

Industry Concentration and Self-Employment Rates

Focusing on Asian Ethnicity Groups

(2001-2005 ACS)

April 7, 2007

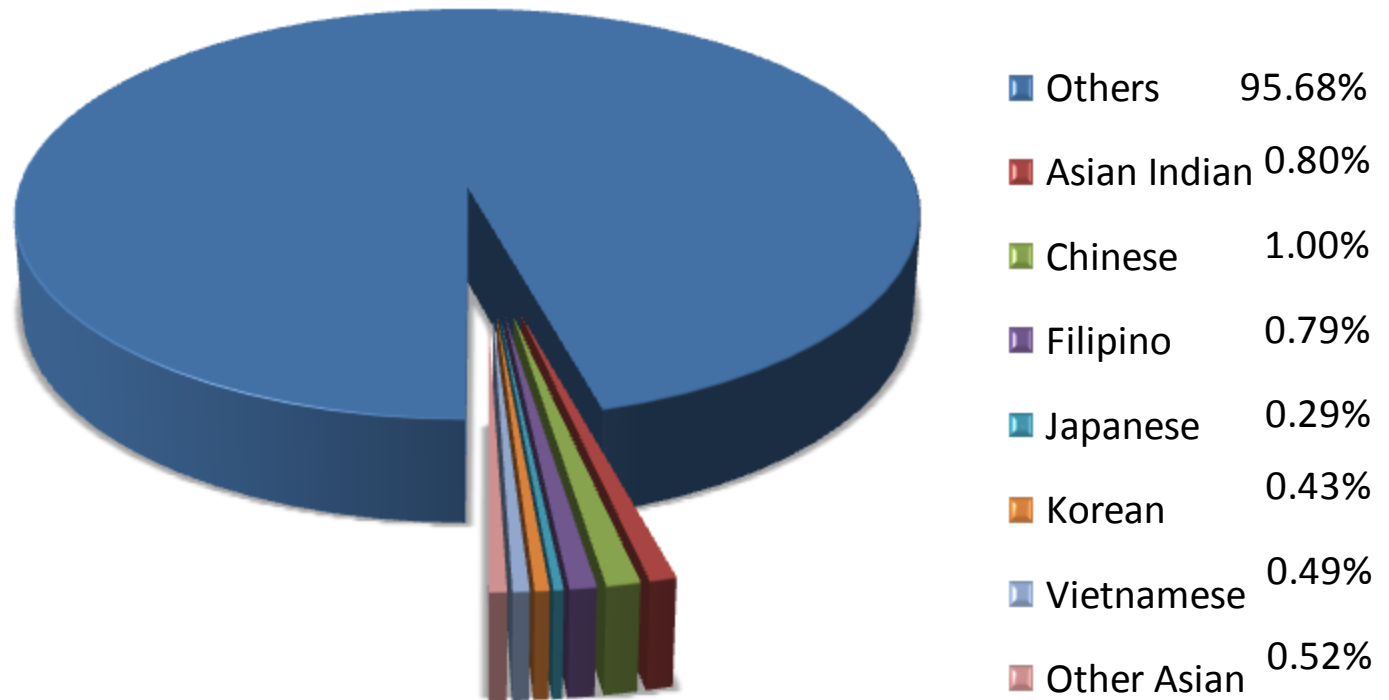
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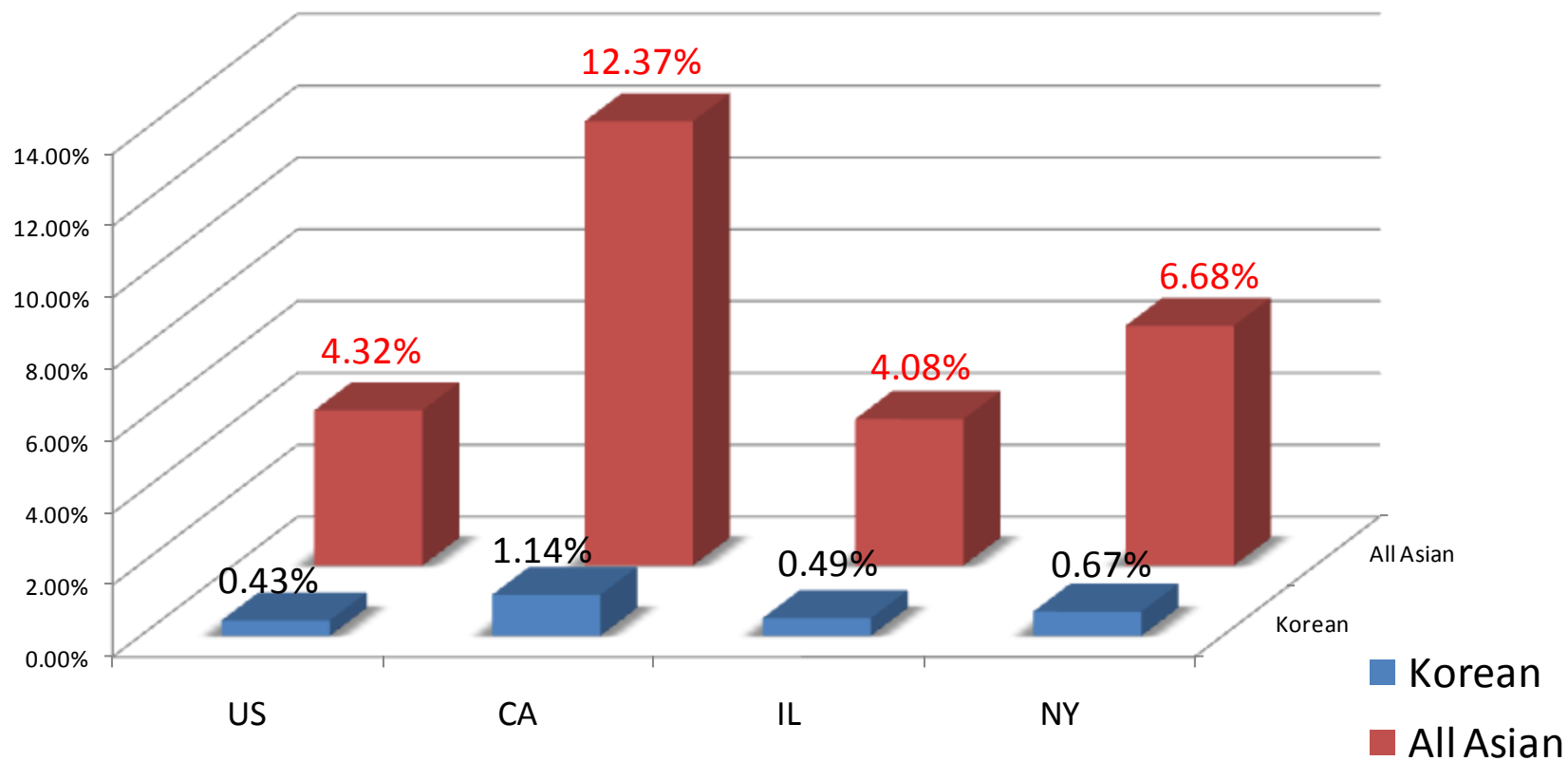
Asian Population in US (2005)



