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Prediction of the Effectiveness of Deferred Retirement in the Labor Market Performance in China

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Abstract: The analytical document touching upon the prospects of how delaying retirement affects labor market ability in China reveals some crucial information about the implications of the retirement age policy modifications. This test may indicate that the retirement age raise would be a huge factor in China's labor market status, such as employment level and national pension funds. Apart from this, the paper is a reminder for the authorities to have a broad policy discussion on diverse fiscal consequences that different retirement age policies may cause like wage inflexibility, disposable labor issues, and the aging population. These results demonstrate that the simulation should be considered for its interplay with individuals' lives as well as for the macro economy. To scrutinize the efficacy of postponing retirement within China's employment market performance, it's critical to deploy some economic theories. The first method involves the insights from both the Beveridge curve and job creation curve to dissect the nuances of job turnover rates, opportunities for finding new jobs, and their influence on unemployment figures. Delving deeper into pension fund ramifications necessitates assessing the shift from Defined Contribution (DC) schemes towards Defined Benefit (DB) plans, while also taking stock of how dependency ratios come into play. Moreover, gauging effects on incremental labor productivity alongside capital-to-labor ratio calls for an expansive view that considers changes across various industrial sectors and their broader consequences on the labor market as a whole.

Keywords: Deferred retirement, labor market, unemployment, pension reserve

1. Introduction

A growing phenomenon in work markets worldwide is the postponement of retirement, which has been centered on the concept of keeping individuals actively occupied with work for a longer time. This idea is significant in present-day labor market analysis because it is projected to have serious implications for economic development, workforce productivity, and the sustainability of pension systems for retirees. The above-mentioned changes in lifespan and demographic structure are basic driving forces behind approaches that defer retirements seek long-lived pension schemes and encourage prolonged working periods [1]. By increasing the age at which people leave professional life or providing incentives to delay stopping work, countries like China are addressing concerns related to population aging and reducing workforce size. Understanding how deferring exit from active employment enhances job market efficiency, manages pension assets properly, and exploits

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talent efficiently is vital for all stakeholders who craft policies on lasting retirement as well as their inclusiveness across all segments of society.

The employment sector in China has experienced major changes throughout the years. These challenges have resulted from an aging population and a shifting demographic profile; hence, the government has put in place various measures to alleviate them, one of which is raising the retirement age. China's retirement ages are among the world's lowest –60 for men, 55 for female office workers, and 50 for female blue-collar workers. As a social trend, when the average life expectancy grows, it seems urgent to simultaneously increase in retirement age. Some supporters suggest that experienced and skillful workers are important for the growth of the economy.

This scheme will enable more people to work for longer periods and engage in economic activities. The job market analysis of China highlights an increasing need for elderly labor, particularly in sectors where there are shortages of workers. Underpinning broader national fiscal goals, this strategy towards late retirement underscores the importance of having a capable and trained workforce. Consequently, many individuals who are planning to retire later can benefit from this opportunity by extending their productive lives and imparting wisdom through hard work to our nation’s economy [2].

The most important goal of this study is to predict how the postponement of retirement impacts labor market outcomes in China. To realize this, the paper will develop around several crucial sections. Initially, it will provide an overall synopsis of labor markets in China and a discussion of retirement delay strategies as well. Further on, using theories such as Beveridge and the job creation curve while looking into wage trends, the research part will analyze the consequences of delayed retirement on unemployment levels. Other recommendations are also given about how to mitigate adverse effects on pension schemes as well as on the whole economic base In addition to that, evaluating issues like effectuation upon marginal productivity per worker or capital-to-labor ratio participation should be considered in one part of appraisal Thus, concerning these all-inclusive considerations; there will be a detailed understanding towards impacts related to postponed retirement within Chinese employment market settings.

