



ChipsJü

WEECS 2024
GHENT BELGIUM
5-6 December



EU Chips Act
Chips Fund

Marco Ceccarelli, European Commission

The CHIPS FUND



Objective: establish a dedicated **semiconductor investment facility** to foster the development of a dynamic semiconductor ecosystem by increasing **funding opportunities** supporting the growth of **start-ups and SMEs**

Chips Act regulation, Article 4:

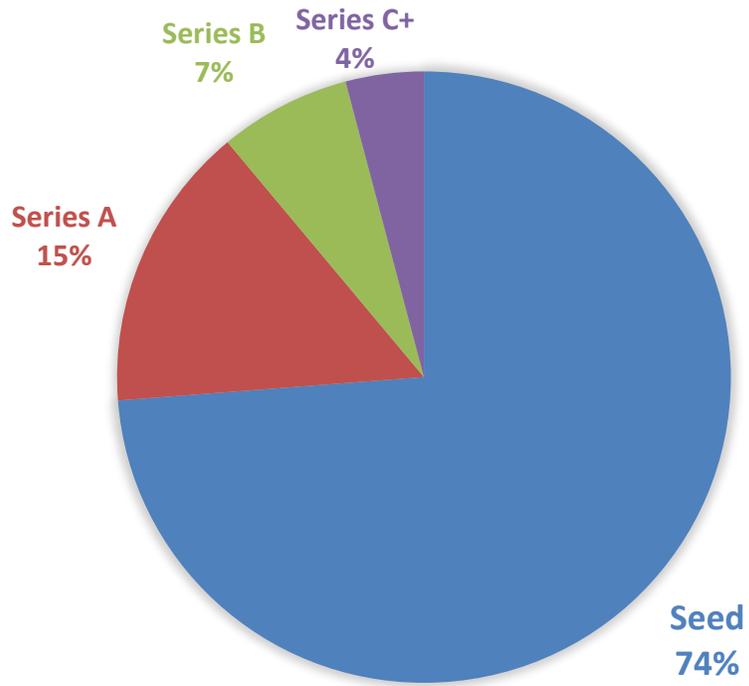
*“operational objective 5: undertaking activities, to be described collectively as ‘**Chips Fund**’ activities, to facilitate access to **debt** financing and **equity**, including by providing clear guidance, in particular for start-ups, scale-ups, SMEs and small mid-caps in the semiconductor value chain, through a blending facility under the **InvestEU** Fund and via the **European Innovation Council**.”*

Why a Chips Fund?

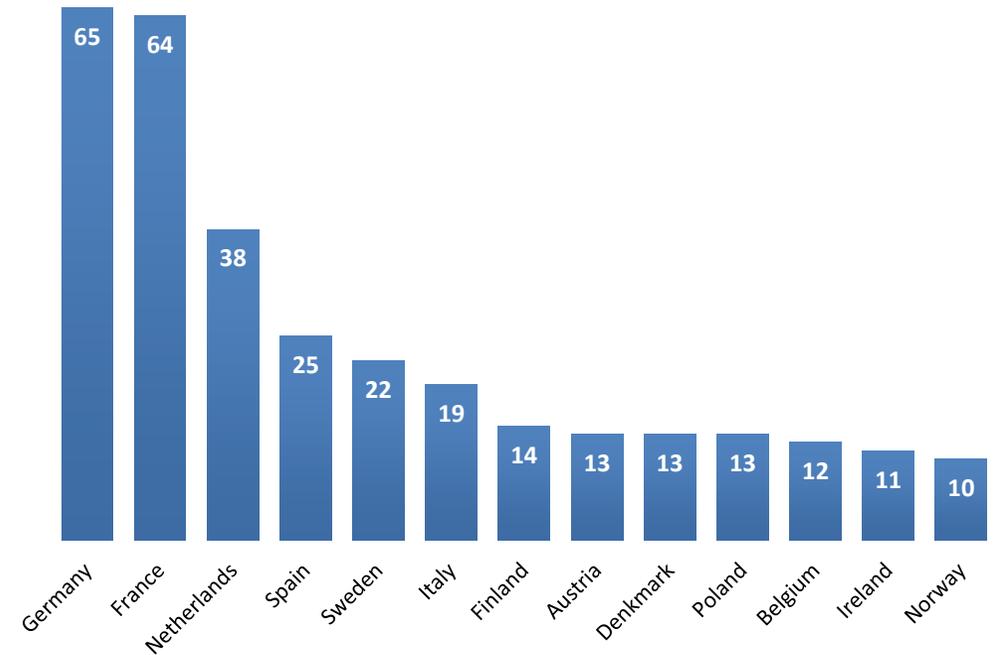
Intervention is necessary to address a **market failure**, as Europe lacks sufficient private capital to enable semiconductor startups to overcome high entry barriers, drive innovation, and compete effectively in a market dominated by major global players

