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Is inflation targeting preferred by Filipinos?

Edsel L. Beja, Jr.[*]

Abstract

Analysis of World Values Survey 2000 data for the Philippines finds that lower income Filipinos are more likely than the upper income ones to support inflation targeting. The same can be said of older, healthier, and employed Filipinos but not of the educated and financially satisfied ones. Given the profile of people who preferred inflation targeting, the shift from monetary targeting to inflation targeting is deemed a pro-poor policy shift. Further analyses find that, in 2000, at least 53.1% of Filipino households preferred inflation targeting; in other words, the preference of Filipino society in 2000 was in line with the preference of the Bangko Sentral ng Pilipinas for inflation targeting.

Keywords: Inflation targeting, central bank policy, Philippines, Filipino preference

JEL Codes: C83, D12, E31

INTRODUCTION

The adverse impact of inflation on economic welfare is well understood (c.f., Easterly and Fischer 2001, Di Tella *et al.* 2001, and Dollar and Kraay 2002). Moreover, high inflation produces uncertainties that, in turn, discourage private enterprises and jobs creation. Even a cursory review of history will find that reductions in economic welfare due to very high inflation induce social dissatisfaction and resentment, which trigger demands for regime change (c.f., Przeworski *et al.* 1996, and Diskin *et al.* 2005). Governments, therefore, know that controlling inflation is a very crucial economic policy issue.

Developments since the early 1990s point to a shift in the management of inflation; more

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and more governments have opted to use inflation targeting instead of monetary targeting.[1] Under inflation targeting, the central bank projects a target inflation rate at period t – there is usually an upper and lower range of inflation – then deploys monetary tools to influence economic activities in the hope that price movements yield an inflation rate that is within the desired range. The target is reasonably low but credible so people are not only sufficiently confident that private objectives (e.g., realization of profits, protection of wealth and private property, pursuit of business plans, etc.) are realized but also secure that policy-makers are conscious of avoiding actions that lead to abrupt fluctuations in prices, thereby precluding undue reductions in economic welfare or surge in political instability. Of course, there are many variations in the application of inflation targeting across countries.

In the Philippines, the decision to shift to inflation targeting was made in January 2000, but its implementation started in January 2002.[2] Two years were spent for technical preparations and public discussions throughout the country. Beja (2008) and Lim (2008), for example, are nuanced in their analyses of Philippine inflation targeting, pointing out that the issue lies not in the determination of the target *per se*, the acceptable range of inflation, the use of monetary tools to influence economic activities, the technical capacity of the Bangko Sentral ng Pilipinas (BSP) to implement the policy, etc; rather, the issue is that successful targeting is largely contingent on the external circumstances, which are more consequential in affecting domestic price movements especially because a significant part of the economy depends on imports. When the external conditions are not benign, inflation will be pushed outside the acceptable range, and the BSP would fail to achieve the inflation target. Similar results happen with domestic supply bottlenecks and production-related problems. Needless to say, scholars of the Philippine economy understand

[1] Inflation targeting was introduced by New Zealand in 1990. To date, the following countries have adopted inflation targeting: Australia, Brazil, Canada, Chile, Colombia, Czech Republic, Ghana, Hungary, Iceland, Indonesia, Israel, Mexico, New Zealand, Norway, Peru, Philippines, Poland, Romania, Slovakia, South Africa, South Korea, Sweden, Switzerland, Thailand, Turkey, and United Kingdom.

[2] See Valdepeñas (2004) and Guinigundo (2005) for an institutional view on inflation targeting.

why between 2002 and 2009 inflation rate was within the target range only in 2009. However, an innovation built in Philippine inflation targeting is the requirement that the Governor of the Bangko Sentral ng Pilipinas sends a report to the President of the Republic of the Philippines to explain why the inflation target was missed and then convey the steps to be taken in order to bring inflation within the acceptable range.

