

Investment Patterns and Sustainability of Social Security Schemes in Nepal

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Abstract

Social security programme based on contributions of employees was introduced in Nepal by enacting the Employee Provident Fund Act - 1962, primarily to address the security needs of the retiring population. Employees Provident Fund, Citizen Investment Trust, and Social Security Funds are three major competing institutions in the social security market in Nepal. This paper explores the investment of funds accumulated through the contribution of employees for value creation as a means to enhance financial viability and further assesses the long-term sustainability of such programmes. The study is based on reviewing and analyzing the documents relating to the defined objectives and targets, investment policies, investment portfolio, legal framework for investment, and achievements. The study finds that all three social security institutions (SSIs) end up investing the accumulated funds in fixed deposits in the banking and financial institutions (BFIs.). This is despite the act empowering them to mobilize the accumulated funds in several productive sectors and set competitive investment goals. This indicates that they fail to explore productive avenues for sustainable investment of the accumulated funds, which could contribute to the economic development of the nation. The current challenges in the social security system in Nepal are the increasing number of pensioners and the need for sustainable investment; making it imperative for the Nepalese SSIs to evaluate their investment priority; feasibility and diversify for higher and long-term returns; focusing on areas that contribute to economic growth and development; and generating employment opportunities.

Keywords: *Social securities, Contribution-based social security, Investment, Social Security fund sustainability.*

JEL Classification: *E44, G2, G23.*

Introduction

Social security systems are crucial programmes designed to mitigate the vulnerability of individuals due to old age, loss of economic opportunities,

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deteriorating health status, and lack of resources, which can lead to the risk of falling below the poverty line. These systems not only address social risks like sickness, old age, unemployment, and social exclusion but also enable older people to lead better lives. Old age and widow pension schemes are particularly important for lifting individuals and households above the 'Survival line,' ensuring a dignified life and access to improved resources for basic needs. However, with the changing demographic pattern and increased life expectancies, the number of pensioners is set to rise significantly posing a formidable challenge that needs immediate attention (Sala-i-Martin, 1995).

Under the leadership of Iron Chancellor Otto Von Bismarck, Germany was the first modern country to introduce welfare and old-age pension programmes in 1881 and 1889. Since then, social security programmes (SSPs) have mushroomed all over the globe. For example, Great Britain enacted old-age pensions in 1908 (Hemming & Kay, 1982); Sweden enacted compulsory old-age pension in 1915 (Stahl, 1982); Switzerland in 1925 (Janssen & Muller, 1982); and the United States enacted 'The Social Security Act' in 1935. However, there were some kinds of old-age SSPs in 33 countries by 1940 and that went up to 80 countries by 1958, 123 countries by 1979, and 130 countries by 1989 (Sala-i-Martin, 1995).

There is no proper documentation about when the SSP was first launched in Nepal, but it is found that a system to provide annual lump sums to wounded soldiers returning from the British Army was practiced during World War - I. 'A Military Money Fund' was established, and then Prime Minister Juddha Shumsher announced one-fifth of the salary as pension for retired soldiers in 1934, and one-sixth of the salary was provided as pension to civil servants in 1948 who had served 25 years. The universal flat pension of NRs. 100 to all the elderly above 75 years was first announced in Nepal by the then Prime Minister of Nepal, Manmohan Adhikari (who led the Communist Party of Nepal- Unified Marxists and Leninists) on 26th December 1994 (NPC, 2012).

Review of Literature

Before going into the 'Social Security Fund,' it would be appropriate to discuss the theoretical concepts of the creation and evolution of social security. A theory of social security needs to explain why social security is necessary and what are the socioeconomic and political forces that create these programmes. All the social security theories assume that elderly retirees and pensions are designed to buy the elderly out of their jobs. Since it is assumed that if the elderly people do not work the total output would be higher. Productivity of both males and females reaches its peak at around the age of 45 and declines afterward. At the age of 65, productivity is believed to be less than one-third of that at the peak (Kotlikoff & Gokhale, 1992). Depreciation in the average skills of elderly people would have negative effects on the productivity of the young. Total output in

the economy would be higher where the elderly people do not work if the gap between the skilled young people and the older people is wider. Social security programmes were introduced to support elderly people, which have been termed elderly people's retirement programmes.

