

元鍾旭*

Contribution)	가	(Defined
가	,IT	가
가	가	가
가	가	가
가	가	가
1998	Survey of Consumer Finances, 1998	가
가	Board of Governors of the Federal Reserve System	가
2000	1998 가	가
	2 1525가	가
	8,000	가
	가	가
:		

*

가

가

2006 “ 가

가

()

가가 (social security)

가

가

(social security)

가 (social security)

가

가

가

(social security)

가

1.

< 3> 25

(: %)

가	1		2		3		4		5	
	4	4	4	5	4	6	5	5	5	6
	18.5		14.5		11.2		17.5		13.5	
	55		55		55		55		55	

: 가 35 , 62 17
가

15 가 18%

< 4> 15

(: %)

가	1		2		3		4		5	
	4	4	4	5	4	6	5	5	5	6
	29		22.5		17.5		26.5		21	
	87		87		87		87		87	

: 가 35 , 62 17
가

2.

가

가

8.3%

가

가

가

< 2>

가

가 12%

가

8.3%

가

가

가

< 1>

가

3.		" 4 "	
가	가	Number of Insurance providing income when disabled	
가	가	Expecting financial obligation	
가	가	Unpaid Education Loan Amount	
가	가	Account Holder	
	가	. Years worked in Current Job	
	가	. Number of Employees in current job	
	(social security)	. Both Contributing	
	Bend Point	Number of Pension plans Respondent and Spouse have	
	\$10,000 ~35,000,	가 가 가 . Plan	
	\$65,000	type 가 가 (pension or retirement)	
< 5>	()	(tax deferred) . Plan	
Household Income 가	, Wage	kind 가 가 (formula)	
Income	. Total contribution	(account) . Years education	
가	,	. Sex	
Contribution rate		Age	
. Spouse-self-employed	가	가	
Retirement income Rating		1 976가 , 2	
	" 1 "	1,263가 , 3 902가	
"	" , " 2 "	\$81,703 1 \$25,653,	
"	" , " 3 "	2 \$48,403, 3 \$188,979	
		가 1 \$42,194, 2 \$70,037, 3	

\$ 236,551
 가 9.81% 1
 8.37, 2가 10.29%, 3 10.68%
 가 가
 가 가
 1 7% 2 20%, 3 17%

< 5>

	pooled Sample		가 1		가 2		가 3	
	가 > = 10,000	가 > = 10,000	10,000 < 가 < = 35,000	35,000 < 가 < = 65,000	가 > = 65,000			
Household Income	109,203	34,022	42,194	31,897	70,037	62,920	236,551	18,589
Wage Income	81,703	164,100	25,653	6,553	48,403	8,544	188,979	277,886
Total contribution rate(100 = 1%)	981	780	837	679	1,029	700	1,068	951
Contribution rate (100 = 1%)	830	620	768	594	846	543	875	736
Spouse self-employed 1: no 2: yes	1.02	0.15	1.00	0.09	1.02	0.14	1.05	0.22
Retirement income Rating 1: totally inadequate 2: Inadequate 3: Enough to maintain Living standard 4: very Satisfactory	2.56	1.21	2.42	1.16	2.61	1.17	2.66	1.31

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	pooled Sample		가 1		가 2		가 3	
	가 > = 10,000	가 > = 10,000	10,000 < 가 < = 35,000	35,000 < 가 < = 65,000	가 > = 65,000			
Number of Insurance providing income when disabled 0: neither covered 1: either R or S covered 2: both covered	0.89	0.68	0.78	0.67	0.96	0.70	0.89	0.65
Expecting financial obligation 1: yes 5: no	2.63	1.98	2.86	2.00	2.62	1.98	2.39	1.93
Unpaid Education Loan amount	1,214	7,614	1,021	5,660	1,824	10,645	567	2,773
Respondent or/and IRA Keough Account Holder 1: yes 5: no	2.97	2.00	3.45	1.94	3.15	1.99	2.19	1.83
Years worked in Current Job	14.19	9.10	12.14	8.69	15.22	8.93	14.99	9.41
Number of Employees in current job 1: less than 10 2: 10 ~ 19 3: 20 ~ 99 4: 100 ~ 499 5: 500 or more	4.45	0.91	4.25	1.05	4.57	0.81	4.48	0.86
Both Contributing 0: no 1: yes	0.15	0.36	0.07	0.26	0.20	0.4	0.17	0.38
Number of Pension Plans Respondent and Spouse have	1.41	0.64	1.33	0.56	1.44	0.56	1.47	0.79

