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ABRIDGED  
QUARTERLY  
REPORT

*public finance  
and redistribution*

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### ***CREDITS***

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*The Report is based on the information and data available up to October 23, 2002.*

## **SUMMARY AND INTRODUCTION**

*The present ISAE Quarterly Report on "Public Finance and Redistribution" is devoted - besides the usual analyses of the economic cycle, of the Budget Law and of the distributive impact of the tax policies adopted on firms and households - to three structural problems of the Italian economy. The first subject concerns education and returns to human capital. Education may be an excellent instrument, both in terms of equity - for its impact on social mobility -, and in terms of efficiency - for its effects on professional training and, therefore, on labour productivity and economic growth. Also the second issue analysed in the Report - the one concerning migrant workers -, has fundamental implications both on the social structure and the development of countries (both home and hosting). The present Report analyses workers' flows from the viewpoint of the country of destination: in particular, it focuses on the factors affecting Italian firms' decisions to hire extra-Community workers. Finally, the Report provides a long-term analysis of income inequality - together with an historical overview of the Italian taxation system - as revealed by the Anagrafe Tributaria database.*

*As regards the Italian current economic cycle, the ISAE forecasts are based on a much less buoyant global economy than expected at the beginning of Summer. The slowdown of the American economy and the missing European recovery are mainly due to events which occurred after the terrorist attack to the USA: in particular, the Stock Exchange fall caused by the financial scandals and, more recently, by the tensions raised by the possibility of a war in Iraq. There are also those who feel that the hypothesis of a war is the paradoxical - and indeed perverse - Keynesian solution, given the huge increase in public expenditures it implies, for the American economy, provided the war does not last too long.*

*The Institute for Economic Studies and Analyses feels that the economic consequences of these events determine a postponement of the recovery to next year, when the OECD economies' growth rate equals 2.3% (as against 1.4% in 2002). There are, however, non-negligible risk factors due, in particular, to the oil price, to the political-financial instability of Latin-American countries and to the confidence of Western consumers and firms.*

*The climate of rising uncertainty has also hit the Italian economy, whose growth rate - according to the ISAE estimates - equals 0.5% in 2002 and 1.8% in 2003. Thus, after the interval of 2001, Italy will have a growth rate smaller than the European one by 0.3% in 2002 and 0.2% in 2003. The profound crisis of the Italian automobile sector alone is estimated to subtract 0.11 percentage points to the GDP dynamics. Next year's growth would be mainly prompted by domestic demand, both in its investment and consumption components. Investments should already accelerate in the late-2002, as the second Tremonti Law (known as Tremonti-bis) is getting closer to expiration (by December 2002). Indeed, ISAE estimates that the 2002 tax relief brought in by the Tremonti-bis leads on average to a 0.5-0.6 growth increase in total investments and to a 0.1 rise in GDP growth rate. With regard to consumption, in 2003 households' expenditures will be prompted by the tax relieves, favouring in particular medium/low-income taxpayers, by higher wages and particularly by the employment rise (+480,000 "heads" in the two years 2002-2003), as well as by the inflation deceleration (2.0% in 2003 as against 2.5% in 2005), especially if this slowdown is accompanied by a fall in the households' perception of a higher inflation than the real one. The gap between the Italian inflation rate and the euro area, measured by the European Commission harmonised index, equals about 0.4 both in 2002 and in 2003. The positive employment dynamics - which is somehow an exception in Europe -, through slowing down compared to the past, goes alongside with an unemployment rate fall (8.8% in 2003) due to a strong elasticity to GDP, by historical standards, owing to the margins of flexibility introduced in the Italian labour market by the so-called 1997 "Treu Package".*

*From a macroeconomic point of view, the public accounts analysis leads ISAE to estimate a ratio between the General Government net borrowing and GDP in 2002 equal to that of 2001, namely 2.2% (0.1 above the official estimates). In our forecasts, that figure falls down in 2003 to 1.8%. The difference with the Government target of 1.5%, indicated in the Forecasting and Planning Report, depends on the slower growth of the ISAE scenario (0.1% in 2002 and 0.5% in 2003) and on an estimated impact of the manoeuvre, contained in the Budget Law, amounting to 19 (rather than 20) billions of euros. Conversely, smaller interest payments on the debt, than those assumed in the*

