Allianz **Demographic Pulse**

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Big and Getting Bigger

Despite financial crisis global retirement market expected to **grow to €36 trillion** until 2020

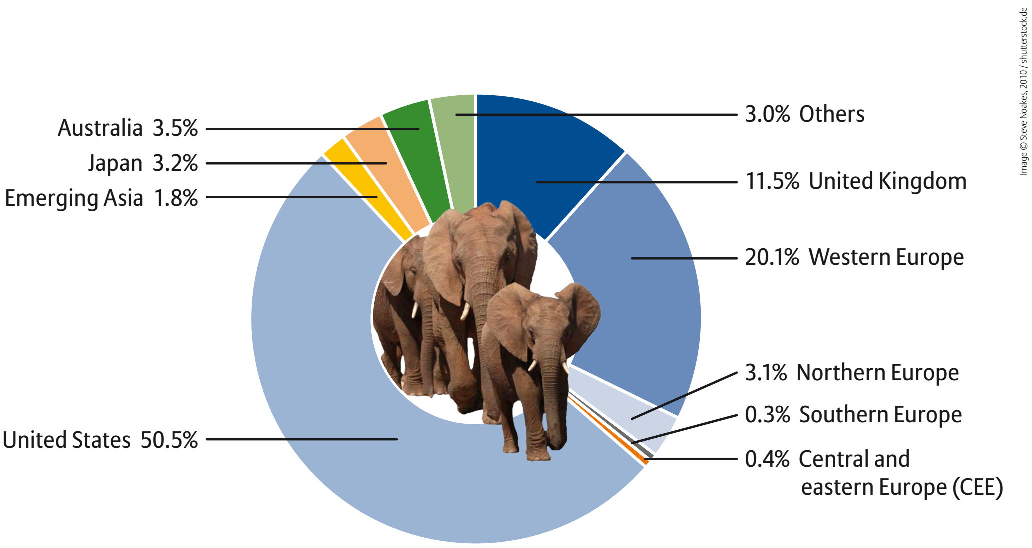
Despite the effects of the 2008 financial crisis, the global retirement market is expected to grow by 66% by 2020, representing an annual growth rate of 4.7%. Total pension assets will increase from €22 trillion to €36 trillion.

The financial and economic crisis had a substantial impact on the overall volume of pension assets. Aside from the short-term influences of the recent crisis, the most important question is what the long-term effects of the crisis will be on pension asset structures over the next decade.

The world's retirement assets are distributed quite unevenly. Covering slightly more than half of the world's total retirement assets of some €22 trillion, in 2009 the United States was the leading retirement market in the world, followed at 11.5% by the United Kingdom. Western Europe's combined retirement assets came to slightly more than 20% while Australia and Japan each laid claim to 3% of the global market. The emerging economies of Asia, and central and eastern Europe (CEE), which are still in the early stages of building up their individual funded pension systems, represented only minor shares (1.8% and 0.4%, respectively).

Mix of retirement income sources
One major factor determining the size of retirement assets is the mix of retirement income sources. In retirement, income from public, occupational and private sources is combined to create a portfolio of income streams with the public pillar determining in large part how much additional money will be needed to achieve a certain standard of living. Therefore, the larger and more generous the public pillar, the smaller funded pensions have to be.

Big and Small – Global Retirement Markets



Source: Allianz, OECD, Central Banks, National Statistical offices

In 2009 Global retirement assets represented EUR 22 trillion

The last two decades have seen a wave of pension reforms all over the world. The dynamics and goals of reform have differed between developed and developing economies, while both reform patterns have had a substantial impact on retirement markets. Realizing how an ageing population can shatter the logic and sustainability of public pay-as-you-go systems, policymakers in countries with predominantly public systems have begun to strengthen funded pensions in order to achieve a more balanced and sustainable approach. At the same time, policymakers in emerging economies have laid the foundations for or extended their public systems and institutionalized funded pensions.

There seems to be an emerging consensus that the best-practice for pension systems worldwide is to combine a sustainable public pillar with a strong funded pension pillar.

