REGULATION OF PENSION FUND INVESTMENTS IN BULGARIA – DEVELOPMENTS AND TRENDS

Ivanka Daneva, PhD
Executive Director of
Pension Insurance Company “Saglasie” JSC

Abstract:
The experiences sharing in relation to the pension reform in Bulgaria is very interesting because Bulgaria was one of the first countries in Eastern Europe to embark upon pension reform in the early 1990s.

This statement is divided into three parts:

• Brief overview on the Bulgarian Pension Reform – the stages of its implementation; the main features of the reform and development of Pension funds in the country;

• Describing pension funds investments regulation almost 9 years after the beginning of the pension reform; amendments of pension legislation related to investments of pension funds assets.

• The last part consists of the main forthcoming changes in regulation and I will try to make some concluding comments.

JEL: G23
One of the most important and successful reforms to have taken place in Bulgaria in the period of transition to democracy and market economy is related to the pension provision system.

The main problems of social insurance prior to 1999 when the state supervision agency came into being were early access to the system, lack of funds, inadequate coverage and a high level of unemployment. There were unfavorable trends in the economic situation, social injustice, high percentage of contributions on pension system and a low level of pension payment. Before 1999 system was the redistribution of funds between the workers and pensioners. The society believed that pension reform is needed.

Common argumentation in benefit of the reform and selected new system is:

• Inherited pension system have been unsustainable;
  • Pay-as-you-go (PAYG) system can not guarantee pensioners a sufficient standard of living;
  • Supplementary pension funds may increase pensions, national savings and employment;
  • The new pension system will improve labor markets, increase investments and will push development of financial markets.

Because of that argumentation the main objectives of the Bulgarian pension reform were a higher level of social justice, improving and stabilizing mandatory pension insurance (I pillar), reducing the deficit in the PAYG system. The objectives included raising the retirement income, achieving financial stability of all mandatory and voluntary pension funds, diversification of the methods of social security for pensions and supply new resources to the capital market.

In practice, this reform began in the year 1994 with establishment of the first supplementary voluntary pension funds. The
later were created as public companies with shares in the years 1994-1995 on the initiative of banks, trade unions and insurance companies. Companies’ activities have been leant mainly on international experience. The experience of those companies played a very important role in defining the strategy and the objectives of the reform and also in adoption of new legislation in this area. Pension reform was implemented in between 1999 and 2003.

In 1998 the Bulgarian government made a decision to build the World Bank 3-pillar model pension system and started implementing measures in the following sequence:

• In 1999 were adopted the Supplementary Voluntary Pension Security Act and the Mandatory Social Security Code as of the 1 of January, 2000. This way was concluded the introduction of the new legislation regulating establishment and functioning of the new pension system;

• In 2000 was made the reform in the existing pension system (pillar 1st) mainly by means of linking benefits with contributions and relocation of a portion of mandatory contributions to a system of private occupational and universal pension funds (pillar 2nd), the same year was created the State Insurance Supervision Agency (SISA);

• Through January the 31st, 2001 9 pension companies have been licensed and the funds under their management were registered. Workers 1st and 2nd labor category made their choice about professional pension fund (PPF) for early retirement. The process of selecting a universal pension fund (UPF) for second pension for individuals born after December the 31st, 1959 finished. Mandatory pension funds (MPF) began collecting contributions.

• In 2003 was created the Financial Supervision Commission in which SISA was included, the new Social Code was enacted and
according to it from the 1st of July 2004 individual accounts of insured persons are kept in terms of Bulgarian currency – leva (BGN) and units and fractions of units, voluntary retirement insurance shall be implemented not only through participation in voluntary fund but also through participation in voluntary fund with occupational schemes.

Now we have a new three pillar pension system which is already showing its social and economic advantages. All the elements of the pension system are functioning effectively.

**Bulgarian Pension Funds are based** on the individual savings account principle and defined-contribution of privately managed pension plans (similar to open-ended investment funds – same mechanism). The pension amount depends entirely on the amount accrued on the individual account from contributions and on the return of the asset’s investments.

Supplementary pension insurance in Bulgaria is based on the following principles:

- legal independence of the pension insurance company (PIC) and the pension fund. This is very important aspect to bear in mind because should a PIC go under, the assets of the pension fund—that is, the workers' investments—are not affected.
  - transparency, separation and exclusiveness of the activity;
  - licensing regime;
  - mandatory periodic reporting and information disclosure;
  - fair competition among pension insurance companies.