Semiconductor startups in EU

European semiconductor startups by last funding round

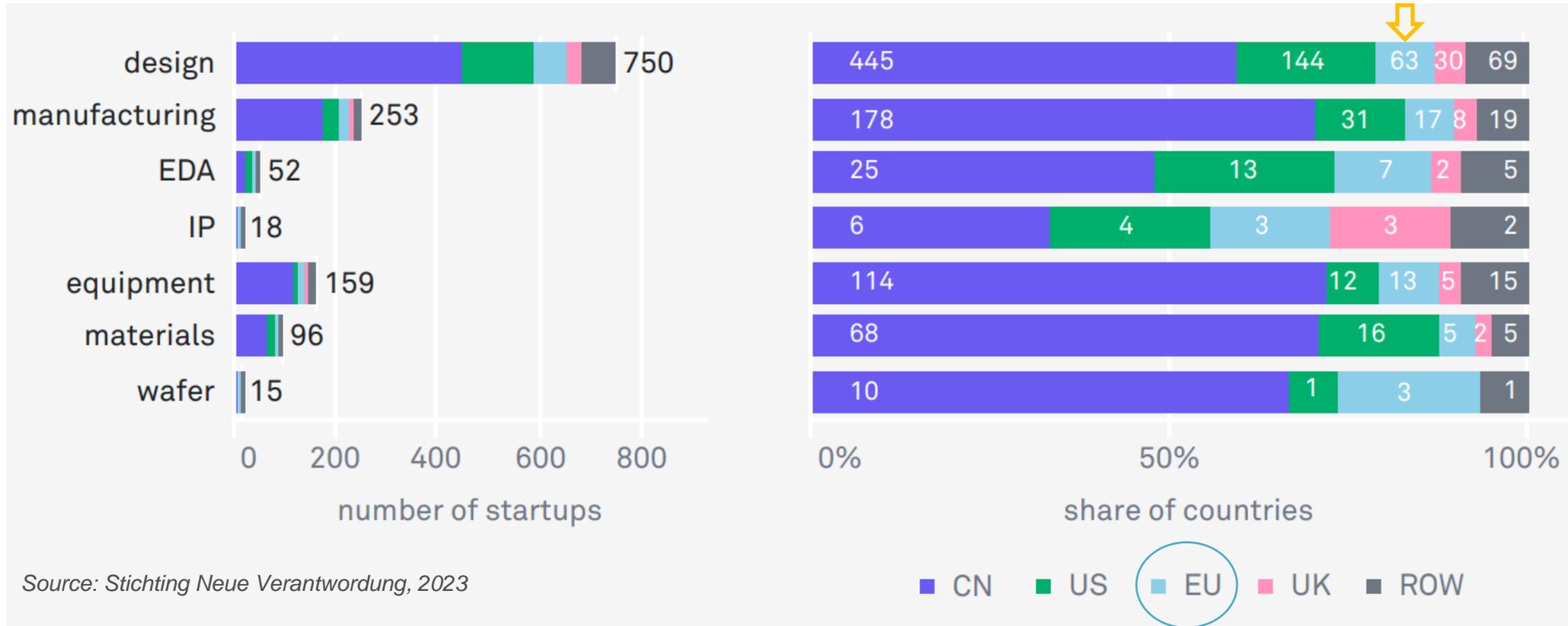


Number of semiconductor startups in EU countries



Source: Dealroom, 2024

Funding to semiconductor startups and value chain position



EU: nearly 2/3 of funded companies are in design

Funding to semiconductor startups and investors

- China:



- over 60% of the funded startups; 20 out of the 25 largest deals
- fuelling strategic ambitions through public investments

- US:

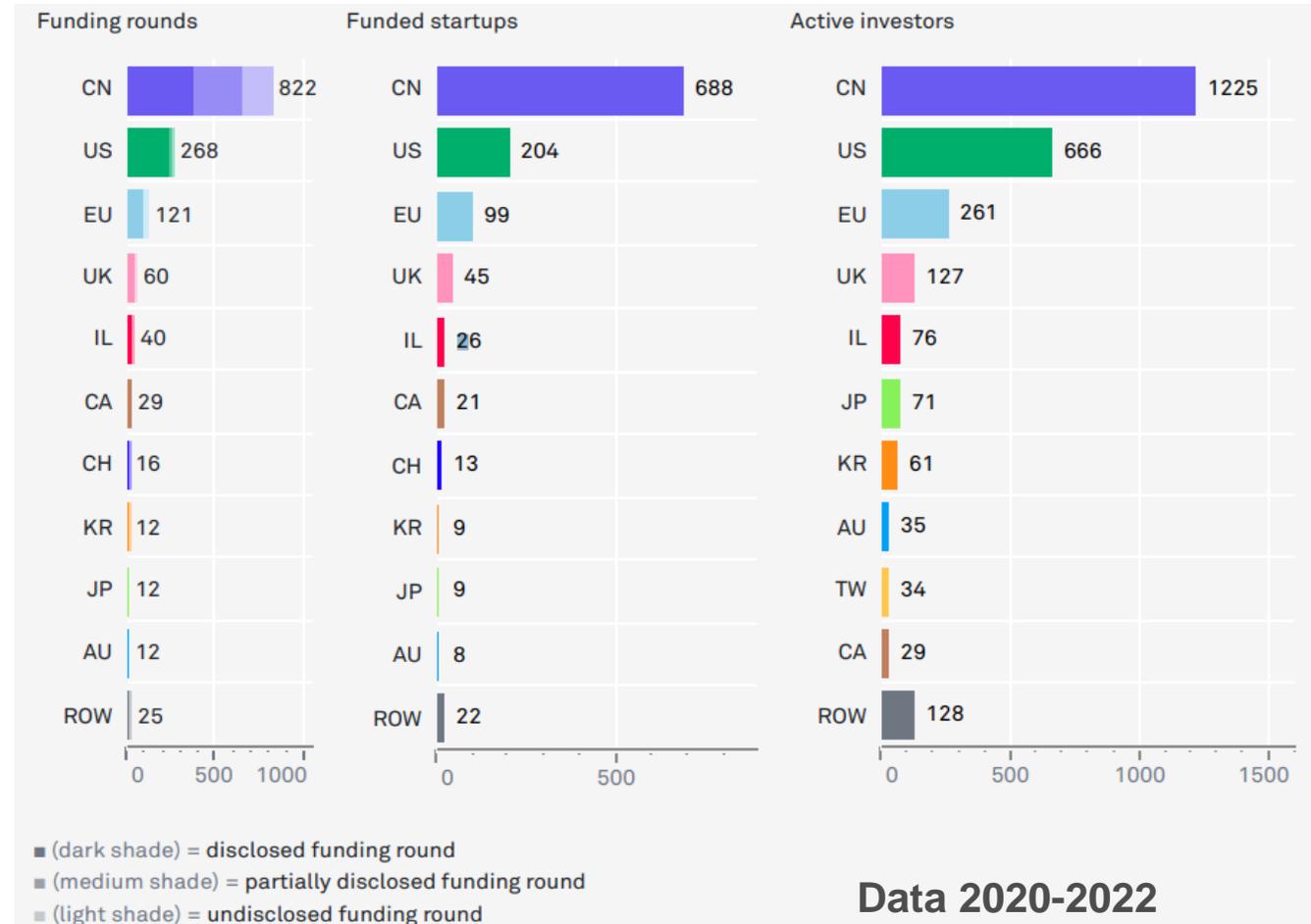


- 18% of the funded startups
- experienced VC ecosystem, well established industry network

- EU:



- 8.6% of the funded startups; 9.6% of active investors
- lack of dedicated VCs/funds



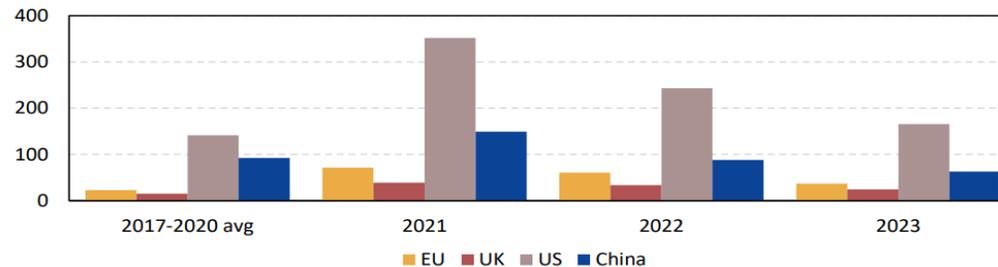
Source: Stichting Neue Verantwoording, 2023