History suggests that SSPs are usually introduced only after the country has reached a certain level of development (or attained some level of income). One way to assess the relationship between social security and the level of development is to look at the correlation between the income per capita and the size of social security funds as a share of GDP for a cross-section of countries. For example, if the correlation coefficient is 0.7 and the regression coefficient is 1.08 (S. E.= 0.14), it implies that a 1 percent increase in income per capita also increases social security funds by about 2.08 percent (Sala-i-Martin, 1995).

Effective retirement and work history is considered an eligibility criterion for SSPs (collecting pensions). Virtually in all countries, the pension received is related to the number of years of contributions and a worker's earnings around the world. However, a basic pension scheme is unrelated to the previous contributions; the country usually provides a minimum subsistence level of income for all the elderly. A second tier relates the pension benefits to the history of previous wage earnings. In the United States, retirement is not mandatory, but the marginal tax rate for retirees under 65 is 50 percent on labor income over U.S.\$ 7,440, and that for retirees between the ages 65 and 70 is 30 percent. A person is entitled to receive a full retirement pension along with a million dollars earned a year as dividend income without further tax. People in the United States have been motivated to retire after a certain age, as one dollar tax is levied for every two dollars of labor income earned if s/he receives more than U.S.\$ 7,440 a year (Sala-i-Martin, 1995). The government finances and administers the SSPs based on wage taxes in almost all countries of the world. This means SSPs are financed through their own special budget. The government also determines the amount of pension to be paid to any individual by formula. Determining the amount of a pension is usually a political decision.

Theories of social security can be classified into two broad categories like 'Political Theories' and 'Efficiency Theories'. Political theories are concerned with the redistribution of resources which is the outcome of political struggle. Such theories assume that the elderly citizens are the winning group involved in the political struggle to extract resources. Efficiency theories identify and explain market inefficiencies and how SSPs would alleviate them. The theory argues that the market fails to provide certain insurance for the elderly so that the government needs to step in with SSPs. It also claims that social security is the optimal way to eliminate inefficiencies. Below are some of the common characteristics and predictions of political and efficiency theories (Mulligan & Martin, 1999).

The results of political theories from political struggles are considered economically inefficient. Thus, political theories assume that social security helps to increase social welfare. In contrast, efficiency theories argue that social security is the optimal policy to combat some kind of market malfunctions. So, it is not necessary for the efficiency model to increase social welfare. The political model is a mandatory and regulatory dimension of government activity. It predicts that the elderly are powerful enough to get SSPs and other political benefits. The efficiency model does not share this prediction.

Political theories are built upon the form of the political game, which determines the quantity and type of resources to be redistributed. Thus, it tends to be inconsistent across the country with different political institutions (such as democratic and non-democratic). The efficiency model does not explain the process of making collective decisions. The design of social security depends more on economic considerations than political considerations. Hence, SSPs are based on economic variables, but not the form of political institutions. A political model focuses on legislation favoring the elderly by considering the elderly as the 'Winners.' Thus, spending on social security is comparatively higher than other spending. The efficiency model does not identify 'Losers' from the policy. It does not predict whether the old people should consume more or less than the young people. Political theories predict social security results in resource re-distribution from young to old people, while efficiency theories do not necessarily make this prediction.

Contribution-based Social Security Programmes in Nepal

The new constitution promulgated in September, 2015 expands the social security provisions, establishes social security as a fundamental right of Nepalese citizens, and provides a broad framework for the social security system. The ongoing social security schemes (SSSs) in Nepal can be divided into two major groups based on the nature of funding: government-funded social security and schemes based on the contribution of employees.

Government-funded SSSs help social solidarity between people and form a relationship between the state and its citizens. The impact assessment of social protection schemes indicates that such social protection initiatives in Nepal are influenced by populism and less by concrete evidence or fiscal calculations (Sijapati, 2017).

The contribution of the employees as the common denominator of the following three SSSs could be considered direct competitors in the social protection market in Nepal. With the enactment of the Employee Provident Fund Act - 1962, Nepal started implementing SSSs based on contributions of the Government, corporate bodies, and other employees. The government also established Citizen Investment Trust (CIT) in 1991 to increase opportunities

for investment for public and private sector employees regardless of whether they work on a permanent, temporary, or contract basis, and also to develop the capital market by enacting the CIT Act - 1991. Similarly, the contribution-based SSSs were launched in 2018 to ensure workers' social security rights by enacting the Contribution-based Social Security Act - 2017.