**Architecture of Pension model in Bulgaria includes** State social insurance – I pillar, Mandatory pension insurance - 2nd pillar and Voluntary pension funds (VPF).

First pillar - state social insurance- covers the working population as a whole. It is based on the PAYG principle, where benefits to current retirees are paid from the contributions of current active workers.
Mandatory funds in Bulgaria are two types - universal and professional. Public and private-sector employees and self-employed persons born in 1960 or later must become members of a UPF. Each employee, working under specific conditions (labor categories I and II - under heavy and hazardous conditions) must, regardless of their age, become a member of a PPF in addition to the UPF. PPF are not organised by the employer and individuals may join the fund of their choice.

The contribution to the mandatory private pension schemes is a part of the total social security contribution. For mandatory pension funds it is a percentage of the monthly insurance income. This percentage is determined in advance by the law. The basis for the contribution calculation cannot be under the minimum insurance income and cannot exceed the maximum monthly amount of the insurance income. The contribution for the UPF is divided between the employer and the insured person, except in the case of the self-employed persons who pay the whole amount. The contributions for the PPF are entirely paid by the employers.

For 2008 the contributions are as follows: contribution to universal fund is 5% divided between insurer and persons in proportion 60-40, the contributions to the professional funds are 12 percent for 1st labour category workers and 7 per cent for the 2nd labour category workers, entirely at the expense of the insurers.

Voluntary pension funds consist the 3rd pillar of the pension system. They are fully funded pension scheme based on voluntary contributions to individual account. They cover the insured events of old age, disability and death. The insured person or the insurer decides himself on the amount of the contribution to the voluntary fund. The State encourages voluntary pension contributions payments by tax relieves for both physical persons and employers.
The coverage of the insured persons in VPF with occupational scheme is stipulated in a collective bargaining agreement or in a collective contract between the sponsoring undertaking and the persons.

The main consideration to adopt this type of insurance into the national legislation is the necessity to transpose the EU Directive 2003/41 (IORP Directive). EU Directive 2003/41 was transposed in its entirety into the national legislation in 2006, and entered into force on 01.01.2007. Till now two authorizations for a voluntary pension fund with occupational schemes have been granted.

Each PIC may establish and manage only one of every fund type and must obtain a license from the Financial Supervision Commission and have a minimum required capital. The fund is represented by the PIC, which also manages the benefit payment.

The main specific features of the Bulgarian Pension Reform which differentiate it from the models adopted by other countries are:

- Retaining a more important role for the public PAYG system;
- Pension funds are separate legal entities;
- The coverage of the fully funded system gradually increasing by transferring an increasing portion of mandatory contributions towards it;
- Payment of contributions in PPF and UPF are mandatory;
- Each company may establishes and manages four different types of pension funds;
- Centralized collections of contributions for the Pillar II (employer and member contributions) are collected by the National Revenue Agency and are then transferred to private pension funds, while
members and employers make direct payment into the pension fund for Pillar III.

- Public supervision and control of the activities of the pension companies operations;
- Tax relieves for contributors – employers and funds members - in III Pillar.

**The supplementary pension insurance has marked a stable for the last 7-8 years growth.** The outcome is evidenced by the number of indicators: growing of the proportion between pension funds assets and Gross Domestic Product (GDP); growing of assets; increasing of funds members; return of pension investments.

For the last 8 years the importance of private pension fund for economy measured by proportion between their assets and GDP is increasing. The share of pension assets of GDP raised over the last 5 years more than 4 folds and consisted till the end of the last year - 4.45%. This is shown at the Figure 1. It would be great achievement to have reached more than 5% of GDP to the end of this year.

![Figure 1. Assets in Pension Funds/Gross domestic product](image-url)
Pension funds have been among the most rapidly growing of all financial intermediaries between 2000 and 2008. Pension assets developments have been stable. They anticipate GDP’s growth and marked a considerable growth. But this year we have prospective for speed’s detention of pension assets.

