

# Analysis of Suicide Statistics

## Section 1 Introduction

The number of suicides across the country in 2012 in Japan was 27,858, which was a decrease by 2,793 in number and by 9.1 % in comparison to the previous year. The number of suicides in Japan continued to be high exceeding 30,000 consecutively since 1998 when the number reached 32,863, an increase by 8,472 in comparison to the previous year and reached a record high of 34,427 in 2003. Since 2010 the number has been decreasing, however, and the total number of suicides in 2012 fell below 30,000 for the first time in 15 years.

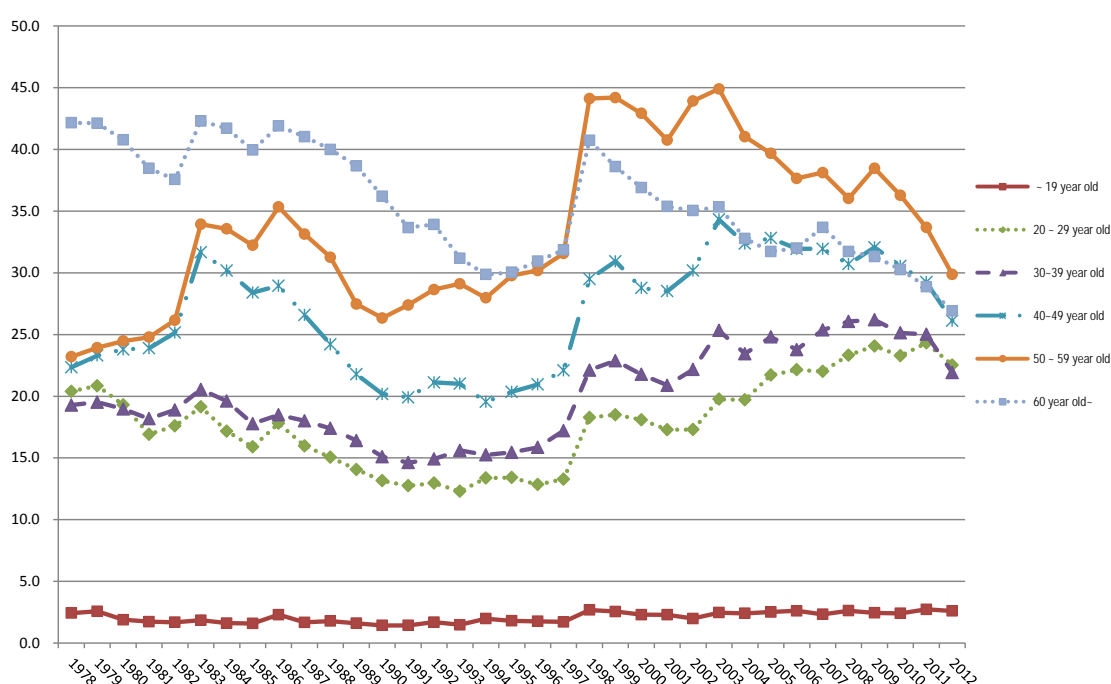
This paper takes a look at the changes observed in suicide trends from 1997 before the suicide rate increased sharply to the latest 2012. In doing so, in addition to long-term time-series source that shows socioeconomic status which is deeply related to suicides, aggregate source of the suicide statistics registration provided by National Police Agency will be fully made use of. Further, we will consider the challenges for the future with a view to achieving the numerical target based on General Principles of Suicide Prevention.

## Section 2 Changes in Suicide Trends per Age Group

**(The suicide rate of people in their 50s and over in 2012 is below that of the levels of 1997 before the sharp rise in the rate)**

The suicide rate per age group increased with the rise of age before the number of suicides started to increase sharply (Figure 1). Since 1998 when the suicide rate increased sharply, however, that of people in their 20s to 50s rose, while that of people in their 60s and over decreased, which resulted in that the suicide rate of people in their 50s overtook those of people in their 60s and over. In addition, since 2003 when the rates peaked, the suicide rate of people in their 20s to 40s is on increase, while that of people in their 50s to 60s and over is decreasing.

