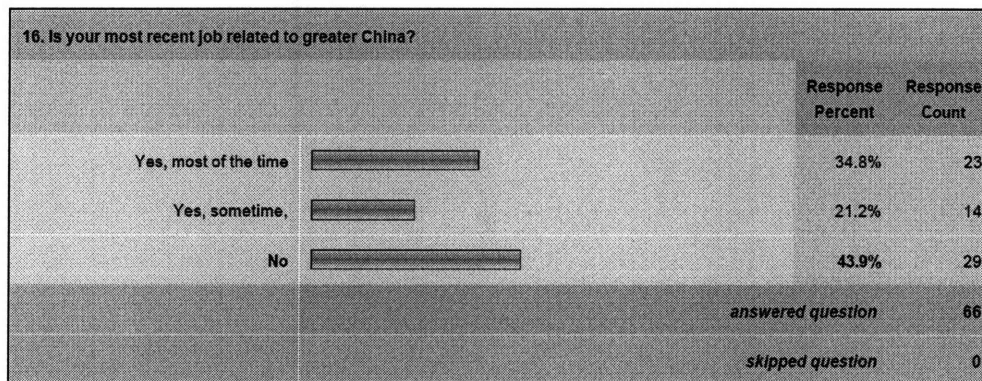
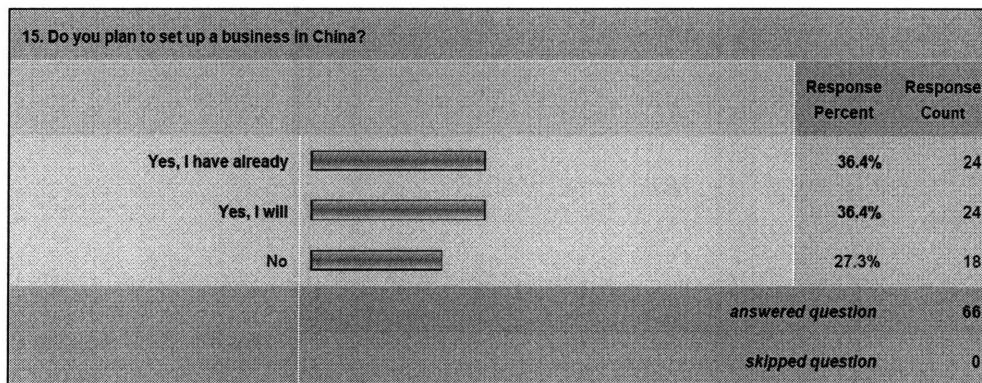
Q20: Where did/do you get the initial funding for your recent start-up?		
	Want-to-be-entrepreneurs	Entrepreneurs
Family/friends/self	46.3%	75.4%
Angel investors	14.6%	18.5%

Banks	4.9%	6.2%
Venture capital firms	12.2%	13.8%
Other	39.0%	7.7%

It raised my attention when I saw 75.4% entrepreneurs and 46.3% Want-to-be-entrepreneurs got/will get their initial funding from family/friends/self sources.






### III. Other Characteristics of Entrepreneurs






The differences and similarities show some important characteristics of entrepreneurs.



The above two plots show that the business of entrepreneurs is evenly spread out between China and the U.S.

There are average 2.6 co-founders when entrepreneurs setup business, where about 20% of them are non-Chinese.

23. How do you evaluate your firm's performance from economic point of view?		
	Response Percent	Response Count
Excellent 	15.4%	10
Good 	36.9%	24
OK 	24.6%	16
Poor 	9.2%	6
N/A 	13.8%	9
<i>answered question</i>		65
<i>skipped question</i>		1

24. Regardless of the economic performance, how do you feel about your experience as an entrepreneur?		
	Response Percent	Response Count
Excellent 	32.3%	21
Good 	38.5%	25
OK 	18.5%	12
Poor 	4.6%	3
N/A 	6.2%	4
<i>answered question</i>		65
<i>skipped question</i>		1

Regardless of business financial performance, most entrepreneurs (70.8%) enjoy their entrepreneurship, about 18.5% take neutral attitude, 4.6% said it was a poor experience.

