# The interaction of private and public guarantee institutions for the SMEs's benefit

**Pablo Pombo – AECM Founding President** 

aecm

## **SUMMARY**

**About AECM** 

# **Z** Private-mixed vs public schemes





## **1. About AECM: Our history in Europe**

# 2. Private vs Public Guarantee Schemes



- Conceptualy framework
- ✓ Heterogeneous schemes, with a common mission, in different identified taxonomies, with different business models.
- ✓ Private origins (SCM), that persist in mixed systems with resources and/or public counter guarantee, along with a greater general development of public schemes, including with supranational counter guarantee in the EU.
- Mixed schemes remain within the scope of the current concept of public-private collaboration.

2. Private vs Public Guarantee Schemes



- Relationship and permanent interaction effects
  - ✓ The SME is the common objective, as well as being an instrument facilitating their access to financing under the best conditions.
  - Consolidation of the guarantee coverage, of guarantee schemes, integrated into the financial system, with a recognized mitigation value.
  - Consolidation of the role of guarantee schemes as a permanent necessity and as a counter cyclical instrument.

# The AECM is everyone's home





## Thank you very much for your kind attention!



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# **AECM 30 years anniversary**







EAAHNIKH ANAIITYEIAKH TPAIIEZA



AECM | Vienna | 15-09-2022

## **Mission/Vision**

OUR MISSION

To facilitate business access to finance by filling market gaps, create value for society and contribute to development with economic, social and environmental benefits

 $\checkmark$ 

**100%** Shareholder is the Greek State

National Development Bank

#### **OUR VISION**

To be the reference institution for the financing of entrepreneurship in Greece. The Development Bank that covers the needs of Greek businesses. We support those who dare, innovate and venture!



To promote sustainable and holistic development of the Greek Economy



**HDB's Strategy** 



## **Products**









#### ■ AECM | Vienna September 2022 ■

Dr Charalampos Agiropoulos Chief Investment & Risk Officer, TMEDE

3-5 P.P. Germanou Str., 105 61 Athens, Greece www.tmede.gr



## OVERVIEW OF TMEDE

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**TMEDE is a Greek Fund established on January 1**<sup>st</sup> **2017** under Greek private law. TMEDE provides Guarantees and Loans to its Members and is the successor of **TSMEDE** in these areas

TMEDE is **exclusively funded** by contributions of its Members

TMEDE received major certifications relating to **Quality**, **Environmental**, **Anti – bribery & Compliance Management System** 



TMEDE is an **active full member of AECM**, the European Association of Guarantee Institutions





### **OVERVIEW OF TMEDE**



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Including more than **5,500 SME** technical companies that constitute the **backbone of Greek** economy

**TMEDE** activities mainly consist of:

And secondly:

- **The Granting of Guarantees**
- **The Granting of Loans to its Members**
- Real Estate Asset Management



## **ACHIEVEMENTS OF TMEDE**

TMEDE has set Digital Transformation at the top of its agenda in a consistent effort to reduce bureaucracy and increase transparency. Thus, ensuring Sustainable Development. In less than 9 months (Q3 2017) from its establishment, the transition of the Fund to the digital era was successfully implemented with quality certifications. 99%

of our Guarantee Letters are issued via our digital application, a major achievement Europe - wide

TMEDE has been formally assessed by the **ECB** following a positive recommendation from the Bank of Greece, which concurred with the opinion of the European Central Bank (ECB), the **Fund** was evaluated and accredited as **private institutional investor in Attica Bank**.

■ "ATTICABANK PROPERTIES" has been acquired by TMEDE in 2020. Through new forward business plan TMEDE provides investments of €0.5 million for 2021, accelerating its digital transformation, designing and developing new services, enhancing its human resources and upgrading its infrastructure aiming to expand its portfolio and developed its services.

TMEDE established a wholly owned "TMEDE Microfinance Solutions", licensed by the Bank of Greece. Through this innovative financial instrument, TMEDE meets in a comprehensive way, the needs of its members for seamless access to funding.



### TMEDE's RUNNING PROJECTS

HDB – TMEDE Fund **TMEDE actively supports the construction sector including SMEs**, self-employed persons and scientists which execute or design public work contracts by giving them access to finance through working capital, up to €200K.

EIF – European Investment Fund TMEDE Microfinance Solutions has successfully applied to the EIF for becoming Financial Intermediary under the InvestEU Microfinance and Social Portfolio Guarantee Products. EIF is expected to approve the total amount of €30 mil. following the due diligence ongoing process (Stage 2).

European Commission (EC) **TMEDE is working with the Greek Ministry of Development and Investment** on accessing finance from EC as a Financial Intermediary offering innovative guaranteed loans to SMEs and self-employed persons of the construction sector.



2017

2018

2019

2020

2021

## WE BUILD THE FUTURE BASED ON CREDIBILITY AND VISION



with 32% cost reduction

The first fully digital service provider

tmede.gr



## **The role of Development Banks**

- Strategic enablers, mobilizers, or implementers of investments.
- The "Visible Hand" that mobilizes and directs the finance based on criteria other than purely financial ones, interlinked with the social and development goals.
- Create shared value not just for customers and shareholders, but for the society and the environment.
- Address market failures, have a counter-cyclical role and a greater risk tolerance than commercial banks.
- Cope with financial bottlenecks both as guarantee providers (risk bearer) for sectors perceived as high risk or not (yet) attractive, and as catalysts of investments through the development of attractive financial instruments.
- Fund activities where important externalities exist, (social returns are higher than market returns) as in the case

#### of environmental externalities.

• "COVID-19 Enterprise Guarantee Fund": a Capped Portfolio guarantee fund with a guarantee rate of 80% per

loan and has three distinct sub-portfolios, one for SMEs with a cap rate of 40%, one for Mid-Cap/Large enterprises with a cap rate of 30% and one for SBPs with a cap rate of 60%.

- **"TEPIX II"**: co-financing working capital loans by 40% and with 100% interest rate subsidy for 2 years.
- **"TADYM"**: dedicated regional fund for co-financing working capital loans by 40% and with 100% interest rate subsidy for 2 years.
- "HDB-TMEDE Guarantee Fund": first Public-Private sector specific Capped Portfolio guarantee fund







## Why HDB's CGS scheme were successful

Quick economic recovery by complementing the private financial institutions and preventing a credit default during COVID-19 crisis.



Historic Default Rates Supply and Demand Max guarantee amount Duration Eligibility Criteria

#### Guarantee Schemes Based on

Cost-Benefit Analysis Isometric and Balanced distribution of financial risk

#### **KEY TO CGS SUCCESS:**

- Appealing to borrowers by providing quick access to finance and avoiding charging an excessive fee;
- Simple, fast and automated processes;
- Appealing to lenders by guaranteeing a significant share of loans with high quality guarantee;
- Ensuring that the provision of guarantees will not entail fiscal costs.



For every € 1 of GVA (Gross Value Added) created by HDB's loan programs, the bank contributes with an additional € 2 to Greece's GDP (Financing for companies that essentially participate in the production model for the maintenance and growth of the Gross National Product)

**Metron Analysis study** 

(2021)



## **PUBLIC AND PRIVATE SECTOR COLLABORATION**



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## Public & private guarantee fund co-investment



The cooperation between **HDB** & the Public Works Engineering Contractors Fund (**TMEDE**), is the first coinvestment where a Public and a Private entity co-invest on the Fund level.

Significant multiplier effect for the TMEDE funds (x 2.4), in comparison with its direct guarantees program.



The HDB-TMEDE Guarantee Fund was established to support and facilitate access to finance for Greek engineers and contractors. Eligible for Small & Medium-sized Enterprises (SMEs) of the sector.



Launched in Sept. 2021 under the **Temporary Framework for COVID19** which ended in June 2022. In order to continue supporting the sector, HDB proceeded to the prolongation of the scheme under the **de minimis regulation**.





Portfolio guarantees for working capital loans toconstructionandtechnicalcompaniesimplementing projects for the public sector.

Guarantee Rate per Loan: **80%** Guarantee fee: **Zero (Subsidized)** Cap Guarantee per Portfolio: **50%** 

Public Funding (HDB): € 19.6 MPrivate Funding (TMEDE): € 8.4 M

**Financial Institutions participating:** 9













Guarantee per loan: 80% Guarantee Fee: Subsidized



Loan Amount Up to 200.000 €



Loan Maturity 5 Years

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## **Eligible Sectors**



Architecture & Engineering



Technical tests and analysis



Building Constructions



**Civil Engineering** 



#### **R&D** in Engineering

HELLENIC DEVELOPMENT BANK



# Thank you!



# The interplay of mutual, private, and public guarantee institutions for the benefit of SMEs





14 September 2022



#### MGS objectives, main characteristics and activity data

- In Spain the business framework is made up of 99% of SMEs and the self-employed who contribute 65% to GDP and 75% to employment.
- The MGS (SGR) are private financial entities, supervised by the Bank of Spain. The mission is to grant guarantees to facilitate access to credit for SMEs and the self-employed under better conditions of interest rate and repayment term.
- The MGS System in Spain has at least one SGR in each Autonomous Community, in addition to one of a sectoral nature. The capillarity of the System facilitates access to SMEs thanks to direct contact in any region and sector.
- The guarantee granted by an SGR is liquid, automatic and effective upon first demand.
- In 2020, thanks to the special Covid-19 lines, the national guarantee system injected close to 2,730 million euros, from 37,940 formalized guarantees, which represented an increase of 93% in the amount provided with respect to 2019. Many MGS multiplied their activity by 2.
- As of June 30, 2022, the SGR in Spain had 166,916 SMEs with a contribution to employment of 898,374 jobs and an induced investment of 51,020 million euros.
- An example of public-private collaboration and a key element for the sustainability of the sector is the public counter-guarantee system developed by CERSA, our greatest counterguarantee support.

