

A Study of Depopulation in Liaoning, China

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Abstract: As one of the most significant industrial provinces in China, Liaoning Province always plays a momentous role in modern Chinese history. For quite a few reasons, Liaoning Province has been facing the problem of depopulation in the past few decades. At the same time, this province has also been facing a severe issue of losing its local residents. It is commonly believed that the successive decrease in population in Liaoning Province is due to negative birth rates as a result of the one-child policy. However, the declining economy can be considered as the main reason for population migration in Liaoning Province, China. This paper is looking forward to discovering the reasons of depopulation based on the factors for total population and outmigration, based on analyzing the factors including reasons behind birth rates, and the drop off economy as “the eldest son of the People’s Republic of China” in the past decade.

Keywords: Depopulation, Outmigration, Northeast China, Liaoning Province

1. Introduction

Liaoning Province, which is located in Northeast China, used to be famous as “the eldest son of the People’s Republic of China”. And it is also close to North Korea, South Korea, Japan, and Russia. Especially in Dandong City, people could see the cities of North Korea from the shore of the Yalu River. With a population of 43 million, Liaoning has 14 cities and 101 counties.

Liaoning is named the eldest son of the PRC because of its contribution to the development of the country. It is also because of its traditional industry, steel and iron. The two-steel enterprise, Ansteel and Benxi Iron & Steel, are the two most significant and eldest steel enterprises in the history of PRC. Even though these two enterprises were founded during 1950s, the history of steel and iron in Liaoning Province could be pursued until the beginning of the last century when this province was invaded by Japanese and Russian. Therefore, it could be summarized that the majority of the population in Liaoning Province has relied on the traditional industries in the provinces [1]. This paper aims to find the reasons for depopulation in the past decade in this special province from both the traditional perspective of the birth rate and the social perspective of how the economy has shaping the province in the past few years.

2. Literature Review

Many studies mentioned that the population of Liaoning Province has been on a downtrend since the 1990s. According to the study by the National Statistical Bureau of China, the total population of Liaoning Province has been decreasing since 2014 [2]. However, since around 2010, the rate of

increase in the total population is apparently lower than the previous years. Before 2010, the increase in the total population is clearly boosting. Since 2010, the increase of the total population has become slower than the previous years. Even between 2013 and 2014, there is only a 0.01 million difference between the two years total population (2010, 43.75 million; 2011, 43.83 million; 2012, 43.89 million; and 2013, 43.9 million). In 2014, the total population achieved the peak of the total population in the history of Liaoning's demography, which is 43.91 million. However, from 2015 to 2018, it dropped from 43.82 million to 43.59 million (2015, 43.82million; 2016, 43.78million; 2017, 43.69 million & 2018, 43.59 million). It is possible to assume that the Liaoning Province is experiencing a decline in population growth. Some attribute this decrease to the lower birth rates resulting from the one-child policy [3]. However, based on the investigation and the experience of the interview, the migration of the population here in Liaoning caused by the decadent economy seems like the major factor in the population decrease. This essay will argue the issue of population loss from the perspectives of the external and internal environment, and the idea of livelihood.