2. Case Description of China's Labor Market and Postponed Retirement Scheme

2.1. An Overview of China’s Current Labor Market Situation

The labor market's current situation in China is a tangled mix of population changes, policy actions, and economic movements. According to the data, the average life expectancy of the Chinese increased from 62.54 in 1978, when the existing retirement age was legislated, to 77.97 in 2025. The waste of experienced labor is an immeasurable loss for China. This is not absolute because Luo and Xie argued that the redistribution of income from rich to poor could be more efficient in terms of improving the population health in China, rather than raising the retirement age in a rapid way [3]. Following common sense of working age is equal to the retirement age minus the school-leaving age, Another evidence that the school-leaving age increased, which means the working age is being squeezed, from the record of the National Bureau of Statistics of China is clear that the total labor force fell successively for five years from 2018 to 2022. As a result of the reasons, the rise of the retirement age will increase the size of the labor force in the long run, potentially tackling other macroeconomic problems during the process. Yet, the success of this policy depends on diverse factors such as the overall pension substitute rate and salary inflexibility.

On the one hand, the quantity of population is important. Since 1960 when the baby boom brought a skyrocketing population to a climax of 1.4 trillion in 2021. Associating with other government policies, the population structure changes during this time. From the economic boom in 2010, GDP contributed by a large growth in population. Zheng and P.P Walsh mentioned the importance of

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urbanization and capital to China's economic growth [4]. To be specific, human capital has proved to be crucial. In an observational study in 2017, scholars showed that China's economic growth may be limited by its human capital, the annual growth rate would be low if there is no or low improvement in the human capital of its labor force in the next twenty years. The upcoming aging society will continue to be concerned when it is projected to rise from 17.8% in 2020 to 32% in 2040.

The past study of endogenous growth by Echevarria discussed the impact of increases in life expectancy using a finite horizon OLG model [5]. He obtained the conclusion that increments in life will not increase the economic growth rate, but reduces it. This only boosts economic growth with a simultaneous increment in the working period [5].

Similarly, this could be proved by the formula since this decreased population may also contribute to a lower Gross Domestic Product of China. Since GDP is equal to GDP per capita multiplied by population. log GDP=log GDP per capita+log population. Differentiate the equation concerning time, to obtain an expression of rate. (1/GDP)(δGDP/δt)=(1/GDP per capita)(δGDP per capita/δt)+(1/population)(δpopulation/δt). Multiply 1/δt, then multiply 100%, there will be a percentage change in rate. Finally, the equation is %δGDP=%δGDP per capita+%δpopulation. This could be used to test some data, for example, the percentage growth in real GDP from 2021 to 2022 is 4.47%, which is caused by a 4.53% increase in GDP per head and a -0.06% decrease in population growth.

According to as cited by Mason in 2005, China has started to lose its 'first demographic dividend' lately, mainly due to the aging population [6]. The shape of the population pyramid in 2023 is an olive shape, with a large portion of middle-aged people compared to teenagers and elders.

2.2. The Postponed Retirement Scheme in China

Table 1: Different retirement ages every year.

Year/Retirement age of different groups	Male	Female Cadres	Women staffs
2025	60	55	50
2026	60+2months	55+4months	50+6months
2027	60+4months	55+8months	51
2028	60+6months	56	51+6months
2029	60+8months	56+4months	52
2030	60+10months	56+8months	52+6months
…	…	…	…
2055	65	65	65

The delayed retirement program in China plans to get rid of the economic problems involved with the aging population that has and will get old by paying the people who continue working more than the age of retirement. The idea identifies the need for easing the responsibility of the pension scheme by giving an option to postpone retirement, attracting more workers to the market, and creating a space-efficient economy. The holistic imperative fits as a glove to the sphere of macroeconomic vision that concentrates on how the changing rates of pensions impact the activity in the labor market and how an aging population, in turn, alters the pattern of demand. According to the 2023 China Pension Development Report, there are two possible methods of delaying the retirement age, although the final implemented method has not been disclosed. Table 1 is built based on the 2025 start. The first method is to set different retirement ages every year. Suppose this policy applies in 2025, recall

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the current retirement age for the three age groups and add two months each year for males [7], four months for women cadres, and six months for women staff, as shown in table 1.