Private capital gap in EU deep tech

Europe's deep tech sector faces a significant **funding gap** compared to **US and China**:

- In 2023, European deep-tech startups raised **20%** of the **venture capital** of US
- **Scale-up gap**: compared to US, EU has over 50% early-stage, but just **10%** scale-ups
- The average of capital raised by EU **scale-up** over its lifecycle is **35% less** than a US counterpart
- **Foreign capital**: venture capital raised in **EU** is only **5%** => mostly non-EU owned equity

These shortfalls underscore the necessity for **public financial support** to deep tech semiconductor startups to bridge the **investment divide**



Source: EIB

Chips Act – Pillar 1: Chips for Europe Initiative

Aim: bridging the gap from lab to fab

5 Objectives

- 1 Reinforce design capacity by providing a **virtual design platform**
- 2 Enhance existing and developing new **pilot lines**
- 3 Accelerate the development of **quantum chips**
- 4 Expand **skills** and set up a network of **competence centres**
- 5 Facilitate SME access to **equity and loans** through a dedicated **Chips Fund**



Chips JU

EIC
I-EU

Basic
Research

Applied
Research

Prototyping

Pilot lines

Production

Design Platform

Support to fabless startups

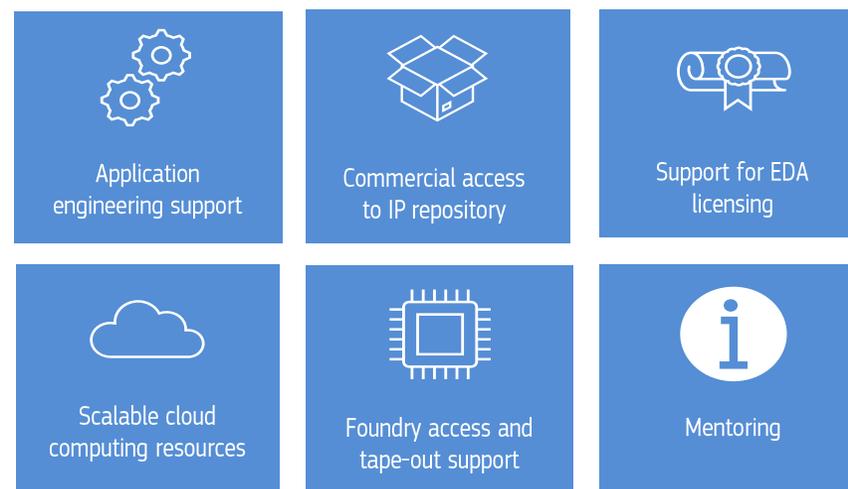
- *Goal:* lowering entry barriers and funding gap for fabless startups by reducing direct costs
- Incubation and Acceleration programmes will offer vouchers for costs related EDA and IP licensing, design support, tape-out
- Chips JU Work Programme: **EU funding for startups 220M€**, to be matched by Member States

Level 1



Access open to qualified designers from entities (commercial and non-) based in EU or 'Chips JU' PS

Level 2



Market rates or access to selected entities with support granted by EU + PS of 'Chips JU'

Chips Fund for semiconductor SMEs



- Established to address specific funding needs of deep-tech semiconductor startups and SMEs
- Implemented through two thematic investment facilities



EIC Accelerator programme – Challenge on “Semiconductor and quantum chips”

Funded by **Horizon Europe**

EIC offers equity and grants to high-potential startups to transform technology into innovation (mid/high TRL)

InvestEU - thematic investment facility on “Semiconductor chips and technologies”

Funded by **Digital Europe** programme

Implemented by **EIF** through intermediated equity (or quasi-equity) for SMEs to bring innovation to market and scale-up

The “Chips Fund”

