

## **GEM 2009 - HONG KONG & SHENZHEN**

### **News Release**

In cooperation with over 300 scholars from 55 countries world wide, The Chinese University of Hong Kong Center for Entrepreneurship and Shenzhen Academy of Social Science conducted a poll of entrepreneurship to benchmark start-up activity in Hong Kong and Shenzhen against the world. From May through August 2009, we conducted 4,000 telephone and 72 face to face interviews in Hong Kong and Shenzhen. These together with over 175,000 interviews world wide were analyzed to produce an accurate, up-to-date picture of entrepreneurship: the Global Entrepreneurship Monitor (GEM) 2009. On January 14<sup>th</sup> 2010 GEM 2009 was released. This is a summary of GEM 2009, with emphasis of those parts of the study of greatest interest to Hong Kong.

#### **1. Absolute entrepreneurship prevalence rates of Hong Kong and Shenzhen are low**

In Hong Kong and Shenzhen 3.6% and 4.8% of the adult populations are involved in early-stage entrepreneurship – either nascent entrepreneurial activity (1.6% and 2.2%) and/or owner-manger of a young/new business, defined as firms less than 3.5 years old, (2.2 % and 2.6%). In Hong Kong and Shenzhen 2.9% and 1.6% of the adult populations are entrepreneurs in established owner-managed companies. These levels of entrepreneurship are below many elsewhere in the world as seen in Figure 1. China, in particular, boasts early stage entrepreneurship prevalence rates of 18.8% while the US reports 8.0%.

#### **2. Adjusting for income, entrepreneurship prevalence rates of Hong Kong and Shenzhen are also low**

Entrepreneurial activity is a declining function of national income – measured by real gross domestic product per capita. Richer and stable countries have lower intensities of startup activity than poorer and developing countries. But as Figure 2 shows, both Hong Kong and Shenzhen are “below the curve” relative to countries at similar levels of development.

### **3. Both Hong Kong and Shenzhen have experienced dramatic drops in entrepreneurial prevalence since our last studies in 2007 and 2004 respectively.**

Hong Kong last participated in GEM in 2007. Then we described the rebound of Hong Kong's entrepreneurial prevalence rates from the post handover and early years of the first decade of the 21<sup>st</sup> century. Rates in Hong Kong from 2002-2004 were around 3% of the adult population, but surged to a high rate of 10% of the population in 2007. Shenzhen has shown a similar drop in entrepreneurship prevalence rates from 2004's rate of 11.5% to today's rate of 4.8%. At the same time, China has seen steady rates rising from 13.7% to 18.8 % ( See Figure 3).

### **4. Deterioration in confidence and dramatic changes in the perception of entrepreneurship have accompanied the drop in entrepreneurial prevalence**

Dramatic changes in attitude to entrepreneurship have accompanied the falls in entrepreneurial activity as Figure 4 shows. The numbers of people expressing confidence in having the skills and experience to start a new business have fallen from about one third of the population to about one fifth of the population while the number of people who consider starting a new business to be a desirable career choice have dropped from two thirds to less than half of the population. Those who think that starting a business have high levels of status and respect have fallen from two thirds to just over half of the population. And most tellingly, those who think that there will be good business opportunities in the next six months have dropped from 81% to only 14%. These changes are more or less mirrored in Shenzhen, but not nearly to the same extent in the rest of China.

Clearly, the global financial crisis – which has impacted Hong Kong and Shenzhen more than the rest of China – can be blamed for much of these changed attitudes among the population. Among entrepreneurs – those actually starting businesses in these harder times – however, the percentage of entrepreneurs who see fewer opportunities due to the global crisis are the same in Hong Kong and China – approximately 50% -- and are actually lower in Shenzhen (40%).

