

Rome, July 4<sup>th</sup> 2025

3rd Banca d'Italia Workshop on Microsimulation modelling

# FROM ACE TO IRES PREMIALE: THE DISTRIBUTIONAL EFFECTS ON ITALIAN FIRMS

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#### **OUTLINE**

- o focus the recent developments of the Italian CIT:
  - Budget law 2024: the cancellation of the ACE and the new deduction for job creation
  - Budget Law 2025: the new 'IRES Premiale', a reduced IRES rate for companies reinvesting profits in qualified fixed assets 4.0 and the changes to the tax credits targeted to qualified fixed assets 4.0
- highlight the effects of the ACE on beneficiary firms over the period 2011-2021
- o illustrate the features of the Istat-MATIS microsimulation model
- o examine the heterogeneous effects the tax changes on Italian firms



#### The IRES tax reform

- a profit tax replaces a tax system that exempts the ordinary remuneration of equity and taxes excess profits, i.e. the definition of income subject to taxation is broadened
- new temporary tax incentives are introduced
  - a deduction for job creation granting a 20 percent increase in deductible labour costs for new permanent hires initially only planned for 2024 and then extended to the years 2025-2027
  - an incentive for the capitalisation of companies in the form of a reduced IRES rate only for 2025 for companies that jointly
  - i) allocate 80% of the profits of the fiscal year 2024 to a specific retained earning reserve
  - ii) **reinvest 30**% of them in the purchase of new 4.0 and 5.0 fixed assets (it must be at least equal to 24% of profits by the fiscal year 2023, and the minimum threshold is EUR 20,000)
  - iii) have maintained stable employment levels in 2024, iv) increase them by at least 1% in 2025
  - v) have not resorted to the wage guarantee fund (CIG) during the fiscal year 2024

The incentive mechanism, to be defined in detail by a specific ministerial decree, raises several doubts

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## IRES premiale: main issues

Contrary to what the Delegation Act (111/2023, Art. 6) provides for

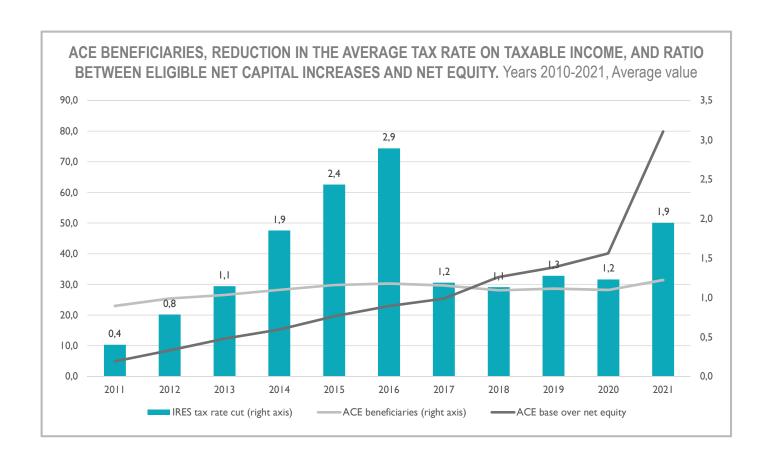
the reduced IRES tax rate **applies to the entire amount of profits** and not only to the proceeds of the activities carried out on the basis of the incentive. This leads to

- unjustified unequal treatment of companies in terms of taxation: the link between the incentive and the level of investments no longer exists
- disproportionate favouring of existing activities, including those that are not part of the company's characteristic management or, again, those activities that would have been carried out even without the incentive, as they would certainly be profitable.
- The guidelines for the design of tax incentives recommend instead the adoption of mechanisms aimed at reducing the costs of using certain production factors (IMF-OECD-UN-World Bank, 2024).
- Indeed, tax incentive that provide preferential tax treatment to expenditure are generally found to be more efficient at stimulating specific firm behaviour than income-based tax incentives.

The **limited number** of potential beneficiaries (18.000) and the **small financial scope** (470 mln euro).