45 entrepreneurs provided number of their co-founders and rated their business economic performance. The below table shows, the number of co-founders does not relate to firm's economic performance level.

Q23: How do you evaluate your firm's performance from economic point of view?	Q21: Average Number of co-founders
Excellent	2.5
Good	2.81
OK	2.75
Poor	2.25

56 entrepreneurs rated both their firms' economic performance (in question 23)

and personal performance (in question 24). The correlation analysis shows the correlation value is 0.28 (p-value = 0.06), so the more successful economically, the higher personal satisfaction is.

At the end of our survey, we set up an open-ended question to ask each entrepreneur to list three lessons they would like to share with future Chinese immigrant entrepreneurs. I, personally, think these comments/suggestions are very valuable. A summary of the results as below:

- Be passionate, persistent, self-confident, competent, generous, social, and patient
- Networking
- Teammates and teamwork
- Sales and market are tougher than expected
- More cash
- China has better chance
- Be honest to your business partner
- Find a right American partner, and know when to compromise
- Start with something small
- Timing
- Hire graduate from good school

#### **IV. Linear Regression Model**

In the previous section, we looked at the characteristics of 66 entrepreneurs. But through this survey, we would also like to see what factors help to become an entrepreneur using a linear regression model.

The dependent variable is entrepreneurship (1 or 0). We selected the following questions to be included in the model.

- ◆ Q1: Which city did you grow up (big city, medium, small city, or rural area)?
- ◆ Q2: Your present age (20s, 30s, 40s, or above 50s)?
- ◆ Q4: What is your major (liberal arts, science, engineering, or other)?
- ◆ Q5: How about your academic performance (top 10%, above average, average, below average)?
- ◆ Q6: Were you a student leader (Yes or no)?
- ◆ Q7: Do you have any patents (Yes, related to my own business; Yes, related to my employer; No)?
- ◆ Q9: How many firms have you worked for in the U.S.?
- ◆ Q10: Type of recent job (R&D; general management; tech management; sales and marketing; finance; others)?
- ◆ Q11: Most of the time, you worked for (big, medium, smaller company)?
- ◆ Q12: How often do you attend social activity (2+times/month, once per

- month, seldom, never)?
- ◆ Q13: Among you friends, what percentage is non-Chinese (<10%, 10-30%, 30-50%, over 50%)?
  - ◆ Q14: How do you rate your English language skill (excellent, good, OK, poor)?
  - ◆ Q16: Is you most recent job related to greater China (Yes, most of the time; Yes, sometimes; No)?

We chose SAS® to run some linear regression models of entrepreneurship on the above questions, using stepwise model selection method with entrance p-value = 0.4, stay p-value = 0.05, after dummy coding (1 or 0) all the above questions. When doing stepwise selection, each individual question is evaluated to see how much it contributes to the entrepreneurship. When the p-value of this individual question is smaller than the defined entrance p-value = 0.4, this question is included in the linear regression model. After a question is added, however, the stepwise method looks at all the questions already included in the model and deletes any question that does not produce a significant level which is greater than the stay p-value, 0.05 in this case.

The questions selected after stepwise selection are

<b>Linear Regression Model: Entrepreneurship</b>		
<b>R-sq = 0.3541</b>		
<b>Positive Factors to Future Entrepreneurship</b>	<b>Coefficient Value</b>	<b>p-value</b>
Q16: Most of time, my recent job is related to greater China.	0.35383	<0.0001
Q11: Working in a small company.	0.1995	0.0026
Q10: My most recent job is general management type of work.	0.36292	<0.0001
Q10: My most recent job is sales and marketing type of work.	0.36549	0.0075
Q7: Have patents related to own business	0.22273	0.0148
Q12: Attend social activity once a month	0.16249	0.0115
Q10: My most recent job is finance type of work.	0.34665	0.0140
<b>Negative Factors to Future Entrepreneurship</b>	<b>Coefficient Value</b>	<b>p-value</b>
Q9: Worked at 2 firms in the U.S.	-0.13718	0.0435

Q4: Liberal arts major	-0.034632	0.0019
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## DISCUSSION

This is first survey to study the career choice and entrepreneurship experience of Chinese immigrants in the New England area. From 190 complete responses, 66 of them are entrepreneurs.