Pension net assets were at the amount of 1.222 billion EUR on 30 of June 2008. This is quite significant, considering the size of Bulgarian economy. Until 2003 the largest part of the total net assets was concentrated in voluntary funds, because of the fact that these funds had the longest period for functioning. From 2004 largest part of the total net assets was concentrated in the universal funds. The main reasons for that were the growing of the amount of the mandatory contribution for them (from 2% in 2003 to 3% in 2004, to 4% in 2005 and to 5% in 2007 and 2008), as well as the big number of insured persons in this type of fund.

The funds’ member growth was sustainable. The number of pension fund participants is getting closer to the potential maximum number of it.
As I have already mentioned the Bulgarian pension system reform has a 13 and a half years history. What was the situation as of 2008? In 2008 services in the field of supplementary pension insurance are offered by 10 pension companies each of them managing two funds for supplementary mandatory pension insurance and one for voluntary pension insurance, and two of them managing voluntary funds with professional schemes (32 pension funds).

The rate of number’s participants increases is quite high. At the end of the 30 of June this year we have already 3, 544 millions persons (Bulgarian population is about 7,699 million) representing 3% more members than at the end of previous year. The number of our citizens, having their individual accounts in these funds, where they accumulated resources for pensions, consist 48% of population. The biggest part of them - 77% were concentrated in the UPF, where 2, 725 million (35% of population) were insured. During the last 4 years this share rose considerably, the reason for which was the growing number of persons...
born after the 31 December 1959, who have to be insured in universal funds. The small part - 214 thousands persons (6% of participants) were insured in the occupational funds and on the 30 of June 2008 in voluntary funds were 605 thousands (17% of participant).

Development of pension funds assets proves that their economic power and significance for the capital market have increased. The percentage of assets growth is remarkable. It reflects many factors – contribution rates, number of participants, initial stages of pension fund selecting.

The pension market is characterized by highly concentration. On the 30 of June 2008 two companies held more than 70% of number of participants and more than 73% market share measured by assets under management. Even thought the market concentration compared with the preceding year slightly decreased. Their total market share dropped by almost 1% on net assets basis and by 1,5% according the number of insured persons. At the same time the proportion between the shares of the three companies became more balanced.

The competition between pension companies will be increasing mainly, because of further developments in pension funds activities transparency that includes:

- disclosure of information of financial state and the state of individual accounts;
- implementation of calculation units;
- consistency and sequences of reporting of net assets and return;

Pension funds investment regulation as a rule is connected with pension funds characteristics as institutional investors. Most participants in Bulgarian pension funds have many years to work until they retire. They hope and expect that their savings will earn a return sufficient to
generate the asset necessary to finance a comfortable retirement. Pension funds investments focus on the paramount objective of providing a safe, sound investment program for the long term benefit of the fund members. They are high quality assets with the ability to provide good returns for the full life of pension plan as a basic for reliability and profitability.

Investment management is one of the primary purpose of PIC. Accordingly, pension assets should be invested in instruments that are liquid, safe and diversified. Since the participants will be invested in the fund for many years the instruments should also be long term assets.

Investment strategy of Bulgarian pension funds as institutional investors depend on the fact that they are long-term investors with limited need for liquidity, switching between funds is limited and pension market is not mature. For pension funds incoming cash receipts are known with considerable accuracy and cash outflows are not difficult to forecast. Pension fund investments are closely regulated in Bulgaria.

Funds investment policy is affected by objective factors as stability, unemployment, inflation, capital market, EU accession. The latter is a global factor for the country including pension industry. EU accession imposed some changes concerning currency matching, limit for state securities etc. Pension funds are developing successfully in comparatively stable economic environment, which defines systemic risks.

**Defined contributions plans expose members to investment risk** and it is important to address issues of solvency, liquidity and proper investment profile. Pension funds investment regulation is one of the more dynamic parts of pension regulation as a hole. It includes investment principles, assets’ classes, investment restrictions and prohibition, assets’ valuation and minimal return.
Pension fund assets shall be managed with the care of a prudent person and in observance of the principles of reliability, liquidity, profitability and diversification in the best interest of the participants.

They may be invested in the following type of investment instruments: government bonds, equities, shares and/or units of collective investment schemes, bonds - corporate, mortgage and municipal, bank deposits, real estate. But pension funds faced limited investment opportunities because the range of investment instruments on the internal capital market is limited.