This paper does not examine Philippine inflation targeting *per se*. The focus is the so-called "beneficiaries" (i.e., the Filipinos) of inflation targeting. There is no question that BSP has the mandate and authority to decide on the appropriate monetary policy to achieve "price stability conducive to a balanced and sustainable growth of the economy" (c.f., Article 1, Section 3, Republic Act No. 7653). There is also no question that BSP has revealed its preference for inflation targeting. Even so, as an exercise in policy validation in the context of "effective and reasonable participation at all levels of social, political, and economic decision-making" (c.f., Article 13, Section 16, 1987 Philippine Constitution), this paper raises the question: *Is inflation targeting preferred by Filipinos?*

METHODOLOGY

Survey data from the transition period of Philippine inflation targeting are relevant to determine if Filipinos have preference for inflation targeting. Yet, no survey was conducted or commissioned by BSP during that juncture. This study therefore relies on other sources.

In 2001, the *World Values Survey 2000* was administered in the Philippines through the Social Weather Stations. That survey contained 1,200 randomly sampled respondents across the country. One section of the survey is applicable to the issue examined in this paper, namely:

> *V122: If you had to choose, which one of the things on this card would you say is most important?*
>
> | | *FIRST CHOICE* | *SECOND CHOICE* |
> |---|---|---|
> | *Maintaining order in the country* | *1* | *1* |
> | *Giving people more say in important govt. decisions* | *2* | *2* |

Fighting rising prices	*3*	*3*
Protecting freedom of speech	*4*	*4*
Don't know [DO NOT READ OUT]	*9*	*9*

V123: And which would be the next most important?

Following Pavot *et al.* (1991), who find that people who say they are happy tend to smile more, the conjecture in this paper is that respondents who said that "fighting rising prices" as the most important policy concern said so because of negative experiences with inflation.[3] Ideally, the survey should have inquired on the maximum inflation rate the respondent can tolerate to get an implicit constraint on "fighting rising prices". What can be inferred given the absence of the information is that the respondents interpreted "fighting rising prices" as price stability (i.e., minimal rise in price) and not price control (i.e., no increase in price). In fact, in another context, Valdepeñas (2004) explains price stability meant minimal rise in price.

Given that BSP prefers inflation targeting, a determination that Filipinos prefer "fighting rising prices" imply preference for inflation targeting. Indeed, initial review of the data suggests that is the case. Table 1 shows that 276 (23%) responded "fighting rising prices" as their first choice (second most frequent first choice) and 413 (34%) responded "fighting rising prices" as second choice (most frequent second choice). Looking at paired combinations of first and second choices finds "fighting rising prices" as the first choice and "maintaining order in country" as the second choice (and vice versa) accounted for 477 (40%) responses, the highest among possible combinations.

[Insert Table 1 Here]

In the survey, "fighting rising prices" is coded using the value of 3. For the analysis, the number is recoded to 1 and the rest as 0. The same is done to the second choice responses. Next, define preference as the sum of "fighting rising prices" as the first and second choices; that is, a value of 1 means that the respondent prefers inflation targeting and 0 means otherwise.

[3] See Kahneman and Thaler (1991) and Kahneman et al. (1998) on the so-called "experienced utility".

Thus, the expected value of "fighting rising prices" is the probability, π_i, of getting the response modeled in logistic form: E("fighting rising prices") = Pr("fighting rising prices" = 1|π_i) = π_i. That is, $\pi_i = \frac{1}{1+e^{-z}}$, where $z = \alpha + \mathbf{X}\beta$; **X** represents the individual characteristics and β is a vector of parameters. Indicators include socio-economic profile, class or income deciles, self-assessment, and job status. Table 2 presents the frequency distribution.

[Insert Table 2 Here]

Socioeconomic Profile: Standard indicators like age, gender, and education are used in the analysis. The dataset contains the actual ages of respondents. The information is further classified according to age deciles then coded accordingly (i.e., from 1 for the lowest age bracket to 8 for the highest age bracket). Gender means male or female. Education attainment was regrouped so as to simplify secondary education categories then recoded accordingly (i.e., from 1 for no formal education to 7 for completed university education).[4]

Class or Income Status: Two sets of information are available in the dataset: class and income deciles. For analysis, class information is recoded to have consistency in the sequencing of numbers (i.e., 1 for lower class to 4 for upper class) with that of income deciles, which follow standard coding (i.e., 1 for the poorest to 10 for the richest).