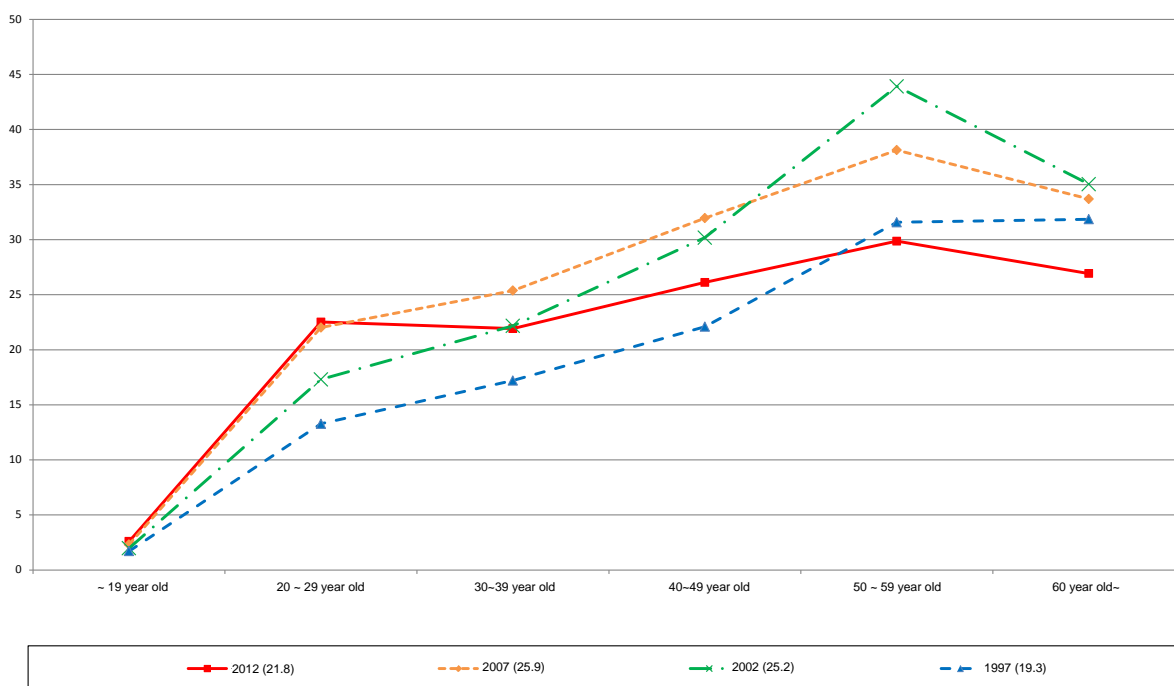
**Figure 1 / Evolution of suicide rate per age group (1978 to 2012)**



Source: National Police Agency "Suicide statistics" and Ministry of Internal Affairs and Communications "Population Census" and "Population Estimates", prepared by the Cabinet Office

According to the evolution of suicide rate per age group of every five years (Figure 2), the decrease in suicide rate, particularly, in the elderly is significant. When compared to that of 1997 just before the suicide rate experienced a sharp increase, the suicide rate of people in their 60s and over (1997: 31.6) is below that of 1997 since 2008 and it was 26.9 in 2012. That of people in their 50s stood at 29.9 falling below the level of 1997 for the first time. In the meantime, the suicide rate of people in their 20s (1997:13.3) which is lower than that of other age groups recorded a high level with 24.3 in 2011 and 22.5 in 2012. As a result, the difference in suicide rate per age group has been significantly reduced.

**Figure 2 / Evolution of the suicide rate per age group (1997, 2002, 2007 and 2012)**



Source: Cabinet Office, National Police Agency, “State of suicide in 2012”

Summing up the above, the suicide rate in 2012 is still higher in all the age groups than that before the sharp increase except that of people in their 50s. It is understood that there is a big difference in the evolution of the suicide rate per age group, accordingly.

### Section 3 Changes in Suicide Trends by Cause and Factor

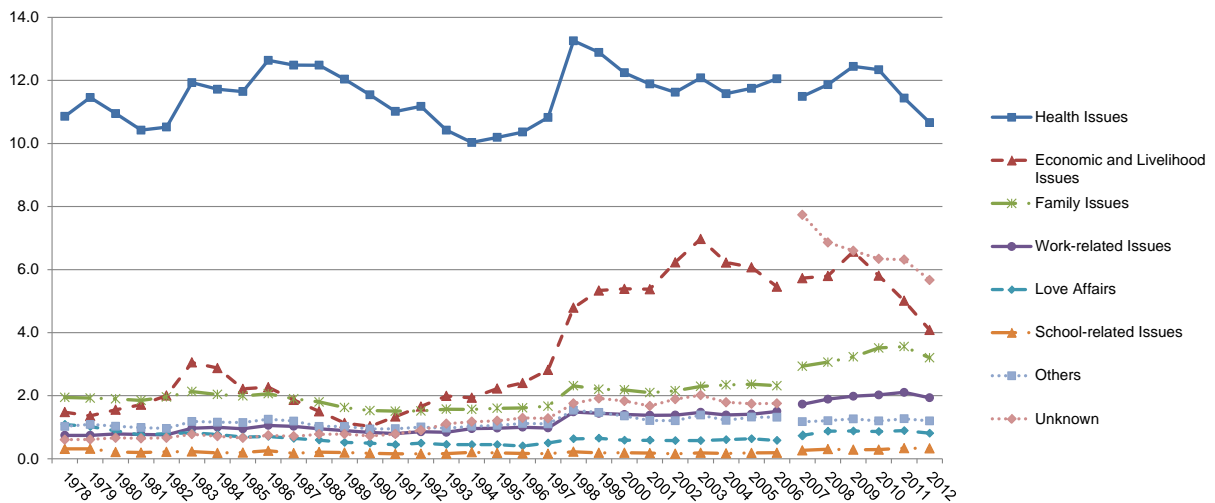
**(The peak of the occurrence of suicides because of health issues was registered in 1998, while the peaks because of “Economic and Livelihood Issues” were registered in 2003 and 2009)**