## **5. Although the quantity of entrepreneurship in Hong Kong has declined, Hong Kong's quality of entrepreneurship has increased.**

Entrepreneurs can start a business out of necessity or to take advantage of opportunities. As countries become richer, the ratio of entrepreneurship of opportunity to entrepreneurship of necessity increases. For China, as Figure 5 shows, the ratio is just over 1. For Hong Kong it is near 4. Interestingly, whereas in the US, the cradle of the current crisis, the ratio of opportunity to necessity entrepreneurship has dramatically fallen, that of Hong Kong has actually increased. The crisis has not seen an increase in hardship entrepreneurship here.

## **6. Entrepreneurs in Hong Kong are increasingly better educated**

High quality entrepreneurship can also be seen in educational attainment in Figure 6. Those with only some secondary education are half as likely to be entrepreneurs as the population as a whole, while those with post-graduate degrees are twice as likely. This positive correlation of education and entrepreneurship, observed in the US and to a lesser extent in Shenzhen, is the opposite of what is seen in China where post graduate degree holders are only one fifth as likely to be entrepreneurs as the population as a whole.

## **7. With high expectations of growth (will employ 20 or more employees in next 5 years)**

High growth entrepreneurship has its most beneficial impact on the economy. In Hong Kong, high growth entrepreneurship accounts for over 20% of total early stage entrepreneurship. Figure 7 shows that Hong Kong's ratio is one of the highest in the world, exceeded by Shenzhen (45%) but well over the rate for China (14%) and the US (9%).

## **8. And of the better off**

Entrepreneurship is profitable in Hong Kong. As Figure 8 shows, established entrepreneurs in Hong Kong are 27 times more prevalent in the top one third of Hong Kong income earners than in the bottom one third. Early stage entrepreneurs are 3.8 times more prevalent among top third of income earners than among the bottom third. For Shenzhen, the relative proportions are 4.2 times for early stage entrepreneurs and established entrepreneurs. In contrast, entrepreneurship in both China and the US appears to be more equally distributed among income groups.

## **9. And higher technologies**

Although the vast majority of start-ups are not market expanding and have no new technologies, Hong Kong's start-ups have seen over the last two years an increase in high technologies, at the same time as the US and the UK have seen a fall in high technologies in start-ups (See Figure 9).

## 10. Informal investment has plummeted even more than start-ups

In 2007, Hong Kong boasted high rates of informal investment with almost 10% of the population being having invested in start-ups over the previous year. But that number has now dropped to just over 2.5% -- again the victim of the global financial crisis.

Regarding the relationship between informal investor and investees in Hong Kong and Shenzhen, similar to the past studies, the majorities are friends or neighbors but not close family members and relatives ( See Figure 11).

## 11. Government programs and the education system have changed for the better over the last few years to support entrepreneurship.

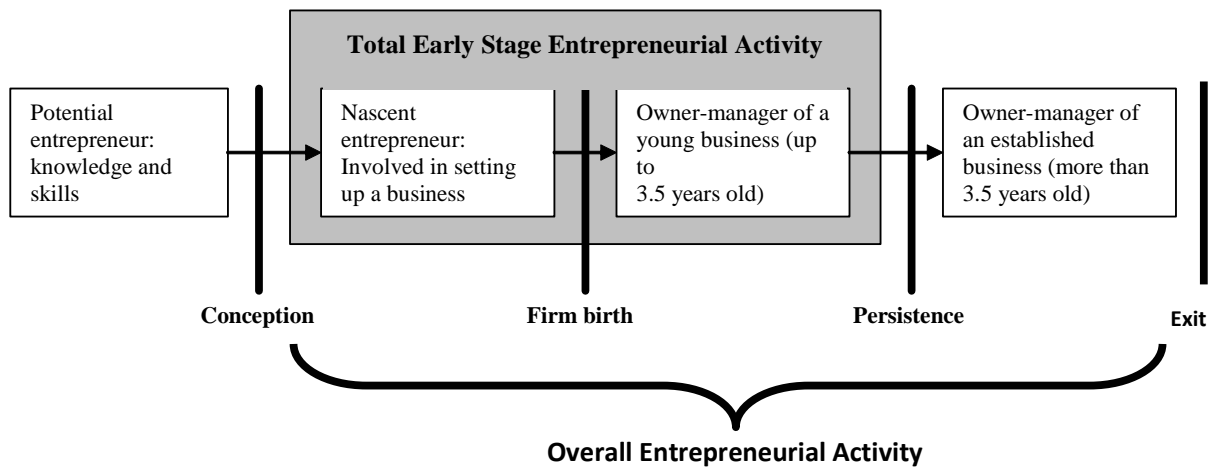
Experts assessing the framework conditions for Hong Kong entrepreneurship continue to give Hong Kong high marks for Hong Kong's commercial and physical infrastructure and low marks for our entrepreneurship policies, R&D transfer and education system. There is substantial room for improvement, but some positive changes are evident. Particularly, experts now recognize the positive role of science parks and business incubators. Moreover the level of teaching of entrepreneurship in vocational technical and continuing education is now recognized as good and the level of management and business education provides adequate preparation for starting and growing new firms.

