

An International Comparison and Analysis of Japan's High Suicide Rate

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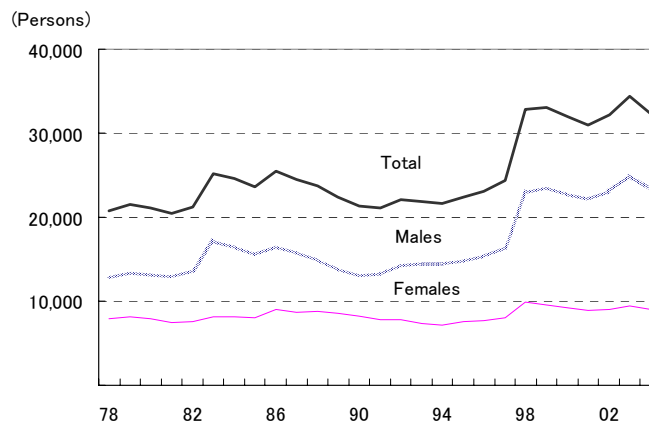
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Introduction

According to the most recent data from the National Police Agency (NPA), "Summary of Suicide Statistics for 2003" (released July 2004), 34,427 suicide cases were reported in 2003, marking Japan's sixth straight year of over 30,000 suicide cases.

Suicide trends since 1978 are shown by gender and total in Figure 1. The number of suicide cases surged 25.3% in 1983, but fluctuated only around 10% per year for the next 15 years, hovering in the low to mid 20,000 range. Then in 1998 the total surged by an astonishing 40.2%. Despite year-on-year fluctuations below 10% since then, the number of suicide cases has trended upward, and shows no sign of returning to pre-1997 levels. The 1998 surge is mainly attributed to the increase among males (the number of male suicide cases rose 34.7%, compared to 23.5% for females).

Figure 1 Trend in Suicide Cases (Japan)



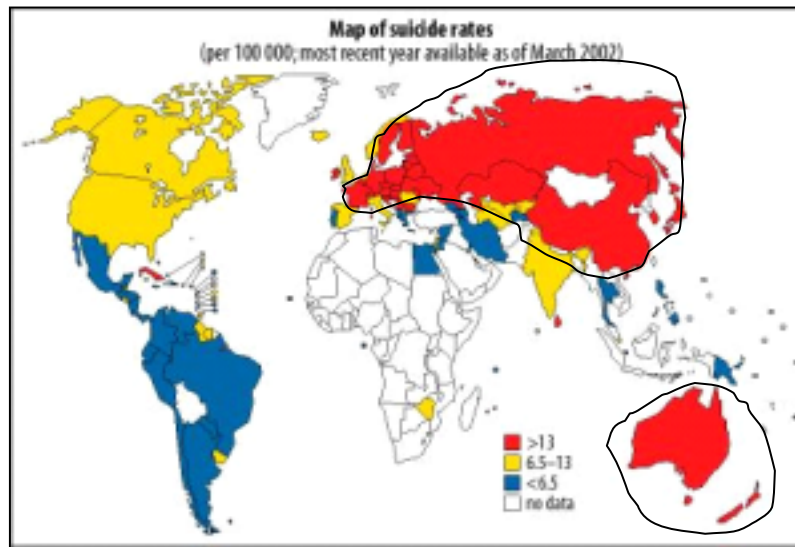
Source: National Police Agency, "Summary of Suicide Statistics for 2003."

1. World's Highest Suicide Rates

Let us see how Japan's suicide rates compare with the rest of the world. The World Health Organization has issued a "map of suicide rates" that identifies countries with high suicide rates, defining high as at least 13 suicides per 100,000 population. For clarity, we circled these countries, which are concentrated in northern Europe, particularly the republics of the former USSR, and

the Republic of Korea, New Zealand, Australia, and Japan (Figure 2).

Figure 2 WHO Map of Suicide Rates



Source: WHO web site (www.who.int/mental_health/prevention/suicide/suicideprevent/en/index.html)

The world's highest suicide rates are found in the republics of the former USSR. However, it would be inappropriate to compare these countries with Japan because they have vastly different economic conditions, as well as a high incidence of alcohol-related deaths induced by cold climate and political instability. A more apt comparison is to focus on OECD countries, drawing on data from *World Statistics 2003* (Statistical Bureau, Ministry of Internal Affairs and Communications), and the World Health Organization's fact sheet, "Suicide Rates per 100,000 by Country, Year, and Sex."