The suicide rate by cause and factor (Figure 3) is most highly associated with “health issues” followed by “economic and livelihood issues,” “family issues,” “work-related issues,” etc. and this order has not changed since just before the sharp increase of the suicide rate until now. In 1998 when the suicide rate registered a sharp increase, these were the main causes and factors. Thereafter, “health issues” have been in slight decrease with small fluctuations, while “economic and livelihood issues” continued to be high and peaked in 2003, and both “family issues” and “work-related issues” slightly increased.

The evolution of suicide rate in recent years show a decrease in “health issues” and “economic and livelihood issues” since 2009 for three years consecutively, registering 10.7 and 4.1 in 2012, respectively. Particularly, “economic and livelihood issues” have undergone a significant decrease of 38 percent in these three years. In addition, “family issues” and “work-related issues” which have been showing a moderate increase but dropped in 2012, registering 3.2 and 1.9, respectively.

The suicide rate because of “health issues” and “economic and livelihood issues” in 2012 apparently seem to fall below the level before the sharp increase, while no decreasing trend has been observed in “family issues” and “work-related issues.” It is understood that there is also a big difference in the evolution of suicide rate by cause and factor, accordingly.

**Figure 3 / Evolution of suicide rate by cause and factor (1978 to 2006) & (2007 to 2012)**

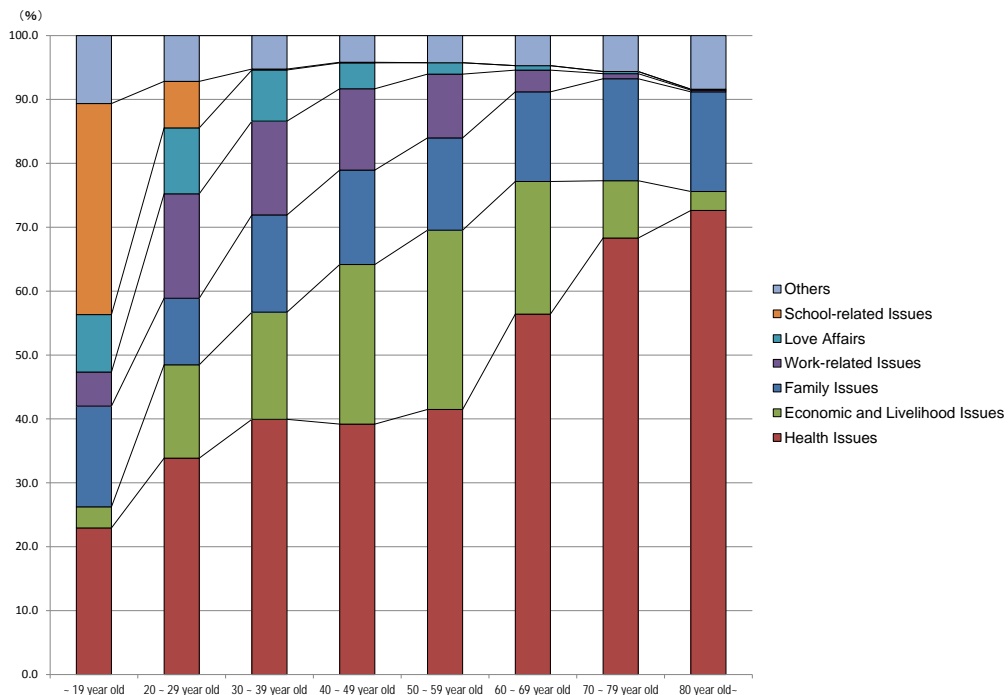


Source: National Police Agency “Suicide statistics” and Ministry of Internal Affairs and Communications “Population Census” and “Population Estimates”, prepared by the Cabinet Office

**(The leading cause and factor for suicide in the elderly is overwhelmingly “health issues,” while that of young people is wide-ranging)**

According to the percentage of the causes and factors for suicides per age group relative to the total causes or factors (Figure 4), “health issues” account for 56.4 percent in people in their 60s and they account for 68.3 percent and 72.6 percent in people in their 70s and in their 80s and over, respectively, exceeding by far “health issues” and “economic and livelihood issues”. In the meantime, the causes and factors for suicides of young people are wide-ranging.