*Government hypotheses, affect positively the ISAE forecasts. Given the negative cycle, the General Government structural deficit falls short of the nominal deficit and equals, according to ISAE, 1.5% of the GDP in 2002 and 1% in 2003. This means that the commitment taken up by the Italian Government in the Eurogroup summit of October 7-8, 2002 (i.e. a structural adjustment each year by at least 0.5% of GDP starting from 2003) will be honoured. According to the ISAE figures, the debt/GDP ratio shows a negligible reduction in 2002, but in 2003 it falls down to 107.8% of GDP (from 109.8 in 2001), provided considerable privatisation take place. A rise in the debt-to-GDP ratio in 2002 would only take place if the numerator increased by about 40 billions of euros in absolute value.*

*Turning to the long-term sustainability, ISAE uses a generational accounting model to estimate the inter-temporal imbalance of the present public accounts and the interventions necessary to annul it. To this end, ISAE adopts the new ISTAT demographic forecasts, which envisage - unlike previous ISTAT scenarios - a more intense population ageing process owing to longer life expectations and lower fertility rates. A worsening of the sustainability indicators emerges: in particular, to absorb the inter-temporal imbalance of the General Government Consolidated Accounts for 2001, taxes should be immediately raised for the present and for all future generations by 5.9% (compared to 4.3% estimated with the old demographic trends) or - alternatively - expenses should be curbed by 6% (as against the past figure of 4.45%). In 2002-2003, taking account of the ISAE forecasts on the public finances, the need emerges to introduce a further, slight tax rise (0.6 percentage points) aimed at restoring sustainability conditions (or an equivalent expenses cut), linked to the composition of public accounts in the two years considered.*

*Turning to the analysis of the distributive effects of the tax interventions introduced by the Government, the present Report examines the main fiscal changes regarding both firms and households.*

*The personal income taxation (IRPEF) reform starts with the draft Budget Law for 2003, which introduces the first step of the announced tax relief. As set in the so-called "Patto per l'Italia" (Pact for Italy), this action hinges on medium/low incomes. Indeed, the two highest marginal tax rates remain unchanged, while the second and third tax*

*rates decrease and tax exemptions are introduced which, apart from offsetting a rise in the lowest tax rate, significantly raise the level of tax exemption. All in all, the composite effects of new deductions and decreases in tax allowances are different between employees and self-employed (besides pensions). This is a traditional approach in Italy, depending on the assumption that tax evasion is high among the self-employed, particularly when the fiscal manoeuvre on households is the outcome of an agreement with the trade unions. That approach - though statistically correct - mines the principle that all citizens are equal in front of the law and eventually penalises honest taxpayers belonging to "risky" categories. It is a sort of recognition that the Fiscal Bureau cannot really control taxpayers. More specifically, the new tax exemptions introduced by the reform widens, for many classes of income, the gap between the fiscal treatment of employees and that of the self-employed. However, the relative position of self-employed improves for very low income classes, as in the past they were subject to the tax payment, while now they are exempted (while employees already were exempted). Thus, also the (limited) benefit for those who are not entitled to tax exemption because they belong to high income brackets is smaller for employees, who lose their past tax deductions. Indeed, an ad hoc safeguard clause provides that taxpayers who are eventually penalised by the reform may resort to the past provisions. Hence, the Government IRPEF manoeuvre is Pareto-improving, because it guarantees that nobody is damaged by the reform and some - namely millions of people - draw benefits.*

*The results of the ISAE micro-simulations on a (Bank of Italy) sample of 7,000 universe-representing households confirm the forecasts: the reform for 2003 raises tax progressiveness and favours employees as against self-employed. Moreover, given the way in which the larger progressiveness is introduced, the new IRPEF provisions reduce relative poverty. The concentration of benefits in medium/low income brackets enables many households who used to be just below the poverty line to go beyond it. Thus, 170,000 households cross the line, which is set at two thirds of the average per capita Italian income (64% for a single-person household; for households with more than one component, this level is computed using an appropriate equivalence scale), if one refers to the distribution existing before the enforcement of the measure. The advantages being concentrated on*

*medium/low incomes means that, given the higher consumer propensity of the winner households, the provision becomes an useful instrument to prompt aggregate demand.*

*Indeed, the intensity of relative poverty increases, as the percentage of poor households decreases, thanks to an intervention favouring those who are relatively better. However, absolute poverty - referring to households below the subsistence line - does not significantly change. The present IRPEF reform (similarly to the measures introduced by the latest Governments) does not affect the income of half of the first-quintile households, because they are exempted. To improve the social-economic conditions of the most disadvantaged categories, one cannot act through direct taxation (unless a negative tax is introduced, as a proxy of the minimum guaranteed income). To this end, it is worth recalling that the "Patto per l'Italia" states that a centralised action in this direction is unfeasible and delegates Administrative Regions to draw up "regional programmes". However, there are doubts whether Administrative Regions have the means and the experience to tackle such delicate and complex task, when subsidy granting are means tested.*