Figure 3 Suicide Rate (OECD)

			(per 100,000)		
Rank	Country	Suicide rate	Rank	Country	Suicide rate
1	Hungary	32.6	16	Ireland	13.4
2	Japan	24.8	17	Australia	13.1
3	Finland	23.4	18	Norway	12.4
4	Belgium	21.3	19	Canada	12.3
5	Switzerland	20.2	20	Iceland	12.2
6	Austria	19.6	21	United States	11.3
7	France	18.0	22	Netherlands	9.6
8	Czech Republic	16.1	23	Spain	8.3
9	New Zealand	15.1	24	Italy	7.8
10	Poland	15.0	25	United Kingdom	7.5
11	Luxemburg	14.5	26	Portugal	5.2
12	Denmark	14.4	27	Greece	3.8
13	Sweden	13.9	28	Mexico	3.5
14	Republic of Korea	13.7			
15	Germany	13.6			

Sources: MIC, *World Statistics 2003*; WHO, "Suicide Rates per 100,000 by Country, Year, and Sex."

Of the 28 OECD countries compared (Slovakia and Turkey are excluded due to incomplete data), Japan's overall suicide rate of 24.8 per 100,000 population ranks second only to Hungary. By

gender, Japan's 35.2 suicide rate for males is also second only to Hungary, while the 13.4 rate for females ranks first in the world. Clearly, Japan's suicide rates are exceptional even by OECD standards.

Figure 4 Male Suicide Rate (OECD)

(per 100,000)					
Rank	Country	Suicide rate	Rank	Country	Suicide rate
1	Hungary	45.5	16	New Zealand	19.8
2	Japan	35.2	17	Sweden	18.9
3	Finland	32.3	18	Norway	18.4
4	Belgium	31.2	19	Canada	18.4
5	Austria	30.5	20	Iceland	17.3
6	Luxemburg	28.6	21	United States	17.1
7	Switzerland	27.8	22	Spain	13.1
8	Poland	26.7	23	Netherlands	12.7
9	France	26.1	24	United Kingdom	11.8
10	Czech Republic	26.0	25	Italy	10.9
11	Denmark	21.4	26	Portugal	8.5
12	Germany	20.4	27	Greece	5.7
13	Republic of Korea	20.3	28	Mexico	5.4
14	Ireland	20.3			
15	Australia	20.1			

Figure 5 Female Suicide Rate (OECD)

(per 100,000)					
Rank	Country	Suicide rate	Rank	Country	Suicide rate
1	Japan	13.4	16	Australia	5.3
2	Hungary	12.2	17	Canada	5.2
3	Belgium	11.4	18	Iceland	5.1
4	Switzerland	10.8	19	Poland	4.3
5	Finland	10.2	20	Ireland	4.3
6	Luxemburg	10.2	21	New Zealand	4.2
7	France	9.4	22	United States	4.0
8	Austria	8.7	23	Spain	4.0
9	Republic of Korea	8.6	24	Italy	3.5
10	Sweden	8.1	25	United Kingdom	3.3
11	Denmark	7.4	26	Portugal	2.0
12	Germany	7.0	27	Greece	1.6
13	Czech Republic	6.3	28	Mexico	1.0
14	Netherlands	6.2			
15	Norway	6.0			

1. Gender Difference

As we already noted, the suicide rate in Japan differs considerably by gender. To compare gender-based differences in other countries, we rearranged the data to show the percentage of male suicide cases in the total (Figure 6).