**Figure 4 / Percentage of the causes or factors for suicides per age group relative to the total causes or factors (except those unknown) (2012)**

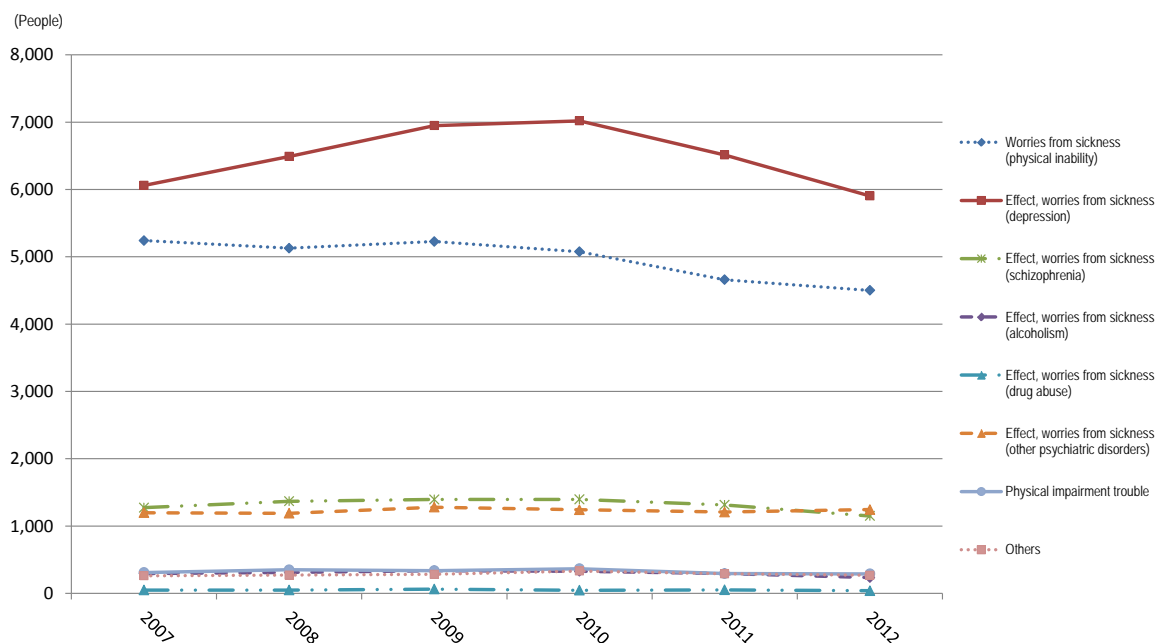


Source: National Police Agency “Suicide statistics”, prepared by the Cabinet Office

## (1) Health Issues

In light of the evolution of the number of suicides by cause and factor derived from “health issues” (Figure 5), a significant number of suicides are attributable to “effect, worries from sickness (depression)” and “worries from sickness (physical sickness)” and the trend remains unchanged.

**Figure 5 / Evolution of the number of suicides by cause and factor derived from “health issues”**

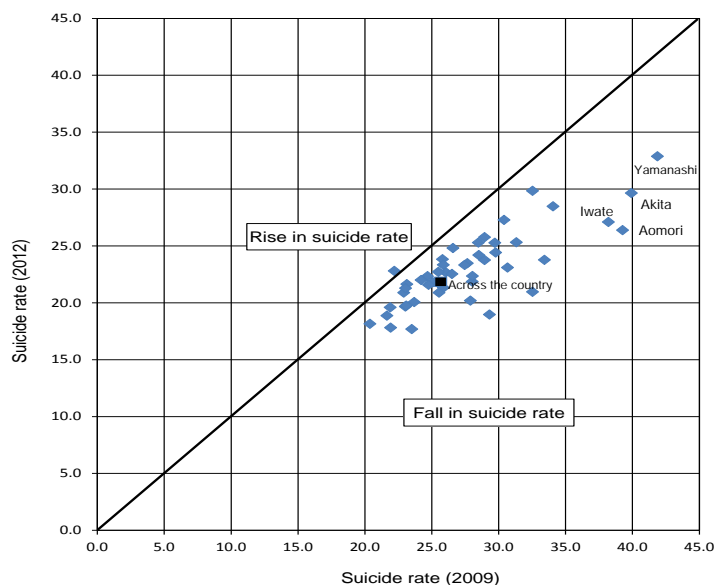


Source: National Police Agency “Suicide statistics”, prepared by the Cabinet Office

## (“Health issues” are more seriously addressed now across the country.)

In light of the changes in the rate of suicides by prefecture in recent years (Figure 6), it is observed that the rate has decreased in nearly all of the prefectures and in particular, in Akita, Aomori and Iwate prefectures which tackled the suicide prevention with a pioneer spirit where the suicide rate was high in 2009, the rate has fallen significantly in 2012.