#### Public – private scheme



### **AQUISGRÁN new source of financing for SME's**

- AQUISGRÁN is an initiative launched by the Spanish guarantee companies (SGR). It guarantees financing to SMEs and self-employed complementary to bank lending and is financed by bonds, quoted in the Spanish Stock market subscribed by the Spanish national development bank ICO with EIF backing. It is planned that these bonds will be subscribed by institutional investors in the future.
- The maximum loan amount is kEUR 250 and the maximum duration is 10 years.
- The conditions of this product are particularly favourable due to the fact that : 1) no financial intermediary is involved, 2) low operating costs thanks to the light structure of the product, 3) low guarantee fee thanks to a counter-guarantee from CERSA and the support of the regional governments. The total cost of financing therefore amounts to approximately 4 % p.a. with a fixed interest rate of around 3 % p.a. and a guarantee commission of 1 % p.a. The beneficiary needs to become a member of the SGR by contributing 3 to 4 % of the amount of the loan to its capital. This will be returned upon full repayment of the guaranteed loan.
- For more information: <u>https://www.aquisgran.es/</u>

#### Aquisgrán: structure



ESPAÑA PUEDE.\_-

PLAN DE RECUPERACIÓN, TRANSFORMACIÓN Y RESILIENCIA

## PROGRAMA DE APOYO AL EMPRENDIMIENTO INDUSTRIAL



O MINISTERIO DE INDUSTRIA, COMERCIO Y TURISMO SECRETARÍA GENERAL DE INDUSTRIA Y DE LA PEQUEÑA Y MEDIANA EMPRESA

#### Política Industrial e Impulso a la PYME

#NextGenerationEU #EspañaPuede #PlandeRecuperación







#### CHARACTERISTICS AND OBJECTIVE OF THE PROGRAM

- Increase the weight of industrial GDP in the economy, in line with European Union policy.
- Increase the size of the industrial company.
- The potential market failure of the private sector to provide long-term industrial finance for entrepreneurship and growth.
- BUDGET: 75 MEUR for 2021-2023
- OBJETIVE: promote entrepreneurship or the growth of smaller industrial companies, improving their access to financing support a minimum of 1,500 operations by the end of 2023. It is expected to reach up to 3,000 operations.
- OPERATIONS: the financing of investments in new industrial facilities or expansion and improvement of the competitiveness of existing ones, guaranteed by the SGR.
- SUBSIDY: the financing costs (maximum financing costs of EUR 200,000) that will include: the guarantee commission of the SGR, the interest on the loan and the expenses of studying and opening the guarantee operation and the loan.
- BENEFICIARY COMPANIES: SMEs whose activity is carried out in the manufacturing and industry services sectors (according to CNAE indicated in the point "Eligible Activities").
#### The role of Cersa: the counterguarantor

Gives coverage to a very important part of the guarantees granted by the SGR to SMEs/self-employed according to the following criteria:

-Additionality. The objective is to expand the financial capacity of the system through public counterguarantee and to support the greatest number of SMEs, allowing better access to financing.

- -Greater support for segments with greater needs and difficulties in accessing credit. Growing companies, innovation, digitization and sustainability projects benefit from the highest percentages of coverage.
- -Coordination with the EU. In the relationship with the European Union, criteria for defining SMEs and permitted state and minimis aids are coordinated, and CERSA's activity is supported in EIF programs.

-Support in the analysis capacity of SGR and the capillarity of their network. CERSA carries out the work of supervision and control of the approved operations, verifying that they adapt to the eligibility criteria and established coverage.

-Automation and eligibility. The counterguarantee contract establishes objective criteria that determine that it can be known a priori if a guarantee operation is eligible to be counterguaranteed by CERSA and in what percentage.

-The minimum risk assumed by the SGR directly must be 20%.

#### The role of Cersa: efficiency of the SGR system

**Multiplier effect** 

The structure of the Guarantee System allows the contribution of public resources through two channels:

-At the state level, through participation in CERSA.

-At the regional level, through the participation of the Autonomous Communities.

-One of the advantages of public contributions to the Guarantee System in relation to direct aid for financing SMEs is the multiplier effect on induced financing, based on solvency requirements. The effect is different depending on whether the contributions are made to CERSA or directly to the SGR.

-Another advantage of contributions to the guarantee system compared to direct aid is found in the rotation of its impact over time, given that as the credits guaranteed by the SGR are amortized, the resources initially contributed are released and used to finance new projects



#### **CERSA's Resources**



- CERSA counter guarantee is provided free of charge to the SMEs and to its financial intermediaries, the Spanish Guarantee Institutions, SGRs.
- Thanks to the combination of support from the Spanish Ministry of Industry (DG Industry&SME) and the UE.
- Ministry of Industry: annual contribution to CERSA's equity, share capital and Fondo de Provisiones Técnicas (FPT reserves).
  - The ordinary contribution is being complemented by an extraordinary contribution funded by the Recovery and Resilience Facility (RRF).
- UE: counter guarantee provided by different loan guarantee facilities/products funded by different programs of the European Commission and managed by EIF.
  - CERSA is managing at present 4 different agreements COSME, CCS, INNOVFIN and EGF.
  - > The application for InvestEU has already been submitted to EIF.

#### From crisis to recovery: Optimal support of SMEs Talking Points Martin Godel Intervention AECM

Dear President of the European Association of Guarantee Institutions (AECM) (Mister Guy Selbherr)

Dear Honorary President (Mister Pablo Pombo)

Dear Secretary General (Madame Katrin Sturm)

Distinguished Guests,

"Promoting structural change for a new sustainable Europe" is the

title of the AECM Annual Event 2022. As in these days we are looking at more structural change than we might like; and we are facing an immense pressure for sustainable energy provision than ever before, this title deserves the award for best timeliness.

It is my great pleasure to join you today in the most beautiful and dynamic city of Vienna. Not only knows the AECM how to choose conference titles, but also a fantastic conference venue.

I have the honour to chair the OECD Committee on SMEs and Entrepreneurship - in short CSMEE - and want to share some insights from an international perspective as well as a glimps from a national experience, as I am also in charge of Switzerland's Small and Medium Size Enterprise policy.

The AECM participates officially as an observer to the CSMEE. But make no mistake - your Secretary General, Katrin, is playing a very active role sharing the AECM's experiences within the Committee and is in no way a passive observer. I thank you Katrin for your always-valuable contributions to the discussions!

I am pleased to walk with you in the next minutes the journey from crisis to recovery. Unfortunately, and I am less pleased about this part of the path, we might go backwards to the future, walking into the next crises.

#### Looking back at the Covid-19-pandemic

Over the last two years, your clients, in particular the Small- and Mediumsized Enterprises have been at the centre of several storms and disruptions of historic proportions - and they still are!

First, the COVID-19 pandemic delivered an unprecedented shock, depressing demand, disrupting supply chains and affecting business operations. SMEs were over-represented in the most affected sectors where they accounted for nearly 75 percent of jobs.

Since the beginning of the economic disruptions due to Covid-19, governments stepped in with unprecedented and bold measures. In most OECD countries, between 20 and 40 % of SMEs received government support in one form or another in the year 2020.

In Europe, no less than 34 credit guarantee schemes have been introduced and at least 35 guarantee institutions have extended their guarantee offer to support SMEs facing lockdown measures.

At the same time, 23 guarantee institutions have introduced accelerated procedures and relaxed their documentation requirements in order to simplify access to finance for small businesses in difficulty.

#### The Swiss experience

I am sure, all of you could tell some stories about these early days of the pandemic. Let me give you some insights from Switzerland. On March 20st, 2020, the Swiss Government announced a historic support package over 20 billion Swiss francs channeled through loans issued by the banks; guaranteed by the 4 loan guarantee organizations backed up by the Swiss Government. The privately organized loan guarantee organizations were essential pillars for this system.

A non-bureaucratic procedure under the slogan "**lend first, check later**" was set up for the occasion so that companies in difficulty could obtain credit within a few hours - at the most within a couple of days.