‘Chips Fund’ equity, grants and loans

Equity products Start-ups / SMEs

EIC

Accelerator Challenge
Semi+Quantum 300M€

InvestEU

Joint RID-SME W
EC + EIF ~250M€

Debt products SME/LE + Large Facilities

InvestEU

RIDW Debt
(Gen+Them)
EIB - based on demand

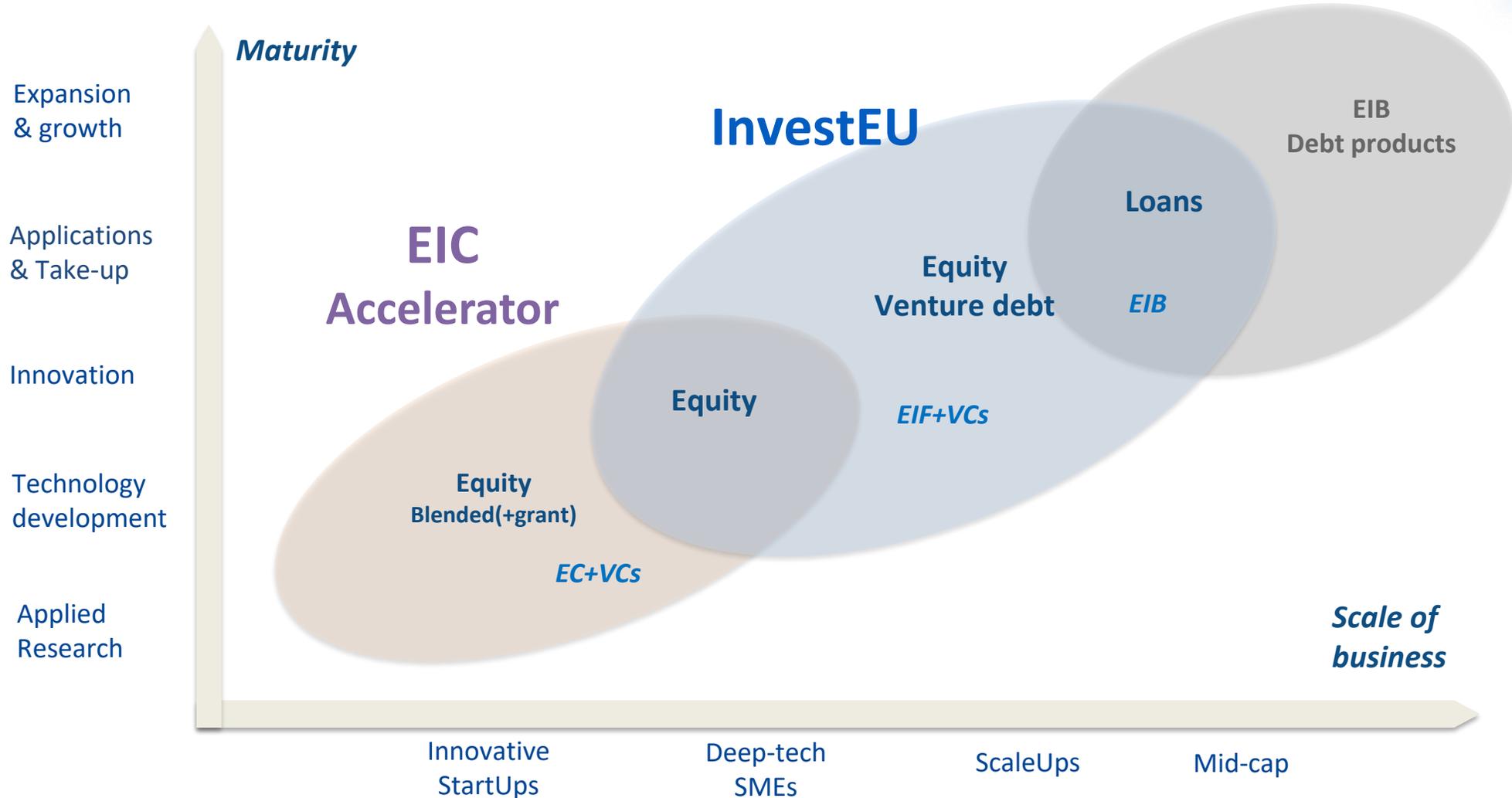
EIB debt products

Loans and Venture Debt

EIB on semiconductors
Based on demand



Chips Fund - Investment types



EIC: main instruments and characteristics

Accelerator (TRL 5-9)

- For individual SMEs
- Development & scale up of deep-tech/ disruptive innovations by startups/ SMEs
- Blended finance (grants up to €2.5 million; equity investment up to €15 million or above)

Transition (TRL 4-6)

- For consortia and single entities
- Technology maturation from proof of concept to validation
- Business & market readiness
- Grants up to €2.5 million

Pathfinder (TRL1-4)

