Business & Development Plan 2021-2025

Retail Investors Release

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"It ain 't what you don 't know that gets you into trouble. It 's what you know for sure that just ain 't so"

Mark Twain

PHOTONIKE CAPITAL SA: BUSINESS PLAN 2021-2025

This document contains the "rationale" and the reasons behind the Business Plan that Photonike Capital SA will adopt in the five-year period 2021-2025, and which will lead it to radically transform to enter a new phase.

It was drawn up and published more than 6 months late due to the recent Covid pandemic that has upset and changed the European and world economy forever. A profound review of the assessments made previously was necessary in the light of new events. Today's world and markets have proved fragile and very changeable, so we preferred to wait for the publication of market reports with more updated and reliable information. The main stable observable characteristic is that no market remains stable, and that the best property a company must have today is and will be resilience and the ability to adapt to changes.

Our company has been able to manage various challenges in a decade, from the most advanced technology in the energy sector to investment in Special Situation and Corporate Turnarounds. These have not always been positive experiences, but they have nevertheless contributed to increasing the learning curve of managers and our stakeholders. In 2018, the reference shareholders gave the management the fundamental objective of positioning our holding in a stable market for the next 15 years, to make the most of the huge resources available and aspiring to a return on net invested capital of at least 4 percentage points to the average of 30-year issues of European bonds.

The search for a stable and profitable market naturally led to the search for a valuable niche in the European market, the one that first the economists Hamel and Prahalad, and then Kim and Mauborgne defined "Blue Ocean": a space without competitions capable of to "create" new customers, not to compete to win customers of others.

For this reason, our company will face the next five years through 3 pillars:

1) the development and cultivation of transversal Core Competencies resistant to the ever faster changes that characterize society and the markets;
2) the creation of products / services intended to satisfy new needs not yet expressed in protected markets, creating new customers;
3) capital protection and an intrinsic ability to react to changes.

Business Organization guru Michael Porter has theorized the strategies for Competitive Advantage within complex markets, with which companies fight to maintain their competitive advantages in the Red Oceans, where over time margins erode and capital is consumed; such strategies will <u>not</u> be applied to outline our future path.

To answer to the demand from our shareholders, we have decided not to fight with competitors to win customers, nor to conquer existing markets by buying companies and competing with competitors; in doing this we have already capitalized on the mistake made in the years 2013-2016, and we have decided to identify those market niches that allow us to create new customers, enhancing our technical experience, our capital and our network.

We have understood that the markets that are created using the benchmark on competitors with imitative products are markets that over time erode any advantage; markets that develop value-added solutions to new customer needs are markets that last over time.

We have worked to:

i) not to compete in existing markets… but to create an undisputed market space
ii) not to beat the competition… but to circumvent the competition
iii) not to exploit the existing demand… but to create new demand
iv) not to favor the choice between cost and value ... but to give value without the embarrassment of cost
v) not to commit ourselves to reducing the cost ... but to commit ourselves to increasing the value.

Our prediction for navigating unstable and variable markets is:

- limit the immobilization of invested capital and increase customer stability;
- allocate the capital on the added value for the customer;
- keep the focus on the customer and his needs.

In fact, stable markets with great competition were characterized by:
- the immobilization of capital in exchange for the prospective profitability of the Invested Capital;

- the allocation of capital on differentiation and competition;
- concentration and focus on the margin.

In almost all economic sectors it is necessary to immobilize capital for a promise of future income in a competitive market; however, once the capital is immobilized (in equipment, costs, debts, etc.) the process is not 100% reversible, and any possible change can lead to a crisis.

We have looked for economic sectors where it is possible to keep the capital liquid for an income from a non-competitive market and without erosion of margins. A market that by nature can be protected from the entry of new competitors, which allows a controlled and managed leverage effect. A sector that allows the creation of secondary markets on which to trade and sell risks while retaining margins:

<u>or a market that, while presenting important barriers to entry, allows for a growing positioning for the future.</u>

The management has identified it in the European Insurance and Reinsurance Market, and in one of its market niches.

THE EUROPEAN INSURANCE MARKET

The insurance market (and the reinsurance market) is among those that in the last 5 years in Europe, also considering the effects of the recent global COVID pandemic, have shown constant growth and returns.

The European Insurance Market is the largest continental market in the world and absorbs approximately 33% of premiums equal to approximately 1,600 billion Euros, of which 65% in 4 countries (UK, Germany, France and Italy). Premiums issued have grown by an average of 2.5% a year over the last 10 years, of which approximately 620 billion euros in the Non Life (Non-Life) sector. The recent EU-UK agreement on definitive Brexit will help to increase the Premiums raised due to the EU risks that were previously assumed by UK companies.

For a correct analysis, we worked on the official EIOPA data and on the 2020 Marketing Reports of Finaccord and Research & Markets, as well as sector reports from Swiss RE, KPMG, EY and the AECM and ICISA trade associations.

In Europe there are over 5,300 companies (Life and Non-Life) and employ about 930,000 employees. It is an immense Red Ocean where competition, albeit limited by strong barriers to entry, remains high. In fact, more than 60% of the global market is controlled by 5 Groups. However, we have identified some niches in the insurance market that have a practically identical value curve for all competitors and in fact represent customers that are not cared for by insurance companies.

A Blue Ocean strategy should minimize the risks and not increase them, and that is why in the great sea of offers for the insurance needs of European customers, we have chosen to focus on a sector that is not cultivated by large groups and presents great prospects. to improve the value curve and create new customers.

The insurance market is divided into Life Insurance and Non-Life Insurance (or also called Non-Life). Photonike Capital has chosen to position itself both in the Life sector, through indirect niche investments that are illustrated in the second part of this Business Plan, and in the Non-Life sector where our company will commit the majority of its available capital.

In this second sector, worth over 620 billion annual premiums, the legislation classifies 18 different risk Classes in which a company can operate:

Classification of risks according to classes of Non Life insurance

1. Accident (including industrial injury and occupational diseases): fixed pecuniary benefits, benefits in the nature of indemnity, combinations of the two, injury to passengers,
2. Sickness: fixed pecuniary benefits, benefits in the nature of indemnity, combinations of the two,
3. Land vehicles (other than railway rolling stock) and All damage to or loss of: land motor vehicles, land vehicles other than motor vehicles,
4. Railway rolling stock. All damage to or loss of railway rolling stock.
5. Aircraft. All damage to or loss of aircraft.
6. Ships (sea, lake and river and canal vessels). All damage to or loss of: river and canal vessels, lake vessels, sea vessels,
7. Goods in transit (including merchandise, baggage, and all other goods). All damage to or loss of goods in transit or baggage, irrespective of the form of transport.
8. Fire and natural forces. All damage to or loss of property (other than property included in classes 3, 4, 5, 6 and 7) due to: fire, explosion, storm, natural forces other than storm, nuclear energy, land subsidence,
9. Other damage to property. All damage to or loss of property (other than property included in classes 3, 4, 5, 6 and 7) due to hail or frost, and any event such as theft, other than that included in class 8.
10. Motor vehicle liability. All liability arising out of the use of motor vehicles operating on the land (including carrier's liability).
11. Aircraft liability. All liability arising out of the use of aircraft (including carrier's liability).