Self-Assessment of Status: The first set of information is the individual assessment of happiness and health. For consistency, data were recoded (i.e., 1 to mean not at all happy or poor to 4 to mean very good or very happy). The other set is the individual assessment of financial status and life in general, which follow standard coding (i.e., 1 is completely dissatisfied and 10 is completely satisfied). To avoid simultaneity bias, only paired combinations of the first and second sets of self-assessment responses are used in the analysis.[5]

[4] Here "secondary education" comprises technical, vocational, or pre-university preparatory type schooling.

[5] Blanchflower and Oswald (2004) find that using happiness and life satisfaction as dependent variables give similar results. Thus, simultaneity bias may explain why they turn out to be statistically insignificant

Jobs Status: The type of employment is available in the dataset; that is, whether the respondent is unemployed, employed (if so, whether employment is full-time, part-time, or self-employed), or not-in-the-labor-force (i.e., retiree, housewife, or student). Data are relabeled for consistency then recoded accordingly (i.e., 1 if unemployed, 2 if part-time, 3 if full-time, 4 if self-employed, and 5 if not in the labor force).

RESULTS

Table 3a summarizes results using logistic regressions. The expected probabilities that Filipinos with characteristics X_i, Y_i, etc. choose "fighting rising prices" are in the Appendix. Gender comes out statistically insignificant perhaps caused by data structure (notice the equal number of male and female respondents in Table 2). Removing gender does not imply that it is not an important factor in making choices. Still, results are not altered after removing gender from the model. Through the process of elimination, model 5 emerges as the most helpful result. The last column of Table 3a shows the marginal effects of the statistically significant variables.

[Inserts Table 3a and 3b Here]

The positive notation in column 9 (of Table 3a) indicates that the older, healthier, and employed Filipinos are more likely to prefer inflation targeting. The sizes of the marginal effects indicate that age and health are the stronger determinants of preference than job status. From Table 3b, there is at least 50% probability of preferring inflation targeting; that is, inflation is a general concern of Filipinos.

Healthy Filipinos support inflation targeting because the alternative (i.e., being sickly or less healthy) is costly. Even with government-sponsored health programs, there remains no meaningful health insurance program that covers for medicines and hospitalization. The finding that there is at least a 50% probability that inflation targeting is supported by Filipinos regardless

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in the analysis (Table 3a).

of their health status is not difficult to understand (Table 3b). Being healthy is important because it affords the person more opportunities to work and enjoy life.

The reason the employed support inflation targeting is straightforward. Those with jobs support inflation targeting more because people want earnings to translate into more goods and services. The same applies to the retirees, housewives and students, who want to fully enjoy their limited pensions, budgets, or allowances. Interestingly, though, those who are unemployed are least likely to support inflation targeting, albeit odds exceeds 50% probability in favor of the policy (Table 3b). Perhaps because unemployment is basically a structural problem and not an option that the unemployed also perceive inflation as a structural problem: feeling helpless towards unemployment. Besides, where job security is absent and labor unions are weak, people feel powerless with regard to the labor market and outcomes.

Moreover, the first set of results are consistent with standard life-cycle analysis, which says that as one grows older the person takes on more responsibilities but the risks associated with health, job status, and old-age increase as well. The findings are not surprising in the context of the Philippines, where social security and basic services are inadequate if not defective and even inequitable.

Table 3a furthermore shows that the educated and better-off Filipinos and those who are relatively satisfied with their financial status are less likely to support inflation targeting. These findings appear counter-intuitive at first glance given that these people lose the most in an inflationary environment. Looking at the Philippine setting again sheds light why such is the case.

Obviously, more educated Filipinos are better in accessing and processing information, effectively enjoying more freedoms than the less educated ones. Matched with sufficient financial resources, educated Filipinos not only have but also can make "better" choices. If the domestic conditions are objectionable (e.g., domestic prices are unacceptable, product quality is poor, etc), the educated and the well-off can seek foreign markets. In any case, Engel's Law says that the wealthy can afford basic goods and services regardless of price movements. In addition, the

affluent Filipinos can easily secure their welfare and wealth regardless of the domestic conditions.

Thus, Filipinos with little education and limited financial capacity are likely support inflation targeting precisely because of the limited options available to them.[6] Being powerless with the state of affairs, underprivileged Filipinos support inflation targeting precisely because they want to secure their own selves notwithstanding limited financial resources.