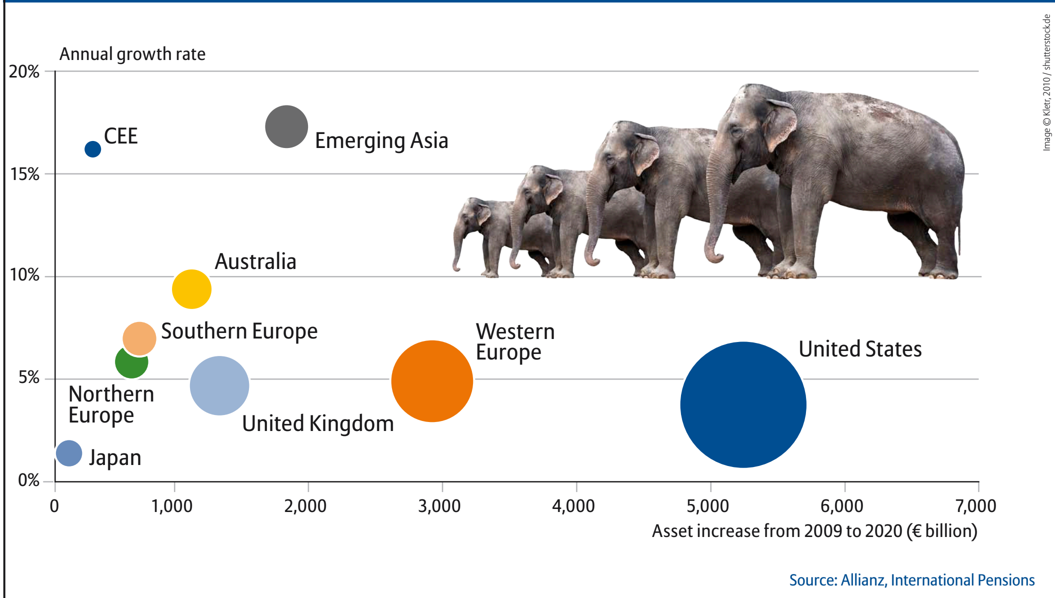
United States was hit harder

The financial and economic crisis has had a significant impact on the volume of global pension assets. At year-end 2008, this volume stood at roughly €20 trillion; down by roughly 15% from year-end 2007 (€23.2 trillion). With a steep drop of 22%, the largest pension market in the world, the United States, was hit even harder. In general, the overall effect of the 2008 financial crisis on pension assets varies in proportion to their equity exposure. The bigger loss in the U.S. is easily explained by the fact that the pension plans of U.S. private households are much more exposed to equity and mutual fund investments than their western European (particularly continental European) counterparts.

Although retirement assets recovered in 2009 to €22 trillion due to a very strong rebound in equity markets, they did not yet reach 2007 levels. In order to recoup the losses after 2007, private households cannot solely count on market recovery but have to save more for their retirement. This will not only occur in countries with mature funded pension systems (such as the United States, the United Kingdom, the Netherlands and Switzerland), it will presumably also take place in states where reforms of pay-as-you-go systems will lead to lower pension levels that need to be compensated for by a build up of capital to preserve an adequate standard of living. The same holds true for eastern European states and emerging Asia, whose households have just started to save and build up wealth in keeping with their increasing prosperity.

Most countries will see a higher savings rate than they had in the recent past. In many of the countries in Europe, Asia-Pacific and the United States, this stronger retirement saving will be the driving force for the development of monetary wealth.

Big and getting bigger – Retirement Assets till 2020



Source: Allianz, International Pensions

The size of the bubbles reflects the estimated asset volume in 2020

Different growth stories

The trend in pension asset growth around the world is likely to remain intact over the next decade. Not surprisingly, the regions with the lowest stock of pension assets – Asia-Pacific, and central and eastern Europe – will experience the largest growth. Both these regions have introduced new formal pension systems, which will accumulate assets predictably over the projected timeframe. Increasing wealth in Asia-Pacific and CEE will further contribute to the development of retirement savings.

At an annual growth rate of 4.7%, by 2020 we expect the world retirement market to increase by 66% overall. The most dynamic pension asset growth will take place in the emerging economies of Asia and central and eastern Europe. The emerging Asian countries are projected to see an annual growth rate of 16.8% to a total volume of €2.2 trillion by 2020 or the size of United Kingdom's market in 2008.