## The ACE at work: years 2011-2021



take-up rate: from 23% to 31.4%

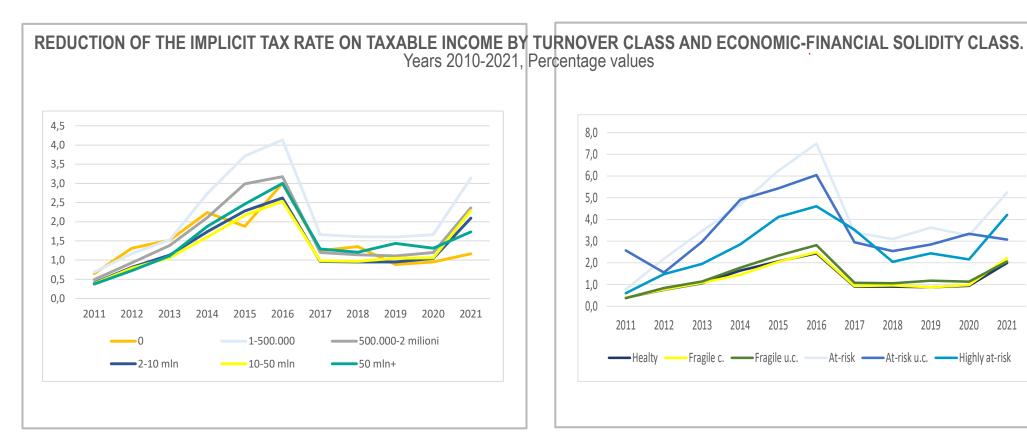
ACE base: from 5% to 80%

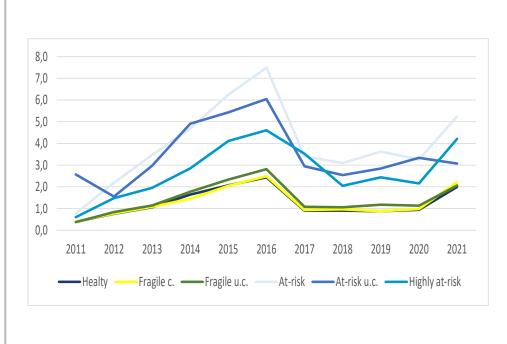
implicit tax rate reduction: from 0.4% to 1.9% (max 2.9%)

2014-2016 reinforcement phase of the measure 2017-2020 tapering phase 2021 innovative ACE



#### The ACE at work: ACE deduction in relation to the tax base







## The ACE at work: some descriptive results for years 2011-2021

the percentage of companies that have evolved to a "healthier" state, characterised by profitability, solidity and sustainable liquidity, is higher among ACE beneficiary companies than among nonbeneficiary companies over the decade

Note: the main diagonal line shows the proportion of companies that remain in the same class between 2010 and 2021. A shift of the line to the right shows an improvement in the state of economic-financial soundness, a shift of the line to the left a deterioration.

TRANSITION MATRIX BETWEEN ECONOMIC-FINANCIAL SUSTAINABILITY CLASSES BY USE OF ACE.

Years 2010-2021, Percentage values

		Classes of firm economic-financial solidiity 2021						
Classes of firm economic-financial solidity 2010		Highly at-risk	At-risk u.c.	At-risk c.	Fragile u.c.	Fragile c.	Healty	Total
Highly at-risk	ACE beneficiaries	45,2	2,5	4,8	41,4	3,7	2,4	100
	non-beneficiaries	54,0	1,7	4,1	35,4	2,8	2,1	100
At-risk undercapitalized	ACE beneficiaries	6,5	44,4	10,1	29,2	0,3	9,5	100
	non-beneficiaries	12,7	41,3	9,4	28,1	0,4	8,1	100
At-risk capitalized	ACE beneficiaries	4,1	3,8	50,7	6,3	7,1	28,1	100
	non-beneficiaries	8,1	3,9	49,9	8,5	8,5	21,1	100
Fragile-undercapitalized	ACE beneficiaries	6,0	2,3	1,6	79,1	3,3	7,7	100
	non-beneficiaries	12,6	2,7	2,3	71,4	3,5	7,5	100
Fragile-capitalized	ACE beneficiaries	3,2	0,2	10,2	15,5	55,8	15,1	100
	non-beneficiaries	6,5	0,2	14,7	17,0	48,9	12,7	100
Healty	ACE beneficiaries	0,6	1,0	10,4	6,8	1,7	79,6	100
	non-beneficiaries	1,9	1,6	13,9	10,0	2,1	70,4	100
Total	ACE beneficiaries	6,4	3,2	9,3	43,5	6,4	31,2	100
	non-beneficiaries	16,7	4,0	11,2	41,3	6,0	20,8	100