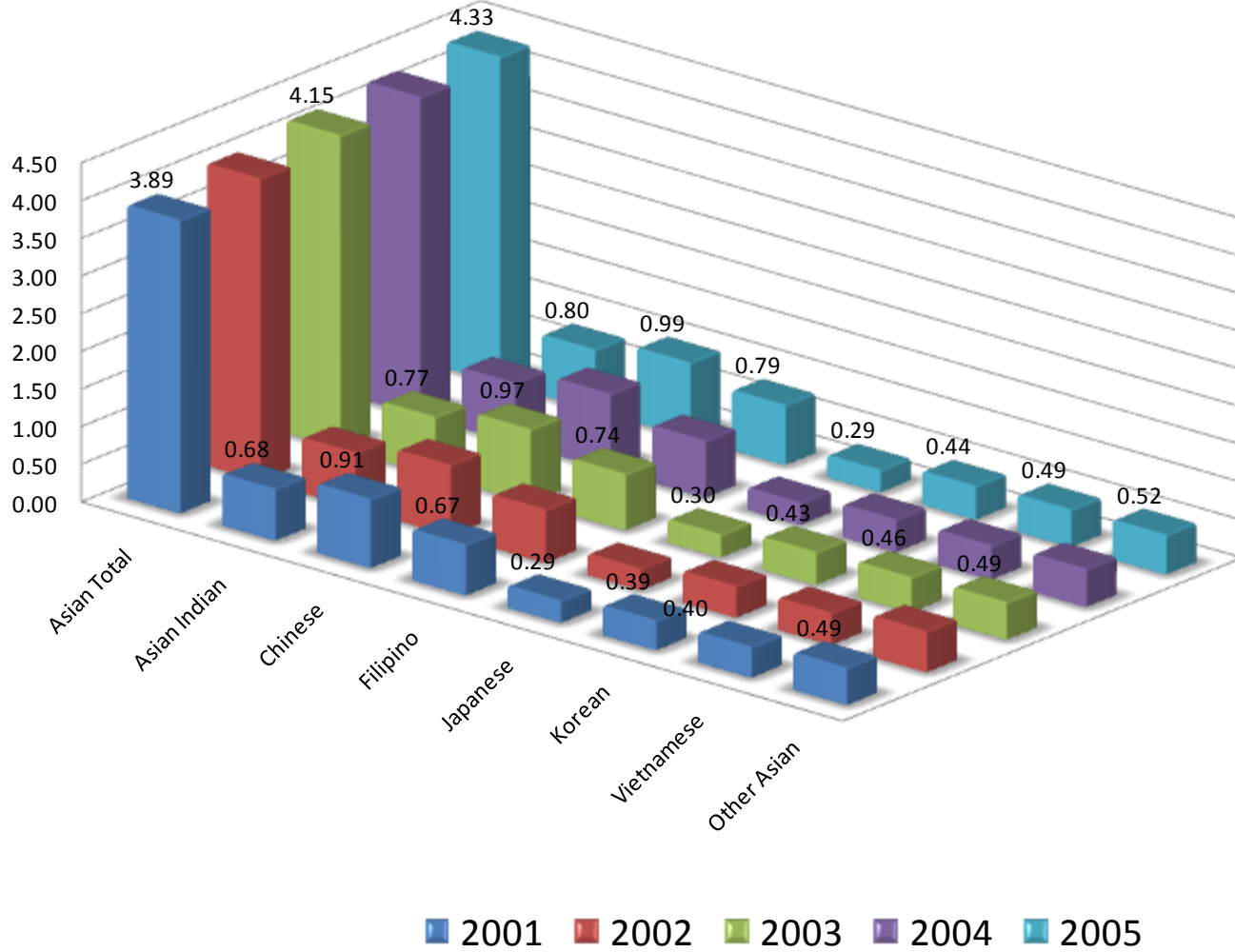
Asian Total
4.32%

Asian Population

US and major states



Asian Responses in ACS by year (% in US)



Demographic Distributions in Industry by Asian Ethnicity, 2005 ACS

INDUSTRY	US Average	Asian Indian	Chinese	Filipino	Japanese	Korean	Vietnamese	Other Asian
ADM_MIL	5.81	3.36	4.12	6.02	6.7	3.2	3.8	4.73
AGR_ETC	10.39	2.14	2.87	3.16	4.45	3.55	3.38	3.11
EDU	8.53	8.05	10.05	4.83	11.07	8.43	4.48	6.82
ENT	9.18	7.03	14.53	9.94	10.63	11.86	9.44	13.88
FIN	6.74	8.67	8.64	7.84	7.8	7.32	4.93	5.88
MED_SCA	11.56	13.84	9.17	26.08	8.85	9.45	7.67	9.94
MFG	11.55	12.13	14.24	9.89	10.59	9.57	23.82	19.67
PRF	9.63	18.59	12.77	8.96	13.48	10.83	7.96	8.22
RET	12.02	14.29	8.76	10.96	10.25	15.89	10.16	14.38
SRV	4.8	2.3	3.58	3.45	4.35	10.68	16.83	4.07
TRN_INF	6.48	6.87	6.75	6.19	7.12	5.18	4.9	6.33
WHL	3.32	2.73	4.53	2.68	4.7	4.06	2.64	2.96

Industry Codes

- ADM_MIL : Administration and Military Service (9370-9870)
- AGR_ETC :Agriculture, Extraction, and Utilities (0170-0770)
- EDU:Education (7860-7890)
- ENT: Entertainment
- FIN: Financial Service (6870-7190)
- MED_SCA: Medical and Health Service (7970-8470)
- MFG: Manufacture (1070-3990)
- PRF: Professional Service including legal, accountant, building service (7270-7790)
- RET: Retail (4670-5790)
- SRV: Service (8770-9290)
- TRN_INF: Transportation and Information (6070-6780)
- WHL: Wholesales (4070-4590)