A few numbers:

- 125 banks participated on a voluntary basis [...andon a side note: streamlining 125 banks within weeks is not a job you want to apply for;) ]
- Total loan guarantees amounted to 17 billion Euros, that is about 2,4
   % of GDP
- More than 20 % of companies in Switzerland received such a guaranteed loan.
- 83 % of loans went to micro enterprises with less than 10 employees; 14 % of loans went to small enterprises up to 50 employees.
- Already 6 of the 17 billion of granted loans have been fully repaid

Although it is too soon for a full conclusion, we can already say that the main objectives of the program have been achieved:

- The program contributed to low level of bankruptcies in particular for SMEs and value chains could be preserved;
- We estimated at the outset of the program a default rate of 15 %.
   Most recents estimates are down to 12 %.
- Although procedures were extremely lean, we observe a relatively low level of abuse.
  - o 8.1 percent of all loans granted were or are subject to an individual case review due to suspected abuse - by the way, according to the slogan "lend first, check later", we checked every single loan after it was granted.

 o Criminal proceedings are pending in 1.2 percent of all loans and
 o tribunals sentenced 0.2 percent of all companies who

#### received a loan.

In short; this support was vital for Switzerland's economy and I am sure most of you can say the same about your country. Loan guarantees kept credit flowing to SMEs when they needed it most.

The 2022 OECD SME Financing Scoreboard documented that government-provided loan guarantees more than doubled in 2020 and direct lending to SMEs was up by 17 % on the previous year.

The members of AECM provided a significant contribution to this success. Without you, this would not have been possible to implement! I said to the Swiss loan guarantee organizations and I want to say it here to you all: You, the loan guarantee organizations, you are the hidden heroes of the Covid-19-pandemic! Thank you for the job you have done!

And your job is not finished. Your institutions continue to have a critical role to play in the optimal support for SMEs.

And on a side note, I am happy that the Swiss loan guarantee organizations joined the AECM - one of the few good things that came out of this virus....

Let's go back to the big picture.

During the Covid-pandemic, monetary policy interventions pushed interest rates down to record lows, with the median SME interest rate falling by 0.4 percentage points in 2020, the largest reduction since 2009.

While the support and easening monetary conditions were crucial to address liquidity shortages, they also implied higher levels of debt for many SMEs - and this needs to be tackled going forward!

To avoid entering a vicious cycle of ever growing debts, SMEs need better access to alternative financing instruments to reduce their dependence on debt. Further, high level of debts might hinder necessary investments and prevent undertaking the long-term investments needed to adapt to major trends such as the green and digital transition.

As economies emerged from the crisis in 2021, the OECD observed positive rebound in the access to alternative financing instruments. The latest data captured in the forthcoming 2023 OECD Scoreboard highlights that, in 2021 leasing and factoring activities recovered strongly, and VC growth was on unprecedented levels. On the other hand, lending and credit conditions for SMEs tightened.

As the world economy was just beginning to leave the COVID shock behind, high inflation not experienced in the last 20 years (!) started to adversely impact the recovery.

Moreover, Russia's large-scale aggression against Ukraine, has triggered a new set of deep shocks directly threatening the economic rebound in particular due to sky rocketing energy prices but also in various fields such as food or other necessary materials.

GDP Growth for the OECD area is projected to slow sharply this year, down 1.5 percentage points as projected earlier to about 3 percentage points.

While the developments in 2021 are a response to the recovery, in 2022 the new set of economic shocks is adversely affecting SME finance again.

For example, we are seeing an even stronger tightening of lending conditions and a sharp decline on equity finance with many companies struggling to raise capital.

While in 2021 interest rates increased in half of the observed countries, in 2022 they are now rising in most countries as a response to the high inflation.

The recent rise of interest rates by central banks to tame inflation will also impact interest rates of new SME loans and on the cost of existing SME loans with floating interest rates. All this will aggravate the debt position of SMEs.

However, and here one of a few dim positive elements - inflation rates above existing interest rates might make debt repayment easier for SMEs, especially if turnover growth approximately aligns with the inflation rate.

From the perspective of the loan guarantees: Despite the fact that a number of credit guarantee schemes were extended throughout 2021, they registered an annual drop of 20 %, and it is likely that they will continue to decline in 2022.

So, has 2021 just been a transition year from crisis to recovery or is it just a parenthesis between two crises? The short answer: Unfortunately, this is what it looks like.

A wave of bankruptcies was avoided in 2020; naturally they started to rise again in 2021 and we see them further rising in several European countries in 2022.

This is not a surprise, as SMEs are yet again facing diminishing revenues with energy and commodity prices surging, and inflation rising - due in part to the effects of the war in Ukraine.

As such, public support needs to continue to stand ready for the new challenges that SMEs face.

For instance, credit guarantees proved valuable in keeping financing flowing despite the economic downturn, de-risking investments to SMEs, and ensuring governments' support was channelled to reach firms.

In the recovery phase, credit guarantees with beneficial conditions can also support funding to help SMEs cope with the rising prices, as well as address needs towards the green transformation. This is even more urgent not only to achieve ambitious climate objectives, but also to enhance energy efficiency, which the current crisis highlighted as a major vulnerability.

Interestingly, investments in green technology - be it in order to produce and store energy or reduce energy consumption - show generally high Returns on Investment. You, the loan guarantee organizations can play an active part to promote the green transition - I invite you to use make use of this opportunity!

What does the CSMEE do in this context?

The OECD Committee on SMEs and Entrepreneurship has a longstanding expertise on SME and entrepreneurship policy and an extensive ongoing programme of work. It leads the OECD work ranging from SME and entrepreneurship finance to SME scale-up, greening, digitalisation and entrepreneurial education and skills.

Its main role is to provide representatives of member countries, ministries in charge of SMEs, SME agencies and associations, including AECM, with evidence-based research, policy advice, capacity-building assistance, and a platform for knowledge sharing.

The SME Financing Scoreboard and the SME and Entrepreneurship Outlook enable countries to benchmark their performance on relevant SMEand entrepreneurship-related topics and monitor their progress in achieving their objectives.

The Committee also provides high-level policy guidance in collaboration with important international forums, which is often the basis for national policy roadmaps.

For example, in June of this year, the Committee approved the 2022 Updated G20/OECD High-Level Principles on SME Financing, which incorporate key guidance to enhance Fintech, resilience on SME Finance in times of crisis and SME access to sustainable finance.

Particularly on this last topic, we created the new OECD Platform on Financing SMEs for Sustainability, to work hand in hand with public and private financial institutions to enhance SME access to finance for their green investments. Perhaps most importantly, the Committee developed the OECD Recommendation on SME and Entrepreneurship Policy, adopted by the OECD Council at Ministerial level last June. It provides an evidence-based, holistic framework to support countries in developing coherent, effective and efficient SME and entrepreneurship policies. I invite you to have a look at these recommendations and approach your governments offering your support to implement these recommendations.

These are just some of the most recent examples of our work, and we aim to continue to collaborate with governments and associations like the AECM on this important effort of placing SMEs as the main actors to build resilient economies.

I thank you all for your hard work in favour of SMEs. The challenges are not getting less, let's embrace them together.

Thank you.

#### Information about Martin for the AECM Staff:

Martin Godel is Head of SME Policy and Deputy Head of the Directorate for Economic Promotion, State Secretariat for Economic Affairs (SECO). Among his responsibilities, he looks after matters related to SME Financing and reducing regulatory cost for SME, including digital government for SMEs. Martin is also the Chair of the OECD Committee on SMEs and Entrepreneurship.

## Guidelines for Integrating Climate Change Mitigation and Adaptation into Credit Guarantee Schemes for SMEs







**Pietro Calice** Senior Financial Economist World Bank

#### Why the 'Guidelines'?

SMEs are central to efforts aimed at decarbonizing economies while at the same time they are directly impacted by climate change

The capacity of SMEs to adopt sustainable practices and seize 'green' business opportunities while adapting to climate change generally faces size-related constraints, including obstacles in getting access to finance

CGSs remain the policy instrument of choice to ease access to finance by SMEs and can play an important role to support SME access to 'green' finance by acting both as 'enablers' and 'shock absorbers'

To that end, CGSs need to mainstream climate action across their strategies and operations, and while the 'Principles' remain sufficiently broad and flexible to accommodate the incorporation of climate change mitigation and adaptation, CGSs could benefit from further specific guidance



## Approach to 'greening' CGSs

The Guidelines aim to promote a principles-based approach on integrating climate change mitigation and adaptation in CGSs

Drafted in a way to accommodate different legal, regulatory, and institutional settings across jurisdictions, in some circumstances implementation may be challenging and an appropriate transitional period is recommended

Avoid unintended consequences and ensure continuous support to activities that do no harm, address exposure to climate-related and environmental risks, and are not inconsistent with country policies on low-carbon, resilient development



Effectively 'greening' PCGSs requires two important enablers: (i) clear taxonomies around environmentally sustainable activities, and (ii) a robust and proportionate climate disclosure framework applicable to both partner financial institutions and SMEs