**Figure 1a: Entrepreneurial Prevalence Rates in the world**

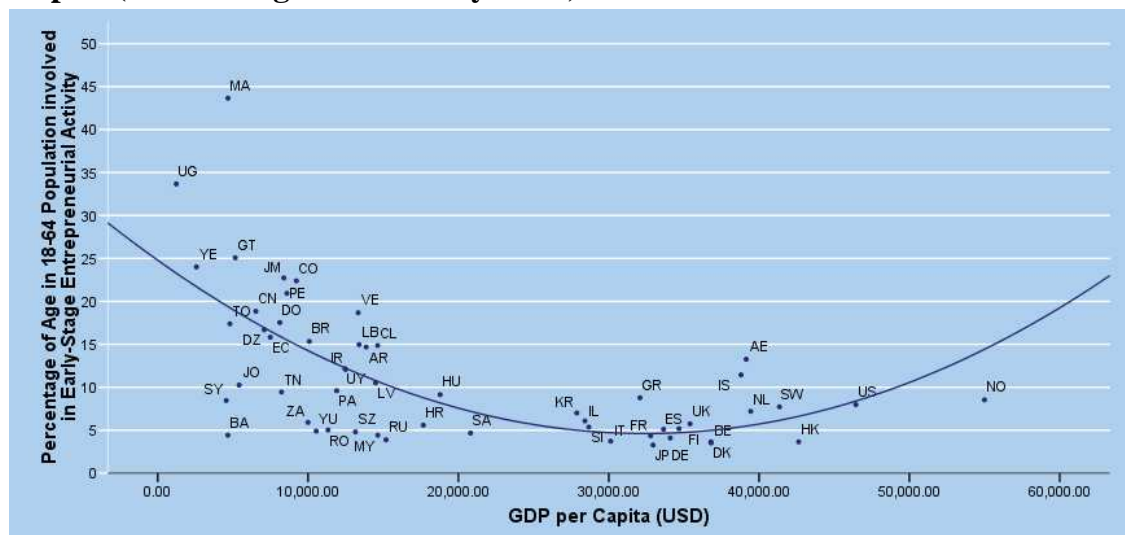
	Early-Stage Entrepreneurial Prevalence (Percent)	Nascent Entrepreneurial Activity (Percent)	New Business Owner-Managers (Percent)	Established Business Owner-Managers (Percent)	Overall Entrepreneurial Activity (Percent)	Number of Observations	GDP per Capita (in 1000 USD PPP)
Hong Kong	3.64	1.63	2.22	2.93	6.53	2,000	42.64
Shenzhen	4.75	2.16	2.59	1.56	6.27	2,000	13.15
China	18.84	7.40	11.78	17.16	35.66	3,608	6.53
Brazil	15.32	5.78	9.75	11.84	26.88	2,000	10.07
Japan	3.26	1.92	1.34	7.84	10.54	1,600	32.95
Russia	3.88	1.77	2.29	2.28	6.04	1,695	15.18
United Kingdom	5.74	2.68	3.20	6.07	11.66	22,881	35.40
United States	7.96	4.91	3.16	5.87	13.68	3,412	46.44

GDP per Capita of Shenzhen was 2008 information. The above statistics are estimates of the true proportion of the population involved in entrepreneurship. For example, we can be 95% confident that between 17.53% and 20.07% of China's adult population, from 2.78% to 4.42% of Hong Kong's adult population and from 3.86% to 5.74% of Shenzhen's adult population are involved in early stage entrepreneurial activity. Similar confidence intervals apply to other statistics in this table.