### The ACE at work: the causal effect on leverage

The ACE recently abrogated has been shown an effective policy measure to (Caiumi and Branzoli, ITAX 2020)

- broke the dependence on debt also for vulnerable and high-risk companies
- make companies less vulnerable to bankruptcy: the estimated average effect of the ACE corresponds to a decrease of the probability of default on bank debt (sofferenze) of its beneficiaries by roughly one tenth
- □ to promote the growth of companies, especially small ones (Istat 2020). By strengthening the capitalisation of companies, the ACE has not only promoted indebtedness reduction, but also productive investments
- Its features (incremental base, the implementation of specific anti-abuse provisions) led to the Italian experience being recognized as a good practice to address the debt bias (Zangari 2014)



#### The Istat-MATIS microsimulation model overview

In the prevailing literature, the distribution of the tax burden on companies is estimated on the basis of financial accounting data

- MATIS model (Bontempi, Giannini, et al. 2001; ISAE 2001-2010), Bardazzi et al. (2003), DIECOFIS model (Oropallo and Parisi 2007) for Italy
- > ZEW TaxCoMM model (2010, 2013) for Germany
- DiRECT model which covers multiple EU countries

The current version of the Istat-MATIS model contributes to the literature on microsimulation models base on large administrative database. It is founded on **corporate tax returns integrated with financial accounting data and statistical archives** regularly used by the Italian Central Institute of Statistics for revenue forecasting and policy analyses since 2013 (Caiumi and Di Biagio 2015 and 2016)

#### Recent contributions

- ➤ MEDITA model developed by the PBO (2019)
- ➤ CITSIM-DF model developed by the Italian Department of Finance (Bellucci et al. 2023)



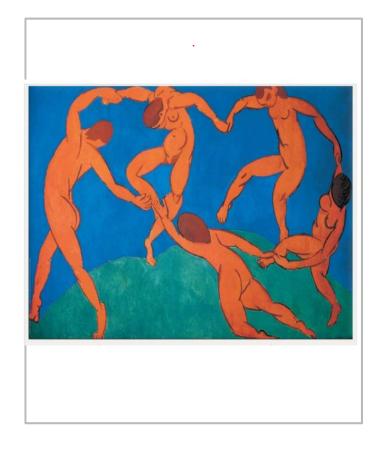
### Istat-MATIS: database

a **very rich** integrated database covers the **population of corporations** enables the identification of a wide range of firms categories based on

- economic sector, technological and knowledge intensity
- o size
- location
- export orientation
- ownership structure
- economic-financial sustainability
- firm's dynamism

covers the years 2005-2022

the panel data is not balanced





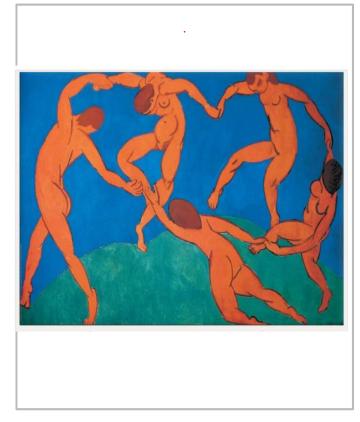
### Istat-MATIS: model framework

the **multi-period framework** takes account carry forward and enables the evaluation of reforms that enter into force gradually (such as the ACE)

maps in detail the main provisions of CIT in Italy from 2008 up to 2025

- ✓ the interest deduction rule
- ✓ deductions from the IRES tax base of the local business tax
- ✓ capital goods allowances, deduction for job creation
- ✓ tax treatment of losses
- ✓ corporate equity allowances
- ✓ consolidated taxation mechanism.