*Turning to corporate taxation, the provisions adopted by the Government through its September 2002 Decree (Decree n. 209/02) and those introduced in the draft Budget Law seem to respond to the opposing needs to increase tax revenues after the unfavourable trend during the first eight months of 2002, on one side, and honour the commitment to grant the tax relieves promised in the "Patto per l'Italia", on the other side. The ISAE analysis, based on micro-simulations carried out on a representative sample of 15,000 firms, gives rise to a few considerations. To begin with, the investment incentive contained in the second Tremonti Law guarantees firms a higher tax relief than the one provided by the Dual Income Tax (DIT), which was meant to incentive risk capital rather than debt. If the two provisions are assessed separately, the incidence of the tax relief is almost non-correlated to the firm's size. However, as the firm's dimension increases, the percentage of firms drawing benefits from the enforcement of both measures - from the DIT in particular - grows, because it is easier for large firms to reach the performances (in terms of own capital/investors' capital ratio or of investment growth) entitling them to benefit from the tax relieves. If one considers that, in*

*2002, the DIT and the Tremonti-bis are both enforced and substantially cannot be cumulated, one observes that more than half of firms draws benefits from neither of them, while most of the luckiest firms resort to the second Tremonti Law- particularly after the DIT reduction introduced by the September Decree (32%) - and the convenience (thus the preference) for the Tremonti-bis is stronger the larger is the firm.*

*The IRAP (Regional Tax on Productive Activities) reduction guarantees a larger tax relief to small firms compared to large ones. With reference to the impact in terms of tax revenues of both Decree n. 209/02 and of the draft Budget Law, the ISAE macro-economic evaluations on the provisions which may be quantified do not differ from those included in Technical Reports on the measures.*

*As mentioned before, one of the structural subjects dealt with in the present ISAE Quarterly Report is education and returns to human capital. A European-level comparative analysis highlights the particularly backward and hardly dynamic situation of Italy in the education area. Data on high school diplomas, and particularly on tertiary education show that the number of people holding a secondary or tertiary school diploma are below the European average. On the top of it, while all the other Mediterranean countries register a positive evolution in their inter-generational structure - i.e. younger generations show higher education levels than old ones -, in Italy the rising of education standards in new cohorts is slow. According to OECD data, Italy has not only a lower education level in terms of volume, but also in terms of quality, namely in lower ability in reading, mathematical and scientific literacy. The inadequacy in the secondary and tertiary educational supply seems even more worrying when evaluated alongside the reduced Italian fertility rate. One may wonder on the social, economic and cultural reasons determining the behaviour of a population, with few children “not studying enough”, even because the consequences in terms of lack and low qualification of the future labour force are worrying. Apart from social and cultural factors linked to historical and anthropological features - going beyond the target of the present Report -, it is worth investigating the economic reasons determining the Italians' educational choices. In particular, it is useful to evaluate whether the returns to education - i.e. the higher wages one may obtain by lengthening or improving*

*investment in education - are such that the small attractiveness of the Italian school and university systems is justified. According to the ISAE estimates, instead, those returns are positive and increasing as the education level grows and particularly high, as indeed happens in all the other European countries with lower average education. Furthermore, those wage benefits must be cumulated with other non pecuniary benefits linked to the quality of life, for instance the pleasure of having a higher cultural level, and a better health situation too. The reasons for Italy's lower-than-average education level must be found elsewhere, for instance in some direct costs deriving from education system shortcomings (such as the length of studies to reach degrees and the high drop-out rate) or in some institutional characteristics (particularly the short compulsory education length which, up to 1999, was limited to 14 years of age, which is an all-time minimum in Europe) or in the limited differentiation of tertiary education programmes (short-term university courses were introduced only ten years ago in Italy).*

*Other interventions on the education system made in European countries may be classified within a larger process of decentralisation in favour of local Authorities and schools. In Italy there is relatively high autonomy in educational and organizational matters, but limited from a financial viewpoint. There is a wide economic policy debate about the benefits of introducing competition in the "quasi-market" of education. These benefits cannot be assessed in terms of prices - given the existing public regulation - but in terms of quality of the results. There is however a risk for efficiency and equity: by the efficiency perspective competition might bring about a downward trend (through the supply of easier and shorter courses to obtain certificates) as the value of diploma is not set by the market but by the official State recognition rather than an upward trend (through a better training). As far as equity is concerned, it has to be considered the heterogeneity of supply provided by schools in different areas (the opportunity of choice by households is however limited because of timing and costs of transportation).*