We expect similar dynamics in central and eastern European economies, where most countries have established a mandatory funded pension pillar over the last decade. Central and eastern Europe will realize an annual growth rate of 15.5% until 2020. Even so, it will not have achieved the volume of Switzerland's market today.

Due to their market size and maturity, the larger retirement markets in more developed economies are not expected to realize such high growth rates. Here, the growth will be primarily driven by a need to compensate for falling state pension benefits due to ageing populations. The U.S. retirement market is still anticipated to dominate the world pension market until the end of the decade even though it is only expected to grow by a 3.6% compound annual growth rate (CAGR). Despite its low growth, the net increase in the United States during this period will equal the total volume of continental western Europe today.

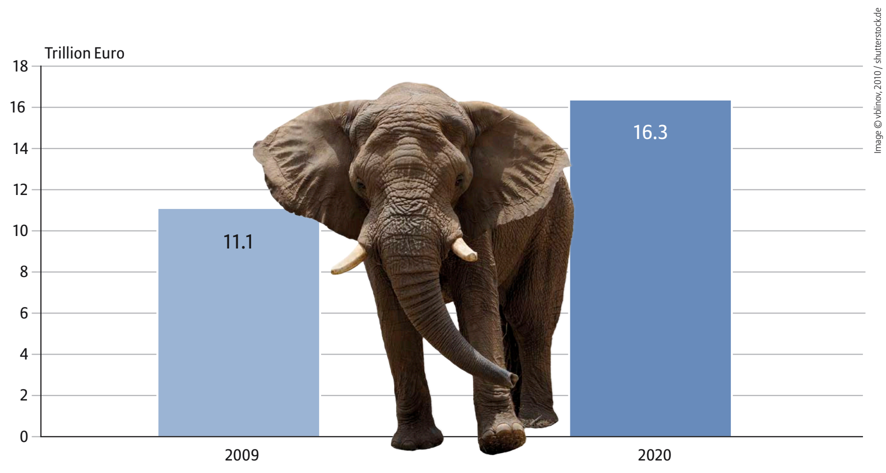
Because sustainable pension systems require a strong funded pillar in order to spread risks, long-term trends like the ageing of societies are likely to have a greater impact than the painful effects of the financial crisis.

As there is a great disparity of swwituations and assets in the global retirement markets we have conducted the following detailed regional outlooks:

- United States
- Western Europe
- Central and Eastern Europe
- Asia Pacific

REGIONAL OUTLOOK

Today and in 2020: U.S. biggest retirement market in the world



Source: Allianz, International Pensions

Projected retirement assets 2020 – U.S.

The United States: Retirement market still below pre-crisis levels

Pension system trends:
The U.S. pension system has been subject to substantial changes. The United States' public pillar provides a quasi basic retirement income, replacing 38.5% of an average earner's pre-retirement income. With the coming onslaught of baby boomers, the U.S. Social Security System is facing substantial challenges in the future.

Over the next two decades, approximately 78 million baby boomers born between 1946 and1964 will enter retirement. To cover increasing Social Security benefit payouts, government spending will grow significantly, putting a strain on current Social Security surpluses and a heavy burden on the federal budget. The Pension Protection Act of 2006 (PPA), has led to substantial changes in occupational pensions and introduced new rules for the funding and asset valuation of defined benefit (DB) plans, clearing the way for automatic enrollment into employer-sponsored defined contribution (DC) plans and improved disclosure standards.

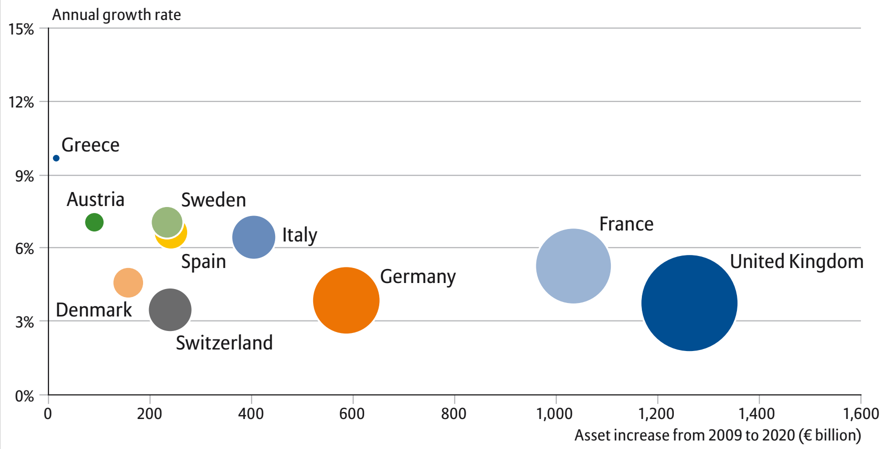
Pension market trends:
Today, most U.S. workers are invested in 401(k) plans as their primary or only retirement plan. Participation in 401(k)s is voluntary and both employer and employee can make pre-tax contributions: contributions are invested at the discretion of the employee and, at retirement, the worker receives a lump-sum payment. The 401(k) is at the heart of the success of DC schemes in the United States. It has been an important trigger for the shift from DB to DC plans and led to an 'individualization' of retirement savings.