#### no behavioural adjustments





## **Istat-MATIS:** model validation

#### COMPARIONS OF ISTAT-MATIS SIMULATION RESULTS WITH OFFICIAL TAX RETURN DATA: IRES REVENUES (million of euros)

Year	Single entities			Fiscal groups					
	Companies	Simulation	Reveneus	Difference %	N. groups	Simulation	Reveneus	Difference %	
2008	730.842	20.089	19.338	3,9	3.347	8.475	8.111	4,5	
2009	736.287	17.666	17.459	1,2	3.579	6.878	6.830	0,7	
2010	755.865	19.077	18.865	1,1	3.712	7.035	6.788	3,6	
2011	774.387	19.628	19.456	0,9	3.906	7.363	7.286	1,1	
2012	778.373	17.393	17.054	2,0	4.007	6.249	6.120	2,1	
2013	805.377	17.159	16.944	1,3	4.032	6.034	5.864	2,9	
2014	804.886	18.023	17.700	1,8	4.045	6.129	6.070	1,0	
2015	819.720	18.968	18.714	1,4	4.173	6.964	6.910	0,8	
2016	846.390	19.644	19.426	1,1	4.226	7.066	6.964	1,5	
2017	868.283	19.031	18.789	1,3	4.281	7.266	7.166	1,4	
2018	890.459	19.950	19.689	1,3	4.385	6.930	6.805	1,8	
2019	913.732	23.191	22.902	1,3	4.501	8.363	7.152	16,9	
2020	919.128	24.391	24.098	1,2	4.627	9.119	8.415	8,4	
2021	948.570	31.582	31.494	0,3	4.744	13.484	13.318	1,2	

## **Istat-MATIS:** the simulation procedure

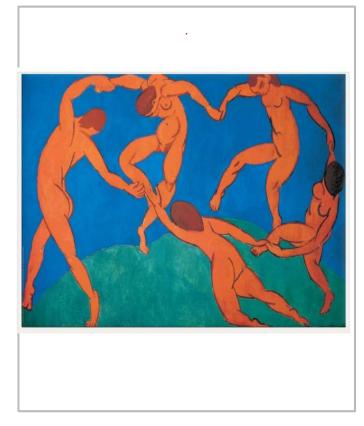
In the absence of current tax data, simulations are obtained by **shifting the simulation year backwards** as if the reforms had been introduced in year t -3, so that the current legislation is simulated based on the information for year t -3

**Caveat**: The disadvantages of this approach are obvious, as both the tax structure and the economic conditions underlying the simulation period change significantly compared to the reference year of the tax rules.

To address this the database is **updated annually** with the latest available data

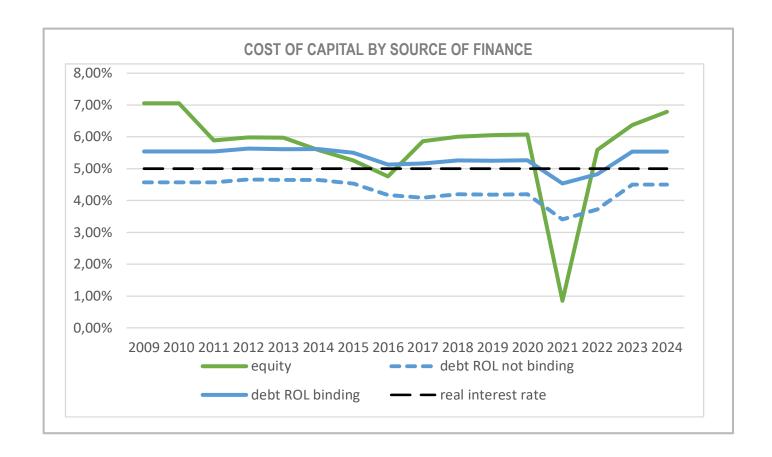
A **nowcasting procedure** has been implemented to limit the sensitivity of the simulation results to the pandemic crisis.