**Figure 1b: The Entrepreneurial Process and GEM Operational Definitions**



**Figure 2: Early-Stage Entrepreneurship as a Function of Real GDP per Capita (Purchasing Power Parity basis)**



AE=United Arab Emirates; AR=Argentina; BA=Bosnia and Herzegovina; BE=Belgium; BR=Brazil; CL=Chile; CN=China; CO=Columbia; DE=Germany; DK=Denmark; DO=Dominican Republic; DZ=Algeria; EC=Ecuador; ES=Spain; FI=Finland; FR=France; GR=Greece; GT=Guatemala; HK=Hong Kong; HR=Croatia; HU=Hungary; IL=Israel; IR=Iran; IS=Iceland; IT=Italy; JM=Jamaica; JO=Jordan; JP=Japan; KR=Korea; LB=Lebanon; LV=Latvia; MA=Morocco; MY=Malaysia; NL=Netherlands; NO=Norway; PA=Panama; PE=Peru; RO=Romania; RU=Russia; SA=Saudi Arabia; SI=Slovenia; SW=Switzerland; SY=Syria; TN=Tunisia; TO=Tonga; UG=Uganda; UK=United Kingdom; US=United States; UY=Uruguay; VE=Venezuela; YE=Yemen; YU=Serbia; ZA=South Africa

\*\*GDP per Capita of Shenzhen was 2008 information.

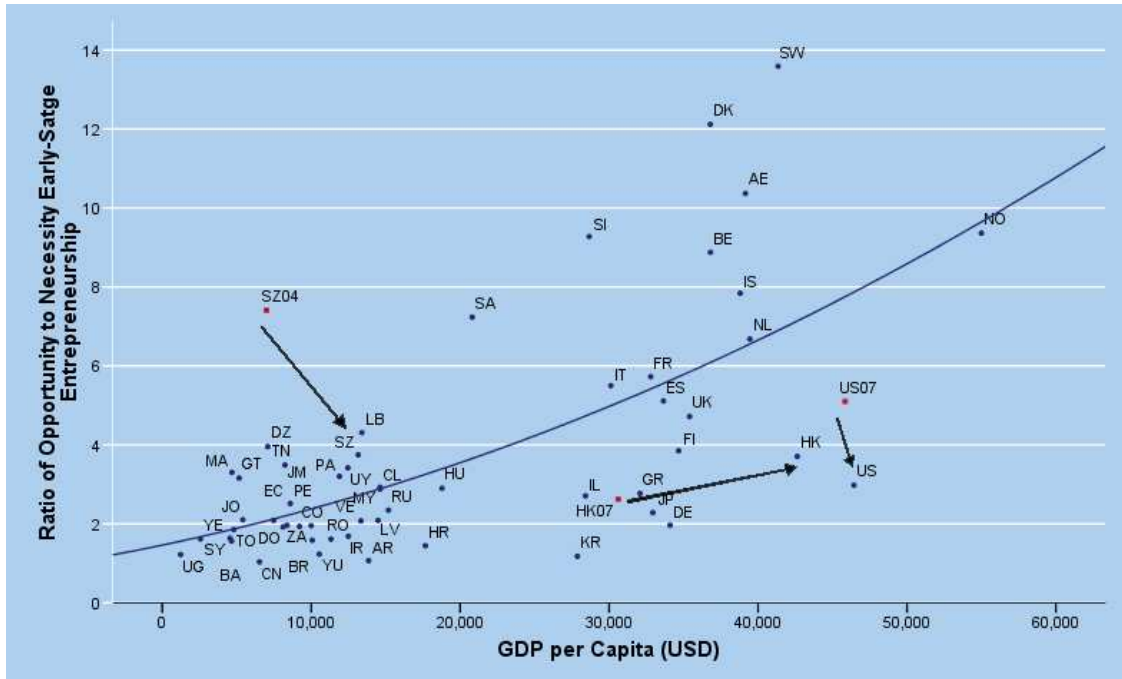
**Figure 3: Entrepreneurial Prevalence Rates in 2009 Compared with the Past**