Retirement assets in 2020:
The losses taken by government, corporate and private pension plans as a result of the financial and economic crisis have considerable implications on the future development of these plans. Although the retirement market has recovered fast in 2009 and reached €11.1 trillion at the end of the year, the total U.S. retirement market is likely to need another two to three years to recoup its overall losses and return to its 2007 level. Pension assets are expected to grow at 3.6% compound annual growth rate (CAGR) to reach €16.3 trillion by 2020. This is a net increase of €5.2 trillion. Around 2013, retirement assets will not only catch up to their 2007 all-time high of more than €13.1 trillion (in the third quarter), but are also expected to surpass that figure.

REGIONAL OUTLOOK

Western Europe: Retirement market on a new high

Western Europe: Retirement Market on a new high till 2020



Source: Allianz, International Pensions

Projected retirement assets in 2020 – Western Europe

Pension system trends:
Aging is a serious challenge for pensions in western Europe, where the proportion of the 65+ population will grow from 17% to 30% by 2050. The various European pension systems differ fundamentally. In some European countries, public pensions show very high replacement rates – the ratio of post to pre-retirement income. Italy, Spain, Portugal, Greece and Luxembourg are examples for that. In other nations such as the Netherlands and the United Kingdom, public pension benefits are much lower, replacing only a fraction of pre-retirement income.

Pension market trends:
Various reform initiatives over the last decade share the common goal of diversifying future retirement income by introducing new funded pension plans and generally strengthening the funded pillars. One distinguishing characteristic relevant to all new occupational pension plans is whether or not they are mandatory for employees. Mandatory second pillar plans have been introduced in Austria and Norway, while most plans operate on a voluntary basis. Some of them, like those in Belgium, attempt to encourage occupational pension provision on a sector basis. Others, such as France's PERCO, target individual employers. Similar to the U.S., there is an obvious shift from defined benefit (DB) to defined contribution (DC) plans in western Europe.

Retirement assets in 2020:
In 2008, the combined retirement market* in western Europe stood at €7.59 trillion which was a 5.8% drop from its €8.05 trillion high in 2007. The recovery of financial markets in 2009 pushed assets above the 2007 level. Retirement assets reached € 8.26 trillion at the end of 2009. Encompassing one third of all pension assets in western Europe, the largest European retirement market is the United Kingdom, followed by France and Germany, the Netherlands and Switzerland. Even though the latter two are comparatively small countries, their strong funded occupational pillars make them very important players in the European retirement markets.

Although the financial and economic crisis had a devastating effect on pension funds in 2008, the trend towards stronger funded elements in a multi-pillar system can be expected to continue due to rising government debt and aging societies; both developments make generous first pillar systems difficult to sustain and a reversal of reforms unlikely. Therefore, we expect retirement assets to grow at an annual rate of 4.7% within the next decade, reaching €13.66 trillion by 2020.