12. **Liability for ships** (sea, lake and river and canal vessels). All liability arising out of the use of ships, vessels or boats on the sea, lakes, rivers or canals (including carrier's liability).
13. **General liability.** All liability other than those referred to in classes 10, 11 and 12.
14. **Credit:** insolvency (general), export credit, instalment credit, mortgages, agricultural credit,
15. **Suretyship:** suretyship (direct), suretyship (indirect),
16. **Miscellaneous financial loss:** employment risks, insufficiency of income (general), bad weather, loss of benefits, continuing general expenses, unforeseen trading expenses, loss of market value, loss of rent or revenue, other indirect trading loss, other non-trading financial loss, other forms of financial loss,
17. **Legal expenses.** Legal expenses and costs of litigation.
18. **Assistance.** Assistance for persons who get into difficulties while travelling, while away from their home or their habitual residence.

B. Description of authorisations granted for more than one class of insurance

The following names shall be given to authorisations which simultaneously cover the following classes:
(a) Classes 1 and 2: 'Accident and Health Insurance';
(b) Classes 1 (fourth indent), 3, 7 and 10: 'Motor Insurance';
(c) Classes 1 (fourth indent), 4, 6, 7 and 12: 'Marine and Transport Insurance';
(d) Classes 1 (fourth indent), 5, 7 and 11: 'Aviation Insurance';
(e) Classes 8 and 9: 'Insurance against Fire and other Damage to Property';
(f) Classes 10, 11, 12 and 13: 'Liability Insurance';
(g) Classes 14 and 15: 'Credit and Suretyship Insurance';
(h) All classes, at the choice of the Member States, which shall notify the other Member States and the Commission of their choice.

These classes reflect the different skills necessary to assess the risks assumed and usually differentiate the Companies by segmenting the type of clientele and the type of offer. Each of the classes statistically has its own claims history from which an actuarial probability of future claims is calculated; Insurance Companies usually choose to focus only on certain Risk Classes both to balance the actuarial losses specific to each Class, and above all for the type of commercial network, premium and internal professional skills necessary for the assessment and assumption of risk for the individual policies.

The European Non-Life Insurance Market is operated by approximately 2,700 Insurance Companies: the EIOPA 2020 Report classifies the EU distribution of funding by Classes in the following commercial subgroups of policies:

- Fire and Properties (Class 8 + Class 9)	26%
- Motor Liabilities and Other Motor Insurances (Class 10 + Class 3 + Class 9)	25%
- Medical Expenses and Health Protection (Class 2)	19%
- General Liabilities (Class 13)	10%
- Incomes Protection (Class 16)	6%
- Marine, Aviation and Trasport (Class 4, 5, 6, 7, 11, 12)	4%
- Legal expenses (Class 17)	4%
- Credit & Suretyships (Class 14 + Class 15)	3%
- Miscellaneus Financial Losses (Class 16 + Class 14)	2%
- Assistance (Class 18)	1%

(Source: Report EIOPA 2020)

The average EU penetration of Non-Life Insurance Premiums on GDP is 2.9% and has an Average Loss Ratio of 66%, an Average Expense Ratio of 29% from which an Average Combined Ratio of 95%.
From the EIOPA 2020 report it can be seen how the distribution of deposits based on Risk Classes varies greatly according to the countries, as well as the penetration of premiums on GDP.

Most of the active Companies choose to operate on the commercial subgroups, and therefore on the Risk Classes, which have a greater collection. This is mainly due to the Internal Competencies, the type of Commercial Network and, in the case of Motor Liabilities, the legal obligation to stipulate a policy in order to be able to circulate. It is easy to understand that the first 4 sales positions require very different technical skills in the assessment and acceptance of actuarial risk before issuing the policy. However, they are homogeneous with each other by sales channel and price as they are intended for retail customers: these are the strategic levers on which 95% of the companies operating in the EU compete.

The Marine, Aviation and Trasportation (MAT) subgroup constitutes an extremely specialized market operated by very few companies, and the Assistance subgroup requires particular skills and logistical organization.

The remaining subgroups:

- Income Protection, Legal Expenses, Credit & Suretyships, Miscellaneus Financial Losses
they are managed by a good part of the large companies but only as complementary offers and intended for customers of the other subgroups. Some specialized products of Income Protection and Credit are specific to banking distribution networks, because they are connected to the provision of loans and mortgages (such as Fire products to protect homes): for them there are specialized companies, and in some cases monopolistic ones such as the case of Trade Credit Insurance, now an oligopoly of the Euler, Atradius, etc. groups.

For the remaining part, the value curve offered in this niche is very flat and similar for all operators, including small and medium-sized companies operating exclusively in this sector.
Furthermore, the regulations require heavier capital requirements for the exercise of some of these Risk Classes which do not encourage large companies to focus on them.
Yet they constitute approximately 40 billion euros of premiums in the EU (sureties, legal protection, other financial losses), of which about 3.35 billion only the specific market for sureties (guarantees) in Class 15.
(Source: Research and Markets, Finnaccord)

In Europe, only about 930 companies operate Class 14, 15, 16 and 17, mainly with complementary offers for customers of the other classes; of these, about 80 companies are specialized in Class 15 Suretyship alone. Overall premium income in Class 15 Suretyship was € 3.35 billion, of which € 2.15 billion specifically in Surety and Guaranty.

Surety and Guarantee Insurance products

Surety Insurance, or Insurance Guarantee Bond, is a form of collateral and a possible alternative of bank guarantees that is broadly used in the EU and the rest of the World as well. Through a surety bond the Insurance Company reimburses all financial loss of the beneficiary, which may result from not fulfilling an obligation based on contract or by law to the beneficiary.
Beneficiaries evaluate insurance bonds similar to bank guarantees due to the fact that insurers have the same financial strenght, legal background and professionalism as banks.

Insurance guarantees are mainly used to guarantee advanced payments, customs duties, performance bonds, especially in the public and private construction sector. They are essential for the award of public construction, supply and management contracts, for the issue of concessions, as well as in relations between private individuals in the case of guarantees on contracts, future payment guarantees, etc. etc.

The overall European 2020 market of sureties (Surety and Guarantees) was 6.90 billion euros of which the banks hold about 64% with 4.42 billion euros, the insurance companies cover 2.20 billion (32.0 %) and the remainder (0.28 billion euros, 4.0%) is operated by authorized financial companies.

The most commonly used types of Sureties Bond are:

- Advance Payment Bonds 40.2%: relating to the guarantee on advances paid for a supply
- Performance Bonds 22.3%: relating to the correct execution of tenders
- Bid Bonds 20.8%: relating to participation in public tenders
- License and permit Bonds 11.7%: relating to concessions or permits
- Customs Bonds 3.3%: relating to customs duties
- Tax Bonds 1.7%: relating to the deferred payment of taxes or duties

Other more specific forms of guarantee are however subsets of the listed above categories.

The main market research companies all agree to estimate the CAGR growth rate of this type of products of 5.8% from 2021 to 2027. This is mainly due to the estimate of the increase in construction and public procurement that will be banned in Europe as response to the economic crisis suffered by the COVID 19 epidemic; another point of growth is the decision of the EU to push on ecological transitions by granting systemic economic aid for which guarantees are required. Furthermore, it is estimated that blockchain technology in the execution of digital contracts (smart contracts) will greatly facilitate the issuance of this type of guarantees in the front-end management to the final consumer.