*Professional training play a fundamental role also for European policies for migrant workers. The analysis shows that countries with a long tradition of immigration are enforcing mechanisms regulating workers' entry, through a selection mechanism based on qualitative*

*criteria. Those choices are consistent with the need of improving productivity, which is particularly relevant for Europe, as already mentioned. An approach to immigration which is more oriented towards the quality of the in-coming human resources might be introduced in Italy as well. This would bring about advantages in terms of growth for our economic system, which is even more important in a country characterised by negative population growth and by a marked ageing, with a consequent sharp fall in the share of active workers and a rise in the economic dependency rate (ratio between non active and active population). Within a wider framework, it would be worth analysing the problem from the viewpoint of home countries, where a possible effectiveness and equity problem emerges, since the emigration of already-trained workers risks to cause a human resource depletion. This is evidently a problem going much beyond the aim of the Report, which must be also tackled taking into account the impact of emigrant workers' remittances and the possibility to come back to their home country with a human capital higher than before. Turning back to the experience of other European countries, those with a longer reception tradition tend to introduce measures to migrant workers' social integration - in terms, for instance, of housing and the availability of public services -. Conversely, the law adopted in Italy (Law n. 189/02, known as Bossi-Fini Immigration Law) entrusts employers with part of the integration costs, see for instance the guarantee which employers must provide in regard to immigrant workers' residence.*

*To this end, a recent ad hoc survey carried out by ISAE on a panel of 4,000 firms, containing some questions on the hiring of extra-Community workers, enables to list the reasons why firms hire migrant workers. The main factor is the lack of national labour force, followed by migrant workers' higher propensity to accept diversified working time and tasks. The ISAE estimates confirm that the probability to hire foreign workers is higher the better is their social integration and the smaller is the local unemployment rate. That result underlines the complementary - rather than substitutive - nature of extra-Community workers with respect to the Italian workers. On the employment side, immigrants wouldn't represent a "risk factor" in our country, especially if they are well integrated in the host social environment, which obviously reduces any problem related to public order or safety.*

*From that viewpoint, the new legal provisions on migrant workers, while aiming at preventing a possible substitution effect between migrant and national workers, are consistent with the natural firms' hiring decisions but cause additional costs. It is however worth underlining that one third of replies given by Italian firms within the ISAE Survey are in favour of the Bossi-Fini Immigration Law, namely 38% feel the new provisions are suitable to simplify the procedures of migrant workers' hiring, even though the percentage of respondents giving no reply is almost as much (37%).*

*The analysis of income distribution in the long-term is based on outsourcing data, namely the households' tax records data (Analisi delle dichiarazioni dei redditi delle persone fisiche), processed and published by the Ministry of Finance; the database - so far almost unexplored - covers the two decades following the fiscal reform (from 1974 to 1995) and provides valuable information on the distribution of tax payers by income brackets; data on 1996 and 1997 are indeed lacking, while data on 1998 have not been published yet. The different variables have been analysed explicitly taking account of the changing methods of gathering and processing data followed between waves; moreover, the database does not allow to control for the impact of tax evasions, elusions and erosions. The contribution presented in this Report intends to be only a first step in a wider research project, where much can be found in terms of both a more extensive use of fiscal data and of a comparison with other data sources.*

*The ISAE analysis of the Gini coefficient and the quintiles of the distribution of Italian income from 1974 to 1995 enables us to "read" twenty years of Italian history. Different phases may be identified: the late-seventies, characterised by the trade unions' pressure for wage increases, with a single-point heavy indexation and the reduction of earnings' dispersion; the eighties, with the so-called "marcia dei 40,000" (40,000-people march), the increase in wages and the gradual elimination of the indexation mechanism; the referendum on what became known as the "Saint Valentine" Decree, with the contemporary rise in wage gaps; finally, the Agreement on Labour Cost on July 1993, and the consequent wage moderation and increased inequality.*

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Turning to a detailed description of single Chapters, the first Chapter shows that, after the recovery registered in the late-2001 and early-2002, the world economy has been experiencing a slowdown since last Spring. The brake was caused by the reduction in the American growth and by the missing recovery in Europe. The new cyclical difficulties are mainly due to Stock Exchange shocks caused by the financial scandals in the United States, which have affected operators' spending decisions. General uncertainty and nervousness were further amplified by the fears connected to the tensions in the Middle East and by the contemporary oil price rise. All that led to a significant reduction in global development - particularly in the industrial area - but not to its zeroing.