Since the inception of social protection schemes based on employees' contributions, they have accumulated large reserve fund balances. As of July 2021, the funds accumulated by the EPF have reached NRs. 444.47 billion. Similarly, the CIT has accumulated NRs. 197.67 billion as a social security fund as of the fiscal year 2019/22, and within March 2022, the contribution-based SSSs have collected the employees' contribution of NRs. 38.69 billion (NRB, 2022).

Rationale for Contribution-based Social Security Programmes

The SSP in the world is fully funded and administered by the government. There could be a big question like, 'Is a fully funded social security system sustainable?' An important reason for the question is the sustainability of fully funded programmes. No SSP in history has been fully funded for any significant length of time. At the same time, several SSPs were supposed to be fully funded but were unfunded by the political system in short order (Mullidan & Martin, 1999).

However, the sustainability of SSSs remains a major challenge owing to several factors, such as aging trends, continuously rising life expectancy, which resulted in pensions being paid out for longer periods than was the case in the past, and lack of proper management of public pensions, which have impacted investment strategies and how assets are invested (Iglesias & Palacios, 2000).

The world is aging due to the following two long-term trends like falling fertility rates and rising life expectancy. According to the latest UN projections in the four short decades between 1990 and 2030, the global count of persons aged 60 and above will increase from 500 million to almost 1.5 billion individuals. As much of this demographic aging will take place in Asia, it follows that retirement systems in Asia will come under substantial pressure (Jackson, 2002). Center for Strategic and International Studies (CSIS) projects that public retirement spending in the typical developed country will grow from 11 percent to 23 percent of GDP by 2050 (Borsch et al., 2016). The aging world and public retirement spending drive each country to rethink its retirement system. The most promising strategy now is to encourage or require people to save more for their own retirement during the course of their working lives.

Thus, different policy options have been floated for the reform of the social security systems. Some termed it a systemic or fundamental reform including raising the social security tax, reducing the benefit replacement rates, and

increasing the normal retirement age among others (Borsch et al., 2016). This has given birth to a contribution system in social securities. It is credited to an individual account and earns a national interest which is the sum of the growth rates of the labor force and labor productivity. The accumulated contribution and the interest income are then converted to an annuity while retiring. Such a system is financially self-stabilizing as the national interest rate adjusts automatically with the changing demographic and the patterns of labour force participation. Such contribution-based social securities are prominent in Asia and Mexico in the form of the 'Provident Funds.'

Research Methodology

This paper explores the investment of funds accumulated through the employees' contribution in the financially viable and sustainable sectors for value creation in the contribution-based social security. The paper delves into the sustainability of such programmes in the long run. The methods adopted in the study are the review and analysis of the documents of SSIs focusing on various issues and activities. The following sections of the paper analyze the defined objectives, targets, legal framework for investment, investment policies, investment portfolio, and the achievements of the SSIs to ascertain their sustainability.

Results and Discussion

Contribution-based social security system of Nepal is a publicly managed programme. The EPF was established under the EPF Act in 1962 to manage the provident fund of government employees, the army, police, teachers, government corporations, and some private companies. The CIT was established under the CIT Act in 1991 to mobilize savings (private and institutional) and provide loans and advances. It is also mandated to work as an issue manager of securities. The Social Security Fund (SSF), which executes contribution-based social security schemes, was established under the Contribution-based Social Security Act - 2017. Medical treatment, health and maternity protection, accident and disability protection, dependent family protection, and elderly protection of employees are the major benefits of contribution-based SSSs (NRB, 2021).

Thus, SSSs should guarantee financial viability in the short run and sustainability of the scheme in the long run through the proper and rational investment of the accumulated funds and safeguarding the value of assets (essentially the financial resources). The 'Financial Stability Report' claims that strong resource-based institutions like EPF and CIT may not be able to develop appropriate long-term investment plans for creating stable financial situations due to the absence of data on the true financial conditions (NRB, 2021). Investment in the contribution-based social security scheme is guided by the Social Security

Fund Investment Procedure - 2020, which is assumed to facilitate efficient and effective mobilization of the money deposited in the SSF (SSF, 2021).