Industry Concentration Factors* (ICF) by Race

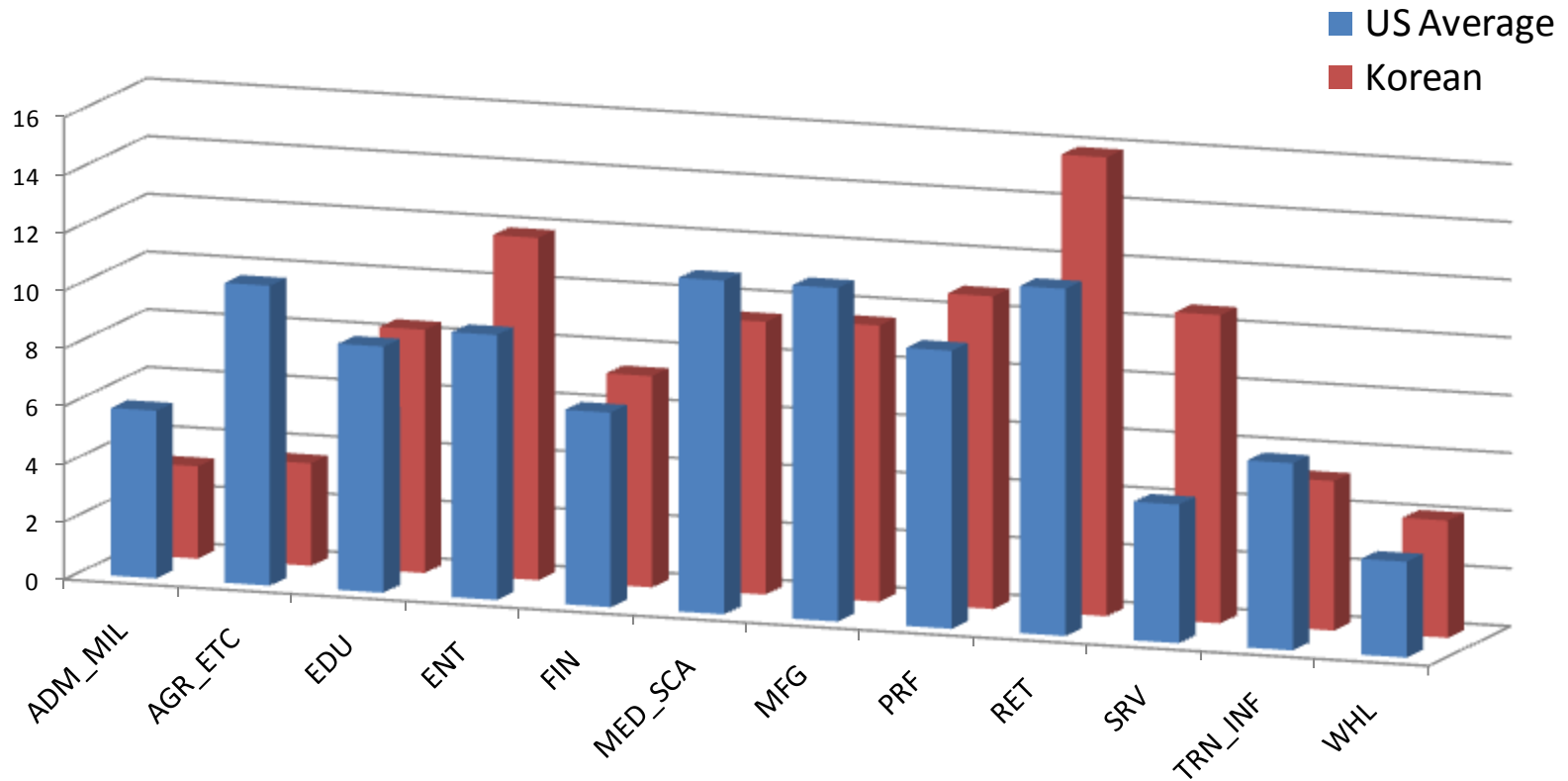
INDUSTRY	Asian Indian	Chinese	Filipino	Japanese	Korean	Vietnamese	Other Asian
ADM_MIL	0.58	0.71	1.04	1.15	0.55	0.65	0.81
AGR_ETC	0.21	0.28	0.3	0.43	0.34	0.33	0.3
EDU	0.94	1.18	0.57	1.3	0.99	0.53	0.8
ENT	0.77	1.58	1.08	1.16	1.29	1.03	1.51
FIN	1.29	1.28	1.16	1.16	1.09	0.73	0.87
MED_SCA	1.2	0.79	2.26	0.77	0.82	0.66	0.86
MFG	1.05	1.23	0.86	0.92	0.83	2.06	1.7
PRF	1.93	1.33	0.93	1.4	1.12	0.83	0.85
RET	1.19	0.73	0.91	0.85	1.32	0.85	1.2
SRV	0.48	0.75	0.72	0.91	2.23	3.51	0.85
TRN_INF	1.06	1.04	0.96	1.1	0.8	0.76	0.98
WHL	0.82	1.36	0.81	1.42	1.22	0.8	0.89

Sources) 2005 American Community Survey

*Industrial Concentration factor (ICF) = % of the industry in the race/ % of the industry in US, ICF > 1 means more workers than US average, ICF < 1 means less workers than US average respectfully .