The main change in investment rules was as regard to government securities. They were with minimal level, and after amendments for them there are without limit. Simultaneously, as a result of the amendments to the Social Insurance Code, concerning the investment alternatives of private pension industry, the percentage of the securities admitted to trading to the regulated markets doubled, compared with the end of 2005. The maximum per cent of equities in the invested moneys of the MPF climbed from 10% to 20%, and the per cent of assets held in the form of corporate bonds picked up to 25% from 20%.

New investment possibilities were also set up. The assets of pension funds may be invested in shares of special purpose vehicles (up to 5% of the mandatory funds’ assets and up to 10% of the voluntary).

Other quantitative rules that were imposed are:

- With accordance to EU Directive currency matching restrictions were implemented from 2006: not more 20 per cent for MPF and 30% for VPF of the assets may be invested in currency other than BGN or euro;
- Repo deals (new change in 2006): up to 5% of the funds assets;
- Securities issued by collective investment schemes, managed by one management company: max. 5% for MPF and 10% for VPF;
- Deposit in one bank: max. 5%;

• Securities issued by a company-insurer: up to 5%; up to 10% in
  securities issued by a insurer and related to it;

In order to avoid conflict of interest pension assets may not be
invested in securities that are not fully paid up; in securities issued by the
managing company, by custodial bank, by investment intermediary or by
the persons related to them; in securities or real estate possessed by the
PIC or by persons related to it; in stocks and corporate bonds not traded at
the organized markets.

**Standard for Bulgarian pension fund is frequency of daily
valuation of all assets (real implementation in 2004).** Asset valuation
rules are determined as “mark-to-market” basis (market value vs.
economic value). Pension fund performance is measured through
calculation units (from 2004) and nominal rate of return. Minimum
nominal return for mandatory funds has been expressed in relative terms
and has a relative guarantee, which are backed by the minimum reserves
in PIC measured as a share of the assets size and by reserve in the funds.

Bulgarian pension mandatory funds have to achieve a minimum
return equal to 60 per cent of the average nominal return of the industry.
In case of excess over determinate limit of average fund’s return,
resources form reserve in the mandatory funds. Minimum returns for PPF
and UPF at the end of July 2008 were respectively 3.76% and 4.04% and
all of the pension funds have reached that returns.

Looking at the data regarding the Bulgarian pension funds’
portfolios it should be noted in advance that the Social Code lays down a
very conservative framework for the investment activity of pension
companies at the very beginning, that were relaxed in 2006.

**Which were the main trends in PF portfolios?** The funds
invested more in shares, corporate and municipal bonds. Investment
property retained their percentage to a large extend unchanged during the
reported period, regardless their absolute growth. The investment limits and underdevelopment of capital market caused uniform investment policy among pension funds till 2006. A highly restrictive regulatory environment during the period 2000-2005 leaded to excessive holdings of a few assets categories. Unlike other financial structure pension funds have much more longer investment horizons and fewer liquidity constraints to limit their capacity to manage risk through broad diversification. Similarity of investment policy and portfolios among pension funds is changing gradually. The introduced amendments to the Social Insurance Code, relating to the investment limits, had a significant effect on the percentage of pension funds investments in securities issued or guaranteed by the State. The obligatory minimal share of 50% of the pension funds resources which had to be held in government securities dropped off and the liberalization of the investment restrictions opened a very attractive opportunities for more full use of their investment alternatives. The funds held in the form of government securities reduced their per cent almost in a half. In the end of 2006 their percentage was only 28.9% compared with the rate of 51.7% at the end of 2005. Higher remained the percentage with the supplementary obligatory pension insurance funds in 2007 (32% of the universal and 33% of the professional funds) and in the voluntary funds the per cent shrank to 21.6% as of 2007 (against 45.6% for the preceding year). In 2008 share of government security is continuing its declining and as of July is 20.6% for PPF and 23.5% for UPF and less 20% for voluntary funds.

As a result of these changes in the statutory pension fund investment limits, the share of the funds held in the form of securities admitted to trading on regulated securities markets edged up from 17.1% in the end of 2005 to almost 33% in the end of 2006 and about 40-45% in 2007. The percentage of the equities grew more than two folds and
reached almost 30%, and the rate of corporate bonds reached 12% on average. Thus at the end of 2007 securities admitted to trading on regulated securities markets were first in size in the pension funds aggregate portfolio and they displaced the government securities and bank deposits, the latter remaining in third position.