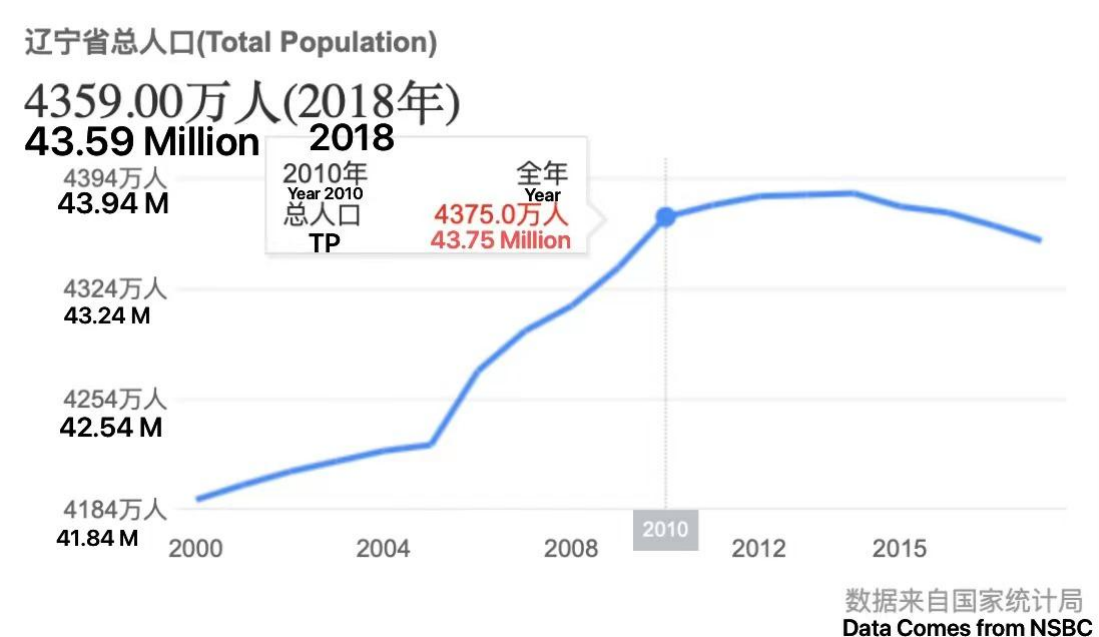


Figure 1: Total Population of Liaoning Province from 2000 to 2018. From National Statistical Bureau of China

3. Methodology

To study the problem of depopulation in China, this paper analyzes the data from the National Statistical Bureau of China, and the local interview with the local officials in some cities in terms of finding the reasons for depopulation in Liaoning Province. This paper aims to combine the results of the data analysis and the local interview, and further to look for the jointly supporting factors and arguments.

4. Traditional concepts of Total Population

The negative birth rate is believed to be the foundation of depopulation from a national perspective. Nevertheless, depopulation is solely a phenomenon in some provinces. Overall from a national range, the total population is still increasing yearly since 2000. From the four figures below, it can find that even though the total population is increasing all the time, the rate of increase of the population is decreasing in the meantime. In 2000, the popularity rate grew by 7.6% (red figure in Figure 2); in

2016, the rate was 5.9%. In 2017 and 2018, the total population increased by 5.3% and 3.8%, respectively [2][4][5][6]. Therefore, from a national perspective, the ascent of the population's birth rate is falling. Most scholars believe, from a national perspective [3], that the one-child policy and the change in the attitudes and values about marriage caused the negative birth rates. Nevertheless, according to the survey and research, Liaoning has unique reasons which caused its depopulation in recent years, which is unlike the perspective in a national view.

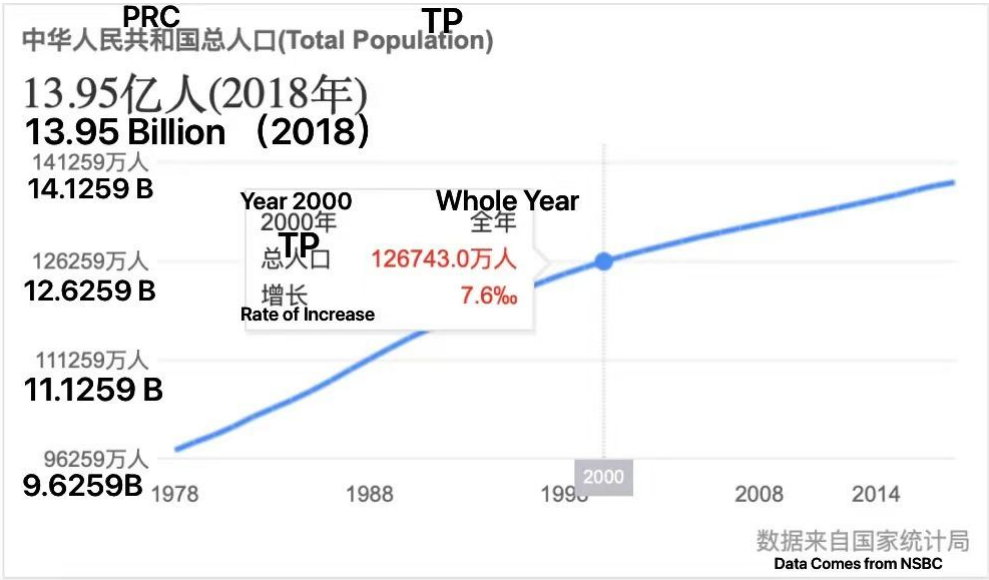


Figure 2: Total Population of PRC, from 1978-2018; total population and rate of increase in 2000. From National Statistical Bureau of China