Figure 6 Percentage of Male Suicides (OECD)

Rank	Country	Males/ Total	Rank	Country	Males/ Total
1	Poland	86.1%	16	Finland	76.0%
2	Mexico	84.4%	17	Italy	75.7%
3	Ireland	82.5%	18	Norway	75.4%
4	New Zealand	82.5%	19	Germany	74.5%
5	United States	81.0%	20	Denmark	74.3%
6	Portugal	81.0%	21	Luxemburg	73.7%
7	Czech Republic	80.5%	22	France	73.5%
8	Australia	79.1%	23	Belgium	73.2%
9	Hungary	78.9%	24	Japan	72.4%
10	United Kingdom	78.1%	25	Switzerland	72.0%
11	Greece	78.1%	26	Republic of Korea	70.2%
12	Canada	78.0%	27	Sweden	70.0%
13	Austria	77.8%	28	Netherlands	67.2%
14	Iceland	77.2%			
15	Spain	76.6%			

Year after year, a distressing aspect of Japan's suicide data is that males comprise over 70% of suicide deaths. As alarming as this is, the OECD data reveals that the problem is international in scope. Indeed, Japan even ranks low in this category.

2. Age Distribution

Data on the distribution of suicide cases by age and gender in 2003 is available from the NPA (Figure 7).

Figure 7 Suicide Distribution by Age and Gender (Japan)

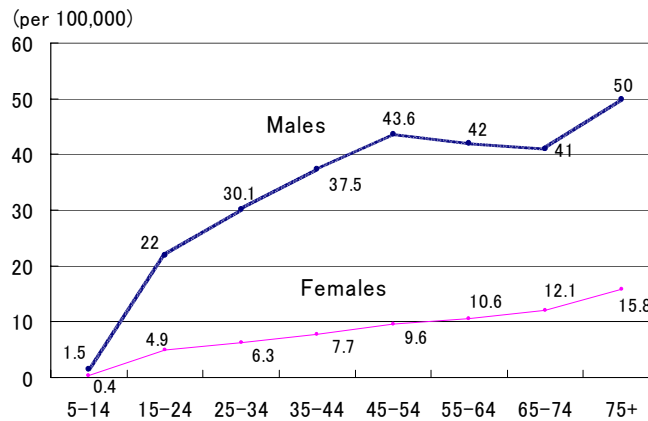
	Under 20	20s	30s	40s	50s	60+	Unknown
Males	1.1%	6.8%	9.8%	12.7%	20.0%	21.2%	0.9%
Females	0.7%	2.9%	3.6%	3.0%	5.0%	12.2%	0.8%

Source: NPA, "Summary of Suicide Data for 2003."

The broadly defined age group of males aged 60 and over (21.2%) comprise the largest group, followed by males aged 50-59 (20.0%) and males aged 40-49 (12.7%). In other words, males aged 50 and over comprise 41% of all suicide cases; and males aged 40 and over comprise one-half of all suicide cases. The NPA's historical data also reveals that males aged 50-59 persistently lead the suicide rate in Japan.

Internationally, according to the WHO fact sheet, "Changes in the Age Distribution of Cases of Suicide," the average suicide age edged up from 1985 to 2000 due to an increase among persons aged 45 and over. In 2000, males aged 75 and over had the highest suicide rate. In many countries, the main cause of the higher age distribution of suicide is the increase among males aged 75 and over.

Figure 8 Age-Specific Suicide Rate (World)



Source: WHO, "Distribution of Suicide Rates per 100,000 by Gender and Sex, 2000."

The same pattern appears in over half of OECD countries. Males aged 75 and over comprise the largest group in (by order of suicide rate ranking): Hungary, Finland, Belgium, Switzerland, Austria, France, Czech Republic, Denmark, Sweden, Republic of Korea, Germany, Norway, U.S.A., Netherlands, Spain, and Italy (Figure 9). Thus among industrialized economies with aging populations, high suicide rates among males aged 75 and over have become a prevalent trend.