The second method is to give people born in different years with different retirement ages, as shown in table 2. For the younger generation, their retirement age will be delayed to a different extent.

Table 2: Different years with different retirement ages

Year of birth/Retirement age of different groups	Male	Female Cadres	Women staff
1970	60	55	50
1975	60+10months	56+8months	52+6months
1980	61+8months	58+4months	55
1985	62+6months	60	56+6months
1990	63+4months	61+8months	60
1995	64+2months	63+4months	62+6months
2000	65	65	65

There are both advantages and disadvantages of these methods. The duration of the second method is longer. Take the male born in 1995 as an example, their retirement age will be extended to 2059. For women staff, the retirement age will be 2065 for those born in 2000. However, if so, the problem of the pressure of government expenditure on pensions and social security will be high.

Thus, if the government aims to delay the retirement age in a phased manner, it is encouraged to use the second method.

A comprehensive exploration is a necessary step to measuring China's extended retirement policy, through job vacancy, salary fluctuation, length of pay, and pension fund stability. Knowing how delayed retirement interrelates with primary markers of macro-robustness will indicate what the result will look like in practice: not only for the workings of labor markets but for the economy as a whole. This statement implies that policymakers have to examine the dynamics of the population's composition continuously and navigate it through the processes to the durability of public finances; this implies more figures and facts to elaborate the reality of these measures in the situation [8].

2.3. Analysis of the Reasons Behind the Implementation of Deferred Retirement in China

The trend of postponing retirement in China can be traced back to a variety of reasons, centered on several important factors. Firstly as mentioned, in coping with an immediately aging population and diminishing workforce, such policies orient towards prolonging the career span of older workers. Such is the further extension which was meant to reduce possible labor supply piths as well as raise economic efficiency [9]. Similarly, letting workers have a longer period to save generates a more substantial financial bedrock in the time of retiring for the future and therefore reduces financial stress on already existing systems of pension. Furthermore, advocating for a later retirement assists in minimizing the pressure on pension reserves so that they remain operable further down the line. Therefore, delaying retirement in China is a forward-looking strategy to address demographical and financial challenges, but time to validate the effectiveness.

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3. Analysis

3.1. A Impact on Unemployment Rate

3.1.1. General Analysis

The adverse implications of extending retirement on China's unemployment levels are to be noted. Making some prominent employees in their retirement years continue to work, there may be fewer job openings for young individuals right away, which would most likely slow down the transit of jobs, leading to a higher rate of frictional unemployment. This situation will make it more difficult for newcomers to find a job and work. This is because people who move to a new place such as a different country often have to undergo significant changes in their jobs as well as their environment and culture. Standing on a moral side, commencing with common sense that for those who worked in the public sector, the job conditions are relatively stable and safe compared to the private sector [10]. These are the people who sacrifice less from the scheme of postponed retirement. However, as mentioned in the population pyramid in China, the age 30~40 is the majority of the workforce. The avenue for promotion will be blocked if the system is arranged in order of seniority.

Their chances are also being deferred. This usually results in a lower initiative to work. Similarly, the strategy of deferred salary could erode the employees' capacity to bargain. Expanding the workforce through retirees whose retirements are postponed also affects wages. With the inflow of labor, wages can almost remain stable or down without any growth in the wage trend eventually. This situation would go against the principles of fair treatment that characterize the world of salaried employees by limiting their incomes and living conditions in the future. For elderly people, Zhang point out that the increase in the number of the elderly labor force is conducive to the employment of the youth group, the two do not have a relationship, but complementary process. He mainly focuses on the professionalism of elderly people whom they contribute the most value, while young people find it hard to meet the criteria of these standards. Take 2025 as an example, for those born in 1965, they can take the job of taking care of children. Alongside, this reduces the pressure of the 80~90s generation, enhances the physical and mental strength, and eventually raises their marginal productivity of labor. The converse of this statement is that without the deferred retirement scheme, the pressure on those 80~90s will be overwhelming. A direct impact would be a lack of desire to raise children. This will negatively offset the efforts made by the Chinese government in terms of the three-child policy. A lower birth rate would further deepen the aging population structure, forming a vicious circle.