Therefore, the expected future market for sureties in Europe will be around 7.30 billion euros by 2027, of which at least 2.35 billion from the insurance sector that will grow faster (CAGR 6.9%).
The sureties market reflects the presence of large groups in the general insurance market, with only 3 groups that collect about 21.5% of premiums (473 million), and the rest distributed among the other companies. Of these, those specialized only in Class 15 (about 80 in Europe) hold 56.8% of the market (1,250 million) and the remaining part of premiums (477 million) is collected by the other 850 companies as a complementary product to other classes of Risk.

The high level of specialization in the Sureties sector can also be understood by the number of Reinsurance companies (European and Extra European) operating in Europe for this sector: only 23 companies of which none are exclusive for this Risk Class.

THE SPECIFICITIES OF THE SURETIES SECTOR

The reason why few companies operate in the Guarantees sector is mainly due to the specific skills needed to assess the risks that such contracts entail. The European demand for Guarantees is estimated at around 21 billion Euros a year, more than 3 times the product actually offered: the reason why with such a high demand only a few companies prefer to operate, is because specific skills are required in assessing reliability of the guaranteed parties, their projects, the market in which they operate and all the exogenous and unpredictable variables that could lead to default on the contract.

While in normal insurance business, the risk profile is assessed using actuarial techniques, based on previous historical statistical series because they refer to random events, in the case of Guarantees the risk variable is strongly influenced by non-independent factors and may have a percentage of non-random factors, as well as problems related to "moral hazard".
For these reasons it is customary that a guarantee contract is often covered by financial and/or equity collateral provided by the contracting party, precisely because of the difficulty of assessing the non-random part of the risk.

The competencies necessary to assess these types of risk are not typical of the insurance sector, and require adequate and specific structures, which most companies prefer to dedicate to different risk classes. The commercial networks for underwriting premiums for guarantee contracts are also very different and specific to the sector, and can hardly make synergy with the collection networks of other insurance products.

THE *NICHE* OPPORTUNITY

Based on what has been illustrated, Photonike Capital Sa has decided to enter the Insurance Guarantees sector in Europe for the following reasons:

1) it is a market worth 2.5 billion euros destined to grow;
The demand is very high and the market requires product innovation

2) it is a market where size and asset reliability are distinctive factors;
Thanks to its capital endowments (in quantity and quality), Photonike Capital Sa can access this type of market through a license as a Reinsurer, proposing itself in Europe as a subject specialized in this type of risk.

3) it is a sector where specific skills are rare and diverse;
Photonike Capital Sa intends to differentiate itself mainly on the subject of Core Competences and dedicated technologies, which are not yet used in this specific niche.

4) it is a sector with a high margin;
The average percentage of reinsurance of this type of risk is the highest of all types of risk and can reach over 75% with a median of 45%; likewise, the median Combined Ratio cost for Suretyships in Europe is among the lowest of other insurance risks equal to approximately 70% with minimum range values of approximately 25% (source EIOPA). This means that there is a bottleneck towards the reinsurer, and that the final margin remains very high.

5) it is a sector with a strong barrier to entry;
The EU regulation and in particular the Belgian one, prescribe very stringent requirements for the issue of a license as a reinsurer, both in terms of capital endowments and managerial experience and internal organization.

6) it is a sector with important growth prospects in some countries;
In addition to the average growth in Europe, some individual countries show even greater room for growth in terms of premium penetration compared to GDP, such as France and Italy (among the top 3 EU insurance markets) and others that are smaller but with strong trends of GDP growth.

7) it is a sector with wide margins of technology application;
The application of blockchain technology for the stipulation of "smart contracts" is intended to be an important lever for both the security and the speed of closing transactions: it also allows the management of digital markets for the collection of premiums. Similarly, the use of artificial intelligence helps to reduce risk assessment times by decreasing the information asymmetry.

8) it is a sector with strong customer loyalty;
The data show that in the sureties sector, only about 7% of customers change supplier over the next 5 years.

9) possibility of tailored insurance;

For the type of service offered, a deep understanding of the needs of the customer and the project is necessary and this entails the possibility of offering specific contracts for each case, creating a very strong differentiation and an extension of the margin.

10) banking competition destined to decrease;

Being treated as a financial risk, the banking sector cannot bear the burden of about 5 billion of sureties issued as it requires strong collateral and absorption of assets, and in fact the trend of penetration of insurance sureties on bank ones is growing; as we will see below (Alternative Risk Transfer) banks will be more profitable to invest in ILS products rather than directly providing guarantees to their customers.

11) it is a sector that has Blue Ocean opportunities for new products and services;

The strong incentive of the EU to use alternative financing instruments for the development of SMEs opens up a new and unexplored market for innovative products.

REINSURANCE

A reinsurance company is a company that acts and reinsures only the insurance companies and not the final customer. Like insurance companies, it also needs a specific authorization from the authorities to be able to carry out this type of activity, and must adapt to a legislation adopted at European level (Directive 2009/138/CE - Reg. EU 2015/35 10-10-2014).

The advantage of operating as a reinsurer is a much more streamlined back-desk, lower commercial costs, greater ease of operating at a transnational level (European and non-European) and the possibility of accessing more modern and advanced forms of assignment and risk management (as will be explained below).
The disadvantages are the need for much higher equity capital, a greater focus on asset reliability, high professionalism and technical competence. Photonike Capital Sa, thanks to its capital endowment, can apply to the Belgian National Bank for authorization to operate as a reinsurer.
Reinsurance companies' premium collection is expected to grow also because the effect of ultra-low yields on government bonds entails asset allocation difficulties for insurance companies with consequent penalization of Solvency II scores; this will lead to a natural tendency to use reinsurance more to balance portfolios and a reduction in the commercial margin.

THE BLUE OCEAN

From what has been illustrated, the plan is to transform Photonike Capital Sa into a reinsurance company specialized in the Surety and Guaranty sector, operating at European level. The goal is to allocate the company's own capital to obtain a license from the Belgian authorities and enter a market worth around 2.5 billion euros destined to grow. The Reinsurance status allows you to work at a European level and also allows, within the limits of Solvency II regulations, to operate as an investment holding company as the company assets must then be reinvested.

However, our company does not intend to enter this sector to compete, but intends to bring a series of important innovations both at the product and at the process level.

In fact, while covering the usual surety risks deriving mainly from the public procurement sector (Bid and Performance Bonds), the company intends to offer the market a very innovative product not envisaged today in Europe by any insurance company: *Financial Guarantee Insurance*.

THE PRODUCT AND THE HISTORY

Financial Guarantee Insurance provides investors in debt securities with guaranteed payment of interest and principal in the event that the issuer of the guaranteed ("wrapped") debt is unable to meet its financial obligations.
The sector born in the United States where is largely based, but its clout is international, not least because securities wrapped by financial guarantors are issued by various internationally active institution and are held in portfolios around the world.
Traditionally, bond insurers have provided guarantees of payments on municipal bonds, where defaults have been very limited. In the late '90s they have been become increasingly involved as guarantoors of elements of various structured financial products, as credit enhancement of mortgage loans and similar. This was a component of the economic crisis of 2007 followed by the default of some historical US big banks. Today the Financial Guarantee Insurance in USA came back to the right use to cover institutional securities issue all around the world.
No Reinsurance and Insurance companies in EU have been and is today active in this sector.