Figure 9 OECD Countries Where Males Aged 75+ Lead the Suicide Rate

			(per 100,000)		
Rank	Country	Suicide rate	Rank	Country	Suicide rate
1	Hungary	32.6	16	Ireland	13.4
2	Japan	24.8	17	Australia	13.1
3	Finland	23.4	18	Norway	12.4
4	Belgium	21.3	19	Canada	12.3
5	Switzerland	20.2	20	Iceland	12.2
6	Austria	19.6	21	United States	11.3
7	France	18.0	22	Netherlands	9.6
8	Czech Republic	16.1	23	Spain Italy	8.3
9	New Zealand	15.1	24	Italy	7.8
10	Poland	15.0	25	United Kingdom	7.5
11	Luxembourg	14.5	26	Portugal	5.2
12	Denmark	14.4	27	Greece	3.8
13	Sweden	13.9	28	Mexico	3.5
14	Republic of Korea	13.7			
15	Germany	13.6			

Note: Highlighting denotes countries in which males aged 75 and over have the highest suicide rate.
Source: WHO, "Suicide Rates per 100,000 by Country, Year, and Sex"

Another conspicuous pattern among OECD economies is the high incidence of suicide among young persons aged 25 to 44 in New Zealand, Ireland, Australia, Canada, Iceland and the U.K. However, this appears to be a divergence from the global trend.

While Japan's suicide age pattern is distinctive among OECD economies, the difference is less pronounced when compared to global trends. Internationally, as Figure 8 shows, middle-aged and older males (age 45-55) have the second highest suicide rate after males aged 75 and over. Outside of the OECD, males aged 50-59 have the highest suicide rate in Kazakhstan and other countries of

the former USSR. In this respect, Japan's age distribution of suicide resembles developing economies more than industrialized OECD economies.

2. Financial Problems Plague Japanese Men Aged 50-59

We next examine the motivation for suicide among males aged 50-59. In suicide cases where a written last statement is found, the NPA compiles data on suicide motives by age and gender.

Of such cases in fiscal 2003, approximately 70% or 7,806 involved males. As expected, males aged 50-59 comprised the largest proportion (2,322 cases). Of these, 53.2% (1,235 cases) cited financial problems such as debt or financial distress. Health-related problems were a distant second at 24.1%.

In the second highest group of males aged 40-49, financial problems also motivated 50.0% of suicides (702 cases). This shows just how deeply financial problems affect males aged 40-59. For males aged 60 and over, health-related problems motivated 53.3% of suicides, which is typical for an aging country.

Among females, financial problems are eclipsed by health-related problems, which consistently exceed 50% for all age groups from 20-29 to 60 and over, reaching 60% for age 50-59 and 70% for age 60 and over. Financial problems edge up to 20% for the 40-49 and 50-59 age groups. The correlation between age and health-related suicides is consistent with the trend among OECD economies for the suicide rate to peak among persons aged 75 and over.

Figure 10 Cause of Suicide, by Age and Gender (Japan)

	Under 20	20-29	30-39	40-49	50-59	60+	Total
Males leaving written statement	109	702	1,025	1,404	2,322	2,250	7,812
<i>Cause of suicide</i>							
Financial problem	6	195	382	702	1,235	605	3,125
(% of males leaving will)	(5.5%)	(27.8%)	(37.3%)	(50.0%)	(53.2%)	(26.9%)	(40.0%)
Work-related problem	3	69	134	163	179	35	583
(% of males leaving will)	(2.8%)	(9.8%)	(13.1%)	(11.6%)	(7.7%)	(1.6%)	(7.5%)
Health-related problem	27	159	238	300	560	1,199	2,483
(% of males leaving will)	(24.8%)	(22.6%)	(23.2%)	(21.4%)	(24.1%)	(53.3%)	(31.8%)
Females leaving written statement	68	291	285	280	542	1,155	2,621
<i>Cause of suicide</i>							
Financial problem	1	9	31	56	106	108	311
(% of females leaving will)	(1.5%)	(3.1%)	(10.9%)	(20.0%)	(19.6%)	(9.4%)	(11.9%)
Work-related problem	1	21	6	8	5	4	45
(% of females leaving will)	(1.5%)	(7.2%)	(2.1%)	(2.9%)	(0.9%)	(0.3%)	(1.7%)
Health-related problem	23	155	149	147	318	811	1,603
(% of females leaving will)	(33.8%)	(53.3%)	(52.3%)	(52.5%)	(58.7%)	(70.2%)	(61.2%)
Total	589	3,247	4,333	5,102	7,772	10,994	10,995

Source: NPA, "Summary of Suicide Data in 2003."

Since financial problems cause the high suicide rate among males aged 50-59, we next compare economic conditions in Japan with other OECD economies.

