Project Title: “PROMOTION OF MODERN FINANCIAL INSTRUMENTS IN THE CROSS-BORDER AREA”

Project Acronym: “FINANCIAL INSTRUMENTS”

<u>Work Package 3</u>:

Identification of Current Status in the Cross-Border Area/Networking Activities

<u>Deliverable D.3.1.:</u>

«Identification, Recording and Evaluation of all modern Financial Instruments/Funds currently available in the cross-border area»

Delivered by the Regional Development Agency of Rodopi S.A. (LB)

and Approved by all Project Beneficiaries

The FINANCIAL INSTRUMENTS project is co-funded by the European Regional Development Fund (ERDF) and by national funds of the countries participating in the Interreg V-A “Greece-Bulgaria 2014-2020” Cooperation Programme

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1 Executive Summary

The 'FINANCIAL INSTRUMENTS' project constitutes an integrated set of activities that aims to promote modern financial instruments, such as Equity Fund, etc., in the cross-border area of Greece and Bulgaria, in order to provide the possibility of getting financed by these modern financial instruments/tools, for the benefit of citizens, businesses, institutions and Chambers located in the cross-border area of Greece and Bulgaria.

One of the main problems (and at the same time challenges) that the Greece-Bulgaria cross-border area is facing through the years is the fact that the level of knowledge in the fields of identifying & exploiting financial instruments is extremely low. As a consequence, if an entrepreneur in the area has a new business idea (either to improve her/his business or to start a new business), it is very difficult for her/him to get financed, since there doesn't exist a source or a mechanism through which she/he can receive specialized information & know-how in order for her/his final submitted funding/business application/proposal to get financed with the best terms possible in the market.

Another basic disadvantage in the area is the complete lack of the "mentality of getting financed by private or other forms of funds". This is happening because there doesn't exist a mechanism which will approach the private and other forms of funds available, inform them about the high potentials of the area and of its businesses and make them (through a professional & organized way) seriously interested in investing in the Greece-Bulgaria cross-border area. What's more, this mechanism will also ensure to the representatives of the potential funds that there is a well-organized & specialized intermediary in the area 'capable to communicate in their own language' and ready to establish a long term cooperation between the relevant stakeholders.

In order to tackle the above mentioned problems and challenges, the "FINANCIAL INSTRUMENTS" project aims to create a Mechanism that will identify, inform, educate & train, connect and assist private bodies/companies and individuals, in the accomplishment of an ultimate goal: "to get financed by one or more of the modern financial tools (e.g. Partnership Agreements for the Development Framework 2014-2020 both in Greece and in Bulgaria, Private Funds and Banking tools & instruments, Greek Investment Law 4399/2016, EU Funding Instruments, such as Horizon, Cosme, Interreg, etc.) available nowadays".

Most important, this (established through the project) Mechanism will continue to be fully functional after the end of the project's end in the premises of the LB (Regional Development Agency of Rodopi S.A.), in Komotini, Greece, ensuring in this way without any doubt the Sustainability and the Capitalization of the project's results.

2 Introduction

The "FINANCIAL INSTRUMENTS" project has as main objective the Promotion of Financial Instruments (e.g. Equity Fund, etc.) in the cross-border area, in order to provide the possibility of Getting Financed by these Modern Financial Instruments/Tools, for the benefit of citizens, businesses, institutions and Chambers located in the cross-border area of Greece and Bulgaria.

What's more, the project aims to create a flexible Mechanism that will identify, inform, educate & train, connect and assist private bodies/companies and individuals, in the accomplishment of an ultimate goal: "to get financed by one or more of the modern financial tools (e.g. Partnership Agreements for the Development Framework 2014-2020 both in Greece and in Bulgaria, Private Funds and Banking tools & instruments, Greek Investment Law 4399/2016, EU Funding Instruments, such as Horizon, Cosme, Interreg, etc.) available nowadays".

These are in full compliance with the Greece-Bulgaria's Program's Priority Axis 01: «A Competitive and Innovative Cross-Border Area», Thematic Objective 03: «Enhancing the competitiveness of small and medium-sized enterprises» and specifically Investment Priority 3a: «Promoting entrepreneurship, in particular by facilitating the economic exploitation of new ideas and fostering the creation of new firms, including through business incubators» (Specific objective: «To improve entrepreneurship SME support systems»).

3 About the Project

3.1 General Data – Work Packages – Deliverables

The "FINANCIAL INSTRUMENTS" project is co-funded by the European Regional Development Fund (ERDF) and by national funds of the countries participating in the **Interreg V-A "Greece-Bulgaria 2014-2020" Cooperation Programme.** The total budget of the project is 433.035,00 € and has a duration of 24 months.

The project has specific outputs that include deliverables & interventions for the successful fulfillment of the project's objectives. More specifically, throughout the project the following will be developed / produced:

- Organization of project meetings in Greece & Bulgaria for the project's proper management & coordination and for the better communication among all PBs
- Preparation, development & submission of the project's Progress Reports on a 6-months basis and of the project's Final Report
- Elaboration of the project's Communication Plan, according to the guidelines of the Programme
- Design, creation & printing of the project's promotion material (hard copy & electronic) in 3 languages (English, Greek and Bulgarian), according to the guidelines of the Programme
- Design, Development & Operation of the Official Project's Website/Platform
- Organization of the Project's Dissemination Events & Public Conferences in Greece & in Bulgaria, in the eligible area of the Programme
- Identification, Recording & Evaluation of all modern Financial Instruments/Funds currently available in the cross-border area
- Identification, Recording & Evaluation of all suitable existing SMEs located in the cross-border area that can apply for funding from modern financial tools
- Networking activities, B2B activities, promotion of synergies between businesses in the cross-border area
- Organization of Specialized Educational Seminars & Workshops in Greece & Bulgaria, in the eligible area of the Programme
- Promotion of a new 'culture'/'mentality' in the cross-border area, regarding available financing opportunities.

The main results of the FINANCIAL INSTRUMENTS project can be summarized as follows:

- Establishment of a flexible "Private Finance Support Mechanism", which will operate even after the end of the project
- Elaboration of Diagnostic Reports and Specialized Studies
- Identification, Recording and Evaluation of all modern Financial Instruments / Funds currently available in the cross-border area
- Identification, Recording and Evaluation of all suitable existing SMEs located in the cross-border area that can apply for funding from modern financial tools
- Overall Support of SMEs in preparing Funding Applications/Proposals
- Evaluation/Appraisal of the Funding Applications/Proposals
- Information and dissemination Activities
- Networking activities, B2B activities, promotion of synergies between businesses in the cross-border area
- Exchange of experience & know-how among relevant bodies & stakeholders in the cross-border area
- Organization of Specialized Seminars (addressed to both the general public as well as to individuals, entrepreneurs, potential investors, public bodies, NGOs, chambers, etc.)
- 'Bringing together' the suitable Financial Instruments/Funds with the selected SMEs and their Funding Applications/Proposals

- Maturing Activities for 3-4 Funding Applications/Proposals
- Continuous Networking of Funding Mechanisms in the cross-border area
- Day-to-day Vocational Training and Dissemination of Financial Instruments information and results.
- Promotion of a new 'culture' / 'mentality' in the cross-border area, regarding available financing opportunities.

The FINANCIAL INSTRUMENTS project consists of the following four (4) Work Packages (WPs):

- WP1: «Project Management & Coordination»
- WP2: «Communication & Dissemination»
- **WP3: « Identification of Current Status in the Cross-Border Area/Networking Activities»**
- WP4: « Establishment of a flexible "Private Finance Support Mechanism"».

WP3 refers to Identification of Current Status in the Cross-Border Area/Networking Activities of the FINANCIAL INSTRUMENTS project and it consists of the following two (2) Deliverables:

- **Deliverable D.3.1: ''Identification, Recording and Evaluation of all modern Financial Instruments/Funds currently available in the cross-border area''**
- Deliverable D.3.2: "Identification, Recording and Evaluation of all suitable existing SMEs located in the cross border area that can apply for funding from modern financial tools"

The purpose of WP3 is to identify, record and evaluate all modern Financial Instruments/Funds currently available in the cross-border area and all suitable existing SMEs located in the cross border area that can apply for funding from modern financial tools. The WP3 is scheduled to last during the entire FINANCIAL INSTRUMENT project (24 months).

This document forms the Deliverable D.3.1: ''Identification, Recording and Evaluation of all modern Financial Instruments/Funds currently available in the cross-border area''.

3.2 The project Partnership and relevant stakeholders

FINANCIAL INSTRUMENTS is implemented by a partnership consisted of four project Beneficiaries from both participating countries as follows:

Beneficiary No	Name of Institution	Budget	Country
LB (PB1)	REGIONAL DEVELOPMENT AGENCY OF RODOPI S.A.	163.550,00 €	Greece
PB2	Democritus University of Thrace - (DUTH) - Department of Economics - Special Account for Research Funds	128.475,00 €	Greece
PB3	"CLUB OF YOUNG ENTREPRENEURS – KARDZHALI" ASSOCIATION, Kardzhali	71.506,00 €	Bulgaria
PB4	INDUSTRIAL ASSOCIATION SANDANSKI	69.504,00 €	Bulgaria
Total		**433.035,00 €**	

3.3 Geographical reference

The Region of Eastern Macedonia and Thrace is one of the regions of Greece. It is the secondary local government organization covering the northeastern edge of the country, namely the eastern part of Macedonia and the whole of Thrace. Its total area is 14,157km², a figure corresponding to 10.7% of its total area of Greece. The population of the region amounts to 562,069 inhabitants, according to the most recent census of 2021.

The Region of Eastern Macedonia and Thrace includes two major islands of the Thracian Sea, Thasos and Samothraki. The included Regional Units are the following six (6):

- Regional Unit of Drama
- Regional Unit of Kavala
- Regional Unit of Thassos
- Regional Unit of Xanthi
- Regional Unit of Rodopi
- Regional Unit of Evros

The Region can be reached via two main roads: Egnatia Road, coming from the west to the east, and from the national road reaching these parts from the south of Greece and leading to the northern parts of our country.

The border junction stations connecting Bulgaria to Greece located in the area are the following: at the region of Drama, the Exochi station of Lower Nevrokopi (where the customs are also located), at the region of Evros, the Kyprinos and Ormenion stations, with the second hosting the local customs station, as well as at the region of Xanthi (Agios Konstantinos station) and Rodope (Nymphaia station). The respective border junction stations connecting Turkey to Greece are both located in the region of Evros and they are the Kipoi and Kastanies stations, which both host the local customs stations.

East Macedonia & Thrace is also connected to the national railroad network, with terminal stations in the cities of Drama and Alexandroupolis. Also, KTEL bus coaches stop at almost every main city of the region. With regard to the railroad border stations of the area, as well as their respective local customs stations, they are all located in the region of Evros. For the Greece-Bulgaria connection, there is the station and the customs of Dikaia, and for the Greece-Turkey connection, the station and the customs of Pythion.

The most important harbors of the Region are also located in Kavala and Alexandroupolis. From the harbor of Kavala, one may travel to the island of Thassos, as well as to other islands of the Aegean (Limnos, Lesvos, Chios), while from the harbor of Alexandroupolis, one may travel to the island of Samothrace. Last but not least, the harbor of Keramoti is located next to Kavala and it is also connected to Thassos. Every day, the two largest airports of Kavala and Alexandroupolis welcome many local and international flights, as well as hundreds of passengers.

The National Kavala Airport "Megas Alexandros" (Alexander the Great) is located at the city of Chrysoupolis and services the prefectures of Kavala, Drama and Xanthi, while the International Airport "Democritus" is located 7km outside of the city of Alexandroupolis.

The geographical position of the area near the development pole of Thessaloniki is an important development advantage, especially with regard to its extroversion, as it becomes a potential hinterland. However, the economic dependence on the competitive urban and metropolitan center of Thessaloniki is a brake on the independent and self-sustaining development of the region. Its proximity to the European States of Bulgaria and (through it) Romania, as well as to Turkey, make Eastern Macedonia and Thrace the country's gateway to the EU. and transnationally.

The Gross Regional Product of the Region of Eastern Macedonia and Thrace decreased from 2010 (€9.2 billion) to 2017 (€6.95 billion), with slight recovery trends in the last two years, following the national pattern of the Greek economy crisis.

Looking at the Gross Added Value of the Region by sector, 8% appears to be concentrated in Agriculture - Forestry - Fishing activities, 20% is concentrated in industrial and manufacturing activities and 72% in service-related activities. The region has historically shown economic specialization in the agricultural sector with the percentage of Gross Added Value being twice the national level, recording a significant interconnection of the primary with the other two sectors. At the same time, the presence of the tertiary sector is particularly dynamic. The corresponding distribution of Gross Value Added at country level concentrates 4% in primary activities, 17% in manufacturing activities and 79% in services.

The economy of the region shows a recession in terms of its development in recent years, while it is characterized by the dynamic presence of the tertiary sector, maintaining, however, to a significant extent its traditionally rural orientation. The pressures on the region's economy are due to a) the country's economic crisis, b) the fact that it is adjacent to regions that are more competitive in terms of taxes and labor costs (Bulgaria) and c) the unfavorable environment recently created by the epidemiological crisis of COVID19.

As far as it concerns Bulgaria, the focus of the research is the main financial instruments and funds that are active on the territory of Blagoevgrad, Kardzhali, Haskovo and Smolyan regions and provide opportunities for financing local businesses

4 Financial Tools/Instruments

4.1 General Definitions

Beneficiary	Public or private body responsible for initiating or initiating and implementing operations. In the context of State aid schemes under Article 107 of the Treaty, the Beneficiaries are public or private undertakings carrying out an individual project and receiving public aid.
Call	All the elements defined by the Administrative Authority through the Invitation and the accompanying Application Guide on the basis of which the operations are included and implemented
Program	A document drawn up by the relevant Ministries, Regions and other relevant partners and approved by the Commission and which defines a development strategy that will be achieved with the assistance of one or more European Structural and Investment Funds.
Investment Project	All the information included in the application of funding of the Beneficiary in the framework of the Call for Action.
Private Participation	Any participation from private capital (Equity and/or External Financing) for project implementation. The beneficiary's Private Participation is defined as the difference between the eligible budget and the public aid.
Funding Body	The Ministry which has the responsibility of rendering the credits to the Beneficiary or to the Intermediate Body in the case of state aid operations.
SMEs	Small and Medium Businesses
GER	General Exemption Rule (Regulation (EU) no. 651/2014)
De minimis aid (concerns investments in accordance with the De minimis regulation 1407/2013)	The total amount of de minimis aid granted per Member State to a single undertaking does not exceeds the amount of 200,000 euros (or 100,000 euros for the road freight sector) in any period of three financial years.
NSRF 2021 - 2027	C(2021) 5617 final Executive Decision of the Commission of 29.07.2021 for the approval of the partnership agreement with the Hellenic Republic (NSRF 2021-2027).
State Aid	Aid falling within the scope of Article 107 of the Treaty on the Functioning of the European Union (TFEU).
Action	All the elements defined by the Administrative Authority through the Invitation and the accompanying Application Guide on the basis of which the operations are included and implemented.
Operational Program	Document that defines the development strategy of the member state.
Debt instrument	Form of finance used to raise capital in which an entity borrows funds from a lender and promises to repay them according to the terms set forth in the contract.
Equity investment	Form of finance that offers dilutive equity risk capital. Dilutive means that the current owners lose part of their ownership in the company. Dilution risk refers to the potential of a company to issue more stock, thereby diluting the percentage ownership of all of the existing shareholders.

Quasi-equity investment	Hybrid form of finance with characteristics of both debt and equity investments. It offers non-dilutive equity risk capital that is paid back based on the performance of the company. Non-dilutive means that the current owners do not lose any part of their ownership in the company.
Aid Intensity	The gross amount of aid expressed as a percentage of eligible costs, before deduction of taxes or other charges.
Business	Any unit, regardless of its legal form, that carries out an economic activity.
Problematic Business	The business/industry for which at least one of the following conditions apply: a) if it is a limited liability company (except an SME that has not completed three years since its establishment or, , in terms of eligibility for business risk financing support, SME that has not completed seven years since its first commercial sale, which meets the criteria for venture capital investment following due diligence review by the selected financial intermediary), when more than half of its registered capital is lost due to accumulated losses. This is the case when subtracting accumulated losses from reserves (and all other items generally considered part of the company's equity) results in a negative cumulative amount exceeding half of the subscribed capital. For the purposes of this provision, the term "limited liability company" refers to the types of companies listed in Annex I to Directive 2013/34/EU of the European Parliament and of the Council (1) and the term "capital" includes, where appropriate, and any premium issue difference. b) if it is a company in which at least some members have unlimited liability for the company's debts (except for an SME that has not completed three years since its establishment or, in terms of eligibility for business financing support risk, an SME that has not completed seven years since its first commercial sale, which meets the criteria for venture capital investments following a due diligence review by the selected financial intermediary), if more than half of the capital has been lost, as shown in the company's accounts, due to accumulated losses. For the implementation of this provision, the term "company in which at least some members have unlimited liability for the company's debts" refers in particular to the types of companies listed in Annex II of Directive 2013/34/EU. c) if it is a company that is subject to collective bankruptcy proceedings or meets the conditions of national law that governs with respect to its submission to collective bankruptcy proceedings at the request of its creditors. d) if it is a business/industry that has received rescue aid and has not yet repaid the loan or resolved the guarantee contract or which has received restructuring aid and is still subject to a restructuring plan. e) if it is a business/industry other than an SME, if in the last two years: 1) its debt-to-equity ratio business/industry is higher than 7.5 and 2) the EBITDA interest coverage ratio of the company/industry is below 1.0.

4.2 Historical Data

In this section we present the historical data for Greek SME financing. Our data source is the OECD library (OECD, 2022), which covers the years 2007 – 2020. Consequently, the post-covid period is not captured. SMEs are companies with at most 250 employees, annual turnovers not exceeding EUR 50 million, and/or an annual balance sheet total not exceeding EUR 43 million (in line with the European Commission Definition).

4.2.1 Greek Enterprises in Numbers

The breakdown of the Greek entrepreneurial landscape is as follows according to data from the European Commission:

- 99.9% (718,558) enterprises, are defined as SMEs,
- 94.6% (680,038) are micro-enterprises employing less than 10 employees
- 4.8% (34,701) are small enterprises
- 0.5% (3,819) are medium-sized enterprises
- 0.1% (522) are large enterprises.
- When it come to the workforce:
- 46.9%, of the workforce is employed by micro-SMEs.
- 83% of the workforce is employed by SMEs.

With regards to the value added in the economy:

Micro-SMEs account for 19.7% of the value added in the economy.

SMEs account for 56.7% of the value added in the economy.

Compared to the EU-27 average, SMEs and especially micro-enterprises are more numerous and more important to the Greek economy.

Distribution of firms in Greece, 2021						
By firm size						
% Share	Number of enterprises		Number of employees		Value added	
	Greece	EU-28	Greece	EU-28	Greece	EU-28
Micro	94.60%	93.30%	46.90%	29.60%	19.70%	18.70%
Small	4.80%	5.70%	23.30%	19.70%	15.90%	17.00%
Medium	0.50%	0.90%	12.80%	15.80%	21.10%	17.30%
SMEs	99.90%	99.80%	83.00%	65.20%	56.70%	53.00%
Large	0.10%	0.20%	17.00%	34.80%	43.30%	47.00%
Total	100.00%	100.00%	100.00%	100.00%	100.00 %	100

Table 1 Distribution of firms in Greece and in the EU for the year 2021, Source: OECD, 2022

4.2.2 Trends in Greek SME lending and financing

SME lending has been materially influenced by the pandemic as well as the lending facilities offered to banks for the year 2020 and the gradual economic recovery in the period 2014-2019 as well as the financial crisis in the years preceding them. More specifically:

- In 2020, new business lending to Greek SMEs increased 1.75 times in relation to 2019.
    - The significant acceleration of bank lending to enterprises was also facilitated by the improvement of the conditions under which banks derived financial resources from the Eurosystem, as well as by the significant support provided by bank lending/co-financing schemes and guarantees offered by the Hellenic Development Bank.
- Despite the increase in new lending, outstanding credit to all businesses and to SMEs fell for the eighth year in a row, reaching EUR 66.6 billion in 2020, mainly attributed to:
    - The severe contraction of new business SME lending as a result of the financial crisis.
        - In 2008 and 2009, banks lent over EUR 12 billion to Greek SMEs. This figure decreased by 91.8% cumulatively from 2009 to 2016.
    - The continual decline of SME outstanding stock of loans due to a moderate economic recovery between 2014 and 2019.
        - 2014 marked the return of economic activity to positive growth rates (+0.8% year on year for Q12014) after six consecutive years of deep recession. Investments, strong absorption of EU structural funds, tourism and exports contributed to Greece’s year-on-year economic growth, as

well as higher exports of goods and services and higher private consumption.

- In 2018, financial institutions in Greece lent EUR 1.16 billion to SMEs, a slight increase from 2017, which in turn saw an increase of 6% compared to 2016.

- The decline in 2020 in the outstanding stock of SME loans primarily driven by a significant removal of non-performing loans (NPLs) from Greek banks' balance sheets (from 36.1% of total loans in 2019 to 28.5% of total loans in 2020) through the introduction in late 2019 of the "Hercules" asset-protection scheme.

New business lending for all enterprises followed a similar trajectory, decreasing by 84.2% from EUR 36.5 billion in 2008 to EUR 7.3 billion in 2017 followed by an increase to 11.4 EUR billion in 2018, almost the double of 2016 figures.

- To tackle the impact of the COVID-19 pandemic on SMEs, the Greek government put in place several measures:
  - One of the measures in place was the "COVID-19 guarantee Fund" providing a guarantee coverage of up to 80% per loan.
  - During the first cycle, the guarantee rate was set at 80% per loan, while the maximum guarantee was set at 40% for a loan portfolio to SMEs and 30% for a loan portfolio to large companies.
  - An additional budget of EUR 780 million was added on the second cycle of the COVID guarantee fund, so the total available funds of the two cycles amounted to EUR 1.78 billion.
  - In the second cycle of the Fund the provision of the guarantee paid by the companies is fully subsidized.
  - 75% to 90% of the new loans of the second cycle of the Guarantee Fund are addressed with priority to Micro-SMEs.

4.2.2.1 Interest rates and credit conditions

Interest rates for both SMEs and large firms fell for the eighth year in a row in 2020, reaching 3.94% and 2.83% respectively, but the spread between the two increased (1.11) compared to 0.85 in 2018.

- This explains the risk-averse approach of Greek banks against SMEs particularly during the pandemic.
- Credit conditions tightened significantly and access to finance continues to be a central problem for Greek SMEs, according to the most recent ECB Survey on Access to Finance of Enterprises (SAFE), with 18% of Greek SMEs citing access to finance as the most important problem they currently face, compared to an EU-28 average of 9%.
- Furthermore, Greece shows the highest percentage of SMEs reporting difficulties in accessing bank loans (22%) and the highest proportion of SMEs reporting fear of application rejections in the EU.

The proportion of Greek SMEs that required collateral when they applied for a loan to a bank continued to decrease, to 18.4% in 2020 compared to 20.7% in 2018.

- The rejection rate declined to 12.3% compared to 2018 (20.5%) but increased slightly compared to 2019 (11.4%).

4.2.2.2 Non-performing loans (NPLs)

The percentage of SME non-performing loans related to all SME loans was 28.5% in 2020 and has declined for the fifth year in a row since 2016, when it had reached 43.2%.

- The decline is primarily due to public programs such as the Hercules Program that assists commercial banks in securitizing and removing NPLs from their balance sheets.
- Despite this, in 2020, almost 20% of all business loans were non-performing in Greece.

4.2.2.3 Alternative sources of financing

In 2020, alternative sources of finance were hard hit in Greece.

- Factoring decreased to EUR 1.89 million compared to EUR 1.96 million in 2019, which was shaped as follows:
  - The total outstanding amount of loans from factoring companies to all companies increased to EUR 1.8 billion in 2009, before decreasing by 20.2% between 2009 and 2013.
  - Factoring activities recovered since 2014, and reached EUR 1.9 billion in 2018, an 11% increase compared to 2017.
  - In 2020 factoring in Greece decreased to EUR 1.89 million compared to 2019 (EUR 1.96 million).
- Leasing and hire purchase activities also decreased in 2020, reaching EUR 3.3 billion compared to EUR 4.2 billion in 2017, which was shaped as follows:
  - The total outstanding amount of financing from leasing companies reached its peak in 2008 and, at EUR 7.8 billion, was an important source of financing for Greek enterprises.
  - Between 2008 and 2013 though, financing from leasing companies halved to EUR 3.4 billion.
  - In 2014 and 2015, leasing and hire purchase activities picked up, but decreased to EUR 4.2 billion in 2017 and to EUR 3.3 billion in 2020, remaining well below pre-crisis levels.
- Venture capital was also strongly hit compared to 2019, declining by 46.7% in 2020 and reaching EUR 78.8 million from EUR 148.3 million in 2019, which was shaped as follows:
  - Venture capital and growth capital investments totaled EUR 32.7 million in 2008, but decreased tremendously until 2012, when no venture and growth investments took place.
  - Investments slightly recovered in 2013, reaching EUR 4.8 million.
  - In 2015, the index reached EUR 12.6 million, and since then rose rapidly to EUR 44.5 million in 2017, a 20.6% increase from 2008.
  - The increase trend continued in 2019 when venture and growth capital reached the amount of EUR 148.3 million but decreased by 46.7% in 2020 when it reached EUR 78.8 million.

Enterprise Financing in Greece															
Indicator	Unit	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Debt															
Outstanding business loans, SMEs	EUR billion	..	..	..	44.9	41.6	39.1	48.1	48.1	46.9	48.4	44.7	41.1	35.2	32
Outstanding business loans, total	EUR billion	102	124	124	117	113	101	97	95	89	88	82	76.4	67.3	66.6
Share of SME outstanding loans	% of total outstanding business loans	..	..	..	38.5	36.8	38.8	49.7	50.6	52.6	55.3	54.4	53.8	52.3	48.1
New business lending, total	EUR billion	..	36.5	36.3	20.7	29.4	21.8	24.3	14.9	6.9	5.8	7.3	11.4	7.9	16.2
New business lending, SMEs	EUR billion	..	12.5	13	4.4	5.2	4.1	3.7	2.3	1.2	1.1	1.1	1.2	1.3	3.5
Share of new SME lending	% of total new lending	..	34.2	35.6	21.4	17.8	18.9	15	15.6	17	18.4	15.5	10.18	16.05	31.8
Outstanding short-term loans, SMEs	EUR billion	..	..	..	..	..	..	..	18.1	17.6	18.8	17	15.1	13.4	9.5
Outstanding long-term loans, SMEs	EUR billion	..	..	..	..	..	..	..	30.1	29.3	29.6	27.7	25.9	21.7	22.5

Share of short-term SME lending	% of total SME lending	..	..	..	..	..	..	..	37.6	37.6	38.9	38	58.4	61.6	42.3
Government loan guarantees, SMEs	EUR billion	..	..	..	..	..	..	0.37	0.31	0.24	0.56	1.08	1.2	1.3	3.9
Non-performing loans, total	% of all business loans	4.6	4.3	6.7	8.7	14.2	23.4	31.8	29.4	31	30.3	30.5	28.6	25.5	19.1
Non-performing loans, SMEs	% of all SME loans	..	..	..	..	..	..	..	41.2	44.1	43.2	42.5	38.1	36.1	28.5
Interest rate, SMEs	%	6.57	6.82	4.62	5.53	6.77	6.87	6.51	5.8	5.38	5.32	4.91	4.66	4.31	3.9
Interest rate, large firms	%	5.32	5.71	3.52	4.27	5.74	5.92	5.77	5.55	4.82	4.61	4.2	3.81	3.64	2.8
Interest rate spread	% points	1.25	1.11	1.1	1.26	1.03	0.95	0.74	0.25	0.56	0.71	0.71	0.85	0.67	1.1
Collateral, SMEs	% of SMEs needing collateral to obtain bank lending	..	..	51.4	40.5	49.4	46.7	45.9	46.2	49.2	39.8	25.7	20.7	18.5	18.4
Percentage of SME loan applications	SME loan applications/ total number of SMEs	..	..	37.9	39.6	30.8	29.9	21.4	25.5	18.8	21.5	17.5	23	23.9	31.3
Rejection rate	1-(SME loans authorised/ requested)	..	..	25.8	24.5	33.8	28.3	26	21.5	19.9	18.2	16.2	20.5	11.4	12.3
Utilisation rate	SME loans used/ authorised	..	..	..	..	..	..	..	..	..	..	..	..	..	
Non-bank finance															
Venture and growth capital	EUR million	19	32.7	16.7	25	10.1	..	4.8	12.6	36.8	38	44.5	84.1	147.1	78.8
Venture and growth capital (growth rate)	%, Year-on-year growth rate	..	72	-49	50	-60	..	..	160	193	3	17	88.8	74.87	-46.86
Leasing and hire purchases	EUR billion	7.28	7.87	7.5	7.28	6.85	6.22	3.36	4.08	4.72	4.4	4.25	3.96	3.39	3.32
Factoring and invoice discounting	EUR billion	1.28	1.73	1.77	1.73	1.49	1.53	1.41	1.69	1.69	1.72	1.74	1.93	1.96	1.89
Other indicators															
Payment delays, B2B	Number of days	..	25	34	30	35	40	43	41	36	47	47	33	17	..
Bankruptcies, SMEs	Number	513	359	355	355	445	415	392	330	189	108	123	114	63	..
Bankruptcies, SMEs (growth rate)	%, Year-on-year growth rate	..	-30	-1	0	25	-7	-6	-16	-43	-43	14	-7	-23.17	..

Table 2 Enterprise Financing in Greece, Source: OECD, 2022

4.2.3 Government Initiatives

4.2.3.1 Direct lending

Several financial instruments with funding from EU structural funds are available to support lending to SMEs in Greece:

- The Hellenic Fund for Entrepreneurship and Development S.A. (ETEAN A.E.) was created in 2011 as a wholly owned state corporation in February 2011, with start-up capital of EUR 1.7 billion.

    - It managed and implemented projects financed via the state budget, public investment programs, and the EU's Agricultural and Fisheries Funds.
    - The government, through the Hellenic Fund for Entrepreneurship and Development S.A., co-financed direct loans to SMEs for investment and working capital purposes.
    - Some of these direct loans targeted young entrepreneurs, export-oriented SMEs or specific sectors (tourism, desalination and waste management, innovation, etc.). The government typically co-financed the loan up to 50% of its value, but some sectoral loans were 33% co-financed.
- The Hellenic Development Bank (HDB) was established in 2019 by the Greek Government, which took place through the transformation and administrative capacity building of two existing entities, the Hellenic Fund for Entrepreneurship and Development S.A. (ETEAN S.A.) and its subsidiary, the New Economy Development Fund S.A. (TANEO SA).
    - HDB's scope is to improve SMEs' access to finance, to foster innovation, to facilitate investments in infrastructure, to encourage equity investments and other alternative financing sources and to provide business support to SMEs, mainly through shared-risk loans and guarantee facilities, as well as financial expertise to the public sector.
    - Since its establishment in 2019, HDB S.A. has been deployed new financial instruments programs by using both public and private funds for the support of SMEs.
    - The HDB S.A. designs and implements financial instrument programs estimated to have significant impact on sustainable growth, regional development, job creation and investments, while at the same time being financially autonomous and sustainable.
- During the 2007-13 EU programming period, The Entrepreneurship Fund provided low-cost loans to SMEs through co-funding schemes with commercial banks that were established after an open tender procedure.
    - The Fund ran programs to cover various SMEs in different sectors, providing funds for the implementation of business plans and the provision of working capital for development purposes.
- Furthermore, during the 2007-13 EU programming period, ETEAN established the Agricultural Entrepreneurship Fund I, a program co-financed by the EU's Agricultural Fund for Rural Development (EAFRD) and the Greek Government, for a total of EUR 253 million.
    - The fund aims to support business plans in the agricultural sector.
    - By May 2016, 144 SMEs benefited from loans totaling EUR 8.6 million, with durations of 5-10 years and interest rates ranging between 3.8% and 4.2%.

Entrepreneurship Fund I in Greece, 2011-2018

Component/ beneficiary	**Period**	**Max. loan amount**	**Interest rate**	**Loan duration**		**Beneficiaries**	**Uptake**
		EUR	%	Years	Deadline	Number	EUR million
Island Entrepreneurship	2013-17*	30 000	0.0-2.8**	4	30-Jan-17	1 537	33.6
Extroversion	2011-16	500 000	3.2	10-May	31-Jul-15	223	87.3
Thematic Tourism, Desalination, Waste Management, Green Infrastructure, Green Applications, Renewable Energy Sources	2011-13	500 000	3.7	10-May	30-Sep-13	371	75.7
Business Restarting: investment	2013-17*	800 000	0% I.R. offered by ETEAN SA and I.R. offered by	12-May	30-Jan-17	4 550	501.2
Business Restarting: working capital	2013-17*	300 000		4	30-Jan-17		

			participating Bank				
Intermediate Entrepreneurship Fund (working capital)	2017-18	800	0% I.R. offered by ETEAN SA and I.R. offered by participating Bank	4	-	2 005****	221.2****
Exceptional Measure to support SMEs in Kefalonia and Ithaki islands from the January 2014 earthquake ***	2014	19 950	0	10-Apr	30-Jun-14	537	9.2

*Table 3 Entrepreneurship Fund I in Greece for the period 2011-2018. Note: *Data leading up to 25-5-2017. ** 0% if island's population is less than 3.100 people. *** Loans Financed by the Island Entrepreneurship Fund. Number and uptake of beneficiaries are parts of number and uptake of beneficiaries of the Island Entrepreneurship Fund. *** Data up to 15-5-2019. Source: OECD (2022)*

4.2.3.2 Support to venture capital

Two of the initiatives that were undertaken to support SMEs through venture capital are presented in this section.

4.2.3.3 The New Economy Fund (TANEO) SA

The New Economy Fund (TANEO) SA was founded in 2003, aiming at the participation on a minority basis in venture capital funds, venture capital companies, and similar schemes governed by the legislation of EU member states. These investment schemes are managed by agencies from the private sector, following a market-based approach, and must invest exclusively in innovative Greek SMEs.

Since its establishment, TANEO has participated in 11 venture capital funds that manage a total EUR 268 million, providing equity to almost 35 SMEs operating in various sectors, such as information and communication technologies, biotechnology, health, industrial materials, energy, food or beverages and services.

In December 2016, TANEO SA merged with ETEAN SA and in January 2017 became a subsidiary of ETEAN S.A. The merger created a large development group to expand access to finance for SMEs.

Furthermore, during 2018 TANEO SA was funded:

- with the amount of EUR 50 million for its participation in newly established venture capital schemes to invest in Greek R&D enterprises in the 4th Industrial Revolution;
- with the amount of EUR 50 million for its participation in investment schemes aiming at the development of production and promotion of branded products "Made in Greece";
- with the amount of EUR 150 million for its participation in investment schemes aiming at the establishment of companies that need restructuring or reorganization and are active in the production and processing;
- with the amount of EUR 450 million for its participation in newly established venture capital schemes which would invest through convertible bonds and bonds to SMEs.

Subsequently, EUR 700 million in total will be invested in risk finance instruments through TANEO SA to Greek SMEs.

In 2019 TANEO became part of the Hellenic Development Bank S.A. and renamed as the Hellenic Development Bank of Investments S.A.

TANEO's venture capital investments in Greece, 2007-2014

Year	2007	2008	2009	2010	2011	2012	2013	2014
Funds' investments	1.6	8.4	17.8	14	12	10.5	9	4

Table 4 TANEO's venture capital investments in Greece for the period 2007-2014, Source: OECD (2022)

4.2.3.4 EquiFund

EquiFund was established by the Deputy Minister of Economy and Development in 2016. As a participating fund, it provides equity to enable high value-added investments, through an initial budget of EUR 320 million, funded in part by the Operational Program for Competitiveness, Entrepreneurship and Innovation of the ERDF (EUR 200 million).

- The European Investment Fund (EIF) and European Investment Bank (EIB) provide an additional EUR 60 million each to Equifund under the framework developed by the European Strategic Investment Plan (ESIF).
- EIF manages the fund.
- Equity is provided by intermediary holding funds chosen through an open competitive procedure.

Specifically, EquiFund will invest in the following three key areas:

- Research and innovation (technology transfer – innovation window).
- General entrepreneurship for start-up enterprises (early stage).
- General entrepreneurship for enterprises in development (scale-up/growth).

A special emphasis will be accorded to the strategic sectors of the Greek economy such as tourism, energy, agri-food, the environment, supply chain, information and communication technologies, health and pharmaceutical industry, creative and cultural industries and materials and construction.

In early 2018, the evaluation process was finalized and eventually nine funds were chosen to provide equity to Greek SMEs.

- Targeted sectors include all sectors with a special focus on the food and beverage, agri-business, tourism and hospitality, environment and energy efficiency sectors.
- At the end of 2019, nine selected funds by EIF invested a total amount of 216 million euro to 74 SMEs, mainly start-ups in the ICT sector activating in applications for hospitality, health technologies, transportation, internet of things, travel-tech, e-commerce, software as a service, big data, business services, real estate etc.

Investments of Equifund by sector			
Industry	**Number**	**Investment in million Euros**	**Investment % (over total)**
Hospitality	3	71.18	32.98%
Internet of Things	3	28.98	13.43%
ICT	4	26.95	12.49%
e-commerce	3	13.38	6.20%
TravelTech	5	10.63	4.92%
FinTech	2	10.17	4.71%
Agrotechnology	3	8.55	3.96%
Health Technology	6	7.47	3.46%
Software	4	4.92	2.28%
Transportation	5	4.33	2.01%
Software as a Service	4	4.06	1.88%
Big Data	3	3.64	1.69%
Business Services	2	3.5	1.62%

EdTech	4	3.27	1.52%
Real Estate	1	2.96	1.37%
Medical devices and equipment	1	2.64	1.22%
SmartCities	1	1.64	0.76%
Total	**74**	**215.84**	

Table 5 Investments of Equifund by sector, Source: OECD (2022)

4.3 Types & Categories

4.3.1 Methodology

The methodology that it is going to be used to categorize and analyze the programs is the Multiple-criteria decision analysis. Multi-criteria analysis is undertaken to make a comparative assessment between projects or heterogeneous measures.

In the evaluation field, multi-criteria analysis is usually an ex ante evaluation tool, and is particularly used for the examination of the intervention's strategic choices. In ex post evaluations, multi-criteria analysis can contribute to the evaluation of a program or a policy through the appraisal of its impacts with regards to several criteria.

Steps involved in multi-criteria analysis are the selection of the field of application and determine the intervention rationale, the choice of the judgement group, the choice of the technical team responsible for supporting the judgement team group, the establishment the list of competing activities to be included in the analysis, the determination of judgement criteria, the determination of each criterion's relative weight, the formulation of a judgement per criterion and finally the aggregation of judgements

This methodology explicitly evaluates multiple criteria – that are analyzed in the following chapters – in decision making concerning the variety of the financial tools.

4.3.2 Categories

The categories of the financial tools/instruments refer to the many ways in which the funding calls can be categorized based on the special features of each call. The most common categories of each call are the:

1. Business activity
2. Company size
3. Pillars
4. Source of funding
5. Maximum budget per investment project
6. Purpose of financial aid
7. Type of aid
8. Evaluation method
9. Obligations and duration after the completion

4.3.2.1 Business activity

The investment calls can be categorized based on the business activities in which the eligibles businesses operate. The different business activities can be divided into the following five general categories:

- Manufacturing
- Tourism
- Services
- Agriculture
- Commerce

Each call contains eligible activities from one or more of the five categories.

4.3.2.2 Company size

The size of a company is divided based on the financial figures of the beneficiary for the last year/s. The size of a company is calculated according to the number of employees of the company as well as its turnover and total assets. The different size categories for each business are as follows the following:

- Very small
- Small
- Medium
- Large

4.3.2.3 Pillars

The pillar in which the financial tool/instrument belongs to is a way of categorizing them based on their general objective in the RRF. The pillars for the RRF are Green, digital, Employment, skills, and social cohesion, private investment and economic and institutional transformation. Each financial tool/instrument may refer to more than one pillar.

According to the European Regional Development Fund (ERDF) and the European Social Fund (ESF) the main pillars-objectives of the New Programming Period 2021-2027 are the following five:

Policy Objective 1: A smarter Europe by promoting innovative and smart economic transformation. The objective concerns the interconnection of research with the country's production network, the adaptation of business activity to the new competitive environment, the strengthening of the innovative capacity of small and medium-sized enterprises, the facilitation of access to financing and the expansion of the range of financial tools by creating of a business-friendly institutional environment, as well as the digital transformation of the Greek public administration, the state and the economy. It also includes meeting skills needs in the context of smart specialization, industrial transition and supporting digital transformation. (Funding Fund: European Regional Development Fund-ERDF)

Policy Objective 2: A greener, low-carbon Europe by promoting the just transition to clean energy, green and blue investments, the circular economy, climate change adaptation, prevention and risk management. The aim is to create a greener Greece and Europe with low carbon emissions through the promotion of energy efficiency measures, the promotion of renewable energy sources, the development of smart energy systems, networks and storage equipment, the rational and sustainable management of water resources, the circular economy, climate change adaptation, risk prevention and management, as well as biodiversity enhancement, green infrastructure in the urban environment and pollution reduction. (Financing Funds: European Regional Development Fund (ERDF), Cohesion Fund)

Policy Objective 3: A more interconnected Europe by strengthening mobility and regional interconnections. The objective concerns the development of a sustainable, safe, coherent and interoperable transport system (road, rail, sea), the promotion of sustainable multimodal urban mobility, as well as the strengthening of digital connectivity (broadband networks, development of modern network infrastructures, optical fibers and 5G networks). (Financing Funds: European Regional Development Fund (ERDF), Cohesion Fund)

Policy Objective 4: A more social Europe through the implementation of the European Pillar of Social Rights. The objective concerns the sectors of employment, education and lifelong learning, health and social protection. It includes the promotion of education, training and lifelong learning, as well as the development of active employment policies to increase employment and combat unemployment. It also includes the promotion of equal opportunities for everyone (especially women, young and long-term unemployed, children, elderly people, residents of remote and degraded areas, the disabled, Roma, citizens of third countries, the mentally ill, etc.), in the strengthening of infrastructure and social actions protection and inclusion of vulnerable social groups and people at risk of poverty or social exclusion, as well as strengthening health care systems (Financing Funds: European Regional Development Fund (ERDF), European Social Fund-ESF).

Policy Objective 5: A Europe closer to its citizens by promoting the sustainable and integrated development of urban, rural and coastal areas, as well as by supporting local initiatives (Financing Funds: European Regional Development Fund (ERDF), European Social Fund-ESF). The objective concerns in strengthening integrated interventions in urban areas that promote the sustainable development of the urban fabric, culture and security, in the implementation of integrated strategies in mountainous, rural and coastal areas aimed at sustainable development, accessibility and promotion of cultural heritage, in the implementation of integrated strategies in the island regions and island clusters aimed at sustainable development, accessibility, the promotion of cultural heritage and the exploitation of their prospects and in integrated strategies in areas that show spatial and thematic continuity, with the possibility of exploiting wealth-producing resources and special local characteristics - cultural, local production, tourist activity.