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	pooled Sample		가 1		가 2		가 3	
	가 > = 10,000		10,000 <가 < =35,000		35,000 <가 < =65,000		가 > = 65,000	
Plan Type								
1: pension or retirement	1.60	0.48	1.58	0.49	1.54	0.49	1.68	0.46
2: tax deferred								
Plan Kind								
1: formula	1.77	0.50	1.73	0.50	1.75	0.53	1.83	0.43
2: account								
Years Education	14.5	2.29	13.1	2.44	14.4	2.00	16.0	1.33
Sex								
1: male	1.38	0.48	1.58	0.49	1.37	0.48	1.19	0.39
2: female								
Age	48.4	5.49	48.8	5.84	47.52	5.18	49.42	5.33
Health								
1: excellent								
2: good	1.75	0.68	1.88	0.73	1.78	0.65	1.54	0.59
3: fair								
4: poor								
	Sample size = 3,141		Sample size = 976		Sample size = 1,263		Sample size = 902	

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가

3
1 가 585가 , 2 가
1,051가 , 3 가 1,505가
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	pooled Sample		가 1		가 2		가 3	
	가 > = 10,000		10,000 <가 < =35,000		35,000 <가 < =65,000		가 > = 65,000	
Household Income	109,203	34,022	25,914	6,611	49,475	8,775	183,289	20,003
Wage Income	81,703	164,100	25,253	6,546	41,524	11,806	131,704	226,358
Total contribution rate(100 = 1%)	981	780	750	560	870	606	1,147	915
Contribution rate (100 = 1%)	830	620	740	553	779	540	901	687
Spouse self-employed								
1: no	1.02	0.15	1.00	0.09	1.01	0.10	1.04	0.20
2: yes								
Retirement income Rating								
1: totally inadequate								
2: Inadquate	2.56	1.21	2.36	1.07	2.53	1.16	2.67	1.29
3: Enough to maintain Living standard								
4: very Satisfactory								
Number of Insurance providing income when disabled								
0: neither covered	0.89	0.68	0.55	0.51	0.85	0.63	1.04	0.71
1: either R or S covered								
2: both covered								
Expecting financial obligation								
1: yes	2.63	1.98	3.08	2.00	2.71	1.99	2.40	1.93
5: no								
Unpaid Education Loan amount	1,214	7,614	422	2,059	1,362	7,472	1,418	8,951

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	pooled Sample		가 1		가 2		가 3	
	가 > = 10,000		10,000 <가 < =35,000		35,000 <가 < =65,000		가 > = 65,000	
Respondent or/and IRA Keough Account Holder	2.97	2.00	3.68	1.87	3.34	1.97	2.42	1.91
1: yes								
5: no								
Years worked in Current Job	14.19	9.10	12.54	8.74	14.23	8.79	14.82	9.37
Number of Emplpyees in current job								
1: less than 10	4.45	0.91	4.22	1.07	4.48	0.90	4.51	0.84
2: 10 ~ 19								
3: 20 ~ 99								
4: 100 ~ 499								
5: 500 or more								
Both Contributing	0.15	0.36	0.01	0.11	0.12	0.33	0.23	0.42
0: no								
1: yes								
Number of Pension Plans Respondent and Spouse have	1.41	0.64	1.34	0.55	1.37	0.53	1.47	0.73
Plan Type								
1: pension or retirement	1.60	0.48	1.58	0.49	1.54	0.49	1.64	0.47
2: tax deferred								
Plan Kind								
1: formula	1.77	0.50	1.71	0.52	1.75	0.52	1.80	0.47
2: account								
Years Education	14.5	2.29	12.77	2.55	14.02	2.12	15.51	1.70
Sex								
1: male	1.38	0.48	1.59	0.49	1.40	0.49	1.29	0.45
2: female								
Age	48.4	5.49	49.32	5.92	47.53	5.42	49.79	5.28

