Why Do More People Commit Suicide after the Economic Bubble

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Abstract: This paper examines the relationship between the economic recession and the high suicidal rates in Japan during the post-economic bubble in the late 1990s and early 2000s. The aim of the study is to explore the relationship between the economic recession, mental health, suicide prevalence and sociocultural dynamics. The literature review and empirical analysis show compelling evidence linking economic instability, financial distress, and unemployment to increased suicide rates. In addition, this paper explores the interplay of cultural factors for instance, stigma surrounding mental health and collective norms, in explaining the vulnerability experienced by individuals during economic recessions and hard times. Key findings emphasize the role of economic stability in increasing vulnerabilities as well as the effects of unemployment, familial relationships and self-esteem. The findings also show that the societal pressure to adhere to traditional roles, especially in times of economic uncertainty, is a key stressor affecting mental well-being. The study advocates for detailed research strategies such as interviews and surveys to further investigate causal relationships. This research provides key insights into the varying factors that contribute to suicide during economic crises, suggesting the need for holistic interventions that address both sociocultural and economic dimensions.

Keywords: Economic bubble, Suicide, Japan, Unemployment, Financial distress

1. Introduction

In the late 1980s, Japan recorded good economy marked with high stock and property prices. People often call this time the "economic bubble." During this time, Japan experienced very high levels of economic growth, which made it one of the top economies in the world. But like any bubble, this sudden increase couldn't last. In the early 1990s, there was a burst in the bubble, which caused a long-lasting economic downturn that lasted for many years. The economic collapse had a big impact on different parts of Japanese society, like mental health and suicide rates. Determining causation is difficult, but many studies have found a significant link between economic instability and an increase in suicide rates. This brings up an interesting question: Did the collapse of Japan's economy and the following long period of economic decline contribute to the increase in suicide rates during the 1990s and early 2000s. The main focus of this research is to understand the connection between the economic problems caused by the collapse of the economic bubble in Japan in the early 1990s and

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the increase in suicide rates that happened afterward. The research aims to find out why the number of suicides in Japan went up between the late 1990s and early 2000s.

2. Literature Review

Many studies have looked at the connection between economic downturns and an increase in suicide rates, especially in Japan after the bursting of the economic bubble. Some important studies have shown how economic factors like having little money, not having a job, and living in cities can affect the number of people who die by suicide [1] [2]. These studies confirm that there is a connection between economic difficulties and the significantly heightened suicide rates that occur after an economic bubble.

2.1. Journal 1

"Low Income, Unemployment, and Suicide Mortality Rates for Middle-Age Persons in Japan. Psychological Reports" shows how having less money, not having a job, and the rates of suicides among middle-aged people in Japan are connected [1]. The research shows that economic difficulties, like having little money and being unemployed, can make people feel very upset and more likely to think about ending their own lives. Their research shows that people are more at risk during times when the economy is not stable. This supports the idea that there is a strong connection between high rates of unemployment and suicide rates in Japan after an economic bubble.

2.2. Journal 2

Looking into "karoshi," which means death from working too much, and gives people information about Japan's demanding work environment [2]. The study shows that feeling the need to fit in with what society expects, especially when it comes to how dedicated we are to our jobs, can make mental health problems worse. The way cultural norms, economic factors, and mental health decline interact with each other is similar to the complicated patterns seen in the connection between economic difficulties and higher rates of suicide.

2.3. Journal 3

Iga helps people understand Japan's cultural aspects of suicide [3]. The research explores how cultural beliefs, like filial piety, combine with financial challenges to make people feel more guilty and upset when they can't meet societal expectations [3]. When cultural norms and economic difficulties come together, it can make people feel even more upset and could possibly be a reason why suicide rates are increasing.

2.4. Journal 4

Otsu studies how the development of cities, economies, and the movement of people for work affects the percentage of Japanese suicides [4]. The research shows that when cities grow quickly and economies improve, it can make people's lives better. However, it can also make people feel more alone and make their connections with others weaker. These things, along with money problems, can make suicide rates go up. The study shows that it is important to think about both money and society when looking at suicide patterns.