	Hong Kong			Shenzhen		China		
	2009	2007	2004	2009	2004	2009	2007	2005
Nascent Activity	1.6%	5.7%	1.5%	2.2%	3.9%	7.4%	6.9%	5.6%
New Business	2.2%	4.3%	1.6%	2.6%	7.8%	11.8%	10.0%	9.4%
Early-Stage Entrepreneurial Prevalence	3.6%	10.0%	3.0%	4.8%	11.5%	18.8%	16.4%	13.7%

**Figure 4: Attitudes and Perceptions**

Question: Do you agree with the statement:	Percent of Respondents Answering "Yes"								
	Hong Kong			Shenzhen			China		
	2009	2007	2004	2009	2004	2003	2009	2007	2005
In the next six months, there will be good opportunities for starting a business	14%	81%	26%	31%	44%	47%	25%	39%	26%
You have the knowledge and skill and experience required to start a new business	19%	32%	24%	28%	36%	44%	35%	39%	33%
In Hong Kong/Shenzhen/China, most people consider starting a new business a desirable career choice	45%	66%	54%	47%	78%	77%	66%	69%	75%
In Hong Kong/Shenzhen/China, those successful at starting a new business have a high level of status and respect	55%	68%	68%	54%	75%	73%	77%	71%	66%

**Figure 5: Opportunity and Necessity Entrepreneurship: Ratio of Opportunity to Necessity Early-Stage Entrepreneurship as a Function of real GDP per Capita (Purchasing Power Parity basis)**