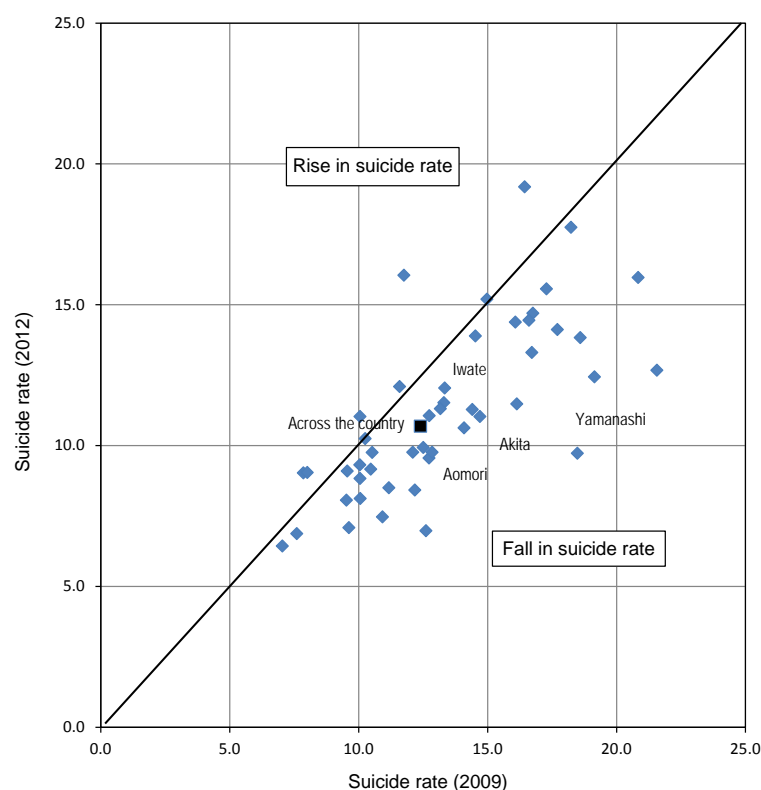
**Figure 6 / Changes in suicide rate by prefecture (from 2009 to 2012)**



Source: National Police Agency “Suicide statistics” and Ministry of Internal Affairs and Communications “Population Estimates”, prepared by the Cabinet Office

In addition, according to the changes in suicide rate because of “health problems” (Figure 7) by prefecture in recent years, it is observed that the rate has decreased in nearly all of the prefectures and the differences between prefectures have been reduced. Incidentally, the suicide rate in Akita, Aomori and Iwate prefectures where the suicide rate were high in 2009 referred to above was not particularly high when compared to other prefectures and the fall in 2012 was not particularly large either.

**Figure 7 / Changes in suicide rate due to “health issues” by prefecture (from 2009 to 2012)**



Source: National Police Agency “Suicide statistics, prepared by the Cabinet Office

Under the circumstances, measures to address “health issues” among other measures to prevent suicide have been adopted in priority order across the country and it can be said that visible results have been achieved in many regions.

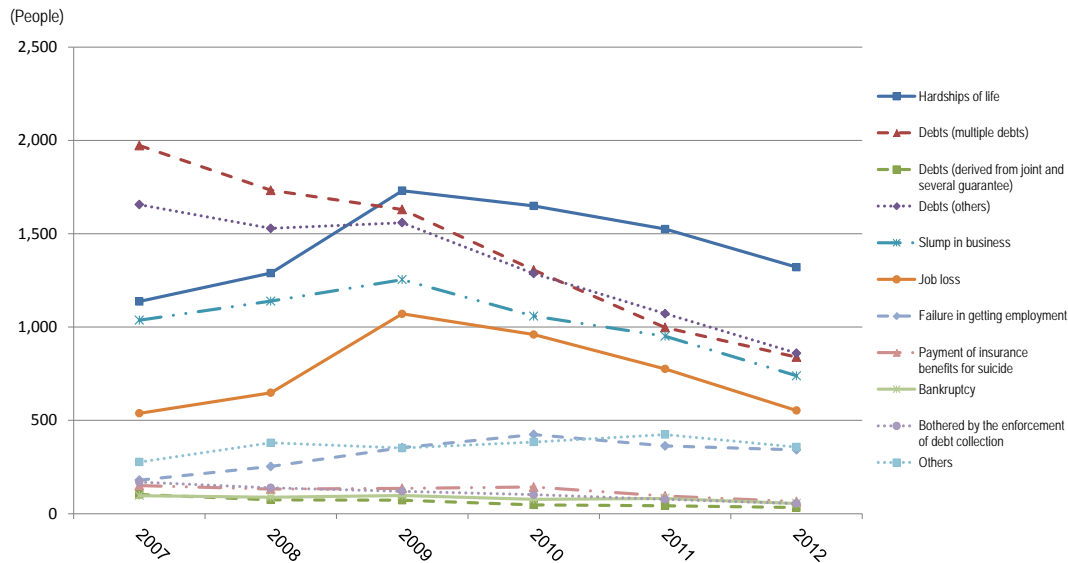
In view of the changes observed in suicide rate by cause and factor because of “health issues” (Figure 3), the rates dropped in two years from 1998 when they reached a very high level not seen in recent years to the level of the end of Showa era and they do not remain at a high level in comparison with other causes or factors which are persistently high. As the sharp increase in suicide rate in 1998 is attributed to the worsening of economic situations in the first place, it is thought that the rise in suicide rate because of “health issues” was its indirect result.