Europe economic space is quite different from USA. In EU the most part of economy is raised and sustained by SME Small Medium Enterprises: small and medium-sized enterprises (SMEs) are defined in the EU Recommendation 2003/361 (source: EU Commission SME Definition User Guide 2020). The main factors determining whether an enterprise is an SME are the staff headcount and either turnover or balance sheet total. Companies below 250 employers, turnover below 50 Million Euro or balance sheet below 43 Million Euro, are defined Small or Medium Enterprises and are the object of particular incentives from the European Community.

In Europe (2019) there are 25,079,310 SMEs of which 235,670 with a number of employees between 50 and 249, 1,472,400 with a number of employees between 10 and 49, and 23,323,900 with a number of employees below 9.
About 97,000,000 people work in European SMEs, equal to 70% of the total workforce and produce 58.8% of European GDP.

These companies traditionally have access to bank financing which has always been the main point of access to credit. Although in most EU countries SMEs do not encounter particular difficulties in resorting to bank debt (except for some cases such as Greece, Italy and Spain), the European Community has made a great effort to allow SMEs access to sources of financing alternatives, and in particular to the diffusion of a specialized Capital Market for SMEs, both for Equity and for Debt Securities.

Both the Small Business Act (Directive 2014/65 / EU and Reg. 2019/2115 / EU) and the MIFID II Directives, have facilitated and encouraged the creation of the so-called SME Growth Markets, or MTF Multilateral Trading Facilities where demand and offer of securities and bonds issued by SME could meet. The result is that since 2012 the specialized markets and the listing of financial instruments issued by SME have multiplied. The European Community has invested heavily in the growth of SMEs which are the real economic engine of the territory, and has also promoted a series of tax relief initiatives aimed at making the economic activity carried out by SMEs more profitable: a large part of European countries has promulgated laws and regulations that lowered the tax burden on SMEs, with the aim of increasing the share of added value produced and making companies more liquid.

Today there are 17 MTF markets active in Europe (all managed by the main European stock exchanges) specifically intended for the listing of Bonds issued by SMEs (Mini-Bonds). They have created an induction of sector and market specialists, both for the introduction on the stock exchange and for the trading of securities. The recent regulations adopted by all EU countries have made the issuance and listing of Bonds for SMEs simpler and more immediate than the constraints that were originally created by the Commercial Law Codes of the individual countries. This has allowed a wide diffusion of these techniques to a greater number of SME companies that intend to finance themselves by issuing Medium-Term Bonds.
Furthermore, the reduction in interest rates allows access to the market at low costs for the usual commercial activity of companies, but competitive and attractive for investors compared to the usual Corporate issues of large companies or Government.

Under current regulations, SMEs' debt issues of less than € 50 million are defined as Minibonds. From 2012 to today in Europe there have been approximately 4,000 issues of listed bonds by SME, of which 765 occurred in 2019 for a total collection of approximately 15 billion euros.
Most took place in the 5 countries France, Germany, Italy, Netherlands and Spain, and were listed on the 17 MTFs dedicated to them. The most complex situation occurs in Germany where the average unitary issue value is very high (about 50 million euros) and recently launched the BondM system of the Stuttgart Stock Exchange which dis-intermediaries banks for placement to individuals, allowing them to buy directly from the Exchange platform; the system was adopted by 4 other German stock exchanges (Frankfurt, Dusseldorf, Munich and Hanover), the Paris and Milan stock exchanges. France is followed by the equivalent value of issues (6.7 billion euros) while Italy is the country with the largest number of listed issues (207 out of a total of 810 active).
The average unitary issue value of the Minibonds, excluding Germany (whose average value is 48 million euros), is approximately 8 million euros with a duration between 4 and 7 years and average interest rates of 4.2%.

Recent studies solved by ESMA indicate that the initial obstacles to the issuance of bonds for SMEs, such as high information asymmetry, uncertainty about creditworthiness, certification of a track record, low visibility and high issuing costs , have significantly mitigated even if two important gaps remain towards investor interest: creditworthiness and information asymmetry.

Despite these obstacles, the SME bond issue market in Europe is now well underway and is set to grow. The launch of the SME Growth Markets imposed by European legislation has created an important industry around the issuance of listed Minibonds, creating a multitude of service companies (advisory and investment banks) in almost all countries. The Herfindahl index which measures the penetration of advisors in the placement of SME Bonds (it is equal to the sum of

the squares of the percentage market shares; the closer it is to zero, the greater the operators) is 0.07 for France and Italy, 0.10 for Germany and in Europe varies from 0.07 to 0.77 in Luxembourg (removing the values 1 for Bulgaria and Latvia). This means that the issuance and debt quotation industry for SMEs is highly developed and has many active operators (for example, in Italy there are about 40 active Originators).
In addition, the recent events of the Covid pandemic require an economic recovery plan which, albeit aided by European public funds, will have to intercept the large share of savings that have remained unchanged from February 2020 to today; the forecasts of emissions for alternative financing of SMEs are very promising for the next 4 years.

SME Bond Insurance

The use of an insurance policy to support the guarantee of payment of capital and/or interest is an important support for the success of the issuance of a Minibond, its placement price and the rebalancing of the information asymmetry between the issuer and the investor.
Photonike Capital as a Reinsurer intends to specialize in products intended for issuers (and their advisors: originators, arrangers, etc.) of Minibond SME, allowing Insurance Companies to reinsure themselves and customize the insurance contract for each single issue.

Photonike Capital has studied a catalog of specific products to cover the risk of total and partial insolvency of the Minibond issues; moreover, it has developed a complete set of skills, technologies and processes aimed at assessing risks in detail and minimizing them during the management phase.
Photonike Capital intends to target issuers of minibonds below € 10 million listed on any European MTF. It will be possible to operate on issues up to a maximum of 50 million, but only to guarantee risks not exceeding 15% of the issue.
The catalog provides guarantees on the payment of principal, interest or both, from 15% up to 100% of their contractual value (depending on a series of reliability parameters that include the company assets, the market, the track record, the management, technological skills, covenants granted to the contract etc. etc.) and a series of more flexible and innovative products such as Mutual Wrap Insurance which covers the issues of a group of SMEs that are mutually guaranteed, or Securitization by Loans SME. Furthermore, the policies may be of the Inside View type if the issuer buys the policy before the bond issue and the beneficiary is the future holder of the Bond, or Outside View if the investor buys the policy after the bond issue has taken place.

The pricing of these products is highly dependent on risk assessment, collateral assets and post-issue risk management contractual clauses. This type of guarantees also have the characteristic of covering time intervals that exceed one year, being parameterized to the duration of the bond they guarantee, therefore they allow management during the life of the bond with a parametric logic (i.e. linked to the performance of the issuing company) and indemnity. Last but not least, the admission of securities to trading on MTF Markets also allows the use of buy-back strategies when the market value is lower than the Technical Reserves allocated for the individual policy.