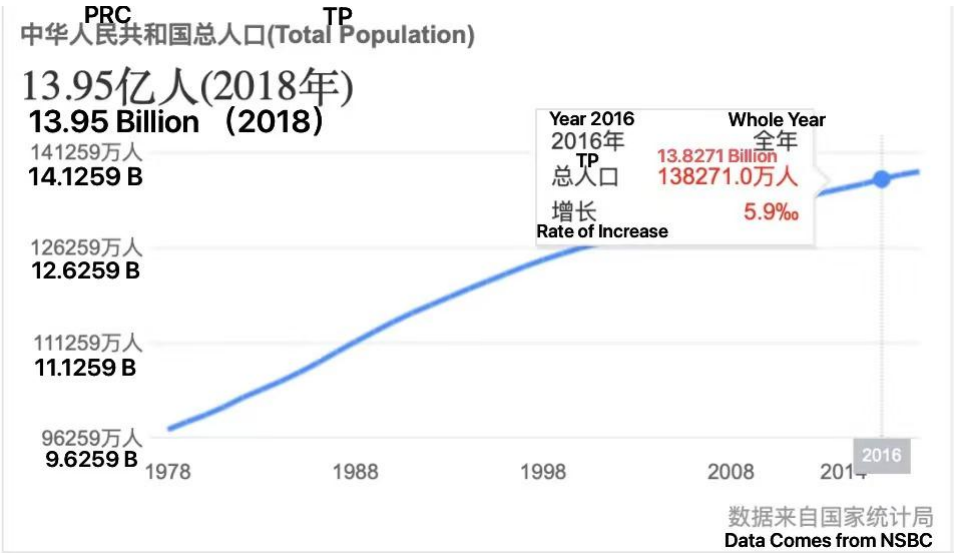


Figure 3: Total Population of PRC, from 1978-2018; total population and rate of increase in 2016. From National Statistical Bureau of China



Figure 4: Total Population of PRC, from 1978-2018; total population and rate of increase in 2017. From National Statistical Bureau of China



Figure 5: Total Population of PRC, from 1978-2018; total population and rate of increase in 2018. From National Statistical Bureau of China

The death rate is higher than the birth rate in a provincial range. According to the National Statistical Bureau of China survey in February 2019, by the end of 2018, the crude birth rate was 10.94 per thousand, and the crude death rate was 7.13% per thousand. The natural growth rate is 3.81 per thousand. Comparatively, in 2017, the birth rate was 12.43 per thousand, the death rate was 7.11 per thousand, and the natural growth was 5.32 per thousand [2].

In 2016, the three figures were 12.07 per thousand, 7.11 per thousand and 4.96 per thousand, respectively. However, in Liaoning province, the figures are lower than the national level. The latest report has demonstrated that 2017 the birth rate in Liaoning Province in 2017 was lower than in 2016[5][6][7].

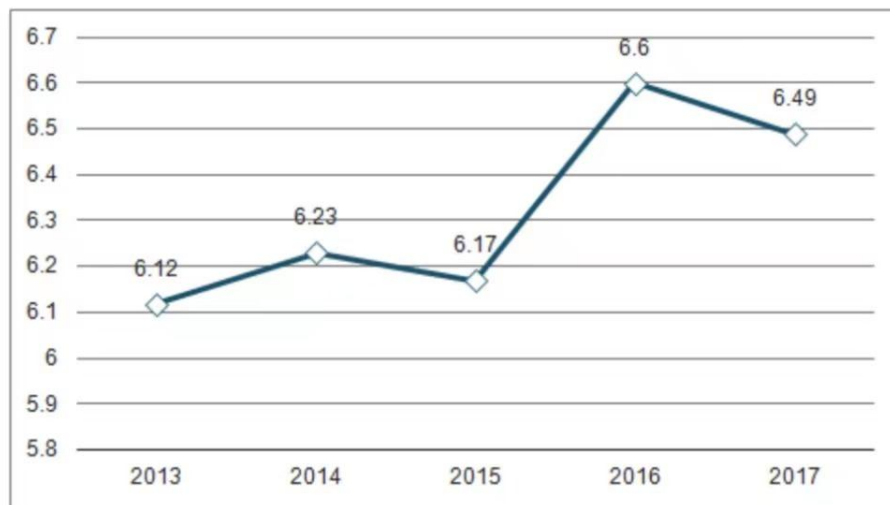


Figure 6: Birth rate in Liaoning Province

And the death rate is always increasing from 6.09 per thousand to 6.93 per thousand in 2017.