See Note in Figure 2

**Figure 6: Early-Stage Entrepreneurship and Education Distribution**

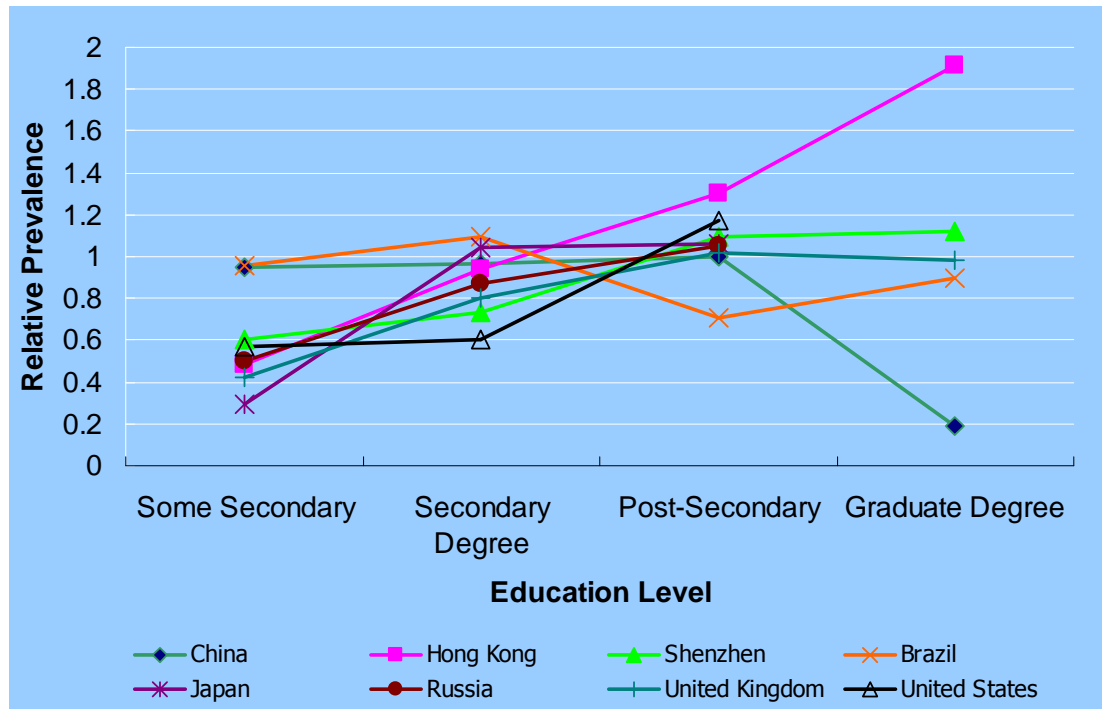


Figure 6 shows the relative prevalence rate of entrepreneurship in each education attainment group. The relative prevalence rate is calculated by taking the entrepreneurship prevalence rate expressed as a percent of the population in each education attainment distribution divided by the country's total prevalence rate; "Some secondary" means some secondary schooling. "Secondary degree" means upper secondary attained. "Post-secondary degree" includes any post high school college or Bachelor degree. "Graduate Degree" includes masters or doctorate.

**Figure 7: High Growth Early-Stage Entrepreneurial Relative Rates in 2009**

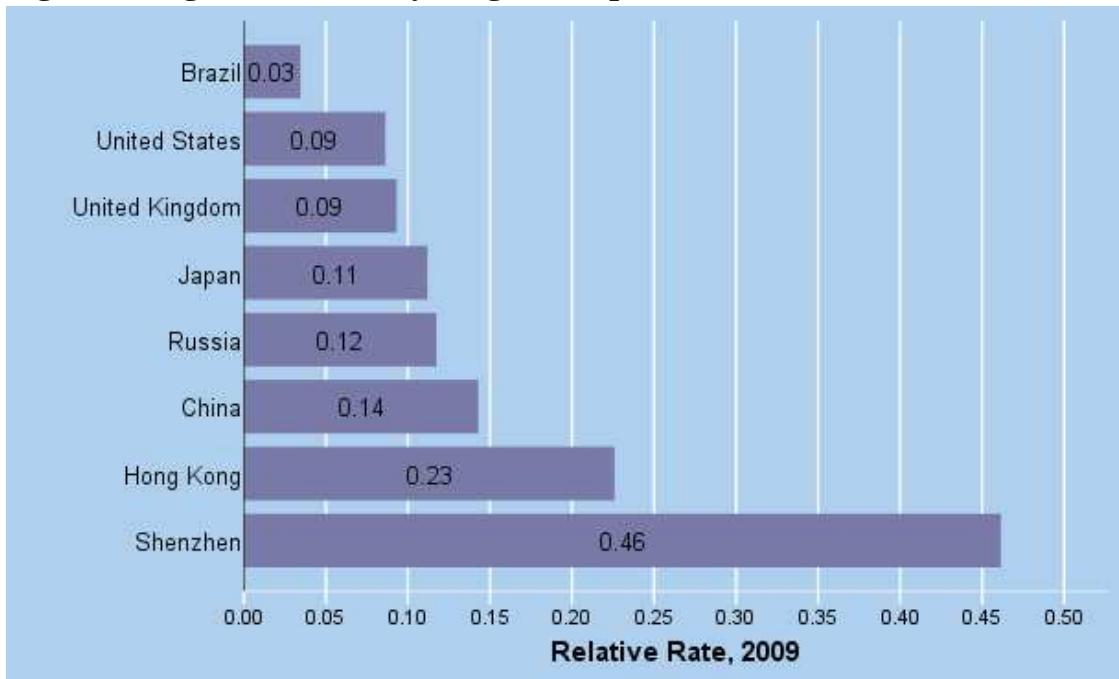


Figure 7 gives the proportion of early stage entrepreneurs who forecast that their firms will employ 20 employees or more in the next five years.