We realized that it would be necessary relying on additional data sources at company level, such as electronic e-invoicing





## The tax wedge on capital



Tax bias + 2.5 p.p. in 2024

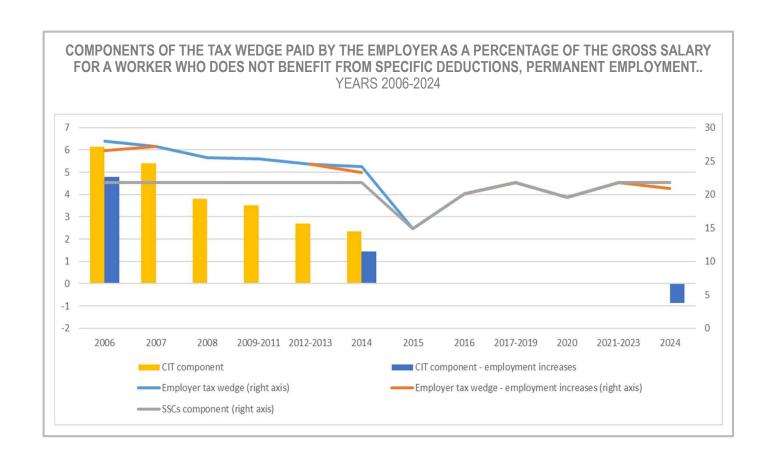
2014-2016 reinforcement phase of the measure 2017-2020 tapering phase

2021 innovative ACE

2024 ACE abolition



## The impact of the deduction for job creation on labour costs



- 0.9 percentage points of the gross salary

The incentives to employment increases granted in 2006 and 2014 under the IRAP regime granted a reduction in the tax wedge of 1.2 and 0.8 p.p. respectively



## MATIS.b ... in scribbles

#### **Corporate Taxable Income**

(from Corporate tax file matched with other admin. data and Statistical archives)

$$y_i = \pi_i \pm adj$$
 where  $\pi_i = pF(q) - wL - rK$  adj are tax adjustments

#### **Corporate net Taxable Income**

- Partial deductibility of interest expenses
- Investment allowance / tax credit i.e. so-called 'super-depreciation' and 'hyper-depreciation'
- · Deduction for job creation
- Tax treatment of losses
- · Allowance for corporate equity
- Tax consolidation

$$y_i^{net} = \pi_i \pm adj - \varepsilon_i$$

where  $\tau$  is the firm-specific allowance tax rule and  $\epsilon$  is the firm behavioral response elasticity

## Abolition of ACE and new deduction for job creation: winners and losers

	Compa	anies	Employee	ACE abolition	Deduction new hires	
			distribution	ACE losers	Beneficiaries	
		%	%	%	%	
Total	953.314	100,0	100,0	25,3	5,6	
Settor:						
Manufacturing	135.964	14,3	28,0	32,9	8,0	
Public utilities	13.896	1,5	2,7	38,0	5,4	
Costructios	150.736	15,8	8,2	23,1	7,9	
Trade	215.035	22,6	17,4	25,8	5,7	
Other services	437.683	45,9	43,7	23,0	4,1	
Turnover:						
0	27.506	2,9	0,7	2,0	0,7	
1-500.000	582.847	61,1	11,5	18,1	3,4	
500.000-2 mln	209.492	22,0	16,4	32,5	9,5	
2-10 mln	101.195	10,6	20,9	46,7	10,5	
10-50 mln	25.813	2,7	17,0	60,2	10,0	
50 mln+	6.461	0,7	33,4	65,7	10,6	