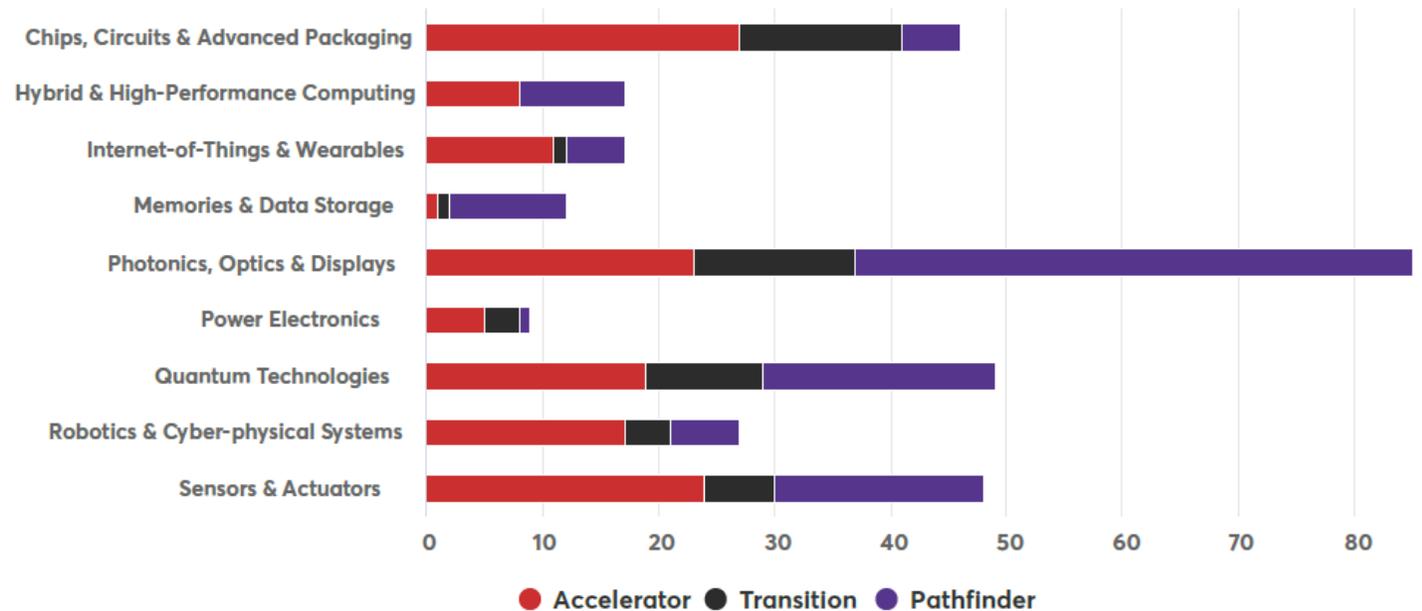
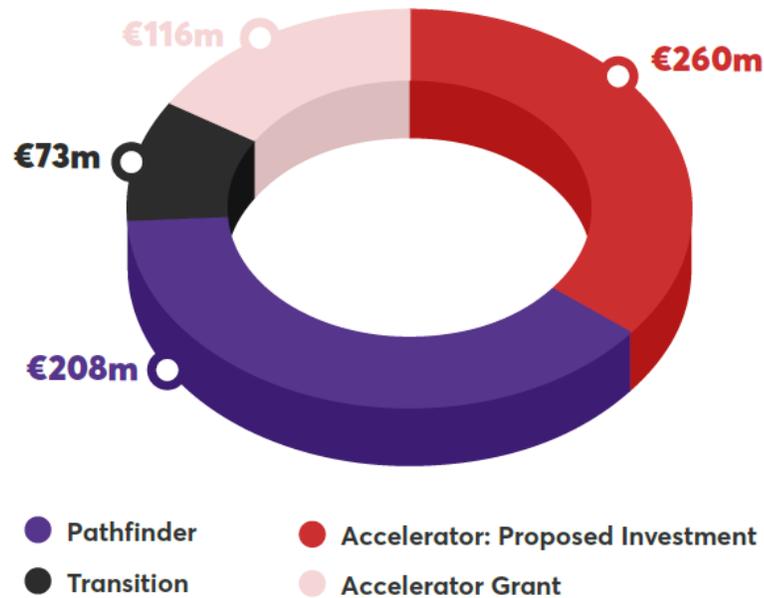
- For consortia
- Early stage research on breakthrough technologies
- Grants up to €4 million

EIC - Funding for hardware and semiconductors

Nearly 140 projects with over €650 million in funding across all EIC schemes

Over €250 million for Semiconductors and over €225 million in support for Quantum Technologies

As of March 2024



EIC Accelerator – Blended Finance

Grant component

- maximum of less than **€ 2.5 million**
- eligible costs are reimbursed up to a maximum of **70%**
- small mid-caps are not eligible for a grant only



Investment component

- € 0.5 million and **maximum € 15 million**
- usually in the form of direct **equity** or quasi-equity
- **minority ownership** (maximum 25% of the voting shares of the company)
- **“patient capital” principle** (7-10 years perspective on average, max 15 years)

