Design of R&D tax relief provisions

Italy provides R&D tax relief through a volume-based R&D tax credit, replacing the previous incremental R&D tax credit available in Italy since 2015. The new R&D tax credit is generally payable in three yearly instalments and available at an enhanced rate to R&D performing firms in the Southern regions of Italy.

Table 1. Main design features of R&D tax incentives in Italy, 2020

<table>
<thead>
<tr>
<th>Tax incentive</th>
<th>R&amp;D tax credit (Legge di Stabilità 2015, 2017)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of instrument</td>
<td>Volume-based, payable in three yearly instalments</td>
</tr>
<tr>
<td>Eligible expenditures</td>
<td>Current, intangibles, depreciation (machinery and equipment)</td>
</tr>
<tr>
<td>Headline rates (%)</td>
<td>12 (18 for certain R&amp;D labour expenses*); in the Southern regions: 45 (small), 35 (medium), 25 (large)</td>
</tr>
<tr>
<td>Refund</td>
<td>Redeemable against income tax liability, regional taxes (IRAP) and social security contributions</td>
</tr>
<tr>
<td>Carry-over (years)</td>
<td>Indefinite (carry-forward)</td>
</tr>
<tr>
<td>Ceilings</td>
<td>R&amp;D tax relief EUR 3m per year and beneficiary</td>
</tr>
</tbody>
</table>

Italy also offers an income-based tax incentive for outcomes of R&D activities. These are beyond the scope of this note. *This rate applies to labour costs for researchers and technicians employed in R&D activity, more specifically costs related to highly qualified employees under 35 years of age with a Ph.D, at their first job and employed with a fixed-term contract.


Key features:

- Companies may offset earned credits against regional taxes and social security contributions, instead of their income tax liability, and carry forward any excess claims.
- The ceiling on R&D tax benefits amounts to EUR 3 million in 2020 (previously EUR 10 million).

Generosity of R&D tax support in 2020

Differences in the design of R&D tax incentives drive significant variation in the expected generosity of tax relief per additional unit of R&D investment. In 2020, the R&D tax subsidy rate for SMEs and large firms in Italy is estimated at 0.11 in both profitability scenarios. This subsidy rate is well below the OECD median for SMEs in profit (loss) estimated at 0.20 (0.18) and for large firms in profit (loss) estimated at 0.17 (0.15).

Figure 1. Implied tax subsidy rates on R&D expenditures: Italy, 2020

1-B-index, by firm size and profit scenario

Note: Implied marginal tax subsidy rates, presented for different firm size and profitability scenarios, are calculated based on headline tax credit/allowance rates (see methodology and country-specific notes), providing an upper bound value of the generosity of R&D tax support, not reflecting the effect of thresholds and ceilings that may limit the amount of qualifying R&D expenditure or value of tax relief. Source: OECD, R&D Tax Incentives Database, http://oe.cd/rdtax, March 2021.
Recent developments in R&D tax relief provisions

Regular reforms of R&D tax incentives lead to continuous changes in the availability, scope and generosity of R&D tax incentives. Such reforms relate to the launch of new tax incentives, the R&D definition adopted for tax purposes, changes in tax credit and allowance rates, adjustments of thresholds or upper ceilings on qualifying R&D expenditure or tax relief amounts, or changes in the terms and availability of refunds.

In 2020, changes in the availability and scope of R&D tax incentives represented the most frequent type of policy reform (OECD, 2020), along with adjustments to the headline R&D tax credit/allowance rates and adjustments of thresholds or upper ceilings on qualifying R&D expenditure or tax relief amounts. In response to the COVID-19 pandemic, several countries increased the generosity of R&D tax relief or introduced modifications to the administration of R&D tax incentives to facilitate and accelerate R&D funding.

In 2020, Italy undertook two changes in its R&D tax relief provisions:

- The existing incremental R&D tax credit was abolished with effect from December 31, 2019 and a new volume-based tax credit for R&D, innovation and design was introduced with effect of tax year 2020.
- In response to the COVID-19 crisis, Italy introduced an enhanced tax credit rate for companies in the Southern regions of Italy. Instead of the standard tax credit rate of 12%, a rate of 45% / 35% / 25% applies to small / medium-sized / large companies in the respective regions.

Trends in the generosity of R&D tax support

The generosity of R&D tax incentives varied significantly in Italy over the 2000-20 period across the four scenarios considered. An increase in implied marginal tax subsidy rates is observable in 2007 when Italy introduced a volume-based R&D tax credit (Law 296/2006) for intramural R&D. With no refund or carry-over option, the implied tax subsidy rates of loss-making firms reflect the status of no tax support.

The marked decline in implied tax subsidy rates in 2010, followed by an upturn in 2015, relate to the abolition of the volume-based tax credit in 2009 and the introduction of a refundable, incremental R&D tax credit for intra- and extramural R&D in 2015. The introduction of a uniform tax credit rate of 50% for all types of eligible R&D expenditure in 2017 and its revocation in 2019, explain the increase in implied subsidy rates from the 2016 level in 2017 and their subsequent reversion to 2016 levels in 2019.