2.5. Synthesis of Literature Review

The literature review fits well with the essay's investigation of how economic difficulties are connected to higher suicide rates in Japan after the economic bubble. The studies show strong evidence that supports the connection between economic factors, cultural norms, and mental health outcomes. The connection between slow economic growth, high unemployment, and increased suicide rates shows how the overall economy affects people's lives. The review of existing literature agrees with the idea that it is important to take into account both economic and sociocultural factors, which aligns with the approach taken in the essay. The studies show that people are more likely to have mental health complications and think about suicide when the economy is unstable. This alignment shows that the observed correlation is complex and involves economic challenges, cultural norms, and mental health outcomes. It highlights that these factors are interconnected and not separate from each other.

3. Correlation Research Methodology

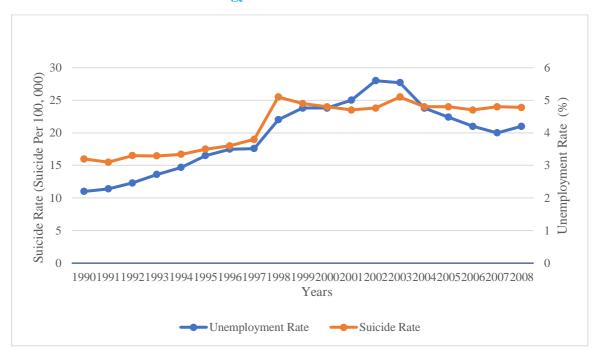


Figure 1: Unemployment against the number of suicides in Japan

The increase in suicides is concerning and shows a troubling connection between unemployment and this sad result. Japan saw a significant increase in suicides during the financial crisis that happened between 1997 and 1998, which was worrying. During this time, there was a significant increase in the number of suicide victims. The total count of suicides went up by about 35%, rising from 24,391 to 32,863 suicides, as shown in Figure 1. During these years, the economy was affected by the long-lasting consequences of the burst of the bubble economy. Some of the significant during this period include the bankruptcy of Yamaichi Securities Co., Ltd. in 1997 and the ensuing occurrence failure of the Long-Term Credit Bank of Japan in 1998 [5]. This financial crisis had an immense effect on the mental health of various people especially the ones that were working for the two banks. The number of suicides skyrocketed, especially in March 1998, which marked the end of the fiscal year. During this period, the authorities responsible for financial regulations laid strict measures to assess the institutions' financial stability. This affected many financial organizations as they had difficulties

accessing money, making many small and medium-sized ventures, including micro-enterprises, unable to pay their debts.

There is a complex relationship between unemployment, corporate bankruptcies, and suicide rates [5]. The studies show that there is a strong relationship between changes in the rates of male suicides and unemployment rates. This connection is mostly significant when combined with the closure of companies that have large debts, usually more than 10 million ven. The studies analyzed data from July 1997 to December 2004, which revealed that the number of male suicides skyrocketed. With the increase in suicides during the financial crisis of 1997-1998 it shows that it is very significant for people to understand the complex economic and social factors that affect suicide rates [6]. Having a better understanding of the specific groups of people that contributed to the significant 35% increase over these years is very crucial. Understanding the spike in suicides requires the careful examination of each factor that contributes to suicide. This will help in the analyzation of the situation in a more detailed manner which eventually helps people gain a better understanding of the numbers involved. "Recession, Unemployment, and Suicide in Japan Society for the Promotion of Science" used a careful method to study the phenomenon [5]. They thoroughly analyzed the increase in suicides from 1997 to 1998. The findings are interesting. They show that people aged 45 and above made up around 25% of the total increase of 35%. This discovery shows that middle-aged people played a very important role in causing the increase in suicide rates during the crisis.