Risk Allocation: Skills, Splitting Up, Evaluation Techniques, Artificial Intelligence and Big Data collection

The assessment of risks in this context is not simple and has already caused great damage in the past; a superficial and ethically incorrect use of Bond Insurance led to the deformation of the reliability information regarding Subprime Loans in 2007, while an excess of enthusiasm in the issuance of Minibonds without adequate verification on the issuers in Germany between 2010 and 2014 produced 26 default on 34 issues with losses of over 1 billion.
Photonike Capital has developed the skills necessary for the correct assessment of financial, business and market risks, especially in the assessment of technological and industrial aspects. It also intends to enhance this type of internal Core Competence by investing in personnel with experience not only in the actuarial and insurance sector, but also in the sector of corporate risk analysis, more typical of investment banks. This includes skills and experience in evaluating:

- Balance sheets
- Business Plan analysis
- Technical and engineering projects
- Technological risks
- Market Competition
- Econometric measurements
- any other discipline that makes it possible to assess the ability of the issuing company to use the funds raised in issue to achieve the market and yield objectives set. This also involves the assessment of opposing forces, such as competitors, general economic conditions, market resistance, legal, technological or environmental constraints, etc. etc.

The competence in producing the right policy treaty with the most suitable contractual clauses for forecasting and managing risk is also fundamental.

THOMAS BAYES AND THE ARTIFICIAL INTELLIGENCE

From an actuarial point of view, our company has developed risk assessment techniques that are not based only on time series, but intensively apply the Bayes Theorem (Probability of Causes Theorem) through the intensive use of software simulators (internally developed) which allow to combine the usual Frequentist Statistics with a Bayesian Statistics for the prediction of risk scenarios. Bayesian statistics not only tell you the past but can calculate the probability of causes that can affect the future.
These software are powered by Big Data from both the ERPs of the issuing companies and from other sources (web, market observers, economic archives, etc.) and allow, through simulation, to have a fair representation of the evolution of the project default risk over time at the basis of the corporate issue and therefore of the default of the repayment capacity of the guaranteed bond.
The choice of appropriate external partners in the Artificial Intelligence sector offering cloud platforms (H2O.ai, Palantir, Acronis, etc. etc.), not only simplifies and accelerates the collection of the Big Data necessary for simulations, but also allows the use of know-how without the need to develop it at home. The AI also generates the boundary conditions necessary for the simulations for the generation of the Risk Curves.

The added value for the issuer of a Bond SME and its advisors (originators, arrangers, etc.) in the structuring of the bond securities, is not limited to obtaining a Guarantee Policy, but also in an evaluation, forecast and certification the level of risk for the investor, reducing the information asymmetry. Photonike Capital does not intend to replace companies that evaluate the creditworthiness of companies and financial instruments, among other things normally obtained through a Frequentist Statistics technique, but adds a strong component of information that completes that provided by the Rating and Reliability specialists. credit, among other things by assuming the risk on one's own.
We refer to the literature of the Nobel laureate George Akerlof (see The Market for Lemons: Quality Uncertainty and the Market Mechanism) on how a reduction of the Information Asymmetry reduces the risks of adverse selection, or that the market tends to quote the worst opportunities.

This is a great Disruption in the world of bond issues, and more generally of insurance risks: we move from a logic of "Estimated Risk" to that of "Managed Risk".

We are not limited to a Credit Reliability (what a company has and its behavioral past) but we deepen the Probability of Success of a project (what a company can reach).

Aristotle: "We do not know the truth if we do not know the cause ..."

With software under development and access to Big Data, it is now possible to obtain the Risk Curves of a bond issue within a few hours of computing.
It is important to point out that these techniques also have a great impact for the assessment of risks related to sureties for Bid Bonds or Performance Bonds in large public and private construction contracts and concessions, where Photonike Capital certainly wants to operate; they are less useful and effective in assessing more casual risks and for non-indemnity policies (damage from fire, catastrophes, civil liability, etc.).

RISK MANAGEMENT THROUGH SPLITTING UP RISK AND POST DEFAULT MANAGEMENT

In the insurance technique and according to European regulations, for each risk assumed by an insurance company, an amount of assets must be allocated in a Technical Provisions associated with that risk. The sizing of this Technical Provisions mainly takes into account the product of the economic consequences of the damage caused by the event and the aggregate probability that it will occur, as well as other collateral risks (both internal and external to the company) that the recent Solvency II regulations have introduced. for the calculation of the overall solvency.
In the case of a guarantee covering (partial or total) the principal and / or interest of a Bond issued by an SME, the calculation of the Technical Provisions must take into account the validity period and the methods of repayment of the Bond, and extends for the period of years equal to the duration of the bond issued. It is understood that the type of product that Photonike Capital intends to distribute involves very high indemnity and reimbursement in the event of default (at most equal to the total of the issue), with a concentration of what are usually defined as "large risks". For this reason, the appropriate and measured "splitting" of the risks assumed is fundamental in the premium collection strategy, both in terms of type of risk and size and duration. These factors must balance each other from the moment of the commercial selection of the projects on which to provide guarantees. A useful and important aid to this evaluation is also provided by the AI and by the internal Bayesian simulation SW which, by evaluating the set of risk curves assumed by the company, effectively directs the assumption of new risks: in practice the know-how of assessment is

also used internally to continuously monitor the position of Photonike Capital itself and guide the Risk Underwriting Policy. It should be noted that the type of product naturally leads to favoring the growth of bond issues "below the threshold" or up to 5 million, in a market that already naturally appreciates over 50% of emissions under 10 million euros: this further favors the splitting of risk, both in terms of the issuing company's business sector and the size of the guarantee. Although the threat of adverse selection may grow, it is largely nullified by the in-depth collection of information.

Historical data indicate that defaults in the repayment of bonds issued by SME are quite rare (except for the parenthesis experienced in Germany in the period 2010-2018). The total of defaults in Europe was 3.2%: if the German parenthesis is excluded, they drop to 2.6%. Also in this case we have very different data from country to country, for example the number of defaults on the total issues in Italy was 2.03% while the number of defaults in France was much higher. These data appear to be in contrast with the average percentage of corporate bankruptcies (including insolvency and liquidation procedures) in Europe which is about 1.6% (data varying from country to country: Germany 0.55%, France 1.30%, Italy 0 , 25%, Spain 0.15%, Belgium 1.30%. Source: Insol Europe, EIF), but it must be considered that the sub-class of SME companies that access the debt capital market constitutes an autonomous cluster and the default in the plan debt payment could be linked to incorrect project planning. It is emphasized that in Europe intentional bankruptcies or due to fraudulent behavior is only 6% of total bankruptcies. Very often the information regarding creditworthiness is information totally inconsistent with the probability of success of the project associated with the bond issue.

However, any default in the repayment does not mean that the issuer has gone bankrupt or is unable to extend the repayment time. In fact, over 85% of the payment defaults of a Bond ended with composition procedures that substantially lengthened the payment times. It must be remembered that in all European national laws, the bondholder is considered a privileged creditor towards the assets of the issuing company. In practice, companies in default always have an average market and cash capacity over time to meet their obligations, therefore any default of payment at zero time can be transformed into a "refinancing" or "second chance loan" for the following years. Photonike Capital has studied appropriate contractual formulas to be included in the guarantee policies, which allow to sell collateral and post-default credits on the NPL, UTP and High Yield Loans market. When the transfer value (including the NAV of collateral) covers the Technical Reserve, the transaction generates an over margin for the insurer. This is done through upstream agreements with third party partners specialized in the management of high-rate corporate loans, allowing automatic risk optimization even after a possible default.