In this survey study, we have gained very valuable information of the well-educated Chinese immigrant in the New England area; also, we studied the specific characteristic of Chinese entrepreneurs, and tried to identify some features that are helpful to become an entrepreneur.

All of the participants are well-educated, and over 80% of them are from cities. Over half of the participants are in their 40s. The science and engineering majors are the mainstream in the participants. However, before some of them started their own businesses, some of them have already doing general management, sales and marketing, or finance type of work, which is very helpful to lead to be an entrepreneur in the future. Many of business owners are doing business in China or the U.S.; there is not much location preference, even given China rapid economic growth.

Most of the participants do not have patents, however, it seems that some entrepreneurs started their own business on their patents. The participants don't show a trend in changing jobs so frequently, or less frequently, nor do they show a trend of company size preference. However, the linear regression model on entrepreneurship shows that working at smaller company is a plus to future entrepreneurship, but working at 2 companies might be a minus leading to the entrepreneurship.

About half of the participants were student leaders in the past. But student leadership training could be a valuable experience to a future entrepreneurship. The entrepreneurs have a larger network and more social activities than non-entrepreneurs. And they have more non-Chinese friends in their social communities.

We don't see much influence of number of co-founders to becoming a successful business. The average co-founders of a business in this survey are about 2.6 people. Even though, both non-entrepreneurs and entrepreneurs say they value their life quality more than financial returns, but a better economic performance of the business does lead to a pleasant personal experience of entrepreneurship.

More valuable information from this survey is the open-ended question, where experienced entrepreneurs have kindly shared lessons they have learned. These suggestions are very valuable personal insights for future entrepreneurs.

There are certain limitations of this survey. Because we don't have any information about the population of Chinese immigrants in the New England area, as well as their



education background and other demographic information, it is hard to see how representative our participants are. Thus our conclusion is drawn from a sample size of 190 participants whom we believe is a good sample size to draw valuable conclusions.

## APPENDIX (The Survey)



Massachusetts Institute of Technology  
Sloan School of Management

### **New England Chinese Entrepreneurship Survey**

This is an entrepreneurship survey of Chinese immigrants in New England area. It is being carried out by an MIT Sloan Fellow, Joe Xiongwei Zhou, to investigate the career choices of local Chinese immigrants. The survey is sponsored by the MIT Entrepreneurship Center under the guidance of Professor Edward Roberts. We'd like to use this opportunity to better understand the human and social resources embedded in the Chinese community so that we can better serve and help Chinese immigrants in their career development.

This survey will take only about 5 to 10 minutes, and will provide great value to us. Your help is greatly appreciated. Please contact me at [xzhou@sloan.mit.edu](mailto:xzhou@sloan.mit.edu) if you have any question.

Thank you.

Joe Xiongwei Zhou

**PLEASE CHECK THE APPROPRIATE BOX OR FILL IN THE LINE AS NEEDED.**

**Section I**

1. In what type of city did you grow up?
  - a. Big city\_\_
  - b. Medium city\_\_
  - c. Small city\_\_
  - d. Rural area\_\_
  
2. Your present age is in the\_\_?
  - a. 20s\_\_
  - b. 30s\_\_
  - c. 40s\_\_
  - d. Above 50\_\_
  
3. From which college did you graduate?  
\_\_\_\_\_
  
4. What was your college major field of study?  
\_\_\_\_\_
  
5. How was your academic performance?
  - a. Top 10%\_\_
  - b. Above average\_\_
  - c. Average\_\_
  - d. Below average\_\_
  