5.6 % beneficiaries for the new deduction for new hires

25.3% ACE losers

Ace losers are located in the **northern regions** export-oriented firms, generally more **solid** and characterized by a **high degree of dynamism** 



## Abolition of ACE and new deduction for job creation: changes in IRES tax liabilities

	ACE abolition	Deduction new hires	
	IRES tax liabilities	IRES tax liabilities	IRES tax liaiblities
	%	%	%
Total	12,2	-1,9	10,2
Settor:			
Manufacturing	12,1	-1,2	10,9
Public utilities	11,5	-1,2	10,3
Costructios	6,6	-4,5	2,1
Trade	9,6	-1,4	8,2
Other services	15,6	-2,7	12,8
Turnover:			
0	3,4	-1,0	2,4
1-500.000	14,2	-3,7	10,3
500.000-2 mln	11,6	-5,6	5,8
2-10 mln	11,5	-3,6	7,9
10-50 mln	12,1	-1,9	10,1
50 mln+	12,4	-0,8	11,7

+10.2% on average

+12.2% for ACE losers

-1.9% for beneficiaries of the new deduction for job creation

up to 30% increase for companies that appear at-risk and highly at-risk based on the economic and financial sustainability indicator



## Simulation of the IRES premiale very preliminary

#### Requirements

- i) **allocate 80%** of the profits of the fiscal year 2024 to a specific retained earning **reserve**
- ii) **reinvest 30%** of them in the purchase of new 4.0 and 5.0 fixed assets (it must be at least equal to 24% of profits by the fiscal year 2023, and the minimum threshold is EUR 20,000)
- iii) have **maintained stable** employment levels in 2024, iv) **increase** them by at least 1% in 2025
- v) have **not resorted** to CIG during 2024

Beneficiaries of Transition 4.0 in 2022 are **potential beneficiaries** of IRES premiale, i.e. 15,700 and the corresponding tax credits amount to 4.2 billion

#### Our simulation procedure

- i) **not applied**: we assume companies can have a flexible dividend distribution policy for 2024
- ii) the amount of investment in qualified assets is determined as the higher of
- 24% of the 2024 profit (30% of the 80% deferred)
- 24% of the profit from 2023
- tax-exhausted companies in the years 2023-2025 are excluded
- newborn firms are excluded
- Companies that fulfil the criterion 7,100
- iii-iv) sensitivity tested, not applied
- v) satisfied



## IRES premium and changes to the Transition 4.0 plan: winners and losers

	Companies		Employee	IRES premiale	IRES premiale & Tra	IRES premiale & Transition 4.0	
			distribution	Beneficiaries	Beneficiaries	Losers	
		%	%	%	%	%	
Total	1,001,366	100,0	100,0	0,7	0,1	1,3	
Settor:							
Manufacturing	142.225	14,2	30,7	2,2	0,2	3,8	
Public utilities	15.999	1,6	2,9	1,2	0,1	2,0	
Costructios	159.760	16,0	8,4	0,8	0,1	1,2	
Trade	221.560	22,1	18,3	0,6	0,1	1,1	
Other services	461.822	46,1	39,8	0,2	0,0	0,5	
Tecnology and knowledge:							
Manufacturing - tecnological intensity							
-high	3.864	0,4	1,6	1,5	0,2	2,1	
-medium-high	25.120	2,5	9,1	1,8	0,2	3,1	
-medium-low	56.961	5,7	10,3	2,8	0,2	4,4	
-low	54.781	5,5	9,5	1,8	0,1	3,4	
Services- knowledge intensity							
-high - tecnology	52.799	5,3	5,2	0,1	0,0	0,3	
-high - market services	80.208	8,0	9,4	0,2	0,0	0,5	
-high - other services	4.018	0,4	0,4	0,2	-	0,9	
-low	546.357	54,6	43,1	0,4	0,0	0,8	
Other	177.258	17,7	11,4	0,9	0,1	1,3	

0.7% beneficiaries of IRES premiale but 0.1% considering the changes to the Transition 4.0