In the ISAE scenario, the international recovery is postponed to 2003. The GDP rise in the most advanced economies - equalling 1.4% in 2002 - reaches 2.3% in 2003; world trade dynamics accelerates from 2% to 7%. The 2003 cyclical improvement mirrors the gradual overcoming of the uncertainty which has been obstructing growth in 2002, as well as the strengthening of the American economy and the consolidation of the European growth. In the United States, the GDP growth equals 2.5% (2.1% in 2002), while in the euro area, it is expected to reach 2% (0.8% in 2002). A more sustained development should characterise emerging countries, particularly in the far East.

Also the Italian cycle is rather uncertain. In February 2002, the deterioration which had been characterising the Italian industrial production throughout 2001 came to a halt. However, the following recovery was very modest. The latest indications show that the industrial sectors still have a weak and very irregularly diffused dynamics: according to the August data, only slightly more than 50% of them follow a positive trend.

Considering these trends, ISAE foresees a rise in the Italian GDP by 0.5% in 2002, that is 0.3% lower than the corresponding euro area figure. Furthermore, considering the direct and indirect effects on all the economy, the crisis of the Italian automobile sector is assumed to subtract 0.11 percentage points to this year growth.

In 2003, the Italian growth equals 1.8%. The domestic scenario improvement and the domestic demand strengthening both influence acceleration. In particular, consumers should draw benefits from the disposable income rise stemming from the tax reliefs granted by

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Government to medium/low incomes and investments might recover after last year's contraction thanks to the general improvement of economic prospects.

ISAE FORECAST ON THE ITALIAN ECONOMY: GENERAL SUMMARY  
(percentage changes, unless specified)

	2001	2002*	2003*
Gross Domestic Product	1.8	0.5	1.8
Imports of goods and services	0.2	-0.2	5.3
Exports of goods and services	0.8	-0.4	4.9
Resident households' expenditure for consumption	1.1	0.0	1.8
Expenditure of General Government and ISSL (1)	2.3	1.7	0.8
Gross fixed investments	2.4	-1.7	3.4
Contribution to GDP growth attributable to:			
- domestic demand (net of stock change)	1.6	0.0	1.9
- stock changes and valuable objects	0.0	0.6	-0.1
- net exports	0.2	-0.1	0.0
Foreign trade balance (fob-fob) (as a percentage of GDP)	1.9	2.1	2.1
Current and capital account balance (as a percentage of GDP)	0.1	0.1	-0.1
Dollar/Euro exchange rate (level)	0.896	0.941	0.990
Consumer prices	2.7	2.5	2.0
Producer prices	1.9	-0.1	1.2
Propensity to consume (percentage level)	87.5	86.4	86.4
<i>Per capita</i> gross earnings in the economy	3.0	2.9	2.9
Total employment (2)	1.6	1.0	0.9
Unemployment rate	9.5	9.1	8.8
General Government net borrowing (as a percentage of GDP)	-2.2	-2.2	-1.8
General Government primary surplus (as a percentage of GDP)	4.1	3.7	3.8
Fiscal pressure of General Government	42.4	42.2	42.2
General Government debt (as a percentage of GDP)	109.8	109.7	107.8
3-month Treasury bills yield (3)	4.1	3.1	3.1
p.m. Nominal GDP (millions of euros)	1,216,695	1,252,771	1,304,530

Source: ISTAT.

(\*) ISAE forecasts.

(1) Non-profit institutions serving households.

(2) In standard labour units.

(3) Gross average annual rate.

The positive labour market trend should go on, with an

unemployment rate which - according to ISAE - reaches 8.8% in 2003 (from the average figure of 9.1 in 2002) and with an employment rise equalling about 480,000 "heads" in the two-year period 2002-2003. With regard to prices, inflation equals 2% in 2003, decreasing by 0.5% compared to 2002.

The risks weighting on the Italian scenario are mostly downward biased. At international level, an oil shock caused by the conflict in Iraq and by its enlargement to other Middle-East areas would have a negative impact on the growth of oil importing countries, particularly if it went alongside with a generalised deterioration of confidence among operators. At national level, a recovery is crucial in investors' opinions and, particularly in households' opinions. Indeed, while in a favourable climate income support through tax relieves usually brings about a consumption rise, in the uncertainty situations which have been emerging over the past few years, there is the risk that the higher disposable income is conveyed in saving rather than in expenditure, which would subtract to recovery one of its major thrusts.