Summing up, it is highly likely that the suicide rate of 2012 because of “health issues” is approaching the level before the sharp rise on the assumption that factors related to “health issues” have not deteriorated after the sharp increase in suicide rate and in consideration of the fact that “health issues” are more seriously addressed in each region across the country.

## (2) Economic and Livelihood Issues

According to the evolution of the number of suicides by causes and factors because of “economic and livelihood issues” (Figure 8) in recent years, it is observed that suicides of people with debts (multiple debts) were most numerous followed by those of people with debts (others). The number of suicides for these reasons has significantly decreased. In the meantime, the number of suicides because of “hardships of life” peaked in 2009, but dropped later. The number of suicides attributable to “slump in business” and “job loss” which follows the “hardships of life” is also decreasing after peaking in 2009.

**Figure 8 / Evolution of the number of suicides by cause and factor because of “economic and livelihood issues”**



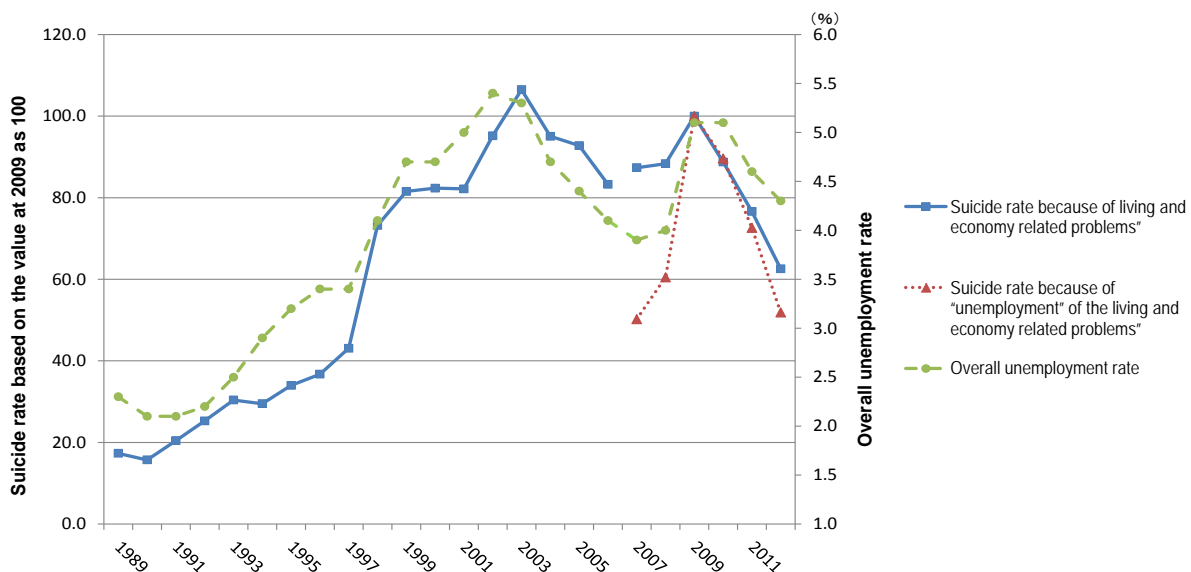
Source: National Police Agency “Suicide statistics”, prepared by the Cabinet Office

**(Unemployment rate varies according to economic situation and peaked in 2002 to 2003 and in 2009 to 2010)**

Generally, it is thought that “economic and livelihood issues” are related to the economic situation to a great extent. Here, the “unemployment rate” is used as a barometer for considering the relationship between the “unemployment” and the suicide rate.