1.3% losers

Both winners and losers are relatively more numerous in exporting companies and increase with size



## IRES premium and changes to the Transition 4.0 plan: ratio between tax benefit and eligible investment expenditure

	IRES premiale and Transition 4.0			
	Tax relief distribution %	Investment 4.0 distribution %	Tax relief over investment %	Tax relief distribution %
Total	100,0	100,0	4,0	100,0
Settor:				
Manufacturing	61,7	60,5	4,1	75,0
Public utilities	3,3	3,5	3,8	3,1
Costructios	13,3	11,5	4,7	6,4
Trade	13,5	13,3	4,1	7,6
Other services	8,1	11,3	2,9	7,9
Tecnology and knowledge:				
Manufacturing - tecnological inte	ensity			
-high	1,5	1,8	3,4	0,9
-medium-high	11,5	8,2	5,7	13,1
-medium-low	27,1	30,8	3,6	42,7
-low	20,8	18,9	4,5	17,8
Services- knowledge intensity				
-high - tecnology	0,5	0,5	_4,3	0,4
-high - market services	0,9	0,7	4,9	0,6
-high - other services	0,0	0,0	0,9	0,1
-low	20,2	23,3	3,5	14,5
Other	17,4	15,8	4,4	10,0

4% on average

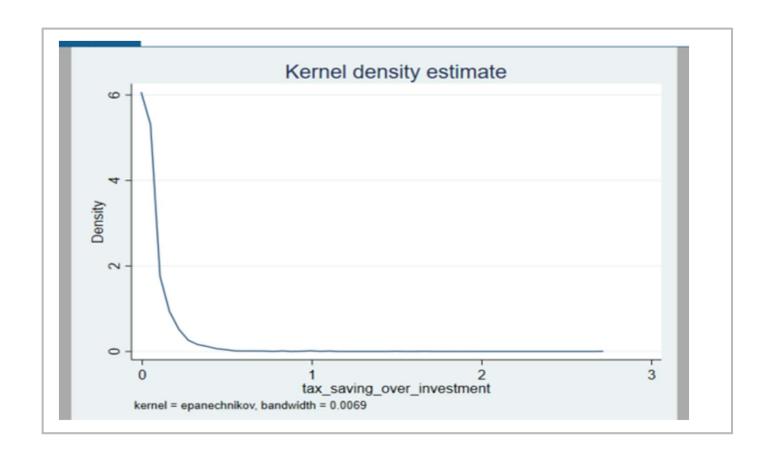
75% of total funding goes to the manufacturing

#### Companies with

- a turnover of more than
   50 million euros will
   receive about 49% of the
   total funds
- in the north-west of the country will absorb 42% of the amount, while less than 20% will go to the south



## IRES premium and changes to the Transition 4.0 plan: the distribution of this ratio between tax relief and eligible investments



6% on average
2.5% median value
270% max
5% companies get >20% of
eligible investment

## **Concluding remarks**

- Companies are generally penalised by the provisions adopted.
- The abolition of ACE and the downsizing of Transition 4.0 will hit the manufacturing industry the hardest.
- Given the complexity of the incentive mechanism, it is unlikely that the IRES premiale will bring about a change in companies' capitalisation decisions.
- Moreover, companies will derive very different benefits from the same investment decisions.
- O Furthermore, we need more ex-post effectiveness analyses on both input additionality and output additionality to support evidence-based and effective economic policy



#### References

- o Istat (2024), Effetti dei provvedimenti fiscali sulle imprese, https://www.istat.it/comunicato-stampa/effetti-dei-provvedimenti-fiscali-sulle-imprese-anno-2024/
- O Istat (2020), 'L'ACE come strumento di rafforzamento patrimoniale e crescita economica delle imprese', in Cap. 4, Rapporto annuale Istat 2020.
- O Branzoli and Caiumi (2020), 'How effective is an incremental ACE in addressing the debt bias? Evidence from corporate tax returns', International Tax and Public Finance, Vol. 27, Issue 6.



# thank you

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