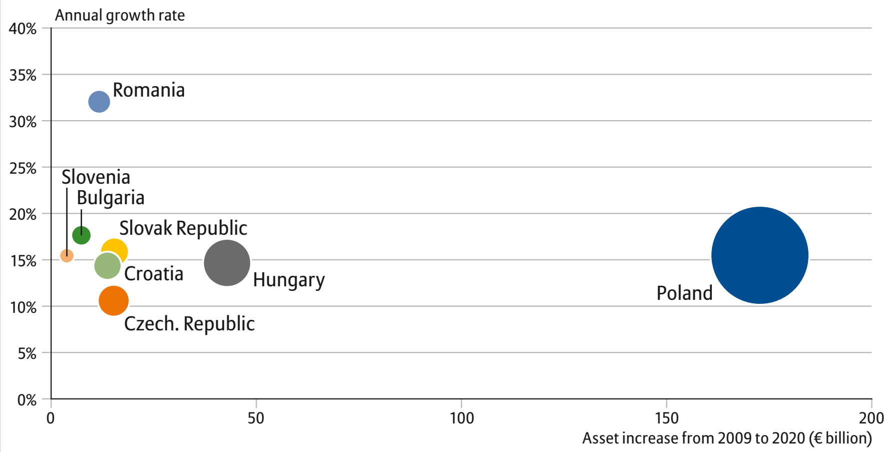
Countries with incipient pension reform, such as Greece, are only beginning to establish funded elements. Since Greece is starting from a very low base, it is expected to eventually show the highest annual growth rate (9.7%).

*As life insurance products are closely linked to private pension provision in western Europe, the retirement market is defined in a broader sense.

REGIONAL OUTLOOK

Central and eastern Europe: Strong growth projection

Central and Eastern Europe: Strong Growth Projection till 2020



Source: Allianz, International Pensions

Projected retirement assets in 2020 – Central and eastern Europe

Pension system trends:
Central and eastern Europe is aging fast, making it just as sensitive to demographic changes as western Europe. The current shape of pension systems in central and eastern Europe (CEE) was first established after the fall of the Iron Curtain, when these countries were faced with the daunting task of reforming their outdated pension systems. Under the old regime, pensions in CEE were the exclusive responsibility of the state and were compatible with neither the current demographic developments nor the new economic environment.

Each of the CEE countries eventually increased retirement ages, reduced incentives for early retirement, established a stronger link between contributions and benefits and increased the required contribution periods. However, reforms went considerably further than that. In most of the CEE countries mandatory second pillar schemes with fully funded individual DC accounts were introduced, creating a very strong funded pension pillar.

Pension market trends:
In CEE, the mandatory second pillar is the central element of the pension markets. The third pillar of voluntary pension savings remains fairly underdeveloped except in countries that do not have mandatory schemes. The second pillar is funded by social security contributions paid out by the social security administration to private pension providers. Since the state organizes the system and is involved in it, this pillar is often considered to be part of the state-run pension system.

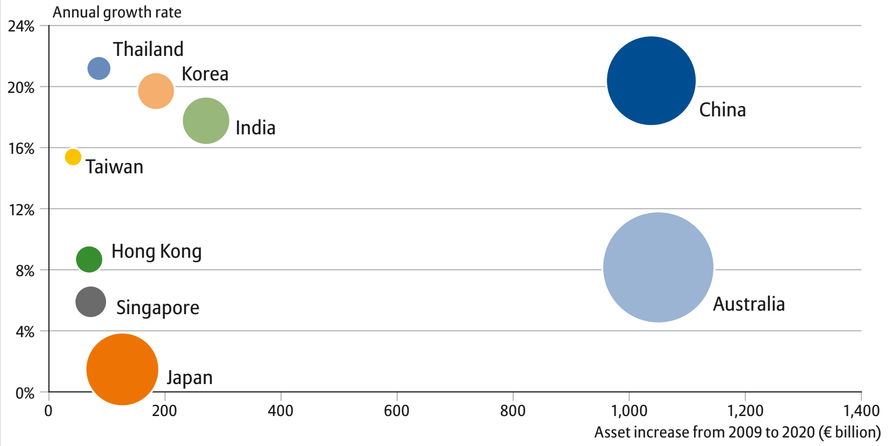
Retirement assets in 2020:
With retirement markets still in their infancy, the funded pillars of pension systems in most CEE countries saw strong growth in assets over the past six years, at roughly 30% per year. Pension assets of the EU Member States in central and eastern Europe* plus Croatia, amounted to €78.4 billion by the end of 2009, with Poland contributing the largest portion (€44.2 billion).