The unemployment rate (Figure 9) continued to rise from the bottom in 1991 and reached the first peak at 5.4 % in 2002 after the collapse of the IT bubble. The rate fell thereafter, rose again from 2007 and reached the second peak at 5.1 % immediately after the Lehman Shock. Although the rate fell again to stand at 4.3 % in 2012, it has not fallen yet to the level of 3.4 %, a figure reached in 1997 before the sharp rise in suicide rate.

**Figure 9 / Evolution of suicide rate due to “economic and livelihood issues” and “job loss” of the “economic and livelihood issues” based on the value at 2009 as 100 and in unemployment rate**



Source: National Police Agency “Suicide statistic” and Ministry of Internal Affairs and Communications “Population Census”, “Population Estimates” and “Labour Force Survey”, prepared by the Cabinet Office

It is recognized that the unemployment rate is strongly related to the suicide rate due to “economic and livelihood issues” before 1997 and it is also found that it is strongly associated with the suicide rate because of “job loss”.

Therefore, it is highly likely that the suicide rate can be further reduced by lowering the unemployment rate to the level before its sharp increase. For that, however, it is necessary to implement comprehensive economic measures beyond measures simply aimed at preventing suicides. In addition, as the fact that a suicide is caused by the worsening of economic situation such as a rise in unemployment rate is itself a big problem, it is expected to address the problem from this standpoint. Incidentally, as a similar trend is observed in “hardships of life” and “slump in business” to that of “job loss”, it is considered possible to find an appropriate indicator which is related to the causes and factors in “economic and livelihood issues”.

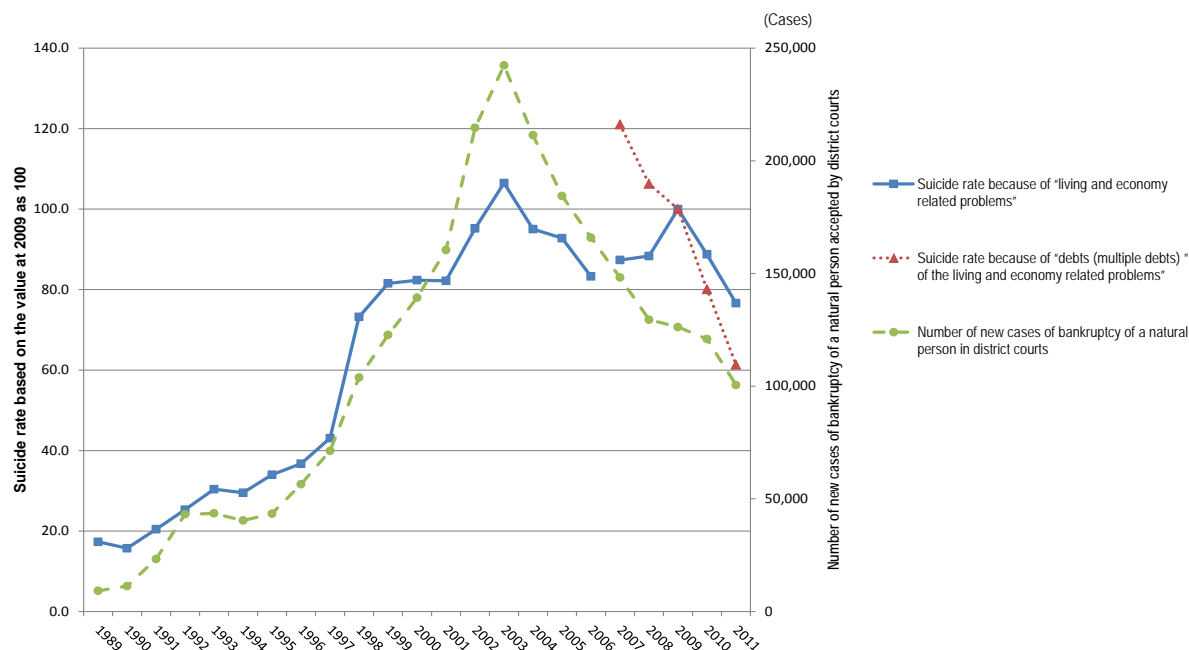
Summing up, it can be said that the suicide rate in 2012 because of “job loss”, “hardships of life,” or “slump in business” has not fallen to the level before the sharp rise, but its level varies to a great extent depending on the economic situation.

**(Personal bankruptcy has significantly decreased after the peak in 2003 due to the progress in the development of measures to combat problems related to multiple debts)**

On the other hand, the evolution of “debts (multiple debts)” is not necessarily related to the economic indicators. Viewing the relationship between the “debts (multiple debts)” and the suicide rate based on the “number of new cases of personal bankruptcy” as a related indicator, we can find that the number of new cases of bankruptcy of a natural person accepted by district courts (Figure 10) started to increase from around 1992 and reached 50,000 cases in 1996. It continued to increase sharply to reach 100,000 cases in 1998 and reached the peak in 2003 with 240,000 cases.

