Contents lists available at ScienceDirect

Research Policy

journal homepage: www.elsevier.com/locate/respol

Are you too young for the Nobel Prize?

John Baffes^a, Athanasios Vamvakidis^{b,*,1}

^a World Bank. USA

^b International Monetary Fund, 700 19th Street NW, Washington DC 20431, USA

ARTICLE INFO

Article history: Received 28 June 2010 Received in revised form 4 June 2011 Accepted 4 June 2011 Available online 22 July 2011

JEL classification: C80 D02

D79 J24 -Y80

Keywords: Nobel Prize Nobel laureates Age Discrimination

ABSTRACT

Although age is not supposed to be a criterion for the award of the Nobel Prize, it is commonly believed that it does play a role. Indeed, econometric evidence in this paper also suggests such a role. However, the paper finds that, if there is a preference for older Nobel candidates, this is introduced during the nomination process. The paper actually finds that the Nobel Committee does not favor older nominees and that, if anything, it seems to partially offset the age premium introduced by the nominators.

© 2011 Elsevier B.V. All rights reserved.

"The whole of my remaining realizable estate shall be annually distributed in the form of prizes to those who, during the preceding year, shall have conferred the greatest benefit on mankind. ... It is my express wish that ... the most worthy shall receive the prize." (Excerpt from Alfred Nobel's Will)

1. Introduction

Consider a young and an old candidate for the Nobel Prize whose contributions are recognized as Nobel-worthy at the same time. Given that the Nobel Prize is not awarded posthumously, will the Prize be "rushed" to the older candidate? The answer should be negative according to Nobel's will. Indeed, when a Nobelprize.org viewer noted to the Secretary of the Economics Prize Committee that "... it seems that the chances [to receive the Prize] are decreasing along the time if we take into account that economists just live a finite horizon" the response was, not surprisingly "... we do not discriminate based on age." Do they?

Detecting such discrimination or bias presents some difficulties. Data on nominations are available with a 50-year lag and hence, for almost half of the life of the Nobel Prize we have information for Laureates, not for nominees. And, for the period during which data on nominees exist, it is far from adequate for empirical work. On the other hand, given that the Nobel Prize is not awarded posthumously, any statistical analysis will inevitably exclude people that made Nobel-worthy contributions but did not live long enough to be awarded the Prize.

Without downplaying such difficulties, this paper is a first attempt to address the question of whether age plays a role in the Nobel decision making process. We do so in a two step process. First, using the full sample for all Laureates, we identify determinants of the age at which candidates receive the Prize, some of which could suggest a preference for older candidates. Then, based on a limited (but richer) sample we conclude that, if such a preference exists, it originates during nomination, not during the final selection by the Nobel Committee. If anything, the Nobel Committee offsets, at least partially, such a preference, by selecting younger candidates from the pool proposed by the nominators.

The age of Nobel Laureates has been discussed extensively in various contexts. As early as the beginning of the Prize, Svante Arrhenius (Nobel in Chemistry, 1903) warned that the Prize should not develop into old-age pensions. The Economist (2000) noted that



Corresponding author

E-mail addresses: jbaffes@worldbank.org (J. Baffes), avamvakidis@imf.org (A. Vamvakidis).

The views in this paper are those of the authors and should not be attributed to the World Bank or the IMF. Comments and suggestions from seminar participants at the IMF and the University of Massachusetts, two anonymous referees and the Editor are greatly appreciated.

Table 1

Summary statistics for nobel recepients (excludes institutions, 1901–2009).

	Total	Physics	Chemistry	Medicine	Literature	Peace	Economics
NOBEL-RELATED STATISTICS							
Number of Awards ^a	806	187	157	195	106	97	64
Single Prize Recipients	320	47	62	37	98	54	22
Prize shared by 2 recipients	120	28	22	31	4	20	15
Prize shared by 3 recipients	82	28	17	32	0	1	4
Prize shared for the same research	151	41	29	56	0	10	15
Average number of recipients	1.53	1.82	1.55	1.95	1.04	1.29	1.56
Prize awarded to women	41	2	4	10	12	12	1
AGE-RELATED STATISTICS							
Average age, all Laureates	59	55	57	57	64	62	67
Average age of women	59	47	52	62	61	57	76
Age of youngest recipient	25	25	35	32	42	32	51
Age of oldest recipient	90	88	85	87	88	87	90
Standard deviation of age	12.1	13.3	11.0	11.2	10.2	11.9	8.3
Average age of contribution	43	38	42	43	48	54	33
Contribution-award gap	16	17	14	14	16	8	34
Average annual age increase ^b	0.11	0.21	0.17	0.10	0.08	-0.07	0.01

Sources: See Appendix A.