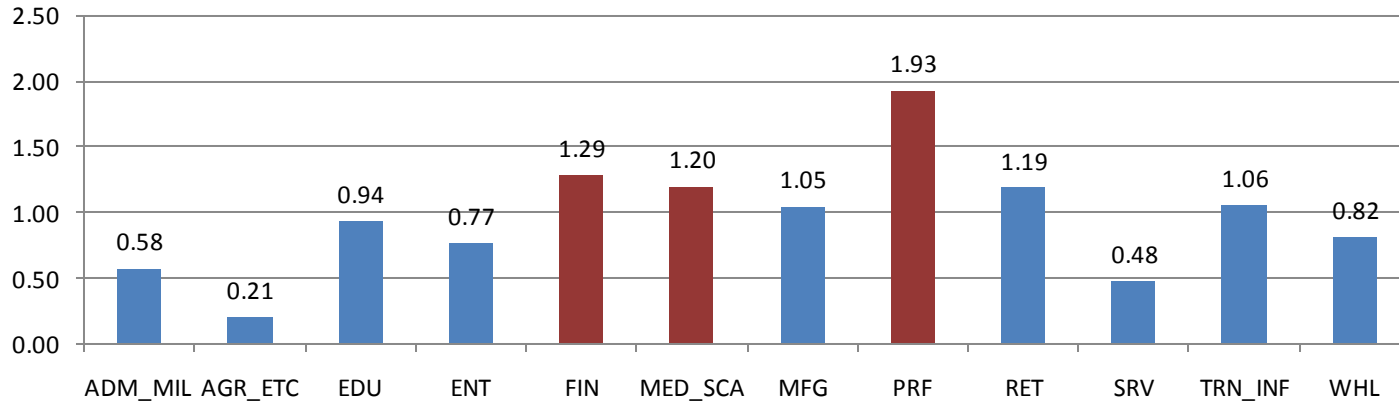
Demographic Distributions in Industry

US vs. Korean in US

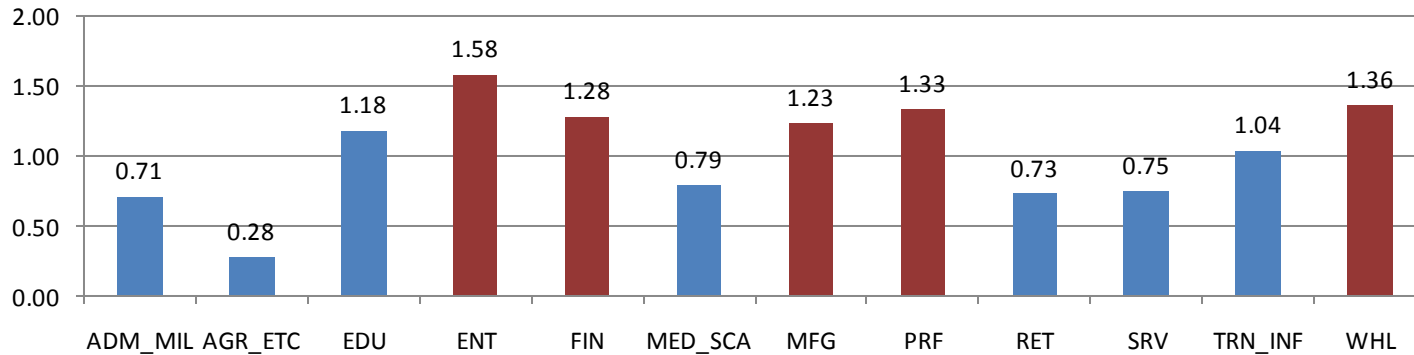


Industry Concentration Factors (ICF) by Industry

A. Asian Indian

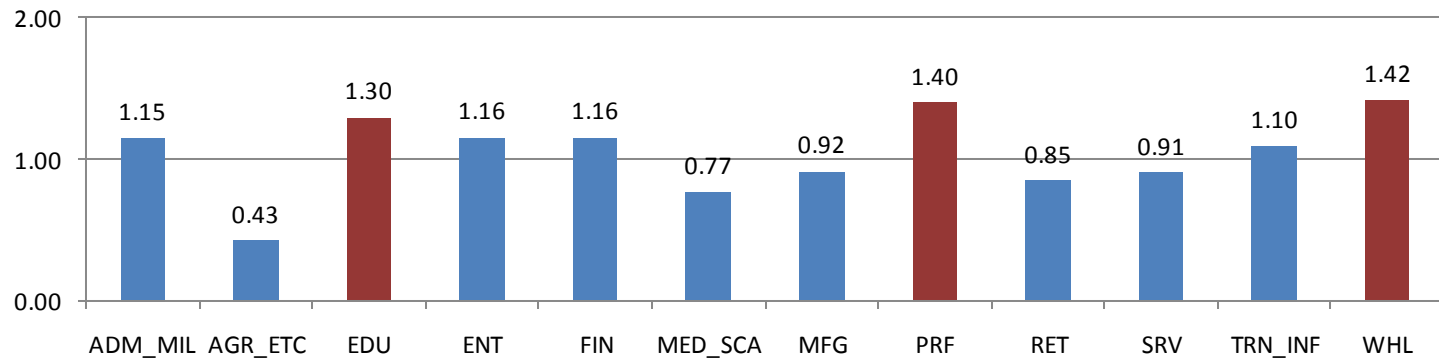


B. Chinese

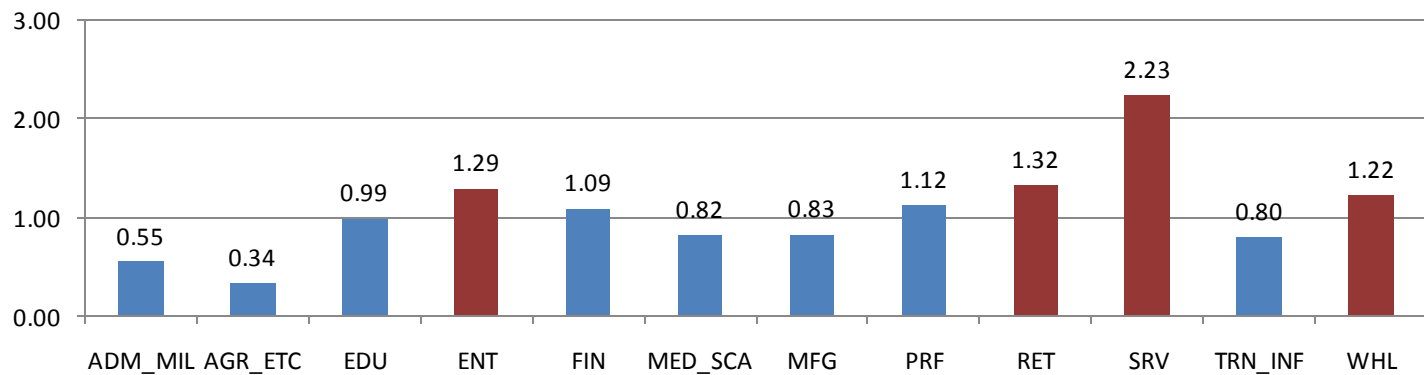


Industry Concentration Factors (ICF) by Industry

C. Japanese

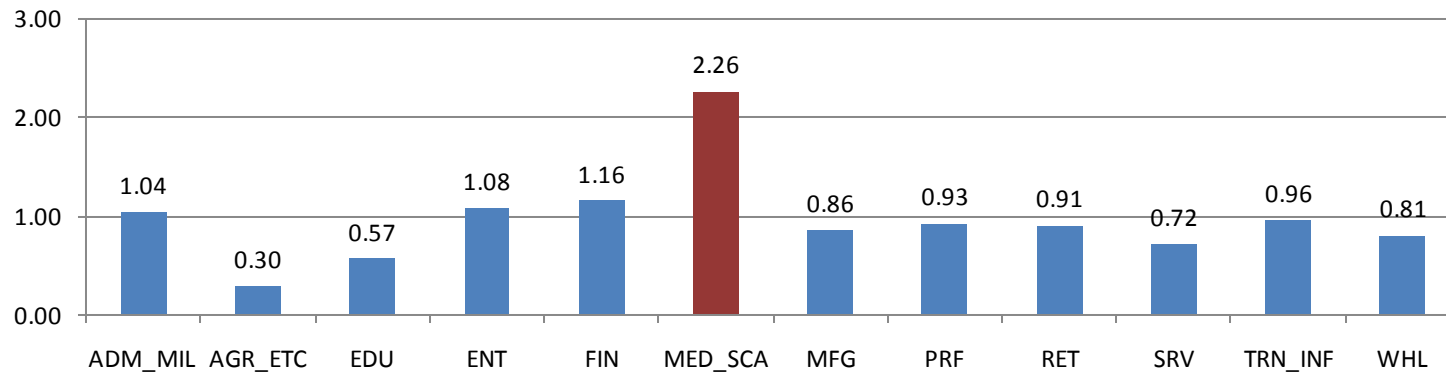


D. Korean

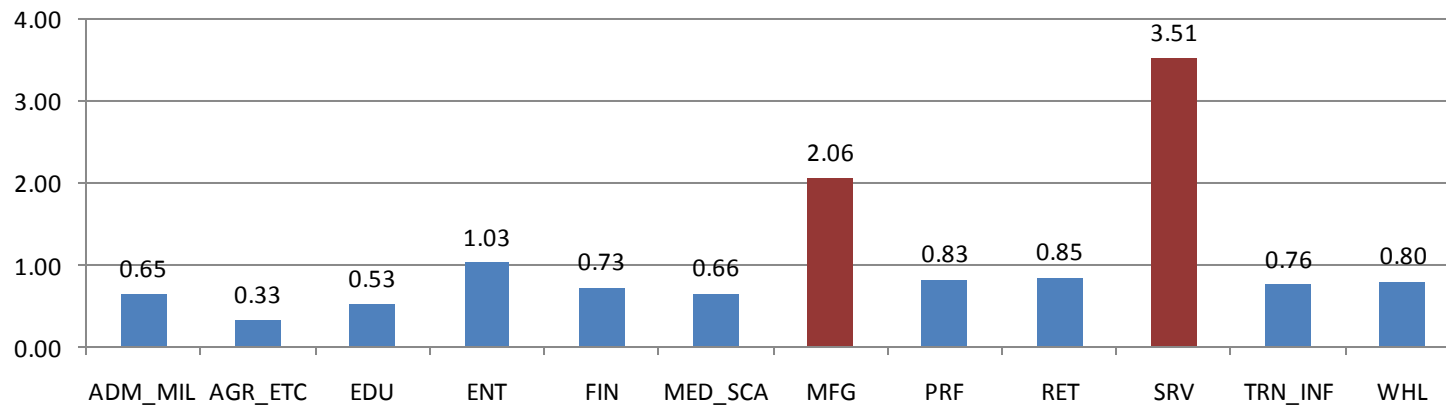


Industry Concentration Factors (ICF) by Industry

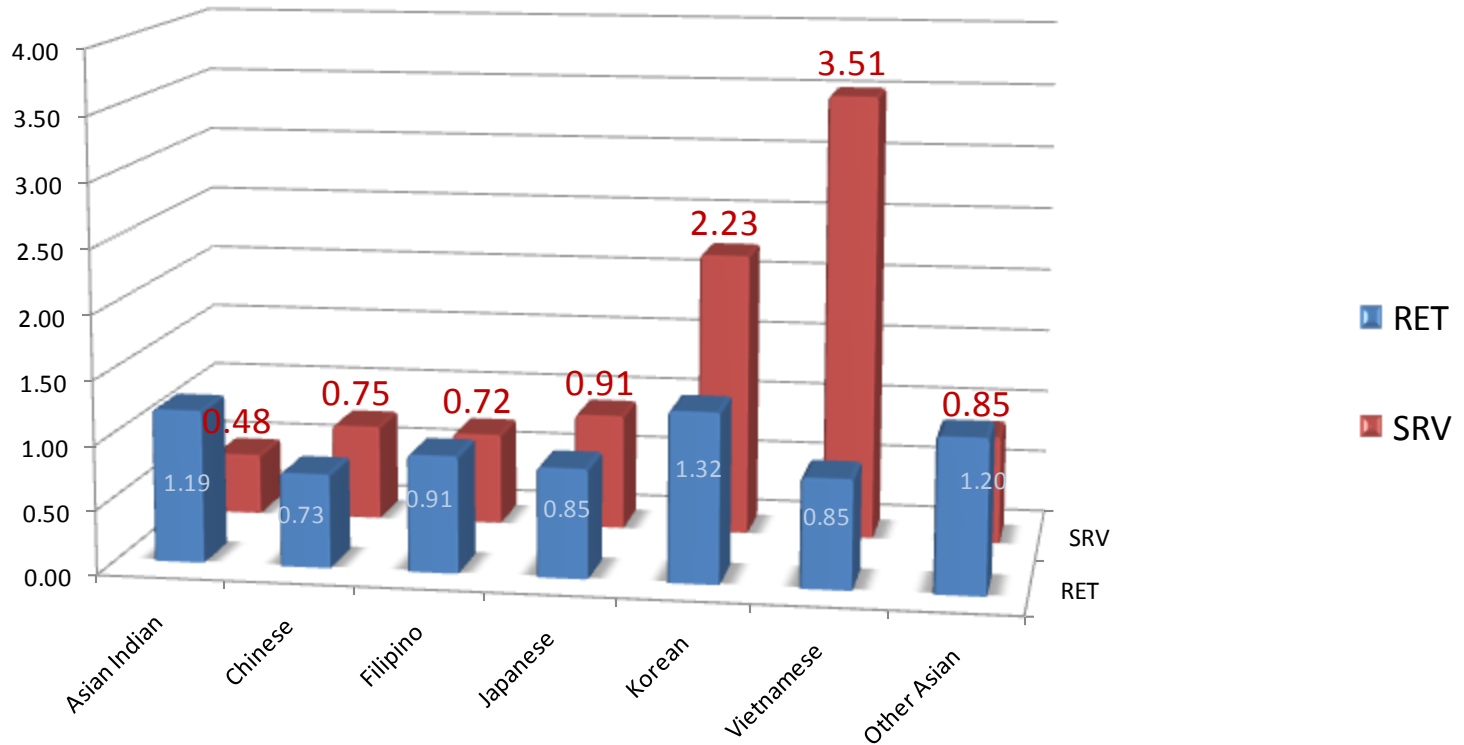
E. Filipino



F. Vietnamese

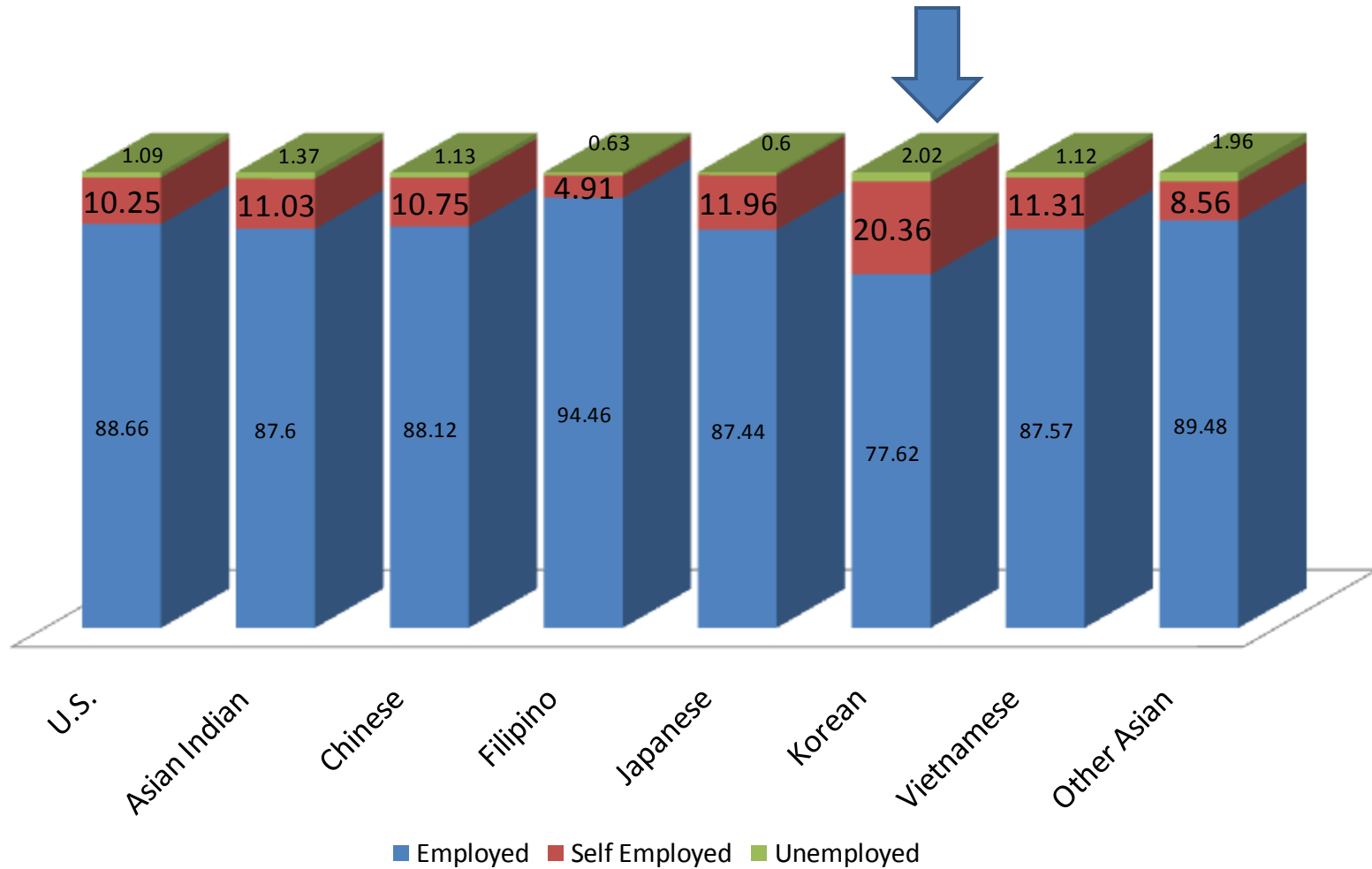


Industry Concentration Factors (ICF) for Service and Retail sectors by Asian Ethnicity

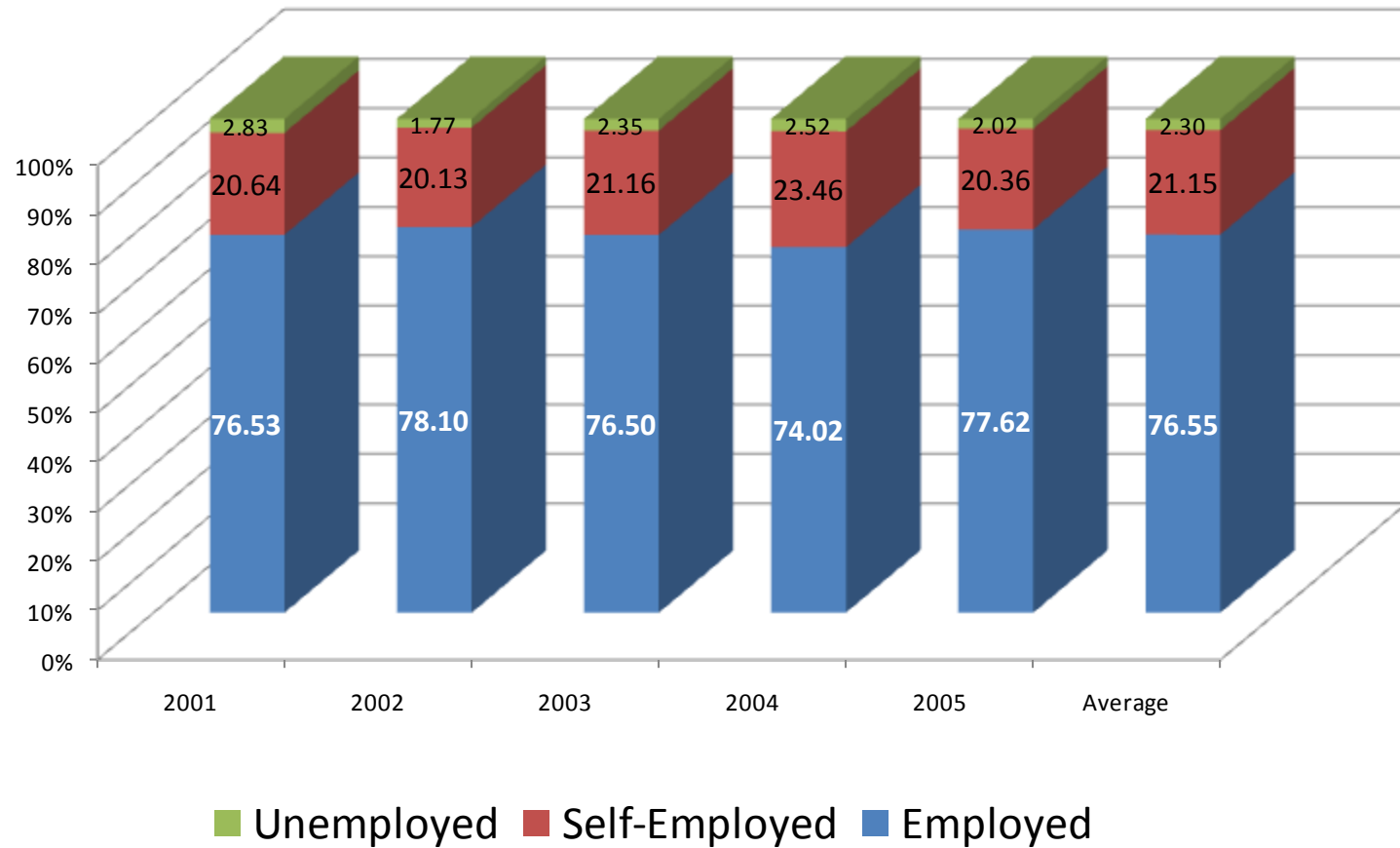