At 31 December, 2007 the resources of pension funds, held in the form in bank deposits represented 16% of the total investments and marked a drop in comparison with the same period of 2006 by 5% percentage points. The resources invested in mortgage bonds decreased as an absolute value, as well as a percentage in the aggregate investment portfolio. At the end of 2007 only 3% of the pension funds assets were held in the form of mortgage bonds, compared with 5.5% at the end of 2006. The statutory set limit of the funds invested in municipal bonds in pension aggregate portfolio remained insignificantly small (0.18%) and even declined in comparison with the preceding year, when that value came to 0.4%. Two folds was the increase in the percentage of the fund held in investment property in 2007. Nevertheless their share remained considerably below the statutorily set threshold for those instruments.

At the end of reviewed period assets of none of the pension funds were invested in derivative instruments, traded on regulated securities market with the purpose of investment risk reduction. Determinative for that was the lack of this investment alternative on the local regulated securities market and the low interest on the side of pension funds for investment in securities derivatives traded on foreign regulated securities markets. The main trends in the voluntary pension fund’s portfolio structure can be seen at the next figure.
Investment policy and asset allocation remain conservatives (over 51% of domestic assets as of 2007 and over 71% of assets as of 2006 are invested in fixed income instruments). Increasing share of debt instruments is one of the main trends.

As a rule the bonds provide predictable interest income and low volatility, while the common stocks generally provide higher returns. The cost of higher returns, however, is greater volatility. The large share of debt in their portfolios explains the level of real returns of pension funds. The latter enhance the scope of financial market moving chronologically from lower risk instruments (government securities, bank deposits) to mortgage bonds and corporate bonds and stocks with higher level of risk.

The Pension Funds money were invested almost wholly in the country till 2006, the share of the investments abroad being below 0.5%. Main reason for that was the higher rate of return, which the funds realized on the local market in connection with the low interest rate levels.
on the international financial markets. The percentage of investment abroad grew significantly from 2006 till now. At the end of 2006 investments abroad formed 8.5% of the pension funds.

The rate of investment abroad was highest in the Voluntary Funds - 25%. Compared with 2005, when the percentage of investment abroad was only 1.25%, the growth was over 20 folds. At the end of 2007 investments abroad increased reaching average for the industry almost 19%.

**The recent main trends in pension fund investments are:**

- Similarity of investment policy and portfolios among pension funds is changing;
• Investment policy and asset allocation became less conservative after 2005 – decreasing the share of bank deposits, increasing the share of equities;
• Diversification was improved in one class financial instrument and between different instruments;
• Investments abroad is increasing;
• Decreasing portion of municipal and mortgage bonds

The three types of funds achieved a very good return thanks to their own investment policy and favorable market conditions. For example, the average return for 2007 for the occupational funds was 17.04%, for the universal funds was 17.19% and for voluntary funds it was more than 20%.

**Pension funds nominal returns**
*(average in %) and other macroeconomic indicators*

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPF</td>
<td>14.07</td>
<td>11.23</td>
<td>10.94</td>
<td>8.16</td>
<td>8.78</td>
<td>17.19</td>
</tr>
<tr>
<td>PPF</td>
<td>10.79</td>
<td>11.00</td>
<td>11.28</td>
<td>7.96</td>
<td>9.33</td>
<td>17.04</td>
</tr>
<tr>
<td>VPF</td>
<td>9.77</td>
<td>11.09</td>
<td>10.37</td>
<td>8.80</td>
<td>9.58</td>
<td>20.27</td>
</tr>
<tr>
<td>Based interest rate</td>
<td>3.96</td>
<td>2.68</td>
<td>2.61</td>
<td>2.04</td>
<td>2.69</td>
<td>3.92</td>
</tr>
<tr>
<td>Consumer price index</td>
<td>3.8</td>
<td>5.6</td>
<td>4.0</td>
<td>6.5</td>
<td>6.5</td>
<td>12.5</td>
</tr>
</tbody>
</table>

The rate of return on annual basis, reached by pension funds (average in %) was higher than the base interest rate and the inflation levels for the period 2002-2007. Over the period real returns were
positive and a real growth was achieved of the pension savings in supplementary pension insurance. Investment returns were attractive till the end of 2007 for all type of funds. Different funds return was changing in the same direction. Because of asset allocation convergence varies types of fund have had after 2003 similar return.