The eight Guidelines are organized around four key areas: (i) committing to 'green' strategies; (ii) managing climate-related and environmental risks; (iii) promoting climate-smart objectives; and (iv) accounting for climate performance



## **Committing to 'green' strategies**

Integrate climate change related challenges and opportunities in the strategy (reference 'Principles': #1 and #5)

- ✓ Understand what climate change entails for the business to make informed decisions
- ✓ Explicitly consider response to the objectives set out under international agreements and in domestic climate policies
- ✓ Develop an internal roadmap to help organize the work and clarify roles and responsibilities

Have a conducive governance and management structure (reference 'Principle': #6)

- ✓ Have roles and responsibilities related to climate change mitigation and adaptation clearly assigned
- Ensure that Board and executive management have adequate collective knowledge, skills, experience, and an understanding of how climate change poses risks and generates business opportunities

Have adequate funding to support 'green' strategy and operations (reference 'Principle': #2)

- ✓ Necessary funding and financial support is needed to help SMEs with the 'green' transition while achieving outreach and additionality with financial sustainability and compliance with relevant regulations
- ✓ Consider tapping international climate finance sources



#### Managing climate-related and environmental risks

Incorporate climate-related and environmental financial risks in the risk management and internal control framework (reference 'Principles': #7 and #8)

- Build an understanding of how climate change affects relevant sectors and markets and the capability to measure exposures to climate change (physical risks and transition risks)
- ✓ Work with industry associations and engage in dialogue with partner financial institutions and SME borrowers to develop the relevant methodologies and data infrastructure
- Adopt a strategic approach to managing and/or mitigating climate-related and environmental risks in line with the business strategy, and adapt policies, procedures, risk limits and risk controls as appropriate
- Consider climate-related and environmental risks at all relevant stages of the screening and monitoring process (e.g., implement an environmental due diligence)
- ✓ Adjust credit risk classification methods in order to identify and evaluate climate-related and environmental risks in the portfolio, and mitigate risks (e.g., through limits and/or reinsurance)
- ✓ Ensure that the audit and compliance function is tasked with ensuring that climate-related and environmental risks are duly considered and effectively integrated in all relevant processes



## **Promoting climate-smart objectives**

Align eligibility and qualification criteria with the 'green' strategy (reference 'Principle': #9)

- ✓ Align eligibility criteria for SMEs with the taxonomies available
- ✓ Select partner financial institutions that are committed to environmental sustainability
- ✓ Align product offering with that of partner financial institutions and develop new products as appropriate

Incorporate climate change considerations in the operational toolkit (reference 'Principles': #11 and #12)

- ✓ Augment the operational toolkit (coverage ratios, pricing, tenors, grace periods and technical assistance) to incorporate climate change considerations to inform the definition of the contractual parameters
- ✓ Use the operational toolkit to differentiate exposures and provide the right set of incentives for climate change adaptation and mitigation
- ✓ Under crisis-related circumstances (e.g., a climate-related natural disaster) that require the provision of emergency financing to SMEs, risk-sharing and risk-based pricing could be waived



#### Accounting for climate performance

Adopt a robust monitoring and evaluation system to measure climate performance (reference 'Principle': #16)

- Establish a sound framework for systematically assessing climate performance based on practicality and meaningfulness for the mandate
- ✓ As an initial step, adopt 'green' metrics (e.g., number of guaranteed 'green' projects, value of guaranteed 'green' projects, share of guaranteed 'green' projects)
- ✓ Work with industry associations to develop common methodologies

Disclose climate-related information and metrics (reference 'Principle': #15)

- ✓ Unless there are relevant regulations in place, align disclosure standards with global or regional initiatives (e.g., TCFD, ISSB)
- ✓ At a minimum, disclose (i) policies and practices in relation to climate change matters; (ii) climate performance metrics; and (iii) material climate-related and environmental risk exposures as well as measures taken to mitigate such risks



## Thank you for your attention



Pietro Calice Senior Financial Sector Economist pcalice@worldbank.org



# An exploration of climate-related financial risks for credit guarantee schemes in Europe







With funding by the EU

Henk Jan Reinders Financial Sector Specialist World Bank

#### **Climate change can lead to physical and transition risks**

#### Gt emissions / year 80 Physical 70 ů risks 60 ...... 50 40 30 20 10 **Transition** 0 risks - 10 2020 2030 2040 2050 2060 2070 •••Orderly (CO<sub>2</sub>) -Orderly (all GHGs) — Disorderly (all GHGs) ••• Disorderly (CO<sub>2</sub>) ••• Hot house world (CO<sub>2</sub>) -Hot house world (all GHGs)

#### **Projected CO2-emission paths and associated risks**



## Climate change is affecting all regions in Europe, but the impacts are not uniform



- Mediterranean region: hotspot, having the highest numbers of severely affected sectors and domains. This includes large increases in heat extremes, increasing the risks of droughts and forest fires. Most economic sectors negatively affected, including crop yields and livestock production.
- Atlantic region: increase in heavy precipitation events, increasing river flow and risk of river flooding.
- Continental region: increase in heat extremes, decrease in summer precipitation. Increasing risk of river flooding and forest fires. Increased demand for cooling.
- **Mountain regions:** increasing risk of landslides and rock falls. Higher than average temperature increase.
- Boreal region: increase in heavy precipitation events. Increased crop yields and higher potential for forest growth.
- Coastal zones: sea level rise and associated increasing risk of coastal flooding.



# With your help we collected spatial and sectoral exposure data to assess exposures to physical and transition risks





# Physical risks: CGSs in Europe are exposed to a broad range of climate-related hazards



Exposure of CGIs to vulnerable areas at NUTS2 level (percentage of total guarantees)



# Transition risks: highest weighted exposure to agriculture, land transport, and mineral products



#### Transition risk score (exposure \* GHG emissions)



# Overall: based on ECB scenarios, annual expected losses could rise substantially (~5-10%)



Sector	Baseline	Stressed	Difference	Stressed	Difference
A - Agriculture, forestry and fishing	208	213	5	231	23
B - Mining and quarrying	3	15	11	3	0
C - Manufacturing	220	235	15	233	13
D - Electricity, gas, steam, and A/C	19	73	54	21	2
E - Water supply, sewerage, and waste	16	17	1	17	1
F - Construction	195	198	3	203	9
G - Wholesale and retail trade	402	431	29	430	28
H - Transportation and storage	86	94	9	89	4
I - Accommodation and food services	202	204	2	215	14
J - Information and communication	51	51	0	53	2
L - Real estate activities	60	61	1	64	4
M - Professional, scientific, and technical	108	127	19	112	4
R - Arts, entertainment, and recreation	47	48	1	51	5
Other	416	446	30	437	21
Total	2,032	2,213	181	2,160	128

(A) Orderly transition

(2025)



(B) Hot house world

(2050)

## **Summary of main findings**

CGSs in Europe are exposed to transition risks in a broad range of sectors as well as to physical risks in vulnerable sectors and regions.

- The effects of climate change differ throughout Europe, with the Mediterranean region being the most vulnerable overall. This region faces large increases in heat extremes, increasing the risks of droughts and forest fires.
- We find the main high-risk exposures to be for wildfire (56 percent of aggregate CGSs' portfolios in our sample), coastal flood (41 percent), and river flood (6 percent).
- Based on GHG emissions data, we find that 72 percent of the transition risk for CGSs is driven by five sectors: agriculture, land transport, wholesale and retail trade, and utilities.
- CGIs are not highly exposed to the most GHG (and capital) intensive sectors, such as coke, refining, utilities, and air transport
- We estimate that for transition and physical risk scenarios the annual expected loss on the guarantee portfolio could increase by EUR 181 million and EUR 128 million, respectively.

Most CGIs expect climate risks to impact their future performance and are planning to embed these risks in the time to come

• Almost 70 percent of the survey respondents indicates that they are planning to conduct a climate risk analysis in the future.