3.1.2. Analysis of the Theories of Beveridge and the Job Creation Curve Concerning Deferred Retirement

Beveridge's curve, as with the labor demand curve, is the foundation for obtaining information on the delayed retirement's influence on the labor environment. It mentions that the retirement postponement of an individual might generate a positive effect on the employment sector, not only implying increased job generation but also a decrease in unemployment rates in an accurate proportion. While in opposition, an argument that described any such change as an aging population just increased new openings for the young workforce will now become limited became more appealing as it could even be a bottleneck to the endlessly smoothly-flowing employment market. It is believed that some of the factors will influence the natural rate of unemployment in China, either in the short run or the long run.

The UV-JC curve widely used model to examine the natural unemployment rate. Although the natural unemployment rate is only the basis of the total unemployment rate, measures the average rate of unemployment around which the economy fluctuates, the determinants of the natural

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unemployment rate such as the job separation rate and the job finding rate. From a previous study in Finland, it is seen that a gradual increase in the retirement age agreed on in the 2017 pension reform has considerably raised the employment rate of those approaching their retirement age. At the same time, unemployment and disability retirement have also clearly increased, as revealed by a new study by the Finnish Centre for Pensions.

By taking into consideration the population and workforce structure in China, the conclusion can be drawn that the job separation rate of elderly people decreases. In the formula of stable natural rate of unemployment, u=s/s+f, when s increases, u will increase by a smaller percentage. In terms of the Job finding rate which further depends on the job vacancy rate, there is a need to use the wage curve and further derive the job creation curve, which is the relation of $v= \gamma(MPL-W/P)$. The wage rate is determined by the bargaining power of workers. It is proved that the deferred retirement age can have a significant impact on the bargaining power of labor, particularly for older workers.

First, there is a negative scale effect, which suggests due to decreasing returns to scale in production in the short run, a higher number of older workers reduces the marginal product of all workers [11]. Second, there may be a degree of complementarity in production between young, middle-aged, and older workers, in which case a higher number of older workers may increase the marginal productivity of young workers. As bargaining power increases, the real wage of labor may increase, which decreases the number of job vacancies. Therefore, the JC curve will move downwards, resulting in higher unemployment in the short run.

With regards to frictional unemployment, due to the issues of lack of total factor productivity, some people are frequently partially unemployed. Deferred retirement can impact frictional unemployment by affecting the matching of skills between job seekers and available positions. Older workers who choose to delay retirement may possess skills and experience that are not aligned with the skill requirements of available job vacancies. This mismatch between the skills of job seekers and the demands of employers can contribute to longer search periods for suitable employment opportunities, potentially increasing frictional unemployment rates.

Moreover, there was a downturn economic situation after the pandemic. The job vacancies depend mainly on small and medium-sized enterprises (SMEs). In 2022, there were over 140 million SMEs and self-employed. Overall, SMEs contribute over 60% of total GDP, 50% of tax income, 79% of job creation, and 68% of exports to the OECD report.

However, the aftermath of a pandemic is enormous, and there is a significant decline in the number of small and medium-sized enterprises finds that financing cash flow, market, personnel flow, cost, and government policies are the major factors that measure the impact of the pandemic on SMEs [12]. Among them, the market has the greatest direct impact on SMEs.

In conclusion, the impact of deferred retirement is complex. By expanding the labor market in China, the final result is similar to the findings from that promoting the upgrading of industrial structure can eliminate the negative impact of aging on employment [13].

Therefore, from now on, the adaptability of the above hypotheses and reduced systematic retirement may manifest new features peculiar to the discussed factors and importantly to tactical choices. Within the broader context of these justified notions rather than postponing decision-making in a Chinese scenario, policymakers need complex expertise to strike a fair balance between the elders' working processes and the young entering the jobs while they walk the career path. Public policies shall be here with the sole purpose of creating a balanced approach toward helping the people involved to maximize their financial potential without compromising their social security. Meanwhile, these policies shall also help in transforming retirement from a common stressful life phase to a much more productive and fulfilling period that is economically beneficial to society.