In developing countries, such schemes cover a large share of retirement income for workers. So, it is important that accumulated assets (funds) are used to meet social security obligations. Investment performance is of central importance (Palacios, 2001). Compared to publicly managed and funded social security (fully or partially), social security funds based on contribution will have a crucial responsibility to keep them in place and allow them to grow for paying a promised benefit for protecting the contributors from risks of market fluctuations and inflation in the long run.

Traditionally, the business of SSIs was limited to registering the contributors, collecting contributions, and paying the eligible beneficiaries. In modern days, investing such accumulated funds has become a core business process of social security administration instead of limiting the provision of short- and medium-term benefits (sickness, maternity, work injury, and unemployment insurance schemes). The purpose of investing in social security funds is gradually yet progressively shifting from profits to investing for value creation (Plamondon et al., 2002).

The guiding principles of investments are safety, liquidity, and yields of social security reserve funds for the fund's sustainability. It also includes the socio-economic and sometimes political dimensions of social protection for Economically Targeted Investment (ETI) and Socially Responsible Investment (SRI) (SSF, 2021). Thus, the funds needed to be invested to increase the money available to pay promised benefits to the contributors. The purpose of such investments should be made clear before investing. There are several alternatives for investing in social security funds. There is no simple right-or-wrong approach to setting the objectives for investment in the fund unless it does not differ from the fundamental purpose. Unclear or contradictory objectives might seriously jeopardize the sustainability and security of the fund.

Since most SSFs are publicly managed and if the fund is sizeable, there is every possibility that the government will try to influence the use of funds for short-term political purposes or, in some instances, even for personal gain, owing to temptation. The role of government is to establish a mechanism by which SSFs are managed and carry out the legitimate functions of monitoring and regulating, minimizing the risk of inappropriate interference in line with the established objectives backed by sound investment analysis.

An analysis of the legal framework of SSIs based on contribution of Nepal shows that there are no strongly defined objectives in relation to the investment of the accumulated SSFs. Clause - 19 of the Employee Provident Fund Act spelled out the powers in relation to the mobilization of its balance/inventories and assets without any specific purpose or objectives. The preamble of the act

is clearly limited to providing an EPF for the employees of the government of Nepal, corporate bodies, and other employees. However, the EPF contributes to the development process in terms of its investment channeled towards different sectors of the economy.

The second strategic plan for 2021-2025 of the CIT has defined its objective as ‘encouraging civilians to save for the formation of national capital, creating opportunities, and expanding the capital market through long-term investment.’ Similarly, the preamble of the CIT Investment Policy-2019 is also limited in strengthening the management capability of the ‘Trust’ for maximizing the returns. However, CIT has been investing its significant resources in various banking and financial institutions due to the unavailability of opportunities, particularly for investment in longer-term projects (NRB, 2021).

The preamble of the Investment Procedure of the Social Security Fund-2020 vaguely limits the purpose of the investment procedure to the effective and efficient mobilization of the collected funds. Setting competitive investment goals is believed to create challenges and opportunities for social security administrations. Investments in infrastructure development, which has the highest deficit, would be more crucial for a country like Nepal.

Acts give the EPF, CIT, and SSF power to make decisions regarding mobilizing its fund balance / inventories and assets. Clause - 19 of the Employment Provident Fund Act, Clause - 32 of the Civil Investment Trust Act. Clause - 32 of the Contribution-based Social Security Act had provisioned investment in the accumulated funds. The major areas of investment / mobilization of the funds made by the EPF, CIT, and SSF are as follows:

Table 1: Areas Provisioned by the Acts for Investments of Accumulated Funds

Provisioned Areas for Investments of Accumulated Funds		
Employees Provident Fund (EPF)	Civil Investment Trust (CIT)	Social Security Fund (SSF)
a. Purchase and sell of government bonds.	a. Underwrite shares of various corporate bodies.	a. Invest in fixed deposits of banks.
b. Invest in fixed deposits of banks within Nepal against appropriate bank guarantees.	b. Provide facility of bridge financing or lend to corporate bodies.	b. Investment in bonds issued by the government of Nepal.