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	pooled Sample		가 1		가 2		가 3	
	가 > = 10,000		10,000 <가 < =35,000		35,000 <가 < =65,000		가 > = 65,000	
Health								
1: excellent								
2: good	1.75	0.68	1.95	0.77	1.81	0.66	1.62	0.62
3: fair								
4: poor								
	Sample size = 3,141		Sample size = 585		Sample size = 1,051		Sample size = 1,505	

4.

가 t-test < 7> 3
 가
 < 7> 1 2
 가 1 3
 가 , 2 3
 가
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< 7> 가 가 t-test

				H ₀ : mean(1)- mean(2) = differ = 0		
	가	가	가	H _a : diff<0	H _a : diff ~ = 0	H _a : diff>0
1	976	768.07	19.02	t = -3.2687	t = -3.2687	t = -3.2687
2	1,263	846.92	15.28			
combined	2,239	812.55	11.98	P<t=0.0005 P> t =0.0011 P>t =0.9995		
diff		-78.84	24.12	: 2,237		
				H ₀ : mean(2)- mean(3) = differ = 0		
	가	가	가	H _a : diff<0	H _a : diff ~ = 0	H _a : diff>0
2	1,263	846.92	15.28	t = -1.0483	t = -1.0483	t = -1.0483
3	902	875.74	24.50			
combined	2,165	858.93	13.55	P<t=0.1473 P> t =0.2946 P>t =0.8527		
diff		-28.82	27.49	: 2,163		
				H ₀ : mean(3)- mean(1) = differ = 0		
	가	가	가	H _a : diff<0	H _a : diff ~ = 0	H _a : diff>0
1	976	768.07	19.02	t = -3.4995	t = -3.4995	t = -3.4995
3	902	875.74	24.50			
combined	1,878	819.78	15.41	P<t=0.0002 P> t =0.0005 P>t =0.9998		
diff		-107.67	30.76	: 1,876		

< 8> 가 가 t-test

				H ₀ : mean(1)- mean(2) = differ = 0		
	가	가	가	H _a : diff<0	H _a : diff ~ = 0	H _a : diff>0
1	585	750.40	23.17	t = -3.9535	t = -3.9535	t = -3.9535
2	1,051	870.84	18.71			
combined	1,636	827.77	18.71	P<t=0.0000 P> t =0.0000 P>t =1.0000		
diff		-120.43	30.46	: 1,634		
				H ₀ : mean(2)- mean(3) = differ = 0		
	가	가	가	H _a : diff<0	H _a : diff ~ = 0	H _a : diff>0
2	1,501	870.84	18.71	t = -8.5786	t = -8.5786	t = -8.5786
3	1,505	1,147.67	23.59			
combined	2,556	1,033.84	16.10	P<t=0.0000 P> t =0.0000 P>t =1.0000		
diff		-276.83	32.27	: 2,554		
				H ₀ : mean(3)- mean(1) = differ = 0		
	가	가	가	H _a : diff<0	H _a : diff ~ = 0	H _a : diff>0
1	585	750.40	23.17	t = -3.9535	t = -3.9535	t = -3.9535
3	1,505	1,147.67	23.59			
combined	2,090	1,036.48	18.59	P<t=0.0000 P> t =0.0000 P>t =1.0000		
diff		-397.27	40.50	: 2,088		