With reference to public finance, a net borrowing equalling 2.2% of GDP (as in 2001) is expected for 2002. For 2003, the deficit estimated by ISAE - including the effects of the Budget Law - equals 1.8% of GDP. The improvement of public finances should also be confirmed by the structural balance, that is the figures adjusted for the effects of the economic cycle. In the ISAE evaluation, the structural deficit equals 1.5% of GDP in 2002 and falls down to 1% in 2003, with a 0.5% contraction. The objectives of the Stability and Growth Pact - that is medium-term balance of the public accounts, a maximum net borrowing not exceeding 3% of GDP - as well as the further commitment taken by Italy at the Eurogroup Meeting of October 7-8, 2002 - an annual structural deficit adjustment equalling at least 0.5% of GDP starting from 2003 - would be honoured.

The second Chapter focuses on the IRPEF reform impact, which - as stated by the fiscal enabling act envisaged by the Government and presently on debate in Parliament - should be enforced step by step through the Budget Laws of the years 2003 and followings. The Budget Law for next year contains, as a first step, interventions aiming at reducing the marginal tax rates for the second, third and (partly) the fourth income bracket (up to 32,600 euros) and increasing the tax rate for the first bracket. The tax rate on incomes up to 15,000 euros is

equal to 23%. The rise of the lowest tax rate is offset by significant tax exemptions, different by income source and negatively correlated with the income level. Hence, the exemption threshold is raised up to 4,500 euros for the self-employed, to 7,000 euros for the pensioners, and to 7,500 euros for the employees; for the other incomes, the threshold is set to 3,000 euros. Tax allowances are reduced as new tax exemptions are introduced. Tax exemptions and allowances are no longer computed on the income deriving from professional activity but on the overall income. Finally, it is worth mentioning that a safeguard clause enables whoever would be penalised by the new rules to resort to the old ones.

To this end, ISAE carries out some micro-simulations with the ITAXMOD model utilising data from the Bank of Italy's 1998 Survey of Household Income and Wealth, updated to 2003. Firstly, the impact of the IRPEF provisions (on an accrual basis) is measured as against a 2002 scenario with unchanged policies: it includes the increased tax allowances introduced by the Budget Law for 2002 and the suspension of the tax rate reduction referred to the second, fourth and fifth bracket provided by the previous Government.

IMPACT OF THE IRPEF PROVISIONS FOR 2003 BY INCOME QUINTILES  
COMPARED TO A SCENARIO WITH UNCHANGED INCOME POLICY  
(percentage values)

	Quintiles of equivalent income (1)					Total	Number of households
	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>		
Unaffected households	51.0	13.0	3.3	2.4	0.9	14.1	2,912,000
Advantaged households	48.9	86.5	95.8	95.5	90.4	83.4	17,179,000
Disadvantaged households (except for the safeguard clause)	0.1	0.5	0.9	2.2	8.7	2.5	507,000
Average earnings in euros (only advantaged households)	301	335	386	425	331	363	
Average earnings as a percentage of income (2)	2.0	1.6	1.4	1.2	0.5	1.1	

Source: ISAE elaborations on Bank of Italy (2000)

(1) Households' disposable incomes are made equivalent by subdividing the overall income for an equivalence parameter. The scale adopted is the one defined by ISEE. The 1<sup>st</sup> quintile is defined as the 20% of households with the smallest equivalent income; the 5<sup>th</sup> quintile includes 20% of households with the largest equivalent income.

(2) Average households' disposable income of the beneficiaries of the 5<sup>th</sup> quintile only.

The overall tax relief ensured by the first stage of IRPEF provisions - i.e. the households' benefit, or the tax revenue loss - is estimated by ISAE as equal to 6.2 billions of euros on an accrual basis, including the effects of the safeguard clause, as against the 5.5 billions

indicated in the "*Patto per l'Italia*" (but, according to the Technical Report, the provisions amount to 3.7 billions in cash for 2003, net of the budget allocations at the present rules for the tax relief provided by the previous Government and taking account of the regional tax rise, which is not considered in the ISAE computation).

More than 80% of households would benefit and only 2.5% (which rises to 9% in the richest quintile) would risk a loss, which can however be avoided through the safeguard clause. The 14% of households - more than 50% of first-quintile households - would be unaffected by the reform, particularly in the lowest income quintiles: these families are not favoured by the tax relief, being already exempted due to their low level of income.