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3.1.3. Suggestions and Solutions to Mitigate Any Negative Effects on Unemployment.

To counteract the detrimental consequences of unemployment stemming from delayed retirement initiatives in China, a variety of recommendations and strategies might be taken into account. One tactic could be bolstering job alignment through enhanced educational programs and skill improvement efforts, aiming to furnish senior workers with the competencies sought by hiring entities within a dynamic marketplace [14]. Moreover, providing adaptable employment setups and options for gradual retirement can propel older individuals to prolong their participation in the workforce, thereby easing the repercussions of deferred retirement on employment opportunities for younger individuals. It is believed that the optional delayed retirement in a phased manner is more suitable than the blanket policy. Specialized reemployment assistance and advisory services designed specifically for senior employees can support their successful return to work life and lessen potential obstacles in generating new jobs.

3.2. Impact on Pension Reserve in China

3.2.1. Analysis of the Impact of Deferred Retirement on the Pension Reserve in China

An in-depth study of the role that postponed retirement plays in the Chinese pension system management is significant work, which may not be done in a rush. When people decide to have their retirement postponed, they will be paying the while to the pension scheme for a longer period, and these will gradually be used to cover the expenses from the pension reserve. Budget incentives can be one way through which the financial well-being of retirement systems can be maintained, not only for those who are already retired but also for future retirees, by improving their capacity to support themselves financially. However, appropriate measures should be taken. It is good to consider different dimensions that entail the impacted pension funds, among other aspects such as pension substitution rates and dependency ratios, knowing the old-age dependency ratio in China increased from 10% (2000) to 13% (2015) and is expected to increase to 44 percent by 2050. Getting serious about challenges with inelastic wage upgrading, understating from both contribution and benefit plans, and critically monitoring the youth-to-adult ratio help to overcome bad results characterizing opposition of the fund loans [15].

3.2.2. The Effect of Wage Rigidity and the Dc&db Scheme on Deferred Retirement

The rigidity of wages sticks to a stiff situation in the labor market, which imposes on pension systems like defined contribution (DC) and defined benefit (DB). In some situations, rigid wages provide an option for companies to lower wage rates after negative financial problems (or when the firm faces some financial problems). This option almost makes it unnecessary for the company to dismiss people simply to avoid the necessity to reduce wages. However, such situations play a role in raising joblessness since senior workers can encounter difficulties in adjusting to the new circumstances that accrue. Within the confines of deferred retirement, the shortcomings of salaries might hinder older people, with the only pathway to work not only in the workplace but also in the rest of the market. The strategy of enhancing the work experience of an individual who opts to eschew full-time employment and remain in employment by accepting less money for fewer hours runs contrary to prevailing situations where incomes are fixed. For example, by overcoming challenges brought by wage rigidity, such as free wage negotiation and consultation methods, there will be increased success rates of deferred retirement projects and more convenient ways to prepare for the job market for older workers.

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3.2.3. Strategies to Address Potential Challenges

According to Selvaratnam, China's social health insurance system and delayed retirement initiatives positively impact the health of China's elderly. Thus, it is concluded that investing resources into continuous education chances and making sure older laborers have access to cost-effective medical services could preserve their engagement in the economy [16].

3.3. Impact on Marginal Productivity per Labor and Capital per Labor Ratio

The effect of postponing retirement on the marginal output for each laborer in China is the most significant problem for the efficiency and productivity of the labor market that will occur. According to the Cobb-Douglas function, which must have the assumption of a competitive and complete market, given the output Y(Y is a function of capital K and labor L, and α is the capital share of income.)

Y=F(K,L)=AK^αL^(1-α)

Divide both sides by L, and obtain an expression for GDP per capita:

=AK^αL^(1-α)/L

=AK^α/L^α

=Ak^α, where k stands for the capital per labor.