The Alternative Risk Transfer ART markets and Integrated Risk Management

One of the strategic sectors in which Photonike Capital Sa wants to invest to mitigate its risk exposure and lengthen the margin curve is that of Alternative Risk Transfer (ART); this requires investments in Core Competence and the construction of a financial partnership network.
We refer the reader to the specialized literature for an in-depth analysis on the subject of ART, but these financing techniques can be briefly defined as the possibility of distributing pure insurance risks on the financial risk market through the securitization of insurance risks in specific corporate vehicles (RSPV Reinsurance Special Purpose Vehicles) that they are financed through the issuance of bonds known as ILS Insurance Linked Securities.
These financial techniques were born in the 90s on the decision of the authorities to deregulate the financial and insurance markets. The current world market ILS Non Life has negotiated 45 Billion Dollars of new issues (2019): many European legislations allow the establishment of RSPV Reinsurance Special Purpose Vehicles (both in-house and through Reinsurance Cells Companies) for the securitization of insurance risks and issue of ILS Bonds.

Photonike Capital SA wants to propose itself as promoter, sponsor and manager of RSPV corporate vehicles, both for its own risks and for third party risks, making this activity another business line with the aim of becoming a leader in the insurance management of this type of corporate vehicles through mandates of Managing General Agent / Underwriter (MGA) (see IRMI.com).
Photonike Capital, as reinsurer, will transfer the risks of SME Bond Insurance to RSPV by offering the related ILS Bonds on the financial market. In practice, the company will not retain the risk on its balance sheets but will transfer it to the market. This will allow for a lower margin which will be balanced by a higher premium income with the same Solvency Margin, but a lower internal risk.
The type of ILS emissions that the corporate vehicles managed by Photonike Capital will emit depends on many factors but in general they will be of the type (Stop Loss or Excess Loss formula):

- Contingent Capital
- Finite Risk Insurance
- Parametric ILS
- Credit Derivatives Options

Institutional investors have great advantages in buying ILS securities deriving from the low (if not negative) interest rates of the Risk Free securities, and from the de-correlation between the insurance risks underlying the ILS and interest rates. Entry into the community of specialized intermediaries requires registration with business associations that manage the market such as IRMI, ISDA and ICMA, to which reinsurance companies are admitted by right.
In practice, the ART market will constitute an exit reservoir for the guarantee risks undertaken and a collection system for additional Tier 2 capital to be used to cover the guarantees.

THE DEVELOPMENT PLAN: 2021 - 2025

The Board of Director has drawn up a strategic action plan to achieve the objectives established with a time horizon of 5 years.

THE OBJECTIVES

Photonike Capital intends to become a Reinsurance player in the Non Life sector for Classes 14, 15, 16 and 17 by assuming risks for sureties, financial losses, legal and credit risks. Furthermore, the company intends to enter the Life sector limited to Class III (Unit Linked products) and V (Capital Redemption products), because they are synergistic with the activities of the Non-Life sector.

The greatest commitment is foreseen for the Non Life sector: the management of Photonike Capital SA must primarily obtain the Reinsurer license from the National Bank of Belgium and direct its organization to create an effective commercial collection network, attract the necessary skills, both professional and technological for the assumption of risks, complete the development process of internal technologies, build the pool of professionals who will manage the ART.

REINSURANCE LICENSE APPLICATION

The license for the exercise of the reinsurer activity in Belgium is granted by the NBB National Bank of Belgium (www.nbb.be), according to a series of capital requirements, management experience and competence, integrity of shareholders and directors, and internal organization. Supervision after obtaining the license is the task of the FSMA Financial Services and Market Authority (www.fsma.be) which protects customers and the market. The authorization process is somewhat complex and please refer to the NBB website for details (https://www.nbb.be/en/financial-oversight/prudential-supervision/areas-responsibility/manual-assessment-fitness-and -4).
One of the fundamental pillars of the granting of authorizations is the quality and quantity of the corporate assets: to this end, the management has started a process of "adaptation" of the corporate financial statements in 2020 aimed at verifying the short-term liquidity requirements of the assets, liquidating or selling those positions that are not useful for the evaluation for an insurance license: for these reasons, appropriate changes have been made to the 2019 financial statements published in December 2020. Photonike Capital has appointed an independent auditing firm for the due verification and certification of the financial statements: in fact one of the requirements requested by the authority is the certification of at least two financial statements. The significant part of the company assets consists of investments in Government Bonds received as a capital increase in 2016, for which the valuation in the financial statements was made taking into account the IAS-IFRS 13 (Fair Market value) standards, at the basis of the EIOPA requirements for insurance companies (see next chapter Solvency II), in apparent contrast with the GAAP regulations of Belgium, which instead require historical evaluation: this apparent discrepancy is actually due to the need to present the financial statements to the NBB in accordance with the insurance regulations in force and it was widely reported in the notes to the financial statements and in the Auditor's report. In the drafting of the 2020 budget, whose approval by statute is expected in May, further legal adjustments will be made to the corporate values, which will be presented for approval to the external Auditor and to the Shareholders' Meeting.
As regards the skill requirements required of managers, some of the members of the Board have been and are already directors of foreign insurance companies, in addition some external insurance managers (former CEO of Life and Non Life Insurance Companies) have already been recruited by the company. These will also give fundamental support in the internal organization of the company which will be evaluated by the NBB for the granting of the license.
Last but not least, the verification of the integrity of the shareholders and managers does not involve particular risks as it is already provided for by the law of listed companies and by the fact that the persons involved have already been assessed by others European financial authorities.

The complete authorization process by law provides for at least 90 days of verification from the moment of submitting the application, and obviously depends a lot on the quality of the documentation presented: the management expects to submit the application immediately after the approval of the 2020 audited financial statements and in the meantime has already made contact with the relevant offices and with a legal advisor for the complete set of documents. It is emphasized that one of the fundamental requirements for the granting of the license will be an opportune modification to the company statutes, which however can be postponed “sub judice” to the prior authorization of the NBB. In this case, the amendment provides for the convene of an Extraordinary Shareholders' Meeting.

ECONOMICS AND SOLVENCY II

In the insurance sector, the risks are balanced by the recording of appropriate Technical Reserves in the balance sheet liabilities, while the Premiums collected by customers are recorded in the assets; the regulations require that the Technical Provisions be balanced by the funds collected over time and by a part of the company's own funds known as the Solvency Margin. With the recent Solvency II regulations, the entire company assets are subjected to consistency checks in terms of liquidity and value retention over time, including not only pure insurance risks, but also the risks that may affect the company assets (financial , market, reputational, etc. etc.) with a complex set of algorithms for which the reader is referred to the specialized literature. The final result is that each insurance company is required to respond periodically (quarterly) to the satisfaction of a minimum Solvency Margin and a Solvency Index called SCR Solvency Capital Requirement Ratio, which by law is set at at least 130%, or the available company capital (Eligible Capital) must be at least equal to 130% of the risks assessed and adjusted according to the Solvency II algorithms.
Therefore, the turnover that can be expressed by an insurance company, understood as annual premiums collected, is highly dependent on the available equity capital (in terms of quantity and quality), which the supervisory bodies do not allow to exceed. An adequate SCR level for a stable insurance company with no risk of default is between 160% and 200%, this involves the use of assignments of risks to third parties (other Reinsurers or RSPVs) and a careful selection of the risks assumed.
In general, for our company, we have made it our duty not to go below an SCR of 180% and to allocate at least 50% of the risks to be sold from the 2nd year onwards. This implies that the Gross Premiums Earned (the expected turnover of the company) by rules can be estimated in a range between 1.5 and 2.2 times the free company capital available (fair market value), which remains the collection objective that we have set ourselves.