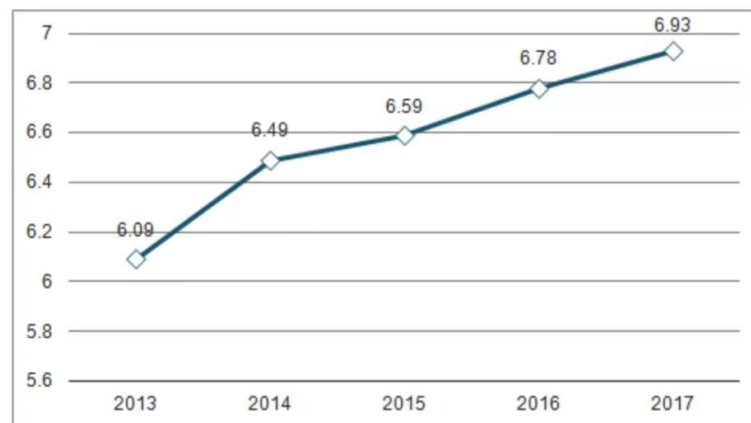


Figure 7: Death rate in Liaoning Province

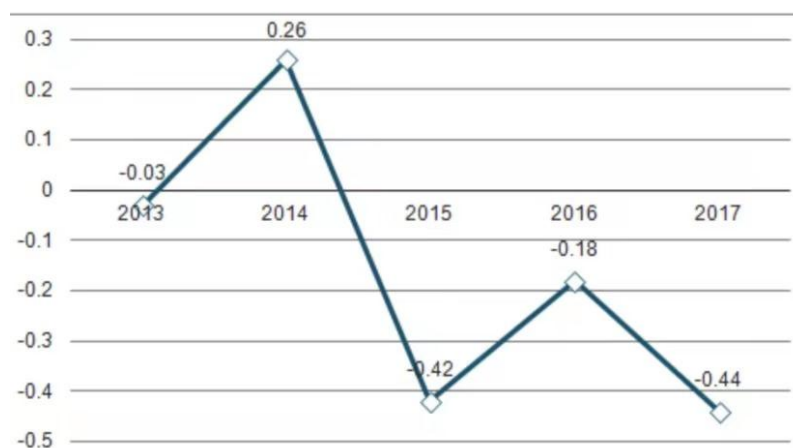


Figure 8: Natural Growth Rate in Liaoning Province

From Figures 6, 7 and 8, it can be seen that the birth rate in Liaoning Province is far lower than the national level in both 2016 and 2017 (around 6 per thousand (Liaoning) and ten per thousand (China)). The death rate in Liaoning seems to be almost close to the national level, but the natural growth rate in Liaoning has been a negative figure since 2015, while at a national level, it is a positive figure all the time. Therefore, it can be concluded from the graphs above that the rate of the death population is higher than the rate of the native-born population in Liaoning Province, because the natural growth rate in Liaoning Province has been descending as a negative figure.

New interpretations of marriage values allow people today to make more choices about their family lives. Like other places in China and the entire world, most youngsters in Liaoning today prefer to be single. Even in their marriage, some people prefer to become DINK. Divorce also becomes a common phenomenon and option in most people's lives.

Traditional ideas believed that increasing the DINK family and the new value of marriage would also influence the depopulation. However, according to the study done by Dai and Chen [8], the result has proven that the rising number of the DINK family and unwillingness to get married could only be considered as resistance instead of practical factors. Indeed, it is believed that the increase in the ageing of the population is the primary reason for the depopulation in a provincial range, which is demonstrated in the graph below. Moreover, according to a survey conducted during the research, Liaoning province is relatively a province with traditional values about the family because of the population distribution here in the province. Pregnancy before marriage would violate the major moral standards in a provincial range. Therefore, in such a society constituted by more senior citizens, it is not towering to see any traditional attitudes towards marriage and family because they would like to be in companionship with their grandchildren.