*Industrial Concentration factor (ICF) = % of the industry in the race / % of the industry in US, ICF > 1 means more workers than US average, ICF < 1 means less workers than US average respectively.

Class of Working (COW) by Asian Ethnicity in 2005



Class of Working Korean in 2001-2005 ACS



Why self-employed

- **Economics Disadvantages : Poverty, unemployment, Discrimination on Wages**

Immigrants face disadvantages such as a difficulty speaking English, the possession of job skills and education that not completely transferable to the U.S. ex) Min (1984) for Korean businessmen in Atlanta: Language barrier, perception of having disadvantages in non business occupations.

- **Ethnic and class resources (Ethnic Group Specific)**

By ethnic group co-work on ethnic foods, homogeneous cultures: like the value of bourgeois, attitudes, and knowledge and skills transmitted

- **Cultural theory of entrepreneurship ('Sajangnim' Preference Theory)**

Certain ethnic or immigrant groups are successful in self-employment because of their cultural attributes.

- **Ethnic Resources**

Such as education and assets may also benefit certain ethnic groups (Korean, Cubans) Korean has more education with more assets.

- **Special Demands**

Residential concentration of some ethnic groups provides a large market and more opportunities for co-ethnics to become self-employed.

- **Economics: Individual choices between self-employment and wage/salary work**

An individual's aversion to risk plays the prominent role (Kihlstrom and Laffont, 1979), The effects of liquidity constraints on the decision to be self-employed (Evan Jovanovi, 1989) .