#### Thank you for your attention



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شركة ضمان مخاطر الائتمان شمم CREDIT GUARANTEE COMPANY s.a.e

## Credit Guarantee Company AECM Annual Event EMGN Network CGC-EGYPT 15 September 2022



**Guarantee Schemes & Transformation** 



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**Guarantee Schemes & Transformation** 

# Guarantee Schemes OPPORTUNITY

# PROPER PLACEMENT on the Economic Development map

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**Guarantee Schemes & Transformation** 

## **ARE WE READY**




# Guarantee Industry REFORM

# Macro & Micro level changes Needed

# As well as Internal & External changes

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# Macro & Micro

# POLICYMAKERS SUPPORT – BUT do we have their BELIEVE in the NEW Guarantee role!!

# **STAKEHOLDERS** – good alignment BUT do they ACCEPT the NEW Guarantee role!!

.<sub>7</sub> ضمان GC



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### **Operation Sustainability**

AGILE STRUCTURE based on Digital Platform

→ INNOVATIVE PRODUCTS:

- Defaulting SMEs
- Startups Focus
- Supply Chain

→ COMPREHENSIVE APPROACH finance +non-finance

ح ممان حور

# YES – A LOT IS NEEDED GUARANTEE SHEMES & NETWORKS COORDINATED WORK ENVIRONMENT TO PAVE THE WAY TO A NEW GUARANTEE ERA

ضمان

### Thank you

Nagla Bahr Nagla.bahr@cgcegypt.com www.cgcegypt.com



شركة ضمان مخاطر الائتمان شمم CREDIT GUARANTEE COMPANY S.A.E cdp

# The role of CDP in supporting the twin transition – Focus on guarantees

16 September 2022

### Agenda







### **CDP** mission

Promoting Italy's **sustainable development**, by using savings responsibly to drive growth and employment and support **innovation and business competitiveness**, infrastructure and local development





Italian National Promotional Institution and Development Finance Institution

Joint-stock company with public/private shareholders ensuring market-oriented governance



Unique institution managing Italian private savings since 1850

Strategically for Italian economy and trustworthy partner of private investors and Italian savers

Key Figures (€/bn)





## 1) Commitment in 10 Areas of UN 2030 Agenda and NRRP

The 4 major challenges of the Country



**Climate change** and ecosystem protection

L sus

Inclusive and sustainable growth



Digitisation and innovation



Rethinking value chains



(1) Energy transition

2 Circular economy

3 Safeguarding local areas

4 Social infrastructure

5 Capital markets

6 Digitisation

7) Technological innovation

8 Support to strategic supply chains

9 International cooperation

0) Transport/logistics hubs

UN Sustainable Development Goals (UN SDGs) of the 2030 Agenda for Sustainable Development



...in line with the UN SDGs and the NRRP's mission



Mission of the National Recovery and Resilience Plan (NRRP)



# 1 Catalyst for Italy's Sustainable Growth



Creating cutting-edge standards with a focus on ESG criteria to become a benchmark for the market, while developing new markets by leveraging resources and technical expertise

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## Transformational Pillars introduced by 2022-2024 strategic plan



# 1 New Operating Model



## **Technical Competence Centers Focusing on Strategic Sectors**



# **2** Support to SMEs' and Corporates





Enhancing indirect investment support and SMEs' and start-ups' growth plans, leveraging efficiently on third parties' financial resources (Italian Regions' and EU funds)

Initiatives	Main elements	
a Guarantees for Banks' capital relief	<ul> <li>Risk sharing and capital relief initiatives carried out through the support of regional, national, and EU resources, which allow CDP to offer guarantees to financial institutions (including public guarantee funds), thus supporting Italian SMEs' and start-ups' growth plans</li> </ul>	
b Revolving Fund for Enterprises («FRI»)	<ul> <li>Sponsored by different Italian Ministries (e.g. MiSE, MiPAAF)<sup>1</sup> or Regions, FRI is based on the provision of public grants to enterprises, subsidized loans by CDP, in pool with market financing by commercial banks, and supported by a subsidiary State guarantee</li> <li>This subsidized credit facility is made available to SMEs' and start-ups in several sectors to support specific investments</li> </ul>	
C Basket bonds	<ul> <li>Investments in securitization transactions backed by newly originated "mini-bond" issued by pre-selected panels of Italian SMEs?</li> <li>Through the bond-pooling mechanism, Basket bonds allow participating enterprises to reach sufficient critical mass to attract institutional/international investors (such as CDP, the EIB etc.)</li> </ul>	
	<ul> <li>To improve the risk-return profile of the bonds, public resources to cover first losses are made available by Regions and EU</li> </ul>	

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# <sup>2a</sup> Capped guarantees for Italian SMEs and start-ups

#### **Main elements**

- CDP is committed to strengthening the capital of the Italian financial institutions (FIs) by providing guarantees and counter-guarantees, partially covering its exposure through EU funds (i.e. COSME, Creative Europe, EGF)<sup>1</sup>
- The final objective is to support access to finance by Italian enterprises
- CDP provides FIs with 80% guarantees, covering losses up to a predetermined amount. A share of CDP exposure, ranging from 50 to 80%, is typically covered by the European Investment Fund (EIF) through funds available under various EU programs
- Thanks to CDP guarantees, Fls are able to free-up regulatory/ economic capital, thus allowing for an increase in the amount of financing that can be granted to Italian SMEs
- Since 2017, CDP has activated a number of key initiatives (see next slide for details), providing guarantees for an overall amount of ~16,5 €/billion, thus supporting the provision of ~26 €/billion of new bank loans in favor of almost 200,000 Italian enterprises

#### Scheme



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# **Guarantee deals since 2017**



1. Calculated as the ratio between the total amount on which CDP grants its guarantee and the free public resources, European or national, used to cover the first losses

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# 2a Focus on the 2022 counter-guarantee deal in favor of the Italian Guarantee Fund

#### Description

- In 2022, CDP has launched a new counter-guarantee deal in favor of the Italian Guarantee Fund for SMEs ("SME Fund") aiming at facilitating access to finance by SMEs eligible under the European Guarantee Fund (EGF) Program
- The transaction consists in an 80% capped counter-guarantee issued by CDP on a 12.5 €/bn new guarantee portfolio originated by the SME Fund in favor of Italian small and medium-sized enterprises. CDP's exposure is covered at 70% by European Investment Fund (EIF) through the EGF Program
- Loans respecting the eligibility requirements (e.g. duration between 3 months and 10 years; maximum guarantee amount by the SME Fund of 3,214 €/mln) are automatically included by the SME Fund manager in the portfolio covered by CDP
- The ramp-up phase of the initiative will end on 31 December 2022 (under EGF 3.1 Temporary Framework)
- Taking into account all the deals structured in favor of the SME Fund, as of today, CDP provided this important public facility with an overall amount of EU resources of more than 1.3 €/bn

# **EGF** portfolio scheme CDP guaranteed share EIF counter-guaranteed share CDP first loss cap SME Fund retained risk EIF first loss cap **CDP 80% guarantee** 56% 25% 20% 15%-100%

80% guarantee with a 15% first loss piece



0-15%

# **2b** Intervention scheme of the FRI (1/2)

#### Description

- The Revolving Fund for Enterprises<sup>1</sup> (FRI) is one of the subsidized credit facilities instruments that CDP offers to support the Italian productive sector
- Through the FRI, **CDP can support Ministries** in structuring interventions to boost companies' investment plans, using public resources efficiently and attracting private resources (i.e. banks' share of the loans)
- FRI's main features are:
  - Subsidized interest rate: approximately 0.5%, based on the different initiatives
  - Subsidiary Guarantee by Italian State on CDP's exposure
  - Long tenors, with a maximum duration of 15 years and a grace period of 36 months
  - Percentage of subsidized loans usually equal to 50% of the loan amount in combination with an equivalent amount provided by a bank at market condition
  - Credit assessment and loan management by partner banks on a mandate basis
- The FRI initiatives that are being launched/ active are:
  - FRI Agricolture
  - $\circ$  FRI Tourism
  - $\circ$  FRI Green New Deal
  - FRI Social Enterprise
  - FRI Circular Economy

#### Structure





# <sup>2b</sup> FRI Green New Deal and FRI Circular economy (2/2)

Key feature

#### **FRI Green New Deal**

Framework

 The Ministry of Economic Development ("MiSE) is enacting a measure on the "Fondo per la crescita sostenibile» (FCS) to support enterprises in obtaining subsidized loan for research, development and innovation projects, in the field of ecological and circular transition. The intervention, which pursues the goals of the "Italian Green New Deal, provides non-repayable grants, complemented by CDP's subsidized loans

• Enterprises of any size engaged in industrial, agro-industrial, handicraft, industry service and research center activities

Eligible expenses

- Projects in line with the scope of the Italian Green New Deal (e.g. decarbonization of the economy, circular economy, reduction of plastic use and replacement of plastics with alternative materials)
- Industrial research and experimental development activities aimed at developing new products, processes or services

Subsidized credit facilities

- Grant of the non-repayable contribution: 15% for industrial research and experimental development activities and advisory costs related to industrialization activities; 10% for the acquisition of fixed assets for industrialization activities
- FRI disbursement of the subsidized loan equal to 60% of eligible expenses
- Funding
- 150 €/mln for the non-repayable contribution
- 600 €/mIn from FRI resources for the subsidized loans

#### **FRI Economia Circolare**

- The MiSE is undertaking an intervention of the "Fondo per la crescita sostenibile» (FCS) in favor of research and development projects in the circular economy to support research, development and testing of innovative solutions for the efficient and sustainable use of resources. The intervention provides non-repayable grants, complemented by CDP subsidized loans
- Enterprises of any size engaged in industrial, agro-industrial, handicraft, industry service and research center activities
- Industrial research and experimental development activities aimed at the realization of new products, processes or services through the development of Key Enabling Technologies (KETs)
- **Projects** should be aimed at the productive reconversion of economic activities within the circular economy
- Grant of the non-repayable contribution: 20% for micro, small enterprises and research organizations; 15% for medium-sized enterprises and 10% for large enterprises
- FRI disbursement of the subsidized loan equal to 50% of the eligible expenses
- 62,8 €/mln for the non-repayable grant
- 157 €/mIn from FRI resources for the subsidized loans