In the meantime, actions were actively taken around the time demanding for repayment of overpaid interests and the number was significantly reduced to around 100,000 in 2011 by the amendment of Money Lending Business Act in 2006 and its full enactment in 2010.

**Figure 10 / Evolution of suicide rate because of “economic and livelihood issues” and “debts (multiple debts)” of the “living and economy-related problems” based on the value at 2009 as 100 and in the number of new cases of bankruptcy of a natural person accepted by district courts**



Source: National Police Agency “Suicide statistics”, Ministry of Internal Affairs and Communications “Population Census” and “Population Estimates” and Court of Justice “Judicial Statistics”, prepared by the Cabinet Office

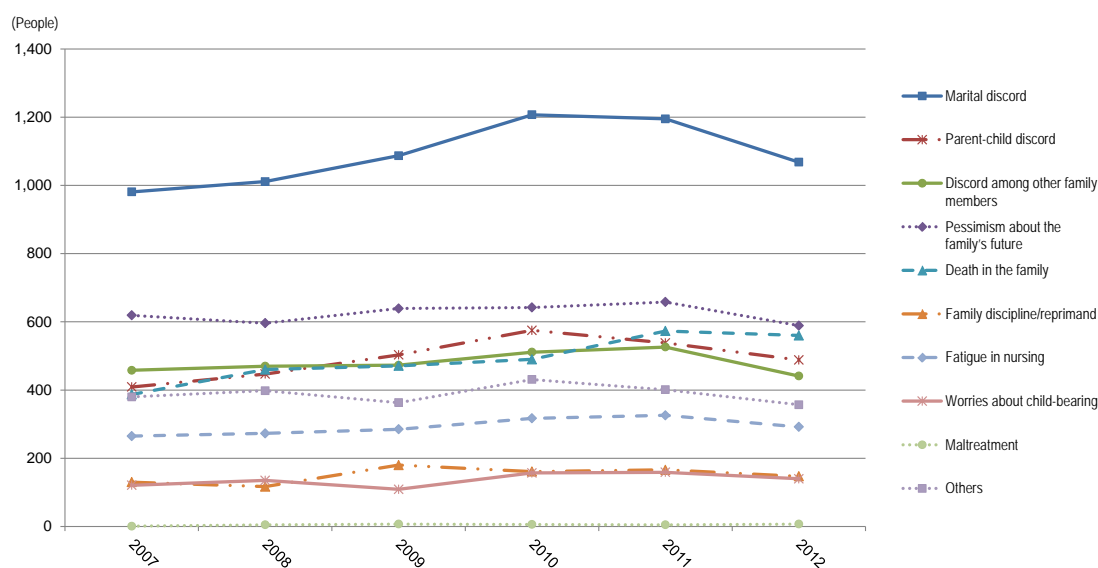
It is recognized that the number of new cases of bankruptcy of a natural person is strongly related to the suicide rate due to “economic and livelihood issues” since 1997 and it is also found that it is strongly associated with the suicide rate due to “debts (multiple debts).”

Summing up, it can be said that the suicide rate in 2012 due to “debts (multiple debts),” has fallen to the level before the sharp rise due to the progress in the development of measures to combat problems related to multiple debts, but there still remains the risk of its rising again due to the emergence of a new factor.

### (3) Family Issues

According to the evolution of suicide rate by causes and factors due to “family issues” (Figure 11) in recent years, it is observed that the number of suicides due to “marital discord” is most numerous, followed by that due to “pessimism about the family’s future”, “death in the family”, “parent-child discord”, etc.

**Figure 11 / Evolution of suicide rate by causes or factors because of “family matters”**



Source: National Police Agency “Suicide statistics”, prepared by the Cabinet Office

**(The number of people who committed suicide due to death in the family has sharply increased since 2011 when the Great East Japan Earthquake took place.)**

In the first place, the factors related to “family issues” include the relationship among family members, caring for children, nursing and care, family members’ health, attendance to higher education, finding of employment, marriage, etc. It is not easy to identify an indicator common to all these issues. In addition, it is thought that the rapid increase in suicide rate in 1998 is attributed to the worsening of economic situations indirectly in the similar manner to that in “health issues.” There is no downward trend in changes as observed in “health issues” or no downward trend has been observed since 2009.

The number of suicides due to the “death in the family” in light of the evolution of the number of suicides by causes or factors (Figure 11) increased sharply in 2011 and remains unchanged, while the number for other reasons has decreased across the board. A further study on the changes in 2011 in detail (Figure 12) shows suicides of male in their 20s to 40s as well as in their 60s, and of female in their 30s to 60s are most numerous in the past few years. In 2012, suicides of male in their 50s and of female in their 20s and 70s are most numerous.