With the introduction of a volume-based R&D tax credit in 2020, replacing the existing incremental tax credit in Italy, the implied R&D tax subsidy rate estimated for SMEs and large firms increased notably from 0.07 to 0.11 in both profit scenarios, reaching the level of generosity that the former volume-based R&D tax credit, available in Italy from 2007 to 2009, provided to firms in the profit-case (0.12).

**Figure 2. Implied tax subsidy rates on R&D expenditures: Italy, 2000-20**

![Implied tax subsidy rates on R&D expenditures: Italy, 2000-20](image)

**Note:** Implied marginal tax subsidy rates, presented for different firm size and profitability scenarios, are calculated based on headline tax credit/allowance rates (see methodology and country-specific notes), providing an upper bound value of the generosity of R&D tax support, not reflecting the effect of thresholds and ceilings that may limit the amount of qualifying R&D expenditure or value of tax relief.

**Source:** OECD, R&D Tax Incentives Database, [http://oe.cd/rdtax](http://oe.cd/rdtax), March 2021.

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1 The R&D tax credit (Law 296/2006) was extended from 2009 to 2011 but was only available to firms that had incurred R&D expenditure in 2007-09 and not yet received tax support.
Policy support for business R&D: the policy mix

Italy is placed above the OECD average in terms of total government support to business R&D as a percentage of GDP, at a rate equivalent to 0.23% of GDP in 2018.

Figure 3. Direct government funding of business R&D and tax incentives for R&D, 2018 (nearest year)

As a percentage of GDP

Note: Data on subnational tax support are only available for a group of countries.

Key points:
- From 2006 to 2018, government support for BERD as a percentage of GDP increased in Italy by 0.19 percentage point (pp), while the OECD average increased by 0.03 pp.
- During this period, business R&D intensity in Italy increased from 0.53% to 0.90%.
- In 2018, R&D tax incentives accounted for 81% of total government support for BERD in Italy.

Distribution of R&D tax relief recipients and government tax relief for R&D

The distribution of R&D tax relief recipients and government tax relief for R&D expenditures (GTARD) provide insights into what types of firms claim and benefit from tax relief.

Figure 4. Number of R&D tax relief recipients and value of government tax relief for R&D, 2018

By firm size*, share in percent

By industry**, share in percent

Note: Figures refer to the R&D tax credit (25-50%; incremental). *SMEs are defined as firms with 1-249 employees and that follow the EU criteria in terms of number of employees, turnover and balance sheet total. **Economic activity is classified based on the NACE.

Key points:
- In Italy, SMEs accounted for 94% of R&D tax relief recipients in 2018, while the share of R&D tax support accounted for by SMEs amounted to around 79% in this year. 20% of R&D tax benefits were allocated to large firms, comprising 3% of the population of R&D tax relief recipients in 2018.
- In 2018, firms in manufacturing represented around 54% of R&D tax relief recipients in Italy, followed by firms in services with a share of 31%. The share of R&D tax benefits accounted for by the latter amounted to 30% in that year, while this share amounted to 58% in the case of firms in manufacturing.
Trends in the uptake of R&D tax incentives

Over the period 2000-2018, the number of R&D tax relief recipients increased considerably in Italy from 620 in 2000 to nearly 27,000 recipients in 2018. With the introduction of a volume-based R&D tax credit (Law 296/2006) from 2007-2009, a first increase in the number of R&D tax relief recipients is observable, only propelled by the latter introduction of an incremental R&D tax credit in 2015. Following the 2015 policy reform, Italy witnessed a more than tenfold increase in the number of R&D tax relief recipients from 2014 to 2020.

Figure 5. Number of R&D tax relief recipients, Italy, 2000-2018

Note: Figures refer to the R&D tax credit (10% volume-based), R&D tax credit (fixed amount on qualified researchers, 60% R&D collaboration), R&D tax credit (90%; R&D collaboration), R&D tax credit (25-50%; incremental) and R&D tax credit (35% research wages).

Trends in government support for business R&D

From 2000 to 2018, the importance of R&D tax incentives has increased in Italy, both in absolute and relative terms, with some significant fluctuations being noticeable over the 2006-18 period. Since 2006, Italy implemented various, temporary R&D credits.

Figure 6. Direct funding of business R&D and tax incentives for R&D, Italy, 2000-18

As a percentage of GDP, 2015 prices (right-hand scale)


- The cost of government tax relief for R&D rose (in 2015 prices) from EUR 18 million in 2000 to EUR 343 million in 2007 and dropped in 2010 with the expiry of the volume-based R&D tax credit (Law 296/2006). Following the increasing uptake of the incremental R&D tax credit, introduced as part of a reform of the R&D tax incentive system in 2015 (Legge di Stabilità 2015), the cost of this support increased sharply from EUR 824 million in 2015 to EUR 3.178 billion in 2018.
- As a percentage of GDP, R&D tax support represented 0.001% of GDP in 2000 and 0.19% in 2018.
- Direct funding of BERD oscillated between 0.03% and 0.07% of GDP during this period, accounting for 0.04% of GDP in 2018.
- The share of R&D tax incentives in total government support increased from 2% in 2000 to 33% in 2007 and reached 81% in 2018.