Therefore, capital per labor is the crucial indicator of the national output and economic growth, as well as the state of technology, which is the total factor of productivity. This means when the working age is extended, the newly entered labor will dilute the ratio of capital per labor. Reducing the retirement age could cause a shrinking marginal output per worker if the skill level were to be lowered, the amount of expertise was to be decreased, and the speed of work of the workforce was to be reduced [15]. A retained competent workforce within the organization can hence increase the capital-to-labor ratio due to extra work viability for the aged workforce, one of the positives thereof. This growth could be twofold: on one hand, it might encourage employees to perform better since seasoned workers typically have more experience than less seasoned ones; on the other hand, they may come up with some creative ideas to improve performance in a range of industries. Nevertheless, as mentioned in 4.1, it is important to have an analysis of the benefits of extended retirement against some undesirable features like a mismatch between required skills and the present trend of the demographic structure of the employees. Therefore, it is important to comprehensively evaluate the marginal contribution to workers' productivity as that affects key metrics in the job market and performance in general.

3.4. Analysis of the Changes in the Capital Per Labor Ratio Due to Deferred Retirement

The labor market might be subject to eventual modifications due to procrastination of retirement plans and might possess quite an influence. However, the longer the retirement period is postponed, the workforce will have a greater number of actively employed individuals, thus changing the balance between supply and demand by the workforce. Initially, people may depend on labor over the production of capital. One can speculate that, in the future, their increase might be due to greater asset accumulation combining those invested into tangible objects with intellectual ones, and since the duration of active working life would be prolonged [1]. Alongside, producers' result in capital formation is greater while the job sector utilizes less labor through the process. It can lead to better productivity and cause short-run economic growth. This is built on the assumption that productivity is highly reliant on the quality of education including college education. To be more specific, smaller segments of the labor supply such as rural workers and urban workers should be considered distinctively. In the long run, a previous study used a regression model to present the relationship between human capital and output in China. It forecasted that in the following twenty years when a

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delayed retirement scheme is imposed, the desired growth rate would be approximately 3%, rather than the 7% that is achieved today.

The postponed retirement ages possess significant consequences in terms of the broader aspects. As more individuals choose to prolong their tenure in employment, areas such as healthcare, education, and technology might witness a heightened necessity for adept laborers. This could pave the way for innovation and boost productivity [17]. Nonetheless, this evolution may amplify issues within conventional sectors dependent on physical labor-intensive jobs by causing structural joblessness. Another consequence could be the reduction in government spending on pensions and other forms of transfer payment. When government spending on government investment accounts for a large portion of China's aggregate demand, the overall demand for labor may drop since it is a derived demand, causing cyclical unemployment. Policymakers should also take actions to maintain confidence, as mentioned when there is a decrease in the burden of raising children, people's remaining purchasing power is high to enable them to save more and spend more. This tackles the unemployment problems laterally.

4. Discussion

4.1. General Suggestions for Addressing Unemployment Impact

To conquer the challenges that have arisen due to growing older workers post-retirement and numerous employability opportunities being declined in the country, several alternatives should be taken into consideration. One of the first things the administration can do is to implement educational initiatives and also provide incentives for senior workers vacating their positions to switch to other fields that fit the changing market needs. Also, making the self-employment dream of the recently-retrenched a reality by providing them assistance, guidance, and financial help helps to create new job opportunities. Again, active partnerships between corporate institutions with academic institutions to create flexible livelihoods such as temporary jobs or task-specific labor may be a solution that gives the skilled labor a chance to return to the labor circles. Through an efficient synchronization of these measures with the specific market demands, China could ameliorate or nullify the unwelcome impact on unemployment figures due to the delay of retirement age and also make valuable use of the indispensable experience as well as knowledge possessed by the elderly employees [18]. In this light, it is essential to have training institutions that equip employees with basic capabilities to keep up with the changes. Those programs are the backbone that links skill shortages with job readiness, shove transitions into result-producing sectors. More specifically, skills presented by the demands such as digital literacy, data analysis, artificial intelligence, and automation can be pinpointed as fundamental targets for informed persons for future employment opportunities [19]. Steering developments into such education and skill training endeavors, those in power as well as businesses can worry less about unemployment risks, spearhead economic progress, and secure the labor market that is replete with both flexibility and strength to cope with the changing scenery of jobs.