So far, the discussion deals with individual preferences. The question, however, is the following: is it sensible to say that the preference of a poor, healthy, and young (say, in the 30s) Filipino who has completed university education but is unemployed be comparable to that of a rich, healthy, and young Filipino who has also completed university education and is unemployed? What is clear is that given the profile of Filipinos who preferred inflation targeting, the policy shift of the BSP from monetary targeting to inflation targeting can be considered a pro-poor policy shift.

The next step then is to obtain the social sentiments. To that end, begin by calculating the total probabilities in choosing inflation targeting taking into account various individual characteristics. Results are detailed in the Appendix. Not surprisingly, the richest groups (deciles 9 and 10) and unemployed are *least* likely to support inflation targeting because are enjoying passive earnings from wealth and other assets (i.e., the so-called "unemployed wealthy"). The richest and employed are *less* likely to support inflation targeting perhaps because their earnings are sufficiently large to cover for inflation. On the other hand, the self-employed and the not-in-the-labor-force are likely to support inflation targeting because they face some constraints: self-employment implies "unsteady" income flow, whereas students, retirees, and housewives merely receive distributions of income.

The structure of preferences is basically similar across income deciles, albeit preference for inflation targeting increases with lower income deciles. Those who belong in deciles 1 to 6,

[6] Most Filipinos do not have adequate schooling nor meet the national and international basic education competency standards (c.f., Luz 2008).

regardless of their age, job, health and financial status, as well as education attainment have at least 50% probability of choosing inflation targeting.

[Insert Table 4 Here]

Finally, applying the total probability of each decile to the number of households per decile obtains an estimate of the overall sentiment with regards to inflation targeting in 2000 (Table 4). Thus, the number of households who would support inflation targeting is 8.1 million or 53.1% of Filipino households.[7] Therefore, majority of Philippine society would have said they supported the shift to inflation targeting if asked.[8] However, the findings do not suggest that the upper incomes Filipinos oppose inflation targeting but only that they are indifferent to it because inflation is not their immediate concern. Naturally, the preference can shift in favor of inflation targeting if inflation starts to impinge on well-being and wealth.

CONCLUSION

The Bangko Sentral ng Pilipinas approved the shift from monetary targeting to inflation targeting in 2000 and the implementation began in 2002, or after two years of technical preparations and public consultations in the Philippines. Using *World Values Survey 2000* data, analysis finds that at least 53.1% of all Filipino households would support inflation targeting if asked. Those in the lower income deciles and who are older, healthier, and employed preferred inflation targeting more than the highly educated and financially satisfied. As such, the shift from monetary targeting to inflation targeting can be considered a pro-poor policy shift. The findings strongly indicate that

[7] Calculated as $X = \sum \text{households per decile} * p(\text{anti-inflation policy})$ and X is the expected number of households who prefer inflation targeting. Data are in Table 4 and Appendix.

[8] It will be interesting to examine if after ten years of implementing the policy Filipinos still prefer inflation targeting. As noted earlier, there is no study on the maximum inflation rate Filipinos can tolerate (i.e., their inflation threshold) under alternative scenarios (e.g., growth, stagnation, and contraction). It is worthwhile to also study Filipino attitudes on the tradeoffs between inflation and, say, unemployment, hunger, growth, environmental sustainability, etc.

the preference of Philippine society as a whole was in line with preference of the Bangko Sentral ng Pilipinas for inflation targeting.

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Table 1: *Distribution of responses*

	Second choice				
First choice	1	2	3	4	*Total*
1		177	***307***	131	**615**
2	85		86	48	219
3	***170***	51		55	276
4	44	26	20		90
Total	299	254	**413**	234	1,200

Source of data: *World Values Survey 2000.*

Definitions:
1 = Maintaining order in the nation
2 = Giving people more say in important government decisions
3 = Fighting rising prices
4 = Protecting freedom of speech

Table 2: *Distribution of respondents, by response*

	Socioeconomic Profile			Class / Income Status		Self-assessment of Status				Job Status
	Gender	Age	Education	Class	Income	Happy	Healthy	Financial	Life	Employment
1	600	61	15	589	98	9	87	115	64	203
2	600	367	158	403	93	133	437	44	32	73
3		279	166	165	134	587	445	82	40	298
4		249	197	34	178	471	231	83	67	237
5		129	292		311			256	198	389
6		88	166		170			157	157	
7		45	206		101			127	142	
8		8			77			127	174	
9					25			55	112	
10					13			154	214	
Total	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200