The imbalance of sex and age ratio caused by the local industries' characteristics might be an effective reason because most of the industries here are constituted by the agricultural and heavy industries, which are traditional with harsh conditions on labour force and productivity. According to the report conducted by the Liaoning Provincial Government, people aged above 60 years old occupy 20.6% of the total population [7]. Since 2016, the ageing of the population has accelerated growth. Meanwhile, even though there is not even an accurate figure has been given by the government, the government still mentioned that the proportion of single-parent families and DINK family is increasing, and there is also a risk caused by the imbalance of sex ratio [7]. According to the survey done during the research, the research team went to Gongchangling, a county in Liaoyang City (One of the cities in Liaoning). The research demonstrated that males occupied more proportion than females in most families in the local population. According to our interview, it is not because of the traditional idea in Chinese culture that a boy could inherit the blood of their family. It is simply because males are more productive in agricultural life, due to their physical strength [9]. Therefore, the remaining local labour force is made up of males in the majority. Meanwhile, most youngsters today would like to seek opportunities in first-tier cities or other coastal cities. During the interview, an interviewee in Gongchangling told us their salaries per month could only achieve 1000 RMB, while in other cities it might be 7000 per month in the similar position in first-tier cities in their assumption. Another example is an interviewee from Fushun City. He mentioned that in their entire county, nearly all the youth went overseas for higher salaries to improve their family life quality. From *National Population Development Plan for 2016-2030*, the government of China has pointed that the cumulative social problems caused by the imbalance of sex and age ratio could not be ignored [10]. And this will be further argued in the coming part of this essay.

However, the result of the local interview could still be summarized as a demonstration. The permanent resident population in provinces like Liaoning is decreasing because of the shifting population to other cities, especially those first-tier cities and coastal cities in mainland China and overseas countries. In Liaoning, it is hard to have outmigration as a permanent resident population.

5. Factors caused the Outmigration

As it has been mentioned in the section of the abstract, the history of the iron and steel industry could be pursued until the occupation during the Japanese and Russian War, and even today, most of the people here are still relying on the traditional industries. And they are the pillars of the local economy. Even though they became decadent, shrinking, degenerating, and dying out.

Steel and coal, which is the pillar of local industries, could also be categorized as the non-renewable resources. Among the 14 cities in Liaoning Province, there are two national famous iron and steel enterprises, Ansteel and Benxi Iron and Steel [1]. As common knowledge found from our interview (because there is no official recording), nearly all the coal mines (25 coal mines) are offering their coals for these two national enterprises. However, according to the report published on the Bureau of Liaoning Coal Mine Safety Supervision's website [11], there are 9 of the coal mines' permissions have been cancelled in this year. Besides the safety issue, the major reason is the shortage of the local resource. Owing to the over exploration of mines since last century, these non-renewable resources have been exhausted.

Depopulation is also caused by the limited positions offered by the traditional industries and the development of the tertiary industries which were not as robust as expected. Therefore, it is difficult to gain more opportunities to increase individuals' incomes, due to the weak development of tertiary industries and the exhaustion of traditional industry, the average income in Liaoning province stays almost the lowest within China. Most of the population in Liaoning Province who are born during 1950s and 1960s, and most of the people are still on their positions today. Therefore, since the positions in traditional industries like iron and steel preferred people who are professional and experienced, there would be limited opportunities given to the new graduates. For tertiary industries, according to the study done by Wang, the employment rate in the business services industry was growing slowly since 1990s [12]. Meanwhile, the increased rate of tertiary industries has been growing slowly compared with other provinces in 18 years. While the increase rate is only around 20%, the increase rate in Guangdong has achieved 81.26%. All the increase rate of the employment in Guangdong Province is also 5 times higher than its in Liaoning. Therefore, positions offered by both secondary and tertiary industries are limited. In other words, the dying secondary industry and under-developed tertiary industry lead to a high unemployment rate.

Furthermore, during the 1990s, the adjustment of the policy targeted the reformation of the old state-owned enterprises made many local citizens lose their jobs. Based on this fact, these employees went to coastal regions in the southeast of China for survival. In 1990s, the Government assets of Liaoning Province were at the top of China. However, after the reformation of the old state-owned enterprises, most of the enterprises were reorganized or even bankrupted, which caused many people to lose their jobs [13](LGDG.2018*)¹. As a result, most people went to coastal cities as outmigration to become migrant workers in other cities. According to the survey in 2010, there was at least 4 million outmigration from Liaoning to other provinces since 1990s. However, besides this kind of outmigration, there are also other kinds of outmigration which would not be considered as outmigration the research team found during the survey. And it is basically based on the experience of the interview which would be discussed in the coming paragraph.