Table 1: Decomposition of Suicide Growth Rate from 1997 to 1998 (The Number of Suicide Victims by Job Type)

		V
		Year
	1997	1998
Number of Suicide	24,391	32,868
Suicide growth rate		34.73%
Self-employed		5.44
Managerial officials		0.81
Employed		9.28
Housemakers		2.02
Jobless people		15.07
Students		082
Unknown		1.29

A more detailed analysis of the contribution percentages in various job categories, as shown in Table 1, shows a clear view of the underlying patterns. The group that made the biggest contribution to the increase, with a significant ratio, is unemployed people. They made up an impressive 15.07% of the total surge of 34.73%. Employed individuals make up 9.28% of the total, while self-employed individuals account for 5.44%. It is important to mention that the group of people called "unemployed" includes older individuals who have retired, highlighting the complex impact of unemployment [6]. However these numbers show a strong connection between the increase in suicide rates during Japan's financial crisis and the fear of not having a job hanging over the society and economy. A detailed examination of the reasons behind the heightened suicide rates, shown in Table 2, helps in understanding the factors that contributed to the 34.73% rise. Of all the suicides, 12.75% were caused by health problems, and 10.26% were caused by financial or life-related difficulties. This observation supports the common belief that depression is a key cause of suicide in Japan. At the same time, the significant impact of financial or life-related problems supports the idea that hidden social and economic challenges, like unemployment, debt, poverty, and difficult working conditions,

can potentially cause depression. The noticeable increase in suicide rates in Japan during the financial crisis from 1997 to 1998 shows a strong connection between being unemployed and feeling suicidal [7]. The information shows that when there are big changes in the economy, like people losing their jobs and companies failing, it can have a negative impact on people's mental health. This situation shows how important it is to deal with social and economic problems to protect people's well-being and mental health when the economy is struggling.

Table 2: Decomposition of Suicide Growth Rate from 1997 to 1998 (The Number of Suicide Victims by Motive)

		Year
	1997	1998
Number of Suicide	24,391	32,868
Suicide growth rate		34.73%
Family		3.36
Health		12.75
Economic or Financial		10.26
Employment-related		2.65
Relationship		0.68
School		0.31
Others		2.24
Unknown		2.48

3.1. Understanding Correlation Results

The correlation analysis in this study shows how economic indicators, cultural factors, and suicide rates are connected. Correlations show how things are related and can help individuals understand complex dynamics. The analysis shows that there is a connection between bad economic conditions, like low GDP growth and high unemployment, and the increase in suicide rates in Japan after the economic bubble. This means that when economic problems became more serious, people became more likely to experience mental health problems and think about suicide. The correlation analysis shows that cultural factors have a big impact on how economic challenges affect suicide rates. Japan's tendency to have low civic involvement and civil capital, along with the negative perception of mental health, worsens the impact of economic downturns [4]. People often feel hesitant to ask for help when they have mental health problems. This is especially true when there are societal pressures and economic instability. These factors make the impact of economic challenges on mental health even worse. The outcome is a complicated mix where cultural expectations and financial difficulties come together to create a situation that makes people more likely to experience mental health problems and have higher rates of suicide.

4. Cultural Factors and Mental Health Decline

4.1. Exploration of Japanese Cultural Characteristics (Low Civic Engagement, Low Civil Capital) and Their Potential Impact on Mental Health

The importance of working together and getting along well with others in Japanese society greatly influences how individuals experience their mental health. This cultural background became more important when the economic bubble burst, showing how cultural factors can affect mental health results. Based on Japan's collectivist traditions, traits such as limited involvement in community activities and social connections unintentionally lead to feelings of being alone and a lack of strong

support networks. Being isolated is even more noticeable when times are tough economically. This can make it harder for people to deal with their mental health. The idea of "tatemae" is very important in Japanese culture. It refers to the public image that people maintain to keep social harmony. This rule in society can make people feel like they shouldn't show their weaknesses or ask for help openly. Focusing on looking good can make it hard to admit difficulties or seek help, especially when dealing with mental health issues [3]. As the economy got worse, many people had money problems and felt pressured to hide their difficulties, which could make their mental health problems worse. When combined with economic downturns, these cultural factors create a special situation. When the economy becomes less stable, it can make it harder for people to get along with each other and find support from their communities. This can make individuals feel more alone. As people struggle with money problems, the focus on community ties might actually make them feel disconnected and alone. The mix of economic difficulties and cultural expectations puts people in a risky situation, which could make their mental health worse.