**Figure 8: Entrepreneurship and Income**

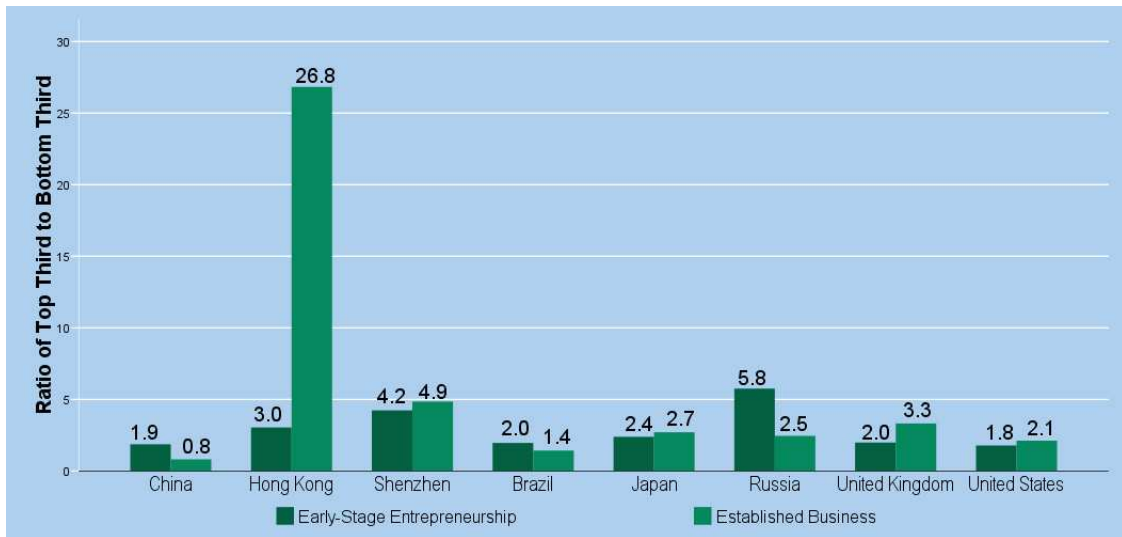


Figure 8 gives the entrepreneurship prevalence rate of the top one third income group divided by the prevalence rate of the bottom one third income group.

**Figure 9: Percentage of Early-Stage Entrepreneurs Introducing New Technologies**

Country	Year	Early-Stage Entrepreneurs		
		No New Technology (%)	New Technologies (%)	Latest New Technologies (%)
China	2007	69	23	9
	2009	64	25	11
Hong Kong	2007	72	20	8
	2009	64	21	14
Shenzhen	2007	-	-	-
	2009	54	36	9
Brazil	2007	82	16	2
	2009	82	12	6
Japan	2007	59	32	9
	2009	55	27	18
Russia	2007	77	14	9
	2009	82	14	4
United Kingdom	2007	72	21	7
	2009	74	19	6
United States	2007	63	24	13
	2009	77	19	4