It is these measures that pave the way for the aged individuals to continue actively contributing to the employment sector effectively through strategies that present various working hours, remote work possibilities, and retirement patterns. It is clear from the research that such flexible working conditions have a favorable influence on the feelings of the employees, their level of effectiveness, and overall healthiness, thus contributing to the desired complex workforce. Furthermore, such activities will spare the job workers from inadequate manpower and promote the periodical interaction of two different generations at work. It can also retain the required skills in the occupied job spheres.

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4.2. Suggestions for Addressing the Pension Reserve Problem

The upgrading of the pension system will need to be facilitated in the near future to sustain its excellent provision. The feasible secularities of China's pension welfare system have necessitated multiple adjustments periodically made by the Authorities of the country. The increase in the retirement age gradually is a measure to synchronize the time of pension liabilities against longevity growth. The rate of wage adjustment should also be kept fair between generations. On the other hand, it can be advisable that voluntary inducements to workers can be added to the personal pension portfolios by the state, therefore, not only does the state dole out to the public coffers but also, workers may have opportunities to contribute to their funds. Taking care of problems like income rigidity and the number of dependents is likely to have a profound effect on the creation of funding pools for pensions.

There might be some ideas for handling inelastic employment as there will be some obstacles in retirement planning. Using flexible or agile reward systems that correlate the compensation aspects of employees with both their individual and prominent achievements might solve the problem of salary inelasticity with the necessary changes regarding global economic scenarios and performance levels. Alongside this, training programs to foster the workers' skills and reduce a bit of the staff market could lead to a higher disparity in salaries and bring down their sturdiness. For retirement plans, implementing a strategy that embraces a combination of Contribution Defined (CD) and Benefit Defined (BD) schemes can limit risks and safeguard the security of the incomes of the persons who have already retired. Longer work-life period encouragement by providing options of retirement postponement assistance to the conservation of reserve for pensions through combating the issues that are likely to be encountered as the population ages. To balance the figure draws on those working out policies to analyze the links between trends in salaries together with pension structure and circumstances in employment marketplaces cautiously which, in the end, will lay the foundation for sustainable economic process and societal development [20].

To improve the workforce age structure in China's employment sector, several tactics might help to realize this aim. The introduction of policies, promoting active aging through ensuring active participation of older staff members, will reduce the load and stress on workers of the working age category. The purposeful creation of workplaces with other employment types, upgrading skills and abilities, and ensuring suitable conditions for age will be the way to go. Another approach for balancing of a dependent population with retirement a workforce of active elderly employees could be having strategies that make the transition of senior workers into mentoring roles or reduced hours evenly spread out among different age cohorts. Thus, a comprehensive fourfold strategy that is centered on bolstering state procedures, promoting incentives from businesses, and encouraging civil society participation is the secret to the success of China's employment market dependency ratio policy.

4.3. Suggestions for Addressing Marginal Productivity and Capital per Labor Impact

Maintaining an edge with the tech-savvy aspect of technological development to outpace the inefficiency caused by an aging workforce in the growing business sector is the ideal desire of a robust and à la mode economy. By taking such technical efficiency measures as automation, AI, and digital models, companies can bridge the workforce lack endangering upcoming retirements, the issue which is currently the most burning in a host of countries, including China. These tech advancements shorten working times and preclude exhaustion to allow more net output than previously. This is also a way that senior staff can manage their stereotype threat and showcase their competence. Plugging resources into training sessions, which will be used as a way to bridge the technology knowledge disparity further between younger and older workers, can enable people to maximize their

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productivity. With the emergence of modern technology, companies can tap into the "knowledge goldmine" for expertise in long-time employees, which not only promotes transaction and translation roles (e.g., financial, marketing, and legal roles) quickly and seamlessly but also cultivates budding entrepreneurs. After all, some practices that were in the lead at the beginning of the technological age become devastated as they do not cope with the pace of development. Investing into the framework of human resource development is a decisive game plan to strengthen competence ability.