In the final analysis for the current project the six main pillars are the following:

- Digital
- Green
- Innovation
- Tourism
- Exports
- Social

4.3.2.4 Source of funding

The source of funding refers to the body from which the funding is derived. The main sources of funding are:

- NSRF
- RRF
- The State
- Financial institutions
- Third party

4.3.2.5 Maximum budget per investment project

The maximum budget per investment for each business, according to data of experience and past programs, is divided in the following categories:

- Micro budget: up to 50,000 euros
- Small budget: 50,001 – 400,000 euros
- Medium budget: 400,001 – 2,000,000 euros
- Large budget: above 2,000,000 euros

4.3.2.6 Purpose of financial aid

As far as it concerns the purposes of the financial aid, are the mainly the following three:

- Investment
- Working capital
- Operating Expenses **Z**

4.3.2.7 Type of aid

The types of aid refer to the different types in which the aid can be received and can be divided into the following:

- Grant

  In Grant the beneficiary receives the aid in the form of a cash amount. The cash amount can be fixed for specific expenses or is derived from the cost of the eligible expenses according to the aid intensity mentioned in the call for the region in which the beneficiary operates.

- Tax exemption

  Tax exemption consists of the exemption from the payment of income tax on the realized pre-tax profits, that arise on the basis of the relevant tax legislation, from all the activities of the company, minus the tax of the legal person or legal entity that is apportioned in the profits distributed or assumed by the shareholders. The amount of the tax exemption is calculated as a percentage of the value of the subsidized costs of the investment project or the value of the new mechanical and other equipment, which is acquired through leasing.

- Leasing subsidy

  Leasing subsidy consists of the coverage of part of the lease installments paid, that is agreed for the acquisition of new mechanical and other equipment, determined as a percentage of their acquisition value according to the aid intensity and included in the installments paid.

- Subsidizing of the cost for new employees

  Subsidizing of the cost for new employees covers part of the wage costs of the new jobs created and linked to the investment plan and for which no other state aid is received. The amount of the subsidy is determined based on the cost of the investment costs, the aid intensity as well as the total cost for the new employees.

- Voucher

  In voucher the beneficiary receives a voucher with the amount of the subsidy which can be used to acquire a product for a lower price or for free.

- Subsidy of interest in business loans

  In Subsidy of interest in business loans the beneficiary is entitled to a lower interest rate for the agreed business loan. The granted amount is deducted from the amount paid for the loan interest and therefore results in lower installments for the business loan.

- Subsidy of guarantee in business loans

  In subsidy of guarantee in business loans the guarantee covers the losses incurred to the financial institution in any case of overdue payments of the eligible loan, according to the Guarantee Rate and based on the max agreed amount between the financial institution and the Greek Development Bank.

4.3.2.8 Evaluation method

The evaluation methods for the applications are the following:

- comparative evaluation method

  In comparative evaluation process, all applications that meet the terms and conditions of each program are evaluated, based on criteria such as the available shareholder/partner funds, the coverage of equity participation with foreign funds and the financial analysis of the investment.

- FIFO evaluation method

  FIFO (first in, first out) is an immediate evaluation process. An independent evaluation is carried out of each legitimate and within the prescribed time limit application, based on the principle of time priority.

- Mixed evaluation method

  The mixed evaluation method combines characteristics of both the comparative evaluation method and the FIFO evaluation method.

4.3.2.9 Obligations and duration after the completion

As fa as it concerns the obligations after the completion of the funding project are categorized upon the criterion of the duration, in the three following categories:

- No obligations

- Short term obligations, that last up to 3 years after the completion of the funding project
- Long term obligations, that last more than 3 years after the completion of the funding project.

4.4 Technical Description of Financial Tools/Instruments

4.4.1 Greek Programs

4.4.1.1 NSRF, RRF

Recovery and Resilience Fund (Resilience Fund)

RRF LOANS

Objective

The objective of the call for RRF loans is the financing of businesses to promote investments in Greek territory with resources from the Recovery Fund.

The Recovery and Resilience Fund Loans will cover a maximum percentage of fifty percent (50%) of the total eligible investment cost of the financed investments, while the private participation of the companies will cover, according to minimum, height percentage twenty percent (20%) of the total eligible investment cost. A percentage of at least thirty percent (30%) of the total eligible investment costs will be covered through a loan from the credit institutions (hereinafter the "Co-Financing Loans").

Budget

The budget of the call that is available for the subsidy of investment loans amounts to €12.7 billion.

Eligible expenses

The eligible expenses that may be included in the investment projects financed with RRF loans are expenses incurred within the Greek territory and include:

a. Land purchase, land for use (depreciation / leases), Configuration of land. The land purchase is eligible as long as it is intertwined with the investment plan and does not exceed 30% of the eligible costs of the investment plan.

b. Building purchase / construction, Building use (depreciation / leases).

c. Equipment purchase / construction, Equipment use (depreciation / leasing).

d. Means of transport purchased, means of transport used (depreciation / leasing).

e. Intangible purchase / construction, Intangible use (depreciation / subscriptions).

f. Payroll linked to the investment plan (as provided by G.E.R.).

g. Movements / bills of travels.

h. Third Party Services.

i. Consumables.

j. Operational (communication, energy, maintenance, leases, administration costs, insurance, etc.).

ya. Cost of funds.

l. Working capital (operating expenses, expenses related to the transaction circuit of the business, VAT, etc.).

m. Promotion and communication expenses (Marketing).

The purchase of a pitch is eligible as long as it is intertwined with the investment plan and does not exceed 30% of the eligible costs of the investment plan.

The sum of working capital and promotion and communication costs cannot exceed 30% of the eligible costs of the investment plan. In any case, credit institutions may grant additional loans, in excess of the co-financing loan rate, in order to cover ineligible costs of the investment project.

Budget per investment project and aid intensity

There are five pillars out of which each investment project needs to address at least one of them. The five pillars are the following:

- Green transition
- Digital transformation
- Innovation, research and development
- Developing economies of scale through partnerships, acquisitions and mergers
- Extroversion

The amount of financing of the investment plan from the RRF loan is calculated according to the existence of a budget of eligible investment costs in the five (5) pillars of the RRF loan program as well as the coverage of specific criteria per pillar.

A - Green transition investment plans			
Minimum budget of green transition investments, which contribute to the green goals (green tagging) of the National Plan of Recovery and Resilience (NPRR), as a percentage of the total budget of the investment plan	20%	40%	50%
Corresponding RRF loan on the investment plan budget	30%	40%	50%
B - Digital transformation investment plans			
Minimum budget for digital transformation investments, which contribute to the digital tagging goals of ESAA, as a percentage of the total budget of the investment plan	10%	20%	40%
Corresponding RRF loan on the investment plan budget	30%	40%	50%
C - Innovation - research & development investment plans			
Minimum investment budget for innovation - research and development as a percentage of the total budget of the investment plan	10%	20%	40%
Corresponding RRF loan on the investment plan budget	30%	40%	50%
D - Investment plans to develop economies of scale through partnerships, acquisitions and mergers			
Existence of an existing or new partnership, or the creation of a new scheme resulting from an acquisition / merger.	Existing partnerships	New partnerships and acquisitions / mergers	
Corresponding RRF loan on the investment plan budget	30%	40%	
E - Investment projects of extroversion			
Alternatively: 1. Minimum average of existing investor export activity as a percentage of turnover (three-year financial data) 2. Minimum investment project export budget as a percentage of the projected total investment project revenue (viability study)	15%	30%	45%
Corresponding RRF loan on the investment plan budget	30%	40%	50%
This pillar also includes investments in the tourism sector, including investments in tourist accommodation, complex tourist accommodation and tourist housing complexes, and the RRF loan percentage on the investment plan's budget is independently 40%, regardless of the investor's financial data or revenue forecasts of the investment plan.			
The percentage of the loan from the pillar is calculated independently of the investment plan budget, as long as the existing export activity of the investor is proved or alternatively the export budget forecast in the investment plan. The percentage of export activity (existing or projected) determines the RRF loan percentage.			
In the case where an investment project is selected in more than one pillar, the quotas of the pillars are added together, and the sum cannot exceed fifty percent (50%). in the case where an investment plan is not an option in the transition green pillars, digital transformation, innovation - research and development or extroversion, due to not meeting the minimum percentages, is an option with an independent RRF Loan amount of thirty percent (30%), as long as the sum of the minimum percentages of the above pillars amounts to at least thirty percent (30%).			

Beneficiaries

Beneficiary of the RRF loans is defined in principle as any person or legal entity who is going to implement an eligible investment, and:

a) It does not constitute:

aa) a person that has its registered or real headquarters or has an establishment in countries included in the currently applicable Union list of non-cooperative jurisdictions [Annex I of the Council Conclusions on the revised EU list of non-cooperative tax jurisdictions (2021/C 66/10)], ab) a person that has its registered or real headquarters or has an establishment in countries included in the Annex of delegated regulation (EU) 2016/1675 (L 254), as applicable from time to time,

a) a person that has its registered or real headquarters or has an establishment in a state rated as "partially compliant", "temporarily partially compliant" or "non-compliant" by the Organization for Economic Co-operation and Development (OECD) and its Global Forum on Transparency and Exchange of Information for Tax Purposes based on the international standard for the exchange of information upon request, as applicable.

ad) a person that has its registered or real headquarters or has an establishment in a state included in the "Public Statement" of Financial Action Task Force (FATF) as applicable i.e. countries or jurisdictions with such serious strategic deficiencies that FATF calls on its members and non-members to implement countermeasures or for which FATF calls on its members to implement enhanced due diligence measures,

ae) a person that has its registered or real headquarters or has an establishment in a state included in the statement "Improving Global AML/CFT Compliance: On Going Process", as applicable from time to time (ie a state or jurisdiction with strategic weaknesses in its AML/CFT measures but which has committed to developing an action plan with the FATF).

Eligibility criteria

RRF loan program pillar	Investment plan eligibility criteria
Green transition	Existence of a budget for green transition investments, which contribute to the green goals (green tagging) of NPRR, at least 20% of the total budget of the investment plan.
Digital transformation	Existence of a budget for digital transformation investments, which contribute to the digital goals (digital tagging) of NPRR, at least 10% of the total budget of the investment plan.
Innovation - research & development investment plans	Eligibility coverage of at least one innovation - research and development indicator and at the same time having a minimum innovation investment budget - research and development at least 10% of the total budget of the investment project. The indicators are: Innovation Indicators: • Funding of PhD researchers in science, technology, engineering and of mathematics (STEM) from the investment project • Percentage of new STEM jobs to total new jobs created by the investment project • Small and medium-sized business investment project that creates a new product (not new brand) • Small and medium business investment project creating a new service (not a new brand) • The investment plan provides for trademark registration costs in a MADRID system country, if it creates a new product or service • The investment plan foresees design registration costs in a country of the HAGUE system • Percentage of sales abroad of products from the investment plan on activity categories 21, 26, 27, 28, 29 and 30 • Percentage of foreign sales of services from the investment plan on activity categories 58.2, 62, 63, 71.2 and 72 Research and Development Indicators: • The subject of the research should be related to its thematic units Horizon Europe. • The subject of the research should be related to its thematic units smart specialization strategy of Greece (RIS3). • The investment plan provides for systematic industrial research and/or experimental development. • The investment plan provides for the investigation to be carried out by an experienced research team with many years of experience in the subject of the investment plan. • The object of the research aims to create new products / services or the

RRF loan program pillar	Investment plan eligibility criteria
	significant improvement of existing products / services. • The object of the research aims at the creation of new or the significant improvement of existing methods of production, distribution and application of products / services. • The investor and/or the main researchers of the research team have participated in research projects co-financed by the Greek State or the European Commission or by another OECD country during the five years before the loan application. • The investor has received confirmations of scientific and technological research expenses from the Greek National Research Council (former Greek Greek Orthodox Church), during the five years prior to the loan application, which include the expenses of the main researchers of the research group. • The investment plan foresees patenting costs in a country of the PCT system
Investment plans to develop economies of scale through partnerships, acquisitions and mergers	Existence of an existing or new partnership, or the creation of a new scheme resulting from an acquisition / merger. Cooperation means the activity governed by long-term (contractual or actual duration of more than five years) binding contracts of cooperation between non-affiliated companies with the aim of jointly promoting business activities (supply partnerships, export partnerships, contract farming, franchising, joint research and development projects, among others), or by creating legal entities with the same objectives as above (joint ventures, cooperatives, producer organizations and groups regardless of legal type, among others). The eligibility of investment projects is determined as follows: Partnerships (existing) • The investment plan includes a commitment by the investor that he will continue to participate in an existing cooperative formation between non-affiliated companies, at least during the next five years. • The average total turnover of the legal entities participating in the collaboration during the three (3) previous years is greater by at least 50% of the turnover of the legal entity with the larger average circle operations between the legal entities participating in the cooperation during same period. • At least 20% of the eligible costs of the investment plan concern the investment costs incurred in accordance with the cooperation agreement. Partnerships (new) • The investment plan includes a commitment by the investor that he will participate in new cooperative formation between non-affiliated firms, at least during the next five years. • The average total turnover of the legal entities participating in the collaboration during the three (3) previous years is greater by at least 50% of the turnover of the legal entity with the highest average turnover operations between the legal entities participating in the cooperation during the same period. • At least 20% of the eligible costs of the investment plan concern the investment costs incurred in accordance with the cooperation agreement. Acquisitions and mergers • The investment plan includes a new scheme, which results from an acquisition or merger that was completed following the publication of the ministerial decision. • The average total turnover of the legal entities, at group level, participating in the merger or acquisition during the three (3) previous years is greater by at least 50% of the turnover of the legal entity, at group level, with the highest average turnover among the legal entities, at group level, participating in the acquisition or merger during the same period.
Investment projects of extroversion	The eligibility of investment projects is determined by the existence alternatively: a. Average investor's existing export activity at least 15% of its turnover. The investor's three-year financial data is examined, alternatively the share of turnover that is carried out with foreign credit cards or remittances. b. Minimum export budget of the investment plan at least 15% of the projected

RRF loan program pillar	Investment plan eligibility criteria
	total revenue of the investment plan (sustainability study). Independently, the investment projects of tourist accommodation, investment of complex tourist accommodation as well as complexes of tourist accommodation that include at least 5 independent tourist residensies are eligible.

Submission period and investment project implementation schedule

The start date of the submission for the investment projects is the 30/09/2021.

The disbursement of RRF Funds to the Final Recipients for the implementation of the eligible investments should be completed by August 26, 2026. In case of earlier exhaustion of the available resources, the Special Recovery Fund Coordination Service will make a relevant publication on its official website.

Tool Summary

Categories		RRF LOANS
1	Business activity	All
2	Company size	All
3	Pillars	All
4	Source of funding	RRF
5	Maximum budget per investment project	Large
6	Purpose of financial aid	All
7	Type of aid	Subsidy of interest in business loans
8	Evaluation method	FIFO
9	Obligations and duration after the completion	Long-term

Funding Calls

PRODUC - E GREEN

Objective

The object of this action is to support investment projects for the production of products in the field of green industry, with an emphasis on the production sector of electrification, renewable energy sources as well as products and goods intended for energy saving.

The action aims at technological, productive, administrative and organizational upgrading, as well as innovative and extroverted development and growth, with the ultimate goal of strengthening the competitive position of productive enterprises in the domestic and international market

Budget

The public expenditure of the invitation amounts to 199,700,000 euros and is financed by the Recovery and Resilience Fund for the period 2023-2025.

Eligible expenses

Eligible expenditure of regional aid

1. The eligible costs of investment projects, for which regional aid is granted, subject to more specific terms and conditions provided herein, are the following:

a. Investment expenditure on tangible assets, which are new unless acquired by an SME or for the purchase of an installation, namely expenses for:

aa. The purchase of land, the construction, expansion and modernization of building facilities, as well as special and auxiliary facilities of buildings, and for constructions to ensure accessibility for disabled and disabled people, as well as shaping the environment space. These expenses cannot cumulatively exceed fifty-five percent (55%) of the total supported expenses of regional character.

These costs are also enhanced in the event that they are carried out on constructions which, according to at the time of submission of the request to be included in the present aid schemes, have been subject to Law 1337/1983 (A' 33) or to Law 4178/2013 (A' 174) or to Law 4495/2017 (A' 167). The beginning of the payment of the aid cannot be carried out, since in the deemed physical object of the investment includes constructions for which the above process of legalization or regularization has not been completed.

ab. The purchase of all or part of the existing fixed assets, such as buildings, machinery and other business equipment voltage, under the following conditions, which must occur cumulatively:

i. the business establishment has closed at least two (2) years before the date of submission of the application for incorporation,

ii. the purchase is made by the entity of the investment plan, which is not related to the seller of the business establishment of case i unless it is a small business, which is acquired by an employee of the original owner, who is not related up to the 3rd degree to the owner/owners of the unit that ceased operation (in the case of a legal entity, the owner means the natural persons who own a share/shares of corporate/share capital) and the employment relationship had a duration of at least two (2) years,

iii. the relevant transaction is carried out under normal market conditions. The cost of assets, which have been subsidized in the past through development laws or other aid schemes prior to their purchase, is deducted from these eligible costs.

iv. if the acquisition of assets of the establishment is accompanied by an additional aid for regional aid, the eligible costs for this additional investment must be added to the costs of the acquisition of assets.

ac. The purchase and installation of new modern machinery and other equipment, including technical installations and means of transport moving within the area of the unit being joined.

ad. The lease payments of new modern machinery and other equipment, the use of which is acquired, provided that in the leasing agreement stipulates that the equipment becomes the property of the lessee at the end of the contract.

ae. The modernization of special facilities that do not relate to buildings, and to mechanical facilities, provided that they constitute tangible asset.

af. The purchase of vehicles, with which the company transports A' materials and products (finished and semi-finished), within the premises of the unit. Eligible are the electric vehicles, the vehicles with zero CO_2 emissions.

b. Investment costs in intangible assets, and specific costs for:

ba. The transfer of technology, through the purchase of intellectual property rights, licenses, patents, know-how, non-proprietary technical knowledge in order to develop innovation in the production process and/or in the products produced,

bb. quality assurance and control systems, certifications, supply and installation of software and business organization systems.

The expenses of the subcategory ba and bb must cumulatively meet the following conditions:

i. to be used exclusively in the business establishment that receives the aid and to remain connected to the project, for which the aid is granted, for the period of compliance with the long-term obligations of article 26,

ii. to be included in the company's depreciable assets,

iii. be purchased in accordance with the terms of the purchase by third parties unrelated to the buyer.

For large enterprises, the subsidized costs for intangible assets cannot exceed thirty percent (30%) of the total subsidized regional aid costs. For SMEs the maximum percentage is fifty percent (50%).

<u>Eligible expenses other than regional aid</u>

1. The investment projects subject to this scheme may be supported in addition to the regional aid for the eligible costs of article 8 and for the following categories of eligible costs:

a. Investment aid for SMEs

These costs are defined in article 17 of the G.E.R. and relate to expenditure on tangible and intangible assets, as analyzed in article 8, without prejudice to any more specific provisions of of article 17 of the G.E.R., which are included in investment projects of small and medium enterprises of the Central, North and South Sectors of Athens and cannot exceed the amount of 8.25 million euros per project.

b. Costs for consulting services to SMEs.

These costs are defined in article 18 of the G.E.R. and relate to studies and fees of external consultants for investment plans of new small and medium-sized enterprises and cannot be the subject of continuous or periodic activity, nor be linked to the normal operating costs of the business. A new business is considered a newly established business that has not a closed administrative use at the time of its application of submission.

c. The costs for research and development.

These costs are defined in article 25 of the G.E.R. and concern basic research, industrial research, experimental development and feasibility studies. Eligible are the costs of instruments and equipment to the extent and for as long as they are used for the project. When instruments and equipment are not used throughout the whole lifetime of the project, only the depreciation costs corresponding to the duration of the project are considered eligible, which are calculated on the basis of generally accepted accounting principles, expenditures on buildings and grounds are eligible to the extent and for as long as they are used for the project. As far as the buildings are concerned, only the depreciation costs corresponding to the duration of the project are considered eligible, and are calculated based on generally accepted accounting principles. For stadiums, commercial transfer costs or actually paid capital are eligible. administrative costs, contract research costs, knowledge and patents purchased or licensed from outside sources on terms of purchase.

d. Spending on innovation in SMEs

These costs are defined in article 28 of the G.E.R. and relate to a) costs for the acquisition, validation and protection of patents and other intangible assets, b) costs for the secondment, by a research and knowledge dissemination organization or by a large enterprise, of highly qualified personnel, who are employed in research, development and innovation activities in new positions created for this purpose in the beneficiary enterprise and do not replace other personnel and c) costs for advisory and support services in the field of innovation.

e. The costs for the acquisition of vehicles

The costs are defined in article 36b of the G.E.R. and relate to electric vehicles or zero-emission vehicles, in accordance with the defined and more specific conditions of article 36 b of the G.E.R.

f. Expenditures for the promotion of energy production from renewable sources, renewable hydrogen as well as high efficiency cogeneration units.

These costs are defined in article 41 of the G.E.R. and concern new facilities. The total investment cost is eligible.

g. The costs for the restoration of contaminated sites meeting the conditions of article 45 of G.E.R.

These costs are defined in article 45 of the G.E.R. and eligible are those required for the restoration work, reduced by the increase in the value of the plot. Valuations of the increase in value of the pitch due to rehabilitation should be carried out by an independent expert.

h. Expenditures for better utilization of resources and transition to a circular economy.

These costs are defined in article 47 of the G.E.R. and the additional investment costs determined in comparison with the total investment cost of a less environmentally friendly project or activity which may be one of those mentioned in par. 7 of article 47 of the General Exemption Rule, under the more specific conditions there, are eligible. Aid should not exempt businesses that produce waste from any costs or obligations relating to waste management to which it is subject under Union law.

Aid should not encourage the production of waste or the increased use of resources. There are no incentives for waste generation or increased resource use, and for investments related to technology that is already a profitable commercial practice across the European Union. Aid may not be granted for investments undertaken to comply with Union standards that have been adopted and are in force. Aid may be granted for investments undertaken to comply with Union standards that have been adopted and have not yet entered into force, provided that the aid is implemented and completed within at least 18 months before those standards enter into force.

In any case, the aid pursuant to this is granted in compliance with all the conditions of the General Part and of the applicable article of the G.E.R., even if they are not explicitly stated in this invitation.

Budget per investment project and aid intensity

The minimum requested budget of each investment project depending on the size of the beneficiary is the following:

The limits of the requested budget of each investment project are the following:

- For small and very small businesses the minimum budget per investment plan is 300,000 €
- For medium businesses the minimum budget per investment plan is 500,000 €
- For large businesses the minimum budget per investment plan is 1,000,000 €

1. The maximum requested eligible budget for the costs of consulting services to SMEs does not exceed 300,000 euros.

2. The maximum requested eligible budget for research and development costs and innovation costs for SMEs does not exceed 750,000 euros.

3. The maximum requested eligible budget for the expenditure for the purpose of acquiring clean or zero-emission vehicles or retrofitting vehicles does not exceed 2,000,000 euros.

4. RES expenditures as defined in article 41 of the G.E.R., do not exceed 30% of the total eligible budget of the investment project. And the highest requested eligible budget for the expenditure for the promotion of energy production from renewable sources does not exceed 1,000,000 euros.

5. Real estate acquisition costs do not exceed 30% of eligible investment costs.

6. Vehicle purchase expenses as defined in article 36b of the G.E.R., do not exceed 30% of the total eligible budget of the investment project.

7. Investment aid to SMEs (Article 17 of the G.E.R.) does not exceed 8.25 million euros.

8. The above limits may not be circumvented by the artificial separation of aid schemes or aid projects.

9. The above actions can be included cumulatively in a business plan, as it is drawn up and submitted by a legal entity

The percentages of aid intensity, for regional aid are formed according to the new map of regional aid and are shown in total in the table below.

Regions	Regional unit	Size of the firm		
		Big	Medium	Small
Attica	West Athens sector	15%	25%	35%
	East Athens, West Athens Pireaus and Islands	25%	35%	45%
East Macedonia-Thrace	All	50%	60%	70%
North Aegean		60%	70%	75%
West Greece		50%	60%	70%
West Macedonia		50%	60%	70%
Epirus		50%	60%	70%
Thessaly		50%	60%	70%
Ionian islands		40%	50%	60%
Central Macedonia		50%	60%	70%
Crete		50%	60%	70%
South Aegean		40%	50%	60%
Peloponnese		40%	50%	60%
AREAS OF FAIR TRANSITION Arcadia (Megalopolis Municipality, Gortynia Municipality, Tripoli Municipality) Messinia (Municipality of Oichalia)		50%	60%	70%
Central Greece		40%	50%	60%

Regions	Regional unit	Size of the firm		
		Big	Medium	Small
Attica	North Athens sector, South Athens sector and Central Athens sector	-	10%	20%

1. The intensity of the aid for advisory services to SMEs cannot exceed 50% of the eligible expenditure (G.E.R., article 18).

2. The intensity of aid for research and development may not exceed 50% of the eligible expenditure for industrial research, 100% for basic research, 25% for experimental development and 50% for feasibility studies (G.E.R., Article 25).

3. The intensity of innovation support for SMEs may not exceed 50% of the eligible expenditure (G.E.R., article 28).

4. The intensity of the aid for electric vehicles and vehicles with zero CO_2 emissions may not exceed 20% of the eligible expenditure. The intensity of the can be increased by 10 percentage points for zero-emission vehicles and by 20 percentage points for medium-sized enterprises or by 30 percentage points for small enterprises. (G.E.R., Article 36b)

5. The intensity of the aid for costs related to the promotion of energy production from renewable sources, renewable hydrogen as well as units of high efficiency co-production using

RES, cannot exceed 45% of the eligible expenditure. The aid intensity is increased by 20% for small businesses and by 10% for medium businesses.

6. The intensity of aid for land restoration may not exceed 100% of eligible costs or 70% for investments to protect or restore biodiversity and for environmentally friendly solutions environmental solutions to adapt to and limit climate change (G.E.R., Article 45).

8. The intensity of the aid for better utilization of resources and transition to the circular economy may not exceed 40% of the eligible costs (G.E.R., article 47).

In any case, compliance with the notification limits of the applicable article of the G.E.R. referred to in article 4 of the G.E.R. is ensured.

Beneficiaries

Beneficiaries of aid can be considered legal entities that either belong to SMEs or large enterprises, subject to those specifically defined in the applicable special article of the G.E.R., that keep category B' or C' books and the date of submission of the aid application and have or will have at the start of the investment project at least one of the eligible activities of this call as their main activity.

Eligibility criteria

Aid applications are evaluated independently based on the time order of their submission (first come, first served), as certified by the protocol number issued by the Application Submission Information System and until the amount of the public expenditure of the call is exhausted.

Submission period and investment project implementation schedule

The start date for investment project submissions under this call is 30 May 2023. Submissions are completed on 30 November 2023.

This duration can be shortened in the event that the available resources are covered before the date of completion of the submissions.

The duration of the implementation of the investment projects is set at 18 months with the possibility of an extension of six (6) months, which will be granted, either for reasons of force majeure, or after special justification. In any case, the deadline for submitting the application for payment of the aid cannot exceed 30 June 2025

Tool Summary

Categories		PRODUC - E GREEN
1	Business activity	Manufacture
2	Company size	All
3	Pillars	GREEN
4	Source of funding	RRF
5	Maximum budget per investment project	Large budget
6	Purpose of financial aid	Investment
7	Type of aid	Subsidy of interest in business loans
8	Evaluation method	FIFO
9	Obligations and duration after the completion	Long-term

GREEN TAXI

Objective

The significantly increasing needs for transport work create environmental, social and economic challenges. Road transport is largely responsible for the air pollution that occurs in most European urban centers, releasing pollutants particularly harmful to both human health and the overall ecosystem (sulphur, nitrogen oxides, ozone, microparticles PM2.5/PM10 etc).

Corresponding to European cities, in the large urban centers of Greece the problem of air pollution and the burden on the environment is particularly intense. Key factors that negatively affect the environment and favor air pollution are, on the one hand, the particularly high average age of vehicles, which is 16.6 years, and on the other hand, engine technology, which according to relevant studies, 50% of the vehicle fleet in circulation is outdated anti-pollution technology, with 90% of the fleet being gasoline engines, while on the other hand, low-emission vehicles (hybrid, electric, natural gas) do not exceed 1% of the fleet.

The fleet of the TAXI vehicles number approximately 28,500 vehicles throughout the Territory, of which only 2,400 are EURO6 anti-pollution technology, i.e. a percentage of only 8.5%. The objective of the "GREEN TAXI" call is the promotion of electric mobility and the penetration of electric vehicles into the fleet of TAXI vehicles circulating within the Greek territory. The green environmental policy reflected in the National Energy and Climate Plan (NECP) aims, among other things, at the transition to zero- and low-pollution mobility which will be achieved through the gradual reduction of Greenhouse Gas (GHG) emissions due in transportation.

The withdrawal obligation creates an important opportunity for the modernization of the fleets of the TAXI vehicles and its gradual electrification through the promotion of electrification and pure electric zero-emission vehicles.

In addition, the necessity of modernizing the TAXI fleet in Greece also results from the medium-term strategy for zero- and low-emission mobility (up to 50grCO2/kilometer), according to which the goal set for 2030 is for one in three new vehicles to be electric.

Budget

The action is financed by the resources of the Recovery and Resilience Fund and the total budget of the action amounts to thirty-nine million nine hundred and forty thousand euros (€39,940,000.00).

The budget of the action is allocated per Region based on the current distribution of circulating TAXI vehicles. In case of non-exhaustion of resources in one Region, the available resources may be added/redistributed to the resources of other Regions, following proportional distribution criteria or entirely in case of exhaustion of resources of another Region.

The indicative distribution of Public Expenditure per Region category is presented in the following table.

Regions	Budget
North Aegean	700,000.00
Crete	1,720,000.00
East Macedonia-Thrace	1,350,000.00
Central Macedonia	4,700,000.00
West Macedonia	700,000.00
Epirus	1,400,000.00
Thessaly	1,670,000.00
Ionian islands	600,000.00
West Greece	2,400,000.00
Central Greece	1,700,000.00
Peloponnese	2,000,000.00

South Aegean	1,500,000.00
Attica	19,500,000.00

The distribution of Public Expenditure per Region may be adjusted by decision of the Minister of Environment and Energy, following a recommendation of the Implementing Body to the Minister of Environment and Energy, depending on the absorption of available resources, within the limit of the total expenditure of Article 5 hereof.

Possible adjustments are announced via a post on the website of the Ministry of Environment and Energy https://ypen.gov.gr and on the website of the action https://prasinataxi.gov.gr.

The aid of this action will be allocated within the framework of the Commission Regulation on de minimis aid 1407/2013 of December 18, 2013 (De Minimis).

Eligible expenses

The eligible expenses of this call include the purchase or leasing of a new pure electric TAXI vehicle as well as the purchase of “smart” recharge station.

Budget per investment project and aid intensity

The following restrictions apply to the eligible expenses regarding the aid provided:

I) For purely electric TAXI vehicles the ecological bonus amounts to 40% on the pretax retail price with a maximum amount of seventeen thousand five hundred euros (€17,500).

II) The compulsory withdrawal of TAXI vehicle is rewarded with an amount equal to five thousand euros (€5,000)

III) The purchase of a "smart" recharge point, for installation in a domestic environment or in a business parking lot with private access, is subsidized with a total amount of five hundred euros (€500) and is optional. If the purchase price of the "smart" n/o recharge point is less than €500 before VAT, the amount of the subsidy is equal to the amount of the purchase price before VAT.

In addition, in the event that the ownership of the license TAXI vehicle is individual:

- Especially for the disabled categories, an increase of one thousand euros (€1,000) is foreseen in the amount of the ecological bonus that results for the purchase of an electric TAXI vehicle.

- Especially for the categories of families with at least three (3) dependent children, an increase of one thousand euros (€1,000) is provided for the ecological bonus obtained for the purchase of an electric TAXI vehicle.

- The increase will be given after checking the number of dependent members through Table 8 of the Income Tax Declaration of the last fiscal year (E1) with the Family Status Certificate.

- Especially for young people whose age does not exceed twenty-nine (29) years in the year of submission of the application for membership and who already hold a TAXI vehicle license, an increase of one thousand euros (€1,000) is foreseen in the amount of the ecological bonus obtained for the purchase of an electric E.D.X. TAXI vehicle.

If the beneficiaries based on the existing TAXI vehicle license is more than one, and each one of them happens to belong to the above special categories, the amount of the surcharge to which he is entitled according to each special category is calculated based on the percentage attributed to him in the existing TAXI vehicle license.

In any case, cumulatively the surcharge amounts of the special categories cannot exceed the amount of the final surcharge per special category as defined in the table below.

Beneficiary category	Number of vehicles	Ecological bonus	Compulsory withdrawal	Smart recharge point	Disabled	Young people (29 years and below)	Families with three (3) or more dependent children
Owner/s of TAXI vehicle license	One (1) per TAXI vehicle license	40% and up to 17,500€	5,00 €	500€ per TAXI vehicle license	1,000€	1,000€	1,000€

In the event that there are cumulative criteria which, based on the table above, increase the total subsidy amount beyond the net value of each vehicle to be subsidized, the upper limit of the total subsidy is equal to the net value of the vehicle (pretax retail price).

The maximum amount of aid pursuant to this, including any other De Minimis aid that the beneficiary has received at the level of a single enterprise, may not exceed the amount of two hundred thousand (200,000) euros per beneficiary/single enterprise, in a rolling period of three financial years. For companies that carry out road freight transport, the corresponding upper aid limit is one hundred thousand (100,000) euros.

Beneficiaries

Beneficiaries/final recipients of the financial incentives of the call and the withdrawal of old vehicles are all the owners of TAXI vehicles of category EURO5 and older, based on the traffic permit, and which have the Main Activity Code 49.32 "Taxi operation".

Owners are those who own one hundred percent (100%) of the vehicle registration. In the event of the existence of several share holders on the license (co-owners), the application is submitted by all the beneficiaries, providing the necessary justifications for all co-owners.

Each beneficiary/final recipient:

- is entitled to purchase or lease one (1) pure electric car with zero CO2 emissions (BEV) per license in which he participates or is the sole owner. It is pointed out that the upper limit of the aid according to article 3 of the De Minimis Regulation, under which the total amount of de minimis aid granted to a single enterprise cannot exceed the amount of 200,000 euros in any period of three financial years.
- may be a sole proprietorship or a company.
- is obliged to withdraw old TAXI vehicle. The subsidy amount for this withdrawal is included in the final amount of the ecological bonus. In addition, it is obliged to carry out a definitive declassification and withdrawal of the old TAXI vehicle in accordance with the provisions of cases a and b of paragraph 5 of article 89 of Law 4070/2012 and paragraph 5 of article 14 of Law 4530/2018 (A' 59), delivering the vehicles in alternative management systems or collection points within the meaning of article 2 of the presidential decree 116/2004 (A' 81),

According to paragraph 2 of article 2, of the De Minimis Regulation, the "single enterprise" includes all enterprises that have at least one of the following relationships between them:

a) a company holds the majority of the voting rights of the shareholders or partners of another company.

b) an enterprise has the right to appoint or dismiss the majority of the members of the administrative, management or supervisory body of another enterprise.

c) an enterprise has the right to exercise a dominant influence over another enterprise by virtue of a contract entered into with it or by virtue of a clause in the latter's articles of association.

d) a company that is a shareholder or partner of another company, controls alone, based on an agreement it has entered into with other shareholders or partners of the company in question, the majority of the voting rights of the shareholders or partners of this business.

Enterprises that have any of the relationships mentioned in items a) to d) of the previous paragraph with one or more other enterprises are also considered a single enterprise.

- Entitles to additional support through the mandatory withdrawal of an old TAXI vehicle.
- Entitles to the additional aid for the purchase of a "smart" laptop recharge point.

It is noted that:

- Vehicles acquired in the context of this call cannot be resold by the beneficiaries/final recipients before two years (2 years) have passed since their acquisition. The aid granted under this call is compatible with the internal market within the meaning of paragraphs 2 and 3 of article 107 of the Treaty on the Functioning of the European Union and fulfill all the conditions of Regulation 1407/2013 (De Minimis).

The accumulation of de minimis aid with other State aid for the same eligible costs or with State aid for the same high-risk financing measure is prohibited, if such accumulation leads to exceeding the highest relative aid intensity or the aid amount determined on the basis of the specific case-by-case data in a block exemption regulation or decision issued by the Commission.

Excluded are companies active in the fishing and aquaculture sectors, which fall under Regulation (EU) no. 1379/2013 of the Commission on the common organization of the markets of fisheries and aquaculture products, amending Council regulations (EC) no. 1184/2006 and (EC) no. 1224/2009 and the repeal of Regulation (EC) no. 104/2000 of the Council (EE L354/ 1 of 28.12.13)104/2000 of the Council, in the primary production of agricultural products, in the field of road freight transport for third parties and that in the case of companies with mixed activity they must ensure the avoidance of subsidization of non- eligible sectors by maintaining separate accounts.

If a company is active in more than one sector for which different maximum aid limits apply in accordance with the above, it ensures by appropriate means such as accounting separation, that for each of these activities the relevant maximum limit is respected.

Eligibility criteria

The applications are subject to the basis of immediate evaluation, i.e. independent evaluation of each application based on the principle of time priority (first in – first served) and the availability of resources per Region and overall.

Submission period and investment project implementation schedule

The submission period for the call ranges from 09/01/2023 to 31/12/2023. The submission period may be shortened in case the available resources are covered before the completion date of the call.

The start date of expenditure eligibility is 01/12/2021. Costs related to the advance payment for the order of the vehicle are excluded.

In particular, eligible are the documents of expenditure on credit, issued for the purposes of the call after the date of commencement of eligibility of the expenditure and within the contractual time of implementation.

Especially for any declassifications or withdrawals of the old E.D.X. TAXI vehicle category EURO5 and older, which were made before the publication of this, the transaction is considered acceptable, as long as it was made from January 1, 2021 and later.

After the approval of the Implementing Agency, the extension of the deadline for completing the application, i.e. the twelve (12) months for which its approval is considered active, is allowed for an additional period of three (3) months. The above extension can only be granted once (1). For the granting of said extension o

beneficiary/final recipient should submit a request exclusively and only electronically in the information system, uploading any supporting documents. The request must be submitted no later than three (3) days before the end of the period for which the extension request is made.

In any case, it is not possible to submit an extension request beyond 30.06.2024 and the payment of the subsidy should not exceed 31.12.2024.

Tool Summary

	Categories	GREEN TAXI
1	Business activity	Services
2	Company size	Very small
3	Pillars	Green
4	Source of funding	RRF
5	Maximum budget per investment project	Micro budget
6	Purpose of financial aid	Investment
7	Type of aid	Grant
8	Evaluation method	FIFO
9	Obligations and duration after the completion	Short-term

CREATION OF BABY CARE SPACES WITHIN BUSINESSES

Objective

The objective of the project is to expand the range of childcare facilities as an integrated service within workplace, providing immediate support to working parents and society still reeling from the economic fallout of the pandemic. In-house childcare facilities actively increase the participation of working parents and especially mothers, strengthen gender equality in the workplace and in the family, and contribute to the well-being of working parents and their children.

Budget

The Program budget (total Public Expenditure) amounts to 15,836,794.00 euros including VAT. The Program is financed by resources of the Recovery and Resilience Fund for the Action of the TAA - with ID code 16945 and title "Creation of baby and toddler care spaces in businesses".

The Program budget is divided into categories as follows:

A) 1st CATEGORY: For the creation and equipment of safekeeping space by beneficiaries, who at the time of submitting the funding application employ, with any contractual status, from one hundred (100) to two hundred fifty (250) people, according to the distinctions defined in par 1 of article 59 of Law 4921/2022 (A' 75), the budget amounts to the amount of two million one hundred thirty one thousand five hundred seventy nine (2,100,000.00) euros.

B) 2nd CATEGORY: For the creation and equipment of safekeeping space by beneficiaries, who, at the time of submitting the application for participation, employ, under any contractual regime, more than two hundred and fifty (250) people, according to the distinctions defined in par. 1 of article 59 of Law 4921/2022 (A' 75), the budget amounts to five million nine hundred sixty eight thousand four hundred twenty one (5,915,000.00) euros.

C) To cover the salary and insurance costs of employing up to two (2) professionals to staff the safekeeping area for two (2) years, the budget amounts to seven million seven hundred and twenty-eight thousand (7,728,000.00) euro.

The Budget per Category may be modified by a newer decision.

The amount of public funding of approved applications may not exceed the Action's budget (total Public Expenditure), as each time it is amended and valid.

The funding of the beneficiaries is granted in the form of aid, in accordance with the framework of the Regulation on de minimis aid EU 1407/2013 of the Commission of 18 December 2013 (EL L 352/24.12.2013) (O.J. EE L 253 of 24.12.2013) concerning the application of Articles 107 and 108 of the Treaty to the aid importance (de minimis aid).

Eligible expenses

Eligible for funding from the ACTION are actions and expenses aimed at the planning, configuration, equipment and staffing of a baby care area within the beneficiary's facility, to serve the employees employed there.

Costs for the design, configuration and equipment of the safekeeping area.

For the planning, configuration and equipment of the safekeeping area, the following actions are eligible:

A) Preparatory actions, in order to design the safekeeping area:

i. Elaboration of a feasibility study, aimed at confirming the technical adequacy and economic viability of the safekeeping area.

ii. Elaboration of technical study, technical report, technical blueprints for the technical and functional design of the safekeeping area

iii. Issuance or revision of necessary planning permits for the adaptation and legal installation of the safekeeping area

iv. Consulting services, which the beneficiary procures from external consultants, through a service contract, which are used exclusively for planning the configuration, operation and staffing of the safekeeping area.

Preparatory actions cannot exceed 20% of the total budget for the design, configuration and equipment of the safekeeping area of the potential beneficiary

B) Configuration and safekeeping area equipment actions:

i. Technical works for the external and internal adaptation/configuration of the safekeeping area, which are assigned by the beneficiary, through a service or project contract to natural or legal persons.

More specifically, the works that will be carried out should concern the construction (extension of the existing business), upgrading and configuration of the space of the assisted business, as well as any form of work to shape its surrounding space with the aim of the proper functioning of the safekeeping area. The specific category of expenses may include indicatively: building works, material costs, electromechanical and hydraulic works, installation of networks and air conditioning in the premises service provider. Purchase of equipment, materials, consumables, supplies and related products for the adaptation/configuration of the safekeeping area

ii. Purchase of equipment, materials, consumables, supplies and related products necessary for the material and technical infrastructure of the safekeeping area.

iii. Remuneration expenses of employees employed through a service or project contract, exclusively for the provision of services and the execution of design, configuration/adjustment work, safekeeping area equipment and are not included in other categories

C) Preparation actions for participation in the call:

1. Consulting services that the potential beneficiary procures from external consultants, through a service contract, which are used exclusively for the preparation and submission of the application for participation in this Action and the dossier of supporting documents.

D) Additional eligible costs

Additional eligible costs in the Action are considered:

i. Engineer's Certificate/Technical Report

ii. Other Expenses, for technical actions, studies, or permits, which may be required by the provisions written in each case for the correct and legal configuration and operation of the Baby Care Area. (e.g. Fire Safety, Small-scale permit for works, etc. as well as fees for the above)

Expenses for the staffing of the Custodial Area

In order to staff the safekeeping area, the Action will finance the employment costs of two (2) professionals, for twenty-four (24) months, who are connected to the beneficiary in a full-time dependent employment relationship, lasting at least four (4) years.

Budget per investment project and aid intensity

Within the framework of the Program, the possibility of financing is given by category as follows:

a. the actual cost of the expenses for the creation, configuration and equipment of the safekeeping area, as shown by the corresponding documents and at most: up to the amount of 42,000.00 euros for Category 1 Beneficiaries and up to the amount of 84,500 .00 euros for Category 2 beneficiaries.

b. the actual cost for the salaries and insurance of two (2) professionals for the staffing of the safekeeping area, as shown by their employment contract and the relevant supporting documents and up to a maximum amount of 64,400.00 euros for two (2) years of employment.