But the Bulgarian stock market, as measured by the level of “blue chips” based index Sofix, placed the new challenges for investment managers. It declined by 73% between the 30 of October, 2007 and October 30, 2008. Over that one-year period, the value of equities in pension funds fell considerably. Downturn of capital market from November 2007 directed attention to bank deposits and government securities. Because of this trend our expectations are for negative return for that year and slightly positive return for the last two years on annual basis.

But the declines also highlight the fragility of our emerging pension arrangement now and in the future. Individuals will bear the full brunt of market turmoil because supplementary pension insurance in Bulgaria is on defined contribution basis. But it should be said, that current financial tsunami will not impact different type of fund equally. Major impacts are likely for voluntary funds in which there are pensioners. Private pension mandatory participants are protected by reserves, formed in managing companies and by reserves in the funds. The first pensioners in mandatory funds should be in 2011 for occupational funds and in 2015 in universal funds. We hope that till that years the effects of recent turmoil in financial markets on retirement security will be overcame.

A few challenges for investment managers now are:

• The need for denominated long term government bonds;
• Bulgarian Stock Exchange had not use at all for the privatization:
  • The need for more initial public offerings (IPOs) on the Bulgarian Stock Exchange:

**Which are recent trends and forthcoming changes in investment regulation of pension funds.**

Investment regulations were changed in a positive way. Investment restrictions were ‘relaxed’ and opportunities for investments with higher return and more adequate diversification were established. Movement to prudential principal is the main direction of changes.

The liberalization of the investment limits introduced with the amendments to the Social Insurance Code in 2006 resulted in redistribution of the percentages of the different investments. The portfolios degree of diversification increased considerably but it has to be increased faster. As a rule investments abroad increase the investment possibilities for pension funds. The possible improvements in the regulation of the pension industry should include: liberalization and implementation of more flexible investment rules and creation opportunities for more sufficient diversification and for active approaches in investment management and transparency.

So far fund members have not been offered a choice of more than one portfolio. Individuals would not make in formed decisions about the composition of their portfolios. We have a project and according to it from the beginning of the next year investment choice for funds members (system of multi-funds) will be introduced and pension companies could offer three type of investment portfolios – conservative, balanced and with relatively high risk profile. Liberalization of the statutory requirements to the structure of the pension funds investment portfolio, as well as the creation of new investment possibilities will allow the pension
insurance companies to form portfolios with various investment risk, which are to be chosen by the insured persons, depending on their preferences concerning the rate of return and the remaining for them time till retirement.

Multi-funds will also foster competition between pension funds managers. A new dimension will added (or reinforced) and investment return will become as important as quality of service and fees. Multi-funds also will help to the stabilization and developing of the local capital market. However, this result will not come automatically. An important condition is to authorize pension funds to invest in a wide spectrum of asset classes and instruments. The large pension funds are the more difficult will be for them to find investments opportunities in local market as long as they are repressed by regulation. So, to allow the market to grow organically, a combination of flexible investments regulation for pension funds and efficient regulation of local capital markets is needed.

Multi-funds should be introduced together with a good educational program. Financial literacy is necessary for workers to use efficiently the opportunities of choices that the existence of multi-funds provides. Investments in financial/pension education of participants is needed differentiated according the generation, because multi-funds are usually defined on the basis of life cycle investments

More attention has to be notice of surveillance, measurement and management of the risk, related to the investments of supplementary pension funds. There should be implementation of common indicators for risk measurement. Portfolios choices are not only a matter of return, risk differentials are also important. So, when introducing multi-funds risk measures need also be introduced. At the same time a long term perspective towards investment should be promoted. Although the pension fund investments almost by definition should be oriented to the
long term, clients and managers are oriented more short-term. Usually last year’s returns are used to show performance. However, one year of a good return for the fund managers is not a demonstration of capability, moreover when the risk dimension is not considered at all.

The more prudence in investment regulation in the future presumes the bigger role of internal control of the pension insurance company’s activity as a hole, the more attention for financial education and for management of the risk.