< 9> 가 가

	가 >		1 가 2 가 3		가 >			
	= 10,000	10,000 < 가 < = 35,000	35,000 < 가 < = 65,000	가 > = 65,000				
Log-TotalIncome	19.97	18.32	260.16(**)	43.73	225.78(**)	44.39	-176.13(**)	35.55
Number of family members	-16.91	9.63	-50.60(**)	17.28	-54.09(**)	12.14	-79.94(**)	23.45
Spouse self-employed 1: no 2: yes	221.42(**)	75.91	254.32	207.15	227.46	117.66	391.29	115.70
Retirement income Rating(social security and pension plan) 1: totally inadequate 2: Inadquate 3: Enough to maintain Living standard 4: very Satisfactory	13.13	9.86	17.57	16.85	3.55	14.51	10.58	19.65
Number of Insurance providing income when disabled 0: neither covered 1: either R or S covered 2: both covered	125.36(**)	18.41	18.54	33.33	54.33(*)	25.39	186.38(**)	40.98
Expecting financial obligation 1: yes 5: no	25.23(**)	6.33	43.97(**)	10.43	34.97(**)	8.73	-7.71	13.82
Unpaid Education Loan amount(\$)	-0.004	0.0015	-0.007(*)	0.0034	0.005(**)	0.001	0.017	0.009

< 9>

	가 > 10,000		10,000 < 가 < = 35,000		2 가 35,000 < 가 < = 65,000		3 가 > 65,000	
Respondent or/and IRA Keough Account Holder	-34.79(**)	6.31	-25.17(*)	10.89	-7.93	8.53	-86.79(**)	14.41
1: yes								
5: no								
Number of Emplpyees in current job								
1: less than 10	-14.99	13.28	70.51(**)	19.14	-20.86	21.21	-101.02(**)	29.98
2: 10 ~ 19								
3: 20 ~ 99								
4: 100 ~ 499								
5: 500 or more								
Years worked in Current Job	1.18	1.41	-1.17	2.41	1.95	2.09	-2.15	2.93
Both Contributing								
0: no	828.80(**)	34.13	342.12(**)	78.67	722.50(**)	43.17	1117.17(**)	66.40
1: yes								
Number of Pension Plans Respondent and Spouse have	338.76(**)	18.98	258.77(**)	35.61	300.61(**)	29.90	425.99	33.92
Plan Type								
1: pension or retirement	111.48	29.88	-9.09(**)	51.89	152.06(**)	39.59	159.15	68.48
2: tax-deferred								
Plan Kind								
1: formula	9.99	28.86	185.28	50.77	-3.09	37.14	-168.00	70.44
2: account								
Years Education	13.47	6.03	34.26(**)	8.50	-1.44	9.09	-37.54	19.24
Sex								
1: female	131.83	25.70	67.64	43.45	60.66	35.86	217.82	63.91
2: male								
Age	0.67(**)	25.70	12.47(**)	3.90	3.004	3.52	-19.51	5.36

< 9>

	가 > 10,000		10,000 < 가 < = 35,000		2 가 35,000 < 가 < = 65,000		3 가 > 65,000	
Health								
1: excellent								
2: good	-5.57	18.34	13.67	28.03	-61.14(*)	26.62	-15.58	42.89
3: fair								
4: poor								
Constant	-681.52(**)	254.21	-4526.62(**)	550.87	-2495.01(**)	540.09	4028.81(**)	644.60
	R ² = 0.30		R ² = 0.24		R ² = 0.33		R ² = 0.44	
	Sample size = 3,141		Sample size = 976		Sample size = 1,263		Sample size = 902	