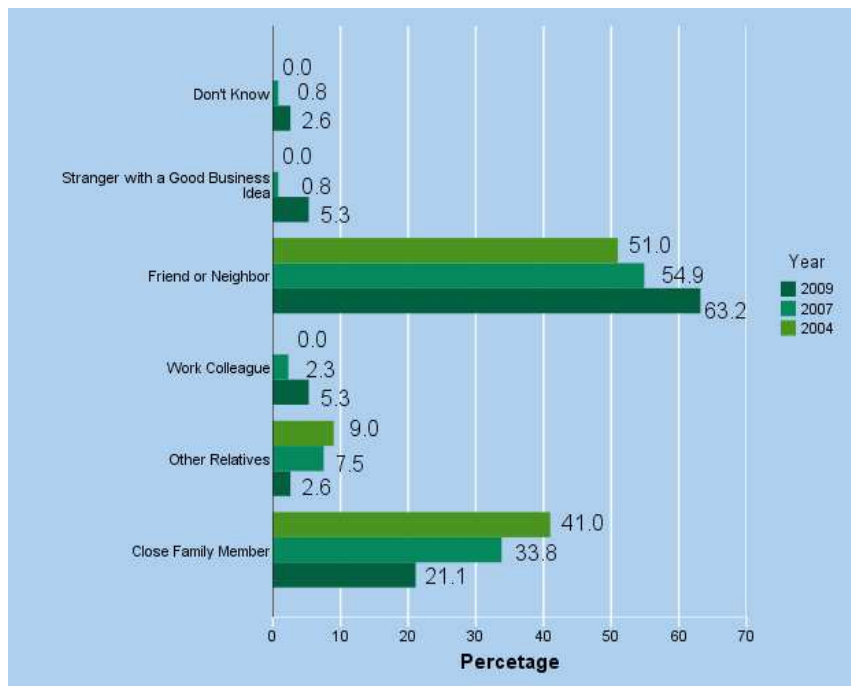
“New Technologies” is defined as technologies introduced for about 1-5 years. “Latest New Technologies” is defined as technologies introduced less than 1 year.

**Figure 10: Informal Investors**

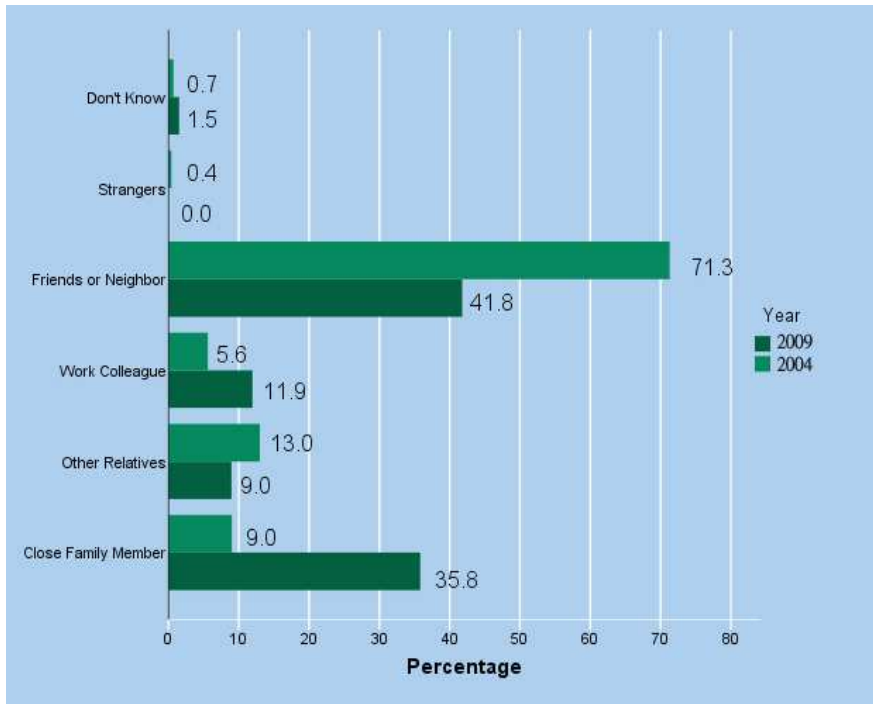
	<b>Informal Investor Prevalence Rate 2009</b>	<b>Informal Investor Prevalence Rate 2007</b>
China	6.61	7.85
Hong Kong	2.58	9.56
Shenzhen	3.78	-
Brazil	0.88	-
Japan	1.65	1.78
Russia	1.47	4.56
United Kingdom	1.13	1.38
United States	4.05	4.94

Figure 10 shows percent of the adult population investing in new start-ups firms within the last 12 months.

**Figure 11a: Relationships between Informal Investors and their Investees in Hong Kong**



**Figure 11b: Relationships between Informal Investors and their Investees in Shenzhen**



The Chinese University of Hong Kong Center for Entrepreneurship is a multi-disciplinary organization dedicated to promoting entrepreneurship through Practice, Research and Education.

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