## <sup>2c</sup> CDP plays the role of anchor investor to support the development of the "basket bond"



- The enterprises **issue bonds that are subscribed by an SPV** *ex lege* 130/1999 and used as collateral for a securitization transaction
- The notes issued by the SPV are subscribed by professional investors; the Region, directly or through the regional financial intermediary, issues a direct and first demand guarantee covering the first losses of the notes
- The amount made available by the Region provides full coverage of first losses with a cap that varies by customer type and related risk



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- Securitization program of minibonds issued by SMEs aimed at supporting access to credit by enterprises with good credit standing:
  - The enterprises issue bonds that are subscribed by an SPV and used as collateral for a securitization transaction
  - The notes issued by the SPV are subscribed by professional investors, guaranteed by the security pool, while possibly benefiting from credit enhancement
  - **CDP subscribes** ABS notes for an amount **typically up to 50%** of each individual transaction

«Market» BBs

**BBs supported** 

by regional/

public funds

# (2c) Typical scheme of a Basket bond supported by public funds









## **Sustainability Increasingly part of CDP's Pillars**

Mission & Values

CDP's mission, which aims at promoting Italy's economic, social and environmental development, has never changed over time, although its scope of action has expanded considerably, even throughout all discontinuities and transition phases that have shaped CDP and the Country's history

Integrity, Inclusion, Environmental Responsibility, Impact and Expertise: the set of principles and values that CDP Group recognizes, accepts and shares are outlined in the Code of Ethics<sup>2</sup>, which all members of corporate bodies and employees undertake to follow and about which all stakeholders (e.g., contractors, consultants, partners, suppliers, business associates) are informed

**Integrated Governance** 

CDP's corporate governance model is based on the principle of sustainable development since 2021, after the Shareholders' Meeting of 27 May 2021 approved the amendment to CDP's By-Laws<sup>3</sup> introducing the above principle

Within CDP's Board of Directors, the Risk Committee, renamed "Risk and Sustainability Committee", has broadened its scope of responsibility in 2021, being assigned with specific functions of control and guidance concerning ESG matters

1. Along with i) Mission and Values and ii) Integrated Governance, the four pillars on which CDP's everyday operations rest are: iii) Internal Control Systems (capable of safeguarding the Company's assets and guaranteeing observance of the applicable laws and regulations) and iv) Risk Management Model (capable of taking advantage of all opportunities that arise)



- 2. Further details available on CDP Code of Ethics at https://www.cdp.it/sitointernet/it/codice\_etico.page
- 3. Further details available on CDP Articles of Association at https://www.cdp.it/sitointernet/en/statuto\_cdp.page

**CDP** Pillars<sup>1</sup>

### InvestEU: main features of the Program

#### **Program Overview**

- The InvestEU Programme supports sustainable investment, innovation and job creation in Europe. It aims to trigger more than 372 €/bn in additional investment in the EU over the period 2021-27
- It will bring together, under one roof, the European Fund for Strategic Investments and 13 other EU financial instruments
- It provides for direct access to the EU guarantee for implementing partners (IPs) other than the EIB Group
- The three components of the Program are:
  - InvestEU Fund: EU budget guarantees to provide risk cover to IPs that offer financial products under the 4 policy windows
  - InvestEU Advisory Hub: EU grants to IPs to support the provision of advisory services in favor of enterprisese or public entities to facilitate project design and development and access to finance
  - InvestEU portal: dedicated tool to support visibility of investment opportunities in the Union, thus helping project promoters seeking funding opportunities

#### InvestEU guarantee allocation per policy windows

**Available guarantees up to 26.2 €/bn** (financial envelope of 10.28 €/bn)



## CDP and CDP Equity as Italy's Implementing Partners of the InvestEU program

Main steps	Description		
Pillar Assessment	<ul> <li>Starting from November 2019, CDP and CDP Equity have undergone an assessment exercise through which the EU evaluate an organisation's compliance with the European Commission's (EC) requirements for indirect management (so-called "Pillar Assessment")</li> </ul>		
	<ul> <li>The Pillar Assessment process was successfully concluded on October 2021 for CDP and on April 2022 for CDP Equity, which were respectively accredited by the EC to become Implementing Partners of the InvestEU program for the period from 2021-2027</li> </ul>		
Call for Expression of Interest	• CDP and CDP Equity participated in the first Call for Expression of Interest under the InvestEU Fund (two cut-off dates in June and October 2021), requesting an overall guarantee amount of 1 €/billion to support financial products to be offered under all the 4 policy windows		
	<ul> <li>CDP also participated in the Call for Expression of Interest for the InvestEU Advisory Hub to become an EC Advisory Partner (requesting the maximum contribution amount: 5 €/mln per Advisory Partner)</li> </ul>		
Agreements with the EC	<ul> <li>Negotiations with the EC started in January 2022. The signing of the guarantee agreements under the InvestEU Fund (for both CDP and CDP Equity) is expected by the of Q3 2022</li> </ul>		
	<ul> <li>The negotiations under the InvestEU Advisory HUB ended last July 4<sup>th</sup>, with the signing of the contribution agreement between CDP and the EC</li> </ul>		

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InnoRate - a European Technology Assessment Tool Possibility of Joint Effort for Building Internationally Accepted Technology Rating System

도전하는 기술기업의 Partner

Hee-Chang (Leo) PARK Team Head & Director Technology Evaluation Modeling Team Technology Appraisal Department Korea Technology Finance Corporation (KOTEC/Kibo)

Korea Technology Finance Corporation



# About InnoRate and TRS cooperation



# New Version of KTRS (AiRate): Big Data & AI (from Jan.2021)



**1 Big Data Based Scoring Algorithm: Leverage many open API and Cumulated Evaluation Data** 

**2** Enhance Predictive Power of Model through AI (Deep Learning Algorithm)

<sup>3</sup> Man-Machine collaboration through the organic combination of evaluations by artificial intelligence and experts

No.1 Partner for Innovative Growth of SMEs and Startur

### Tech Rating Results Analysis Module



- ① Based on the algorithm structure of the entire system, the flow of scoring and the percentile rank for individual scores are provided
- 2 The '1' item is provided in the form of a radar chart to increase visibility (Comparison AI score vs. Expert Score)
- ③ The distribution and position of tech rating data and scores in individual sub-models are provided
- ④ Provides scores and percentile ranks for input variables (each criteria) in a sub-model

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It is possible to interpret the final grade by providing the appraiser with the flow of score calculation and the score and percentile rank for each sub-model

## **Old Version of KTRS**





- The algorithm is based on AHP and Logistic regression
- But, it was hard to make a balance predictive power on success and risk(default) at the same time 104
- Need a re-scaling & recalculation process annually

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# Feature: Well-Balanced Distribution of SAGR and Default Rate by Grade



- Growth-measuring index 

   High growth rate & Risk measuring index
   Default rate
- Shows higher correlation between KTRS grade and default rate in real case
- In the case of general credit-based financial institutions, the adequacy of credit rating was measured based solely on the default rate.
- Since KOTEC is a policy-based financial institution, it required a measuring index for the "growth potential" of an enterprise. The "high growth rate (SAGR : Size-Adjusted Growth Rate)" criterion is applied.

## **Development of KTRS**



KOTEC strived to future develop its Technology Rating System through the various cooperation with inside/outside of Korea



## What is InnoRate Project?

O InnoRate is a H2020 project that aims to facilitate tech-driven SMEs showcase their potential and access more easily financial solutions necessary to scale and grow.
 O For more information, please click <u>www.innorate-project.eu</u>



#### $\bullet \bullet \bullet \bullet$

# **Overview of InnoRate Consortium**

Торіс	" <b>Data-driven tools</b> for supporting and improving the decision-making processes of invest for financing innovative SMEs"
Start Date(Duration)	1 January 2019 (36 Months)
EU Budget	€ 2.998.00,00

Joltcapital	JOLT CAPITAL SAS France www.jolr-capital.com		Exceptional case co-working with countries <u>outside of EU area</u>	
ebn Enovation network	EUROPEAN BUSINESS AND INNOVATION CENTRE NEWWORK AISBL www.ebn.eu	<b>1</b> <160	KOREA TECHLOGY FINANCE CORPORATION(KOTEC) Republic of Korea www.kibo.or.kr	
EY	EY ADVISORY S.p.A Italy www.ey.com		UNISMART PADOVA ENTERPRISE S7 ITALY	
TechTour	TECH TOUR GLOBAL Bulgaria www.techtour.com	🔅 ontotext	ONTOTEXT AD Bulgaria www.ontotext.com	
C-PLAN	Q-PLAN INTERNATIONAL ADVISORS PC WWW.qplan-intl.gr	<b>White Research</b>	WHITE RESEARCH SPRL Belgium www.white-research.eu	




## **InnoRate Technology Rating System**

## **InnoRate Technology Rating System (ITRS)**

"A forward-looking technology assessment and rating methodology for the European context"

Leverages an objective and tested technology assessment and rating methodology (KTRS).