6. Were you a student leader?
  - a. Yes, highest rank \_\_\_\_\_
  - b. No\_\_
  
7. Do you have any patents?
  - a. Yes, related to my own business\_\_
  - b. Yes, related to my employer\_\_
  - c. No\_\_
  
8. Why did you come to the U.S.? Please check.
  - a. Did not think about it seriously at that moment, followed the majority to go abroad \_\_\_\_\_
  - b. For advanced education, management/science/technology \_\_\_\_\_
  - c. For preparing my own future business \_\_\_\_\_
  - d. Other (please specify) \_\_\_\_\_
  
9. How many firms have you worked for in the U.S.? \_\_\_\_\_
  
10. Type of most recent job? Please check.
  - a. R&D \_\_\_\_\_
  - b. General management \_\_\_\_\_
  - c. Technical management \_\_\_\_\_

- d. Sales and marketing \_\_\_\_\_
- e. Finance \_\_\_\_\_
- f. Other (please specify) \_\_\_\_\_

11. Most of the time, you worked for? Please check.

- a. Big company \_\_\_\_\_
- b. Medium-sized company \_\_\_\_\_
- c. Small company \_\_\_\_\_
- d. Other (please specify) \_\_\_\_\_

12. How often do you attend social activities?

- a. More than 2 times per month\_\_
- b. Once per month\_\_
- c. Seldom\_\_
- d. Never\_\_

13. Among your friends, what percentage is non-Chinese?

- a. Less than 10%\_\_
- b. 10% ~ 30%\_\_
- c. 30% ~ 50%\_\_
- d. More than 50%\_\_

14. How do you rate your English language skill, such as listening/writing/speaking?

- a. Excellent\_\_
- b. Good\_\_
- c. OK\_\_
- d. Poor\_\_

15. Do you plan to set up a business in China?

- a. Yes, I have already\_\_
- b. Yes, I will\_\_
- c. No\_\_

16. Is your most recent job related to greater China?

- a. Yes, most of the time\_\_
- b. Yes, sometimes\_\_
- c. No\_\_

17. Have you ever set up a start up firm independently or jointly with others?

- a. Yes, in China. How many? \_\_
- b. Yes, in USA. How many? \_\_
- c. No\_\_

## Section II (Entrepreneurial experience)

18. Are you already or do you want to become an entrepreneur? Yes \_\_\_\_\_ No \_\_\_\_\_

**If you answered “No”, please skip to Question 26. If “Yes”, please continue!**

19. Why do/did you want to become an entrepreneur? Please check all that apply.

- a. Enjoy life as an entrepreneur \_\_\_\_\_

- b. Independence \_\_\_\_
- c. High financial return \_\_\_\_
- d. Other (please specify) \_\_\_\_\_

20. Where did you get the initial funding for your recent start-up? Please check all that apply.

- a. Family/friends/self \_\_\_\_
- b. Angel investors \_\_\_\_
- c. Banks \_\_\_\_
- d. Venture capital firms \_\_\_\_
- e. Other (please specify) \_\_\_\_\_

21. How many co-founders do you have? \_\_\_\_\_

22. Among the co-founders, how many are non-Chinese? \_\_\_\_\_

23. How do you evaluate your firm's performance from economic point of view?

- a. Excellent\_\_
- b. Good\_\_
- c. OK\_\_
- d. Poor\_\_

24. Regardless of the economic performance, how do you feel about your experience as an entrepreneur?

- a. Excellent\_\_
- b. Good\_\_
- c. OK\_\_
- d. Poor\_\_

25. Please draw 3 lessons that you'd like to share with future Chinese immigrant entrepreneurs

\_\_\_\_\_  
\_\_\_\_\_

26. Thank you very much for your participation. I would really appreciate it if you can provide your contact information so that I can share the survey results with you later.

Name: \_\_\_\_\_

Email Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_