Category	Description	Max eligible expense	Aid intensnity
Category 1	Business/cite employing from one hundred (100) to two hundred fifty (250) people	42,000.00 €	100%
Category 2	Business/cite employing more than two hundred fifty (250) people	84,500.00 €	100%
Wages	Salary and insurance costs employment of up to two (2) professionals for the staffing of the safekeeping area for two (2) years	64,400.00 €	100%

The amount of the aid cannot exceed the above amounts. In the event that the beneficiary's expenses exceed the maximum eligible expenses, the beneficiary covers the difference with its own funds.

In case b of paragraph 1 of article 59 of Law 4921/2022 (A' 75), the beneficiary is understood to be the consortium or the association persons and the amount of aid is calculated in total for all its members.

The intensity of the aid is 100%, with the reservation of not exceeding the limit of accumulation, in accordance with the provisions of the call. Aids paid in installments are reduced to their value at the time of their grant. The interest rate used for the reduction is the applicable discount rate at the time of granting the aid.

The costs supported under the Action may not be supported by another source, national or European.

Beneficiaries

Beneficiaries are businesses - employers in the private sector, who join the Action according to the criteria of this Call.

The first cycle includes up to fifty (50) beneficiaries, with employed persons from two hundred and fifty (250) and above and up to twenty five (25) beneficiaries, with employed persons from one hundred (100) to two hundred and fifty (250). Funding applications for each category are submitted, classified and approved separately, drawing funding from the Action's budget.

Eligibility criteria

1. The potential beneficiaries of paragraphs a' and b' of paragraph 1 of article 59 of Law 4921/2022 (A' 75) are eligible for funding if they meet the following conditions at the time of submission of the application for inclusion:

a. They constitute a legal entity of the private sector (Stock Company, Limited Liability Company, Joint Stock Company or Limited Partnership, Private Equity Company, Social Cooperative Enterprise, Cooperative) or Sole Proprietorship and keep simple or double-written books.

In the case of a Consortium, the constitutive deed of the Consortium (statutes) can be drawn up either with a private agreement or with a notarial document and must contain at least: name, registered office, duration, purpose, percentages of participation of the contracted members, representation, rights and obligations of contracting members. The minimum duration of the Consortium must be four (4) years and its purpose must consist in the implementation of the call.

b. They operate in the Greek Territory with a Greek VAT number in an eligible activity. Eligible activity for the purposes of the Action means any economic activity carried out on the free market, except those that are marked as ineligible for aid in the context of Regulation 1407/2013 (de minimis). Specifically ineligible are:

i) aid to companies active in the fishing and aquaculture sectors, which fall under Regulation (EC) No. 104/2000 of the Council.

ii) aids granted to companies active in the primary production of agricultural products, as defined in par. 1 of no. 2 of EC 1407/2013;

iii) aids granted to companies active in the processing and marketing of agricultural products, in the following cases:

a. where the amount of aid is determined on the basis of the price or quantity of such products sold by primary producers or placed on the market by the enterprises concerned,

b. where the aid is accompanied by an obligation to repay it in part or in full to primary producers

iv) aids for activities related to exports to third countries or to Member States, in particular aids directly linked to the exported quantities, to the creation and operation of a distribution network or to other current costs related to the export activity.

v) aid conditional on the use of domestic goods instead of imported goods.

In the case of companies operating in the sectors to which Reg. 1407/2013 does not apply but at the same time they are also active in one or more of the sectors that fall within the scope of the above Regulation or carry out other activities that fall within the scope of the above Regulation, the Regulation applies to aid granted in these latter sectors or activities, provided that the companies in question ensure by separating the activities or distinguishing the costs that the activities in the sectors that are excluded from the scope of the Regulation in question do not benefit from the aid granted under this aid

In addition, the following are excluded:

i. Activities of a non-commercial nature, such as activities of public administration and compulsory social security, activities of organizations, activities of households as well as activities of non-resident organizations.

ii. Activities related to the application of the principle of "doing no significant harm" and in particular:

a. Activities related to fossil fuels, including downstream use, excluding projects under the said measure for the production of electricity and/or heat, as well as the related transmission and distribution infrastructure, using natural gas, which meet the conditions set out in Annex III of the technical guidance on the application of the principle of not causing significant harm (2021/C 58/01).

b. Activities under the EU Emissions Trading System (ETS) to achieve the projected greenhouse gas emissions that are not lower than the relevant benchmarks.

c) Activities related to waste landfills, incinerators and biological treatment plants, and

d) Activities in which the long-term disposal of waste may harm the environment.

They employ, under any contractual status, or have an establishment in which they employ:

i) from one hundred (100) to two hundred fifty (250) persons or
ii) from two hundred and fifty (250) persons or more. In the case of a Consortium, the employed persons of all its members are included.

c. They are classified in Category C (low) risk according to article 10 of the Code of Laws for Health and Safety at Work (KNYAE, Law 3850/2010, A΄ 84).

Business classified in Category B or A (medium or high risk) or, although it belongs to Category C Category, includes individual tasks and holdings of higher risk, belongs to Action, as long as the safekeeping area operates in a facility that is not affected by the company's production process and is free, according to the occupational risk report, from exposure to physical, chemical, biological agents. If it is an industry/craft, it can join the Action if, in addition to the above, there is no other industrial or craft facility within a distance of five hundred (500) meters.

Businesses whose activity falls under the provisions of Joint Ministry Decree No. 172058/2016 KYA (B΄ 354) are included exclusively for the facilities that house administrative services and as long as they are outside the intended impact zones.

d. They have not been sanctioned against them, with final force, for violating the legislation on health and worker safety, in particular the provisions of the Code of Laws for Health and Safety at Work (OHS) which was sanctioned by the first article of Law 3850/2010, as well as the regulatory acts issued under its authority for at least two (2) years before the submission of the application for inclusion in the Action.

e. They operate legally and comply with the relevant EU and national environmental legislation, providing, if requested, the appropriate documentation, in accordance with the current legislation and their activity (e.g. operating license, operating license exemption, notice of commencement of operation, the environmental licensing, if applicable, etc.).

f. They are active, they are not in a state of inactivity, liquidation, bankruptcy, or forced administration, nor has their VAT number been suspended for any reason, as this appears from the data of the tax register of AADE.

g. The total amount of de minimis aid they have received as a single enterprise, as defined in article 2, par. 2 of Regulation 1407/2013, including the aid from this Action, does not exceed the amount of 200,000 euros (or 100,000 euros for the road freight transport sector for third party account) within a three-year period (current financial year and the two (2) previous financial years) before 10 the time of granting the legal right to the aid. In the case of enterprises with mixed activity, the beneficiary is obliged to separate the activities and distinguish the cost elements, so as to additionally ensure that the support of the road freight transport activity does not exceed the amount of 100,000 euros.

De minimis aid granted under Regulation 1407/2013 may be cumulated with de minimis aid granted under Regulation (EU) No. 360/2012 of the Commission (1) until the upper limit specified in said Regulation. They may be cumulated with de minimis aid granted under other de minimis regulations up to the relevant maximum limit specified in article 3 paragraph 2 of Regulation 1407/2013.

The accumulation of de minimis aid with other State aid for the same eligible costs or with State aid for the same high-risk financing measure is prohibited if this accumulation leads to exceeding the highest relative aid intensity or the amount of aid determined on the basis of the specific case-by-case data in a block exemption regulation or decision issued by the Commission. De minimis aid which is not granted for specific eligible expenditure or cannot be attributed to specific eligible expenditure may be cumulated with other State aid which granted under a block exemption regulation or decision issued by the Commission.

In the case of mergers or acquisitions, all previous de minimis aid already granted to any of the merging undertakings is considered to determine whether the new de minimis aid to the new or acquiring undertaking exceeds the relevant ceiling. De minimis aid that was lawfully granted before the merger or acquisition remains legal.

If an undertaking is split into two or more separate undertakings, the de minimis aid which granted before the break-up is attributable to the undertaking which received this aid, which is against rule the undertaking that undertook the activities for which the de minimis aid was used.

If such imputation is not possible, the de minimis aid must be apportioned proportionately on the basis of the book value of the equity capital of the new undertakings at the actual date of the division.

h. The exclusion grounds of Article 40 of Law 4488/2017 (A 137/13.09.2017) do not apply, based on which:

potential beneficiaries are excluded from joining a program or being subject to aid schemes that are financed by EU or national funds, if they have been imposed against them, within a period of two (2) years before the deadline for submitting an application for participation:

i) Three (3) acts of fine imposition by the competent auditing bodies of the Body Labor Inspection for violations of labor legislation characterized, in accordance with ministerial decision 2063/Δ1632/2011 (Β΄ 266) as applicable from time to time, as "high" or "very high" seriousness, which result cumulatively from three (3) audits carried out or

ii) Two (2) acts of fine imposition by the competent audit bodies of the Labor Inspection Body, for violations of labor legislation concerning undeclared work, which result cumulatively from two (2) performing controls. The above acts of imposition of fine shall have become final.

i. The safekeeping area meets the technical and operational specifications and conditions of the call and is kept in operation for at least 4 years from the start of its operation.

2. In case of submission of application for participation by several companies - employers of the private sector, as Joint venture in accordance with para. b of par. 1 of article 59 of Law 4921/2022 (A' 75), the eligibility conditions of par. 1 (criteria a' to i') must be met cumulatively by each member of the Consortium except for the total number of employees for the calculation of which all employees are counted of all consortium members.

A basic condition for participation in the Action is the submission of a Funding Application per VAT number for all facilities available to the business or employer and the commencement of work at the competent Public Economic Service at the time of submission of the application. Companies or employers applying as members of a Consortium are not allowed to submit an individual application.

Submitted applications are evaluated using the direct evaluation method. During the immediate evaluation process, an independent evaluation of each legal and timely application is carried out, based on the principle of time priority and available resources.

Submission period and investment project implementation schedule

The start date of the call (start of the submission period and eligibility period) is the 07/02/2023. The submission period will remain open until the available call budget is exhausted.

Potential Beneficiaries are asked to take into account the following timelines:

1. Date of final submission of the application for participation in the system of work inspection service

2. Issuance of an approval decision for the inclusion in the Action and the establishment of the safekeeping area. (Requirement for Advance Payment)

3. Completion of the works and supplies for the configuration and equipment of the safekeeping area, as analyzed in this Call

4. Recruitment of Staff of the safekeeping area and start of its operation. (Milestones #3 and #4 are prerequisites for the 2nd Payment)

5. End of the first year of operation of the safekeeping area with the maintenance of the jobs financed by the Action. (Requirement for 3rd payment)

6. End of the second period of operation of the safekeeping area, with maintenance of the jobs financed by the Action. (Requirement for 4th and final payment)

7. Completion of the Action with the expiry of four years of operation of the safekeeping area, with maintenance of the jobs financed by the Action.

The more specific terms and conditions for the fulfillment of the above milestones for each beneficiary are specified in the relevant approval decision.

In order to fulfill the objectives of the Action and to better serve the beneficiaries, the General Secretariat of Demographic and Family Policy and Gender Equality may, with subsequent decisions, modify the above milestones.

Tool Summary

	Categories	CREATION OF BABY CARE SPACES WITHIN BUSINESSES
1	Business activity	Manufacturing Tourism Services Commerce
2	Company size	Medium Large
3	Pillars	Social
4	Source of funding	RRF
5	Maximum budget per investment project	Small budget
6	Purpose of financial aid	Investment
7	Type of aid	Grant
8	Evaluation method	FIFO
9	Obligations and duration after the completion	Short-term

CHARGE EVERYWHERE

Objective

The objective of this call is the installation of more than 8000 publicly accessible recharging points (300000 kW as the cumulative installed power of these points) throughout the Greek territory, including urban, peri-urban areas as well as other points of interest along highways, within ports, airports, etc.

Therefore, this action aims to provide financial support for investments that will contribute to economic and social resilience, in safe and sustainable transport and in clean, efficient production and use of energy, through the strengthening of publicly accessible recharging infrastructures throughout the Territory, which are powered by energy produced by Renewable Energy Sources (RES) with the aim of creating a core network (trunk) of public charging in the country, with the maximum geographical and population coverage, but also ensuring a healthy competition.

Budget

The call "CHARGE EVERYWHERE" is financed by the Recovery and Resilience Fund, and in particular by the Ministry of Environment and Energy.

The total budget of this action is distributed as follows:

Investment category	Budget
Category A: Electric Vehicle Charging Projects	29,921,250 €
Category B: Other Publicly Accessible Space	49,868,750 €
Subcategory B.1	14,960,625 €
Subcategory B.2	34,908,125 €

The total amount of public expenditure committed to Category A is distributed by Region according to the table below:

Regions	Budget
Attica	6,746,032 €
East Macedonia-Thrace	2,050,778 €
North Aegean	858,903 €
West Greece	1,955,268 €
West Macedonia	624,253 €
Epirus	1,078,674 €
Thessaly	2,027,376 €
Ionian islands	698,195 €
Central Macedonia	6,344,761 €
Crete	2,317,512 €
South Aegean	1,832,271 €
Peloponnese	1,920,861 €
Central Greece	1,545,115 €
Total	29,921,250 €

The total amount of public expenditure committed to sub-category B.2 based on Table 2, is distributed by Region according to the following table:

Regions	Budget
Attica	9,332,571 €

East Macedonia-Thrace	2,158,922 €
North Aegean	844,167 €
West Greece	2,556,990 €
West Macedonia	1,208,914 €
Epirus	1,347,515 €
Thessaly	2,400,477 €
Ionian islands	779,159 €
Central Macedonia	5,265,124 €
Crete	2,399,649 €
South Aegean	1,781,089 €
Peloponnese	2,331,538 €
Central Greece	2,501,939 €
Total	34,908,125 €

The distribution of Public Expenditure per site category and/or per Region may be adjusted by decision of the Minister of Environment and Energy, following a proposal from the Agency Implementation to the Minister of Environment and Energy, depending on the absorption of available resources, within the limit of the total expenditure of this call.

Eligible expenses

The eligible expenses of this call are mentioned in the table below.

Basic Categories of Eligible Expenses and Subcategories of eligible expenses	
Basic Category of Eligible Expenditure I: Cost of equipment for charging stations	
Individual categories of eligible expenses I	Cost of new equipment of the charging station including the relevant technical equipment and equipment that ensures the intelligent readiness of the station and the necessary software for its operation.
Basic Category of Eligible Expenditure II : Cost of installation work of a charging station	
Individual categories of eligible expenses II	1. Construction work for the installation and commissioning of the charging station. 2. Elaboration of an electrical study for the installation of the charging station. 3. Costs of parking area configuration and surroundings as well as auxiliary equipment (fences, lighting, security systems, canopy, auxiliary lighting, protective bars of the station, parking sensors, etc.). 4. Marking of the charging station and placement of a sign (including the Recovery and Resilience Mechanism poster) and site marking. 5. (In the case of connecting a charging station to the Medium Voltage) Work and equipment supply costs for a new Medium Voltage Substation or modernization of an existing Medium Voltage Substation in case of an increase in its installed capacity.
Basic Category of Eligible Expenditure III : Cost of connecting the charging station to the network	
Individual categories of eligible expenses III	Expenses for connecting charging stations to a new supply or by increasing an existing supply of the network.

For Category A, eligible are the costs which are explicitly and distinctly described in each Concession Agreement signed between the Granting/Contracting Authority and the Concessionaire as long as they are included in the eligible costs of the table above.

For Category B, a maximum amount of eligible budget is defined per charging station and per category of basic eligible costs of the table above, included in the subsidy application.

Budget per investment project and aid intensity

The total budget per investment project can be estimated based on the aid presented in the table below.

<table>
<tr><td>AC/DC</td><td>Installed power range (P)</td><td colspan="2">Maximum total eligible budget per charging station installed (based on eligible costs Table)</td></tr>
<tr><td></td><td></td><td>Maximum eligible budget for Basic cost categories I & II (€/KW)</td><td>Maximum eligible budget for basic expenditure category III based on the method of connection to the distribution network (€) *</td></tr>
<tr><td>AC</td><td>P ≥ 7,4 kW</td><td>200</td><td rowspan="5">Connection to Low Voltage (LV)
• 3,000 - for supply size up to No. 3
• 15,000 - for supply size No. 4 or greater,
Connection to Medium Voltage (MV):
• 70,000</td></tr>
<tr><td rowspan="4">DC</td><td>30kW ≤ P < 50kW</td><td>370</td></tr>
<tr><td>50kW ≤ P < 100kW</td><td>630</td></tr>
<tr><td>100kW ≤ P ≤ 150kW</td><td>470**</td></tr>
<tr><td>150kW < P ≤ 360kW</td><td>400**</td></tr>
<tr><td colspan="4">*The correspondence of the size of a benefit with the power, where described in the Table, is obtained based on the coding of the benefits by the Operator of the Hellenic Electricity Distribution Network.
** this amount increases to 600 €/kW if the connection to the grid is made at Medium Voltage and at the same time work and equipment supply costs for a new Medium Voltage Substation are proven or modernization of an existing Medium Voltage Substation in the event of an increase in its installed capacity.</td></tr>
</table>

Beneficiaries

1. Beneficiaries of the aid, granted on the basis of this scheme, are the investment entities that are established or have a branch in Greek Territory at the time of payment of the aid and have one of the following forms:

a. Commercial companies and sole proprietorships,

b. cooperatives,

c. Social Cooperative Enterprises, Agricultural Cooperatives, Producer Groups, Urban Cooperatives, Agricultural Corporate Partnerships

d. Joint ventures that carry out commercial activity,

e. Public and Municipal enterprises and their subsidiaries, provided that:

- they have not been assigned to serve a public purpose,

- they have not been assigned by the state exclusively to offer services,

- their operation is not subsidized with public funds for the period of compliance with long-term obligations.

2. Beneficiaries of the aid are divided into two categories:

Beneficiary category I: Beneficiaries who (a) will have the ownership of the supported charging station, (b) will have the ownership or legal right to exclusive use of the installation premises of the charging station and (c) will have entered into a contract with the Electric Vehicle Charging Infrastructure Operator (EVCIO) registered with the Register of Infrastructure and E-Mobility Market Bodies (RIEMB), for the representation of this station, in accordance with the provisions of Law 4710/2020, for a period of at least five (5) years.

Beneficiary category II: Beneficiaries who (a) will own the supported charging station and (b) will themselves operate as a EVCIO registered at RIEMB, in accordance with the provisions of Law 4710/2020.

3. Category II beneficiaries, i.e. EVCIOs should either (a) be the owners of the place where the charging stations are installed or (b) to have entered a long-term contract of at least five (5) years for the granting of full and complete use with the owners or those who have a legal right to exclusive use of the installation sites of the E/O charging stations.

4. In the event that the beneficiary of the aid is a different legal entity from the main/having legal right of exclusive use of the premises of the installation of the charging station, any expense incurred for its installation station from the latter, including any cost to connect the station to the electricity supply network, should ultimately to burden the former, so that it can be included in the applicant-beneficiary's eligible expenses. In this case, it should be proven, with a relevant agreement and all supporting documents, that the beneficiary of the aid undertook and fully shouldered the relevant costs that the owner/owner of the legal right to exclusive use of the space had initially paid.

Eligibility criteria

1. The basic participation conditions for each potential beneficiary are the following:

i. To operate with one of the legal forms of article 4 of this call.

ii. Not to fall under any of the cases of article 6 par. 6 of this call.

iii. To have or undertake with a responsible declaration that until the completion of the action/investment it will provide for the appropriate infrastructure and services with the aim of minimizing obstacles and facilitating access to them, wherever this is necessary and essential, for people with disabilities, in accordance with the provisions of article 7 of Regulation (EU) no. 1303/2013 of the European Parliament and of the Council, of 17 December 2013, laying down general provisions for the European Regional Development Fund, the European Social Fund and the Cohesion Fund and the repeal of Regulation (EC) no. 1083/2006. Infrastructure means both building infrastructure and electronic applications aimed at the customer public (e.g. websites and other electronic applications, such as electronic information points and/ and service etc.).

iv. To undertake that the entire physical object of each application has not been included and will not be submitted, at a later time, to another program with similar object, financed by national or Community resources.

2. For investment projects with a total eligible budget of more than €500,000, it is required to document the coverage of the same participation either individually per company VAT number or cumulatively at the level of a single company. The documentation of the term will be implemented by the presentation of evidence from the point of view of the potential beneficiary as described in this call. In particular, in the event that the above documentation is provided through loan approval or Bank's Certificate of intent to lend the Investment Plan (loan pre-approval), this loan should not be provided in the context of granting public aid to a financial institution, as defined in article 17 section 17.2.1. par. 4 of this call. It is pointed out that both the loan approval as well as the certificate of intent to lend should bear a date prior to the date of submission of the potential beneficiary's application.

3. Especially for category A, a basic condition for participation in the action is compliance with all the conditions as reflected in the contract that has been signed between the Concessionaire/Contracting Authority and the Concessionaire.

4. All the above conditions are necessary conditions for eligibility and participation in the action. Their completion is checked by submitting the necessary supporting documents, as provided for in this call. The non-satisfaction of each of them is a condition for disqualification of the application and/or recovery of the aid. Therefore, their non-satisfaction or the incomplete or non-existent documentation for their satisfaction is reason for the complete rejection of the application, regardless of the stage at which it is and/or recovery of the aid.

Applications are subject to immediate evaluation, i.e. independent evaluation of each application according to time priority (first come-first served).

Submission period and investment project implementation schedule

The start date for submitting applications will be 11/05/2023, while the duration of submitting applications in the context of the relevant action will be until 31 December 2023.

This duration can be shortened if the available resources are covered before the above date.

The date on which the Beneficiary submits the application is defined as the start date of eligibility of the expenses.

The final date for the completion of the project (physical object) and the registration of the charging stations in the Register of Infrastructure and E-Mobility Market Bodies, is set as October 31, 2025.

Tool Summary

Categories		CHARGE EVERYWHERE
1	Business activity	All
2	Company size	All
3	Pillars	Green
4	Source of funding	RRF
5	Maximum budget per investment project	Large budget
6	Purpose of financial aid	Investment
7	Type of aid	Grant
8	Evaluation method	FIFO
9	Obligations and duration after the completion	Long-term

PHOTOVOLTAICS ON THE ROOF

Objective

The "Photovoltaics on the Roof" Program, grants households to install Photovoltaic (PV) systems with storage and farmers for the installation of PV systems with or without a storage system for self-consumption with the application of energy offset.

The Program aims at the installation of photovoltaic stations for self-consumption of electricity in combination with electric accumulator systems (batteries), which contribute to energy savings, in the pursuit of the building stock approaching near-zero energy consumption specifications by 2050, as well as achieving lower costs of living.

Budget

The Program budget for subsidizing the installation of photovoltaic systems and storage systems amounts to €238,000,000.

The distribution of Public Expenditure is presented in the following table for the categories of beneficiaries as follows:

Category	Beneficiaries	Eligible expense	Budget
A	Household facilities (Vulnerable households)	PV station installation with storage system	45,000,000 €
B	Household facilities (Individual Income <=€20,000 or Family Income <=€40,000)	PV station installation with storage system	100,000,000 €
C	Household facilities (Individual Income > €20,000 or Family Income > €40,000)	PV station installation with storage system	63,000,000 €
D	Farmers	PV station installation with or without storage system	30,000,000 €

Eligible expenses

The eligible costs of this Program are as follows:

a) Supply and installation of PV frames, inverter, as well as accessory materials (panels, cables, etc.).

b) Supply and installation of base system.

c) Supply and installation of a PV meter.

d) Supply and installation of storage system as well as accessory materials (panels, cables, etc.).

e) Fee for study - dimensioning of the system (Photovoltaic and battery) and its installation work.

In the context of this Program, expenses are considered eligible if:

a) are necessary for the realization of the physical object,

b) are carried out within the eligible time period,

c) are legal,

d) are documented according to the necessary supporting documents and documents, such as those provided by the applicable tax legislation and properly accounted for.

It is especially pointed out that:

a) VAT is an eligible expense (except for category D - Farmers),

b) all the provisions of Regulation 1407/2013 of the EU Commission on deminimis aid apply to the rented/free housing, where the limits of accumulation (€200,000) are determined over a rolling period of three financial years. A declaration of compliance with the de minimis regulation, as it applies from time to time, is required from the beneficiary (full principal, beneficiary) as well as the presentation of corresponding declarations from the other co-owners,

c) all the provisions of Regulation 1408/2013 of the EU Commission on de minimis aid are applied to the beneficiary farmers, where among other things, it is determined that the total amount of minor aid granted per member state to a single enterprise does not exceed the amount of 200,000 euros in any period of three financial years (article 3 par. 2 Reg. 1408/2013). A declaration of compliance with the de minimis regulation, as it applies from time to time, is required from the beneficiary farmer,

d) if the costs exceed the maximum grant amounts, the additional cost will be covered by the beneficiary,

e) in any case, the station should not have been connected - activated, before submitting the application to participate in the Program.

Budget per investment project and aid intensity

Through the Program, a percentage (%) of the cost of the photovoltaic plant and the storage system is subsidized, subject to the maximum grant amounts for the photovoltaic plant and the storage system, as set out in the following tables:

In case the applicant falls into the category of persons with disabilities to a degree of at least 67%, or in a single-parent family or in a family with three children family or in a large family, the table percentages and the maximum subsidy amounts of each category are increased by 10%, regardless of whether it falls in one or more of these categories. In any case, the subsidy rates cannot exceed the total (100%) cost of the PV plant or storage system (battery). Especially for the category of persons with disabilities, the increase of the previous paragraph is additionally applied for the spouse or for his/her dependent children.

Cate gory	Beneficiaries	PV station aid intensity		Battery aid intensity	
		Power ≤ 5kWp	5kWp<Power≤10 .8kWp	Capacity ≤5kWh	5kWh < Capacity ≤10.8kWh
A	Household facilities (Vulnerable households)	65%	60%	100%	100%
B	Household facilities (Individual Income <=€20,000 or Family Income <=€40,000)	35%	25%	100%	100%
C	Household facilities (Individual Income > €20,000 or Family Income > €40,000)	30%	20%	90%	90%
D	Farmers	40%	40%	90%	90%

Category	Beneficiaries	Max PV station subsidy	Max battery subsidy

		Power ≤ 5kWp	5kWp<Power≤10.8kWp	Capacity ≤5kWh	5kWh < Capacity ≤10.8kWh
A	Household facilities (Vulnerable households)	1,200 €/kWp	830 €/kWp	890 €/kWp	820 €/kWp
B	Household facilities (Individual Income <=€20,000 or Family Income <=€40,000)	650 €/kWp	350 €/kWp	890 €/kWp	820 €/kWp
C	Household facilities (Individual Income > €20,000 or Family Income > €40,000)	560 €/kWp	280 €/kWp	800 €/kWp	750 €/kWp
D	Farmers	450 €/kWp	450 €/kWp	600 €/kWp	600 €/kWp

Beneficiaries

1. People (households) and farmers (professional farmers or special status farmers) who, at the time of application of submission, have entered into a relevant Connection Agreement for the PV station and the storage system (if any) have the right to participate in the Program, with the Operator of the Hellenic Electricity Distribution Network.

The beneficiaries are divided into four categories based on the following table.

Category	Beneficiaries
A	Vulnerable households
B	Household facilities (Individual Income <=€20,000 or Family Income <=€40,000)
C	Household facilities (Individual Income > €20,000 or Family Income > €40,000)
D	Farmers

2. A condition for the inclusion of the photovoltaic plant and the storage system (if any) in the project is the absence of public support for the same system (photovoltaic plant with or without storage system) from any other financing program.

3. For categories A, B and C, the photovoltaic station must necessarily be combined with a storage system (battery), while the beneficiaries of the Category D (Farmers) can choose whether the photovoltaic station will be combined with a storage system or not.

4. In the case of a Connection Agreement for a photovoltaic plant without the existence of a battery, in order to submit an application to the Program for Categories A, B and C, the Connection Agreement must first be modified accordingly to include the required storage system.

Eligibility criteria

1. For the inclusion of each application, the consumption provision of the interested party is taken into account, which is also indicated in the Connection Agreement concluded between the applicant and the Operator of the Hellenic Electricity Distribution Network.

2. An application is submitted by the person (household) or the farmer who is recorded as a counterparty of the Operator of the Hellenic Electricity Distribution Network in the Connection Agreement, which has been concluded with the Operator of the Hellenic Electricity Distribution Network for the development of the said photovoltaic plant and the storage system.

3. In order to submit an application, a beneficiary must have a Tax Registry Number, and valid access codes to the tax online services, through which they can be identified, as well as:

a) in the case of households for Categories B and C (Category A is excluded), the person must have submitted an income tax return (E1) in the tax year 2021, either as an obligator of an individual or joint return, or indirectly as "spouse or member of a cohabitation agreement" in case of a joint declaration.

b) In the case of farmers for Category D, to be registered in the Register of Farmers and Agricultural Holdings.

4. In particular, with regard to the eligible beneficiaries of the Program, the following are clarified:

a) Eligible beneficiaries in category A (Vulnerable Households), are the beneficiaries of a social household tariff, upon submission of the application, according to the Register of Vulnerable Clients maintained by the Operator of the Hellenic Electricity Distribution Network.

b) Eligible beneficiaries in category D (Farmers) are exclusively professional farmers and special status farmers, who are registered in the Register of Farmers and Agricultural Holdings.

c) Beneficiaries who had submitted an income tax return in the reference year (2021) as foreign residents are not eligible.

d) Beneficiaries are not eligible who in the reference year (2021) submitted a joint income tax return (specifically as obligator and spouse or member of a cohabitation agreement), if the other member or dependent child of the return was a foreign resident in the reference year (2021).

e) Dependent members who do not independently submit a declaration (i.e. they are not obliged to submit their own individual declaration) may not submit an application for their participation in the Program.

5. In the context of submitting the application, it is noted that:

a) Each person (household) may submit a single application concerning a single residence, for which the following conditions are cumulatively met:

aa) Is the main or secondary residence of the applicant (owned, leased or granted).

ab) It has an active, domestic electricity supply, through which the applicant's residence is identified.

b) For category A (Vulnerable Households), the applicant can submit an application exclusively for the benefit for which he has declared and is entitled to the Social Household Invoice. In case the applicant wishes for a different benefit, he does not fall into Category A (Vulnerable Households) but Category B or C.

c) For category D (Farmers), the applicant may submit more than one application, each of which corresponds to an active electricity supply for agricultural use according to the Register kept by the Operator of the Hellenic Electricity Distribution Network, through which the applicant is also identified.

d) In case of submitting an application for agricultural benefit or agricultural benefits, the applicant (farmer) is allowed to submit an application for his residence also in accordance with para. a) of this paragraph.

e) It is not possible to submit more than one application for the same residence or electricity supply.

f) In case of rejection or cancellation/withdrawal of the submitted application by the applicant himself, subject to paragraph g), the submission of a new application is allowed, as long as there are available resources in the category in question.

g) It is not allowed to cancel/withdraw an application submitted by the same applicant more than two (2) times.

Beneficiaries are required to certify and ensure the accuracy of the information they submit.

Submission period and investment project implementation schedule

All projects and their related costs are eligible, regardless of the date of conclusion of the Connection Agreement and issuance of the documents of article 14, subject to par. 3 of article 8 hereof, i.e. the station must not have been connected - activated before the submission of the application for participation in the Program.

The start date for submitting applications in this call is the 02/05/2023. Grant applications can be submitted by interested parties from the day the Program starts until June 30, 2024 or until all available resources per category are covered.

The time limit for the implementation of the station and the commitment of the electrical space is defined in the Connection Agreement concluded by the Self-Consumer with the Operator of the Hellenic Electricity Distribution Network and does not exceed twelve (12) months from the entry into force of the Agreement.

The deadline for the completion of the physical object is June 30, 2025.

Tool Summary

	Categories	PHOTOVOLTAICS ON THE ROOF
1	Business activity	Agriculture
2	Company size	All
3	Pillars	Green
4	Source of funding	RRF
5	Maximum budget per investment project	Micro budget
6	Purpose of financial aid	Investment
7	Type of aid	Grant
8	Evaluation method	FIFO
9	Obligations and duration after the completion	Long-term

“INNOVATION AND GREEN TRANSITION IN AGRICULTURAL PRODUCT PROCESSING” 2nd CALL

Objective

The objective of the Sub-Project is:

a) To increase the degree of cooperation in the primary sector through collective schemes and/or the adoption of contract farming.

b) The improvement of the position of the farmer in the value chain.

c) To strengthen the competitiveness of products in the markets with research, modern technology and digital tools.

d) The integration of innovation processes and the use of new technologies, but also environmentally friendly processes that limit the phenomenon of climate change.

e) The sustainable development and more efficient management of natural resources.

Each investment plan needs to fulfill at least one of these objectives.

Budget

The public aid amounts to €65,000,000, financed by the Recovery and Resilience Fund for the period 2022-2025.

Categories of aid

1. This call concerns the following categories of aid:

a) Article 14 of section 1 of the General Exemption Rule (GER): "Regional investment aid"

b) Article 18 of section 2 of the GER: "Aids for advisory services to SMEs"

c) Article 19 of section 2 of the GER: "Aids for SME participation in exhibitions"

d) Article 28 of section 4 of the GER: "Innovation aids for SMEs"

e) Article 36 of section 7 of the GER: "Investment aid to companies for exceeding EU standards or for increasing environmental protection in the absence of EU standards".

f) Article 41 of section 7 of the GER: "Investment aid for the promotion of energy production from renewable sources"

2. The sub-project concerns the support of companies active in at least one of the eligible activity sectors of the call.

Eligible expenses

Investments in tangible and intangible assets are eligible provided that the conditions of the applicable article of the General Exemption Rule are met in each case. Investments have reasonable implementation costs and must be documented in writing in a clear, specific, and up-to-date manner in the submitted economic and technical study.

Regional aid expenditure (GER article 14) as they apply each time:

1) Regional investment aid (GER, Article 14)

a) Purchase of land, construction and modernization of properties.

b) Configuration of the surrounding area of the investment unit.

c) Vehicles with which the company transports materials and products (finished and semi-finished), within the premises of the unit. Eligible are electric vehicles, vehicles with zero CO_2 emissions and vehicles that emit CO_2 less than 50g/Km.

d) Purchase, transportation and installation of equipment, including laboratory equipment to the extent that it serves the operation of the unit.

e) Acquisition of all assets belonging to a business unit that has been closed and which is acquired by an investor unrelated to the seller and excludes the simple acquisition of the shares of a business. The purchase of all or part of existing fixed assets, such as buildings, machinery and other equipment, of a business unit, is eligible if the following cumulatively occur conditions:

i. This business establishment has closed or would have closed had it not been purchased.

ii. The purchase is made by the entity of the investment that is not related to the seller.

iii. The relevant transaction is carried out under normal market conditions.

iv. If assets have previously been granted or subsidized through development laws or other aid schemes prior to their purchase, the cost of those assets shall be deducted from the eligible costs of the submitted investment plan linked to the acquisition of a business establishment.

v. For the assets related to mechanical and other equipment, the date of the first acquisition is not more than 10 years from the date of submission of the financing application.

vi. The total costs for the acquisition of all assets belonging to a closed business establishment do not exceed 30% of the eligible costs of the investment.

f) Expenditures for company computerization equipment (such as purchase of telephones facilities, intercom networks, computers and peripheral machines, photocopiers, facility security systems, facility fire protection systems). Computerization equipment includes the costs for remote and intelligent management with the installation of remote-control systems as well as any other investment that leads to a digital upgrade of businesses. Equipment that operates in an environmentally friendly manner and is accompanied by corresponding certifications is eligible if they exist on the market.

g) Expenditures for ensuring accessibility for people with disabilities.

h) Costs for the establishment and modernization of distribution networks (logistics) are eligible if they are part of costs for investment plans in the marketing and processing of agricultural or non-agricultural products and provided that the payment request includes, among other things supporting documents:

i) geospatially tagged topography, and

ii) geospatially tagged photographs and time stamp where the situation before and after the investment is captured.

j) Intangible costs such as acquisition of software and acquisitions of patents, intellectual property rights licenses, trademarks (including investments in digital upgrading of businesses) / Technical specifications and product design / Market research / Corporate identity & branding (logos, corporate presentations etc.) / Design of promotions and materials for companies and products. In addition, it is eligible to obtain quality assurance certificates from competent organizations (such as ISO, HACCP, BRC Global Standards, IFS FoodStandard, GLOBALG.A.P. etc.) which ensure the quality and safety of the food to the consumers.

ii) Intangible assets are eligible for the calculation of investment costs, if they are used exclusively in the business establishment that receives the aid, are depreciable, are purchased in accordance with the terms of the purchase by third parties unrelated to the buyer and are included in the assets of the enterprise to which the aid is granted and remain connected to the project for which the aid is granted for at least five years or three years in the case of SMEs.

2) Expenditure other than regional aid, as defined in the GER

a) Aid for consultancy services to SMEs (GER, Article 18)

aa) Eligible expenses consist of the cost of consulting services provided by external consultants.

ab) The services in question must not be a continuous or periodic activity nor be linked to the normal operating costs of the business, such as regular tax and legal advisory services or advertising services.

ac) Beneficiaries are only SMEs.

b) Aid for participation of SMEs in exhibitions (GER, Article 19)

ba) Eligible are the costs of participating in any exhibitions (hire, installation and management of a stand).

bb) Beneficiaries are only SMEs.

c) Innovation aid for SMEs (GER, Article 28) ca) Eligible are expenses for the acquisition, validation and protection of patents and other intangible assets as well as expenses for consulting and support services in the field of innovation.

cb) Beneficiaries are only SMEs.

d) Investment aid to companies for exceeding EU standards or for increasing environmental protection in the absence of EU standards (GER, Article 36).

da) Eligible are the additional costs that are necessary to exceed the applicable Union standards or to increase the level of environmental protection in the absence of Union standards.

db) Expenditures for the purchase of new vehicles for road transport to comply with published Union standards are eligible goods and products provided that the purchase is made before they come into force.

i. For vehicles with a gross load of up to 3.5 tons, electric vehicles are eligible vehicles with zero CO_2 emissions and vehicles that emit CO_2 less than 50g/Km.

ii. For vehicles of categories N1, N2 and all heavy vehicles in general, zero-emission heavy commercial vehicles and low-emission heavy commercial vehicles as defined in Reg. 2019/1242 are eligible.

dc) When the cost of the investment for environmental protection can be determined in the total investment cost as a separate investment, this cost related to environmental protection constitutes the eligible costs. In all other cases, the cost of the investment in environmental protection is determined on the basis of a similar less environmentally friendly investment that could obviously be made without the aid. The difference between the cost of the two investments determines the cost which is linked to the protection of the environment and constitutes the eligible costs.

e) Investment aid to promote the production of energy from renewable sources (GER, article 41)

ea) Renewable energy production equipment is not supported as an individual action, but as part of the overall productive investment.

eb) Investments in renewable energy sources (RES), including solar energy, will be based on a relevant study of energy requirements and in which an analysis is made of the percentage of coverage of the operating needs of the beneficiary's business. Based on this study, the method of energy substitution is analyzed and the efficiency of the investment of substitution of energy needs by RES is estimated (kWh of produced energy of the RES system / euro of investment, to two decimal places). The relevant study is submitted to the payment request that includes the RES expenditure.

ec) Investments to produce biofuels are eligible only if are used to produce sustainable biofuels that are not based on edible plants.

ed) Eligible costs in RES are considered the additional investment costs that are necessary to promote the production of energy from renewable sources and are calculated as follows:

i. When the cost of the investment for the production of energy from renewable sources can be identified in the total investment cost as a separate investment, for example as an easily identifiable additional component in an existing installation, these costs related to energy from renewable sources constitute the eligible costs

ii. Where the cost of the investment for the production of energy from RES can be determined on the basis of a similar, less environmentally friendly investment, which could obviously be carried out without the aid, this difference between the costs of the two investments determines the cost associated with energy production from renewable sources and constitutes eligible expenditure.

ee) Aid is granted only to new RES installations. No aid is granted or paid after the installation is operational and the aid is independent of production.

Budget per investment project and aid intensity

The limits of the requested budget of each investment project are the following:

- For SMEs the total budget per investment plan needs to be between 500.000 € and 7.500.000 €
- For Large companies the total budget per investment plan needs to be between 2.000.000 € and 12.500.000 €

Regions	**Size of the firm**

	Large	Medium	Small
North Aegean	45%	55%	55%
Crete	40%	50%	55%
East Macedonia-Thrace	45%	55%	55%
Central Macedonia	45%	55%	55%
West Macedonia	40%	50%	55%
Epirus	45%	55%	55%
Thessaly	45%	55%	55%
Ionian islands	40%	50%	55%
West Greece	45%	55%	55%
Central Greece	40%	50%	55%
Peloponnese	40%	50%	55%
South Aegean	30%	40%	50%
East Attica/ West Attica /Pireaus and islands	25%	35%	45%
West Athens Sector	15%	24%	35%

The aid intensity depends on the Region in which the business unit is placed as well as the size of the firm based on the table above.

The evaluation of the submitted proposals will be implemented via the FIFO method and until the available budget of the call is exhausted.

The potential beneficiary has the possibility to request a lower rate of aid intensity, in relation to the aid rates of the table above, for costs included in the regional aid, to receive priority during the evaluation of subsection.

Maximum budget limits per aid category

In the context of this call, the following limitations apply:

1. The maximum requested eligible budget for expenditure on consulting services in SMEs does not exceed 300,000 €.

2. The maximum requested eligible budget for expenses for the purpose of participation of SMEs in exhibitions does not exceed 500,000 €.

3. The maximum requested eligible budget for innovation costs for SMEs does not exceed 500,000 €.

4. The maximum requested eligible budget for the expenses for the purpose of exceeding EU standards or for increasing the protection of the environment in the absence of EU standards does not exceed 2,000,000 €.

5. The maximum requested eligible budget for the costs to promote the production of energy from RES does not exceed 1,000,000 €.

6. For large enterprises, the costs of intangible assets, in the context of regional aid, do not exceed 50 % of the eligible costs of the investment.

7. Real estate acquisition costs, within the framework of regional aid, do not exceed 30% of the eligible costs of the investment.

8. Land acquisition costs (land purchase), within the framework of regional aid, do not exceed 10% of eligible investment costs.

9. Vehicle purchase costs as defined in Article 36 of the GER do not exceed 30% of total eligible budget of the investment plan.

10. The costs in RES as defined in Article 41 of the GER, do not exceed 30% of the total eligible budget of the investment plan.

11. The above limits may not be circumvented by the artificial separation of aid schemes or aid projects.

12. The above actions can be cumulatively included in a business plan, such as this one drawn up and submitted by a legal entity.

Beneficiaries

In the framework of the Sub-Project, legal entities that either belong to the SMEs or to the

large enterprises, except for those specifically defined in the special article of the GER applicable in each case, that keep simple and/or simple books and the date of submission of the aid application and meet one of the following conditions:

a) They are Producer Groups, Producer Organizations, Associations of Organizations Producers, Agricultural Cooperatives, Agricultural Corporate Partnerships and Joint Stock Companies whose majority shares belong to Agricultural Cooperatives of Law 4673/2020 "Agricultural Cooperatives and other provisions".

b) They are Social Cooperative Enterprises of Law 4430/2016 and commercial law companies, apart from those in the above case a), which: apply contract farming under the following terms, conditions and limitations:

ba) if they process and/or trade an agricultural product with a final agricultural product, at least 40% per year, of the value of the materials used in the aided investment is an agricultural product of contract farming. Contracts are concluded between the beneficiary of the aid and the producers of the agricultural product or between the beneficiary and associations of producers (regardless of legal form) operating in any member state of the European Economic Area (EEA).

bb) if they process and/or trade an agricultural product, with a non-agricultural product and at least 40% per year, of the value of the agricultural product used, as raw material, in the supported investment, is an agricultural product of contract farming. Contracts are concluded between the beneficiary of the aid and the producers of the agricultural product or between the beneficiary and associations of producers (regardless of their legal form) operating in any member state of the European Economic Area.

bc) the obligation to implement contract farming starts from the date of completion of the investment implementation and the contracts are at least 3 years long.

bd) after 3 years from the completion of the implementation of the investment and within a period of 2 months, the beneficiary is obliged to provide a signed certificate from a chartered accountant where the above condition of cases ba) and bb) will be documented.

c) They are Social Cooperative Enterprises of Law 4430/2016 and commercial law companies, apart from those in case a) above, which show a degree of verticalization per year, utilizing self-produced agricultural products at a rate of at least 40% of the value of the agricultural product which they use as raw material. The obligation to maintain the verticalization rate begins after the completion of the implementation of the investment and is 3-years. After the 3rd day from the start of the obligation to verticalize the production and within a period of 2 months, the beneficiary is obliged to provide a signed certificate from a chartered accountant, where the above will be documented condition.

d) Beneficiaries may also be considered legal entities under constitution, which complete recommendation procedures before the issuance of the individual aid approval decision.