4.2. Discussion of Societal Expectations and Pressures Contributing to Mental Health Decline

In Japan, people face a lot of pressure to do well academically and professionally because society has very high expectations. These pressures become even stronger when the economy is uncertain, like after a bubble bursts. Changes in job opportunities caused by the changing economy can make societal pressures worse, which can cause a lot of mental distress [2]. In the past, having a stable job in big companies gave many Japanese people a feeling of security and a sense of who they were. But the economic downturn messed up these established career paths, making jobs unstable and making people rethink their professional paths. Feeling anxious about finding a job in an uncertain market, and feeling pressure to have a stable job, can make people feel more stressed and like they're not good enough [3]. People in a society that values following norms and contributing to the group may feel a strong fear of not meeting societal expectations. When people feel like they're not meeting the expectations of their family and community, they may feel guilty and ashamed. These emotional burdens, along with the financial difficulties of the time after the economic bubble, can all lead to a decrease in mental well-being.

4.3. Examination of the Stigma Associated with Mental Health Issues in Japanese Culture

The way people think about mental health problems makes it hard for people to ask for help and get help quickly. In Japanese culture, there is a strong emphasis on self-control, determination, and keeping peace, which can sometimes make it difficult to talk openly about mental health challenges. People often don't want to admit or accept that they have mental health issues, and they are even less likely to ask for help from a professional. Society's norms that prioritize the group's well-being over individual needs reinforce this stigma. Although the collectivist approach has advantages, it may make it difficult to talk about personal problems because admitting to mental health challenges could be seen as causing disruption within the group. The outcome is a society that prevents people from having honest discussions about their mental health and discourages them from seeking assistance, even when they are going through difficult times [8]. The economic decline after the bubble made this problem worse. As people experienced money problems and job insecurities, the tendency to pretend to be stable became stronger. Recognizing and admitting to having difficulties with one's mental health might be seen as a weakness or a lack of ability to handle things, which can make it even harder to ask for assistance. As a result, people had to deal with their mental health problems alone, without the help they needed to feel better.

5. Economic Downturn's Impact on Mental Health and Suicide

5.1. Amplifying Vulnerabilities: Economic Downturns and Mental Health

Economic downturns, which are major changes in financial stability, have impacts that go beyond just the economy [4]. The way they affect mental health is very strong, showing a complex relationship between outside difficulties and personal weaknesses. When the economy becomes unstable, it doesn't just affect financial records, but also people's emotions. The resulting impact can be very dire for people who are already struggling with mental health issues [9]. Financial instability, uncertain employment, and limited opportunities create a situation that can lead to feelings of anxiety and depression. Economic difficulties can make people feel really sad and hopeless. Economic challenges can make people feel uncertain and lose control, which can make them feel more vulnerable and worsen their existing mental health conditions [4]. In this world where money and feelings come together, when the economy goes bad, it can make people's mental health worse.

5.2. Unveiling Emotional Abysses: The Scars of Unemployment and Financial Insecurity

Unemployment is not just being without a job; it is a journey into unknown psychological difficulties. Losing a job suddenly can really hurt a person's self-esteem because it's often tied to their identity and sense of purpose. The empty space that remains is not just an absence in a job application; it is a hollow area that resounds with emotions of not being good enough and experiencing defeat. This strong emotional storm has a wide impact, affecting not only the person experiencing it but also their families, relationships, and communities [1]. Being unemployed can be mentally challenging. What used to provide order and regularity is now replaced by a disturbing emptiness. Not having a purpose or routine can make you feel lost and confused, which can affect your mental well-being. At the same time, when there is financial instability, it adds stress to every interaction, causing social networks to break and making family tensions worse. Unemployment can be like a confusing maze for people, and it can make their mental health worse and increase their chances of having different mental health problems [10].