3. Perception Gap

Considering that Japan has the second highest suicide rate in the OECD, and that the leading cause is financial problems among men aged 50-59, what can we say about Japan’s economic prosperity compared to other OECD economies? Since Japan’s age distribution of suicide resembles developing economies more than OECD economies, and financial causes are so widespread, we would be tempted to think that Japan is in dire economic condition.

To examine the relationship between suicide rate and economic conditions, we first compare per capita GNP among 28 OECD economies (excluding Slovakia and Turkey, for which suicide data is incomplete). Ranking ninth with \$33,727, Japan appears not to be in any economic difficulty (Figure 11).

Figure 11 Per Capita GNP (OECD)

			(US\$)		
Rank	Country	Per capita GNP	Rank	Country	Per capita GNP
1	Luxemburg	58,440	16	Germany	29,136
2	Norway	48,754	17	Canada	27,512
3	Switzerlabnd	44,584	18	Australia	25,731
4	Denmark	39,599	19	Italy	25,571
5	Ireland	38,416	20	Spain	20,424
6	United States	37,424	21	New Zealand	19,953
7	Iceland	36,252	22	Greece	15,779
8	Sweden	33,965	23	Portugal	14,635
9	Japan	33,727	24	Republic of Korea	12,691
10	Netherlands	31,715	25	Hungary	8,381
11	Austria	31,150	26	Czech Republic	8,343
12	Finland	31,070	27	Mexico	6,051
13	United Kingdom	30,341	28	Poland	4,894
14	France	29,249			
15	Belgium	29,201			

Source: MIC, *World Statistics 2003*.

Next, we identify the rich OECD countries with at least US\$30,000 per capita GNP, and note their position in the suicide rate ranking. There are seven rich OECD countries that also have a high suicide rate (defined by the WHO as at least 13 suicides per 100,000 population): Japan, Finland, Switzerland, Austria, Luxemburg, Denmark, and Sweden.

Figure 12 Suicide Rate (Rich OECD Countries Highlighted)

			(per 100,000)		
Rank	Country	Suicide rate	Rank	Country	Suicide rate
1	Hungary	32.6	16	Ireland	13.4
2	Japan	24.8	17	Australia	13.1
3	Finland	23.4	18	Norway	12.4
4	Belgium	21.3	19	Canada	12.3
5	Switzerland	20.2	20	Iceland	12.2
6	Austria	19.6	21	United States	11.3
7	France	18.0	22	Netherlands	9.6
8	Czech Republic	16.1	23	Spain	8.3
9	New Zealand	15.1	24	Italy	7.8
10	Poland	15.0	25	United Kingdom	7.5
11	Luxemburg	14.5	26	Portugal	5.2
12	Denmark	14.4	27	Greece	3.8
13	Sweden	13.9	28	Mexico	3.5
14	Republic of Korea	13.7			
15	Germany	13.6			

Source: MIC, *World Statistics 2003*.

Excluding Japan and Luxemburg, the other five countries have a suicide rate that peaks at age 75 and over, suggesting that the main cause of suicide relates to aging. Thus age-related factors appear to play a larger role in the high suicide rate than financial factors.

Two factors make Japan unique in the OECD: the suicide rate peaks at age 50-59 and not age 75 and over, and the main cause of suicide is financial. The question then arises, why does a gap emerge between the material wealth of the economy and the widespread perception of financial distress (particularly among men)?

One hint comes from the change in suicide rate from 1990 to 2000 in OECD countries with \$20,000 per capita GNP. According to *World Statistics* (MIC), the 49.4% increase in Japan's suicide rate during this decade is the largest increase by far. Ireland is second with a 36.7% increase, and other countries have a change of approximately 20%.

During this decade, Japan saw its bubble economy collapse and stagnate for an extended period, while the rest of the world prospered. The deep financial and psychological wounds from this bitter experience may explain a large part of the surge in suicide rate.

Though less flamboyant than in the bubble era, Japan remains one of the world's most prosperous economies. Japan's current condition was perhaps best expressed by the late Koin Takada of Nara Yakushi-ji Temple: What good is material wealth if the spirit is impoverished?