On the Broad Impacts of Pension Systems

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Abstract

We usually consider pension systems from financial perspective. But pension systems have broad impacts to our society. Pension payments increase the incomes of old people. At the same time, pension deductions decrease the incomes of young people, at their most fertile time. This greatly reduces the fertility rate of the population. Societies with heavy pension obligations generally have below replacement fertility. This causes population aging and makes the society unsustainable. Aging societies are very vulnerable to disturbances, such as pandemics. Pension deductions are taken from every working person. But pension contributions most flow to large companies. This weakens the capacity of most individuals and small companies. At the same time, a small number of large monopolistic companies become increasingly powerful. Societies become less democratic over time due to the operation of pension systems. Pension deductions are taken from all industries. But pension contributions mostly channel into financial industry. This weakens most types of industries, such as manufacturing industry, and strengthen financial industry.

It is often thought that pension systems are neutral. We benefit from what we contribute. However, pension systems are far from neutral.

All people and businesses contribute to pension deduction. Yet most pension money flows to large publicly traded companies. Small businesses not only reduce their own resources with pension deduction, but also aid their large competitors with pension investment. The pension systems rob the small to aid the large.

We contribute when we are young. Most start from twenties. We benefit when we are old. Most start from sixties. When we are young, we are supposed to arise with the sunrise, flying high into our lofty dreams. Instead we are dragged down by heavy pension deductions. When we are old, we are supposed to settle down with the sunset, retiring into our gentle life. Instead we are buoyed up by the rising asset values and generous flush of pension payments. We dictate the activities of young with our bundle of cash. Pension systems rob the young to aid the old.

For the majority of businesses and individuals, the pension deductions force them to part resources from their most familiar, most knowledgeable and most passionate activities. For businesses, it is to reinvest in their own products and services. For individuals, it is to reinvest in their own families, and reproduce their next generations. The pension deductions greatly curtail the abilities for most businesses and families to regenerate. Many small communities withered under heavy pension burdens and other regulatory constraints. Many families could not afford to have the number of children they wish to have. In most countries with heavy pension deductions, fertility rates drop far below replacement rate. Low fertility rate causes population aging and social declining. The vast amount of pension deductions are all channelled into finance industry, which flourishes at the cost of many other industries.

Pension systems are usually considered from the perspective of finance. However, pension systems deeply affect everyone in the society. They have broad impacts on business profits, demographic structures, economic efficiency, competitiveness, wealth distribution, immigration, economic geography and other fundamental issues that have great influence on the future of our society.

1. Every business pays into the system. Large businesses receive most benefits.

Pension systems deduct incomes from every businesses and working individuals. But pension funds mainly invest in the stocks of a small number of large publicly traded companies. The pension deductions harm most small businesses. They have less resources available to sustain and grow their businesses. At the same time, pension funds enhance the competitiveness of large businesses. Over time, our society is increasingly dominated by a small number of large businesses. This greatly increases the power of monopoly and makes our system less democratic.

Pension deductions reduce resources and hence growth opportunities for most businesses. This reduces the opportunities for workers. For the majority of people, their incomes have been stagnant for several decades. At the same time, pension deductions transfer wealth from all working population to a small number of large businesses. This accelerates the concentration of wealth to small percentage of people that control large companies. Pension deductions stifle the income of the majority of the population, accelerate the wealth accumulation of a small number of people and increases the level of inequality of the society.

Pension funds increase investment money for assets. This increases the prices of assets. At the same time, pension deductions reduce the growth opportunities for most businesses and hence reduce the growth rate of total economy. As a result, the ratio of wealth over GDP increases over time. This makes the life especially difficult for the young people, who often have few assets.

Large businesses often operate in many different countries. In negotiations and disputes at different parts of the world, they hope to maintain favorable positions backed by a strong government. Large companies headquartered in the most powerful countries often enjoy competitive edge over others. Over time, most successful large companies are headquartered in US, the most powerful country. Consequently, many pension funds in different countries invest heavily in US capital market. Pension deductions in most countries are subsidizing dominant international businesses, while at the same time bleeding the domestic businesses.

Most large businesses concentrate in a few metropolitan areas. The development of the pension systems helps concentrate the wealth in a few regions and impoverish most other regions. Indeed, most small towns and rural areas are in decline.

The accumulation of pension funds creates ferocious appetites for new financial assets. Mortgage backed securities are a type of such financial assets. The demand for more financial securities generates housing booms. Houses become larger and larger. People are encouraged to own many different houses. The tremendous amount of resources diverted to the housing reduces the amount of resources allocated to raising children. As houses become larger and larger, the number of children in each household becomes less and less.

2. **Young people pay into the system. Old people receive benefits from the system.**

The pension deductions reduce the available resources while people are young and fertile. This reduces the ability of young couples to have more children. When fertility rates drop below replacement rate, the population will age over time. Social systems become unsustainable. With aging population, our societies become more susceptible to diseases. We are especially vulnerable to pandemics.

Increase of pension deductions reduces spending power of working population. It also increases the spending power of retirees. The locations of retirees are not tied to work places. Many retirees choose to live where weather and service are good. Many Canadian seniors move to USA and other countries, bringing resources into those places and away from Canada.

Many retirees staying in Canada will move to places with good weather and comprehensive service. In general, large cities have more comprehensive services. This further increases the concentration of population in large cities. The productions of resources are more spread out in different parts of the country. High pension deduction causes the detachment of resource production and resource consumption. This makes the resource production and distribution less efficient. The increasing concentration of population to large cities and places of good weather makes the housing prices in these places very high. The good weather BC, especially Vancouver, faces continued upward pressure on housing prices. The increasing concentration of population also makes us more vulnerable to contagious diseases.