5.3. Descent into Despair: Economic Uncertainty and Suicidal Vulnerability

Economic uncertainty can be described as a situation that causes strong emotional distress and is connected to the worrying increase in suicide rates. People easily feel hopeless and get feelings of despair and resignation when they are faced with uncertainty. In times of economic trouble such as the economic bubble in Japan, people lose hope and the illusion of opportunities disappears. This causes people to struggle with limited job options and money problems. It becomes easy for many people to commit suicide when faced with such harsh situations as they see it as their only way to escape hardship. The connection between economic uncertainty and suicide rates is a clear link, tied together by the feeling of hopelessness. When the economy is not stable, the risk of suicide increases [5]. With the effects of the economic problems on people's lives, it is clear that there should be strong support systems in place to help during such times. In addition to economic uncertainty breaking the financial stability, it also affects the emotional strength of individuals which makes it more important to offer various forms of assistance during hard times.

6. Interpretation of Correlation Findings

6.1. Discussion of the Strength and Direction of Correlations between Economic Indicators, Cultural Factors, and Suicide Rates

The correlation analysis in this study shows important information about how economic indicators, cultural factors, and suicide rates are connected. Correlations can help give a better understanding of the complex dynamics by showing the strength and direction of relationships. The analysis points out that there is a connection between bad economic signs such as low GDP and high levels of unemployment and heightened levels of suicide rates after the bubble period in Japan [4]. This is an indication that whenever economic problems become severe, there is a higher likelihood of more people experiencing mental health problems resulting in suicide.

6.2. Analysis of How Cultural Factors and Mental Health Decline Interact to Amplify the Impact of Economic Downturns

The correlation analysis shows that cultural factors have a strong effect on how economic challenges affect suicide rates. Japan's tendency to have low civic engagement and civil capital, along with the negative views on mental health, worsens the impact of economic downturns. People often feel hesitant to ask for help when they are facing mental health problems. This is especially true when there are societal pressures and economic instability. These factors make the impact of economic challenges on mental health even worse. The outcome is a complicated mix of cultural norms and economic difficulties that create a situation where people are more likely to experience mental health problems and have higher rates of suicide.

7. Implications and Future Research

7.1. Discussion of the Significance of the Research Findings within the Broader Context

The research shows that Japan's high suicide rates are influenced by its unique cultural traits. The study showed how cultural factors and economic challenges connected during the burst of the economic bubble. This intersection greatly affected various generations, particularly those who experienced the economic downturn, such as the post-bubble and 80s generations [6]. The research some of the weaknesses that individuals face when there are economic difficulties/unemployment, the social expectations that affect how they react to the situation and the possible impacts on their mental health. These insights are very significant as they help people better understand the complex reasons that can cause concerning trends such as the increase in suicidal rates as witnessed in Japan following the economic bubble. These insights help people better understand better the complicated reasons that can cause concerning trends, like the increase in suicide rates seen in Japan after the economic bubble burst. Additionally, the study found that there is a significant pattern that exists within the current "hikikomori" phenomenon. This pattern suggests that a large number of individuals who are classified as hikikomori are men who are either middle-aged or elderly. The research gives a deeper understanding of the factors that led to the increase in the number of suicides in Japan by finding connections and patterns. The research in this study has significant implications for understanding how the different aspects of mental health, economics, culture and suicide are connected.

7.2. Reflection on How the Research Contributes to Understanding the Complex Relationship between Economics, Culture, Mental Health, and Suicide

This study has discovered the complex links that come together to affect suicide rates during difficult economic times. The study looks at the connection between cultural factors and mental health outcomes. According to the analysis, it is evident that there is a connection between cultural norms, economic challenges, and declining mental health, which can increase the number of suicides [9]. The research helps people understand the complex factors that caused the suicidal trend observed. This will help people make better policies, better discussions and provide support.

7.3. What the research did not achieve

The research found strong connections between different factors, but it couldn't prove that one factor directly causes another. The research recognizes that it discovered links between cultural factors, economic difficulties, and suicide rates. However, it cannot say for certain that one directly causes the other. Causation requires a more detailed examination and influence that was not part of this study.