2. Persons operating in the form of a civil law company may not be considered beneficiaries, apart from Social Cooperative enterprises and joint ventures.

Eligibility criteria

1. CRITERION 1: Maturity of Investment Plan

The maturity of the investment plan concerns the coverage of private participation and is documented with the supporting documents of Appendix I of the call.

2. CRITERION 2: Legal establishment of the beneficiary

The legal establishment of the beneficiary is documented with the supporting documents in Appendix I of the call.

3. CRITERION 3: Green transition

a) At least one action is required from those listed below and described in the submitted economic and technical study:

aa) Processing of biological materials or materials produced by environmentally friendly methods environment, after the completion of the investment.

ab) Investments in building facilities to achieve a higher energy efficiency factor than the minimums provided for in the current institutional national and EU framework.

ac) Investments in mechanical equipment with reduced energy consumption.

ad) Supply of vehicles of the highest available emissions measurement standard, as applicable for each vehicle category.

ae) Investments in RES including RES from solar energy.

af) Investments in infrastructure that contribute to water conservation.

ag) Investments in mechanical equipment that contributes to water conservation.

4. CRITERION 4 : Investment in innovation and digital transformation

At least one investment action is required for the purpose of developing innovative products and/or

modern production methods and processes and are described in the submitted economic and technical study. Investments in modern remote-control systems and recording/monitoring of the production process.

5. CRITERION 5: Sustainability of the investment

a) To determine the viability of the investment, the acceptable limits of the selected performance indicators in the submitted economic and technical study, are:

aa) General liquidity of the Entity before the investment (Current Assets / Short-term liabilities) > 1 in at least one of the last three closed years. It only applies to existing businesses, which have closed at least one management year. It does not apply to companies under incorporation.

ab) Net profit margin of the Entity after the investment (Net profit / total turnover) > 1%

ac) Internal rate of return (IRR) of the Agency after the investment for a period of 10 years > 10

ad) Interest repayment capacity (IAT) of the Agency after the investment < 2

Submission period and investment project implementation schedule

Submission of applications from May 12, 2023, to July 12, 2023

The duration of the implementation of the investment projects is set at 18 months with the possibility of an extension of six (6) months, which will be granted, either for reasons of force majeure, or after special justification. In any case, the deadline for submitting the last application for payment of the aid does not exceed 31 May 2025.

Tool Summary

Categories		**"INNOVATION AND GREEN TRANSITION IN AGRICULTURAL PRODUCT PROCESSING" 2nd CALL**
1	Business activity	Agriculture
2	Company size	All
3	Pillars	Green Innovation
4	Source of funding	RRF
5	Maximum budget per investment project	Large budget
6	Purpose of financial aid	Investment
7	Type of aid	Grant
8	Evaluation method	Mixed
9	Obligations and duration after the completion	Long-term

“INDUSTRIAL DOCTORATES” CALL

The objective

The project aims to satisfy the need for creating links between private companies and University Institutions through industrial research, solving problems in the productive sector through focused industrial research as well as the corresponding transfer of know-how from Greek universities to companies.

The main strategic priorities to which the project contributes are the following:

- Strengthening the connection between universities, as research organizations, and the market, facilitating the transfer of knowledge to the real economy and stimulating innovation.
- Knowledge transfer to companies and applied scientific research to produce innovative products or services.
- Contribute to business innovation and growth, with an emphasis on cutting edge technologies.
- Strengthening the cooperation between private companies and university institutions.
- Training and development of innovative researchers into industrial researchers.
- Providing incentives for private investment.
- Strengthening links between university institutions and businesses.
- Connecting young researchers with the private business sector.
- Promotion of Research and Development programs in cutting edge technologies
- Promoting applied industrial research and strengthening the employment of young researchers to stop the "brain drain".

The application concerns the conduct of industrial or applied research, with a view to export research results to produce innovative products or services, as well as conducting an industrially focused research project.

Budget

The co-financed public expenditure available for the inclusion of the projects in accordance with this invitation amounts to 20,366,069.00 euros, which is financed by the Fund Recovery and Resilience for the period 2022-2025 (RRF budget).

Categories of aid

The support of the projects are grants and will be allocated within the framework of Regulation (EU) no. 651/2014 of the Commission of 17 June 2014 on the declaration of certain categories of aid as compatible with the internal market, pursuant to Articles 107 and 108 of the Treaty (General Exemption Rule), as the Reg. (EU) 651/2014 was amended and is now in force, and the Announcement of the European Commission, C (2022) 7388 final /19-10-2022.

Eligible expenses

The support of the projects are grants and will be allocated within the framework of Regulation (EU) no. 651/2014, as amended and in force.

Based on the amendment of Reg. (EU) 651/2014, aid is not granted to businesses that are problematic. However, they may, by way of derogation, be granted to businesses that were not problematic on 31 December 2019, but became problematic in the period from 1 January 2020 to 31 December 2021.

As a legislative framework for the financing of businesses, article 25 of European Regulation 651/2014 (GER) is applied with the aid intensity at 50% and for research organizations article 2.1.1 point 20 of the Guidelines for Research, with 100% financing [Announcement from the European Commission, C (2022) 7388 final/19-10-2022 "Framework on state aid for research and development and innovation - R&D"] in case of fulfillment of the conditions set by them, to carry out industrial research.

Eligibility rules

Eligibility rules for the costs of the research projects/operations to be financed under the project should be included in the eligible research and development activities (Article 25 of EU 651/2014) described in the GER).

In particular, beneficiaries may receive project funding for expenditure incurred in one of the following eligible expenditure categories:

Category	Max eligible amount for university	Max granted amount for business/ industry	Maximum eligible private participation amount for business/ industry
Doctoral Candidate Fee	-	47.985,00 €	47.985,00 €
Equipment costs	18.145,30 €	5.000,00 €	5.000,00 €
Consumables	4.465,91 €	1.489,76 €	1.489,76 €
Travel/transportation fees	-	1.000,00 €	1.000,00 €
Expenses for participation in conferences	-	600,00 €	600,00 €
Indirect expenses	1.582,78 €	3.925,24 €	3.925,24 €
Total	24.194,00 €	60.000,00 €	60.000,00 €

Budget per investment project and aid intensity

The maximum budget of the proposal cannot exceed the amount of 144,194.00 euros, for the total duration of the project, of which:

- Public Expenditure up to 84,194.00 euros through the TAA (60,000.00 euros for business/industry and 24,194.00 euros for universities) and
- Private Participation up to 60,000.00 euros for the business/industry

The budgeted expenditure for universities amounts to 17% of the total budget of the project-proposal and for Business/Industry 83% of the total budget of the project-proposal.

The university will be financed for all eligible costs (100%) up to the amount of 24,194.00 euros through TAA and at the same time, the business/industry for 50% of eligible costs through TAA (up to 60,000.00 euros), while the remaining 50% is private participation, with a maximum amount of eligible costs, in total from RRF and from the private sector participation, the 120,000.00 euros.

Beneficiaries

a. Universities: The Special Accounts of Research Funds of the Higher Education Institutions Educational Institutions of the Country, as defined in the provision of article 3 of Law 4957/2022 (Government Gazette A΄ 141), whose academic units (Departments/Uniform Schools) organize first, second and third cycle programs.

Scientific Manager of the Project

The Scientific Manager of the project (SM) is designated by a decision of the Research Committee in accordance with article 234 of Law 4957/2022 and the Financing Guide of the E.L.K.E. and is the proposer supervisor of the PhD Candidate.

In particular, for Candidates already enrolled in a Doctoral Studies program Ph.D.s, Scientific Supervisor is designated by the supervisor or a member of the three-member advisory committee of the Doctoral Dissertation, as defined in article 94 of Law 4957/2022.

The Scientific Officer is responsible for the coordination and supervision of the project by scientific and technical side, the correct implementation of the physical object of the project and monitoring the financial object of the project.

The Special Account for Research Funds of universities in collaboration with its Scientific Manager project submits the Funding Application on behalf of the university and the collaborator business/industry in the online system and at the same time they have the responsibility of communication with the managing body.

b. Enterprises/Industries:

Any unit, regardless of its form and size, which carries out economic activity.

The business/industry must, at the time of submitting the application, be operating legally (based or branch) in Greece or in another member state of the European Union and have a VAT number. Companies which, at the time of submission, do not have a head office or branch in Greece pledge that on the date of payment of the aid they will have a facility or branch (not setting up a new, subsidiary company) within the Greek Territory.

The project is addressed to existing businesses regardless of the date of establishment, which intend to provide their facilities as well as financial support for the entire duration of the project.

The basic conditions for the participation of the business/industry - potential beneficiary, according to time of submitting the application, are the following:

- To operate as a legal entity, regardless of its type (e.g. SA, LTD) or as a sole proprietorship.
- To keep aplographic or diplographic books based on the IFRS.
- Not be in bankruptcy, liquidation, or compulsory administration.
- Not to be a problematic business/industry in dificculties as defined in the call. By way of derogation, state aid may be granted to businesses that were not problematic on 31.12.2019 but became problematic on period from 1.1.2020 to 31.12.2021.
- Not be pending against the recovery of aid following a previous decision of the Commission, whereby an aid is declared unlawful and incompatible with the internal market.
- Not to be spin off companies in accordance with the provisions of the law 4864/2021 in which the supervisor or member of the three-member advisory board committee participates.
- To include in the Funding Application costs that have not been funded and have not join another program financed by national or Community resources.
- To pledge that the Funding Application has not been submitted for inclusion and if approved to funding will not be submitted to another program funded by national or community resources.
- No fines have been imposed on the company/industry which have become final and binding force, for violations of labor legislation and in particular for: - Violation of "high" or "very high" severity (3 fines/3 checks) - Undeclared work (2 fines/2 checks), within a period of two (2) years prior to the start date of submission of Applications Funding, for the purposes of art. 40 of Law 4488/2017.
- To undertake that he accepts any relevant audit to verify the statements data from the competent national or community authorities, as well as the cross-checking of these with data coming from the information systems of public services and insurance organizations.

All the above prerequisites are conditions of eligibility and participation in the project. THE non-satisfaction, or incomplete or non-existent documentation of satisfaction, each of which constitutes exclusion condition of the proposed project.

Businesses are excluded from submission:

- Against whom execution of a previous European recovery decision is pending Commission for unduly or illegally paid state aid.
- Which are under bankruptcy, liquidation, or compulsory administration.
- Which are considered problematic according to the definition of article 2, point 18, of the Regulation (EU) 651/2014.

The definition of a problematic business/industry according to Regulation (EU) 651/2014, for businesses that have received rescue or restructuring aid. However, the businesses they have are a potential beneficiary received rescue aid but have repaid the loan and the guarantee contract has been terminated, as well as the companies that have received restructuring aid which has been completed.

Business/Industry Representative on the Project

The company/industry authorizes a representative with experience and knowledge related to the subject of the doctoral thesis, with the task of guiding the PhD Candidate and supervising his/her research project on the part of the company/industry.

The Company/Industry Representative will collaborate with the PhD Candidate as well as the PhD Candidate's academic supervisor for the implementation of the research project.

The Company/Industry Representative should generally have:

- At least 5 years of experience with the subject or related subject of the project.

The Company or Industry Representative may participate, without the right to vote, in the meetings of the three-member advisory committee and the seven-member investigation committee, expressing his/her opinions.

c. PhD candidate

1. Candidates who meet the conditions for enrollment in doctoral study programs in accordance with articles 92 to 95 of Law 4957/2022 (Government Gazette A΄141/21.7.2022) and apply for the preparation of a doctoral thesis, which is part of the field of industrial engineering or applied research of article 96 Law 4957/2022 or

2. Doctoral Candidates for whom one (1) calendar year has not passed from the date of acceptance of their application by the General Assembly of the relevant department in the program and their doctoral thesis may be prepared in accordance with the terms and conditions of article 96 of Law 4957/2022 (Government Gazette A 141) (industrial doctorate).

For this category of Doctoral Candidates eligible expenses are only those incurred after the submission of the relevant Funding Application for the "Industrial Doctorate" project.

The control of the conditions for the selection of doctoral candidates in article 96 is carried out by the Assembly of the Department, in accordance with par. 1 of article 92 (Law 4957/2022), as amended and in force, which has undertaken the support of the program doctoral studies.

For those already enrolled in a doctoral study program, the decision of the Department's Assembly is taken after a written positive recommendation of the three-member advisory committee of article 94 of Law 4957/2022, which establishes that the thesis falls under paragraph 1 of article 96 in combination with the provisions of the Doctoral Studies Regulations of the Department and in the PhD Regulation of the university, if it exists. If the application is accepted, the more specific procedures defined in article 96 of Law 4957/2022 for the preparation of industrial doctorates will apply.

In addition, the funded doctoral research must not be financed (in whole or in part) by any other public, private, European, or international source.

Doctoral Candidates have all the obligations provided for by the internal Regulations of the Institution and the Regulations for Doctoral Studies of the relevant Department, which are drawn up in accordance with par. 2, article 91 of Law 4957/2022.

The above conditions must be met at the time of issuance of the Financing deed and cover the entire duration of the project implementation.

d. Cooperation Protocol

In the context of the research project, among the supporting documents of the relevant Annex III, a Cooperation Protocol between the university, the cooperating company or industry and the PhD Candidate, for the joint implementation of the project and the more specific conditions of cooperation between them.

The Cooperation Protocol is established between the participating entities of the project, to settle issues that will (or may) arise during the execution of the project. The Cooperation Protocol is approved by the Senate of the university, following a recommendation by the Assembly of the Department and it defines the more specific conditions of cooperation for the preparation of the doctoral thesis in business or industry and the export of the research results, the use of infrastructure and equipment of the university, if the research is conducted within the university, the obligations and rights of each contracting party, including the determination of intellectual property rights over the work carried out during the preparation of the doctoral thesis.

Regarding the results of the research project in particular, the Cooperation Protocol should stipulate that the contracting parties (business/industry, university, and PhD candidate) jointly benefit from the results of the project, or otherwise there will be a wide dissemination of the results for the case of university on a non-exclusive and non-discriminatory basis, either through teaching, or through publications and participation in recognized conferences in accordance with Article 2.1.1 of the European Commission Announcement C (2022) 7388 final/19-10-2022 "Framework on State aid for research and development and innovation - R&D".

The cooperation protocol does not negate or challenge the Advisory Decision on Incorporation and is a basic condition for the issuance of the Approving Decision on Granting Aid, of which it is an annex. The cooperation protocol is agreed and co-signed after the issuance of the Approving Decision Granting Aid and is submitted together with the other supporting documents in the call, as condition of public funding.

A Model Cooperation Protocol is listed in the call. The Model is indicative, and the partnership is not required to adopt it as is.

Eligibility criteria

Investment proposals for this call are eligible for grant provided the following:

- The correct submission/entry of all the details of the Funding Application.
- The appropriate completion/drafting and submission of the Funding Application.
- The total budget of the proposal does not exceed the maximum eligible budget per proposal and per beneficiary.
- The total budget per expenditure category does not exceed the maximum eligible amounts.
- The control of the amount of private participation, according to Table of the Maximum Eligible Amounts and determination of private participation.
- The participation of a business/industry based on the filed GEMI Certificate.
- The submission of the necessary supporting documents based on the call.

Funding Applications are independently checked for completeness, based on the time order of their submission, as certified by the date and time of submission of the application.

The evaluation of funding applications is carried out until the available resources are exhausted.

Submission period and investment project implementation schedule

The "Industrial PhD" research projects between universities and businesses/industries, will receive funding through RRF and through private funds, with a duration from twenty-four (24) to thirty-three (33) months, which covers the period from the Approving Decision to Grant the Project Support, until 31.12.2025 at the latest.

Tool Summary

Categories		INDUSTRIAL DOCTORATES
1	Business activity	Manufacture
2	Company size	All
3	Pillars	Innovation
4	Source of funding	RRF
5	Maximum budget per investment project	Small budget
6	Purpose of financial aid	Operating expenses
7	Type of aid	Grant
8	Evaluation method	FIFO
9	Obligations and duration after the completion	Long-term

NSRF

RESEARCH - INNOVATE 2021-2027

Objective

The main objective of the single action "Research - Innovate 2021-2027" is to connect research and innovation with entrepreneurship and to strengthen the competitiveness, productivity and extroversion of businesses towards international markets, with the aim of transitioning to quality innovative entrepreneurship and the increase of domestic added value.

The Action is aimed at businesses, with an emphasis on small and medium enterprises (SMEs), and research organizations. The proposals that will be strengthened concern research and innovation projects. The application area of the Action is the entire territory of Greece.

The main objectives of the action are:

- Providing incentives for private investment in research, technological development and innovation, with an emphasis on SMEs.
- Economic growth based on knowledge and sustainable expertise.
- Integration of new knowledge and innovation into existing as well as new products, services, production systems and value chains.
- Increasing the competitiveness of Greek businesses and strengthening the export profile in the context of international competition.
- Employment of highly qualified and specialized scientific potential (Brain Gain).
- Connecting the academic with the productive sector.

The Action is primarily aimed at satisfying the needs of businesses and other entities active in the research and innovation ecosystem, covering the maximum possible range of potential Beneficiaries.

The Funding Applications that will be strengthened in the context of the Action can be submitted either by individual small and medium enterprises, or by groups of enterprises, or by partnerships of enterprises with research organizations.

The Action "Research - Innovate 2021-2027" will include four (4) interventions:

I. Research and Development by Enterprises

II. Business Partnerships with Research Organizations

III. Utilization of Research Results

IV. Seal of Excellence for businesses

The main objective of intervention I "Research and Development by Businesses" is the creation of new research and scientific/technical staff positions through the support of research, the promotion of innovation and the strengthening of business networking. The main objective of intervention II "Partnerships between Businesses and Research Organizations" is to promote collaborations/partnerships between businesses and research organizations. Intervention III "Utilization of Research Results" aims to promote research to the next level of technological readiness, based on results produced in previous research projects. Finally, intervention IV "Seal of Excellence for Businesses" aims to support research and innovation through the financing of proposals of significant value submitted by Greek SMEs within the framework of the "Horizon Europe" Program of the European Union (EU) and received the Seal of Excellence. The Seal of Excellence is the high-quality label awarded to projects that were submitted to the above program, deemed worthy of funding, but did not receive funding due to exhaustion of the available budget.

Budget

The total Public Expenditure of the Action amounts to 300,000,000 euros.

Beneficiaries

Potential Beneficiaries of the Action are a) Businesses and "Other entities treated as businesses" and b) Research organizations and "Other entities treated as research organizations". To participate in the Action, businesses must be legally incorporated and operate in Greece or another European Union Member State either as legal entities or as sole proprietorships. Excluded are troubled businesses as well as businesses for which a decision to recover support from the EU is pending.

In comparison, for each of the four interventions:

I. Research and Development by Enterprises

Intervention I is addressed to existing Businesses regardless of the date of establishment. Potential beneficiaries are either a small and medium-sized enterprise (SME) or Business Groups in which at least one necessarily is an SME.

II. Business Partnerships with Research Organizations

Intervention II concerns partnerships of existing companies, regardless of size and date of establishment, with research organizations, with companies as the main recipients.

In partnerships of two or three or four partners - bodies, one must necessarily be an SME. In partnerships of more than four partners - bodies, two must necessarily be businesses and at least one must be an SME.

III. Utilization of Research Results

Potential beneficiaries of Intervention III are existing individual small and medium enterprises (SMEs).

IV. Seal of Excellence for businesses

Potential beneficiaries are small and medium-sized Greek companies that received the Seal of Excellence for research and development projects.

Eligible expenses

As far as it concerns the Investments and the eligible expenses, the Funding Applications for research projects that will be submitted will concern the 8 sectors of the National Smart Specialization Strategy (NSSES).

1. Materials, Construction & Industry
2. Tourism, Culture & Creative Industries
3. Agriculture Food Chain
4. Environment & Circular Economy
5. Life Sciences, Health, Medicines
6. Transportation & Supply Chain
7. Sustainable Energy
8. Digital Technologies

Budget per investment project and aid intensity

For all interventions, the costs eligible for funding should be included in eligible activities described in the General Exemption Regulation (Regulation (EU) No. 651/2014, as amended and in force. The projects that will be proposed will be eligible if they concern industrial research, experimental development, feasibility studies.

The maximum total budget of the Funding Application is (indicatively):

I. Research and Development by Businesses: €800,000

II. Business Partnerships with Research Organizations: €2,000,000

III. Utilization of Research Results: €2,000,000

IV. Seal of Excellence for businesses: At the limit of approved budget by Horizon Europe.

The duration of implementation of the submitted project proposals must not exceed thirty-six (36) months.

The proposals of Intervention IV "Seal of Excellence for businesses" will have duration equal to that approved by the "Horizon Europe" Program.

Eligibility criteria

The evaluation of proposals will be based on specific criteria, per Intervention, which will be described in the Detailed Call for Action. For these, care will be taken to harmonize them with the criteria of the Horizon Europe (HEU) program of the EU for research and innovation of the period 2021-2027 and will mainly concern:

- Scientific and technical excellence
- Results and Impact
- Quality and efficiency of the Implementation

Especially for project proposals with a Seal of Excellence, the evaluation will not concern the scientific subject of the proposal and will be limited to checking the fulfillment of the other conditions for participation in the Action.

The evaluation will be direct in Intervention III "Utilization of Research Results" based on the order of submission of the proposals and until the exhaustion of the available budget. The same applies to project proposals with a Seal of Excellence (Intervention IV).

The evaluation will be comparative in Interventions I "Research and Development by Businesses" and II "Partnerships of Businesses with Research Organizations".

Submission period

The start and end of submission of proposals will be defined in the Ministerial Decision of the Detailed Call for Action "Research - Innovate 2021-2027", which is planned to be issued within the fourth quarter of the year.

The submission of Funding Applications (proposals) will be implied electronically in the Greek language through the state subsidy information system (OPSKE).

Tool Summary

Categories		RESEARCH - INNOVATE 2021-2027
1	Business activity	Manufacturing, Tourism, Services, Agriculture
2	Company size	SMEs
3	Pillars	Innovation
4	Source of funding	NSRF
5	Maximum budget per investment project	Medium budget
6	Purpose of financial aid	Investment
7	Type of aid	Grant
8	Evaluation method	comparative
9	Obligations and duration after the completion	Short term

"

"ENERGY SAVE IN BUSINESS" - IMPROVING THE ENERGY EFFICIENCY OF MICRO, SMALL AND MEDIUM TRADE, SERVICE AND TOURISM ENTERPRISES

Objective

The action *" Energy Save In Business " - Improving the Energy Efficiency of Very Small, Small and Medium Trade, Services and Tourism Enterprises* is part of the policies and measures of the National Energy and Climate Plan (ESEK), which defines in detail the plan action to achieve specific energy and climate targets by 2030. Key elements for the ESEK are improving energy efficiency by implementing the strategy for building renovation in the residential and tertiary sectors and improving the energy efficiency and competitiveness of the industrial sector. The application area of the Action is the entire territory of Greece.

The proposed program is part of an effort to implement the green transition and is related to the following climate and environmental objectives set out in EU Regulation 2020/852:

- limiting climate change
- adaptation to climate change
- transition to a circular economy

The implementation of energy efficiency measures in businesses can contribute significantly to the achievement of national energy saving targets. Therefore, it is important to strengthen interventions to improve the energy efficiency of the country's businesses. In this context, savings are expected to result from:

a) the energy upgrade of the building infrastructure with interventions in the building shell, upgrade of internal electrical installations, upgrade of cooling/heating systems, upgrade or integration of new materials and equipment to reduce energy losses, upgrade of lighting equipment, etc., and

b) the installation and certification of energy management systems and automation devices.

For each project that will be submitted and subsidized under the program, the minimum energy-environmental goal is determined as follows:

- reduction of emitted pollutants (CO_2) by at least 35%
- primary energy savings of at least 35%
- upgrade of the energy category based on PEA by at least three (3) energy classes in relation to the existing classification (or mandatory B' class when it comes to a radical renovation) if it is an upgrade of building infrastructure that falls under the provisions of Law 4122/2013.

Budget

The public expenditure budget of the action amounts to a total of €200 million and will be divided separately into €100 million for the Trade and Services sectors and €100 million for the Tourism sector. The action is financed by resources of the Recovery and Resilience Fund and the distribution of resources will be done at the district level.

Beneficiaries

Within the framework of the Action, existing medium, small and very small enterprises are strengthened, as they are defined in Commission Recommendation 2003/361/EC. All businesses in the trade, services and tourism sectors are eligible for the Action.

The basic conditions for participation, among others, are:

- To have established a business, eligible for the activity code numbers KAD Action until 31/12/2020.
- To have closed before the date of electronic submission of the financing proposal at least two (2) management years of twelve months duration.
- To achieve at least the minimum energy target, according to the relevant Section.

Eligible expenses

The eligible expenses are divided into costs for the implementation of energy upgrading interventions (energy-efficient retrofitting), which fall under the General Exemption Regulation, and other supporting costs (i.e. costs necessary for the preparation, submission and monitoring of the application as well as the final control of the achievement of the minimum energy objectives), which fall under the De Minimis Regulation. Eligible are interventions (energy-efficient retrofitting) of the following:

- interventions to upgrade the energy of the building shell such as thermal insulation of opaque structural elements, replacement of transparent structural elements, installation of shading systems
- interventions to upgrade the energy of the lighting system, both internal and external, such as replacement of light fixtures with new LED technology, installation of automations for coupling artificial with natural lighting, installation of automations to reduce consumption due to the absence / presence of users,
- energy saving interventions in space heating systems such as replacing boilers with heat pumps, strengthening the thermal insulation of distribution networks, replacing terminal units with new, more energy efficient ones,
- energy saving interventions in space cooling systems such as replacing coolers with newer technology heat pumps or coolers, strengthening the thermal insulation of distribution networks, replacing terminal units with new more energy efficient ones,
- energy saving interventions in space ventilation systems such as replacement of K.K.M. of newer technology that have the recovery of the energy of the discharged air, reinforcement of thermal insulation of distribution networks, replacement of fan units with new more energy efficient ones controlled by electronic devices (inverters),
- energy saving interventions in domestic hot water systems such as replacing boilers with heat pumps, strengthening the thermal insulation of distribution networks, replacing storage units with new more energy efficient ones,
- installations of renewable energy systems, such as solar thermal systems, photovoltaic systems, energy storage systems, small wind turbines and geothermal A/T including geo-exchangers,
- installation of automation, control and management systems at a local but central level

Maintenance work, the installation of non-permanent mobile elements (for example curtains etc.), other equipment that does not contribute to the energy upgrade of the building, employer contributions for construction work and costs related to customs duties are not eligible.

Within the framework of the Action, it is possible to finance the following supporting services:

- Energy Auditor Services, as defined by Law 4342/2015 and the relevant H.A. 178679/04.07.2017.
- Energy Inspector Services, as defined by Law 4122/2013 and the relevant H.A. 178581/30-06-2017 for the issuance of Energy Performance Certificates (initial and final) for the cases of buildings that fall within the scope of KEnAK (Regulation on the Energy Performance of Buildings).
- Development and Certification of an energy management system according to the ISO 50001 standard.

- Monitoring and Management Consultant Services
- Elaboration of studies and research of any kind necessary for the implementation of the report of the results of the energy audit related to the purposes of the Action.

Budget per investment project and aid intensity

For the Trade and Services sectors, projects with a total investment budget (subsidized per person) of up to €100,000 are supported. For the Tourism sector, projects with a total investment budget (subsidized per person) from €50,000 to €500,000 are supported. The capacity of the unit should be up to one hundred (100) beds. The upper limits do not include VAT, which is not an eligible expense.

The duration of the implementation of each proposal cannot exceed eighteen (18) months from the date of issuance of the decision to include the proposal.

The percentages of support for investment projects for the total eligible costs of the investment projects are as follows:

For medium enterprises the percentage is 40%. For small and very small businesses, concerning the Energy saving expenditures (Regulation (EU) No 651/2014 (Article 38)) the percentage is 50%. For small and very small businesses, concerning Support costs (De Minimis) the percentage is 40%.

Eligibility criteria

The evaluation of the investment plans will be comparative, in the context of an overall score that will be obtained based on the following criteria:

- K1: Reduced annual primary energy savings (kWh/m2)
- K2 Special Annual Primary Energy Saving (reduced to operating hours)
- K3 Investment Efficiency: the ratio of the annual primary energy Saving (kWh/m2) to the cost of the Investment (in reduced sizes).

Total Rating of investment plan application: K = ΣKi x bi

Submission period

In order to be included in the program, the potential beneficiaries should submit an application for investment project financing for evaluation in accordance with the detailed procedure that will be determined in the Program Invitation which is planned to be issued within 2023. Applications must be submitted through the Program's Information System.

Tool Summary

Categories		"ENERGY SAVE IN BUSINESS" - IMPROVING THE ENERGY EFFICIENCY OF MICRO, SMALL AND MEDIUM TRADE, SERVICE AND TOURISM ENTERPRISES
1	Business activity	Tourism,Services,Commerce
2	Company size	SMEs
3	Pillars	Green
4	Source of funding	NSRF
5	Maximum budget per investment project	Small budget
6	Purpose of financial aid	Investment
7	Type of aid	Grant
8	Evaluation method	comparative
9	Obligations and duration after the completion	Short term obligations

BASIC SME DIGITAL TRANSFORMATION (ACTION 1 OF THE "SME DIGITAL TRANSFORMATION" BUNDLE)

Objective

The "Action 1 - Basic Digital Transformation of SMEs" belongs to the bundle of state support actions "Digital Transformation of SMEs" in the "Competitiveness" Program of the NSRF 2021 - 2027. The main objective of the Action is the digital upgrade of SMEs by implementing basic digital transformation actions so that the supported enterprises are able to respond to the increased digital demands of the modern market. The Action encourages, as a matter of priority, the implementation of targeted digital transformation actions that contribute to an extroverted, innovative, competitive and sustainable critical production of products and services of higher added value. The application area of the Action is the entire territory of Greece.

Budget

The total budget of the bundle of state support actions "Digital Transformation of SMEs" in the "Competitiveness" Program of the NSRF 2021 - 2027, amounts to €300,000,000. The budget for this action amounts to €90,000,000.

Beneficiaries

The Action concerns companies that have not yet integrated important information and telecommunications technologies (ICT) in their operation and aims to cover basic deficiencies in applications and equipment.

Existing medium, small and very small businesses, as defined in Commission Recommendation 2003/361/EC, can apply for funding in the Action. The basic conditions for the participation of companies that apply for financing are, among others, the following:

- To have closed at least one (1) full administrative use.
- To be active in one of the eligible activity code numbers KAD of the investment plan for one (1) at least (1) year.
- To have at least three (3) EMEs (annual work units) of dependent work during the calendar year preceding the submission of the funding application.

Eligible expenses

The basic expenses covered by Action 1 – Basic Digital Transformation of SMEs concern:

- Equipment Expenses with indicative expenses: Supply of digital office equipment, upgrade of internal data transfer networks, interaction with employees, customers or suppliers, etc.
- Software Expenses with indicative costs: Supply of basic business resource & process management applications (eg ERP, WMS, KPIs, EDI, BMPS, etc.), image processing, 3D models and CAD, digital security, customer and supply chain management, production optimization, etc.
- Costs for the provision of services related to the digital upgrade with indicative costs: Consulting support for monitoring the implementation of the investment plan, technical support for the implementation of the investment plan, installation or configuration of applications included in the financing application.

Budget per investment project and aid intensity

The minimum and maximum total supported budget of the funding application is set from €18,000 to €30,000.

The percentages of support based on the EU Regulation 1407/2013 (De Minimis) for all Regions of Greece (except the Fair Transition Areas), is 50%. Concerning the Fair Transition Areas, Public Subsidy is up to 60%. Concerning the Fair Transition Areas, Private Participation is up to 40%.

The Fair Transition Areas are as follows:

- Regions: Western Macedonia, North Aegean, South Aegean, Crete
- Municipalities: Megalopolis, Gortynia, Tripoli, Oichalia.

The maximum duration of completion of the physical and financial object of the investment project cannot exceed nine (9) months, from the date of issuance of the Incorporation Decision.

The subsidized budget of the funding application may not exceed three times the highest turnover achieved in one of the three (or less if the company does not have three) management periods preceding the year of submission of the funding application, with a maximum amount of €30,000.

Submission period

Funding applications are evaluated using the direct process (FiFo) method. 23/02/2023 is set as the start date for the electronic submission of funding applications to the state subsidy information system (OPSKE Portal). Submitting a funding request is allowed either only in "Action 1 - Basic Digital Transformation of SMEs" or only in "Action 2 - Advanced Digital Transformation of SMEs" or only in "Action 3 - Cutting Edge Digital Transformation of SMEs".

Tool Summary

Categories		BASIC SME DIGITAL TRANSFORMATION (ACTION 1 OF THE "SME DIGITAL TRANSFORMATION" BUNDLE)
1	Business activity	Manufacturing, Tourism, Services, Commerce
2	Company size	SMEs
3	Pillars	Digital
4	Source of funding	NSRF
5	Maximum budget per investment project	Micro budget
6	Purpose of financial aid	Investment
7	Type of aid	Grant
8	Evaluation method	FIFO
9	Obligations and duration after the completion	Short term obligations

ADVANCED SME DIGITAL TRANSFORMATION (ACTION 2 OF THE "SME DIGITAL TRANSFORMATION" BUNDLE)

Objective

"Action 2 - Advanced Digital Transformation of SMEs" belongs to the bundle of state support actions "Digital Transformation of SMEs" in the "Competitiveness" Program of the NSRF 2021 - 2027. The main objective of the Action is the upgrading of SMEs through the utilization of advanced systems and technologies with which can improve their position in international markets, strengthen operational flexibility, improve the production process and also upgrade their competitiveness. The Action encourages, as a matter of priority, the implementation of targeted digital transformation investment projects that contribute significantly to an extroverted, innovative, competitive and sustainable operation of companies producing products and providing services of higher added value. The application area of the Action is the entire territory of Greece.

The Action concerns businesses that aim to expand their digital and technological maturity with integrated investments in new ICT that will upgrade their competitiveness.

Budget

The total budget of the bundle of state support actions "Digital Transformation of SMEs" in the "Competitiveness" Program of the NSRF 2021 - 2027, amounts to €300,000,000. The budget for this action amounts to €150,000,000.

Beneficiaries

Existing medium, small and very small businesses, as defined in Commission Recommendation 2003/361/EC, can apply for funding in the Action. The basic conditions for the participation of companies that apply for financing are, among others, the following:

- To have closed at least one (1) full administrative use.
- To be active in one of the eligible activity code numbers KAD of the investment plan for at least one (1) year.
- To have at least one (1) eligible activity code numbers KAD of activity, when submitting the application for financing the investment plan.
- The investment should exclusively concern activity code numbers KAD contained in Appendix XI.
- To have at least five (5) EMEs of dependent work during the calendar year preceding the submission of the funding application.
- Work on the investment project has not started prior to the submission of the support application.
- To collect at least a grade of 80 in the digital maturity questionnaire of this Call.

It is pointed out that the co-location of companies is not allowed, so that it is not possible to use the equipment and/or the software of the supported investment by another company. The term co-location means the establishment of the supported enterprise in the same, non-distinct space with another enterprise.

Eligible expenses

The basic expenses covered by the Action concern:

- Equipment with indicative costs: Supply of sophisticated plant or personnel operation systems, production automation with robotic systems, CNC machines, 3D printers, 3D scanners, upgrade of internal data transfer networks, supply of sophisticated technological systems and mechanical equipment for the production of Industry 4.0 systems and equipment ., security systems and equipment (e.g. space surveillance, cyber-protection, etc.), automation systems, robotic systems, digital sensors and controllers, digitally controlled mechanical equipment, advanced digital production systems, etc.
- Applications/software, with indicative costs: Supply of modern applications for management of business resources & processes (eg ERP, WMS, EDI, BMPS, etc.), image processing, 3D

models and CAD, IoT, Big data analysis of large volumes, digital security, customer management and supply chain, artificial intelligence tools, production optimization, service upgrade, digital facility control, etc.

- Services related to the digital upgrade with indicative costs: Technical support for the configuration and integration of the new systems in the operation of SMEs, system certification, etc.

The minimum and maximum total supported budget of the funding application is set from €50,000 up to €650,000.

The maximum duration of completion of a physical and financial object is fifteen (15) months, from the date of issuance of the Incorporation Decision.

The subsidized budget of the investment project may not exceed three times the highest turnover achieved in one of the three (or less if the company does not have three) management periods preceding the year of submitting the funding application, with a maximum amount of of €650,000.

The investment projects that will be submitted should comply with the conditions of the financial regime of Regulation EU 651/2014 set out in Articles 13 "Scope of application of regional support ", 14 "Regional investment support ", 17 "Investment support to SMEs" and 18 " support for consultancy services to SMEs".

Aid intensity

For the costs supported under Article 14 "Regional investment support" of the General Investment Fund and their intensities are set out as follows concerning costs for *Equipment* and *Software* (Map of Regional Support 2022-2027):

- Prefectures of North Aegean, Crete, East Macedonia –Thrace, Central Macedonia, West Macedonia, Epirus, Thessaly, Ionian Islands, West Greece, Sterea Hellas, Peloponnese: 50% Public Subsidy for both medium enterprises and small – very small enterprises
- Prefecture of South Aegean: 40% Public Subsidy for medium enterprises and 50% for small – very small enterprises
- Prefecture of Western Sector of Athens: 25% Public Subsidy for medium enterprises and 35% for small – very small enterprises
- Prefecture of Eastern Attica: 35% Public Subsidy for medium enterprises and 45% for small – very small enterprises
- Prefecture of Western Attica: 35% Public Subsidy for medium enterprises and 45% for small – very small enterprises
- Prefecture of Piraeus and Islands: 35% Public Subsidy for medium enterprises and 45% for small – very small enterprises.

It is pointed out that the investment plans based on Article 14 should have the character of an initial investment.

For the expenses supported under Article 17 "Investment support to SMEs" of the Reg. EU 651/2014 (for businesses in the Central, North and South Sectors of Athens only), concerning costs for *Equipment* and *Software*, the Public Subsidy is up to 10% for medium enterprises and up to 20% for small – very small enterprises.

For the expenses supported under Article 18 "Investment support to SMEs" of the Reg. EU 651/2014 concerning costs for Services, the Public Subsidy is up to 50% for all SMEs.

Submission period

Funding applications are evaluated using the direct process (FiFo) method. 23/02/2023 was set as the start date for the electronic submission of funding applications to the state subsidy information system (OPSKE Portal). The Call is open until the available budget per District Category is exhausted.

Tool Summary

Categories		ADVANCED SME DIGITAL TRANSFORMATION (ACTION 2 OF THE "SME DIGITAL TRANSFORMATION" BUNDLE)
1	Business activity	Manufacturing, Tourism, Services, Commerce
2	Company size	SMEs
3	Pillars	Digital
4	Source of funding	NSRF
5	Maximum budget per investment project	Small budget
6	Purpose of financial aid	Investment
7	Type of aid	Grant
8	Evaluation method	FIFO
9	Obligations and duration after the completion	Short term obligations

LEADING SME DIGITAL TRANSFORMATION (ACTION 3 OF THE "SME DIGITAL TRANSFORMATION" BUNDLE)

Objective

"Action 3 - Digital Transformation of Leading SMEs" belongs to the bundle of state support actions "Digital Transformation of SMEs" in the "Competitiveness" Program of the NSRF 2021 - 2027. The main objective of Action 3 is the upgrading of SMEs with cutting-edge technologies or advanced digital systems of the 4th industrial revolution and additionally the coverage of individual needs in information and communication technologies (ICT) that expand their productivity and competitiveness. The Action encourages, as a matter of priority, the implementation of targeted digital transformation investment projects that contribute to an extroverted, innovative, competitive and sustainable critical production of products and services of higher added value. The application area of the Action is the entire territory of Greece.

The Action concerns companies that have already integrated ICT in many of their operations and now seek to implement integrated investments in cutting-edge technologies or 4th industrial revolution solutions.

Budget

The total budget of the bundle of state support actions "Digital Transformation of SMEs" in the "Competitiveness" Program of the NSRF 2021 - 2027, amounts to €300,000,000. The budget for this action amounts to €60,000,000.

Beneficiaries

Existing medium, small and very small businesses, as defined in Commission Recommendation 2003/361/EC, can apply for funding in the Action. The basic conditions for the participation of companies that apply for financing are, among others, the following:

- To have closed at least one (1) full administrative use.
- Be active in one of the eligible activity code numbers KAD of the investment plan for at least one (1) year
- Have at least nine (9) EMEs of dependent work during the calendar year preceding the submission of the funding application.
- Work on the investment project has not started prior to the submission of the support application.
- To collect at least a grade of 70 in the invitation's digital maturity questionnaire.

It is pointed out that the co-location of companies is not allowed, so that it is not possible to use the equipment and/or the software of the supported investment by another company. The term co-location means the establishment of the supported enterprise in the same, non-distinct space with another enterprise.

Eligible expenses

- The basic expenses covered by the Action concern:
- Equipment, with indicative costs: Digitally controlled E/M equipment, sophisticated remote plant operation systems, automation of the various stages of the value chain (production – transport – storage) with robotic systems, upgrading of internal data transfer networks, digital technological systems: interaction with employees , customers or suppliers, Industry 4.0, digitally controlled systems, state-of-the-art mechanical equipment for the production of Industry 4.0 systems, autonomous machines, robotic systems, augmented reality, state-of-the-art mechanical equipment for the production of state-of-the-art systems for space security, etc.
- Applications/Software, with indicative costs: Provision of applications of increased intelligence of administrative and financial planning, digital security, customer and supply chain management, data analysis with artificial intelligence tools, production optimization, upgrading of services provided, block chain, etc.
- Services related to the digital upgrade, with indicative costs: Consulting and technical support for the configuration and integration of the new systems in the operation of SMEs, system certification, etc.

The minimum and maximum total supported budget of the funding application is set from €200,001 up to €1,200,000. The subsidized budget of the investment plan may not exceed three times the highest turnover achieved in one of the three (or less if the company does not have three) management periods preceding the year of submission of the funding application.

The maximum duration of completion of a physical and financial object is eighteen (18) months, from the date of issuance of the Incorporation Decision.

When submitting the application, the company must choose the financial support scheme. There is the option of choosing either EU Regulation 651/2014, Article 13 "Scope of application of regional support ", Article 14 "Regional investment support " and Article 18 " support for consultancy services to SMEs" or EU Regulation 1407 /2013 (De Minimis). The choice of status is mandatory for the submission of the Funding Application.

