Worker To Retiree Ratio

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The worker to Social Security Beneficiary ratio is simply the number of workers in our economy to one beneficiary. When Social Security began in 1937, there were no beneficiaries only workers. Social Security began paying Old Age Social Security benefits in 1940. These benefits were paid to those who had paid Social Security taxes and were age 65 and over. This means any retiree who earned benefits must have been working for the previous three years.

The number of individuals working past 65 in 1937 were few and as age increases the numbers decreased. The result was in 1941, only about 1 million individuals out of over 9 million were eligible for Old Age Social Security benefits.

On the working side though, every worker working and who was not in a work category not covered by Social Security paid the social security tax. In 1941 Social Security reports there were 49.5 million workers.

There are two ratios which can be calculated. One is based on those who paid social security taxes and those who received social security benefits. This first method **excludes** 90% of the retirement population resulting in a very large worker to retiree ratio. However, this ratio quickly drops with each passing year as more retirees meet eligibility requirements and those who did not pass on. The second ratio is based on the total workers to total retirees over a particular age. The table below shows this ratio beginning in 1941. Unlike the social security calculated ratio, this number is much smaller and does not show such a the dramatic change over the past sixty-five years..

The social security ratio in many ways is misleading. Some interpret a higher ratio as indicating few individuals made it to age 65 to retire. This then leads to a conclusion that there has been a dramatic increase in life expectancy. The truth is that the ratio has little correlation to increases in life expectancy. The one and only reason behind the reduction in this ratio is due to declining birth rates.

If we have zero growth rate (we have enough children to replace ourselves only), we will reach an equilibrium where the ratio will then be directly related to life expectancy. If however, we were to experience 2% population growth each year, we could expect to have 1.45 additional workers for every retiree in forty five years. The reduction in the worker to retiree ratio is solely due to the drop in birth rates. If we were to add the 1.45 number of 2% growth in births, we would be back up to almost a ratio of 5:1 which is close to the value in 1941.

The table below shows the ratio of potential workers in the US population versus Potential retirees based on age. This table classifies those over age 20 as a potential worker. The total population over age 20 and up to the age listed multiplied by 80% yields the total number of workers. As one can see, the ratio has been decreasing since the inception of Social Security.

In summary, it is not increased life expectancy which is causing the problem, nor is it the baby boom generation. Rather it is the initial tax rate, which is the root cause.

Worker to Retire Ratio Versus Retirement Age															
Age	**1941**	**1950**	**1960**	**1970**	**1980**	**1990**	**2000**	**2010**	**2020**	**2030**	**2040**	**2050**	**2060**	**2070**	**2080**
62	4.5	3.9	3.2	3.0	2.9	2.8	2.9	2.6	2.1	1.7	1.7	1.6	1.5	1.5	1.5
63	5.0	4.3	3.5	3.3	3.1	3.0	3.1	2.9	2.2	1.8	1.8	1.7	1.6	1.6	1.6
64	5.5	4.7	3.8	3.6	3.4	3.2	3.3	3.2	2.5	2.0	1.9	1.9	1.8	1.7	1.7
65	6.1	5.2	4.2	3.9	3.7	3.5	3.5	3.4	2.7	2.1	2.0	2.0	1.9	1.8	1.8
66	6.7	5.8	4.6	4.3	4.0	3.8	3.8	3.7	3.0	2.3	2.2	2.2	2.0	2.0	1.9
67	7.5	6.4	5.1	4.7	4.4	4.1	4.0	4.1	3.3	2.5	2.3	2.3	2.2	2.1	2.1
68	8.4	7.2	5.7	5.1	4.9	4.5	4.3	4.4	3.6	2.7	2.5	2.5	2.4	2.3	2.2
69	9.4	8.1	6.3	5.7	5.3	4.9	4.7	4.8	4.0	3.0	2.7	2.7	2.6	2.4	2.4
70	10.7	9.1	7.0	6.3	5.9	5.4	5.0	5.3	4.4	3.3	2.9	3.0	2.8	2.6	2.6
71	12.1	10.3	7.9	6.9	6.5	6.0	5.5	5.7	4.9	3.6	3.1	3.2	3.1	2.9	2.8
72	13.8	11.6	8.9	7.7	7.2	6.6	6.0	6.2	5.4	4.0	3.4	3.5	3.4	3.1	3.0
73	15.8	13.2	10.1	8.6	8.0	7.3	6.5	6.8	6.1	4.4	3.7	3.8	3.7	3.4	3.3
74	18.2	15.1	11.5	9.6	9.0	8.1	7.2	7.5	6.9	4.9	4.0	4.1	4.0	3.7	3.5
75	21.1	17.3	13.1	10.9	10.1	9.0	7.9	8.2	7.7	5.5	4.4	4.5	4.4	4.0	3.9
76	24.6	19.9	15.1	12.3	11.3	10.1	8.8	9.0	8.6	6.2	4.8	4.9	4.8	4.4	4.2
77	28.8	23.2	17.5	14.1	12.8	11.4	9.9	9.9	9.7	7.0	5.4	5.3	5.3	4.8	4.6
78	34.0	27.1	20.5	16.3	14.6	12.9	11.1	10.9	11.0	8.0	6.0	5.8	5.9	5.4	5.1
79	40.3	32.0	24.1	19.0	16.6	14.7	12.6	12.1	12.5	9.1	6.7	6.4	6.6	6.0	5.6
80	48.1	38.1	28.5	22.3	19.1	16.8	14.4	13.6	14.1	10.5	7.6	7.1	7.4	6.7	6.2
81	57.9	45.8	34.1	26.4	22.1	19.3	16.5	15.4	16.1	12.1	8.7	7.9	8.3	7.5	6.9
82	70.4	55.6	41.0	31.6	25.7	22.4	19.0	17.5	18.4	14.1	10.0	8.9	9.3	8.5	7.7
83	86.6	68.3	49.8	38.0	30.2	26.2	22.0	20.1	21.1	16.6	11.5	10.0	10.6	9.7	8.7