EIC and Chips Act



- EIC has a mandate of dedicating **€ 300 million** to contribute to the **Chips Act** in 5 years (2023-2027) as part of the **Chips Fund**
- In 2025 the EIC will implement a **STEP*** call for scale-ups with a budget of **€ 300 million** offering investment up to € 30 million per company

* STEP= Strategic Technologies for Europe Platform

EIC results for the Chips Fund

EIC Accelerator Challenge on *Semiconductor and quantum chips*

- Allocated: **150 Million**
- Awarded: EUR **195 Million**
 - Grants: EUR 44 M
 - Equity: EUR 151 M
- Total Semi+Quantum including Open call: EUR **310 Million**
 - Grants: EUR 75.3 M
 - Equity: EUR 235 M
- 76 startups from 18 countries supported with grant, equity or blended finance

Axelera AI SiPearl Alice&Bob IQM Comptek
 Pasqal VSORA Videantis Alcyon Upmem
 Innatera Equal1 Scintil Quandela E-Peas Quant
 CODASIP Ferroelectric Swave Bifrost Diam
 Memory Photonics ...

InvestEU

€26.2bn
InvestEU Fund

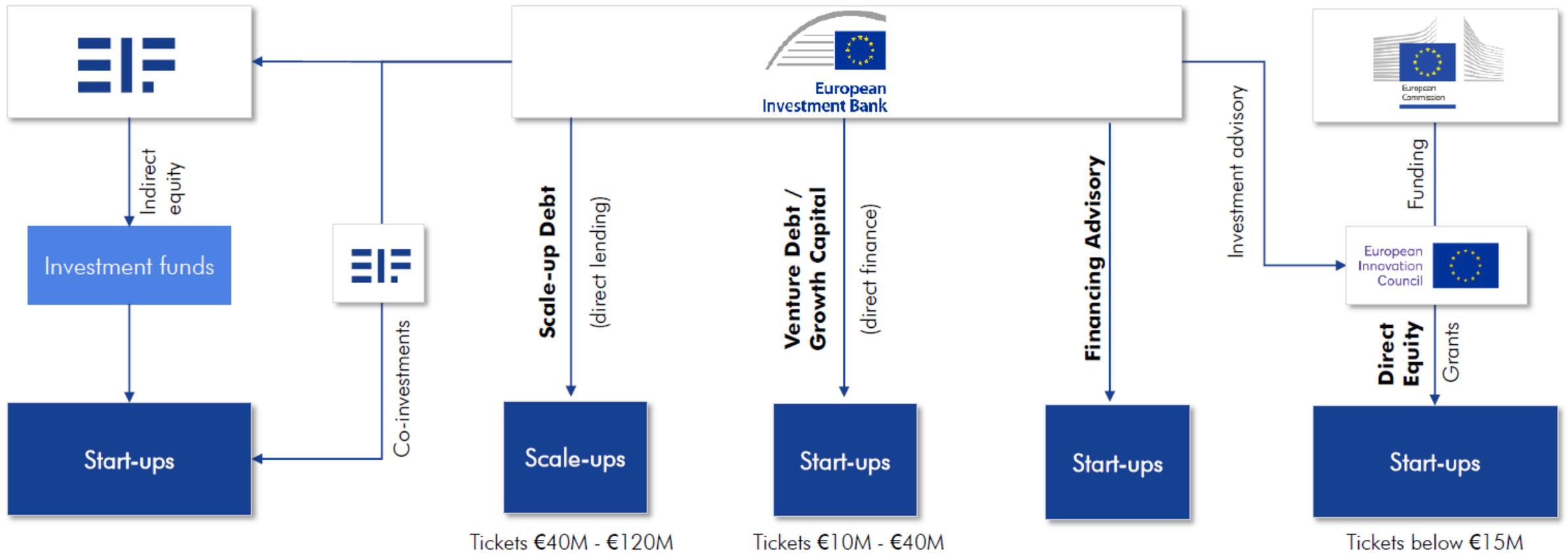
*EU guarantee
to trigger a new
wave of investment*



- **EIF: €6.5bn** to commit as a **Limited Partner** across **Private Equity** and **Venture Capital**, for investments until 2027
- EIF can modulate the intensity of support for funds aligned with policy objectives
 - Ringfenced budget of EUR 250M dedicated to VCs with strategies that specifically target investments in **Semiconductor Technologies and Chips**
- Intermediated equity through financial intermediaries: started Jan 2024, so far 4 VCs focusing on semiconductors