The support percentages of the investment projects and the private participation of the beneficiary of the support for the total supported costs of the investment projects are, as the case may be, as follows:

Aid intensity

For the costs supported under Article 14 "Regional investment support" of the General Investment Fund and their intensities are set out as follows concerning costs for *Equipment* and *Software*:

- Prefectures of North Aegean, Crete, East Macedonia –Thrace, Central Macedonia, West Macedonia, Epirus, Thessaly, Ionian Islands, West Greece, Sterea Hellas, Peloponnese: 50% Public Subsidy for both medium enterprises and small – very small enterprises
- Prefecture of South Aegean: 40% Public Subsidy for medium enterprises and 50% for small – very small enterprises
- Prefecture of Western Sector of Athens: 25% Public Subsidy for medium enterprises and 35% for small – very small enterprises
- Prefecture of Eastern Attica: 35% Public Subsidy for medium enterprises and 45% for small – very small enterprises
- Prefecture of Western Attica: 35% Public Subsidy for medium enterprises and 45% for small – very small enterprises
- Prefecture of Piraeus and Islands: 35% Public Subsidy for medium enterprises and 45% for small – very small enterprises.

It is pointed out that the investment plans based on Article 14 should have the character of an initial investment.

For the expenses supported under Article 18 "Investment support to SMEs" of the Reg. EU 651/2014 concerning costs for Services, the Public Subsidy is up to 50% for all SMEs.

The percentages of support based on the EU Regulation 1407/2013 (De Minimis) for all Regions of Greece (except the Fair Transition Areas), is 50% Public Subsidy. Concerning the Fair Transition Areas, Public Subsidy is up to 60% Public Subsidy and up to 40% Private Participation

The Fair Transition Areas are as follows:

- Regions: Western Macedonia, North Aegean, South Aegean, Crete
- Municipalities: Megalopolis, Gortynia, Tripoli, Oichalia.

Funding applications are evaluated using the direct process (FiFo) method.

Submission period

The start date for the electronic submission of funding applications to the state subsidy information system (OPSKE portal) was set for 23/02/2023. The Call is open until the available budget per District Category is exhausted.

Tool Summary

Categories		LEADING SME DIGITAL TRANSFORMATION (ACTION 3 OF THE "SME DIGITAL TRANSFORMATION" BUNDLE)
1	Business activity	Manufacturing, Tourism, Services, Commerce
2	Company size	SMEs
3	Pillars	Digital
4	Source of funding	NSRF
5	Maximum budget per investment project	Medium budget
6	Purpose of financial aid	Investment
7	Type of aid	Grant
8	Evaluation method	FIFO
9	Obligations and duration after the completion	Short term obligations

ACTION 1 – GREEN TRANSFORMATION OF SMES (OF SME GREEN TRANSITION BUNDLE OF ACTIONS)

Objective

The Action entitled "GREEN TRANSFORMATION OF SMEs" will be implemented with resources from the "Competitiveness" Program of the NSRF 2021 - 2027 in a total amount of €300,000,000 and aims at the operational upgrading of the country's small and medium enterprises.

It is one of the two distinct actions of the "GREEN TRANSITION SME" set of actions, which cover targeted needs of SMEs, depending on the amount of their investment plans. In particular, Action 1 – Green Transformation of SMEs, concerns companies with a subsidized investment plan budget from €200,001 to €1,000,000 (choice of either EU REGULATION 1407/2013/De minimis or EU REGULATION 651/2014/ GAC). Action 2 – Green SME Productive Investment, concerns businesses with a subsidized investment project budget of €30,000 to €200,000 (REGULATION E.E. 1407/2013 (De minimis). It should be noted that submitting a funding application is allowed either only in "Action 1 – "Green Transformation of SMEs" or only in "Action 2 – "Green Productive Investment of SMEs".

This Action 1 - "Green Transformation of SMEs" encourages investment projects aimed at the utilization and development of modern technologies, the upgrading of the products produced and/or services provided and their activities in general, rewarding actions that utilize modern technologies, infrastructures and best practices in matters of energy upgrading, circular economy and adoption of clean energy sources. The Action is co-financed by the European Union, in particular by the European Regional Development Fund (ERDF) and by the Greek State. The application area of the Action is the entire territory of Greece.

Beneficiaries

Existing medium, small and very small businesses, as defined in Commission Recommendation 2003/361/EC, can submit a proposal to the Action.

The eligible activity code numbers (KAD), depending on the choice of financial support scheme, are indicated in the detailed Call for Action. The basic conditions for the participation of potentially benefiting companies are the following:

- Have at least one (1) complete closed management year before the date of electronic submission of the funding application.
- To be substantially active (Main Activity Code or Activity Code with the highest revenue) in one (1) eligible activity code numbers KAD activity of this call before the date of electronic submission of the funding application.
- Have the eligible investment bank(s) of this call before the date of electronic submission of the funding application.
- Have at least three (3) full-time or part-time dependent employment in the calendar year preceding the submission of the funding application. This will be confirmed based on the declared data held for this company in the ERGANI information system.
- Work on the investment project has not started before the submission of the funding application.
- To declare as place/places for the implementation of the actions of this action exclusively one category of Region.
- To operate exclusively as businesses of a corporate/commercial nature
- To meet the conditions of application of the EU Regulation on which the financial support scheme is based, which they will necessarily choose when submitting the funding application. There is the option of choosing either EU Reg. 651/2014 or EU Reg. 1407/2013 (De minimis).

Budget

The subsidized budget of each investment project ranges from €200,001 to €1,000,000. The subsidized budget of the investment project may not exceed twice the highest turnover achieved in one of the three (or less if the company does not have three) management periods of the year preceding the submission of the funding application with a maximum amount of of €1,000,000. The amounts of the budget that will be given with Reg. EU 651/2014 cannot exceed the limit of €150,000,000 per year.

The maximum duration of completion of the physical and financial object of the investment project cannot exceed twenty-four (24) months, from the date of issuance of the Incorporation Decision.

Budget per investment project and aid intensity

When submitting the application, the company must choose one of the two financial support regimes. The choice of status is mandatory for the submission of the Funding Application and cannot be changed at a later stage. The maximum grant limit is set at €500,000 per VAT number.

The percentage of the subsidy may receive an additional percentage of 10% of the Public Subsidy if "Green Transition" GREEN costs are included at a percentage of 20% of the eligible budget of the investment plan when the investment plan is included. The above increased grant rate will remain fixed during the stage of interim verifications and payments. The specific increase is confirmed if "Green Transition" costs of at least 20% of the total eligible budget of the investment project are realized and certified during the final verification stage.

The percentage of the subsidy is up to 40% - except for the special cases (Western Sector of Athens, Eastern Attica, Western Attica, Piraeus, Islands) that follow the EU Regulation. 651/2014 (Article 14) whose rates are described in detail in the Invitation. The percentage of the grant may receive a 10% increase, provided that "Green Transition" costs of at least 20% of the total eligible budget of the investment project are realized and certified during the final verification stage.

Eligible expenses

The eligible expenses are the following:

- Buildings, facilities and surrounding area
- Machinery – Equipment (Contractual Expenses)
- Equipment (GREEN)
- Certification of Products - Services - Processes
- Packaging Design – Label – Branding Services
- Advertising and Outreach Expenses
- Participation in trade fairs
- Technical Studies & Consulting Services
- Means of Transport (GREEN) – Mandatory electric
- Salary cost of new employees – (new staff from 1 to 3 EME)
- Indirect costs

The date of start of expenditure eligibility is defined as the date of electronic submission of the funding application.

Maximum duration of completion of physical and financial object: Twenty-four (24) months from the date of issuance of the Incorporation Decision.

The evaluation of the applications will be immediate (First Come First Served) and the investment plans will be examined according to the order they are submitted until the Action budget is exhausted per Region category and in any case until the regulations expire, based on the standard participation conditions as well as scoring criteria as defined in the Invitation. A score of 45 is defined as the minimum acceptable score for the approval of an investment plan.

Submission period

The funding application must be submitted by potential beneficiaries electronically via the state subsidy information system (OPSKE). The Call is open for applications until the available budget per Region category is exhausted.

Tool Summary

Categories		ACTION 1 – GREEN TRANSFORMATION OF SMES (OF SME GREEN TRANSITION BUNDLE OF ACTIONS)
1	Business activity	Manufacturing, Tourism, Services, Commerce
2	Company size	SMEs
3	Pillars	Green
4	Source of funding	NSRF
5	Maximum budget per investment project	Medium budget
6	Purpose of financial aid	Investment
7	Type of aid	Grant
8	Evaluation method	FIFO
9	Obligations and duration after the completion	Short term obligations

ACTION 2 – GREEN SME PRODUCTIVE INVESTMENT (OF SME GREEN TRANSITION BUNDLE OF ACTIONS)

Objective

The Action entitled "GREEN TRANSFORMATION OF SMEs" will be implemented with resources from the "Competitiveness" Program of the NSRF 2021 - 2027 in a total amount of €400,000,000 and aims at the operational upgrading of the country's small and medium enterprises. It is one of the two distinct actions of the "GREEN TRANSITION SME" set of actions, which cover targeted needs of SMEs, depending on the amount of their investment plans.

In particular, Action 2 – Green SME Productive Investment, concerns companies with a subsidized investment project budget of €30,000 to €200,000 (REGULATION E.E. 1407/2013 (De minimis). It should be noted that submitting a funding application is only allowed in the "Action 1 – "Green Transformation of SMEs" or only in "Action 2 – "Green Productive Investment of SMEs".

This Action 2 - "Green SME Productive Investment" encourages small investment projects that aim to utilize and develop modern technologies, to upgrade the products produced and/or services provided and their activities in general, rewarding actions that make use of modern technologies, infrastructures and best practices in matters of energy upgrading, circular economy and adoption of clean sources. The application area of the Action is the entire territory of Greece.

The Action is co-financed by the European Union, in particular by the European Regional Development Fund (ERDF) and by the Greek State.

Beneficiaries

Existing medium, small and very small businesses, as defined in Commission Recommendation 2003/361/EC, can submit a proposal to the Action.

The eligible activity code numbers (KAD), depending on the choice of financial support scheme, are indicated in the detailed Call for Action.

The basic conditions for the participation of potentially benefiting companies are the following:

To invest exclusively in one District Category

- Have at least one (1) complete closed management year before the date of electronic submission of the funding application
- To be substantially active (Main CA or Largest Revenue CA) in one (1) eligible activity CA, prior to the date of electronic submission of the funding application
- Have the eligible investment credit card(s) of this call before the date of electronic submission of the financing application
- To have at least two (2) EMEs of dependent work in the calendar year preceding the submission of the funding application. This will be confirmed based on the declared data held for this company in the ERGANI information system.
- Work on the investment project has not started before the submission of the funding application
- To operate exclusively as businesses of a corporate/commercial nature

To meet the application conditions of EU Regulation 1407/2013 (De Minimis) on which the Action is based.

Budget

The subsidized budget of each investment project ranges from €30,000 to €200,000. The subsidized budget of the investment project may not exceed twice the highest turnover achieved in one of the three (or less if the company does not have three) management periods of the year preceding the submission of the funding application with a maximum amount of of €200,000.

The maximum duration of completion of the physical and financial object of the investment project cannot exceed twenty-four (24) months, from the date of issuance of the Incorporation Decision.

Eligible expenses

The eligible expenses are the following:

- Buildings, facilities and surrounding area
- Machinery – Equipment (Contractual Expenses)
- Equipment (GREEN)
- Certification of Products - Services - Processes
- Packaging Design – Label – Branding Services
- Advertising and Outreach Expenses
- Participation in trade fairs
- Technical Studies & Consulting Services
- Means of Transport (GREEN) – Mandatory electric vehicles
- Salary cost of new employees – (new staff from 1 to 3 EME)
- Indirect costs

The date of start of expenditure eligibility is defined as the date of electronic submission of the funding application. Maximum duration of completion of physical and financial object: Twenty-four (24) months from the date of issuance of the Incorporation Decision.

The evaluation of the applications will be immediate (First Come First Served) and the investment plans will be examined according to the order they are submitted until the Action budget is exhausted per Region category and in any case until the regulations expire, based on the standard participation conditions as well as scoring criteria as defined in the Invitation. A score of 40 is defined as the minimum acceptable score for the approval of an investment plan.

Submission period

The funding application must be submitted by potential beneficiaries electronically via the state subsidy information system (OPSKE). The Call is open for applications until the available budget per Region category is exhausted.

Tool Summary

Categories		ACTION 2 – GREEN SME PRODUCTIVE INVESTMENT (OF SME GREEN TRANSITION BUNDLE OF ACTIONS)
1	Business activity	Manufacturing, Tourism, Services, Commerce
2	Company size	SMEs
3	Pillars	Green
4	Source of funding	NSRF
5	Maximum budget per investment project	Small budget
6	Purpose of financial aid	Investment
7	Type of aid	Grant
8	Evaluation method	FIFO
9	Obligations and duration after the completion	Short term obligations

DIGITAL EUROPE PROGRAM 2021-2027

The European Commission with the new multi-annual financial program "Digital Europe Program 2021-2027" seeks to strengthen the capabilities of the European Union in the fields of high performance computing (HPC), artificial intelligence (AI), cyber security, development of advanced digital skills (digital skills) and the digital transformation of public administration and interoperability.

In the context of the "Digital Europe Program 2021-2027", the European Commission intends to support the development of a network of European Digital Innovation Hubs - EDIHs that will play a central role in its implementation.

It is noted that the exact terms of the "Digital Europe 2021-2027" program, its implementation method and the overall budget will be specified with the finalization of the relevant regulatory framework by the competent bodies of the European Union.

A European Digital Innovation Hub (EDIHs) is a single organization or partnership of organizations with complementary specializations, not-for-profit, that will support businesses - in particular SMEs and mid-caps - and/or the public sector in their digital transformation.

The aim of the EDIHs is, through specialization and synergies between them, to be the hubs that will support the digital transformation of the European Union and will spread the latest developments mainly in the above-mentioned sectors (HPC, AI, cyber security), both in businesses as well as in public administration. These nodes will be "one-stop shops" and will provide services:

- Test before invest: this group of services provided will allow supported organizations (SMEs and/or public sector) to test and experiment with the services and products they plan to develop, before investing in them. Among other things it includes public awareness actions, digital maturity assessment, demonstration activities, digital transformation plans, promotion of integration, adoption and adaptation of various technologies, testing and experimentation with digital technologies (software and hardware / equipment), transfer of knowledge and know-how with particular emphasis on the key technologies promoted in the Digital Europe 2021-2027 program, namely high performance computing (HPC), artificial intelligence (AI) and cyber security.
- Skills and training: human resources are recorded in the research literature as the most important form of intangible capital. The human factor is the most important multiplier of productivity, due to the human capacity for innovation and creation that cannot yet be copied by machines. Therefore, in order to ensure the appropriate level of digital skills in supported organizations to make the most of innovative digital technologies, EDIHs should provide services such as hosting trainings and/or providing training, boot-camps, internships, as well as and supporting the implementation of short-term training programs in advanced digital skills, employment of students and graduates in companies and research centers to acquire advanced digital skills.
- Support to find investments: EDIHs will support companies, organizations and public administrations in securing investments to become more competitive and improve their business models through the use of new technologies. This category of services may include access to financial institutions and investors, support in exploiting the InvestEU program and other relevant financial mechanisms in close cooperation with the InvestEU Advisory Hub and the Enterprise Europe Network (EEN), etc.
- Innovation ecosystem and networking opportunities: EDIHs are called upon to act as a mediator and bring together industry, businesses and organizations, which need new technological solutions, with companies, especially start-ups and SMEs, which have solutions ready for the market. EDIHs should promote synergies at local level but also work with other EDIHs to find matching partners elsewhere in Europe when suitable local partners cannot be found. Structured relationships with regional authorities, industry associations, SME associations, business development organizations, incubators, accelerators, EEN, chambers of commerce, etc. they will greatly assist in their function as mediators.

According to the provisions of the working text of the European Commission, EDIHs, in order to benefit from the intended funding, can create a partnership of legal entities, which should be reflected in a Cooperation Agreement. However, there is no obligation to create a new separate legal entity. EDIHs are free to determine their organization, composition and governance structure.

EDIHs are called upon to support SMEs and the public sector in the integration of technologies promoted under the Digital Europe program (high performance computing (HPC), artificial intelligence (AI) and cyber security), but also other innovative technologies such as New and emerging technologies of wide application (Key Enabling Technologies). Based on the dynamics of the local society (industry, public sector) and the future needs of the local industry and public sector, each EDIH can be active in a specific thematic area supporting the integration of one or more of the above technologies. The thematic specialization should be consistent with the Smart Specialization Strategy (National or Regional). They should also have appropriate links with companies and/or public sector organizations depending on their target.

At the core of EDIHs is expected to be a research and technology body or an academic institution that provides technology services. The partnership (hub) should include bodies with experience in business development, public sector innovation and education as well as other bodies such as business innovation clusters and research organizations, chambers of commerce, business incubators, industry associations, vocational training centers, the Enterprise Europe Network (EEN), KIC (Knowledge & Innovation Community), EIT (European Institute of Innovation and Technology).

The EDIHs are planned to be co-financed (in the form of a grant for a period of 3 to 7 years) by the European Union and by the Member States. Concerning Greece the total budget of the Program is 25,000,000 euros and the announcement is planned in year 2023. According to the draft regulation for the "Digital Europe Program 2021-2027" (Digital Europe Program 2021-2027), each Member State is invited to designate, through an open and competitive process, the EDIHs that will take part in the call to be published by the European Committee (closed tender process), in order to select the EDIHs that will make up the initial network.

Tool Summary

Categories		DIGITAL EUROPE PROGRAM 2021-2027
1	Business activity	Services
2	Company size	SMEs
3	Pillars	Digital
4	Source of funding	NSRF
5	Maximum budget per investment project	to be determined
6	Purpose of financial aid	Investment
7	Type of aid	Grant
8	Evaluation method	to be determined
9	Obligations and duration after the completion	to be determined

NEW ENTREPRENEURSHIP FUND (TEPIH) - ACTION "BUSINESS FINANCING"

The "Business Financing" Action of the Entrepreneurship Fund (TEPIH) aims to promote entrepreneurship, to facilitate the access of very small, small and medium-sized enterprises to financial mechanisms, as well as to strengthen the country's investment activity.

In the context of the previous invitations of TEPIH, loans are granted with favorable terms, given that 40% of the capital of each loan is interest-free, as it is financed by the Entrepreneurship Fund, of the Hellenic Development Bank – HDB.

The resources of the Action will amount to 500 million euros, which are provided by the Entrepreneurship Fund which was financed for this purpose by the Operational Program "Competitiveness, Entrepreneurship, Innovation" (EPANEK). In addition to the capital to be paid by the "Entrepreneurship Fund", partner banks contribute 60% to each loan with a co-investment ratio of 1.5 (partner bank) : 1 (TEPIH).

Eligible for submitting a request for inclusion in the action are those under establishment, newly established, new and existing, very small, small and medium-sized enterprises of the eligible economic sectors that develop sustainable business activity in the Greek territory.

The loans offered are of two categories:

- Special purpose business development loans (working capital) of €10,000 to €500,000 with a repayment period of up to 60 months and the possibility of a grace period of up to 6 months.
- Investment loans of € 25,000 to € 1,500,000 with a repayment period of 5-10 years and the possibility of a grace period of up to 2 years. The loans concern either independent or investment projects that were included in state aid programs and have not been implemented.

The Fund establishment is programmed for the 2nd quarter of 2023 and the activation of Fund to SMEs for the 4th quarter 2023. The application area of the Action is the entire territory of Greece.

Tool Summary

Categories		NEW ENTREPRENEURSHIP FUND (TEPIH) - ACTION "BUSINESS FINANCING"
1	Business activity	to be determined
2	Company size	SMEs
3	Pillars	Innovation
4	Source of funding	NSRF
5	Maximum budget per investment project	to be determined
6	Purpose of financial aid	Investment
7	Type of aid	Subsidy of interest in business loans
8	Evaluation method	to be determined
9	Obligations and duration after the completion	to be determined

"KNOW YOUR CUSTOMER (KYC)" INITIATIVE OF THE HELLENIC DEVELOPMENT BANK (HDB)

The Hellenic Development Bank's "Know your customer" initiative makes it easier for small and medium-sized businesses to have access to bank loans, as although they could get a loan, they are unable to get a loan from a bank due to their size. The "Know your customer" initiative includes four financial programs totaling 2.5 billion Euros. The aim is to link investments, grants and low-interest loans with the obligation of businesses to adapt to the double challenge of digital transformation and climate change, the green transition.

The "Know Your Customer" platform of the Hellenic Development Bank (HDB) has been operating since January of this year at the online address https://kyc.hdb.gr/. With this platform, a clear picture is created for the whole of entrepreneurship (tax - insurance awareness) and the State knows in detail which businesses have problems with which State bodies.

Specifically, the "Know your customer" platform is interconnected with AADE (Independent Authority rod Public Revenue), EFKA (National Social Security Entity) and Teiresias (system which specializes in the collection and supply of credit profile data on corporate entities and private individuals and the operation of a risk consolidation system regarding consumer credit) in order to certify the tax, insurance awareness and solvency of the businesses concerned. On the same platform, entrepreneurs submit their business plans in a standardized form and declare the banks they want to approach.

In this way, the competitiveness between banks is strengthened so that there are more chances that the application will be approved by a bank in the context of expanding the portfolio and there are chances that a company will get a better offer in terms of speed and amount of financing.

The companies that can proceed with bank loans reach 100,000 to date. A key advantage for businesses is that the part of the loan that is co-financed by the bank is interest-free, resulting in a 40% lower final interest rate on the loan.

The four programs will be announced in the 2nd quarter of 2023. The "Know your customer" platform will remain active in all bank announcements from now on.

In more detail, the programs included in "Know your customer" are:

- Green co-financed loans with partial subsidization of the interest rate for small and medium enterprises active in the fields of energy efficiency/transition as well as in the development of RES. They are loans of 80,000-8 million Euros with 40% co-financing from the program and 60% from the bank, and duration of 5-10 years.
- Digital upgrade loans of 25,000-1 million Euros with 40% co-financing from the program and 60% from the bank and duration of 2-10 years for digitalization of activities with the aim of increasing productivity.
- Loans of 10,000-1.5 million Euros for working capital with 40% co-financing from the program and 60% from the bank, duration 2-5 years with the aim of dealing with increased energy costs and protecting jobs.
- Loans of 50,000-10 million Euros for businesses that have joined the development law with an 80% fund guarantee, lasting up to 10 years.

Tool Summary

Categories		"KNOW YOUR CUSTOMER (KYC)" INITIATIVE OF THE HELLENIC DEVELOPMENT BANK (HDB)
1	Business activity	to be determined
2	Company size	SMEs
3	Pillars	Digital, Green
4	Source of funding	NSRF
5	Maximum budget per investment project	to be determined
6	Purpose of financial aid	Investment
7	Type of aid	Subsidy of interest in business loans
8	Evaluation method	to be determined
9	Obligations and duration after the completion	to be determined

PROGRAM	TYPES AND CATEGORIES								
	Business activity	**Company size**	**Pillars**	**Source of funding**	**Maximum budget**	**Purpose of financial aid**	**Type of aid**	**Evaluation method**	**Obligations**
RRF 1	Manufacture	All	GREEN	RRF	Large budget	Investment	Subsidy of interest in business loans	FIFO	Long-term
RRF 2	Services	Very small	Green	RRF	Micro budget	Investment	Grant	FIFO	Short-term
RRF 3	Manufacturing Tourism Services Commerce	Medium, Large	Social	RRF	Small budget	Investment	Grant	FIFO	Short-term
RRF 4	All	All	Green	RRF	Large budget	Investment	Grant	FIFO	Long-term
RRF 5	Agriculture	All	Green	RRF	Micro budget	Investment	Grant	FIFO	Long-term
RRF 6	Agriculture	All	Green, Innovation	RRF	Large budget	Investment	Grant	Mixed	Long-term
RRF 7	Manufacture	All	Innovation	RRF	Small budget	Operating expenses	Grant	FIFO	Long-term
NSRF 1	All	SMEs	Innovation	NSRF	Medium budget	Investment	Grant	comparative	Short-term
NSRF 2	Tourism, Services	SMEs	Commerce	NSRF	Small budget	Investment	Grant	comparative	Short-term
NSRF 3	All	SMEs	Digital	NSRF	Micro budget	Investment	Grant	FIFO	Short-term
NSRF 4	All	SMEs	Digital	NSRF	Small budget	Investment	Grant	FIFO	Short-term
NSRF 5	All	SMEs	Digital	NSRF	Medium budget	Investment	Grant	FIFO	Short-term
NSRF 6	All	SMEs	Green	NSRF	Medium budget	Investment	Grant	FIFO	Short-term
NSRF 7	All	SMEs	Green	NSRF	Small budget	Investment	Grant	FIFO	Short-term
NSRF 8	Services	SMEs	Digital	NSRF	*to be determined*	Investment	Grant	*to be determined*	*to be determined*
NSRF 9	*to be determined*	SMEs	Innovation	NSRF	*to be determined*	Investment	Subsidy of interest in business loans	*to be determined*	*to be determined*
NSRF 10	*to be determined*	SMEs	Digital, Green	NSRF	*to be determined*	Investment	Subsidy of interest in business loans	*to be determined*	*to be determined*

On the above table all programs concerning Greece are evaluated on the nine criteria that are already analyzed. Each program is numbered in the order presented in this deliverable.

4.4.2 Bulgarian programs

4.4.2.1 Classification-grouping of Bulgarian programs

The main funds and financial instruments that are active in Bulgaria, aimed at business and applicable in the considered cross-border region can be classified according to the type and source in the following several groups:

1) State (republican) budget, according to the Investment Promotion Act:

- Priority investment projects
- Investments with a class A or class B certificate
- Class B investments (projects of municipal importance)

2) European Structural and Investment Funds (2021-2027)

- Program 1. Competitiveness and innovation in enterprises
- Program 2. Scientific research, innovation and digitization for intelligent transformation
- Program 6. Development of human resources
- Strategic plan for the development of agriculture and rural areas
- Maritime and Fisheries Program
- Programs for territorial cooperation

3) Recovery and Resilience Plan:

- Pillar 1 "Innovative Bulgaria"
- Pillar 2 "Green Bulgaria"
- Pillar 3 "Connected Bulgaria"
- Pillar 4 "Just Bulgaria"

4) Fund of Funds:

- Debt instruments
- Equity and quasi-equity investments (seed and acceleration fund, venture capital fund, mezzanine/growth fund, etc.)

5) Banking instruments – loans, guarantees, leasing, etc.

6) Private sources, incl. in the form of public-private partnerships between enterprises and the state/municipal authorities, shared financing, business angels, export financing, private and state funds for equity financing, etc.

This document does not present the Just Transition Fund, which is the first pillar of the Just Transition Mechanism and will finance the regions and sectors most affected by the transition to climate neutrality by 2050 due to their dependence on fossil fuels or carbon intensive processes. The reason is its limited territorial scope, namely the districts of Pernishka, Kyustendilska and Starozagorska, which have been designated as priority for funding by the European Commission. The funds for Bulgaria amount to EUR 1.178 billion (EUR 505 million from the Multiannual Financial Framework (MFF) 2021-2027 + EUR 673 million from the "Next Generation EU" element (ESEU) 2021-2024).

4.4.2.2 Programs

STATE BUDGET ACCORDING TO THE INVESTMENT PROMOTION ACT

The Law on the Promotion of Investments regulates the conditions and procedure for the promotion of investments on the territory of the Republic of Bulgaria, the activities of the state authorities in the field of the promotion of investments, as well as their protection.

The main objectives of this law are:

1. Increasing the competitiveness of the Bulgarian economy by increasing investments for scientific research, innovation and technological development in production and services with a high added value in compliance with the principles of sustainable development;
2. Improving the investment climate and overcoming regional differences in socio-economic development;

3. Creation of new and highly productive jobs.

According to the Investment Promotion Law and its Implementing Regulations, investments that have received Class A and Class B certificates, as well as priority investment projects are promoted in accordance with the Law on Corporate Income Taxation, the Law on Value Added Tax, the Law on promotion of employment and the Law on the ownership and use of agricultural lands, if they meet certain conditions. The necessary funds for the implementation of the financial measures are provided annually by the law on the state budget of the Republic of Bulgaria.

Investments that have received a class A or class B certificate are encouraged to implement the investment project through:

- Shortened deadlines for administrative service
- Individual administrative service necessary for the implementation of the investment project
- Acquisition of ownership rights or limited real rights on properties
- Financial support for the construction of elements of the technical infrastructure necessary for the implementation of one or more investment projects
- Financial support for training to acquire a professional qualification for persons, including interns from higher education institutions in the country, who took the new jobs related to the investments
- Financial support for partial reimbursement of mandatory insurance contributions made by the investor at his expense as an employer for the state social insurance, for the additional mandatory pension insurance and for the mandatory health insurance for newly hired workers and employees

Priority is given to investment projects implemented in economic activities that are particularly important for the economic development of the Republic of Bulgaria or for the regions in the country. They must meet a set of requirements under the Regulations for the Implementation of the Investment Promotion Law. The minimum amount of investments in one object is BGN 100 million, with the exception of the following cases:

- BGN 50 million, when the priority investment project is carried out within the administrative boundaries of municipalities that, for the previous year before the current one, had an unemployment rate equal to or higher than the average for the country or are engaged in economic activities from the industrial sector - processing industry with codes C 10 - C 33.2
- BGN 30 million for investments in high-tech activities from the processing industry
- BGN 20 million for investment in one facility in high-tech and knowledge-based services
- BGN 15 million for the construction of an industrial zone, industrial park or technology park with the necessary technical infrastructure to attract investments in scientific research and/or education and/or information technologies, including innovation activities for technological renewal of production products and technologies

Priority investment projects can be promoted with a package of measures which, in addition to measures for class A and class B investments, also include the following:

- Financial support for building the technical infrastructure
- Other measures for regional investment aid, defined as transparent aid within the meaning of Art. 5 of Regulation (EU) No. 651/2014
- They have the right to acquire or establish a remunerative limited real right on immovable property immovable property - private state or private municipal property, at the location of the investment, without holding an auction
- Institutional support

Projects of municipal importance are promoted as class B investments when they are implemented within the administrative boundaries of a certain municipality and meet certain conditions. They are encouraged to implement the investment project through:

- Shortened deadlines for administrative services provided by the municipality in whose territory the investment is carried out;
- Individual administrative service provided by the municipality in whose territory the investment is carried out;
- Acquisition of property rights or limited property rights on properties - private municipal property

EUROPEAN STRUCTURAL AND INNOVATIONS IN ENTEPRICES (2021-2027)

The program "Competitiveness and innovations in enterprises" 2021 - 2027 is directly aimed at achieving intelligent and sustainable growth of the Bulgarian economy, as well as the implementation of industrial and digital transformation. It includes two main priorities.

- Priority 1 "Innovation and growth" with 3 specific objectives:
    - Specific objective 1.1. "Development and strengthening of capacity for research and innovation and the introduction of advanced technologies".
    - Specific objective 1.2. "Capitalizing the benefits of digitization for citizens, companies, research organizations and public authorities".
    - Specific objective 1.3. "Promoting the sustainable growth and competitiveness of SMEs and job creation, including through productive investment".
- Priority 2 "Circular Economy" with 2 specific objectives:
    - Specific objective 2.1. "Promoting energy efficiency and reducing greenhouse gas emissions"
    - Specific objective 2.2. "Promoting the transition to a circular and resource-efficient economy".

The support provided under the **Program "Research, Innovation and Digitization for Smart Transformation" 2021-2027** contributes to achieving the goals of the European Green Deal aimed at building a modern, resource-efficient and competitive economy. A leading horizontal priority is the transition to a green, blue and circular economy. The priorities of the program are twofold as follows:

- Priority: P1. Sustainable development of the Bulgarian research and innovation ecosystem, with the following specific goals:
    - Specific objective RSO1.1: "Development and strengthening of capacity for research and innovation and deployment of advanced technologies (ERDF)"

Action Types:

- Priority direction 1: Sustainable development of the national capacity for scientific research and innovation
- Priority direction 2: Stimulation of international scientific cooperation and participation in EU framework programs
- Priority direction 3: Transfer of technologies and knowledge;
- Priority direction 4 Synergy with Horizon Europe and Digital Europe programs

- Specific objective: RSO1.4. Developing skills for smart specialisation, industrial transition and entrepreneurship (ERDF)

- Priority: P2. Digital transformation of the public sector
    - Specific objective: RSO1.2. Harnessing the benefits of digitization for citizens, companies, research organizations and public authorities (ERDF)

Action Types:

- Priority direction 1: Data as a key capital of society
- Priority area 2: Cyber security

The support provided under the **Human Resources Development Program 2021-2027** is aimed at overcoming challenges in the field of the labor market and obstacles to social inclusion and equal opportunities for vulnerable groups in society. It has 4 priorities, some of which provide for the provision of financing to enterprises - for hiring new employees, for increasing professional qualifications, for improving working conditions, and others.

- Priority 1 "Promoting employment and skills development" with 5 specific objectives:
    - Specific objective 1 "Improving access to employment and activation measures for all jobseekers and especially for young people, in particular through the implementation of the Youth Guarantee, the long-term unemployed and disadvantaged groups in the market of labor and for inactive persons, as well as by promoting self-employment and the social economy"
    - Specific objective 2 "Modernization of institutions and services dealing with the labor market in order to assess and anticipate skills needs and provide timely and appropriate assistance, as well as support the matching between demand and supply in the market of work, transitions and mobility"

  - Specific objective 3 "Promoting balanced participation of the sexes in the labor market, equal working conditions and work-life balance, including through affordable care for children and dependents"
  - Specific objective 4 "Promote the adaptation of workers, businesses and entrepreneurs to change, active living for older people and healthy ageing, and a healthy and well-adapted work environment that takes health risks into account"
  - Specific objective 5 "Promote lifelong learning, in particular flexible upskilling and reskilling opportunities for all, taking into account entrepreneurial and digital skills, better anticipation of changes and new skills requirements depending on the needs of the market, the facilitation of transitions in professional development and the promotion of professional mobility"

- Priority 2 "Social inclusion and equal opportunities" with 3 specific objectives:
  - Specific objective 1 "Promote active inclusion with a view to promoting equal opportunities, non-discrimination and active participation and better employability, in particular for disadvantaged groups"
  - Specific objective 2 "Promoting the socio-economic integration of marginalized communities such as the Roma"
  - Specific objective 3 "Improve equal and timely access to quality and sustainable services at an affordable price, including services that stimulate access to housing and person-centered care, including health care; modernizing social protection systems, including promoting access to social protection, paying particular attention to children and disadvantaged groups; improving accessibility, including for people with disabilities, the efficiency and sustainability of health systems and long-term care services'

- Priority 3 "Promoting youth employment" with one specific objective:
  - Specific objective 1 "Improving access to employment and activation measures for all jobseekers and especially for young people, in particular through the implementation of the Youth Guarantee, the long-term unemployed and disadvantaged groups in the market of labor and for inactive persons, as well as by promoting self-employment and the social economy"

- Priority 4 "Social Innovation" with 4 specific objectives:
  - Specific objective 1 "Improving access to employment and activation measures for all jobseekers and especially for young people, in particular through the implementation of the Youth Guarantee, the long-term unemployed and disadvantaged groups in the market of labor and for inactive persons, as well as by promoting self-employment and the social economy"
  - Specific objective 2 "Modernization of institutions and services dealing with the labor market in order to assess and anticipate skills needs and provide timely and appropriate assistance, as well as support the matching between demand and supply in the market of work, transitions and mobility"
  - Specific objective 3 "Promote the adaptation of workers, businesses and entrepreneurs to change, active living for older people and healthy ageing, and a healthy and well-adapted work environment that takes health risks into account"
  - Specific objective 4 "Improve equal and timely access to quality and sustainable services at an affordable price, including services that stimulate access to housing and person-centered care, including health care; modernization

The Strategic plan for the development of rural areas 2023-2027 is aimed at creating conditions for the achievement of the cross-sectoral objective of the European Union, which is expressed in the modernization of agriculture and rural areas by stimulating and sharing knowledge, innovation and digitalization in the rural agriculture and rural areas and by promoting their greater use by farmers through better access to research, innovation and knowledge exchange and through training, and to achieve the specific objectives of the Common Agricultural Policy. The plan envisages the implementation of the following interventions:

- Interventions in the form of direct payments:
  - Basic income support for sustainability
  - Additional redistributive income support for sustainability
  - Additional income support for young farmers
  - Climate, Environment and Animal Welfare Schemes
  - Production linked income support
  - Special crop payment – cotton

- Sectoral interventions
  - Plovode and green vegetables
  - Bee products
  - Wine
  - Milk and milk products
- Rural Development
  - Environmental and climate obligations and other governance obligations
  - Natural or other area-specific constraints
  - Area-specific disadvantages arising from some mandatory requirements
  - Investments, including irrigation investments
  - Investment in basic services and small-scale infrastructure in rural areas
  - Establishment of young farmers and new farmers and start-up of business in rural areas
  - Risk management tools
  - Cooperation
  - Knowledge sharing and information dissemination

The Maritime and Fisheries Program 2021-2027 contributes to the achievement of two of the EU's policy objectives - PC 2 "A greener, low-carbon Europe by promoting a clean and fair energy transition, green and blue investments, circular economy, adaptation to climate change and risk prevention and management' and PC 5 'Bringing Europe closer to citizens by promoting sustainable and integrated development of urban, rural and coastal areas and local initiatives'.

- PMDRA is financed by the European Maritime, Fisheries and Aquaculture Fund (EMFA) and includes investments in the scope of 5 priorities.
- Priority 1: Promotion of sustainable fisheries and conservation of aquatic biological resources
  - SO 1: Strengthening of economically, socially and ecologically sustainable fishing activities
  - SO 2: Promoting the adaptation of fishing capacity to fishing opportunities and contributing to the achievement of a fair standard of living in the event of a given temporary cessation of fishing activities
  - SO 3: Promoting effective fisheries control and enforcement and reliable data for knowledge-based decision-making
  - SO 4: Contribution to the protection and restoration of aquatic biodiversity and ecosystems
- Priority 2: Promoting sustainable aquaculture activities and the processing and marketing of fishery and aquaculture products, thereby contributing to food security in the Union
  - SO 1: Promote sustainable aquaculture activities, in particular by strengthening the competitiveness of aquaculture production while ensuring that activities are environmentally sustainable in the long term
  - SO 2: Promoting the marketing, quality and added value of fisheries and aquaculture products, as well as the processing of these products
- Priority 3: Ensure a sustainable blue economy in coastal, island and inland areas and promote the development of fisheries and aquaculture communities
  - SO 1: Interventions that contribute to enabling the conditions for a sustainable blue economy in coastal, island and inland areas and to promoting the sustainable development of fisheries and aquaculture communities
- Priority 4: Strengthen international ocean governance and create conditions for the safety, security, cleanliness and sustainable management of seas and oceans
  - SO 1: Strengthen the sustainable management of seas and oceans by promoting knowledge of the marine environment, maritime surveillance and/or cooperation in coast guard functions
  - Priority for technical support

The Recovery and Resilience Plan is structured in four pillars:

1) Innovative Bulgaria - aimed at increasing the competitiveness of the economy and transforming it into an economy based on knowledge and smart growth through measures in the field of education, digital skills, science, innovation, technology and the interrelationships between them. The pillar includes the following three components:
   - Education and skills

    - Research and innovation
    - Smart industry
2) Green Bulgaria - with a focus on the sustainable management of natural resources, enabling the current needs of the economy and society to be met, while preserving ecological sustainability, so that these needs can continue to be met in the long term. The pillar includes the following three components:
    - Low-carbon economy
    - Biodiversity
    - Sustainable agriculture
3) Connected Bulgaria - emphasizing the increase in competitiveness and sustainable development of the country's regions, such as the improvement of transport and digital connectivity, as well as the promotion of local development, stepping on the specific local potential. The pillar includes the following three components:
    - Digital connectivity
    - Transport connectivity
    - Local development
4) Just Bulgaria - with a focus on disadvantaged people to achieve more inclusive and sustainable growth and shared prosperity for all, as well as with an emphasis on building efficient and responsible public institutions, sensitive to the needs of business and the needs of the citizens. The pillar includes the following three components:
    - Business environment
    - Social inclusion
    - Healthcare

"Fund Manager of Financial Instruments in Bulgaria" EAD performs the functions of the **Fund of Funds for Bulgaria**. Sources of the financial resource are:

- The European structural and investment funds
- National funding from EU operational programs
- Additional attracted funds from the private sector

The types of financial instruments managed by the Fund of Funds are the following:

- Debt instruments:
    - Recovery Program - The purpose of the "Recovery" Program is to facilitate business access to loans for the recovery of activity after the gradual lifting of measures in connection with the COVID-19 pandemic. Gaining access to a financial resource primarily to meet current liquidity needs, for new investments, transformation and growth.
    - Financing in rural areas - The objectives of the instrument are 1) Economic development of rural areas; 2) Increasing the competitiveness of the agricultural sector; 3) Restoration and strengthening of forestry; 4) Promotion of social inclusion and support for sustainable development of small farms
    - Urban Development Fund - Sofia, South and North - The objectives of the instrument are: 1) Improvement of the urban environment (including urban transport, cultural and sports infrastructure); 2) Stimulating economic growth in the regions through the development of economic development zones in cities, increasing the energy efficiency of single-family residential buildings and student dormitories; 3) Development of tourism related to immovable cultural values of national or world importance.
    - Loans in the "Waste" sector - The objectives of the instrument are: 1) Increasing the investment potential of private and municipal enterprises to implement projects to reduce landfilled household waste; 2) Reduction of the amount of household waste deposited in the country.
    - Loans for water supply operators - The objectives of the instrument are: 1) To supplement the non-reimbursed financing from OPE for eligible projects of WSO operators; 2) Reconstruction and modernization of the infrastructure in the "WSO" sector; 3) Improving the environment by reducing water losses; 4) Achieving compliance with EU environmental legislation.

- Microcredit with shared risk - The objectives of the instrument are: 1) Improving access to financing for the creation and development of start-up enterprises; 2) Support of social entrepreneurship; 3) Promotion of entrepreneurship among vulnerable groups.
- Individual guarantees in the "Fisheries" sector - The objectives of the instrument are: 1) Stimulation of lending in the sector of sustainable and viable projects; 2) Overcoming the difficulties of final recipients in accessing financing, due to lack of sufficient collateral, high interest rates, high risk in the assessment of banks.
- Portfolio guarantees with cap on losses – OPHRD - The objectives of the instrument are: 1) Improving access to financing for the creation and development of start-up and social enterprises with a high risk profile; 2) Support of social entrepreneurship; 3) Promotion of entrepreneurship among vulnerable groups.

4.4.3 Banks, Funds, Business Angels, Crowd funding, other in Greece

The Bulgarian Development Bank offers a range **of credit products** for small and medium-sized enterprises. Below are the main ones.

- Energy efficiency of SMEs

Investment credit for micro-, small and medium-sized enterprises, which have submitted project proposals under the procedure "Restoration of SMEs by improving energy efficiency" to OP "Innovations and Competitiveness" 2014 - 2020. Borrowers should develop their main economic activity in the sector "Processing industry'.

- Revolving credit for raw materials

With the funds, companies can purchase goods and raw materials that are expected to increase in price. The purpose of the loan is to overcome the negative effects of the continuous increase in inflation and the rising prices of basic goods and services.

- Tourism Support Program

The product is aimed at the hotel and restaurant business. Micro, small and medium-sized companies from these sectors can benefit from preferential financing, even if they have debts up to 90 days in arrears.

The product also provides financing for restaurateurs, incl. startups. Working capital for funds needed to pay for inventory, wages, labor costs and overhead costs incl. rental and advertising costs; for refinancing existing obligations to the state and to suppliers; for the refinancing of existing obligations to financial institutions (including overdue up to 90 days); for refreshment and renewal.