: (*) 5%
(**) 1%

가 2 가
가 , 가
가 , 가
5 , 가 가

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가 가
(Keough Account:
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	가 > 10,000		10,000 < 가 < = 35,000		1 가 2 가 35,000 < 가 < = 65,000		3 가 > 65,000	
Log-TotalIncome	19.97	18.32	88.31	77.22	167.10	104.70	-93.94(**)	31.24
Number of family members	-16.91	9.63	39.94	21.37	-58.45(**)	11.84	-6.25	17.43
Spouse self-employed 1: no 2: yes	221.42(**)	75.91	8.078	247.17	-102.06	166.90	352.67	95.52
Retirement income Rating(social security and pension plan) 1: totally inadquate 2: Inadquate 3: Enough to maintain Living standard 4: very Satisfactory	13.13	9.86	-32.27	20.98	39.09(**)	14.62	4.536	15.36
Number of Insurance providing income when disabled 0: neither covered 1: either R or S covered 2: both covered	125.36(**)	18.41	27.18	46.60	84.92(**)	27.98	138.70(**)	28.23
Expecting financial obligation 1: yes 5: no	25.23(**)	6.33	17.12	12.58	22.50(**)	8.76	26.94	10.50
Unpaid Education Loan amount(\$)	-0.004	0.0015	0.033(**)	0.01	-0.007	0.002	-0.003	0.002

< 10>

	가 > 10,000		10,000 < 가 < = 35,000		1 가 2 가 35,000 < 가 < = 65,000		3 가 > 65,000	
Respondent or/and IRA Keough Account Holder 1: yes 5: no	-34.79(**)	6.31	-26.36(*)	12.43	28.04	8.99	-65.32(**)	10.58
Number of Emplpyees in current job 1: less than 10 2: 10 ~ 19 3: 20 ~ 99 4: 100 ~ 499 5: 500 or more	-14.99	13.28	135.54(**)	21.23	-2.325	19.87	-112.62(**)	23.80
Years worked in Current Job	1.18	1.41	-1.18	2.70	-3.866	2.11	2.792	2.25
Both Contributing 0: no 1: yes	828.80(**)	34.13	894.54	191.13	427.34(**)	54.70	951.85(**)	46.54
Number of Pension Plans Respondent and Spouse have	338.76(**)	18.98	222.63(**)	40.01	317.19	33.77	415.57	27.41
Plan Type 1: pension or retirement 2: tax-deferred	111.48	29.88	138.73(*)	60.42	182.75	40.57	75.92	49.91
Plan Kind 1: formula 2: account	9.99	28.86	-48.33	56.69	-32.20	38.47	85.04	49.98
Years Education	13.47	6.03	19.25(*)	9.10	-1.39	8.70	25.78(*)	11.85
Sex 1: female 2: male	131.83	25.70	-42.32	48.77	-16.86	38.08	339.55(**)	42.76
Age	0.67(**)	25.70	14.43(**)	4.18	0.988	3.48	-3.61	4.12

(2000), 『
 (2003. 6), 『2003
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 (2001), 『
 (2002), 『
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Summary

Analysis on the differences in the individual contribution rates of different income groups under the Korean Occupational Pension System

Jong-Wook Won

This paper analyze the motives for the higher income groups of Korean employed workers to contribute higher possible contributions toward private occupational pension plans. As the pressure for the financial stability of the Korean National Pension on System increases, the benefit from the inter-generational transfer will decrease and intra-generational transfer will be strengthened.

Consequently, the benefit level of the Korean National Pension System will be diminished and the contributing premium level will increase to meet the long-term financial stability.

The empirical work using U.S. data was performed to illustrate higher contribution rate in the U.S. private occupational pension system. The data used is *Survey of consumer Finances*, 1998 which was conducted by the Board of Governors of Federal Reserve System. This data contains financial information on the 21,525 households including affiliation of the private pension schemes.

Thorough diverse empirical works we have obtained evidence of higher contribution rate of the private occupational pension system as the income level increases.

It implies similar pattern will be observed in Korea as the Korean National Pension System becomes less favorable to the high income groups.