Provisioned Areas for Investments of Accumulated Funds		
Employees Provident Fund (EPF)	Civil Investment Trust (CIT)	Social Security Fund (SSF)
c. Lend money to any industry, enterprise, or corporate body against the guarantee of the government of Nepal.	c. Provide credit to purchase securities to the investors participated in Investment Account Scheme run by the Trust.	c. Investment in shares of banks and financial institutions, industries, and corporate bodies
c ₁ . Investment in shares of BFIs.	d. Invest in bonds issued by the government of Nepal.	d. Investment in debentures.
c ₂ . Co-financing in collaboration with other BFIs. against collateral.	e. Hold any movable or immovable assets in security or deposits or hypothecation or collateral and accept any agreement or contract or any instruments or documents as per necessity and put conditions for the protection of its interest and for utilization as per the purpose of the facility provided.	e. Investment in mutual funds
c ₃ . Investment in debentures.		f. Investment in fixed assets
d. Operate housing projects solely or in collaboration with other institutions (sell and distribute houses and housing plots).		-
e. Building construction and renting.		-
f. Lend money to companies or corporate bodies against adequate security / guarantee		-
g. Acquire assets belonging to any institution for any outstanding loan by the fund	f. Provide term loan to corporate body.	-

Source: GoN, (EPF Act, 1962; CIT Act, 1991; and CBSSF Act, 2017).

Administrative and benefit expenditures are the two main categories of expenditures. The contribution income and investment income are the two main categories of revenue for SSIs. Fluctuations in interest rates and saturation of financial markets have increased investment risks. The fiduciary responsibility of the manager of SSFs is required to mitigate these risks in the best interests of both the SSPs and the contributors. One of the measures is to maintain an

investment portfolio. Based on the acts of investment provisions of the fund, CIT and SSF have prepared their investment policy and procedures respectively. In order to avoid the risk of investment, both SSIs have specified upper limits for sectorial investments. Following are the sectorial investment limits fixed by the SSIs.

Table 2: Sectorial Investment of the Social Security Institutions

	Civil Investment Trust (CIT)		Social Security Fund (SSF)	
	Particulars	Limits in %	Risk Category - A	Limits in %
a	Government bonds	15	a. Government bonds	20
b	Corporate debentures	20	b. Fixed deposits	20
c	Fixed deposits	65	c. Mutual fund	10
d	Equity share	17	d. Fixed assets	10
e	Housing project and fixed assets	10	e. Collateral loan	5
f	Co-financing loan	20	Risk Category - B	
g	Institutional loan	25	a. Equity share	10
h	Institutional bridge loan	5	b. Debenture	10
i	Institutional working capital loan	5	c. Loan for contributors	15
J	Loan for contributors	25	Risk Category - C	
k	Collateral loan	As decided by the working committee	a. Co-financing loan	10
			b. Institutional loan	5

Source: GoN. (CIT Investment Policy, 2018; and SSF Investment Procedures, 2020).

The investment of EPF shows a slow growth on an average of less than 5 percent after 2010 comprising a negative growth of 2.6 percent in 2012 against a positive growth of 5.6 percent in mid-January 2013. Ensuring productive, secure, and profitable investment are the major focus of the investment policy and portfolio of the EPF in 2014. However, under the situation of weak investment and an unstable financial market in the country, EPF faces a great challenge in managing its long-term portfolio in the liquid form to fulfill its long-term obligations to the contributors of EPF (NRB, 2014).

Unlike the CIT's defined objective (i.e., encouraging civilians to save for the formation of National capital for creating opportunities and expansion of the capital market through long-term investment, CIT set investment limits of 15 percent, 20 percent, and 17 percent in government bonds, debentures, and equity respectively), it has invested 65 percent of its accumulated funds in fixed deposits. This is probably due to the pressure of investing in the area that guarantees the returns and perceived limitations in investing opportunities in mega projects to develop the national economy. CIT has confined its investments to interest-generating BFIs (CIT, 2020).

The Contribution-based Social Security Scheme is a new programme that competes with the existing EPF and CIT in the social security market. Besides, it will require innovative and attractive products / services that will look better than the competitors as well as an investment policy that is different from the traditional investment pattern based on the exploration of new investment sectors. The first strategic plan of the Social Security Fund from 2020 to 2024 has defined a strategy for the identification of investment sectors and preparing an investment portfolio for secured investment through risk mitigation and optimum return. As a result, SSF Investment Procedure - 2020 and sectorial investment limits have been formulated.