Due to the high degree of separation between resource production and resource consumption, people often have little knowledge and emotional attachment to the process of resource production. The construction of oil pipelines, which would have generated great amount of wealth for Canada, has been facing great political resistance.

Raising children is hard work. Statistically, those who raise more children have shorter lifespan. Grownup children have no private obligation to their parents. But everyone has to pay tax to support general public, in particular old people. People with fewer children on average live longer. People with fewer children receive more pension benefits and other old age benefits, while they work less to raise the next generation. Due to this negative incentive, societies with heavy pension deductions usually have very low fertility rates.

Low fertility reduces working force over long term and generates population aging. With less people in work force and more seniors to care, mass immigration becomes a necessity. The increase of pension deductions reduces the flexibility of a country's immigration policies.

One has to live long to enjoy pension benefits. The longer one lives, the more benefits one receives. Pension systems destroy our passion for adventure. Instead, we seek security and longevity.

3. All industries pay into the system. Financial industry receives the most benefits.

The pension systems lower the profit opportunities for general industries and increase profit opportunities for financial industry. Of the five largest companies by market capitalization in Canada, often three are banks. The concentration of wealth in financial industry makes the economy very undiversified and unstable.

For many people, the pension deductions start at twenties. The pension benefits start at sixties. The long span between deductions and benefits is a great source of wealth for the financial industry. It is also the cause of tremendous dissipation of real wealth for the general public.

Partly because of heavy pension deduction and taxes, many people borrow heavily to finance their daily needs. Credit cards often charge twenty to thirty percentage interest. Short term money lenders often charge several hundred percent interest. Pension returns are very low compared with credit card financing cost for the public.

4. A quantitative analysis on the return of pension systems

We will make a quantitative analysis of the pension returns. Pension systems involve many different types of pensions. In Canada, we have Old Age Security (OAS), Canada Pension Plan (CPP), company pensions, Registered Retirement Saving Plan (RRSP) and other private pensions. CPP has well defined deduction rates and benefits rates. This makes it possible to make a quantitative estimate of returns.

CPP (Canadian Pension Plan) is run by the federal government. It started in 1966. Through these years, the pension benefit rate has been flat. Until 2018, pensioners will receive 25% of the pensionable income every year after retirement.

How good is the pension plan for pensioners? At early periods, people contribute little but receive high pension income. However, the generosity of early pensions was funded by contributions from people who were still working. This pay as you go system is unsustainable. Over time, CPP deduction rate increased from 3.6% in 1966 to 9.9% in 2018. At the deduction rate of 9.9%, we cannot even get the principle back. The following table lists the deduction rate over the years.

year	total deduction rate (%)
1966	3.6
1980	3.6
1990	4.4
2000	7.8
2010	9.9
2020	10.5

Let us make a simple calculation. Many people start to work at 22, when we graduate from college. Assume we start to work at 22 and retire at 65, working for a total of 43 years. Assume we contribute 9.9 dollars per year. Over 43 years, we will contribute a total of 9.9 * 43 = 426 dollars. How much money we will receive after retirement? For every 9.9 dollar contribution, we will receive 25 dollar per year after retirement. The average lifespan of Canadian is 81 years old. On average, we will receive 81 - 65 = 16 year benefit. This average number is calculated by including people who die before retirement. So average benefit will be 25*16 = 400 dollar, which is less than 426 dollar, the amount we contribute. We don’t even get the principal of our contribution back. When we read newspapers, many articles report the high return from pension investment. But these same articles rarely point out that the pensioners don’t get high returns. High return from pension investment means high income to pension managers, not high return for pensioners.

The earlier pensioners of course got very good returns. But the very fact that the deduction rate keeps increasing means that the earlier rates of return are not achieved from high investment return, but from pension deductions from late comers. The good returns for early pesioners are unsustainable. Will the deduction rate of 9.9% in 2018 sustainable? The CPP system undergoes a transition, starting at 2019. It will move toward a benefit rate of 33% instead of 25%. In the current plan, the deduction rate will rise gradually to 11.9% in 2023 and stay at that level. Is this projection realistic?

Before the transition, the benefit/deduction ratio is 25/9.9 = 2.53. After transition, the eventual benefit/deduction ratio will be 33/11.9 = 2.77. The new ratio is higher than the old ratio. This promise of constant future deduction rate cannot and will not be kept. Indeed, the deduction rate has kept increasing in the past for several decades, despite the constant benefit rate at 25% of pensionable income.

5. Concluding remarks

The pension systems make the society unsustainable and unstable. The pension systems enrich the rich and suppress the wage of the working classes for several decades. The pension systems cause the decline of many small towns and small businesses. Why was the pension system developed? There are many official explanations. But an important reason is that early adopters do benefit greatly from the system. They pay little deductions and receive great benefits. Like any other Ponzi scheme, or pay as you go scheme, early participants get great deals.

When the pension system was firmly established, most old and middle aged people have already contributed heavily. They are deeply entrenched in the system. They have little incentive to abolish the system. They only have incentive to increase deductions so their benefits will be higher. Financial institutions also benefit greatly from the steady flow of pension money.

Because of these and other factors, pension systems, once established, are very hard to shake off. If unchecked, pension deductions and other deductions, such as taxes, will increase over time, until the collapse of the whole social structure.