EIB group – venture instruments



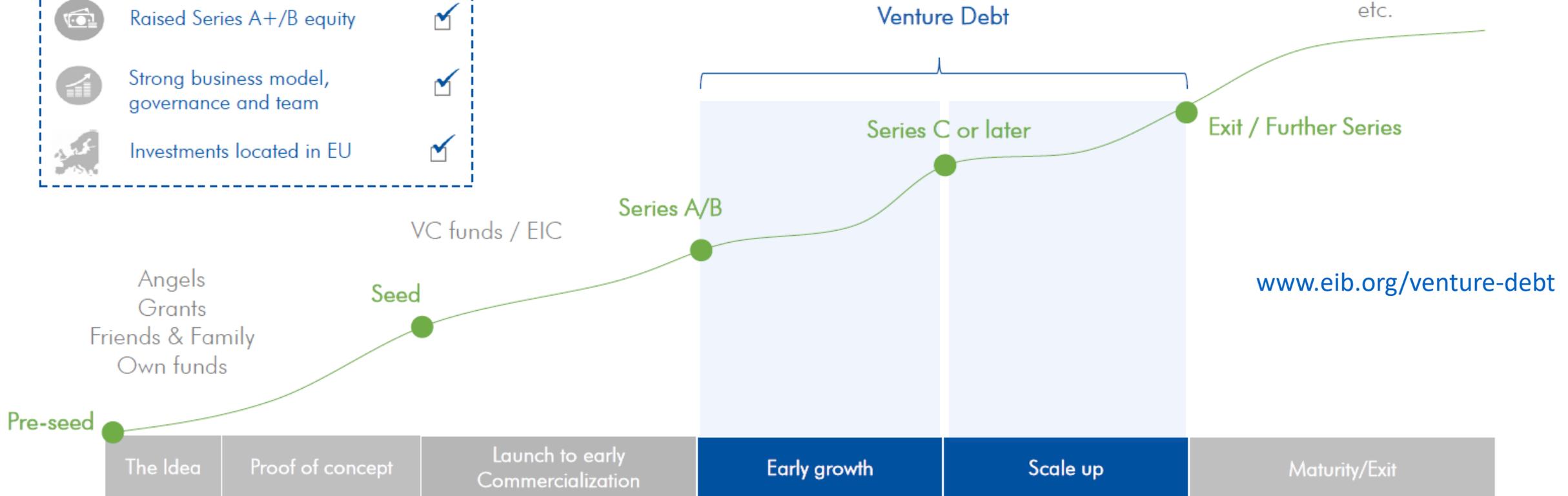
EIB – venture debt

Who is Venture Debt for?

- Innovation-driven companies in commercial stage
- Raised Series A+/B equity
- Strong business model, governance and team
- Investments located in EU

- Debt financing, equity type risk, but lower dilution than equity
- Exit: bullet repayment/IPO/sale/conversion
- Ticket: EUR 15-120 M

Bank debt
M&A
PE funds
IPO
etc.



EIB Advisory Services

Eligible companies can benefit from **FREE** financial advice to access financing and participate in **ecosystem development activities**.

FINANCIAL ADVICE



Review of investor material



Review of business plan, financial model, commercial, growth and scale-up strategy, pitch deck, investor memorandum



Independent valuation of your company



Advice on bankability and financing options

ECOSYSTEM DEVELOPMENT ACTIVITIES



Invitation to join sector-specific Finance Labs, workshops, roundtables relevant to the sector with other companies and EU institutions



Invitation to closed LinkedIn Group & latest news on market trends



Participate in consultations on new financing schemes for the sector

Chips Finance Lab

Financial advice to semiconductor companies organised by EIB advisory

Events 2024:

- Workshop: Assessing Barriers to Finance for Semiconductor Companies - 29 January 2024
- EIB Fundraising Masterclass – 18 June 2024
- EU funding instruments and case studies - 17 September 2024
- EIC/EIC/EIF “VC Chips pitch day” – 13 November 2024 @ Semicon Europa



Chips VC pitch day

Munich 13 November 2024 (during Semicon Europa)

- Highly successful event organized by EIB in collaboration with EIC and EC
- **26 semiconductor start-ups** selected from over 60 applications
- Pitched their projects to **25 VC funds** and Corporate VCs
- Unanimous positive feedback, investors praised the quality of the companies
- Productive networking sessions fostering investment opportunities

Successful example of collaboration
between EIB, EIC and Commission
May be repeated in 2025...





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