- Financing for green energy

The credit product finances the construction of photovoltaic plants with a capacity of up to 1MW/p for the needs of businesses and is in response to the growing concern of companies about the prices of electricity in our country and in Europe, and the increasing demand. Switching businesses to solar energy is a workable solution in the context of depleting non-renewable sources and the EU's carbon neutrality targets.

- Tool for accelerated absorption of European funds

Supporting funding is provided for enterprises with approved projects under European and national programs. It is intended for micro, small and medium-sized enterprise borrowers who have submitted a project proposal for assistance under procedures/measures under European and national programs, certified by a printout/extract of the project proposal from the EUMIS system and/or the submitted business plan.

- Funding of groups and organizations of agricultural producers

The total amount of the program is BGN 10 million and provides working and investment financing to groups and organizations of agricultural producers

- Rose processing support

Direct loans for micro-, small and medium-sized enterprises in the form of a revolving credit line for working capital for amounts up to BGN 1.5 million with a term of up to 60 months.

Concerning Greece, an enterprise is asked to choose its financing method(s) in order to ensure the funds necessary for its operation. These funds can be loan/ debt (or foreign) funds or equity (own) funds. The usual forms of the former are (bank) loans, bonds and private debt. The usual forms of the latter are shares and private equity/venture capital. Their main characteristics are presented below.

4.4.3.1 Bank Loans

The loan is perhaps the simplest and most well-known form of financing. What interests a company is the repayment (amortization) of the loan. There are a number of different types of loans, but the loans that are most common are those that provide for partial repayment in equal installments.

The amount of each installment is the sum of the (accumulated) interest and the arrears (part of capital). The first covers the interest that accumulates as a result of the partial repayment of the loan. The second is directed towards the gradual repayment and therefore the reduction of the capital.

The installment is calculated if the present value of the installments is set equal to the disbursed amount of the loan. That is:

$$PV = \sum_{\nu=1}^{N} X/(1+r)^{\nu} \Rightarrow X = PV/\sum_{\nu=1}^{N}(1+r)^{-\nu} \Rightarrow X = PV/\{[1-(1+r)^{-\nu}]/r\}$$

Where:

PV: The disbursed amount of the loan

N: The number of years (or periods) of repayment of the loan

r: The interest rate of the loan

The presentation is easier to understand with an example:

Example 1

You received a loan of 10,000 Euros and you are required to repay it in three annual installments. The interest rate is 10%.

(a) What should be the loan installments?

(b) Create the loan amortization table.

Answer:

(a) Using the installment calculation formula, we obtain that

$$X = PV/\{[1-(1+r)^{-\nu}]/r\} = 10.000/\{[1-(1+0,10)^{-3}]/0,10\} \Rightarrow X = 4.021,15$$

(b) The amortization/payback table is calculated as:

Time (A)	Principal (B)	Installment (Γ)	Interest (Δ)=(B)*r	Principal Repayment (E)=(Γ)-(Δ)	Loan balance (Z)=(B)-(E)
0					10.000
1	10.000	4.021,15	1.000	3.021,15	6.978,85
2	6.978,85	4.021,15	697,89	3.323,26	3.655,59
3	3.655,59	4.021,15	365,56	3.655,59	0

4.4.3.2 Bonds

Characteristics of Bonds

Motivation – Intuition

The development of the bond market is of particular importance for any economy since it achieves the reduction of borrowing costs for both businesses and the public sector.

A few years ago, the bond market had only plain vanilla bond issues to display, the valuation of which presented no difficulties. The rise in interest rates and their volatility in the late 1970s and early 1980s resulted in the emergence of new types of bonds such as zero-coupon bonds, floating rate notes (FRN's), or bonds with built-in call or put options.

What is a Bond?

A bond or bond is a loan that has one borrower and several lenders. The loan is divided into smaller parts, often referred to as securities. The borrower, called in this case the issuer, has borrowed through the securities the amount he or she wants from more than one lenders, called bondholders or investors.

The bond usually pays until maturity periodically (annually or semi-annually) only the interest, referred to as interest coupons or coupons, while at maturity it pays the amount of the loan called face value.

The bond is therefore defined by the issuer, the face value, the maturity date and the coupon.

- The issuer is the entity that received the loan by issuing the bond.
    - It can be a government – central or local, such as a state or municipality, a company, a supranational organization, etc.
- The face value is the amount of the loan that the issuer receives.
    - Usually, the minimum subdivision is expressed per security and is 100 or 1000 monetary units.
- The coupon may be fixed for the life of the bond or may be floating.
    - If it is zero, then the bond pays only the nominal value at maturity and is called zero-coupon.
- The bond usually has a specific maturity date.
    - If the bond does not expire, then it is called perpetuity.

Bonds in the past had a paper/ physical/ tangible form and the securities were anonymous. Now the majority of them have an intangible/ digital form and the titles are nominal. The coupon gets its name from the fact that when bonds were in physical/ paper form, they had punched/ detachable coupons at the end that holders had to present to the issuer to collect the (six-monthly or annual) interest. Now the bonds are in intangible form and the investor does not need to keep them, but simply shows their possession in an investment account/investment share. Coupons are paid into a bank account.

Bond Indentures

Bond indenture is the legal document that contains all the details of the bond issue.

Classes of Bonds

Bonds (Treasury Bonds & Treasury Notes) are those securities that have a duration longer than one year. Securities with a duration equal to or less than one year are classified as Treasury Bills (TB's).

Depending on the issuer, the bonds are divided into

(a) Government bonds

(b) Corporate bonds and

(c) Bonds of Supranational Organizations (supranational(s) such as World Bank, E.I.B, E.B.R.D.).

Usually, the issuer of the bond with a very good name does not give the buyers of the bond any additional security (premium).

The first unsecured issues are called debentures while the ones that follow are called subordinated debentures.

In some cases, the payment of the coupon or the principal is linked to the course of an investment or is covered by a pledge. Some examples are:

1. Revenue Bonds: Interest and principal are paid from revenue that comes from an investment that has been financed by the issuance of the bond.

2. Mortgages: The money from the issue is used for the purchase of land and buildings which also serve as collateral.

3. Income Bonds: The coupon is paid only if there have been profits from the investment of the capital of the issue.

Depending on the way the coupon is defined and paid, the bonds are divided into:

1. Annuities (Fixed Rate Bonds): They have a fixed coupon that is paid at regular intervals, usually every year or six months.

2. Zero Coupon (Zero Coupon Bonds): Interest is paid on the maturity date of the bond.

3. Floating Rate Notes – FRN's (Floating Rate Notes): The coupon changes every period according to the terms of issue.

Fixed Income Markets

Motivation – Intuition

But where can an investor find a bond and what is the process of making it available to the investment public?

In this subsection we present the bond markets, which are distinguished according to the time until the maturity of the bonds as well as the process of making them available to the general investment public.

Fixed Income Markets

Markets are divided into 2 categories based on the assets traded in them:

Money Market

Fixed income assets with a maturity of less than one year are traded here. It could also be considered a subcategory of the fixed income market.

The issues traded into this market are:

- short-term
- accessible to private investors
- highly liquid
- with great marketability

This includes:

- Treasury Bills
- Certificates of Deposit
- Commercial Paper
- Banker's Acceptances
- Eurodollars
- Repos and Reverses

Fixed Income Capital Market

It is also known as the Bond Market. Fixed income assets with a maturity of more than one year are traded here.

The issues traded into this market are:

- of longer duration
- not always accessible to private investors
- sometimes with limited liquidity
- sometimes with limited marketability

This includes:

- Treasury Notes and Bonds (Treasury Notes and Bonds)
- Federal Agency Debt

- Municipal Bonds
- Corporate Bonds
- Mortgages and Mortgage-Backed Securities

Primary and Secondary Market

Primary Market is the market in which new issues of securities (bonds, shares, etc.) are made available by investment banks to the investment public. It concerns the initial distribution of the securities, which in the case of the State could also be done directly, i.e., without the intermediation of an investment bank.

There are two types of primary issues (mainly found in stocks):

(a) Initial Public Offerings (IPO's), where securities are made available to the investment public for the first time

(b) Seasoned New Issues, where securities that have already been issued are reissued.

Another distinction of primary issues concerns the recipients of the issues and also has two types:

(a) Public Offering, during which the securities are made available to the general investment public and concerns a large-sized issue. It is addressed to a large number of investors. It is then traded on the secondary market. Possible approval by the Securities and Exchange Commission (SEC/USA) is required.

(b) Private Placement, during which the securities are made available to a few, as a rule, institutional investors. It usually concerns a small-sized issue and is not addressed to the general investment public. It is usually not held until maturity. It is not very liquid and marketable, but it has a higher yield and possibly a higher risk.

The steps for a public offering are:

1. The new securities are available through underwriting investment banks.

2. Investment banks usually form underwriting syndicates for the distribution of the new bonds.

3. Some of the banks are put in charge (leads/ lead banks).

4. It is a common tactic for relatively large releases as it ensures access to a larger number of potential investors.

5. Banks advise issuers on what terms they should try to sell their securities.

A preliminary prospectus is drawn up and describes the terms of the issue and the issuer's prospects. It is submitted for approval to the Capital Market Commission. Finally, after the relevant approvals and adjustments, the prospectus is drawn up. The offering price of the securities to the investment public is announced.

There are two methods of underwriting securities:

(a) The firm commitment agreement, in which the underwriting investment banks buy the securities from the issuer and undertake to sell them to the public. The sale of the securities by the issuer to the underwriters is done at a lower price than they are available to the public (spread). Underwriters assume the risk that the entire issue will not be sold.

(b) The best effort agreement, in which the underwriting investment banks agree to help the issuer sell its securities to the public. Underwriters don't buy their securities. But they act as intermediaries. They do not have the risk of their securities being left unsold.

The publishers choose the underwriters:

(a) Either by negotiations

(b) Either by competitive bidding.

In the first case, a negotiation takes place regarding the spread and possibly as a fee the contractor will receive some of the issuer's securities. In the second, prospective underwriters are invited to submit underwriting offers.

The secondary market is the market in which the purchases and sales of securities that have already been issued take place. Its operation is very important since it allows investors to trade securities quickly, without affecting the price of the securities as much, due to the liquidity it offers.

The following fall under the secondary markets:

(a) The organized stock exchanges

(b) Over-The-Counter markets

(c) The direct negotiation between two counterparties

The first category usually concerns stocks and corporate bonds. The second category is very common in the US for both stocks and bonds. In the OTC market traders (and specialist traders) quote prices to buy or sell securities and hope to make the spread. OTC trading of listed securities is known as the Third Market. The last category concerns the direct trading of securities by counterparties without the intermediation of a broker. It is used by large institutions that want to avoid transaction costs. A flourishing of this market (Fourth Market) was observed after the introduction of electronic trading systems (Posit, Instinet).

Issuers

Common issuers (and their respective issues) are:

- The State
- Index-Linked Bonds
- Municipalities (Bonds)
- Companies (Bonds & Shares)
- Government Organizations (Bonds)
- Mortgages

Intermediaries

Intermediaries between issuers and investors are include:

- Investment Bankers - Primary Market
- Dealers & Brokers - Secondary Market
- Mutual funds
- Insurance companies
- Pension Funds
- Commercial Banks

Valuation and Bond Yields

Motivation – Intuition

What remains after the topics presented in the previous sections is to understand how bonds are valued. What should be made clear is that the approach followed leads to the determination of a fair value for the bond after it has been issued using a theoretical method. This value may differ from the market price of the bond, although unless there is a reason value and price should be the same.

The concept of value is not necessarily the same as the concept of price. Value is a quantity assigned to an asset by a theoretical method. Price is the amount for which an asset can be sold (or bought) in the market.

Valuation of Bonds

Bonds may be bought and sold or traded in organized or over-the-counter markets (as seen above). This means that an investor can buy or sell them from the time of issue to the time of maturity as long as there is a counterparty willing to sell or buy them respectively. This creates the need to calculate the price at which the purchase and the sale takes place. This price is nothing more than the present value of the cash flows paid by the bond, i.e., the coupons and the face value:

$$P_0 = PV = \frac{c}{1+r} + \frac{c}{(1+r)^2} + \cdots + \frac{c+FV}{(1+r)^N}$$

Where

r the interest rate corresponding to an investment of the same level of risk as the bond

c the coupon (e.g., annual)

N the maturity of the bond (e.g., in years)

FV the face value of the bond

PV the present value of the payments the bond makes

P_0 The price of the bond

Example 2

Consider a bond with an 8% coupon, 30 years to maturity with a nominal value of 1,000 Euro. The bond pays a coupon semi-annually, so it will make 60 coupon payments, of €40 each. If the interest rate was 8% per annum or 4% semiannually then the bond value/ price would equal

$$B = \sum_{t=1}^{60} \frac{40}{(1+0.04)^t} + \frac{1000}{(1+0.04)^{60}} = 1{,}000$$

In this case the coupon was equal to the yield to maturity.

If the interest rate is not equal to the coupon, then if e.g., the interest rate was 10% or 5% for each semester, the price of the bond would become

$$B = \sum_{t=1}^{60} \frac{40}{(1+0.05)^t} + \frac{1000}{(1+0.05)^{60}} = 810.71$$

If the interest rate became 6% per year or 3% for each semester, then the price would be

$$B = \sum_{t=1}^{60} \frac{40}{(1+0.03)^t} + \frac{1000}{(1+0.03)^{60}} = 1{,}276.76$$

We observe that a rise in interest rates means a fall in the price of bonds and vice versa. Bond prices are inversely related to interest rates.

As the price of the bond depends on the interest rate, this means that the price of the bond is a decreasing function of the interest rate.

This relationship is very important for calculating the yield to maturity (YTM) or the bond price depending on what is known. It also helps investment managers in the various calculations they perform for the positions they should take.

However, it is very important to note that for our bond an increase in interest rates results in a drop in price that is smaller than the increase in price that results if the interest rate is reduced by the same amount. There is therefore a convex curve that maps the relationship between price and interest rates. So, a gradual increase in the interest rate means a gradually smaller decrease in the price of the bond. Consequently, the curve is getting flatter. These concepts will be better understood after the introduction of the concepts of duration and convexity below.

We also notice that the longer the time to maturity of the bond, the more sensitive its price is to changes in interest rates. This is explained by the fact that the longer the duration of a bond, the longer the time the investor has locked up his or her money at a specific interest rate (the coupon). As a result, the loss is greater in the event of an increase in interest rates.

Relation of price to the face value

As may have become apparent from the above example, the relationship between the price and the face value of the bond, depending on the level of the interest rate, is as follows:

• If $c = r$, then $B = FV$.

• If $c > r$, then $B > FV$.

• If $c < r$, then $B < FV$.

In the above:

• r is the discount rate and corresponds to an investment of the same level of risk. It is given by the relationship

$$r = rf + spread.$$

• c is the coupon of the bond.

• B is the price of the bond.

• FV is the face value of the bond.

The above relationships are interpreted as follows:

- That the bond price equals the face value when the interest rate equals the coupon was seen above and is perhaps easy to understand. If the bond offers the same coupon as the alternative investment of the same level of risk, then its price will be equal to its face value, that is, the amount that the investor lends to the issuer.
- If the interest rate is less than the coupon, then since the price is a decreasing function of the interest rate it should be higher than the face value. This may intuitively be understood by the fact that since the coupon is higher than the return on the alternative investment of the same level of risk, then investors will want to invest in the bond so its price will be higher than the face value.
- If the interest rate is greater than the coupon, then since the price is a decreasing function of the interest rate it should be lower than the face value. This may intuitively be understood by the fact that since the coupon is lower than the yield of the alternative investment of the same level of risk, then investors will want to invest in the alternative investment; hence, its price will be lower than the face value, so that it is attractive.

Purchase price and selling price

So far, we have not taken into account any transaction costs. In fact, when we buy and sell bonds in the secondary market, we do so at slightly different prices. The purchase/ bid price is the price at which the dealer is willing to buy the bond from us. The selling price (ask price or offer price) is the price at which the intermediary (dealer) sells the bond to us.

The ask price is always higher than the bid price and the difference between the two is called the bid – ask spread or bid – offer spread. This is essentially the intermediary's fee. This is a type of transaction cost.

The bid-ask spread or bid-offer spread is generally smaller in bonds with high liquidity compared to bonds that have low liquidity.

When looking at the price of a bond in an electronic trading system, we observe two prices, the price we buy (the highest) and the price we sell (the lowest).

Example 3

In the previous example we saw that the price of the bond was 810.71 Euros. If we were to take into account the discussion above, then we would see a bid price of 810.56 Euros and an ask price of 810.86 Euros. This means that the broker is willing to buy from us at 810.56 Euros and sell us at 810.86 Euros the same bond. The difference is 0.30 Euro and is the bid-ask spread.

Quotes – Reference Prices

The price of the bond that one may see in the press or in any trading system, often referred to as quoted price, is not the cash price one would pay to buy it or receive to sell it. This price is also known as clean price.

The cash price includes the part of the coupon that has accrued since the issued, also referred to as accrued interest. This price is also known as dirty price.

This means that:

cash price=quoted price+accrued interest since last coupon date.

Example 4

Let's say it's 5/3/2019 today and the bond we're interested in has an 11% coupon with semiannual payments. The market price of the bond is 95.50.

Assume that the accrued interest is calculated on an actual/actual basis, and the previous coupon payment date is 5/1/2019. In other words, 54 days have passed.

We therefore get that:

*cash price=95.50+(54/181)*5.50=97.14*

If the minimum amount were 1,000 Euros, then the corresponding cash price would be 971.4 Euros.

Bond Yields

Motivation - Intuition

But what the investor really cares about is the yield he or she achieves from the investment in the bond. There are several ways to measure bond yields. We need measures that give both the current yield and the increase or decrease in the price of the bond over its life. The main measures are presented below.

Yield to Maturity (YTM)

It measures the total return (interest plus capital gains or losses) of the investment. In other words, it is the actual return for the investor (from the time of purchase) under the assumptions that:

(a) the bond shall be held to maturity and

(b) all coupons will be reinvested at the same rate of return, i.e., YTM.

It is practically the internal rate of return or IRR of the bond investment. To calculate the YTM we solve the equation that gives us the price of the bond in terms of YTM.

Example 5

Let us consider a bond with a six-month coupon of 8%, with a duration of 30 years and a selling price of 1,276.76 Euros. The equation we need to solve is:

$$1{,}276.76 = \sum_{t=1}^{60} \frac{40}{(1+\mathrm{y}/2)^t} + \frac{1{,}000}{(1+y/2)^{60}}$$

The solution gives y/2 = 3% per semester. But the annual yield to maturity is y = YTM = 2 x 3% = 6%.

The YTM is essentially the discount rate, unless there is some reason for which the price of the bond differs from the value we calculated.

Consequently, if P denotes the price of the bond in the market, and B the price (value) of the bond we calculated, then we find the following:

• If P = B, then y = r.

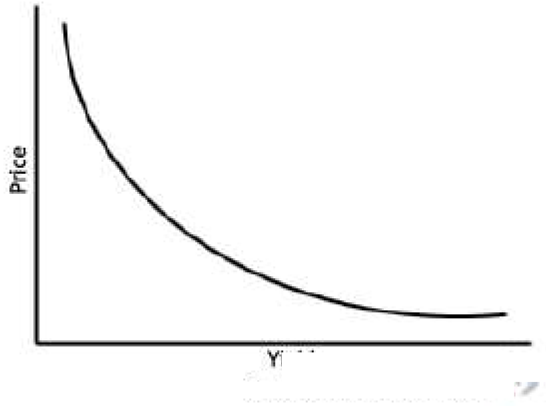
• If P > B, then y < r.

• If P < B, then y > r.

In the previous y denotes the yield to maturity and r the interest rate.

We notice that the price of the bond is inversely related to the YTM.

Figure 1. Relationship between bond price and yield to maturity



Source: Investopedia (2003)

As a result, when we observe the price of a bond in an electronic trading system, we can see two prices, the price we buy (the highest) and the price we sell (the lowest). Next to them we also see two YTMs, one corresponding to the bid price and one corresponding to the ask price. The former is obviously higher than the latter.

Effective Yield (EY)

The effective (annual) yield of a bond essentially takes into account the effect of compounding.

Example 6

In the previous example the effective annual yield gives the compounded interest rate. It is calculated as

$$(1+r)^2 - 1 = (1.03)^2 - 1 = 1.0609 - 1 = 6.09\%$$

Current Yield (CY)

It measures only the portion of the yield that is associated with the coupon payments. Any capital gains or losses are not accounted for.

Current Yield = Annual Coupon/ Bond Clean Price.

It should be noted that for bonds traded at a discount the YTM is always greater than the Current Yield. Similarly for bonds that trade at a premium the YTM is always less than the Current Yield.

Example 7

If the coupon of a 30-year bond is 8% and its price is 1,276.76 Euros, then

CY=80/1276.76=0.627=6.27%

Realized compound yield (RCY)

It measures the real yield for bonds that pay a coupon more than once a year. For a bond with a six-monthly coupon this yield is measured as follows:

$$RCY = [1 + (R/n)]^n - 1.$$

Where:

- R = yield to maturity
- n = the number of times a coupon is paid over time\

Simple Yield to Maturity (SY)

It is also known as Japanese Yield. It takes into account both the Current Yield and any capital gains or losses. It is calculated as follows:

$$SY = \frac{CPN + \dfrac{Par - Clean\,Price}{N}}{Clean\,Price}$$

N measures the remaining life of the bond in years. It is calculated by dividing the total number of days until the bond maturity by 365.

Yield to Call

The YTM is calculated on the condition that the bond will be held to maturity. But if the bond is callable, then it can be withdrawn before its maturity date by the issuer. These are essentially bonds that have an integrated call option in which the issuer has a long position (buy position).

In these bonds the issuer has the option to repurchase the bond, at a specific price, on a specific date before the maturity date. Exercised by the issuer if interest rates fall and the coupon is substantially higher. There is usually a protection period during which the call option (deferred callable bonds) is not exercised.

In this case, in addition to the yield to maturity, the yield to call is also of interest. It is calculated like YTM but time to call replaces time to expiration and the price at which the call is made replaces par value.

Example 8

Let as consider a bond with a six-month coupon of 8%, with a duration of 30 years and a selling price of 1,150 Euros. It is callable in 10 years with a price of 1,100 Euros. The yield to call is calculated at 6.64% while the yield to maturity at 6.82%.

	Yield to Call	**Yield to Maturity**
Coupon	40	40
Number of Payments	20 periods	60 periods
Final Payment	1,100	1,000
Price	1,150	1,150

Most callable bonds are issued with an initial protection period. They cannot be called during this time.

Deep discount bonds are indirectly protected. Even if interest rates fall enough, their price will be below the call price.

Bonds at a premium, sold near call prices are likely to be called if interest rates fall further.

Treasury Bills (T-Bills)

On the date of issue, the price of Treasury Bills is determined based on the assumption that the month has 30 days and the year has 360 days. Thus, we have:

$$P_0 = \frac{Parvalue}{(1 + y\dfrac{D}{Basis})}$$

Where:

• P_0 the current price.

• Par Value the face value.

• y the yield to maturity or the issue rate.

• D the number of contractual days, i.e., 90, 180, 360 days for 3-, 6-, 12- month T-Bills.

• Basis the contractual number of days for a period of 12 months (360).

Solving this relationship in terms of y we find the yield-to-maturity of the T-Bill.

Zero-Coupon Bonds

The price of a zero-coupon bond is calculated as follows:

$$P_0 = Par/(1+y)^N$$

Solving this relationship in terms of y we find the zero-coupon bond yield.

Example 9

Suppose we want to know the interest rate at which by investing 450 Euros today we will get 1000 Euros in 7.5 years. Solving the above equation, we have:

$$450 = 1000/(1+y)^{7.5}$$

So

$$y= 11.23\%.$$

Floating Rate Bonds

A floating rate bond does not have a fixed coupon. Its coupon resets on the annual anniversary. In this case the future coupons are not known and it is not possible to determine the price based on the above formulas.

Assuming that the dividends are paid once a year we have:

$$P_0 = (C_1+FV)/(1+y)^1.$$

The numerator is the 1st year cash flow, i.e., the coupon and the bond face value. This is because at the moment the coupon is paid, the bond is instantly worth as much as its face value after the coupon resets to be determined anew.

However, while the equation is similar to fixed rate bond pricing, it is not. This is because a fixed rate bond provides a constant stream of coupons based on a discount rate, which is not the case with floating rate bonds.

Bond Price Changes

Motivation – Intuition

The price of bonds changes over time. This is because the interest rate may change, but also because the time to maturity is reduced.

We will study the change in the price of the bond in relation to the change in interest rates in the next section.

How does the price of bonds change over time?

We consider two cases:

(a) Coupon to be below market rates.

(b) Coupon to be above market rates.

Change in the price of the bond over time

Understanding the change in bond price over time is best achieved with an example.

Example 10

Let us consider a bond that was issued some years ago and with an interest rate of 7% at the time. The coupon then was set at 7% and was annual. Its price was 1,000 Euros.

Let's say there are 3 years left until the bond matures and the interest rate has risen to 8%. The price of the bond is calculated as:

$$B = \sum_{t=1}^{3} \frac{70}{(1+0.08)^t} + \frac{1000}{(1+0.08)^3} = 974.23 < 1000$$

After one year, with the same interest rate, its value becomes:

$$B = \sum_{t=1}^{2} \frac{70}{(1+0.08)^t} + \frac{1000}{(1+0.08)^2} = 982.17 < 1000$$

This gives a capital gain of 7.94 per year and a total revenue including coupon of 77.94. Therefore, the overall performance is

77.94/974.23=8%.

The price of the bond, however, should approach 1,000 as it approaches maturity.

Zero-Coupon Bonds

Bonds without a coupon but issued below par are called zero-coupon bonds. They don't give a coupon but give all the interest as appreciation.

Example 11

Let us consider a zero-coupon bond with 30 years to maturity. Let the market interest rate be 10%. The price of the bond today is:

$$1000 / (1.10)^{30} = 57.31$$

After one year it is:

$$1000 / (1.10)^{29} = 63.04$$

We notice that the increase is of the order of 10%.

Holding Period Return

Motivation - Intuition

Investors do not necessarily hold bonds to maturity. They may keep them for a shorter period of time. This results in their yield possibly being different from the yield to maturity YTM.

But what we saw above is that if the interest rate remains constant, then the yield on the bond for one year is the same as the yield to maturity, that is the discount rate. We will find that this is true for all years.

Holding Period Return (HPR)

Let us consider a bond that matures in N years, pays an annual coupon c and has a yield to maturity y = r. We observe that its value at time 0 is:

$$P_0 = \frac{c}{1+r} + \frac{c}{(1+r)^2} + \frac{c}{(1+r)^3} + \cdots \frac{c+FV}{(1+r)^N} .$$

Its value at time 1 is:

$$P_1 = \frac{c}{1+r} + \frac{c}{(1+r)^2} + \cdots \frac{c+FV}{(1+r)^{N-1}} .$$

Its value at time 2 is:

$$P_2 = \frac{c}{1+r} + \cdots \frac{c+FV}{(1+r)^{N-2}} .$$

Its value at time k (where k = 0, 1, 2, … N) is:

$$P_k = \frac{c}{1+r} + \cdots \frac{c+FV}{(1+r)^{N-k}} .$$

Its return if the investor holds it for 1 year is:

$$HPR_1 = \frac{P_1 + c - P_0}{P_0} ,$$

since the investor has also collected the one-year coupon. HPR stands for holding period return. The index indicates the years of holding to the bond.

But we notice that

$$P_1 + c = c + \frac{c}{1+r} + \frac{c}{(1+r)^2} + \cdots \frac{c+FV}{(1+r)^{N-1}} = P_0 \cdot (1+r) .$$

So, we get that:

$$HPR_1 = \frac{P_1 + c - P_0}{P_0} = \frac{P_0 \cdot (1+r) - P_0}{P_0} = r = (1+r) - 1 .$$

That is, the bond's return for a holding period of 1 year is exactly the bond's YTM.

If the investor holds the bond for two years, then

$$HPR_2 = \frac{P_2 + c + c \cdot (1+r) - P_0}{P_0} ,$$

since the investor has also collected the two-year coupon. The coupon of the first year is reinvested for 1 year. We consider the reinvestment rate to be the constant discount rate. This is a strong assumption, which we may remove.

We find that:

$$P_2 + c + c\cdot(1+r) = c\cdot(1+r) + c + \frac{c}{1+r} + \frac{c}{(1+r)^2} + \cdots \frac{c+FV}{(1+r)^{N-1}} = P_0\cdot(1+r)^2$$

So, we get that:

$$HPR_2 = \frac{P_2 + c + c\cdot(1+r) - P_0}{P_0} = \frac{P_0\cdot(1+r)^2 - P_0}{P_0} = (1+r)^2 - 1\,.$$

That is, the bond's annualized return for a holding period of 2 years is exactly the bond's YTM, since

$$(1+r)^2 - 1$$

is the return on the investment of 1 Euro for 2 years with annual compounding.

If the investor holds the bond for k years, then,

$$HPR_{\mathrm{k}} = \frac{P_k + c + c\cdot(1+r) + \cdots c\cdot(1+r)^{k-1} - P_0}{P_0}$$

since the investor has also collected the k-year coupon. The coupon of the first year is reinvested for k-1 years, the coupon of the second year is reinvested for k-2 years, of the k-1 year for 1 year, while the last one is not invested. We assume that the reinvestment rate is the constant discount rate, which as we said is a strong assumption, which we may remove.

We find that:

$$P_k + c + c\cdot(1+r) + \cdots c\cdot(1+r)^{k-1} = c\cdot(1+r)^{k-1} + \cdots c + \frac{c}{1+r} + \cdots \frac{c+FV}{(1+r)^{N-1}} = P_0\cdot(1+r)^k$$

So, we get that:

$$HPR_{\mathrm{k}} = \frac{P_k + c + c\cdot(1+r) + \cdots c\cdot(1+r)^{k-1} - P_0}{P_0} = \frac{P_0\cdot(1+r)^k - P_0}{P_0} = (1+r)^k - 1\ .$$

That is, the bond's annualized return for a holding period of k years is exactly the bond's YTM, since

$$(1+r)^k - 1$$

is the return on investment of 1 Euro for k years with annual compounding.

4.4.3.3 Stocks

What is a stock?

Stocks are securities that represent the equal shares into which the equity/ stock capital of a company is divided. Stocks can be common or preferred.

Stock Valuation

By the same logic that the price of a bond equals the present value of its cash flows, the theoretically fair (or intrinsic) price or economic value or simply price of a stock will equal the present value of its dividends, since it gives its owner every time dividend from the profits of the business. In the case of the stock, however, the dividends are not known in advance. The investor who buys the stock has an expectation for these dividends.

It is clear that an investor would like to have a method for calculating the value of a stock as in the case of bonds. As we look for a value, we recall that this is not necessarily equal to the trading price of the stock, but rather reflects a "fair price". It is therefore a "theoretical" quantity that we seek to calculate with some method.

If we proceed in a way similar to how we calculated the value of a bond, we notice that we should find what future income an investor can expect from a stock. These are best expressed through dividends. Since typically stocks do not have an expiration date, we understand that the value of the stock should be given by an equation of the form:

$$V_0 = \sum_{i=1}^{\infty} \frac{D_i}{(1+r)^i},$$

Where:

D_i is the expected dividend of year i.

r is the interest rate corresponding to an investment of the same level of risk as the share

V_0 is the value of the stock.

This stock valuation model is called the dividend discount model (DDM).

The above equation is clear, but unfortunately it does not give us a way to predict future dividends. A fairly popular variant is the one that assumes that:

$$D_{i+1} = (1+g)D_i$$

for g constant. That is, it assumes a constant growth rate of the dividend and is called constant-growth DDM. Our equation then becomes:

$$V_0 = \sum_{i=1}^{\infty} \frac{D_1(1+g)^{i-1}}{(1+r)^i} = D_1 \sum_{i=1}^{\infty} \frac{(1+g)^{i-1}}{(1+r)^i}.$$

If $g<r$, then:

$$V_0 = \frac{D_1}{r-g} = \frac{(1+g)D_0}{r-g},$$

which is known as Gordon's formula.

If the dividend growth rate is zero, then we refer to this as the constant dividend or zero growth model and the above equation becomes:

$$\mathrm{V}_0 = \frac{\mathrm{D}}{\mathrm{r}},$$

where D is the fixed dividend.

In the case where the dividend growth rate g is not constant, but there is an (estimated) growth rate g_1 until year t_1 and another dividend growth rate g_2 from t_1 onwards in perpetuity, we can apply Gordon's formula sequentially, but where we should find the present value today (at t) of the stock price for the dividends from t_1 onwards. The equation for $t_1=\mu$ becomes:

$$V_0 = \sum_{\nu=1}^{\mu} \frac{D_0 \times (1+g_1)^{\nu}}{(1+r)^{\nu}} + \frac{1}{(1+r)^{\mu}} \times \frac{D_{\mu}(1+g_2)}{(r-g_2)}$$

Example 1

Let us consider a company that pays a fixed dividend on its preferred shares equal to €3, while the required return for this share is 8%. We wish o calculate the theoretically correct share price.

Answer

D=€3 and since the growth rate of the dividend is zero (constant dividend) then, according to the zero-growth model:

$$V_0 = \frac{D}{r} = \frac{3}{0{,}08} = 37{,}5.$$

Example 2

This year company Ω pays a dividend of €0.8 per share. If the dividend is expected to grow at a rate of 4% per year and investors' required return is 10%, what should the theoretically correct stock price be today?

Answer

According to Gordon's model for a constant dividend growth rate we will have:

$$V_0 = \frac{D_0 \cdot (1+g)}{r - g} = \frac{0{,}8 \cdot (1+0{,}04)}{1 - 0{,}04} = 13{,}86.$$

Example 3

Suppose that the current dividend per share of company Z is €1.2 and is expected to grow at a rate of 10% for the next 3 years, after which its long-term growth rate is expected to fall to 4%. Calculate the value of the stock today if the required return on the stock is 15%.

Answer

The value of the stock today is equal to the present value of the dividends of the next 3 years and the present value of the stock price after 3 years. Therefore, we will apply the equation:

$$V_0 = \sum_{\nu=1}^{\mu} \frac{D_0 \times (1+g_1)^{\nu}}{(1+r)^{\nu}} + \frac{1}{(1+r)^{\mu}} \times \frac{D_{\mu}(1+g_2)}{(r-g_2)}$$

where g_1 = 10%, μ = 3, g_2 = 4% and $D_3 = DX(1+g_1)^3 = 1.2X(1+0.1)_3 = 1.597$

So:

$$V_0 = \frac{1{,}2 \times (1+0{,}1)}{(1+0{,}15)} + \frac{1{,}2 \times (1+0{,}1)^2}{(1+0{,}15)^2} + \frac{1{,}2 \times (1+0{,}1)^3}{(1+0{,}15)^3} \frac{1}{(1+0{,}15)^3} \times \frac{1{,}597 \times (1+0{,}04)}{(0{,}15-0{,}04)}$$

There are other stock valuation methods as well as stock selection criteria based on both fundamental and technical characteristics. We will not deal with these methods here.

4.4.3.4 Private Debt

Overview of private debt

Definition

Private debt or private debt or private placement of debt or private lending has recently been considered only as an asset class and the term covers a number of different forms and investment strategies. The term private debt is usually applied to debt investments that are not financed by banks and are not issued or traded on an open market, while the word private refers to the investment instrument itself and not necessarily to the borrower - i.e., listed - public companies can borrow through private debt, just as private – unlisted companies can. Private debt falls into a broader category called alternative debt or alternative credit and is used without distinction with terms such as direct lending, private lending and private credit.

In the private debt market, investors lend to investee entities - be they corporate groups, subsidiaries or special purpose entities created to finance specific projects or assets - in the same way that banks lend to those entities. Private debt investments are typically used to finance business growth, provide working capital or finance infrastructure or real estate development.

Note here that some investors and authors consider private debt as part of private equity. However, as it has its own special characteristics, we cover it in a separate section.

From this, however, the reader can see that its history is essentially parallel to that of private equity, as described in the corresponding subsection of private equity. Likewise, it has the advantages and disadvantages of private equity over public debt.

The position of private debt in the asset market

What is worth seeing is how private debt can be positioned in the asset market both from the point of view of investors and as a form of financing for businesses. This is shown comparatively in Figure 1.

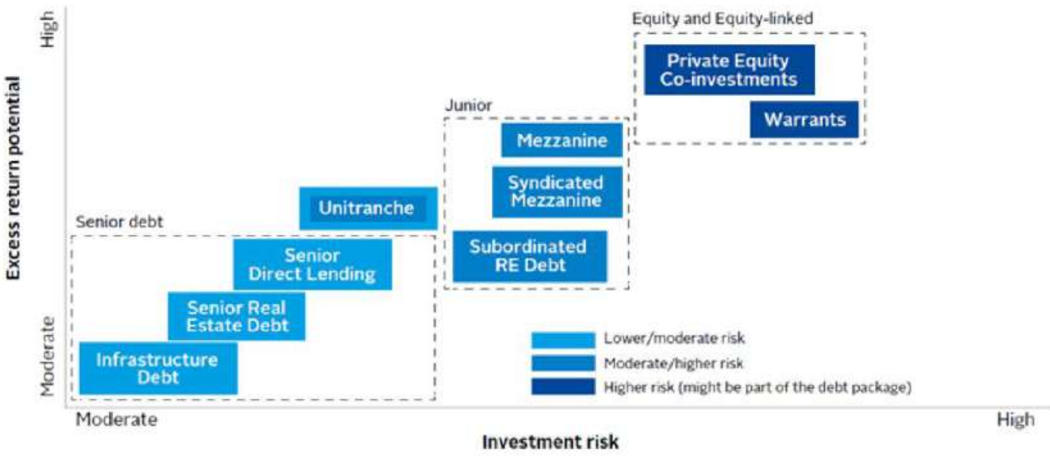
Figure 1 Comparison of private debt with other asset classes

	EQUITY		DEBT	
	PUBLIC	PRIVATE	PUBLIC	PRIVATE
Investee entity	Public company	▪ Private company ▪ Special Purpose Vehicle (SPV)	▪ Government-related entity ▪ Public company ▪ Private company ▪ SPV	▪ Public company ▪ Private company ▪ SPV
Investor/investee relationship	Legal owner (partial)	Legal owner (full or partial)	Lender (contractual relationship only)	Lender (contractual relationship only)
Returns profile	Investor potentially participates in both upside and downside	Investor potentially participates in both upside and downside	Investor participates in downside only	Investor participates in downside only
Investment holding period	Potentially unlimited	Potentially unlimited (typically seven-15 years for Private Equity funds)	Limited by bond tenor	Limited by terms of loan (illiquidity typically requires hold-to-maturity approach)
Liquidity	Most liquid	Somewhat liquid	Most liquid	Least liquid
Investment objective	Growth (occasionally income)	Growth	Income	Income
Investor control over investee	High (via voting and engagement)	High (via engagement and board seats)	Medium to low (limited opportunities to engage)	High to low (dependent on access to management)
Investee reporting requirements	Stock exchange requirements and national legal minimum	National legal minimum	Stock exchange requirements (public companies only) and national legal minimum	National legal minimum (for private companies)

Source: PRI (2019)

Also, its comparative evaluation in terms of performance - risk is interesting. This is shown in Figure 2.

Figure 2. Risk-return profiles for various investment strategies



Source: PRI (2019) from IHS Markit (2017) The Rise of Private Debt

The operation of private debt

Types of private debt

Private debt includes mezzanine financing and other forms of debt financing that come mainly from institutional investors such as funds and insurance companies - but not from banks. Unlike listed corporate bonds, private securities are generally illiquid and not regularly traded on organized markets. They originate from the UK and US, where they are an established form of finance and have long been used to finance growth and acquisitions. Fund managers generally specialize in specific market segments:

Senior debt

Senior debt refers to secured loans used to finance acquisition transactions and growth financing. Returns come almost entirely from current interest payments.

Mezzanine debt

Mezzanine debt is an intermediate form between debt and equity. It is mainly used for acquisitions and growth financing and is often dependent on bank debt. Returns are made up of various components - mainly current and final interest payments, as well as options to buy shares of the acquired company, known as equity kickers.

Credit opportunities

Credit opportunities funds invest in a wide variety of financing structures and situations. Alongside complex refinancings of companies withdrawing from the capital markets for various reasons, the funds also specialize in secondary transactions.

Distressed debt

Distressed debt funds mostly buy senior secured loans in the secondary market at a discount to their face value. They focus on acquiring healthy assets in situations where businesses are experiencing financial difficulties.

Infrastructure debt

Debt used for infrastructure development and investment in existing assets, generally with longer-term horizons (30+ years) due to the extended useful life of the assets.

Real estate debt

The most common real estate debt strategy is direct lending to purchase real estate. This may include buying and selling securitized real estate loans in the secondary market. Risk profiles differ depending on the underlying assets.

Special situations

Debt or structured equity investments made for the purpose of acquiring control of a company - generally, one that is in financial distress. Special situations may include trading in the secondary market, or the debt of distressed companies, where the manager believes there is a price distortion.

Venture debt

Debt financing was extended to venture capital-backed companies. For entrepreneurs, business debt serves to extend the financing corridor without losing ownership.

Reasons for investing in private debt

The main reasons for investing in private debt are summarized as follows:

1. Attractive, stable spreads

Private debt and mezzanine debt offer attractive spreads on government bonds, corporate bonds and high yield securities.

2. Low correlation with other asset classes

Low correlation with traditional asset classes provides positive diversification.

3. Reduction of risk

Stable performance in all market cycles thanks to the combination of different credit strategies.

4. Established asset class

The asset class has highly experienced fund managers with verifiable track records and diversified investment approaches.

The private debt market

Private debt represents a significant portion of private markets -10% to 15% of total assets under management with most private mid-caps having at least some debt. Investor demand for debt capital is increasing. Depending on factors such as interest rates, regulations and the business cycle, investors see private debt as a less risky way to invest or diversify their assets.

The global market has grown significantly as a result of both supply and demand factors.

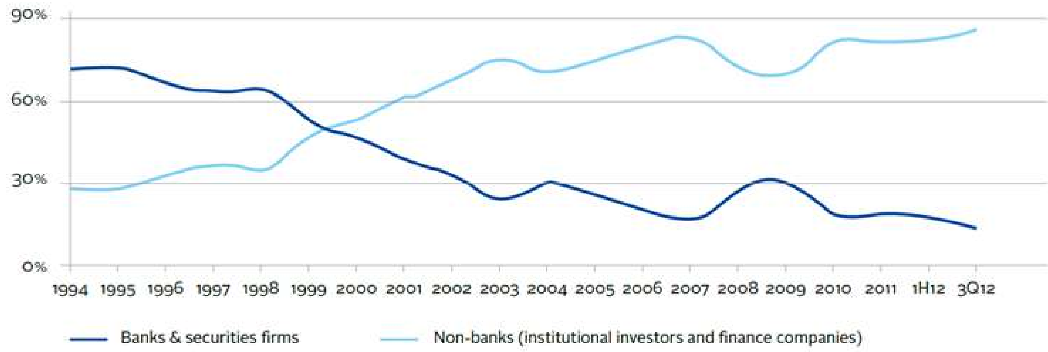
Supply factors

- Banks have reduced lending (especially to smaller private companies) in order to meet EU regulatory capital requirements through deleveraging, thus limiting sources of capital.
- In turn, this has made direct lending more attractive to investors, as yields can be higher than government debt and flexible terms can allow indices to be linked to indices.

Demand factors

- Investors seek to increase yield in an extremely low interest rate world.
- Investors seek diversification from traditional asset classes.
- Companies seek floating rates to protect themselves from rising interest rates.
- A recovery in the global economy has led to significant corporate demand for (re)financing loans for growth.