Source of data: *World Values Survey 2000.*

Definitions:

Gender	Male (1); Female (2)
Age	Person in 10s (1); in 20s (2); in 30s (3); in 40s (4); in 50s (5); in 60s (6); in 70s (7); in 80s (8).
Education	No formal education (1); incomplete primary education (2); completed primary education (3); incomplete secondary education (4); completed secondary education (5), incomplete university education (6); completed university education (7)
Class	Lower class (1); lower middle class (2); upper middle class (3); upper class (4)
Income	From lowest decile (1) to highest decile (10)
Happy	Not at all happy (1); not very happy (2); quite happy (3); very happy (4)
Healthy	Poor (1); fair (2); good (3); very good (4)
Financial	From dissatisfied (1) to satisfied (10)
Life	From dissatisfied (1) to satisfied (10)
Employment	Unemployed (1); full-time employment (2); part-time employment (2); self-employed (3); not in the labor force (4)

Table 3a: *Determinants of preferences for inflation targeting and marginal effects*

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*Final*	*Marginal*
Constant	0.0556	-0.0288	0.4286	0.2760	0.2101	0.1429	0.6271	0.5065^{ws}	0.2022	
Gender	0.0044	0.0029	0.0019	0.0008	-0.0056	-0.0112	-0.0091	-0.0137		
Age	0.1062^{vs}	0.1049^{vs}	0.1008^{vs}	0.0999^{vs}	0.1070^{vs}	0.1054^{vs}	0.1024^{vs}	0.1012^{vs}	0.1071^{vs}	0.0255
Education	-0.0803^{hs}	-0.0828^{hs}	-0.0752^{hs}	-0.0782^{hs}	-0.0519^{ws}	-0.0502^{ws}	-0.0467^{ws}	-0.0457^{ws}	-0.0519^{ws}	-0.0124
Class	0.0339	0.0240	0.0312	0.0221						
Income					-0.0731^{hs}	-0.0880^{vs}	-0.0747^{hs}	-0.0887^{vs}	-0.0730^{vs}	-0.0174
Healthy	0.1055^{ws}	0.0891^{ws}			0.1081^{ws}	0.0952^{ws}			0.1082^{ws}	0.0257
Happy			-0.0567	-0.0425			-0.0748	-0.0631		
Financial Satisfaction	-0.0594^{vs}		-0.0565^{vs}		-0.0397^{s}		-0.0373^{ws}		-0.0397^{s}	-0.0094
Life Satisfaction		-0.0283^{ws}		-0.0262		-0.0091		-0.0079		
Employed	0.0714^{s}	0.0735^{s}	0.0702^{s}	0.0726^{s}	0.0749^{s}	0.0771^{s}	0.0731^{s}	0.0755^{s}	0.0745^{s}	0.0177
McFadden R^2	0.0161	0.0128	0.0150	0.0120	0.0190	0.0174	0.0281	0.0167	0.0190	

Note: Very significant (vs), $\alpha = 0.01$; highly significant (hs), $\alpha = 0.05$; significant (s), $\alpha = 0.10$; weakly significant (ws), $0.10 < \alpha \leq 0.25$. N = 1,200. Calculations of the author.

Table 3b: *Probabilities of determinant X_i choosing inflation targeting, ceteris paribus*

Category	Age	Education	Income	Health	Finance	Employed
1	0.53	0.49	0.48	0.53	0.49	0.52
2	0.55	0.47	0.46	0.55	0.48	0.54
3	0.58	0.46	0.45	0.58	0.47	0.56
4	0.61	0.45	0.43	0.61	0.46	0.57
5	0.63	0.44	0.41		0.45	0.59
6	0.66	0.42	0.39		0.44	
7	0.68	0.41	0.37		0.43	
8	0.70		0.36		0.42	
9			0.34		0.41	
10			0.32		0.40	

Note: $P(X_i) = \frac{1}{1 + e^{\alpha + \hat{\beta} iXi}}$, where X_i represents the ith value of determinant X = age, education, income, health, financial satisfaction, and employment status. Calculations of the author.