The investment areas of the EPF include lending to contributors (45.07 %) and investment in fixed deposits (30.04 %). The loan and investment to total fund ratio stands at 98 percent. Similarly, fund mobilization of CIT also depends on BFIs (52.27 % of total funds in fixed deposit) and loans (30.22 % in loans and advances to members) to the contributors in mid-July 2021. SSF funds are concentrated on investment in fixed deposits. As of mid-July 2021, fund placement with BFIs stood at NRs.30.75 billion (SSF, 2020). The following is the summary of SSI investment portfolios as of July, 2021 based on the contributions of employees.

Table 3: Investment Portfolios of the Social Security Institutions (NRs. in billion)

S. N.	Sectorial Investment	EPF		CIT		SSF	
		Amount	%	Amount	%	Amount	%
1	Total fund collected	444.47	-	197.67	-	38.69	-
2	Investments Portfolio						
	a. Government bond	0.32	0.07	1.05	0.60	-	-
	b. Fixed deposit	131.14	30.04	103.32	58.78	30.75	97.03
	c. Equity shares	34.44	7.89	18.29	10.41	0.94	2.97
	d. Debentures	1.11	0.25				
	e. Project loan	68.54	15.70	-	-	-	-
	f. Lending to contributors	200.32	45.89	53.12	30.22	-	-
	g. Investment in properties	0.67	0.15	-	-	-	-
	Total	436.54	100	175.78	100	31.96	100

Source: Financial Stability Report-Fiscal Year 2020/2021 (Issue no. 13); Nepal Rastra Bank, 2022.

However, EPF invested more than NRs.26.0 billion in long-term national importance projects like hydropower in 2013. Similarly, aiming at a positive impact on economic development, the EPF has invested in different infrastructure and other projects. Moreover, various income and employment-generating activities as a contractual saving institution for the smooth supply of petroleum products, a loan facility (NRs.8.0 billion) has been provided to the Nepal Oil Corporation. As an achievement of its investment, the EPF has created reserves from the profit worth of NRs.4.66 billion, NRs.9.96 billion, and NRs.29.06 billion in the fiscal years 2015 /16, 2017/ 18, and 2019 / 20, respectively.

The CIT investment side has been found weak even though the total sources / uses show an increasing trend over the period. As defined in the preamble of its act, it possesses adequate resources for investing in longer-term projects and contributing to capital formation in the economy. But in the name of mitigating investment risks, CIT has selected BFIs as its sector for the investment of funds, ignoring its organizational objectives, and perceiving the unavailability of opportunities, particularly for investing in longer-term projects, as excuses.

Being a contractual saving institutions with strong resource-based EPF and CIT could have reduced its dependency on fixed deposits and invested in long-term projects. It could increase their investment in long-term projects such as hydropower generation, which will substantially increase income by investing the funds in long-term assets. The contribution-based Social Security Scheme is still in its initial stage of operation. It is still developing organizational infrastructure for its investment modality. The working policy is in its first strategic plan, and SSF is trying to lay the foundation for investment modality by preparing necessary procedures and guidelines.

Conclusion

With the growing size of funds, the complex and uncertain investment environment, and the urgency for guaranteed returns, it has become much more difficult for SSIs based on contributions of employees to meet the promises from the returns from traditional investment structures. Due to the perceived limitations in investment opportunities, SSIs are confined to the guaranteed interest-generating accounts of BFIs. As there has been a shift in investment beliefs, it has gradually shifted from investing for profits to investing for value creation. Safety liquidity and yields are considered the fundamental determinants of investment decisions for the first, whereas progress and diversification for growth for the second. Therefore, keeping in mind, the ‘value creation as an alternative for profits’, the social security administrations should define and assess their investment goals that take advantage of new investment opportunities within the framework. Value creation as a goal opens a new horizon for social protection systems investment by providing alternative investment options for short-term liquidity management and strengthening long-term financial sustainability instead of limiting focus on safety, liquidity, and yields. Thus, evaluating investment priority and feasibility based on risk analysis have become necessary to diversify investment sectors with higher and long-term returns focusing on areas that increase gross domestic production and generate employment opportunities.

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