Figure 3 Relationship between bank and non-bank loans for leveraged loans from 1994 to 2012

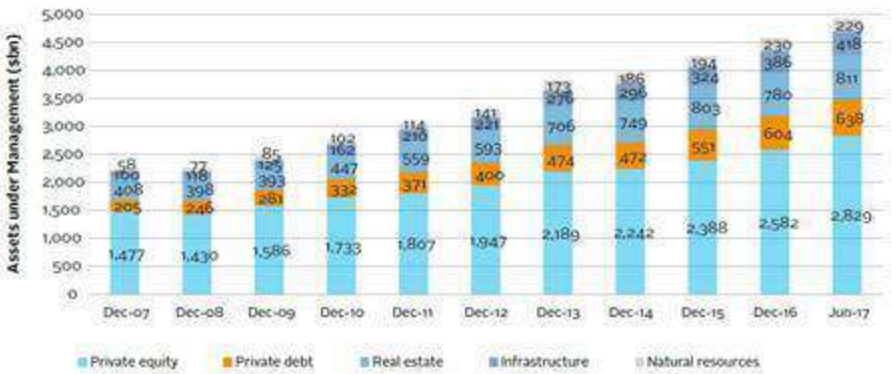


Source: PRI (2019) from S&P Capital IQ LCD

The total volume of assets under management by institutional investors allocated to private debt is estimated at approximately $638 billion worldwide. There are two dominant private debt markets worldwide, the US and Europe. The US market is larger and more mature than the EU market (which consists mainly of British and French publishers).

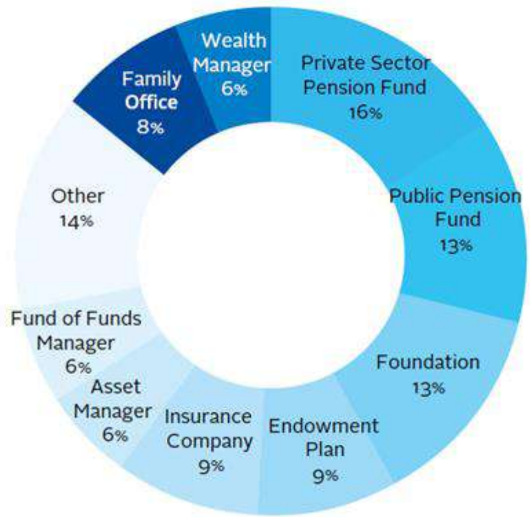
About $107 billion of new capital was raised in private debt in 2017 globally, of which $67 billion was raised from US funds, $33 billion from European funds and $6 billion from Asian funds. Elsewhere - especially in Germany and the Nordic countries - banks still dominate the lending market for historical and/or regulatory reasons.

Figure 4 Growth in private equity assets under management by asset class from 2007 to 2017



Source: PRI (2019) from Preqin (2018) 2018 Preqin Global Private Debt Report

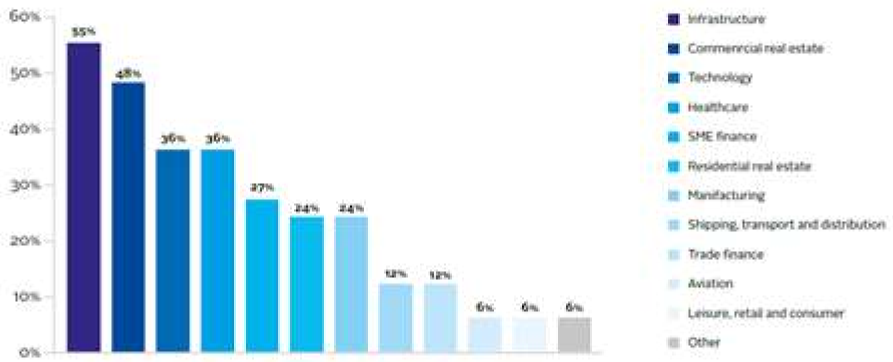
Figure 5 Analysis of investors participating in the private debt market



Source: PRI (2019) from Preqin Private Debt Spotlight March 2018

The most active investors in the private debt market are pension funds, foundations, endowments and insurance companies (Figure 5). Sectors likely to attract the largest placements from investors over the next 12-24 months (based on Q4 2017) are real assets such as infrastructure and commercial real estate, followed by companies financed by private equity (Figure 6).

Figure 6 Expectations of private debt funds for sectors that will attract their highest levels of investment



Source: PRI (2019) from Intertrust (2018) Changing Tides: Global Private Debt Market in 2018

Comparison of private debt with private equity

Private debt covers loan financing, which is when money is lent to a company to finance current operations or infrastructure improvement. Often the loan will be secured against an existing asset, such as real estate, but private debt funds do not seek to own companies. Private equity funds, in contrast, will usually own part or all of the company.

Private debt funds can sometimes be open-ended, while private equity funds will often be closed-ended and have a limited life. Private debt generates returns from interest on loans, while private equity funds seek to return profits by increasing the value of portfolio companies.

Concerns about private debt

Despite the attractiveness of private debt, there are some concerns that stem mainly from the risks that investing in it entails.

- There can be no assurance that specific performance or income targets will be met. Past performance and predictions are no guarantee of future success.
- Minority shareholders who do not participate in the management of a private debt fund have no or only limited means of influencing the fund manager.
- At the level of private debt funds, it is often permissible and common to use not insignificant levels of debt, known as leverage. Although the use of leverage can improve returns, it also increases the potential for losses.
- Market values of private debt funds may experience significant volatility due to macroeconomic factors and/or other market conditions, in particular market interest rates.
- Private debt funds are generally not regulated as investment vehicles and provide only limited protection to investors.
- Investors bear the tax and regulatory risks associated with private debt funds and the investments they make.
- If the risks arise, investors in private debt funds may suffer losses up to the total loss of their invested capital.

4.4.3.5 Venture Capital/ Private Equity

Overview of private equity

Definition

Private equity or private capital or private placement in shares or private participation is an alternative category of investment and consists of funds – investments in companies or assets that are not listed on the stock exchange.

Private equity consists of funds and investors that invest directly in private companies or that carry out acquisitions of public companies, resulting in the deletion of public holdings from the stock exchange (delisting). Institutional and retail investors provide the capital for private equity, and the capital can be used to finance new technology, make acquisitions, expand working capital, and strengthen and consolidate a balance sheet.

A private equity fund has Limited Partners (LP), who typically own 99 percent of the shares in a fund and have limited liability, and General Partners (GP), who own 1 percent of the shares and have full liability. The latter are also responsible for the execution and operation of the investment.

Note here that some investors and authors consider private debt part of private equity. However, as it has its own special characteristics, we cover it in a separate section.

Understanding private equity

Private equity investments come primarily from institutional investors and accredited investors, who can commit significant amounts over extended periods of time. In most cases, long participation periods are often required for private equity investments in order to ensure the recovery of troubled companies or to facilitate liquidity events such as an initial public offering (IPO) or a sale to a public company.

Advantages of private equity

Private equity offers several advantages to companies and start-ups. It is preferred by companies because it allows them to access liquidity as an alternative to conventional financial mechanisms, such as high-interest bank loans or listings on public markets.

Some forms of private equity, such as venture capital, also finance early stage ideas and companies. In the case of delisted companies, private equity can help these companies try to develop unorthodox – unconventional growth strategies away from the view and microscope of public markets. Otherwise, the pressure of quarterly earnings dramatically reduces the amount of time available to senior executives to help a company recover or experiment with new ways to cut losses or make money.

Disadvantages of private equity

Private equity has its own unique rules, which may make it difficult to put money into it. First, private equity holdings can be difficult to liquidate because, unlike public markets, there is no ready order book available to match buyers with sellers. A business must itself search for a buyer in order to sell its investment or company. Second, the pricing of a company's shares in private equity is determined through negotiations between buyers and sellers rather than market forces, as is usually the case with publicly traded companies. Third, the rights of private equity shareholders are generally decided on a case-by-case, negotiated basis, rather than a broad governance framework that typically dictates rights for their public market counterparts.

History of private equity

While private equity has only come into the limelight in the past three decades, the tactics used in the industry date back to the beginning of the last century. Banker tycoon JP Morgan is said to have made the first leveraged buyout of the Carnegie Steel Corporation, then among the nation's largest steel producers, for $480 million in 1901. It merged with other major steel companies of the time, such as the Federal Steel Company and the National Tube, to create United States Steel - the largest company in the world. It had a market capitalization of $1.4 billion. However, the Glass Steagall Act of 1933 put an end to such large consolidations created by banks.

Private equity firms have largely remained on the fringes of the financial ecosystem after World War II until the 1970s, when venture capital began to invest in America's technological revolution. Today's tech moguls, including Apple and Intel, received the capital they needed to grow their businesses from Silicon Valley's emerging private equity ecosystem when they were founded. During the 1970s and 1980s, private equity firms became a popular source of financing for companies struggling to raise capital from the public markets. Their offers caused publicity as well as scandals. With greater knowledge of the specifics of the industry, the amount of capital available for investment has multiplied and the size of the average private equity transaction has increased significantly.

When it took place in 1988, Kohlberg, Kravis & Roberts' (KKR) purchase of RJR Nabisco Group for $25.1 billion was the largest transaction in private equity history. It was surpassed 19 years later by the $45 billion acquisition of coal plant TXU Energy. Goldman Sachs and TPG Capital worked with KKR to raise the debt needed to buy the company during the private equity boom between 2005 and 2007. Even Warren Buffett bought $2 billion of bonds from the company. new company. The purchase turned into bankrupty seven years later, and Buffett called his investment "a big mistake."

The boom years for private equity, however, were those immediately preceding the financial crisis and coincided with the increase in their debt. According to a Harvard study, global private equity groups raised more than $2 trillion in loans, and each dollar was leveraged with more than two dollars of debt. However, the study found that private equity-backed companies performed better than their counterparts in the public markets. This was particularly evident in companies with limited capital at their disposal and in companies whose investors had access to networks and capital that helped to increase their market share.

In the years following the financial crisis, private equity funds represented an increasing share of activity at private equity firms. These funds raise money from institutional investors, such as pension funds, to provide credit for companies that cannot tap into corporate bond markets. These funds have shorter time periods and terms compared to typical private equity funds and are among the least regulated parts of the financial services industry. Funds, which charge high interest rates, are also less affected by geopolitical concerns than the bond market. However, we cover private debt in another section.

The operation of private equity

Private equity firms raise money from institutional investors and accredited investors for funds that invest in different types of assets.

Strategy

When a management team invests in private equity, there are three parts to their strategy:

Buy

• An acquisition strategy has been mapped out

• Capital is accumulated for the purchase/acquisition

• A takeover deal is completed

Change

• Once the company is purchased, it is restructured or reorganized to improve profitability

• It becomes, in effect, a new company

Sale

• After the company is converted and transformed, it is marketed

• Sold at a profit

• Private equity holders share in the profits

Figure 1 Private equity strategy

Source: Blackrock (2019)

Each stage represents a part of the private equity management team's acquisition strategy. This recovery process is what differentiates private equity from other forms of investment: it undertakes corporate transformation, with the goal of profitability.

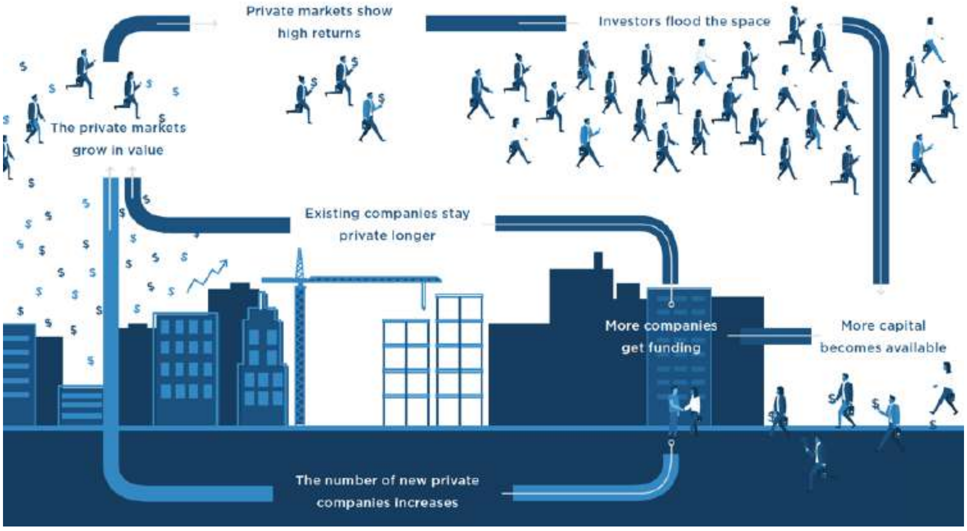
The use of private equity

Private equity generally refers to capital investments designed to bring about positive change in a company, such as:

- Developing a new business: Investing the growth capital for expansion or growth
- Business change: Restructuring or introducing innovations in the operation of a business to make it more profitable
- Financing an acquisition: Raising capital to make the purchase of another entity
- Private takeover of a public company: Converting a previously public company into a private entity (delisting it from the stock exchange) to enable it to provide the benefits that come with private status, so that if it is no longer focused on short-term (quarterly) profits, to be able to pursue long-term growth strategies that are not available to listed companies.

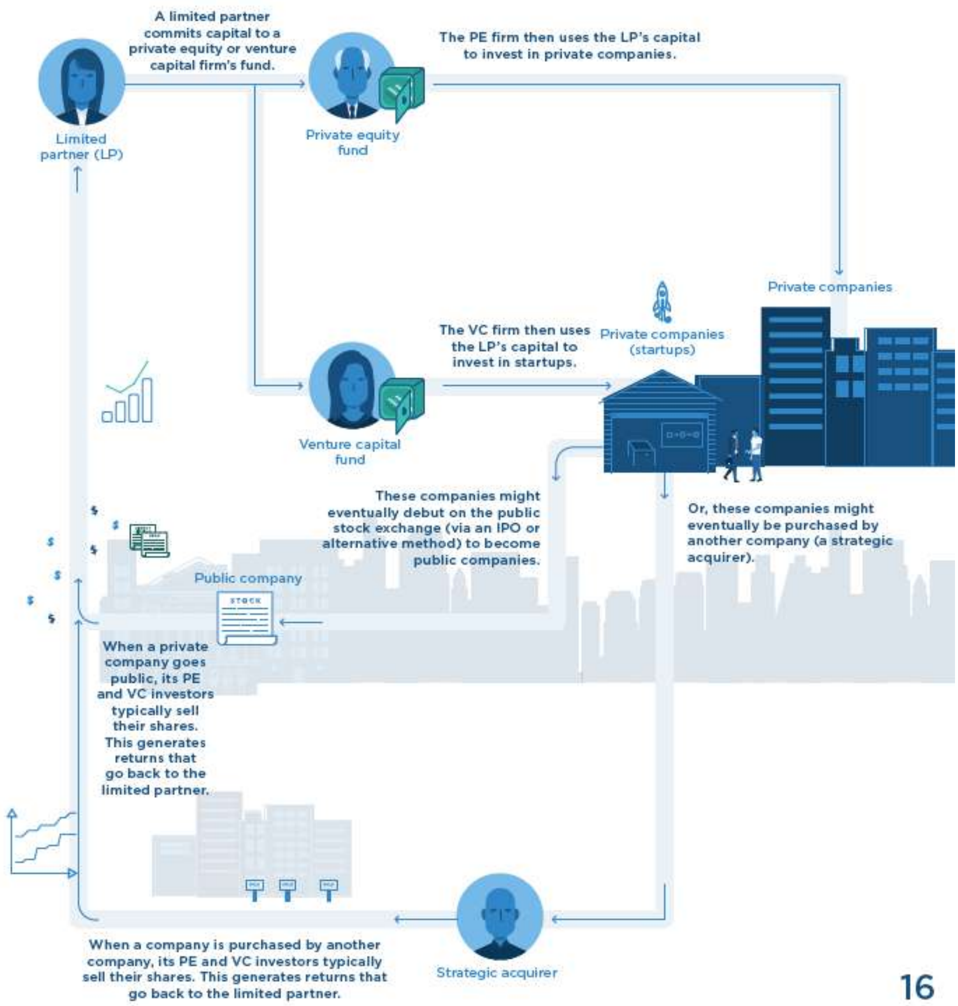
Because private equity returns are achieved through operational improvements and financial restructuring, the experience and leadership of the private equity manager is paramount.

Figure 2 Operation of private equity



Source: PitchBook (2019)

Figure 3 Private equity formation



Source: PitchBook (2019)

Types of private equity

The most popular types of private equity financing are listed below.

Distressed funding

Also known as vulture financing, money in this type of financing is invested in troubled companies with underperforming business units or assets.

The intention is to transform them by making the necessary changes in their management or operations or to carry out a sale of their assets at a profit. Assets in the latter case can range from physical machinery and real estate to intellectual property such as patents. Companies that have filed for bankruptcy are often candidates for this type of financing. There has been an increase in private equity funding of distressed businesses since the 2008 financial crisis.

Leveraged buyouts

This is the most popular form of private equity financing and requires the full acquisition of a company with the intent of improving its business and financial health and reselling it or making a profit for an interested party or an IPO. Until 2004, the sale of non-core business units of publicly traded companies constituted the largest category of leveraged buyouts for private equity.

The leveraged buyout process works as follows. A private equity firm identifies a potential target and creates a Special Purpose Vehicle (SPV) to finance the acquisition. Typically, businesses use a combination of debt and equity to finance the transaction. Debt financing can be up to 90% of total capital and is transferred to the balance sheet of the company being acquired for tax benefits. Private equity firms use a variety of strategies, from downsizing to replacing entire management teams, to transform a company.

Real estate private equity

There has been an increase in this type of financing after the financial crisis of 2008 and the resulting collapse in real estate prices. Typical areas where capital is used are commercial real estate and real estate investment trusts (REITs).

Real estate funds require a higher minimum capital for investment than other types of private equity financing. Investor funds are also locked up for several years in such type of financing. According to research firm Preqin, real estate private equity funds are expected to grow 50% by 2023 to reach a market size of $1.2 trillion.

Funds of funds

As the name suggests, this type of financing focuses mainly on investing in other funds, mainly mutual funds and hedge funds. They offer access to an investor who cannot afford the minimum capital requirements in these funds. However, critics of such funds point to the higher management fees (because they are imported from multiple funds) and the fact that unlimited diversification may not always lead to an optimal return-multiplying strategy.

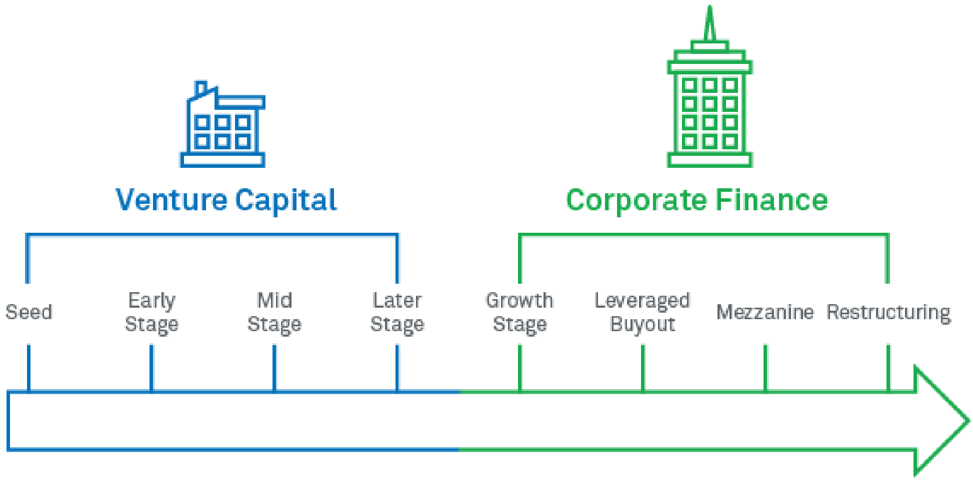
Venture capital

Venture capital funding is a form of private equity in which investors (also known as angels) provide capital to entrepreneurs. Depending on the stage at which it is provided, venture capital can take various forms.

Seed financing refers to capital provided by an investor to develop an idea from a prototype to a product or service. On the other hand, early-stage financing can help an entrepreneur further develop a business, while a Series A financing allows them to actively compete in a market or create a market.

Private equity investments can play an important role in the growth of a business. Their ability to progress from early-stage venture capital to mature venture funding demonstrates their flexibility, authority and appeal as an alternative investment.

Figure 4 Business financing at the various stages of its development



Source: Blackrock (2019)

Sources of income of private equity firms

The main source of income for private equity firms is management fees. The fee structure for private equity firms varies, but typically includes a management fee (outgoing) and a performance fee (outgoing). Some firms charge an annual management fee of 2% on assets under management and require 20% of the profits made on the sale of a company.

Positions at a private equity firm are highly sought after, and for good reason. For example, consider a business with $1 billion in assets under management (AUM). This firm, like the majority of private equity firms, is likely to have no more than twenty-twenty-five professional investors. 20% of gross profits generate millions in management fees. As a result, some of the top players in the investment industry are attracted to positions in such firms. Depending on the level, salaries for workers can range from a few hundred thousand dollars to as much as a million dollars, depending on the job and the level of the hierarchy.

Comparison of private and public placement

By its very nature, private equity has different characteristics that differentiate it from public equity. Private equity can take advantage of opportunities outside the organized stock markets. For example, it can extract private information. The active ownership status of private equity contrasts with the passive investors of the public markets, and private equity investments can lead to greater entrepreneurship and risk-taking in pursuit of profits.

In summary, we observe the following:

Private equity

• Uses private information to make decisions

• Investors act as operators

• Private concentration of ownership

• Multi-year strategic planning

• Ability to retain entrepreneurs and attract qualified executives through equity participation

Public equity

• Public information

• Passive investors

• Broad public ownership

• Focus on quarterly earnings

• Traditional incentive structures (options, restricted stock grant)

Ways to invest in private equity

There are several ways to invest in private equity. Some of the most important are:

Funds of funds

A mutual fund owns the shares of a wide selection of private partnerships that invest in private equity. It offers investors a cost-effective vehicle that lowers their initial minimum investment requirement. It can also offer diversification as it can invest in hundreds of companies covering a wide range of venture capital types and industry sectors. Since their asset allocation is so diversified with such a multitude of individual investments, a fund of funds can also represent a hedging approach.

Private equity exchange-traded funds

Exchange-traded funds (ETFs) track an index of publicly traded companies and invest in private equity - and they're easy to get hold of. Because their shares are available to buy on a stock exchange, there is no minimum investment requirement. However, ETFs may include a management fee that will not be part of a direct private equity investment as well as brokerage fees.

Public shares of private equity managers

By buying the listed shares of private equity managers - companies that manage private equity - an investor is still investing in private equity and diversifying his portfolio, because these managers invest in a whole spectrum of funds that spreads the risk. The expected return is not as high as investing directly in a mutual fund that produces significant profits.

Concerns around private equity

Beginning in 2015, there have been calls for more transparency in the private equity industry, primarily due to the amount of revenue, profits, and high salaries earned by employees at nearly all private equity firms. Since 2016, a limited number of states have advanced bills and regulations that allow greater access to the inner workings of private equity firms. However, there is also the reverse pressure that calls for restrictions on its access to access to information.

4.4.3.6 Crowdfunding

Definition

Crowdfunding is considered as a means of alternative financing, as well as a kind of crowdsourcing by which people, can contribute money to a person, cause, event, or business venture primarily via the Internet or the social media.

This method can be used to fund

- startup businesses,
- help communities suffering from a natural disaster, and
- aid families and individuals in financial need due to a medical emergency or a death.

Crowdfunding is now a common method for connecting entrepreneurs and investors—offering an alternative to bank loans or venture capitalists—and it is now a popular way of supporting cultural institutions, such as art organizations and charities.

Billions of dollars are raised annually via this fundraising method (Britannica, 2023).

In our case the interest is in the use of crowdfunding for the financing of small business ventures via the collection/ accumulation of small amounts of capital from a large number of individuals/ investors. Its contribution is in bringing together investors and entrepreneurs in an attempt to foster mainly start-up entrepreneurship. It increases the candidate investors beyond the traditional ones: owners, relatives and venture capitalists (Investopedia, 2022).

The Operation of Crowdfunding

There are three components to crowdfunding (Britannica, 2023):

1. The person seeking money to help fund or pay for an idea, product, or expense.

2. Those who support the concept or business and are willing to invest or help pay for it.

3. A platform or service that brokers the financial transactions.

Crowdfunding operates via

- Social media sites such as Facebook and Twitter and direct email solicitations,
- Numerous platforms that facilitate crowdfunding, including Kickstarter, Indiegogo, GoFundMe, and Crowdfunder.

Revenues

These services generate revenue by taking a percentage of the total amount of funds collected as well as by charging a fee per pledge and credit card transaction. These fees and charges vary, but often the total cost of a crowdfunding campaign can range between 5–12 percent of the donated funds (Britannica, 2023).

Fund collection

Typically, a person or business posts a request on a digital site, and potential contributors can browse offerings and decide whether or not to participate. Those interested in a project can typically contribute as little as $5 - $10. Individuals or businesses posting a crowdsourcing request often send emails to friends, acquaintances, and customers. Many of the listings include photos, videos, and detailed descriptions about the product, service, or cause. A brief biography about the person soliciting pledges is also typically included.

Many contributors do so altruistically (for nothing in return except the satisfaction of supporting a person or a cause), though some funders may receive products or gifts in exchange for their contributions. On some crowdfunding platforms, organizations are charged a fee only if the project meets its funding goal by the stated deadline. On other crowdfunding sites, a minimum level of donations must be met before the host can receive any of the contributed funds (Britannica, 2023).

Types of crowdfunding

The two most traditional types of crowdfunding are

- For the funding of start-up companies looking to bring a product or service into the market.
- For the funding of individuals who experienced some type of emergency.

The latter covers two main categories of individuals:

- Individuals affected by a natural disaster, hefty medical expense, or another tragic event such as a house fire have received an amount of financial relief, they wouldn't otherwise have had access to thanks to crowdfunding platforms.
- Creative people, such as artists, writers, musicians or podcasters, so as to support their work by establishing a steadier source of income (Investopedia, 2022).

3.1 Examples of crowdfunding platforms

The most popular crowdfunding platforms are Kickstarter, Indiegogo, and GoFundMe. Their particulars are as follows (Crowdfunding, 2023):

Platform	Total Raised	Supporters	Platform Fee	Payment Fee
GoFundMe	$25B	50M	0%	2.9%+$0.30
Indiegogo	$1.5B	10M	5%	3.0%+$0.30
Kickstarter	$3B	15M	5%	3.0%+$0.20

Advantages and Disadvantages of Crowdfunding

Advantages

The main advantages of crowdfunding are:

- Start-up companies or individuals gain access to a larger and more diverse group of investors/supporters.
    - With the ubiquity of social media, crowdfunding platforms are an incredible way for businesses and individuals to both grow their audience and receive the funding they need.
- Entrepreneurs and start-ups can access financing beyond banks and venture capital firms.
    - They may be able to launch a project/ product faster and without the restrictions that traditional financing institutions may impose.
- It can help enhance a brand and marketing efforts by creating an extended community that might also extend to crowdsourcing ideas.
- Many crowdfunding projects are rewards-based; investors may get to participate in the launch of a new product or receive a gift for their investment.
- Equity-based crowdfunding is growing in popularity because it allows startup companies to raise money without giving up control to venture capital investors.
    - In some cases, it also offers investors the opportunity to earn an equity position in the venture.
    - In the United States, the Securities and Exchange Commission (SEC) regulates equity-based crowdfunding (Investopedia, 2022 & Britannica, 2023).

Disadvantages

The main disadvantages of crowdfunding could be:

- The possible damage to a company's reputation caused by "resorting" to crowdfunding.
- The fees associated with the crowdfunding site.
- Projects usually require a significant investment of time and resources.
- Large, complex projects can also be difficult to describe and to raise funding for.
- (On some platforms) If the funding goal is not reached, then any finance that has been pledged will be returned to the investors and the company will receive nothing (Investopedia, 2022 & Britannica, 2023).

4.4.3.7 Business Angels

Introduction

Definition

The term business angel – BA describes a high-net-worth individual who invests private capital and may offer value-adding services to unlisted start-ups and entrepreneurs with whom they have no family ties.

Purpose

The purpose of business angels is to achieve a financial return higher than their initial investment. They generally try to create an active relationship between them and their investments, but without getting involved in day-to-day business operations.

Role - Offer

There is no doubt that business angels play an extremely important role in the informal investment market for new enterprises seeking funding today, in an environment where bank lending was (and may still be) limited, but borrowing costs can also be high.

In addition to capital, angel investors provide the entrepreneur with business management experience, skills and contacts. Experienced angels also know that they may have to wait to achieve the desired return on their investment. They can therefore be a good source of "smart and patient" capital.

Business angels play an important role in the economy. In many countries, they are the second largest source of external funding for start-ups, after family and friends. Thus, they develop into increasingly important providers of venture capital and thus contribute to economic development and technological progress.

Business angels can invest individually or as part of a syndicate where usually one angel takes the lead role.

Business Angels in the European Union (EU)

The EU has tasked its members with finding means and tools to promote business angel investment. They should create incentives for individuals willing to invest in enterprises. This includes, among others, the use of public funds to co-invest with business angels.

The European Commission encourages EU countries to learn from good practice by supporting business angel investments, especially cross-border, and by working with venture capital funds. The Commission also supports good practices in investment readiness training.

Given the local and regional dimension of business angel activities, the European Commission considers that through co-investment opportunities through the European Structural and Investment Funds (ESI Funds) and through financial instruments enable business angels to play an important role in the financing of Small and Medium Enterprises (SMEs) at this level, as long as there is their active involvement and participation.

Business Angels in the Investment Universe

Business angels (according to a study by Sørheim and Landström (2001)), are only one category of investors in the informal investment market. Investor groups can be distinguished based on the determinants of "ability" and "investment activity", creating a categorization of four different informal investor groups:

Figure 1 Categorization of informal investors

		Competence: Low	Competence: High
Investment Activity	High	Group 2 Traders	Group 4 Business Angels
	Low	Group 1 Lotto Investors	Group 3 Analytical Investors

Source: Created by the authors with data from Schulz & Schmücker (2017)

Business angels are categorized as the group that exhibits both high levels of investment/ management ability and entrepreneurial experience. They can thus actively support their investments but also be active in more investments at the same time and per year. They appear to be the most capable and active of the informal investors, hence their name. After all, these characteristics make them suitable financiers as well as business advisors for start-ups.

It is therefore important that the enterprises that wish to attract them understand what they are interested in when choosing/considering a business to invest in. What is easy to diagnose is that they do not have similar characteristics.

Characteristics of business angels

Business angels cannot be considered as a homogenous group behaving in similar ways and patterns – they have been shown to be very different from each other and can be distinguished in a variety of characteristics – at least in terms of their investment process, preferences and selection criteria (Mason et al., 2017). Other characteristics, such as demographic characteristics (age, gender and career path), however, seem to be rather consistent for most business angels.

Age and Gender

Regarding the first two characteristics, it appears that business angels are usually men with an average age of 56 years (Kelly, 2007; Månsson and Landström, 2006; Politis and Landström, 2002).

Professional Course

The professional development of business angels also shows similar development paths. After rising through the ranks of the companies they worked for in the first phase of their professional life and then gaining experience as entrepreneurs in the second phase of their careers, they begin their investment activity. The first two stages provide the angels with the necessary work, management and start-up experience to be able to support other ventures and invest in them in the third stage (Politis and Landström, 2002). This very experience/ previous service of theirs is fundamental in terms of the criteria applied by business angels for their first investments in other (start-up) companies.

Method of Investment

A consequence can also be seen in the way business angels invest. Previous research shows that angels rely on their feelings and intuition rather than a detailed analysis of data (Shane (2008), Haines et al. (2003)). This is one of their differences with venture capital firms, which have a much more objective, rigorous and sophisticated investment approach, mainly because they have the resources for detailed evaluations of the opportunities they (re)take (Parhankangas, 2007).

Investment Experience

When looking at the differences between business angels, a particularly important aspect is their investment experience. If they have not yet invested, but are thinking about doing so, they can be considered as beginner angels. At the other end of the spectrum, there are very experienced business angels with several dozen capital inflows into new ventures (Harrison et al., 2015; Mitteness et al., 2012). The factor of experience and its application in practice can influence, for example, the speed of the decision-making process or the criteria that lead to the approval or rejection of an investment opportunity (Harrison et al., 2015). As a result, experienced angels tend to make quicker decisions about whether or not to pursue an investment opportunity and place more emphasis on matching the investor with the entrepreneur. In contrast, inexperienced angels spend more time on each step in the process and are more likely to base their decisions on financial aspects (Harrison et al., 2015).

Business Angels of Interest

It is clear that a start-up business needs a number of resources and means to be able to start and operate/ succeed in its field of activity. In addition to funding – which is perhaps the obvious need, a number of structures and processes are also required. It is therefore important that it can receive guidance on these structures and processes from people who have the necessary experience to pass on their knowledge. Therefore, experienced business angels are of greater interest as financiers of a start-up company, since in addition to undertaking the investment, they can also offer support in matters of management, production activity, but also the daily operation of the enterprise.

The reasonable question is what business angels are looking for in a company, but also what steps/stages they follow and what criteria they apply in order to undertake this type of investment - financing. The investment process that business angels (seem to) follow will be examined in the following sections.

The Business Angel Investment Process

Prototype/ primitive models (stages) of the investment process

The recording of the investment process followed by business angels is done in the literature with a qualitative methodology, mainly from the experience they themselves convey through interviews. Emphasis is therefore placed (and this is what we follow in this text) on the supply side, i.e., the investor, and not on the demand side, i.e., the company that receives the investment (recipient). So initially this process could be divided into three big/broad stages:

1. before the investment,

2. the negotiation of the contract/agreement, and

3. after the investment.

When screening/selecting enterprises for/ before the investment, the interest of business angels to contribute to the business in addition to the financial contribution, potentially passing on their expertise in strategy, marketing, operations, etc., is noted.

Another point of interest in the investment process followed by business angels is the evaluation criteria they use and concerns the negotiation-decision stage. Initially some broad criteria could be considered such as:

a. the assessment of the entrepreneur's abilities

b. the evaluation of the entrepreneur's background, and

c. the balancing of risk and reward.

Especially with regard to the risk-return relationship (stage 1) the question that concerns business angels is how likely it is that the actual results of the investment will be different from those predicted and how this risk compares with the potential returns from the business.

During the decision-making stage/phase (stage 2) (Payne et al., 1992) a business angel may be faced with a choice characterized by conflict, uncertainty and complexity.

- A conflict may arise over the details of the agreement.
- Uncertainty can occur, for example, when there are still doubts and/or concern about the ability of the entrepreneur behind the business.

- Complexity can increase when a business angel considers more than one investment opportunity or participates in an investment syndicate whose members have different views on the commercial viability of the entrepreneur's plans.

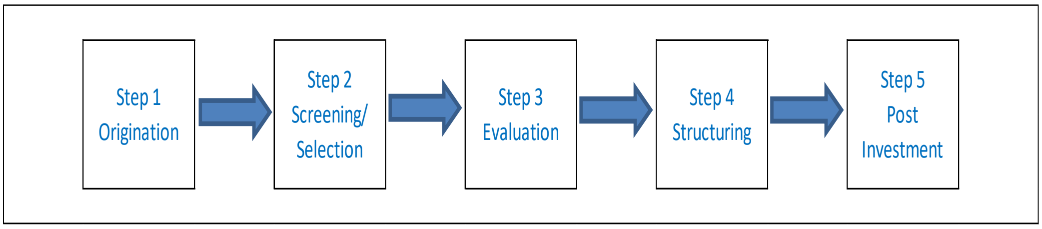
The business angel's assessment of the entrepreneur's personal qualities and characteristics (Harrison and Mason, 2017), the assessment of the marketing strategy and financial projections/forecasts (Mason and Harrison, 1996) and the angel's needs and expectations of what requires an investment need to be combined as a final decision is to be made, leading to a single, combined/mixed/ balanced choice during the decision process.

At the post-investment stage (stage 3), evidence shows that angel investors follow their investments with the majority taking a hands-on role in the business using their commercial skills and experience to add value beyond their financial investment (Harrison and Mason, 1992; Freear et al., 1995; Madill et al., 2005). An angel with sufficient funds does not need to wait until an investment comes to fruition before looking/considering/evaluating and potentially investing in other opportunities. The experience of the process, successful or not, is also likely to influence the types of opportunities an angel subsequently pursues. Evidence on angel exit strategies is limited, but suggests that the majority had no preference if achieved through a management buyout, trade sale, or initial public offering (Paul et al., 2003). Given the high-risk nature of informal investing, there is also the possibility that the venture will fail or be moderately successful, so it may be difficult for the angel to exit, an investment called "living dead" investing (Ruhnka et al. (1992)).

The first attempts to capture the steps taken by business angels come from the field of venture capitalists. These steps could still be used today to help the prospective company understand what a business angel is looking for. A point of caution is that the market for venture capitalists is more structured and organized than that of business angels.

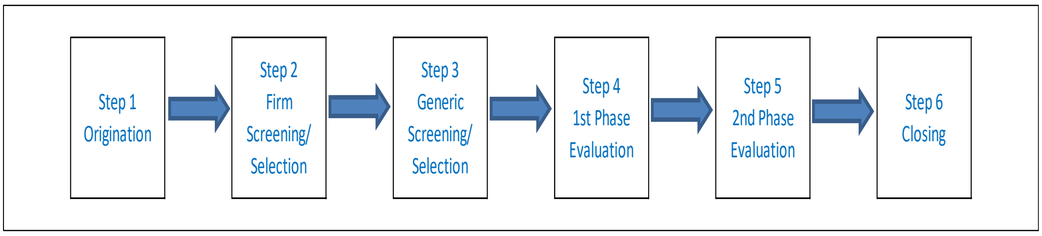
These steps are taken from Tyebjee & Bruno (1984) and are described in Figure 2 and from Fried & Hisrich (1994) and described in Figure 3.

Figure 2 Steps of business angels according to Tyebjee & Bruno (1984).



Source: Created by the authors with data from Paul et al. (2007)

Figure 3 Steps of business angels according to Fried & Hisrich (1994)



Source: Created by the authors with data from Paul et al. (2007)

We notice a similarity in the two approaches. Fried & Hisrich (1994) essentially have two steps for the examination/selection/control of the companies to be invested and two steps for their evaluation in relation to Tyebjee & Bruno (1984). However, they do not have the step of actions/activities after the investment.

Based on the above, it is clear that a company that is interested in receiving funding from business angels should at least follow the following steps in order to be considered a candidate for investment:

1. To get noticed/ in the investment universe/ on the radar of business angels.

2. To project its unique points which will make it stand out and be selectable (whether there is one or more selection/screening phases) by the business angels.

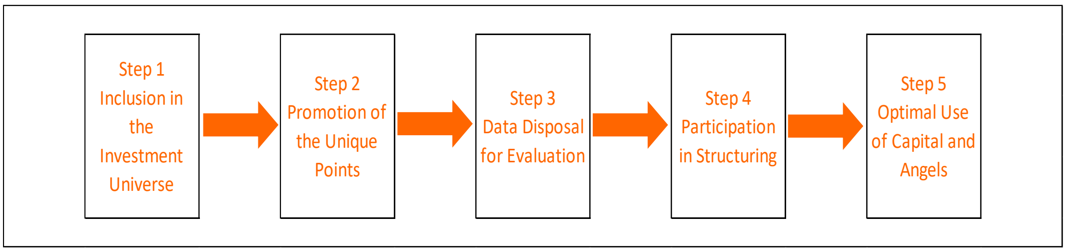
3. To make available to the business angels all those elements/data/documents which will allow/facilitate its evaluation (whether there is one or more phases of evaluation) by them.

4. To actively/dynamically assist in building its financing plan from business angels and to ensure that it receives as much help and guidance from them as possible in matters of strategy, strategic planning, business plan, etc. as well as in marketing, sales and operations.

5. To take care after the (agreement on) investment to mobilize/use in the best possible/optimal way the available funds and to activate the willing/available business angels to help both in matters of strategy, strategic planning, business plan, etc. etc. as well as in matters of marketing, sales and operations (as mentioned above) in order to ensure the success of the venture.

These steps are somewhat shadowy of the steps/stages followed by business angels and are shown in Figure 4.

Figure 4 Shadow steps of enterprises to get funding



Source: Created by the authors

The stages mentioned above, and this attempt to capture the steps of the investment process followed by business angels are somewhat primitive. Therefore, it is amenable to improvement/ refinement/ deepening in order to capture all the steps.

But both this first impression, as well as the more complete one that follows, are based on interviews with active business angels with a focus on the last investment they made. This approach has some advantages:

• Speculation and theoretical or hypothetical or improbable answers are avoided.

• The accuracy of the experience/investment description is ensured.

• Consideration of sequential decision-making becomes possible.

• The tendency for self-report/self-report bias is minimized because the success or failure of the investment is (preferably) unknown at the time of the interview.

• Narrative stories of the past that may not have anything to do with current conditions are avoided.

These advantages are an indication that companies wishing to be candidates for investment can also organize/structure similar interviews with business angels in order to understand on the one hand what they are looking at and the results of their previous investments, on the other hand to determine whether they fit with any interested entrepreneurs - angels. After all, the investment process is a two-way process. It is not enough that the company (or entrepreneur) is eligible, suitable or desired by the business angel. Correspondingly, the business angel should be suitable or desired by the company (or the entrepreneur).

In this way, it can also be understood which are the stages that the business angel (eventually) follows not only in terms of their content, but also in terms of the time they require, the relevance of these stages to the interested/candidate enterprise, and the thoughts and feelings that are created.

Of course, interviews are to some extent based not only on facts but also on perceptions/beliefs – and this is perhaps a point of caution. But entrepreneurship and the matching of the business angel-investor with the prospective investment company-entrepreneur is also based to a certain extent on the coincidence of their perceptions/beliefs or approaches. After all, capturing real situations (such as the stages that business angels (might) follow) is always a challenge.

Advanced models (stages) of the investment process

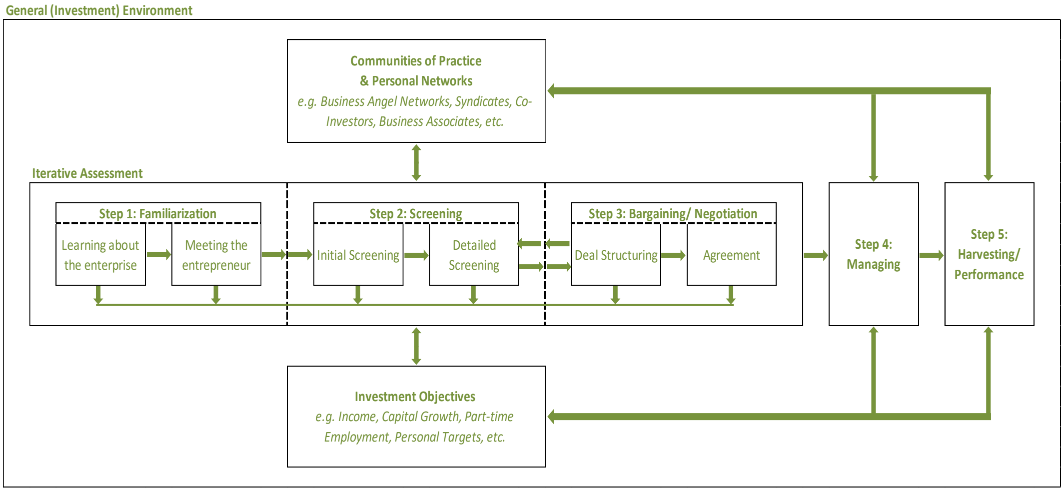
Over the years, more advanced models have been recorded that attempt to capture the stages/steps that business angels follow during the investment process. Their main differences in relation to the above initial/prototype/ primitive stages are found in the individual and deeper analysis they offer, in the consideration of more specific and descriptive titles based on the actions that take place in each step/stage and in the finding that some actions are repetitive and so they constitute an iterative process for the business angel.