Table 4: *Number of households in 2000, by decile (in 1,000s)*

Decile		Number	Prob.	Expected No.
1:	under - 29,999	1,241	0.69	861
2:	30,000 - 39,999	1,339	0.66	881
3:	40,000 - 49,999	1,503	0.62	933
4:	50,000 - 59,999	1,409	0.58	821
5:	60,000 - 79,999	2,252	0.53	1,198
6:	80,000 - 99,999	1,630	0.50	818
7:	100,000 - 149,000	2,553	0.46	1,177
8:	150,000 - 249,000	2,060	0.44	898
9:	250,000 - 499,000	1,044	0.41	425
10:	500,000 - above	237	0.38	91
	Total	15,268		8,104

Source of data: *National Statistics Office* and Appendix for the probabilities. Calculations of author.

APPENDIX

Probability that the respondent says that "fighting rising prices" is the most important priority of the country

	Age	UNE	PART	FULL	SELF	NLF		UNE	PART	FULL	SELF	NLF
Decile 10	in 10s	0.27	0.31	0.33	0.34	0.36	Decile 10	0.25	0.29	0.30	0.32	0.33
And	in 20s	0.29	0.33	0.35	0.37	0.38	and	0.27	0.31	0.33	0.34	0.36
Healthy	in 30s	0.32	0.36	0.37	0.39	0.41	Unhealthy	0.29	0.33	0.35	0.37	0.38
	in 40s	0.34	0.38	0.40	0.42	0.44		0.32	0.36	0.37	0.39	0.41
	in 50s	0.36	0.41	0.43	0.44	0.46		0.34	0.38	0.40	0.42	0.44
	in 60s	0.39	0.43	0.45	0.47	0.49		0.36	0.41	0.43	0.44	0.46
	in 70s				0.50	0.52					0.47	0.49
	in 80s				0.50	0.54					0.50	0.52
Prob. = 0.38		0.33	0.37	0.39	0.43	0.45		0.31	0.35	0.36	0.41	0.42
Decile 9	in 10s	0.29	0.33	0.35	0.37	0.39	Decile 9	0.27	0.31	0.33	0.34	0.36
and	in 20s	0.32	0.36	0.38	0.39	0.41	and	0.29	0.33	0.35	0.37	0.39
Healthy	in 30s	0.34	0.38	0.40	0.42	0.44	Unhealthy	0.32	0.36	0.38	0.39	0.41
	in 40s	0.37	0.41	0.43	0.45	0.46		0.34	0.38	0.40	0.42	0.44
	in 50s	0.39	0.43	0.45	0.47	0.49		0.37	0.41	0.43	0.44	0.46
	in 60s	0.42	0.46	0.48	0.50	0.52		0.39	0.43	0.45	0.47	0.49
	in 70s				0.53	0.54					0.50	0.52
	in 80s				0.55	0.57					0.52	0.54
Prob. = 0.41		0.35	0.40	0.41	0.46	0.48		0.33	0.37	0.39	0.43	0.45

Note: Calculations of the author.

Table continued…

	Age	UNE	PART	FULL	SELF	NLF		UNE	PART	FULL	SELF	NLF
Decile 8	in 10s	0.32	0.36	0.38	0.39	0.41	Decile 8	0.30	0.33	0.35	0.37	0.39
and	in 20s	0.34	0.38	0.40	0.42	0.44	and	0.32	0.36	0.38	0.39	0.41
Healthy	in 30s	0.37	0.41	0.43	0.45	0.47	Unhealthy	0.34	0.38	0.40	0.42	0.44
	in 40s	0.39	0.44	0.45	0.47	0.49		0.37	0.41	0.43	0.45	0.46
	in 50s	0.42	0.46	0.48	0.50	0.52		0.39	0.44	0.45	0.47	0.49
	in 60s	0.44	0.49	0.51	0.53	0.55		0.42	0.46	0.48	0.50	0.52
	in 70s				0.55	0.57					0.53	0.54
	in 80s				0.58	0.60					0.55	0.57
Prob. = 0.43		0.38	0.42	0.44	0.49	0.51		0.36	0.40	0.42	0.46	0.48
Decile 7	in 10s	0.34	0.39	0.40	0.42	0.44	Decile 7	0.32	0.36	0.38	0.40	0.41
and	in 20s	0.37	0.41	0.43	0.45	0.47	and	0.34	0.39	0.40	0.42	0.44
Healthy	in 30s	0.39	0.44	0.46	0.47	0.49	Unhealthy	0.37	0.41	0.43	0.45	0.47
	in 40s	0.42	0.46	0.48	0.50	0.52		0.39	0.44	0.46	0.47	0.49
	in 50s	0.45	0.49	0.51	0.53	0.55		0.42	0.46	0.48	0.50	0.52
	in 60s	0.47	0.52	0.54	0.55	0.57		0.45	0.49	0.51	0.53	0.55
	in 70s				0.58	0.60					0.55	0.57
	in 80s				0.61	0.62					0.58	0.60
Prob. = 0.46		0.41	0.45	0.47	0.51	0.53		0.38	0.42	0.44	0.49	0.51