THE INVESTMENTS WE NEED

The path outlined requires an economic commitment to strengthen internal Core Competences through an adequate selection of insourcing and outsourcing of essential services.
A first direct investment is the costs related to obtaining the license, which can be reduced to legal and advisory costs. Much of the work has already been carried out and paid for in previous years and spending by 2021 is expected to be around 180,000 euros.
The most important investment, on the other hand, concerns the internal Core Competence to be divided into qualified personnel and Information Technology.

- Core Competence for Risk Assessment: Euro 2,100,000 in 4 years from 2022 with the goal of 5 people in 2025.
- Compliance: Euro 1,350,000 in 5 years from 2021 with the goal of 2 people in 2025.
- Internal IT SW (Bayes Simulator): Euro 500,000 from 2021 until 2023.
- Sales & Distribution Team: Euro 1,500,000 in 5 years from 2021.
- External AI partners: Euro 2,500,000 from 2022 in 4 years.
- Blockchain Platforms and Smart Contracts: Euro 500,000 from 2023 to 2025.
- Staff and miscellaneous: Euro 3,000,000 in 5 years from 2021.
- ART Team and Staff: Euro 1,200,000 in 3 years from 2023 to 2025.
- Top Management: Euro 2,000,000 in 4 years from 2022.

The expected total of investments is equal to 14,650,000 euros in 5 years and is covered for 95% by expected revenues, the rest by the company's own funds. The remuneration of the ART team is variable on the issue results achieved.

THE DISTRIBUTION NETWORK, THE EUROPEAN DIFFUSION, THE COMPETITORS AND THE RATING

A reinsurance company "sells" its services mainly through external agreements with specialized brokers; however the type of SME Bond Insurance product requires a network of Senior Managers in contact with issuance advisors (originators, arrangers, legal firms, banks, etc.).
European legislation allows a company authorized in an EU country to operate in free provision of services in all other European countries, through a specific authorization that is requested through its supervisory body (in our case FSMA) which will forward it to the supervisory bodies from other countries. The response deadline is 90 days and is mandatory if there are no specific reasons for refusal. Therefore, immediately after the necessary license obtained from NBB,

Photonike Capital plans to apply for LPS in the following countries: France, Germany, Italy, Spain, Holland, Finland, Austria, Denmark. It reserves the right to evaluate the opening of Eastern European countries from 2023.
For each country, the company will enter into specific distribution agreements with the main reinsurance brokers, aimed at the negotiation of reinsurance contracts with local insurance companies, which may be of the optional type or general treaty, proportional or not. For the SME Bond Insurance product, the contracts are stipulated directly with Photonike Capital Sa which will use a Main Fronting Insurance Company for the contracting. It is not excluded that the company may grant MGA mandates to specific brokers. The development plan provides for the contracting for all target countries from 2021 and by 2022, and the stipulation of partnership contracts with the main 5 SME Bonds Originators and Arrangers in their respective countries. The remuneration of the distribution network is conventionally variable and will be included in the annual commercial costs (they are part of the Expenses Loss); the company does not envisage changes in commercial fees compared to market standards for brokers and reinsurance, both in acceptance of risk and risk ceding.

The competition in each country on the products that Photonike Capital intends to distribute comes mainly from the specialized insurance companies in the sector (the group of 80), which, however, can recognize a diversification opportunity in the new reinsurer on the market. In fact, usually the role of the Broker in the individual markets is not to promote the Reinsurer on the active Companies, but to directly intercept the demand for sureties and guarantees, and to close the contract with the Reinsurer through a local fronting company that collects a commission and transfers the main risk. One of the competition factors is certainly the speed of response and innovation in risk management, which also produces the possibility of generating new customers on traditional product lines.
Conversely, in the SME Bond Insurance sector, a class of competitors are the government Credit Guarantee Schemes created to help spread alternative finance for SMEs; about 40% of SME bonds issued and listed on MTF are secured (usually with pledge on real estate) and of these about 30% have governmental protection or directly issued by a bank on behalf of a public body (Public Guarantee Scheme) or through mutual guarantee schemes which in turn are co-guaranteed by individual governments. The former are usually unfunded, the latter are funded, however both usually cover up to a maximum of 30% of the issue (in some disadvantaged European regions it can reach 50%) and can be requested after the declaration of liquidation by a bankruptcy court.
Indeed, this form of guarantee does not completely constitute competition for the SME Bond Insurance product, because they all originate from the funds managed by the EIF European Investment Fund, the body appointed by the European Community to facilitate the development of SMEs through the Guarantee Schemes, including of which the most wealthy is the COSME Loan Guarantee Facility Program with an endowment of approximately 35 billion euros. Any qualified EU financial operator can be accredited to this program, including a Reinsurer; therefore Photonike Capital may request the EIF to participate in the Guarantee Scheme program, thus being able to partially discharge the risk assumed with the SME Bond Insurance on the EIF. Therefore, the Credit Guarantee Schemes can be considered upstream partners in the commercial activity.

It has been said that reliability is a strategic lever for reinsurance companies and also for bond issues. Our company is established in Belgium and is under the supervision of the NBB, and has invested more than 90% of its assets in Government Bonds with AA-AAA rating. Since the S&Poors rating of Belgium is currently AA, it is estimated that when fully operational the reliability rating attributed to the company will be at least equal to AA, with an important commercial impact in countries where reliability is very strong (Italy, France, Spain etc. .).

THE PRODUCT CATALOG

Based on what has been illustrated so far, we can summarize the catalog of products that Photonike Capital Sa intends to offer:

Class A) Private to Public Risks (tenders for costructions, concessions, management, etc.)

- Bid bonds
- Performance Bonds
- Financial Losses

Class B) Private to Private Risks

- Sureties and Advance Payment Bonds
- Mantainance Bonds
- Performance Bonds
- Parametric Performance Bonds
- Legal Expenses
- Financial Losses (Parametriche, Indennitarie incluso Meteo, escluso Catastrofali)

Class C) SME Bond Insurance (only listed bonds)

- Inside View (pre-bankruptcy or post-bankruptcy coverage)
- Outside View (pre-bankruptcy or post-bankruptcy coverage)

- Securitisation of SME Loans
- Mutual Wrap
- Contingent Capital Options

Class D) Credit Guarantee

- SBLC confirmations
- Derivative contracts (swap, forward, underlynes etc.) if related to SME Bond Insurance

The revenue forecast table shows the percentages of business that are expected to be achieved and the expected market penetration year by year.

INVESTMENT IN THE LIFE INSURANCE SECTOR

Photonike Capital Sa indirectly invested in 2020 in the Luxembourg-based insurance holding Nucleus Holding II SCPA, owner of the two insurance companies Nucleus Life AG in Liechtenstein and Tricap Assurance Ltd in Cayman. The investment in the capital was € 10 million for a 24% stake in the holding, with some ancillary rights on the marketing of life policies. Both companies are authorized and active in Class III for the management of Unit Linked policies. Overall, the companies have an Asset under Management amounting to approximately € 1 billion and have a development plan in Europe for both Class III and Class V products for the management of Capital Redemption policies. The characteristic market for these products in Europe is growing strongly, further grown with the recent Covid pandemic.