^a During 1901–1909, 802 individuals and 20 organizations were awarded the Nobel Prize (23 awards were given to organizations, with one organization receiving 3 awards and another one receiving 2 awards). The number reported in the table, 806, counts separately the four Laureates who were awarded the Prize twice. They are: Marie Curie (Physics 1903 and Chemistry 1911)—the only female to receive two Nobel Prizes; John Bardeen (Physics 1956 and 1972); Frederick Sanger (Chemistry 1958 and 1980); and Linus Pauling (Chemistry 1954 and Peace 1962)—the only Laureate to have been awarded two unshared Prizes.

^b The annual age increase (percent) is based on a linear trend regression.

"...the awards committee is giving the impression that they have a list of the great and good to get through before those worthies shuffle off to the big laboratory in the sky." Feldman (2000, p. 124) wrote that "... since one never knows when the Nobel committee will decide to award you the prize, the final advice on how to win the award is: live to a very old age. They may finally catch up with you." The Nobel Committee itself has acknowledged on a few occasions that the outcome might not have been the same, had certain candidates lived longer. When George Seferis was awarded the Prize (Nobel in Literature 1963), the announcement noted (Österling, 1963): "Now that Palamas and Sikelianos are dead, Seferis is today the representative Hellenic poet, carrying on the classical heritage." Would Seferis (1900–1971) have received the Nobel if Sikelianos (1884–1951) was alive in 1963?

The long history of the Nobel Prize provides sufficient variation to address empirically the question of what determines the age at which candidates become Nobel Laureates. Such history (1901-2009) includes 806 Prizes to individuals, 195 of which to medicine, 187 to Physics, 157 to Chemistry, 106 to Literature, 97 to Peace (excluding institutions), and 64 to Economics (Table 1). The science fields (Physics, Chemistry, and Medicine) have twice as many Laureates compared to their social counterparts (Literature, Peace, and Economics). The average age of Nobel recipients is 59 years but varies considerably, from as young as 25 (Physics 1915) to as old as 90 (Economics 2007).² Physicists are, on average, the youngest recipients (55), followed by chemists and physicians (57), Peace advocates (62), writers and poets (64), and economists (67). Almost 60% of Nobel recipients are between the ages of 45 and 65; 20 recipients are younger than 36, while 26 recipients are older than 80 (Fig. 1).

The history of nominations for the Nobel Prize is equally rich. However, as details on nominations become publicly available with a 50-year lag, our information is limited to 1901–1950. During this time, there were a total of 4247 nominations in Physics and Chemistry, corresponding to 1950 nominees, implying that the average nominee received a little more than two nominations (Table 2).

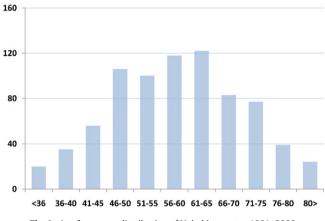


Fig. 1. Age frequency distribution of Nobel Laureates, 1901–2009.

The average age of nominees was 53 years (51 in Physics and 54 in Chemistry), with the age of nominees ranging from as young as 22 (Chemistry in 1916) and as old as 89 (Chemistry in 1949).

Although, to the best of our knowledge, no study has examined the determinants of the age of Nobel recipients, the latter has been studied in somewhat different contexts. Stephan and Levin (1993) examined the relationship between age and productivity for Nobel recipients in sciences, founding the latter to fall considerably after the age of 50. Van Dalen (1999) found that Nobel-worthy research is undertaken at a younger age for economists compared to scientists, although economists receive the Prize much later in life. Rablen and Oswald (2007) concluded that winning the Nobel Prize leads to a longer life. Finally, a number of papers have attempted to predict Nobel Laureates (Ashton and Oppenheim, 1978; Gingras and Wallace, 2008).

2. Determinants of the age at which candidates become laureates

2.1. Discussion

An obvious determinant of the age of Nobel recipients is the age when the Nobel-worthy contribution took place. Contributions made early in life could lead to early awards. However, the correla-

² The youngest person ever to be awarded the Nobel Prize was William Lawrence Bragg, who, at the age of 25, shared the 1915 Nobel in Physics with his 53-year old father, Sir William Henry Bragg. The oldest person was Leonid Hurwicz, who was awarded the 2007 Prize in Economics at the age of 90.

Download English Version:

https://daneshyari.com/en/article/985041

Download Persian Version:

https://daneshyari.com/article/985041

Daneshyari.com