Note: Calculations of the author.

Table continued

	Age	UNE	PART	FULL	SELF	NLF		UNE	PART	FULL	SELF	NLF
Decile 6	in 10s	0.38	0.43	0.44	0.46	0.48	Decile 6	0.36	0.40	0.42	0.44	0.45
and	in 20s	0.41	0.45	0.47	0.49	0.51	and	0.38	0.43	0.44	0.46	0.48
Healthy	in 30s	0.43	0.48	0.50	0.52	0.53	Unhealthy	0.41	0.45	0.47	0.49	0.51
	in 40s	0.46	0.51	0.52	0.54	0.56		0.43	0.48	0.50	0.52	0.53
	in 50s	0.49	0.53	0.55	0.57	0.59		0.46	0.51	0.52	0.54	0.56
	in 60s	0.51	0.56	0.58	0.59	0.61		0.49	0.53	0.55	0.57	0.59
	in 70s				0.62	0.64					0.59	0.61
	in 80s				0.65	0.66					0.62	0.64
Prob. = 0.50		0.45	0.49	0.51	0.55	0.57		0.42	0.47	0.48	0.53	0.55
Decile 5	in 10s	0.42	0.47	0.48	0.50	0.52	Decile 5	0.40	0.44	0.46	0.48	0.50
And	in 20s	0.45	0.49	0.51	0.53	0.55	and	0.42	0.47	0.48	0.50	0.52
Healthy	in 30s	0.47	0.52	0.54	0.56	0.58	Unhealthy	0.45	0.49	0.51	0.53	0.55
	in 40s	0.50	0.55	0.56	0.58	0.60		0.47	0.52	0.54	0.56	0.57
	in 50s	0.53	0.57	0.59	0.61	0.63		0.50	0.55	0.56	0.58	0.60
	in 60s	0.55	0.60	0.62	0.63	0.65		0.53	0.57	0.59	0.61	0.63
	in 70s				0.66	0.68					0.63	0.65
	in 80s				0.68	0.70					0.66	0.67
Prob. = 0.54		0.49	0.53	0.55	0.59	0.61		0.46	0.51	0.52	0.57	0.59

Note: Calculations of the author.