Business angels appear to follow a sequential approach with steps in a sequence, but these are not necessarily standardized. This is for a number of reasons, as deals do not always progress in the same way and can be delayed or interrupted. Reasons why this can happen include:

- Raising the full amount of capital required for a business activity can involve funding from many angels and while some may be willing to invest, others may not be so reluctant.
- An angel may not be convinced and delay the whole process to carry out further checks.
- Business like human relationships (which are such after all) also have ups and downs as prospective partners know and try to match their preferences, perceptions and idiosyncrasies.
- External factors may affect the investment process, such as an illness or a pandemic nowadays, and therefore timescales vary depending on the case and circumstances from a few months to over a year.
- A business angel can easily withdraw from the process by ending discussions with the entrepreneur at any time before an investment is made.

However, more modern models suggest that a business angel investment evolves through five stages (Paul et al. (2007)): familiarization, screening/selection/examination, negotiation, management and harvesting/gathering/performance (Figure 6):

Figure 6 Steps of angel investors according to Paul et al. (2007)



Source: Created by the authors with data from Paul et al. (2007)

This process is iterative to the first three stages followed by the business angel, i.e., familiarization, screening/selection/examination and negotiation, allowing/leading to an iterative evaluation that includes six main activities/actions to which an angel adds constantly on the information available to him. Consultation and analysis, which may involve third parties in the form of friends and advisors, may take place as a more detailed knowledge and understanding of the business is thus gained. This repeatability allows the existence and confirmation of both primary and secondary data so that the transition from one stage to another is possible. At the same time, it is a safety net for the business angel as he or she thus has the opportunity/possibility to verify the correctness/validity of his decision/choice before making the final investment. After all (Paul et al. (2007))

- A business angel has the opportunity to terminate the process at any time during this iterative phase.
- In practice/reality there is the possibility of going back to previous steps as an agreement is formed.
    - Angels initially have limited information to guide them in valuing their stake in a business.
    - The arrival or acquisition of new information or unexpected events may lead to a reassessment of their position.

The last two stages followed by business angels are those of managing and harvesting (the profits) of the investment.

Business angels are human and therefore are influenced by a number of factors, such as the formal and informal networks in which they operate, their personal investment goals and of course the overall (investment) environment (Paul et al. (2007)).

- Therefore, the importance of formal and informal networks that may influence the investment choices of business angels should not be overlooked.
    - Formal networks include communities of practice that actively support angel activity, such as business angel networks, unions and economic development agencies (where available).
    - Informal networks include informal personal networks to which a business angel can turn for advice and support such as friends, but also co-investors and business partners.
- The importance of an angel's personal investment goals in the process is of course great. These can be (financial) economic, such as achieving income and/or increasing one's capital. But they may also include other goals, such as finding a part-time interest, such as spending time on the angel side of a business after the investment has been made. The investment process can be affected by an angel's investment objectives, particularly if they change.
    - For example, a change in (financial) economic conditions may force a business angel to re-prioritize the balance between achieving income or capital growth and, in turn, may affect the evaluation of a potential investment.
- Many factors enable and constrain investment processes and therefore the model is completed by showing the impact that the general (investment – and not only) environment can have at any stage.
    - This includes economic, socio-cultural, political and technological influences, which individually or collectively may affect the activities of business angels.

Familiarization Stage

Business Angels

This stage of the investment process involves two main activities,

1. learning opportunity and

2. the meeting with the entrepreneur.

Business angels appear to find investment opportunities through three main sources:

a. business partners,

b. business angel networks and

c. investment syndicates.

The more formal methods of finding investments through, for example, accountants, lawyers, banks and other financial institutions appear to be relatively trivial.

At this early stage of the process,

- Most business angels prefer to read a business plan summary of two to three pages, although some want to see a more detailed version.
- Opportunity evaluation begins immediately with the key considerations of location and industry.
    - Angels prefer to invest relatively close to their place of residence.
    - Investing in longer distances requires compensation from other factors.
- Business angels may be willing to consider proposals that do not meet their preferences, particularly if a trusted business partner has referred the proposal to them.
- The entrepreneur is contacted/acquainted, initially usually by phone or video call, in order to have a preliminary discussion and arrange a first meeting. In this acquaintance the following should be taken into account:
    - Business angels are wealthy individuals and are generally under little pressure to make an investment in order to generate income or capital growth. They can afford to wait until not only the right opportunity but also the right person comes along.
    - The assessment at this stage focuses on the entrepreneur or team behind the business, although more information about the business opportunity may be gathered at the same time.
    - Finding the right entrepreneur and the impression he gives them is important for the business angel. They should judge that they can work with him and share comparable views and understandings but also possibly fit better overall.

Entrepreneurs

It is therefore clear that if entrepreneurs want to attract the serious interest of a business angel, they must be able to present not only their ideas but also themselves effectively.

- It is important that they give the impression of reasonable, reliable, consistent and composed people who know what they want to do, without being dogmatic. If the latter is true, the possibility of a long-term relationship/cooperation with the business angel is very small.
- Equally important is the team that surrounds the entrepreneur. She should also be convinced of her ability to carry out the project.
- The entrepreneur together with his team should inspire the business angel to want/decide to work with them.
    - A strong team may cover any gaps that will be diagnosed in a business plan.

Control/Examination/Selection Stage

Business Angels

From this stage onwards in pre-investment activities, angels engage in more structured evaluation in which the term screening/examination/selection is used. The business angel

- Examines both primary and secondary data (hard and soft data) about the opportunity and the entrepreneur(s) behind it.
- Begins with an initial screening stage during which further meetings are held with the entrepreneur as the business angels try to confirm first impressions and delve deeper into the business opportunity.
- Interested parties can use their own business networks to check the background and history of the entrepreneur.

A thorough study of the business plan will also be done at this stage.

- When a proposal involves angels investing in an industry or technology with which they are unfamiliar, they may seek advice from business partners to bring them into the deal as additional angels.
- At this stage, business angels are also likely to assess how they can contribute to the business beyond the scope of their financial investment.
- Envisioning a fulfilling, more holistic post-investment role can be a key factor in ensuring that the investment process unfolds smoothly, as their involvement in the company's operations makes it more likely that angels will be successfully matched with the right entrepreneurs.

- Business angels may form an "emotional" commitment to an investment proposal (Fried and Hisrich (1994)).
    - During the review of an opportunity, business angels may spend more time and suggest changes to the business plan.
    - The most common areas for review are marketing and (finance).

At this point in the process, the number of additional angels, if any, to participate is determined. Having experienced angels or a syndicate inspires confidence in the less experienced as well as the entrepreneur.

Entrepreneurs

At this stage, companies interested in receiving funding from business angels should therefore pay attention – in line with the above – to the following:

- Make available to business angels all the information they have about the business they want to recommend (or have already recommended) with full transparency.
    - This can be sometimes be laborious or procedural but it helps to gain useful time that can be used creatively in strategy planning.
- To have made sure to draw up at least a preliminary business plan. The first "justification" a funding body looks for is the business plan.
    - Therefore, it is important that the company has prepared at least a simple version of it including its main points.
    - The parts and content of a business plan are discussed/presented in the respective texts/tools.
- Get in touch with business angel networks to identify – if possible – business angels who invest in related activities or would like to invest in related or non-related activities.
    - This effort may help to find business angels who will at least have an interest in the company's activity or industry.
    - Without meaning that there will be an absolute match, it shows a motivation and an interest on the part of the entrepreneur and this might spark the interest of some (additional) business angels.
    - It also makes it easy to access the history of the entrepreneur or business, which is what business angels are looking for.
- To have thought about the possibility of suggesting to the business angels themselves areas that could contribute to the business. On the one hand, this will mobilize business angels, but possibly also attract the most qualified in these fields.
    - Areas of interest are strategy, marketing, sales, operations and finance.
- Let the entrepreneurs themselves think about the profiles of business angels that would match them. What are the characteristics that a business angel should have in order to work with him, who would make him their partner and who would co-invest with him.
    - An important aspect is whether they would like - among others - business angels who invest in similar businesses and therefore already have experience, or whether they consider this would lead to a conflict of interest and therefore choose business angels who invest in unrelated businesses.
    - Thus, it can be ensured to some extent that their views, perceptions and beliefs will match, which is important for business angels as well.
    - After all, the investment process, as mentioned above, is a two-way street. It is not enough that the investment is considered suitable for the investor. The investor should also be acceptable to the company and should not constitute a solution of necessity.

Negotiation Stage

Business Angels

At this stage the due diligence is completed.

- Several times it is not a standardized activity and is performed, at least in part, by the angels themselves.

- Also, the negotiations on the value of the financial investments in terms of shares are completed.

The return an angel (should) expect to receive for different levels of investment is a key issue.

- These negotiations are often difficult and intense as business angels and entrepreneurs try to find common ground.
- In part, this may be because business angels invest early in the business process, when their value is often minimal and of course there is no track record of returns.
- However, when the entrepreneur has already established a business and made an investment of time and money, this provides the angel with a reference point to more easily assign an approximate value.
- However, angels often approach the subject of stock valuation intuitively, without necessarily following a logic. They therefore often rely on their judgment.

How and when additional investment capital will be made available is also considered, although in most cases this is not set out in a formal agreement.

- Given the risk and reward issues outlined in the negotiation phase, reaching a final agreement is often more difficult than the parties thought.
- Disagreements may also arise in finer points of the deal such as the equity composition as the addition of additional partners or the departure of angels may occur.

Completing the negotiation stage is a formal agreement between the entrepreneurs and the angels that sets out the details of the deal reached.

Entrepreneurs

This stage is perhaps difficult and demanding for entrepreneurs as well, as the outcome of the negotiation will determine the shareholder composition of the company, the expected or promised returns and the role of each interested party (entrepreneur or business angel) in the governance and daily activity of the company.

Entrepreneurs should be prepared for a number of issues:

- Based on the business plan (even in its preliminary form) entrepreneurs should know what their real need is for financing of each form and specifically what amounts they expect from business angels.
    - Do they favor one or more business angels so that there is no concentration on one of them?
- They should also have a first view of the activities (other than financing) in which a business angel's contribution may be needed (eg marketing) and be prepared to ask for it as part of the negotiation.
- To have thought about which points of the business plan, the share composition, the returns, etc. are important to them and therefore (potentially) non-negotiable and which are of lesser importance and to some extent would be subject to change to conform to the preferences, expectations or requirements of the business angels.

Management Stage

Business Angels

Business angels often choose to be actively involved in the enterprises they choose to invest in. In this way, they appreciate that they contribute to the success of the project and help the company in the execution of their tasks. Depending on their experience they can contribute in matters of organization, management and motivation of teams, strategy, marketing, operations, etc.

Typically, business angels limit the number of companies they invest in. While the overall level of funds available for investment is a limiting factor, time is also a critical resource. Angels are careful not to commit to too many companies, especially if they devote some of their time to the business so they can meet the demands.

Entrepreneurs

At this stage, entrepreneurs have an interest/interest in ensuring that what has been agreed on, on the one hand, in terms of the financing/provision of capital, and, on the other hand, in terms of the participation of business angels in the operation of the company, are respected.

It is now the stage when the company - if it did not exist before - has entered the phase of its productive activity or a new phase of development - if it existed before. It is important to have a cooperative spirit to implement the business plan and achieve production, sales, profitability, etc. goals. set by the company. These goals are the focus of entrepreneurs' interest and they must ensure that business angels remain focused, committed and available to achieve them.

Entrepreneurs should ensure that the business angels they have invested in continue to provide the (financial) resources or assistance in the functions that have been agreed, particularly if they have chosen to do this for more than one business. The latter is important as other enterprises may claim part of their resources or time.

Harvesting/ Collecting/ Performance Stage

Business Angels

Angels can get the result of their investment probably by a sale of their share. Less likely is through an initial public offering process or a management buyout. Business angels have an exit strategy that depends on their temperament, their engagement with the business and the prospects it provides. Exit schedules are flexible. A decisive role in maintaining the investment – apart from its prospects – is the maximization of any tax advantages.

Entrepreneurs

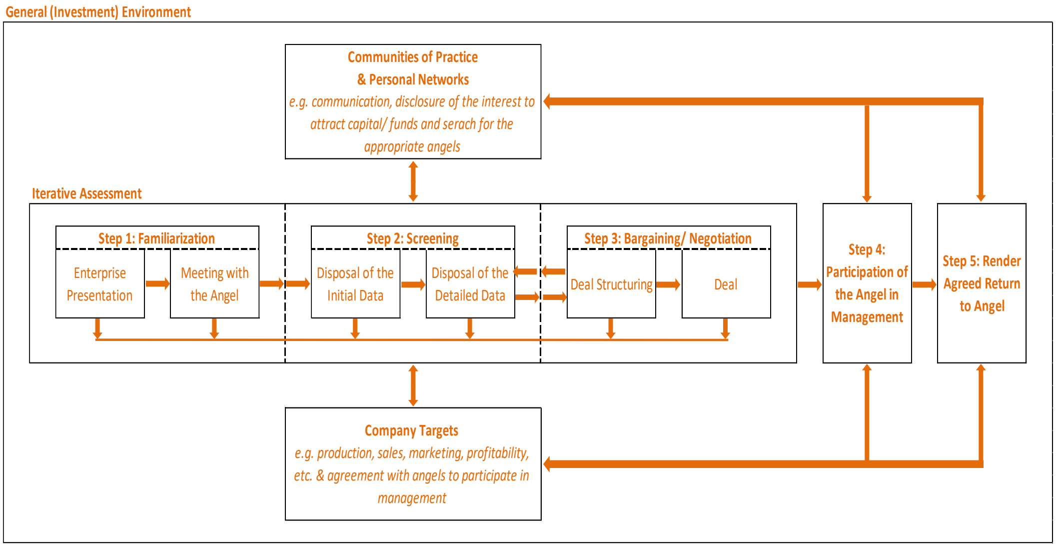
The entrepreneurs at this stage ensure – in collaboration with the business angels – that the returns are paid as agreed, but also that any planned exit strategy is followed. Depending on the case, possibly the entrepreneurs (themselves):

- To have collected the amount required to buy the share of the business angels participating in the business.
- To have taken care to find new partners or business angels to replace those who will leave.
- To have drawn up a plan to introduce the company to an organized stock market through an initial public offering.
- Willing to continue working with existing business angels, thereby convincing them to roll over/continue their investment for additional years.
- To have chosen/decided to dissolve or sell the enterprise as a whole (possibly due to a change in circumstances, unfavorable environment or failure of the venture), so they are moving in this direction in collaboration with business angels.

Of course, in any case the circumstances will determine what will happen in the end. As mentioned, the schedules are flexible for business angels. The same is largely true for entrepreneurs. What is important is that entrepreneurs are prepared and foresee - as far as possible - what the next steps of their cooperation with business angels will be - depending on the course of the business and the formation of the general (investment) environment.

In summary the process from the business side is shown in Figure 7:

Figure 7 Shadow steps of enterprises to receive angel funding



Source: Created by the authors

The informal nature of business angel investment

Although a five-stage business angel investment process has been described, one cannot claim that the process is always so structured and orderly in stages. In practice, these stages overlap and the boundaries between them are blurred. Angels do not always perform them in the same order or necessarily in their entirety. This is largely due to the informal nature of angel investing. Nevertheless, two generative mechanisms can be identified that drive the investment process followed by investment angels (Paul et al. (2007)):

• the personal nature of the process and

• the assessment activity.

Personal nature of the process

Business Angels

The model described above explains that informal investment is a process characterized by intense interaction through a series of interconnected stages in which there is a transition from one stage to the next as cooperative practices develop. This can be seen throughout the process. This process is significantly based on the temperament and personal preferences, beliefs and choices of the business angel and not on official protocols for recording procedures or undertaking investments. Examples are (Paul et al. (2007))

- knowledge/information about the business/investment, where the source of information is important for business angels
- the choice of investment before or after which is decided the personal involvement of business angels in the ventures in which they invest, an involvement facilitated by a good working relationship with the entrepreneur (Harrison and Mason, 1992; Freear et al., 1995; Paul et al., 2003; Mason and Stark, 2004)
- the entire investment process and throughout its duration, where personal relationships underpin the informal investment process with angel investors emphasizing the choice of business activity entrepreneurs who inspire credibility (Shane and Stuart, 2002).

Entrepreneurs

Entrepreneurs hoping for business angel funding should recognize this intensely personal stamp that each business angel puts on the process and prepare to attract and partner with the business angels they feel are a good fit. After all, start-up entrepreneurs often operate in this way as well. Their personal intuition weighs more than standards, and the coincidence of opinions, beliefs and perceptions is important in choosing partners. Therefore they are called:

- Make sure to communicate their interest to agencies that have contact with business angels.

- Know what activities business angels can participate in other than financing and address the appropriate ones.
- Ensure that both their venture and themselves and their teams exude trust, credibility and consistency.

Evaluation

Business Angels

The second generative mechanism, which also covers the entire investment process, is evaluation. Once an angel learns about a potential investment opportunity, the evaluation begins by weighing both primary and secondary data, where the business angel tries to find answers to a series of questions that will help him in the evaluation (Paul et al. (2007)):

- First, the angel assesses whether the opportunity meets its investment criteria in terms of location and industry by asking a series of questions:
    - What is the distance from the enterprise?
    - What do I know about this industry?
- The angel's focus then turns to the entrepreneur, his personality, background and experience by asking a few more questions:
    - Can I work with this person?
    - Does the entrepreneur have a good track record in this field?
- As the process evolves, emphasis is placed on marketing and (financial) considerations:
    - Are the sales forecasts justified?
    - Do we have our amounts correct?
    - Who else can invest in the company?
- Post-investment angels are (often) actively involved/participating in the business which enables them to not only monitor but to actively evaluate and manage their investment by considering:
    - How is the company doing?
    - Are sales high enough?
    - What else can I do?
- And, although the harvest/gathering/performance stage is perhaps not clearly prescribed when it will happen, it can be seen as involving the business angel's assessment of if and when it will go away.

The decision to invest ultimately represents a synthesis of the angel's assessment of primary and secondary data (hard and soft data) that has been and continues to be collected throughout the process.

Entrepreneurs

Assessment reflects (when done correctly) the image created by the assessee. It is therefore in the interest of the entrepreneurs to ensure that the impression that the business angels get during the evaluation they carry out at all stages of the process is the right one. More specifically:

- To make available to the business angels all the data necessary to form an opinion on the appropriateness of the investment, possibly addressing those they consider relevant to the subject.
- Be honest and forthright in revealing their strengths and weaknesses, highlighting their comparative advantages, both themselves and their teams, with an emphasis on reliability and consistency.
- To explain the forecasts of sales and other commercial and financial figures having made sure that they are based on realistic data and assumptions.
- To prepare for (and co-implement when the time comes) the involvement of business angels in the running of the business and possibly suggest activities in which they would like to be involved.
- Cooperate for the exit or stay of the business angels in their business, delivering each time what was agreed upon.

Comparison with formal/standard forms of investment

Business Angels

A comparison of the steps/stages followed by business angels, which as explained constitute an informal market and have an informal nature of investment with other formal/organized markets and forms of investment (such as venture capital for example) shows that there are similarities and differences (Paul et al. (2007)).

Similarities

The approaches (represented linearly above) are based on a series of stages of stakeholder engagement in activities (Paul et al. (2007))

- before the investment and
- after the investment that
- are associated with a successful negotiation phase in which a formal agreement is reached.

Differences

However, compared to data on investors in the formal market, we found that business angels give more weight to more secondary factors/secondary data (soft factors). These differences can be traced to the individual stages of the business angel investment model (Paul et al. (2007))

- An important difference is the importance that business angels give to the early stages of investment. In the familiarization stage, the impression the entrepreneur makes/gives at the first meeting with the angel is important in determining whether the investment will proceed further. It is essentially an acquaintance that resembles an interview. The impression they make on each other (and especially the entrepreneur on the business angel) is important to whether there will be further steps. In the case of business angels this will determine whether they will eventually provide the funding.
- When screening/screening/selecting investments, business angels are more likely than venture capitalists to place more emphasis on personal factors. Trust in the entrepreneur in the informal market is of the utmost importance and he should inspire credibility. The latter is also important for venture capitalists, who seem to be equally or more interested in the business's growth dynamics.
- During the trading stage, informal investors work with less information, have little precedent to draw on, and lack the resources to conduct in-depth market analysis compared to venture investors (Fiet, 1995). Faced with these obstacles, business angels operate more on intuition in terms of estimating how much equity/equity they should receive in return for their investment. This intuition involves the integration of disparate information (Hisrich and Jankowicz, 1990) as an angel performs a balancing act in which the value of the opportunity is weighed in terms of equity. Evidence from the formal venture capital market suggests that investment candidates are typically evaluated by applying one or more valuation techniques to the financial and accounting information contained in the business plan submitted by the entrepreneur (Wright and Robbie, 1996). This evaluation process is likely to involve many iterations to test the robustness of the internal rate of return (IRR), the most common performance measure used by the venture capital industry (Murray, 1999). Business angels may not have the means to calculate the expected IRR and thus may not include it during the valuation or other phase of the investment process. Furthermore, while financial theory suggests that, faced with a lack of information about an opportunity, investors respond by writing contracts designed to transfer risk to the entrepreneur (Denis, 2004), this does not seem to apply in the stages that follow business angels (either at the negotiation stage or at other stages);
- The extent of post-investment involvement in the management of the business is likely to vary between venture capital and angel investors. In the formal market, the main roles undertaken by venture capital investors are as members of strategic boards/committees and financial advisors (Manigart and Sapienza, 2000). In contrast, in the management stage of the process, angels are usually expected to assume a role that allows them to contribute not only strategically but also operationally by interacting with the entrepreneur on an ongoing basis (Madill et al. (2005), Paul et al. (2007)).

Consequently, as the role of venture capitalists and business angels are complementary and their markets of operation are also complementary, these similarities and differences are perhaps to be expected (Paul et al. (2007)).

- In terms of similarities, it is clear that both markets serve the same purpose of providing private financing to high-risk business activities in exchange for equity stakes and returns higher than expected from public investment/listed companies. These returns are hoped to materialize at a future date for significant return.
- In terms of differences, there is a focus of business angels/informal markets on the secondary factors (soft factors) which can be attributed to two main reasons:
  1. In the early stages of a firm's development, assets are often intangible and knowledge-based (Hsu, 2004) and evidence from trading performance is limited if not non-existent unlike venture capitalists who have access to a wealth of evidence / data for business (science). Business angels therefore work with little (art) or no (magic) historical performance data on which to base their investment decisions (Freear et al., 1995). Therefore, business angels have no choice but to give relatively more weight to the characteristics of business founders/entrepreneurs.
  2. Second, venture capitalists employ others/manage other people's money and raise capital signaling their ability to spot opportunities and then maximize investment returns. In contrast, angels use their own funds and are fully exposed to both the risk and reward of any investment. They have no fixed performance goals and timelines, and are accountable practically only to themselves. While venture capitalists focus on due diligence, due diligence and contracting during the investment process as a risk reduction strategy, angels are more likely to focus on an active role after involvement in the business (Van Osnabrugge, 2000). This involvement/relationship approach with the entrepreneur to reduce the risk of venture failure results in angels placing more emphasis on secondary factors throughout the investment process compared to venture capitalists.

Entrepreneurs

As angels pay more attention than venture capitalists to softer factors this means that they should be emphasized by entrepreneurs. Specifically, you should

- Prepare to promote themselves and their business proposals more effectively.
- To be trained in presentation skills for entrepreneurs in the general context of investment readiness (Mason and Harrison, 2001).
- Assess the role they wish an angel to play after the investment. A successful relationship between an angel and an entrepreneur underpins the informal investment process and, in turn, is facilitated by a good match between the skills and experience an investor can offer and the needs of the business.

4.4.4 Banks, Funds, Business Angels, Crowd funding, other in Bulgaria

Public-private partnerships

Among other groups of possible sources of funding are public-private partnerships (PPPs), which are agreements between entities from the municipal and private sectors for the construction of public infrastructure and utility facilities and for the provision of related services. The characteristic of these partnerships is that the partners involved in them share the investment, the risk and responsibility and the reward/profit.

Business angels

Business angels are individuals who invest personal funds in start-up companies (in most cases at an early stage), for a minority share of the capital, usually between 5 - 250 thousand euros. In addition, they provide management experience, skills and a network of contacts to the companies in which they invest. They invest in all sectors of the economy.

Private capital and venture capital funds

These funds invest in companies that have the potential to achieve growth and sustainable competitive advantage. Venture and private equity funds take an equity stake in the company and work with management to improve their market position.

Crowdfunding

Crowdfunding is the financing of a single project or venture by raising funds from a large number of people. It is done through specialized internet platforms, but it can also be done in other non-traditional ways, such as specially organized events or even through emails. There are two main types of crowdfunding, one is based on “reward-for-funding” where users fund a particular venture in return for receiving a certain good or service, and the other is funding in return for receiving a portion of the capital.

Export insurance

Export insurance and reinsurance is at the expense of the state and refers to export risks related to the production and export of Bulgarian goods and services or the realization of Bulgarian investments abroad. The insurance provides traders in the event of property damage incurred by them as a result of commercial or political risk

5 Evaluation of Financial Tools/Instruments

5.1 Methodological Framework - Greek Partner's Approach

5.1.1 Methodology of Greek Partner

We compare the different financing tools in terms of six different dimensions, which are key from the perspective of the investor. Namely,

Liquidity, which measures the ease with which an asset or security can be readily converted into cash without affecting its market price (Investopedia, 2023b). It ranges from low to high.

Investment objective, which ranges from income to growth (Cooper Pacific, 2020).

Growth investing at increasing the value of the investment over time, and is based on compound interest. It can provide the potential for significant returns, but it also involves a high level of risk. Growth investments often favor faster-developing companies at early stages in their development.

Income investing, on the other hand, is based on dividends paid out to the investor. Income funds target a steady stream of income. Income investing can provide a steady stream of income, but the potential for returns may be lower.

Control of the investor over the investee, which means that the investor is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee (Annual Reporting, 2019). It ranges from low to high.

Holding Period of the investment, which is the time the investment is held by an investor, or the period between the purchase and sale of a security. The holding period is used to determine the taxing of capital gains or losses on the investment. The holding period is calculated, starting on the day after the asset's acquisition and continues till the day of its disposal or sale. The holding period can also include the time for which the person, who gave you the asset, held them. It ranges from limited to unlimited.

Expected Investment Return, which is is the profit or loss that an investor anticipates on an investment that has known historical rates of return (RoR). It is calculated by multiplying potential outcomes by the chances of them occurring and then totaling these results (Investopedia, 2023a). It ranges from Medium to High.

Assumed Risk, which is the possibility or probability of losing money or not achieving the expected return on an investment. It is caused by various factors, such as market conditions, political instability, or public perception. Investment risk is often related to investment returns, meaning that safer investments tend to offer lower returns, while riskier investments may offer higher returns. Investment risk can be managed by diversifying the investments and understanding the different types of risk involved (Morning Star, 2021).

5.1.2 Evaluation Matrix – basic elements of tools of Greek partner

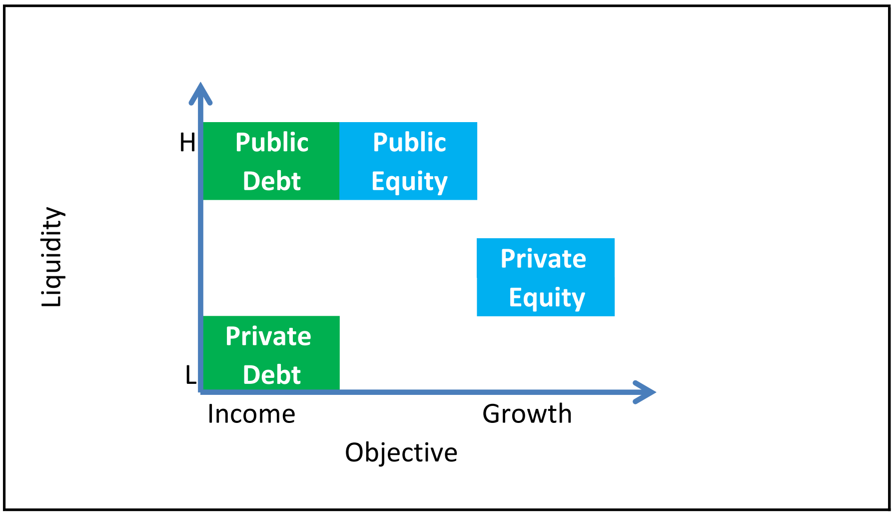
It is now the stage when the company - if it did not exist before - has entered the phase of its productive activity or a new phase of development - if it existed before. It is important to have a cooperative spirit to implement the business plan and achieve production, sales, profitability, etc. goals. set by the company. These goals are the focus of entrepreneurs' interest and they must ensure that business angels remain focused, committed and available to achieve them.

Based on the above definitions, we assess the financing tools in terms of the aforementioned dimensions, i.e.

1. Liquidity
2. Investment objective
3. Control of the investor over the investee
4. Holding Period of the investment
5. Expected Investment Return
6. Assumed Risk.

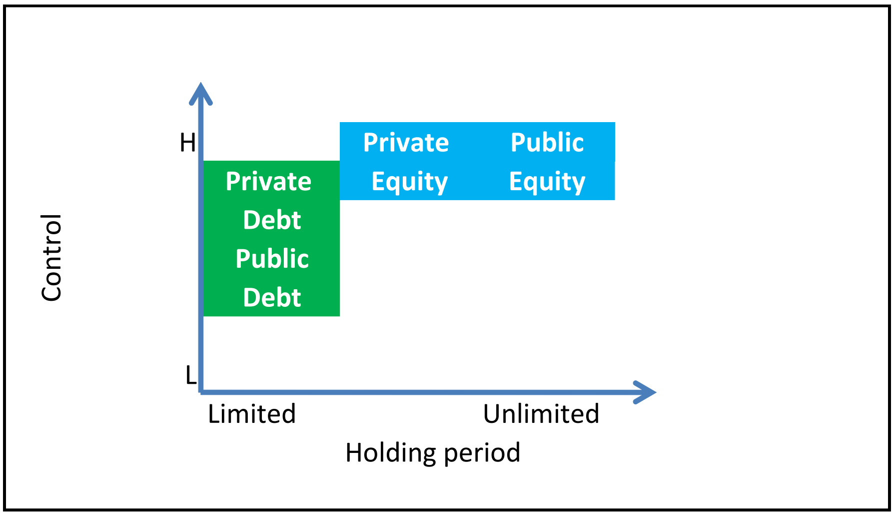
We derive the following charts (Poufinas, 2022):

Comparison asset categories in terms of liquidity and objective



Note: Created by the author with information assembled from PRI (2019).

Comparison asset categories in terms of control and holding period



Note: Created by the author with information assembled from PRI (2019).

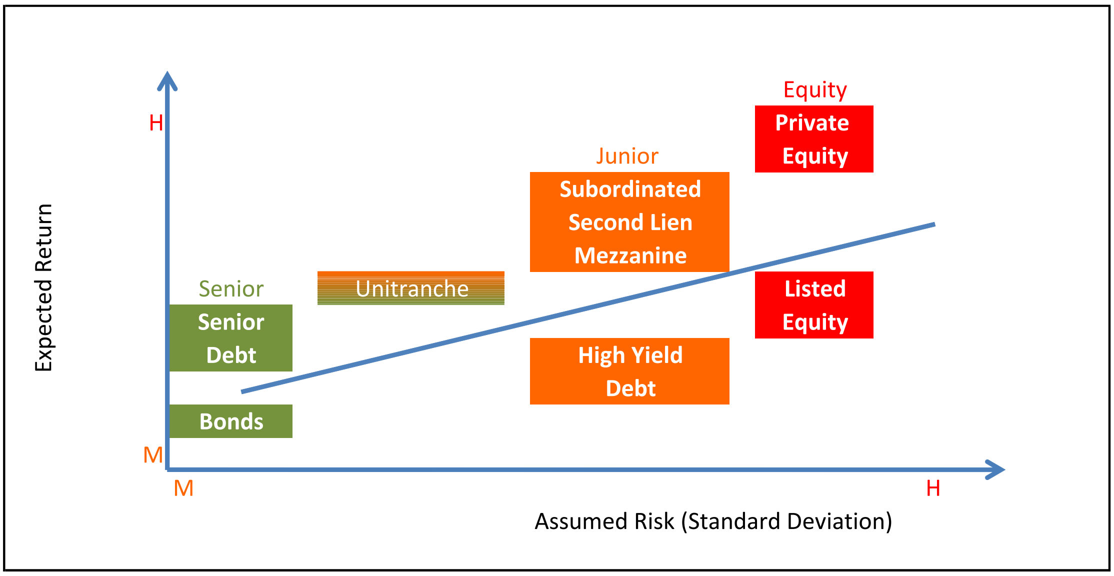
PRI (2019) has drafted the above in a tabular form:

Overall Comparison of different investment types.

	EQUITY		DEBT	
	PUBLIC	PRIVATE	PUBLIC	PRIVATE
Investee entity	Public company	▪ Private company ▪ Special Purpose Vehicle (SPV)	▪ Government-related entity ▪ Public company ▪ Private company ▪ SPV	▪ Public company ▪ Private company ▪ SPV
Investor/investee relationship	Legal owner (partial)	Legal owner (full or partial)	Lender (contractual relationship only)	Lender (contractual relationship only)
Returns profile	Investor potentially participates in both upside and downside	Investor potentially participates in both upside and downside	Investor participates in downside only	Investor participates in downside only
Investment holding period	Potentially unlimited	Potentially unlimited (typically seven-15 years for Private Equity funds)	Limited by bond tenor	Limited by terms of loan (illiquidity typically requires hold-to-maturity approach)
Liquidity	Most liquid	Somewhat liquid	Most liquid	Least liquid
Investment objective	Growth (occasionally income)	Growth	Income	Income
Investor control over investee	High (via voting and engagement)	High (via engagement and board seats)	Medium to low (limited opportunities to engage)	High to low (dependent on access to management)
Investee reporting requirements	Stock exchange requirements and national legal minimum	National legal minimum	Stock exchange requirements (public companies only) and national legal minimum	National legal minimum (for private companies)

Source: PRI (2019)

Risk-return profiles for various investment strategies



Note: Created by the author with information assembled from PRI (2019), IHS Markit (2017) and NN Investment Partners (2017).

5.2 Methodological Framework - Bulgarian Partner's Approach

5.2.1 Methodology of Bulgarian Partner

The purpose of the present study is to evaluate the suitability of introducing one or more of the existing financial instruments for the enterprises at the local level according to previously developed evaluation criteria. Given the state of the ecosystem for the development of entrepreneurship in the region, criteria have been developed, based on which an overview of the willingness of enterprises to take advantage of the available financial instruments has been made.

The following indicators are relevant for evaluating financial instruments in a given region:

- Popularity of financial instruments in the region
- Use of financial instruments in the region
- Existence of a targeted policy for the promotion of financial instruments by the relevant institutions (e.g. program management bodies, funds and banks)
- Willingness of enterprises to benefit from a combination of financial instruments
- Availability of support networks for the more effective absorption of financial instruments, etc.

On this basis, the following applicable criteria are identified in the evaluation methodology:

1. Accessibility – the popularity, availability and awareness of the financial instrument, as well as availability of consultation
2. Effectiveness – the usefulness and applicability of the financial instrument in relation to the needs of the business, as well as attainability and effectiveness in terms of achieving the goals of the business
3. Complexity – the possibility of combining and reconciling the financial instrument with other instruments and sources of financing
4. Scale – the size of the budget of the financial instrument relative to the financial capacity of the business
5. Profitability - degree of risk, return, profitability and the ability of the business to make a profit from the use of the financial instrument

Based on the information gathered from local sources above, the following assessment was made.

5.2.2 Evaluation Matrix – basic elements of tools of Bulgarian partner

According to the Bulgarian partner approach the Scale for evaluating the suitability of the introduction of one or more of the existing financial instruments for enterprises at the local level can be seen in the following table.

Table 1. Scale for evaluating the suitability of the introduction of one or more of the existing financial instruments for enterprises at the local level

Criteria	Assessment scale			
Accessibility	Popularity, Reachability, Awareness And Consultation	Reachability, Awareness And Consultation	Popularity, Accessibility	Consultation
	10 points	7 points	4 points	0 points
Effectiveness	Suitability, Applicability, Achievability and Effectiveness	Suitability, Applicability, Achievability	Suitability and Effectiveness	Effectiveness
	10 points	7 points	4 points	0 points
Complexity	Can be combined with 3 other instruments	Can be combined with 2 other instruments	Can be combined with 2 other instruments	Cannot be combined with other tools
	10 points	7 points	4 points	0 points
Scale	Applicable to business with below average financial capacity	Applicable to businesses with medium financial capacity	Applicable to business with above average financial capacity	Applicable to business with high financial capacity
	10 points	7 points	4 points	0 points
Profitability	Low Risk, High Returns Yield And Profit	Low Risk, High Returns And Profit	Low Risk, High Return	Low Risk
	10 points	7 points	4 points	0 points
Total:	**50 points**	**35 points**	**20 points**	**0 points**

Source: Expert assessment

Based on the characteristics of the available financial instruments in the region and the scale with the criteria above, the following assessment of the suitability of the introduction of one or more of the existing financial instruments for enterprises at the local level has been made, as follows:

Table 2. Reputation assessment and prioritization of tourist routes

Financial Instrument	***Accessibility***	***Effectiveness***	***Complexity***	***Scale***	***Profitability***	**Total points**
Funding from the state budget under the Investment Promotion Act	4	10	10	0	10	**34**
Grant programs funded by the EU	10	10	10	10	10	**50**
Financing from private or state investment funds	4	10	10	7	10	**41**
Banking instruments for financing	10	10	10	10	10	**50**
Public-private partnerships	7	10	10	10	10	**47**
Business Angels	4	10	10	7	10	**41**
Crowdfunding	7	7	10	10	10	**44**
Export insurance	0	10	10	7	10	**37**

Source: expert calculations

Based on the assessment, the suitability of introducing one or more of the existing financial instruments for enterprises at the local level can be graded as follows:

Table 3. Degree of suitability of existing financial instruments for enterprises at the local level

Place	Financial Instrument	Assessment Points
I	Banking instruments for financing	50
II	Grant programs funded by the EU	50
III	Public-private partnerships	47
IV	Crowdfunding	44
V	Business Angels	41
VI	Financing from private or state investment funds	41
VII	Export insurance	37
VIII	Funding from the state budget under the Investment Promotion Act	34

Source: expert calculations

Bank financial instruments and grant programs funded by the EU are identified as the most suitable for business in the region, and funding from the state budget under the Investment Promotion Act is identified as the most specific and, accordingly, less suitable for mass business. export insurance. The remaining financial instruments such as public-private partnerships, shared financing, financing from business angels, private or state investment funds are applicable on a project basis, depending on the nature and type of the investment and the business as a whole.

6 Conclusions

The main funds and financial instruments that are active in Bulgaria, aimed at business and applicable in the considered cross-border region can be classified according to the type and source in the following several groups:

1) State (republican) budget (ZNI), according to the Investment Promotion Act:
   - Priority investment projects – projects implemented in the economic activities that are particularly important for the economic development of the Republic of Bulgaria or for the regions in the country
   - Investments with a class A or class B certificate – projects with significant indicators for the size of investments and promotion of employment
   - Class B investments - projects of municipal importance

2) European Structural and Investment Funds (2021-2027)
   - Program 1. Competitiveness and innovation in enterprises - aimed at achieving intelligent and sustainable growth of the Bulgarian economy, as well as the implementation of industrial and digital transformation
   - Program 2. Scientific research, innovation and digitization for intelligent transformation - contributes to achieving the goals of the European Green Deal aimed at building a modern, resource-efficient and competitive economy. A leading horizontal priority is the transition to a green, blue and circular economy.
   - Program 6. Development of human resources - aimed at overcoming challenges in the field of the labor market and obstacles to social inclusion and equal opportunities for vulnerable groups in society.
   - Strategic plan for the development of agriculture and rural areas - aimed at creating conditions for the achievement of the cross-sectoral objective of the European Union, which is expressed in the modernization of agriculture and rural areas by stimulating and sharing knowledge, innovation and digitization in agriculture and rural areas and by promoting their greater use by farmers through better access to research, innovation and knowledge exchange and through training, and to achieve the specific objectives of the Common Agricultural Policy.
   - Maritime and Fisheries Program - contributes to the achievement of two of the EU's policy objectives - PC 2 "A greener, low-carbon Europe by promoting a clean and fair energy transition, green and blue investments, circular economy, adaptation to climate change and risk prevention and management" and PC 5 "Europe closer to citizens by promoting sustainable and integrated development of urban, rural and coastal areas and local initiatives".
   - Programs for territorial cooperation
     - INTERREG VI-A Greece-Bulgaria 2021 – 2027 - aims to achieve economic, social and territorial convergence. Joint projects aimed at improving connectivity, preventing risks arising from climate change, protecting the environment, promoting equal access to education and promoting the integrated development of the cross-border region will be supported. The territorial scope of the program is the regions of Haskovo, Smolyan, Kardjali and Blagoevgrad on the territory of the Republic of Bulgaria and the regions of Evros, Xanthi, Rhodope, Drama, Kavala, Thessaloniki and Serres on the territory of the Republic of Greece.
     - INTERREG VI-A IPP Bulgaria - Turkey 2021-2027 - with the common goal of strengthening the territorial cohesion of the cross-border region Bulgaria-Turkey by providing support for increasing the competitiveness of the local economy, digital and green transformation and expanding access and improving the quality of services of general interest, incl. reducing pollution and the negative effects of climate change, as well as supporting joint actions for institutional and operational cooperation to strengthen the good governance of migration in the cross-border area.

3) Recovery and Resilience Plan – with the main objective of facilitating the economic and social recovery from the crisis caused by the COVID-19 pandemic. In the pursuit of this goal, a set of measures and reforms have been grouped to make a significant contribution to the recovery of the economy's growth potential and to develop it by ensuring resistance to negative external impacts. This will allow, in the long term, the achievement of the strategic goal of convergence of the economy and incomes to the European average. At the same time, the Plan lays the foundations for a green and digital transformation of the economy, in the context of the ambitious goals of the Green Deal.

4) Fund of funds for debt instruments and equity and quasi-equity investments (seed and acceleration fund, venture capital fund, mezzanine/growth fund, etc.)
5) Banking instruments – loans, guarantees, leasing, etc.
6) Private sources, incl. in the form of public-private partnerships between enterprises and the state/municipal authorities, shared financing, business angels, export financing, private and state funds for equity financing, etc.

The applied methodology for assessing the suitability of the introduction of one or more of the existing financial instruments for enterprises at the local level identifies the following applicable criteria:

1. Accessibility – the popularity, availability and awareness of the financial instrument, as well as availability of consultation
2. Effectiveness – the usefulness and applicability of the financial instrument in relation to the needs of the business, as well as attainability and effectiveness in terms of achieving the goals of the business
3. Complexity – the possibility of combining and reconciling the financial instrument with other instruments and sources of financing
4. Scale – the size of the budget of the financial instrument relative to the financial capacity of the business
5. Profitability - degree of risk, return, profitability and the ability of the business to make a profit from the use of the financial instrument

Bank financial instruments and grant programs funded by the EU are identified as the most suitable for business in the region, and funding from the state budget under the Investment Promotion Act is identified as the most specific and, accordingly, less suitable for mass business. export insurance. The remaining financial instruments such as public-private partnerships, shared financing, financing from business angels, private or state investment funds are applicable on a project basis, depending on the nature and type of the investment and the business as a whole.

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