✓ The KTRS has a track record of assessing over 200,000 cases and helping SMEs acquire more than EUR 75 billion of guarantee funding in the Republic of Korea.



Grasps both quantitative and qualitative (hard-to-quantify) aspects of the technological potential – rates the market potential and risk of an innovation.



Comprised of 36 assessment indicators in 4 business perspectives: Management, Technology, Marketability, and Business Feasibility



Customisable rating weights per use case and per company's development stage (start-up, growth, mature).



Easily applied to companies in diverse technological domains.

Source: InnoRate Consortium Presentation for European Big Data Value Forum, https://ebdvf.eu



## **Developing InnoRate Technology Rating System**



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Source: InnoRate Consortium Presentation for European Big Data Value Forum, https://ebdvf.eu

## InnoRate Technology Rating System : Focus Indicators

- ✓ InnoRate has the similar structure(module) and indicators compared with KOTEC's TRS indicators (KTRS + TRS for R&D +  $\alpha$ )
- ✓ Difference: InnoRate has two assessment process (quick assessment + deep assessment)

	MANAGEMENT	TECHNOLOGY Competency	MARKETABILITY	BUSINESS FEASIBILITY
QUICK ASSESSMENT	<ul> <li>Work Experience in the Same Industry</li> <li>Technical Expertise</li> <li>Production and Utilization of IPR</li> <li>Capital participation</li> </ul>	<ul> <li>R &amp; D Organization</li> <li>Technical Employees</li> <li>R&amp;D Environment</li> <li>Technology Development Achievement &amp; Awards</li> <li>Retention of IPRs</li> <li>Management of Technology Development</li> </ul>	<ul> <li>Market &amp; Growth Potential</li> <li>Competitive Environment</li> </ul>	<ul> <li>Production capacity</li> <li>Funding Capacity</li> </ul>
DEEP ASSESSMENT	<ul> <li>Technical Understanding</li> <li>Management of Technical Employees</li> <li>Management Competency</li> <li>Technology management strategy</li> <li>Professional Expertise of the Management</li> <li>Relationship between CEO and Management and Management Capability</li> </ul>	<ul> <li>R &amp; D Investment</li> <li>Management of Technology Development</li> <li>Uniqueness of Technology</li> <li>Difficulty of Imitation</li> <li>Phases in tech life cycle</li> <li>Commercialization Stages of Technology</li> <li>Independence of tech</li> <li>Ripple effect of tech</li> </ul>	<ul> <li>Size of target market</li> <li>Legal Factors</li> <li>Awareness</li> <li>Market share</li> <li>Competitive Advantage of Product(s)</li> </ul>	<ul> <li>Marketing capacity</li> <li>Appropriateness of investment size</li> <li>Funding Capacity</li> <li>Diversity and stability of markets</li> <li>Return on Investment (ROI) Potential</li> </ul>

Source: InnoRate Consortium Presentation for European Big Data Value Forum, https://ebdvf.eu



#### $\bullet \bullet \bullet \bullet$

## **Overview of InnoRate Platform**



#### Platform which crowds in private financial institutions to the area of 'technoprenuers'

## Long & Deep Discussion of Developing TRS with EU



InnoRate Project was not realized just in a day....it has been through many researches and studies

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## The Reason Behind of KTRS in Europe

- InnovFin Advisory (EIB) published "Financing the Deep Tech Revolution" (March 2018) selected KOTEC's case as one of the best practice
- The report to reduce information asymmetry and effective rating tool for highly innovative companies such as KETs (Key Enabling Technologies)



Source: pp 50, Financing the Deep Tech Revolution. March, 2018, European Investment Bank

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## **KOTEC's Global Cooperation Activities on Introducing KTRS**



No 1 Partner for Innovative Growth

#### Transferring KTRS is not just giving... It's a learning opportunity





- The insightful questions during co-projects inspired KOTEC to further develop its KTRS
- KOTEC found the value of co-project and knowledge sharing
- started to think of co-studying the possibility to develop globally accepted TRS

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## What is TRS? Why TRS is important?

## Why Technology Appraisal(Rating) is important for SMEs?

### Case 1 00 Implant Ltd.

- Founded in 25 Jan 1988
- Transformed its major products from Toothpaste to Implant
- Unique 3D design Implant using Laser Beam Scanning
- 45 Patents (including Pending)
- Financial Credit Rate CC (Poor Cash Flow ↔ Too Much R&D)
   Vs. KTRS Rate A (Strong IP, Technical Staff...)
- Became the 3rd market player in Korea (export to 70 countries)



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## Does this company deserve to get a credit loan?



66





#### Case 2

66

#### 00 graph Co.,Ltd.

- Graphic Design startup which produces special effects on film making
- Wanted to receive licensing agreement from a research institute (ETRI\*)
   \* ETRI: Electronics & Telecommunications Research Institute
- "Multi-point of view computer graphics"  $\rightarrow$  Saving Time
- Needed Money for licensing contract
- Financial Credit Rate B- (No Financial Record)

Vs. KTRS Rate **A** (Technological edge. Technical Market Feasibility)

• The moive "The Admiral" had 17 million viewers (the unbreakable records in Korea)



## **Does Credit Rate System fairly value this company?**





## **Credit Rating System vs. Technology Rating System**

Credit Rating System	Technology Rating System	
Predicts the credit risk for an enterprise	Predicts the commercialization probability for a technology held by an enterprise	
Focuses on the history of an enterprise	Focuses on the future growth potential of an enterprise	
Assessment base - Past	Assessment base – Future	
Valuates tangible assets	Valuates intangible assets	
Factory sites, buildings, machines, etc.	Business rights, patents, R&D expenses, etc.	
Mainly analyzes financial results	Mainly analyzes non-financial results	
Banks' credit rating models	KTRS (AIRATE)	

In assessment of	of venture	husinesses /	' startups
			ocarcapo

Credit rating system	No business history in the past	Low rating
Technology rating system	Future growth potential	High rating

Technology Rating System is an effective evaluation tool especially to Technology Driven Start-Ups as well as R&D Intensive SMEs.

## The Reason behind the interest on KTRS

## It is a Global Trend

#### Global Industry Shift

🛅 Capital(Labor) Intensive

Technology(Innovation) Intensive

📋 Intangible Assets (i.e. IP) became more valuable than before

#### - **Need a right measure** (different point of view to evaluate)

To find SMEs with innovative technology and idea

Financial records of companies  $\neq$  the real value of companies

### Relieve Information Asymmetry between FIs and SMEs

🖺 Lack of tangible collaterals in early stage SMEs

Fls have much information on credit but not enough on tech potential of SMEs







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## **Globally Accepted Technology Rating Criteria**





## Let's work together

The exchanges of experts (Knowledge Sharing)



#### • Co-develop the Study platform for technology rating and financial support for Tech-based SMEs

- Formulate study group under AECM or EU Study Novel Financial Products and
- Study on how to further develop TRS in a global way
- Research on novel financial products for tech-driven SMEs
- Expedite Technology Transfer/Joint R&D

#### - Official process of cooperation request





# **Appendix: About KOTEC**



## **Credit Guarantee Institutions in Republic of Korea**



OTEC



## What makes KOTEC differentiate from other CGCs?

#### Conventional Guarantee Scheme's Role

- Relieving the SMEs' problems
- Information Asymmetries
- Lack of Collateral
- Transaction costs for small-scale Lending
- Effective Policy Vehicle
- Protecting SMEs
- Countercyclical Measure
- Secure Employment

#### KOTEC's Role

- Bridging Innovation and SMEs - Derive Business from R&D result
- Boost R&D activities of SMES



- Screening Next Growth Engines
- Small Business can be "Super Star"
- Identifying Promising SMEs
- Focusing on Startups
- Keep pace with industrial Policy

KOTEC's position is somewhere between Innovation Promotion Agency and Credit Guarantee Institution

1<160

## **KOTEC in number**







## **Target companies**



#### **Tech-based Start-ups**

Have been established for less than 7 years

Geared with Novel Idea/Technology Takes majority (74.8%) of KOTEC's client portfolio (as a number of companies)



#### **Govt's Innovation Focuses**

19 Next Growth Engines 6 Major Industries

IT(Information),BT(Bio)NT(Nano ),CT(Culture), ET(Environment), ST(Space) Take +40% of KOTEC' client portfolio (as a number of companies)