The average income of advantaged households equals 360 euros. Compared to the households' equivalent average income, it falls down from 2% in the first quintile to 0.5% in the fifth, which indicates a (somehow surprising) rise in personal income tax progressiveness, which depends on the fact that, firstly, the tax rate reduction does not concern the higher tax rates and, secondly, the new exemptions dramatically decrease as the taxable income rises. It is also worth underlining that the other side of the coin of the higher progressiveness is a significant contraction of relative poverty. That reduction is equal to 0.8% when the relative poverty threshold (conventionally defined for a two-person household as the income level corresponding to the average *per capita* income) is determined in a context of unchanged policy. This means that 170,000 households come out from a situation of exclusion, that is more than 450,000 people concentrated in the Centre and in the South. Should that threshold be computed again on the basis of the distributive Government's intervention, taking account of the *per capita* income growth due to the IRPEF provisions, there would be a relative poverty reduction by only 0.4% and this would affect 75,000 households, that is 180,000 people. In both cases, the households leaving poverty would have relatively higher incomes, close to the poverty line. Therefore, the distance from the poverty threshold would be farther for those who remain below that line, with a consequent rise in the poverty gap.

Absolute poverty would register no major variations and it would be reduced by 0.1%, thus affecting 10,000 households, because the excluded households are not those generally benefited by the tax relief,

as they are exempted. Admittedly, the interventions needed to affect the “hard core” of the social-economic hardships are not of fiscal nature.

The analysis by income source of the household's head points out other interesting results. The share of benefited households - equal to the 92% of employees - falls down to the 80% among the self-employed. Furthermore, the gain for employees is above 400 euros on average - which is higher than 1% of the households' equivalent disposable income - while the income of the self-employed rises slightly more than 300 euros, i.e. 0.6% of their income.

ISAE also compares the IRPEF provisions' effects with the situation which would have emerged in 2003 if the draft measure on the tax rates and tax allowances decided for 2003 by the previous Government had remained unchanged and the higher tax allowances envisaged in the Budget Law for 2002 had not been introduced. In that scenario - “at present legislation” - there would have been a tax rate reduction not focused on the lower incomes, while distributed among the second, fourth and fifth income bracket; besides, there would have been no new tax exemptions, but only modified tax allowances. Compared to that situation, the first step of IRPEF provisions should guarantee a gain for 77% of the Italian households. The potentially disadvantaged households - which indeed would not be disadvantaged because they would resort to the safeguard clause - would account for 10% of the total figure and would concentrate in the highest quintile (37%). The impact of the draft Budget Law for 2003 compared to the scenario "at present legislation" would be even more progressive and poverty reduction would be greater.

In the third Chapter, ISAE analyses the impact of the provisions on corporate taxation foreseen by Government. Those analyses are based on the MATIS micro-simulation model applied on a sample (representative of the universe consisting of the ISTAT intermediate firms' census for 1996) of 15,000 companies drawn from CERVED database operating in the manufacturing and service sectors.

In the past few months, many provisions concerning corporate taxation were adopted. Just to mention the most recent ones, it is worth recalling Decree n. 209/02, aimed at prompting tax revenues so as to offset the unfavourable trend of corporate taxation in 2002. It envisages the weakening in the Dual Income Tax (DIT), a mechanism

introduced in 1997 to stimulate the formation of firms' own capital. The September Decree reduces the percentage of taxable income subject to the DIT tax relief through the elimination of the 1.4 multiplier applied to the capital increases realized after the financial year under way on September 30, 1996, and through the reduction of the ordinary remuneration conventionally computed on the capital variation itself, brought to equal the legal interest rate, that is reduced from 6 to 3%. It also envisages provisions meant for firms holding equity of companies so as to hamper or limit the deducibility. Tax exemption is also reduced for the technical reserve rises of insurance companies.

Conversely, the draft Budget Law for 2003 implies a tax revenue reduction, as it is aimed at allowing the tax relief already promised with the *"Patto per l'Italia"*. In particular, it reduces the corporate income tax rate (IRPEG) to 34%, which is 1 percentage point lower than the existing law, including the cut already envisaged by Law n. 388/00 for 2003. It also reduces the IRAP burden through a rise in lump-sum deductions by taxable income bracket as well as through the introduction of a further deduction based on the number of employees, up to a maximum of 5 employees. According to the ISAE estimates, in terms of effects on the revenues, the DIT weakening guarantees larger revenues equalling slightly more than 400 millions of euros for 2002 and 900 millions for 2003 (as against about 600 and 1,100, according to the Technical Report, in the two years respectively, taking account of the revenues coming from partnerships). Conversely, the impact of the rules on the deducibility of capital losses are not computed, as the information necessary to calculate it are not available. According to the ISAE forecasts, the reduction of the corporate income tax rate reduces the 2003 revenues by about 900 millions of euros (1.3 billions according to the Technical Report, 30 millions of which deriving from non-commercial bodies), while the IRAP modifications cause a revenue reduction by only 50 millions of euros (the Technical Report estimates that the impact on partnerships and joint-stock/limited-liability companies and on non-commercial bodies equals 390 millions of euros). The average advantage by firm equal about 94 euros (117 euros according to the Technical Report), with a levy contraction by 0.27%, but it is smaller for large and medium-sized firms (50 euros) and larger for small firms (119 euros), which save also 2% of the tax.