All these points above just proved that the economy in Liaoning Province has been decadent. Digital economy is also not developed enough here, which also limited the job positions and the development of the economy. As a result, people today would like to pursue a better opportunity for their employment to make more money. And these could be summarized into two groups, those who are and who are not graduates.

¹This conclusion is directly quoted from a report published by Liaoning Province Grain Development Group.

- Most students who are able to go to the top universities in China would like to choose to live in first-tier cities instead of coming back to their hometown after graduation for better working opportunities and higher income. Most of the graduates would have Liaoning registered permanent residence, but theoretically, they are not either parts of migrant population in those first-tier cities, or parts of the outmigration in Liaoning Province. Also, some of their parents prefer to live with them after retirement. Thus, these parents could not be counted as part of outmigration in Liaoning province as well. According to the investigation during the interview, the research team found that in one of the 14 cities in Liaoning, there are nearly 1000 graduates from one famous high school in this city. And nearly all the 1000 graduates would choose to live in the cities their universities located after they graduated from their universities. And things happened similarly in most of the cities in Liaoning Province. Because of the decadent economy here, most of our interviewees lost their confidence. Like the example in one of our interviews listed above, in Gongchangling county, the average salary of a university graduate is around 1000 RMB per month, much lower than that in first-tier cities(around 6000 MRB). Therefore, in order to earn more and seek for better life, most graduates prefer to stay in other provinces instead of facing the risks of not finding any jobs in their hometown because of the fierce competition and limited positions. Some of the children would leave their parents in their hometown, others may take their parents with them after their parents retired. However, in most of our investigations, most of the university graduates would not be able to get a registered permanent identity in the cities they lived. Therefore, they could not be counted as part of the population of the outmigration. But indeed, they are doing the exact same things as the outmigration. These graduates would hardly come back to their hometowns, instead, they prefer to work and live in other cities for chasing better opportunities.

- Besides the university graduates, field research revealed the fact that local farmers would also have the same decisions as the university graduates. Like the example in Fushun, people believed that there were more opportunities in overseas cities. Therefore, they would go overseas but still be counted as a part of the total population in the end. And things happened similarly towards the employment in the national enterprises in Liaoning Province. During our investigation with Neusoft, the reasearch team found no matter how your wellbeing is in this province, the risk of losing the elites still exists, because of the decedent population. As one of the most famous and powerful digital companies in China, Neusoft is also one of the four companies which could produce medical CT machines in the world. During our investigation with the managers of Neusoft, they told us that their salaries and well-beings could be counted as the best in the Liaoning Province, but still, they are losing their elites with a great proportion every year. This is simply because compared with the enterprises in the other cities and provinces in China, the salaries and well-being offered by the Neusoft could still be possibly lower. Because the average of life quality like the economy and education in Liaoning Province is still lower than the provinces like Zhejiang Provinces and other coastal provinces in the South. Such a kind of diversity causes many people to move to other cities and provinces. Depending on the places those job-hoppers went, some job-hoppers would go by themselves; others may take the other family members with them. But there are still some people who cannot move their registered permanent residence with them to the cities they are working and living in. Therefore, this kind of people could still not be counted as outmigration, but technically they are outmigration.

6. Conclusion

The traditional perspective, which believed that a negative birth rate is a significant reason for Depopulation, might apply to a nation. However, different provinces have their unique backgrounds and economic environment. Particularly in provinces like Liaoning in Northeast China, the

phenomenon of Outmigration for livelihood, caused by its unique economic environment, may be the primary reason for Depopulation in this region.

Acknowledgment

All the interviews mentioned in this essay were done during the author's internship with the author's supervisor and other colleagues as a research team from Liaoning Social Science Academy a few years before. The author have kept most of these recordings. And the author declare all the information in this paper is authentic.

The only problem that the writer worried about in this essay is about the timeliness of the information, because the policy of population and livelihood could be adjusted at any time. Thus, the situation and the fact about population and our lives might be influenced and further changed as well. Since 2017, it has been hard to find any updated literature reviews about the latest population issue in Liaoning. But whatever happens, the historical influence is one of the big factors of the depopulation in Liaoning province, which also caused the outmigration in recent years since 2015. Therefore, this essay might have some timeliness questions, whether the study could catch on with the current events.

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