7.4. Proposal for Future Research: Primary Research Methods (Surveys, Interviews) to Explore Causal Relationships More Deeply

Although correlational research has been helpful, it is important to further explore causal relationships to gain a better understanding. Doing original research, like long-term studies or controlled experiments, can give stronger proof of cause and effect. Collecting information directly from people through surveys, interviews, or group discussions can help reveal hidden processes and give a better understanding of the complicated connections involved. These methods help individuals better understand how people feel, what drives them, and how they deal with tough economic times. By studying the personal stories of people who are affected, scientists can understand why things happen and find ways to help fix the main reasons behind these patterns. Moreover, exploring the experiences and viewpoints of various demographic groups, particularly middle-aged and elderly men who are greatly impacted, could provide valuable understanding. This could mean looking into their personal experiences, difficulties, and ways of dealing with financial difficulties and societal expectations.

8. Conclusion

After Japan's economic bubble burst, there was a significant increase in suicide rates, a concerning trend that needed careful examination. This study aimed to establish the connection between unemployment, mental health decline, cultural factors and an increase in suicide rates. This study gives a detailed understanding of the factors that caused this concerning trend. The analysis shows that there might be a connection between unemployment and an increase in the number of suicides in Japan. Although most of the studies used show that there might be a connection between the two, more studies should be conducted to help establish a deeper connection between the two. Such studies should ensure that they leave no room for assumptions: they need to involve a large region, and number of participants and use different methods of collecting data. Future research should provide certain results by showing a strong connection between unemployment caused by the economic bubble and the increased number of suicides in Japan.

References

[1] Yamasaki, A., Sakai, R., & Shirakawa, T. (2005). Low Income, Unemployment, and Suicide Mortality Rates for Middle-Age Persons in Japan. Psychological Reports, 96(2), 337–348. https://doi.org/10.2466/pr0.96.2.337-348

- [2] Kawanishi, Y. (2008). On Karo-Jisatsu (Suicide by Overwork): Why Do Japanese Workers Work Themselves to Death? On Karo-Jisatsu (Suicide by Overwork) Why Do Japanese Workers Work Themselves to Death? Source: International Journal of Mental Health, 37(1), 61–74. https://doi.org/10.2753/IMH0020-741
- [3] Iga, M. (1996). Cultural aspects of suicide: The case of Japanese oyako shinj[ubar] (parent-child suicide). Archives of Suicide Research, 2(2), 87–102. https://doi.org/10.1080/13811119608251959
- [4] Otsu, A., Araki, S., Sakai, R., Yokoyama, K., & Scott Voorhees, A. (2004). Effects of urbanization, economic development, and migration of workers on suicide mortality in Japan. Social Science & Medicine, 58(6), 1137–1146. https://doi.org/10.1016/s0277-9536(03)00285-5
- [5] Cheong, Y., Yonsei, C., Mori, K., University, Y., & Sawada, Y. (2017). Recession, Unemployment, and Suicide in Japan Society for the Promotion of Science.
- [6] Chang, S.-S., Gunnell, D., Sterne, J. A. C., Lu, T.-H., & Cheng, A. T. A. (2009). Was the economic crisis 1997–1998 responsible for rising suicide rates in East/Southeast Asia? A time–trend analysis for Japan, Hong Kong, South Korea, Taiwan, Singapore and Thailand. Social Science & Medicine, 68(7), 1322–1331. https://doi.org/10.1016/j.socscimed.2009.01.010
- [7] Kuroki, M. (2010). Suicide and unemployment in Japan: Evidence from municipal level suicide rates and agespecific suicide rates. The Journal of Socio-Economics, 39(6), 683–691. https://doi.org/10.1016/j.socec.2010.06.009
- [8] Takahashi, Y., & Berger, D. (2000). Cultural dynamics and suicide in Japan.
- [9] Huikari, S., Miettunen, J., & Korhonen, M. (2019). Economic crises and suicides between 1970 and 2011: time trend study in 21 developed countries. Journal of Epidemiology and Community Health, 73(4), 311–316. https://doi.org/10.1136/jech-2018-210781
- [10] KOO, J., & COX, W. M. (2008). AN ECONOMIC INTERPRETATION OF SUICIDE CYCLES IN JAPAN. Contemporary Economic Policy, 26(1), 162–174. https://doi.org/10.1111/j.1465-7287.2007.00042.x