#### **Knowledge-based Services**

Engineering Cultural Contents

TV Drama, Musical, Game (Online, Mobile), Character, Animation

## **Major Mission of KOTEC**



#### Gross Domestic Spending on R&D, 2019, % of GDP, OECD data

Rank	Country	% of GDP	Rank	Country	% of GDP
1	Israel	4.93	17	European Union(27)	2.11
2	Korea	4.64	20	United Kingdom	1.75
3	Chinese Taipei	3.49	22	Canada	1.59
4	Sweden	3.38	24	Italy	1.46
5	Japan	3.20	29	Spain	1.12
6	Germany	3.19	38	Argentina	0.46
9	United States	3.06	39	Colombia	0.32
13	China	2.11	40	Mexico	0.28

- KOTEC contributes to the R&D capacity of SMEs and Startups
- KOTEC leads the R&D results to the success in the commercial market

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## **Diverse Type of KTRS**

## **2 Industry Groups – 10 Industries**



## **4 Categories 12 Models**



# Thank You Stay in Touch

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Leo (Hee-Chang) PARK

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## Adding Value to Technologies



# InvestEU-EIF Guarantee Products



# Total of EUR 10.7bn available across a range of products & target areas

Thematics	Climate & sustainability	Innovation & digitalisation	Growth & competitiveness	Social impact, inclusion, skills & education	Culture & creativity
Finance for	Green innovation & transformation – contributing to the EU Green Deal	Innovation & digitalisation to fuel productivity & competitiveness	Higher risk, high growth & recovering smaller companies to ensure European competitiveness	Microenterprises, social enterprises as well as students and learners	Enterprises active in the CCS to help hone Europe's valuable sector & digitalise into the future
Guarantee products Indicative InvestEU EIF resources for	Sustainability Portfolio Guarantee Product	Innovation and Digitalisation Portfolio Guarantee Product	SME Competitiveness Portfolio Guarantee Product	Microfinance and Social Portfolio Guarantee Product Skills and Education Portfolio	Culture and Creative Sectors Portfolio Guarantee Product
different guarantee products	€4.4bn Guarantee	€3.7bn Guarantee		Guarantee Product	
			€1.7bn Guarantee	€600m Guarantee	€300m Guarantee

## IEU – Implementation status

#### 130 Applications received\*

- Covering one or more thematic products
- Most financial intermediaries (FIs) applied for at least two thematics - in total **314 requests for IEU guarantee products**

#### **# of requests per IEU guarantee products**



#### **Covering 23 EU Member states**

 Applications from Malta, Cyprus and Estonia expected to come by YE

#### **Requested amount exceeds available budget**

	IEU application distribution by country and guarantee product	# of guarantee products per country	# FIs per country
ESP	13 11 6	<b>1</b> 3 34	16
CZ	10 6 4 3 5	28	12
BG	14 <b>4</b> 3 <mark>1</mark> 4	26	6
IT	3 <b>1</b> 1 <b>1</b> 13	19	4
RO	4 3 2 2 6	17	9
FR	<b>6</b> 4 6 <mark>1</mark>	17	12
FIN	5 3 1 2 5	16	4
HR	4 2 <u>3</u> 2 5	16	5
BE	5 3 2 3 2	15	7
PT	6 2 2 2 2	14	2
SK	5 3 3 2	13	5
SWE	3 1 2 1 3	10	4
LT	4 4 1	10	7
HUN	4 2 2 1	9	4
AUT	2 3 1 2	8	5
DE	1 2 2 1	6	4
PL	1 1 2 1	5	3
NL		5	2
SLO	3 1	4	3
DEN	2 1	4	1
LU		2	2
IRL	1	2	2
GR	11	2	2
Multi-Country	11 <b>5 5 2</b> 9	32	9



## THE GUARANTEES COUNTERCYCLICAL ROLE PERSPECTIVES AND TRENDS



RED IBEROAMERICANA DE GARANTÍAS

SEPTIEMBRE 2022



## **REGAR** THE IBEROAMERICAN NETWORK OF GUARANTEES

OPERATES AS IBEROAMERICAN NETWORK SINCE 1998, ESTABLISHED AS AN ASSOCIATION IN 2017 24 SUCCESSIVE EDITIONS OF THE IBEROAMERICAN FORUM ON GUARANTEE SYSTEMS.



Registered in the register of Iberoamerican Networks of the Iberoamerican General Secretariat SEGIB.

## SUBSTANTIAL ACTIVITIES

aec

WORLD BANK GROUP



#### **STATISTICS**

**Observatory of the statistics** of Latin American guarantee systems/schemes, Spain and Portugal

#### **ANNUAL SURVEYS**

**Comparative analysis,** Latin American and European. Collaboration of **REGAR – AECM** 

#### **STUDIES AND PUBLICATIONS**

"Guarantees and Financing", collaborative publications with other institutions, since 2008

#### **SCIENTIFIC SPACE**

**Research and publications** on guarantee systems in the scientific and academic fields.

#### **TASK FORCE**

Impact and Additionality Assessment Guidelines on 'greening' credit guarantee schemes

#### INTERNSHIPS AND TRAINING

Within the framework of the Ibero-American Forums and **Annual Internship Program** 







## DIMENSION OF THE REGION'S GUARANTEE SYSTEMS 2020

A SIGNIFICANT INCREASE IN THE ACTIVITY OF GUARANTEES, PARTICULARLY IN PROGRAMS TO SUPPORT THE RECOVERY OF PRODUCTIVE ACTIVITY, WITH RELEVANCE OF NATIONAL COVID GUARANTEE PROGRAMS



Source: Statistical Report on the Activity of THE REGAR Guarantees



## A GLOBAL VISION: CURRENT GUARANTEES 2020 (millions US\$)

#### LATIN AMERICA INCREASES 203% BEING ONE OF THE REGIONS WITH THE HIGHEST GROWTH AND MORE THAN 66 BILLION US\$ IN CURRENT GUARANTEES



Source: Statistical Report on the Activity of THE REGAR Guarantees

U.S.: New product (COVID EIDL Loan) with better conditions to support small businesses. / Europe AECM: Spain approved a line of State Guarantees of up to 122.175 million dollars. / LATAM: Peru: the National Government implemented the "REACTIVA Peru" Program (Cofide) with an amount of up to US \$ 16,577 million in guarantees.



### A GLOBAL VISION: **NUMBER OF SMES** WITH CURRENT GUARANTEES 2020

#### LATIN AMERICA WITH MORE THAN 6 MILLION COMPANIES SUPPORTED WITH GUARANTEES IS THE REGION WITH THE LARGEST CONTRIBUTION



Source: Statistical Report on the Activity of THE REGAR Guarantees

U.S.: New product (COVID EIDL Loan) with better conditions to support small businesses. / Europe AECM: Spain approved a line of State Guarantees of up to 122.175 million dollars. / LATAM: Peru: the National Government implemented the "REACTIVA Peru" Program (COFIDE) with an amount of up to US \$ 16,577 million in guarantees.



## A GLOBAL VISION: CURRENT GUARANTEES / GDP 2020



#### Source: Statistical Report on the Activity of THE REGAR Guarantees

Spain approved a line of State Guarantees of up to 122,175 million dollars. / Peru: the National Government implemented the "Reactiva Peru" Program with an amount of up to US\$ 16,577 million in guarantees.



EXPANSION AND GROWTH, RETURNING TO AVERAGES HIGHER THAN BEFORE THE CRISIS.

01	RESOURCES		Public policies more <b>oriented towards</b> <b>social programs</b> and financial inclusion
02	RECONFORMATIÓN	-	Industries changed their business models and <b>the map of sectors changed</b>
04	SHARED RISK		New risk structures with reinsurance and reassurance.
05	SPECIALIZATION		Increasing specialization in <b>instruments</b> and types of mechanisms.







EXPANSION AND GROWTH, **RETURNING TO AVERAGES HIGHER THAN BEFORE THE CRISIS.** 

THE ACTIVITY OF GUARANTEES WILL ONCE AGAIN FOCUS ON THE DEVELOPMENT AND GROWTH OF THE SUBSTANTIAL ACTIVITIES OF SMES.

CONTINUITY OF THE **RELEVANT ROLE OF THE STATE IN THE IMPLEMENTATION AND DEVELOPMENT**, COEXISTING WITH PRIVATE PARTICIPATION.

POLICY REVIEW, **NEW REQUIREMENTS FOR MULTILATERAL LINES, ADDITIONAL COSTS**, GSCS WILL BE RELEVANTS.

**DIGITAL TRANSFORMATION AND CLIMATE CHANGE WILL IMPACT MODELS**, RISK AND OPERATION



**RED IBEROAMERICANA DE GARANTÍAS** 



XXV FORO IBEROAMERICANO Sistemas de Garantías

El tiempo para reactivar es hoy,

cuando el sol iberoamericano brillo desde el océano de El Salvador.

> 12 - 14 de octubre 2022 El Salvador

BANDESAL

🦉 🚳 IFC 🚃 🚽

Registrate

Socios Estratégicos de REGAR

ya

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