Table continued

	Age	UNE	PART	FULL	SELF	NLF		UNE	PART	FULL	SELF	NLF
Decile 4	in 10s	0.46	0.51	0.53	0.54	0.56	Decile 4	0.44	0.48	0.50	0.52	0.54
and	in 20s	0.49	0.53	0.55	0.57	0.59	And	0.46	0.51	0.53	0.54	0.56
Healthy	in 30s	0.52	0.56	0.58	0.60	0.61	Unhealthy	0.49	0.53	0.55	0.57	0.59
	in 40s	0.54	0.59	0.60	0.62	0.64		0.51	0.56	0.58	0.60	0.61
	in 50s	0.57	0.61	0.63	0.65	0.66		0.54	0.59	0.60	0.62	0.64
	in 60s	0.59	0.64	0.65	0.67	0.69		0.57	0.61	0.63	0.65	0.66
	in 70s				0.69	0.71					0.67	0.69
	in 80s				0.72	0.73					0.69	0.71
Prob. = 0.58		0.53	0.57	0.59	0.63	0.65		0.50	0.55	0.57	0.61	0.63
Decile 3	in 10s	0.50	0.55	0.57	0.59	0.60	Decile 3	0.48	0.52	0.54	0.56	0.58
and	in 20s	0.53	0.57	0.59	0.61	0.63	and	0.50	0.55	0.57	0.58	0.60
Healthy	in 30s	0.56	0.60	0.62	0.64	0.65	Unhealthy	0.53	0.57	0.59	0.61	0.63
	in 40s	0.58	0.63	0.64	0.66	0.68		0.56	0.60	0.62	0.64	0.65
	in 50s	0.61	0.65	0.67	0.68	0.70		0.58	0.63	0.64	0.66	0.68
	in 60s	0.63	0.67	0.69	0.71	0.72		0.61	0.65	0.67	0.68	0.70
	in 70s				0.73	0.74					0.71	0.72
	in 80s				0.75	0.76					0.73	0.74
Prob. = 0.62		0.57	0.61	0.63	0.67	0.69		0.54	0.59	0.60	0.65	0.66

Note: Calculations of the author.

Table *continued*

	Age	UNE	PART	FULL	SELF	NLF		UNE	PART	FULL	SELF	NLF
Decile 2	in 10s	0.54	0.59	0.61	0.62	0.64	Decile 2	0.52	0.56	0.58	0.60	0.62
and	in 20s	0.57	0.61	0.63	0.65	0.67	and	0.54	0.59	0.61	0.62	0.64
Healthy	in 30s	0.60	0.64	0.66	0.67	0.69	Unhealthy	0.57	0.61	0.63	0.65	0.67
	in 40s	0.62	0.66	0.68	0.70	0.71		0.60	0.64	0.66	0.67	0.69
	in 50s	0.65	0.69	0.70	0.72	0.73		0.62	0.66	0.68	0.70	0.71
	in 60s	0.67	0.71	0.72	0.74	0.75		0.65	0.69	0.70	0.72	0.73
	in 70s				0.76	0.77					0.74	0.75
	in 80s				0.78	0.79					0.76	0.77
Prob. = 0.66		0.61	0.65	0.67	0.70	0.72		0.58	0.63	0.64	0.68	0.70
Decile 1	in 10s	0.58	0.63	0.65	0.66	0.68	Decile 1	0.56	0.60	0.62	0.64	0.65
and	in 20s	0.61	0.65	0.67	0.69	0.70	and	0.58	0.63	0.65	0.66	0.68
Healthy	in 30s	0.64	0.68	0.69	0.71	0.72	Unhealthy	0.61	0.65	0.67	0.69	0.70
	in 40s	0.66	0.70	0.72	0.73	0.74		0.64	0.68	0.69	0.71	0.72
	in 50s	0.68	0.72	0.74	0.75	0.76		0.66	0.70	0.71	0.73	0.74
	in 60s	0.71	0.74	0.76	0.77	0.78		0.68	0.72	0.74	0.75	0.76
	in 70s				0.79	0.80					0.77	0.78
	in 80s				0.81	0.82					0.79	0.80
Prob. = 0.69	0.69	0.65	0.69	0.70	0.74	0.75		0.62	0.66	0.68	0.72	0.73

Note: Calculations of the author. UNE = unemployed; PART = part-time employment; FULL = full-time employment; SELF = self-employed; NLF = not in the labor force.

Assumptions:

1. Healthy-and-employed as well as healthy-and-not-in-the-labor-force have "very good" (4) self-assessment of own health. Healthy-and-unemployed have "good" (3) self-assessment of own health. Unhealthy-and-employed as well as unhealthy-and-not-in-the-labor-force have "good" (3) self-assessment of own health. Unhealthy-and-unemployed have "fair" (2) self-assessment of own health.
2. Deciles 7 to 10 have completed university education (7), decile 6 has incomplete university education (6), decile 5 has completed secondary education (5), decile 4 has incomplete secondary education (4), decile 3 has completed primary education (3), decile 2 has incomplete primary education, and decile 1 has no formal education (1).
3. Decile status also corresponds to self-assessment of own financial status.
4. Retirement is age 65 but may still work until age 69 then classified as self-employed from age 70 or retired.