Previous Studies about Korean Entrepreneurship

- About one third of Korean immigration families in the U.S. are involved in small business (Min, 1984)
- 40 Percent of all employed Korean men in Los Angeles were self-employed. (YU, 1984)
- Self-employment rates: 16 percent of Korean in 1980 Census and 24.4 percent in 1990 Census (Fairlie, 1994)

Demographic Distributions of Self-Employed Asian Ethnicity by Industry 2001-2005 ACS (% of each Ethnic Group)

INDST	Asian Indian	Chinese	Filipino	Japanese	Korean	Vietnamese	Other Asian	Other US
EDU	1.79	1.77	2.12	4.57	3.73	0.21	1.35	1.49
ENT	11.68	21.49	5.74	12.89	12.45	8.88	17.50	6.13
FIN	8.75	9.82	10.85	7.43	6.11	5.05	6.22	8.53
MED_SCA	15.84	9.98	26.62	9.69	4.59	6.00	8.48	8.56
MFG	2.11	3.96	3.56	3.06	5.35	4.71	3.31	3.97
PRF	15.50	17.48	20.49	26.37	10.55	10.90	13.18	18.93
RET	23.32	12.05	7.93	8.14	23.79	8.63	17.62	9.02
SRV	4.64	6.50	11.23	10.61	19.12	43.01	11.77	11.25
TRN_INF	8.68	4.12	3.30	2.45	2.07	2.70	8.99	5.19
WHL	4.30	7.66	2.25	8.23	6.15	2.45	4.08	3.03
total	100	100	100	100	100	100	100	100

Demographic Distributions of Self-Employed Asian Ethnicity by Industry Illinois, 2001-2005 ACS (% of each Ethnic Group)

INDST	Asian Indian	Chinese	Filipino	Japanese	Korean	Vietnam ese	Other Asian	Other Illinois
EDU	2.80	2.58	2.12	18.94	1.74	1.68	2.16	1.47
ENT	10.04	20.36	3.80	3.39	10.74	0.00	18.71	5.68
FIN	6.68	8.77	8.75	15.12	5.84	0.00	11.73	8.68
MED_SC A	26.50	12.94	39.57	7.53	3.31	0.00	7.61	9.41
MFG	2.31	2.72	3.65	8.20	4.19	0.00	5.66	4.25
PRF	16.15	31.98	22.90	18.95	5.68	4.31	5.88	19.38
RET	20.47	6.08	7.43	3.05	16.18	5.98	10.46	9.00
SRV	3.22	2.57	4.94	12.69	39.51	75.74	19.42	10.45
TRN_INF	5.23	2.48	1.25	2.32	2.95	0.74	11.96	5.89
WHL	3.97	5.16	0.00	8.29	7.43	4.20	3.12	3.25

ICF* Self-Employed Asian Ethnicity in Illinois ACS 2001-2005

INDUSTRY	Asian Indian	Chinese	Filipino	Japanese	Korean	Vietnamese	Other Asian
EDU	1.90	1.76	1.44	12.87	1.18	1.14	1.47
ENT	1.77	3.58	0.67	0.60	1.89	0.00	3.29
FIN	0.77	1.01	1.01	1.74	0.67	0.00	1.35
MED_SCA	2.82	1.37	4.20	0.80	0.35	0.00	0.81
MFG	0.54	0.64	0.86	1.93	0.99	0.00	1.33
PRF	0.83	1.65	1.18	0.98	0.29	0.22	0.30
RET	2.28	0.68	0.83	0.34	1.80	0.66	1.16
SRV	0.31	0.25	0.47	1.22	3.78	7.25	1.86
TRN_INF	0.89	0.42	0.21	0.39	0.50	0.13	2.03
WHL	1.22	1.59	0.00	2.55	2.28	1.29	0.96

*ICF = (% of workers of each Ethnic group in the industry) / (% of workers of the rest of Illinois in the industry)

Distributions of Self-Employed Korean by Industry and Major State, ACS 2001-2005

INDST	CA	FL	GA	IL	NY	WA	OTHERS	US Average
EDU	4.15	1.96	0.79	1.74	3.82	7.49	2.88	1.49
ENT	13.37	7.49	16.77	10.74	8.26	24.82	14.61	6.13
FIN	7.71	2.58	2.34	5.84	3.14	2.27	3.80	8.53
MED_SCA	5.55	8.93	8.49	3.31	7.78	5.94	4.75	8.56
MFG	6.08	9.55	1.36	4.19	4.11	6.47	4.13	3.97
PRF	9.05	11.88	14.45	5.68	13.67	5.00	9.29	18.93
RET	23.43	31.82	22.90	16.18	27.79	16.83	28.61	9.02
SRV	11.43	14.82	18.41	39.51	18.59	21.86	20.92	11.25
TRN_INF	2.68	0.55	1.74	2.95	4.23	1.93	1.58	5.19
WHL	7.13	5.64	3.67	7.43	4.91	6.03	3.60	3.03

Service Industry by Korean in US

(% of total US correspondent Business)

Service Business	Overall	Employed	Self-Employed
Auto Service	0.29%	0.26%	0.37%
Dry Cleaning, Laundry Service	5.90%	2.89%	24.99%
Other Service	0.37%	0.30%	0.54%
Personal Care	1.10%	1.12%	1.02%

Service Industry by Korean in Illinois

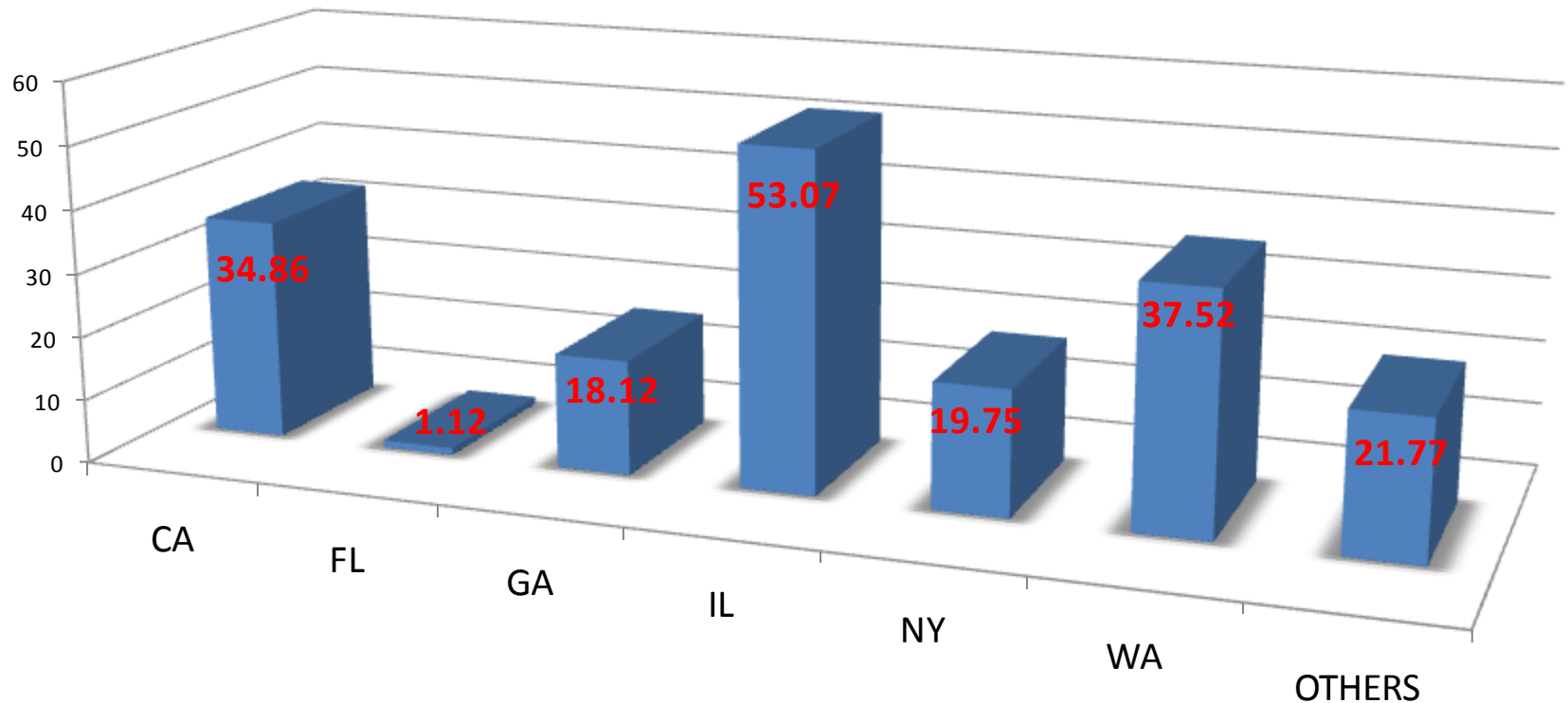
(% of total Illinois correspondent business)