The aim of Photonike Capital Sa is to be present in a competence center for the qualified and professional management of Assets, in addition to the synergies deriving from the management of the assets deriving from the Non-Life sector. Furthermore, not least, the valuation methodologies of the Technical Provisions imposed by Solvency II in the case of Unit Linked Policies (underlying hedgeable liabilities) are applicable to the Non Life insurance case when the type of risks assumed are of a financial nature such as those that Photonike Capital intends to manage: this allows for an important synergy in terms of know-how and resources.

The ultimate aim of the holding's management is that of a listing on the Luxembourg Stock Exchange, a prospect that will also allow for an important future revaluation of the investment. Currently the subscribed capital increase is awaiting the final approval of the Liechtenstein supervisory body, responsible for Nucleus Life AG, which received from the controlling holding a capital injection of 6 million from the Capital Increase subscribed by Photonike Capital.

The final summary table shows the economic forecasts of the Nucleus Holding II Scpa Business Plan as filed with the Supervisory Body.

P&L SUMMARY FORECAST 2021-2025

In the attached summary table, we have reported the development objectives planned for the five-year period 2021-2025 divided between the Non-Life and Life Lines of Business, with the estimated returns on investment and profits. This forecast takes into account the 2020 balance sheet as it will be consolidated and presented for approval to the shareholders and in compliance with the Solvency II regulations regarding the assets eligible for the insurance year. The forecast does not take into account any changes, adjustments or corrections that the authorizing body may require when issuing the license.

The data presented is based on a minimum SCR objective of 180% through the transfer of 50% of the risks assumed to third parties, applying the commercial fees currently in use in this sector. The expected results from ART activity on the financial markets are also represented.

Photonike Capital Sa: Table P&L, SCR, MCR Forecast Summary for Line Of Business 2021-2025

Non Life LOB	2021 *	2022	2023	2024	2025
Own Net Funds (eligible)	**104.925.632 €**	**106.963.688 €**	**112.452.084 €**	**116.598.580 €**	**120.026.055 €**
Total Assets	**127.087.036 €**	**250.332.044 €**	**328.478.977 €**	**415.671.438 €**	**504.387.363 €**
Technical Provisions	21.227.398 €	142.510.288 €	211.670.743 €	293.341.298 €	377.117.864 €
Other Liabilities	934.006 €	858.068 €	4.356.150 €	5.731.561 €	7.243.444 €
SCR Target	32.789.260 €	50.935.089 €	59.185.307 €	64.776.989 €	66.681.142 €
SCR Ratio	320%	210%	190%	180%	180%
MCR Target	9.759.723 €	15.523.997 €	18.614.963 €	20.080.866 €	22.004.777 €
Gross Premiums Earned	**84.909.592 €**	**131.953.971 €**	**154.504.192 €**	**176.711.625 €**	**180.439.169 €**
Class A risks	38.209.316 €	46.183.890 €	49.441.341 €	53.013.488 €	54.131.751 €
Class B risks	21.227.398 €	23.751.715 €	15.450.419 €	17.671.163 €	18.043.917 €
Cumulative Class A+B % market share	4,81%	5,66%	5,25%	5,72%	5,84%
Class C risks	22.925.590 €	55.420.668 €	77.252.096 €	88.355.813 €	90.219.585 €
SME Bond Issuance % market share	7,64%	18,47%	25,75%	29,45%	30,07%
Class D risks	2.547.288 €	6.597.699 €	12.360.335 €	17.671.163 €	18.043.917 €
EU % market share	0,03%	0,08%	0,15%	0,21%	0,21%
Reinsurance & ART outwards	42.454.796 €	65.976.985 €	77.252.096 €	88.355.813 €	90.219.585 €
% Risk Ceded	50%	50%	50%	50%	50%
Margin on Risk ceded	1.273.644 €	1.649.425 €	3.476.344 €	4.417.791 €	4.510.979 €
Commercial Expenses	13.797.809 €	19.067.349 €	22.403.108 €	25.623.186 €	25.261.484 €
Total Net Premiums	28.656.987 €	46.909.637 €	54.848.988 €	62.732.627 €	64.958.101 €
Other Expenses	373.602 €	1.645.862 €	3.386.260 €	3.903.423 €	3.870.659 €
Claim Losses	38.209.316 €	63.337.906 €	69.526.886 €	79.520.231 €	90.219.585 €
Of which Reinsurance and ART	12.226.981 €	28.502.058 €	31.287.099 €	35.784.104 €	45.109.792 €
Net Claim Losses	25.982.335 €	34.835.848 €	38.239.787 €	43.736.127 €	45.109.792 €
Operative Margin	2.301.050 €	10.427.926 €	13.222.940 €	15.093.076 €	15.977.650 €
Contingenties	254.729 €	395.862 €	695.269 €	883.558 €	902.196 €
Operative Investments	1.250.000 €	3.000.000 €	3.550.000 €	3.600.000 €	3.250.000 €
Gross Profit (Losses) LOB	796.321 €	7.032.065 €	8.977.671 €	10.609.518 €	11.825.454 €
Earns from Financial Portfolio	88.961 €	300.398 €	394.175 €	623.507 €	756.581 €
Operative LOB Profit (Losses)	**885.282 €**	**7.332.463 €**	**9.371.846 €**	**11.233.025 €**	**12.582.035 €**
Life LOB(Nucleus Holdings II Scpa)					
Total Assets (Nucleus Life + Tricap)	**995.124.803 €**	**1.144.311.655 €**	**1.519.466.508 €**	**1.865.555.160 €**	**2.324.233.584 €**
Total income	4.132.900 €	6.266.335 €	8.602.395 €	9.083.018 €	10.955.292 €
RoA	0,42%	0,55%	0,57%	0,49%	0,47%
General expenses	1.046.158 €	1.081.763 €	1.112.200 €	1.143.869 €	1.176.824 €
Audit, legal	809.139 €	812.213 €	836.579 €	861.676 €	887.527 €
Directors fees	364.906 €	314.906 €	315.889 €	316.922 €	318.007 €
Non-operational epenses	82.056 €	82.056 €	128.785 €	128.785 €	128.785 €
Total expenses	2.302.259 €	2.290.938 €	2.393.453 €	2.451.253 €	2.511.143 €
Net contribution to Holding	**1.830.641 €**	**3.975.397 €**	**6.208.941 €**	**6.631.765 €**	**8.444.149 €**
Net Dividend from NHII Scpa (24%)	**219.677 €**	**636.064 €**	**1.117.609 €**	**1.458.988 €**	**2.026.596 €**
Tax	190.336 €	1.833.116 €	2.436.680 €	3.257.577 €	3.648.790 €
Net Profit (Losses)	**914.623 €**	**6.135.411 €**	**8.052.776 €**	**9.434.436 €**	**10.959.841 €**
Equity Reserve	457.312 €	3.067.705 €	3.221.110 €	2.830.331 €	3.287.952 €
Dividends	**457.312 €**	**3.067.705 €**	**4.831.665 €**	**6.604.105 €**	**7.671.888 €**
Gross ROI	**0,43%**	**2,79%**	**4,17%**	**5,49%**	**6,22%**

*) Note: due to authorization times, the collection of Prmiums for 2021 is expected in the second half of the year. Therefore, the Claim Losses included in the income statement refer to the provisions that the legislation imposes in the case of risks with a probability of a claim in the following accounting year. A similar principle was adopted for the Technical Provisions.