Increased efficiency and production levels lie in the realization of the productive potential of a workforce. By doing so, employee resourcefulness, health status, and skill level can significantly be enhanced through programs of education, training, and health service provisions. According to Jayaram, the improvement in human capital arises in a country because it directly connects with better results in its economic growth process [21]. Keeping the importance of workers in the industry in mind, and notifying them of the ever-changing technological requirements, coupled with current market developments, will give them more power, thus helping in creating new competition levels. The contribution of individuals through the development of human capital is a necessity to overcome the challenges brought by an aging population, as the sole engines of future progress. To ensure further improvement and to sustain the development of its national workforce, China may set aside a budget that will be invested in the education of future workers.

4.4. Policies to Optimize the Capital-labor Ratio for Sustainable Economic Growth

Scaling the labor-capital ratio by regularly employing sustainable economic development approaches keeps the capacities better efficient and independent over the long run. A particular approach is associated with channeling investments into technologies that require substantial capital pushing toward higher productivity of the employees and a more efficient overall functioning [22]. Moreover, it should be ensured that employees may acquire the necessary skills so they can be responsive to new technological developments and, consequently, the labor quality may significantly rise and it may become more amenable to capital inputs. Furthermore, concentrating on the schemes that are intended to revolutionize the education of employees to improve their capabilities and their ability to be proactive in the face of new technological changes affects the labor quality that would ultimately be at par with the capital allocations. Furthermore, focusing efforts on technology innovation as well as research and development will support technological development. Hence, the balance between liquidity and output will be improved.

5. Conclusion

With the absorption of a vast number of essential viewpoints, it has become clear of necessity to extend the retirement age in the Chinese job market. The transitional policy to postpone retirement may lead to the growth of human capital by facilitating an economic expansion. However, the search for an ideal deferred retirement age is a matter of contention, which further necessitates scrutiny that leads to an equilibrium where the platforms are adequate for both the senior employees and allow the generations to come to be properly included. These findings bring possible insights to flattening the old or working condition cut-offs in China with more practical ramifications on the employment dilemma faced by both age groups and the young workforce among the most employable part of the population. Consider how the analysis might influence the workforce market of China in the future. As a result of the research, employers in this sector realize the importance and the complicated situation that the job market in China undergoes. The practice of postponing the retirement age, evaluated with the statistics of reservation percentage, reveals not only the resistance but also the benefits of this way. Additionally, when rolling out wage trends with the effects of ailing pension funds, it binds the area for immediate planning to somehow overcome the existing fixed salaries

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revise pension plans to accommodate an aging workforce, and reduce the dependency ratio on the persons supporting them.

Another significant thing highlighted is the importance of an industry-changing nature for which one must still demand the adjustment of labor parameters at the expense of capital. This paper attentively interested in the sustainable trajectory of China's labor, the total strategies that minimize the losses but leverage the new opportunities required to be set in place. To make a policy plan and inform the custodians through the research outcomes, the decision-makers and parties involved ought to have a couple of recommendations in their book.

First, the appropriate solutions should be outlined to attack the attention that is given to unemployment due to the lengthy working years. Job opening programs should be endorsed which provide training sessions for the aging employees as well. Moreover, the development of new pension scheme regulations should be considered that should be able to cope with demographic changes affecting older retirees. This should be done by adjusting the defined benefit (DB) and defined contribution (DC) systems, aside from fixing wages and coordinating the credit ratio. These, in the first place, are to be directed to making workers more efficient through the implementation of the suggested strategies and solutions in this recollection, such as less per-worker output and a greater capital-to-worker ratio. Secondly, the objective of this directive is to counter the consequence of postponing retirement from the workplace until a late age by generating jobs while having long-run growth.

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