Service Business	Employed	Self-Employed
Auto Service	0.84%	0.51%
Dry Cleaning, Laundry Service	5.34%	53.07%
Other Service	0.53%	1.33%
Personal Care	0.81%	1.01%

Self-Employed Korean in Major States

Dry Cleaning and Laundry Business

(% of self employed in each state in Dry Cleaning and Laundry business)



Retail Industry by Korean in US

(% of US correspondent sector)

Retail Business	Overall	Employed	Self-Employed
Clothing, Shoes, Jewelry	1.14%	0.76%	5.77%
Grocery, Liquor	0.74%	0.51%	5.31%
Health Store	2.23%	1.22%	7.72%
Other Retail	0.43%	0.33%	1.27%

Self-employed Koreans in Retail Industry by Major States

(% of each state in correspondent business)

Retail Business	CA	FL	GA	IL	NY	WA	OTHERS
Clothing, Shoes, Jewelry	11.67	2.30	12.68	5.11	6.35	6.36	3.91
Grocery, Liquor	10.00	2.99	4.88	0.08	13.11	9.21	3.51
Health Store	5.76	1.69	8.81	0.08	6.67	5.61	10.33
Other Retail	4.15	0.76	1.13	1.13	1.62	1.70	0.73

Year of Entry by Class of Work

Year of Entry	Employed	Self-Employed	Unemployed
1960s or Before	74.20	23.36	2.45
1970s	72.01	26.40	1.59
1980s	70.66	27.03	2.31
1990s	80.94	16.12	2.94
2000s	85.64	11.63	2.73

Citizenship Status by Class of Work

	Employed	Self-Employed	Unemployed
CIT_BRN	90.13	7.45	2.42
CIT_NAT	73.44	24.63	1.93
CIT_NOT	76.04	21.24	2.72

CIT_BRN= Born in US or by American Parents

CIT_NAT = Citizen by Naturalized

CIT_NOT= Not a Citizen of the US

Age Groups by Class of Work

Age Group	Employed	Self-Employed	Unemployed
10s	90.02	2.92	7.06
20s	93.48	4.37	2.15
30s	84.65	13.47	1.87
40s	68.18	29.73	2.08
50s	61.25	36.15	2.59
60s or older	64.68	33.19	2.13

Who are Self-Employed in US?

Probit Model Approach

INDVAR	OLS		PROBIT		
	Coef.	Std. Err.	Coef.	Std. Err	Marginal
AGEP	0.003	(.0001)	0.042	(.0001)	0.70%
AGESQR	0.000	(.0001)	-0.024	(.0001)	-0.40%
YOEP60	0.000	(.0011)	0.010	(.0005)	0.20%
YOEP70	0.000	(.0011)	0.018	(.0004)	0.30%
YOEP80	-0.021	(.001)	-0.121	(.0004)	-1.80%
YOEP90	0.006	(.0026)	0.049	(.0013)	0.80%
YOEP00	-0.004	(.0022)	-0.038	(.001)	-0.60%
EDUCOLL	0.002	(.0003)	0.011	(.0001)	0.20%
EDUGRAD	0.027	(.0005)	0.127	(.0002)	2.20%
CIT_NAT	0.017	(.0009)	0.076	(.0004)	1.30%
CIT_NOT	0.019	(.0011)	0.092	(.0004)	1.60%

AGEP = AGE of the respondent, AGESQR = (Square of AGEP)/100

YOEP60= Year of Entry before 60s, YOEP70 = Year of Entry in 70s, YOEP80 = Year of Entry in 80s, Etc.

EDUCOLL= Any Education in college level, EDUGRAD= Any Education in graduate level

CIT_NAT= Citizen by Naturalized, CIT_NOT= Not a Citizen of the US

Who are Self-Employed Koreans in US?

Probit Model Approach

	OLS			PROBIT		
INDVAR	Coef.	Std. Err.		Coef.	Std. Err.	Marginal
AGEP	0.025	(.001)		0.139	(.0004)	3.60%
AGESQR	-0.019	(.002)		-0.115	(.0005)	-3.00%
YOEP60	0.074	(.013)		0.236	(.0032)	5.70%
YOEP70	0.044	(.009)		0.146	(.0021)	3.80%
YOEP80	-0.110	(.01)		-0.375	(.0025)	-8.90%
YOEP90	0.041	(.026)		0.184	(.0079)	5.20%
YOEP00	-0.043	(.022)		-0.202	(.0066)	-4.80%
EDUCOLL	-0.001	(.007)		0.031	(.0019)	0.80%
EDUGRAD	-0.051	(.01)		-0.135	(.0025)	-3.40%
CIT_NAT	-0.029	(.015)		0.018	(.0041)	0.50%
CIT_NOT	-0.012	(.017)		0.059	(.0045)	1.50%

AGEP = AGE of the respondent, AGESQR = (Square of AGEP)/100

YOEP60= Year of Entry before or in 60s, YOEP70 = Year of Entry in 70s, YOEP80 = Year of Entry in 80s, Etc.

EDUCOLL= Any Education in college level, EDUGRAD= Any Education in graduate level

CIT_NAT= Citizen by Naturalized, CIT_NOT= Not a Citizen of the US

Summary

- Asian Ethnicity Groups are concentrated and specialized in certain industries; Asian Indian- Medical and Health Service and Retail, Chinese – Entertainment and Whole Sales, Filipino - Medical and Health Service, Korean – Retail and Service, Vietnamese – Service, Etc
- The self-employment rates of Korean is very high and they are are highly concentrated in Service and Retail industries
- Immigration Status, Age, and Year of Entry are very significant variable to decide Korean to be self-employed while they are not significant in US in general.

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