Annual growth is expected to reach 15.5% by the end of this decade (€384 billion), up from €78.4 billion in 2009. The bulk of this increase will take place in Poland, Hungary and the Czech Republic, which combined are expected to generate 77% of the anticipated market volume even though they represent only 55% of the CEE population. Following Poland, Hungary and the Czech Republic are Slovakia and Croatia. The two new EU Member States Bulgaria and Romania are likely to show the highest growth rates.

* Bulgaria, Czech Republic, Estonia, Hungary, Lithuania, Latvia, Poland, Romania, Slovenia, Slovak Republic.

REGIONAL OUTLOOK

Asia Pacific: Rapid growth expected till 2020



Source: Allianz, International Pensions

Projected retirement assets in 2020 – Asia-Pacific

Asia-Pacific: Strong growth at varying paces

Pension system trends:
Pension systems in Asia-Pacific can be broadly classified in two groups. Australia, Japan and Singapore run well-established, comprehensive and mature systems. The Asian emerging markets are either in the process of establishing formal pension systems or have done so only in the recent past. Well functioning pension systems will be exceedingly important for the emerging economies as their demographic situation will worsen.

While life expectancy has increased substantially, traditionally high fertility rates in Asia have dropped dramatically in the course of industrialization and urbanization. Hong Kong, Japan, Singapore, South Korea and Taiwan are aging rapidly and, by 2050, will belong to the oldest societies worldwide. China is quickly catching up. Traditionally, the main component of retirement income in Asia has been family support. However, the rapid economic development and increasing mobility have put this model under serious pressure.

Pension market trends:
Australia is the precursor for the region. Its introduction of mandatory DC schemes in 1992 has provided guidance for pension reformers in other countries. Since the late 1990s, China, Hong Kong, India and Taiwan all introduced DC schemes of various designs and Thailand plans to do the same.

Generally, pension system designs in Asia-Pacific differ from country to country; there is no single coherent model. Australia and Japan run mature multi-pillar systems. Singapore is unique in operating a one-pillar system with one single fund for various purposes. China is in the process of introducing a multi-pillar system. India has reformed civil-service pensions in favor of a defined contribution system; this system is open to all citizens and an attempt to advance retirement savings. In 2000, Hong Kong introduced the Mandatory Provident Fund, a compulsory occupational scheme. In 1998, South Korea established a comprehensive public pension system and is in the process of replacing its severance pay system with formal occupational schemes. Taiwan recently introduced a new defined contribution system for private employees as well as a new social safety net.

Retirement assets in 2020:
In 2009, the whole Asian Pacific market in focus had combined assets under management of €1,853 billion. Pension assets in Asia-Pacific have not been spared the negative effect of the financial and economic crisis. With mature markets taking major losses (Australia down 11% and Japan down 18.7%), Asia-Pacific as a whole lost 10.2% asset stock between 2007 and 2008. Emerging Asia, on the other hand, recorded an increase of 17%. As in CEE countries, in the just emerging Asian systems, net inflows make up a vastly larger proportion of accumulation, whereas performance does not contribute as much. Strong market recovery pushed Australia back above the 2007 level so that the retirement market assets of the Asia-Pacific region as a whole recaptured the former growth route.

Looking forward, we expect pension assets in all the emerging countries in focus to grow by 16.8% a year to a total volume of €2.158 billion by 2020.

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Why does Allianz care about demography?

As a global financial service provider, Allianz believes demographic change to be of crucial importance. Identified as one of the major megatrends, demographic change will hold the key to many upcoming social challenges, whether with regard to health, old-age provision, education, consumption or capital markets.

Why does it matter to journalists and the public?

Demographic change is challenging today's societies in many ways: People are getting older, and this raises the issue e.g. of long-term care and dementia. Furthermore in the future there will be a significant decline in the workforce in all of the world's markets, triggering for example a challenge in pension funding. Only information, awareness and discussion on the topic will help to change attitudes, behavior and situations, so hopefully solve urgent needs and come up with innovative solutions.

What are the benefits of Allianz Demographic Pulse?

Allianz Demographic Pulse is based on the latest research into various aspects of demographic change. Conducted and written by Allianz experts, it highlights current and globally relevant demographic data and provides an insight into their impact on worldwide economies and societies. To ensure up-to-date coverage of major developments in this field, Allianz Demographic Pulse is published on a regular basis, thus providing ongoing and detailed information about a major trend that is shaping the world we live in.

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