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The taxable income reduction by number of employees reduces IRAP on labour cost.

DISTRIBUTIVE EFFECTS OF THE CORPORATE INCOME TAXATION CHANGES FISCAL  
YEAR 2003  
(percentage changes)

	Sample composition (%)	DIT withdrawal variation	IRPEG withdrawal variation	IRAP withdrawal variation
Total of firms	100.00	1.67	-2.77	-0.27
Geographical partition				
North-west	37.28	1.33	-2.79	-0.26
North-east	21.47	0.84	-2.84	-0.18
Centre	23.83	2.52	-2.71	-0.30
South	12.11	3.93	-2.64	-0.43
Islands	5.32	1.4	-2.78	-0.79
Firm size (number of employed)				
1-2	45.14	3.03	-2.6	-2.31
3-9	29.76	1.15	-2.79	-0.61
10-49	19.49	2.07	-2.74	-0.09
50-249	3.26	0.85	-2.82	-0.01
250-499	0.15	1.81	-2.83	-0.14
>500	2.22	1.91	-2.85	-0.00
Productive sector				
Manufacturing industry				
<i>Food products, drink &amp; tobacco</i>	1.89	3.42	-2.73	-0.16
<i>Textile &amp; clothing</i>	3.27	1.48	-2.95	-0.29
<i>Leather &amp; leather goods</i>	1.08	2.02	-2.75	-0.05
<i>Timber and wooden furniture</i>	6.9	1.08	-2.67	-0.18
<i>Paper and printing</i>	2.25	1.63	-2.78	-0.19
<i>Chemicals</i>	1.07	1.15	-2.81	-0.02
<i>Plastic &amp; rubber products</i>	1.33	2.79	-2.73	-0.08
<i>Non-metallic mineral products</i>	1.61	1.91	-2.77	-0.07
<i>Steel industry</i>	4.00	1.64	-2.72	-0.07
<i>Mechanical industry</i>	3.35	1.61	-2.82	-0.05
<i>Electrical equipment, appliances &amp; components</i>	2.53	1.09	-2.87	-0.07
<i>Transportation equipment</i>	0.73	2.01	-2.84	-0.11
<i>Others</i>	1.91	1.76	-2.62	-0.12
Electricity, gas and water supply	0.24	1.41	-2.77	-0.05
Construction	13.74	1.65	-2.93	-0.55
Trade	26.66	1.47	-2.8	-0.46
Hotels and restaurants	3.87	1.47	-2.84	-0.61
Transport, storage and communication	3.53	1.52	-2.79	-0.13
Financial intermediation	2.31	0.47	-2.83	0.10
Real estate services and other related services				
<i>Real estate services</i>	11.58	0.39	-2.82	-1.67
<i>Computer &amp; electronic products</i>	3.27	2.31	-2.74	-1.56
<i>Professional activities</i>	7.91	2.03	-2.73	-0.11
Public and social services				
<i>Waste disposal</i>	0.46	0.95	-2.74	-0.08

Source: ISAE elaborations on CERVED data.

To assess the distributive effects of the DIT weakening introduced

by Decree n. 209/02, one has to estimate to which extent firms benefit from tax relieves, also considering the fiscal incentives introduced by the *Tremonti-bis*. This provision is aimed at prompting investments by granting benefits proportional to the difference between the investments realized and those made in the previous five years. It cannot be cumulated to the DIT, except for a very limited amount (in particular, entrepreneurs who make use of the *Tremonti-bis* can benefit from the smaller tax rate foreseen by the DIT only if their ordinary remuneration share does not exceed 10% of their taxable income net of the *Tremonti-bis*).

To this end, ISAE evaluates the impact of the DIT and of the *Tremonti-bis* with reference to the law enforced in 2002. To reach this result, various steps are necessary. First off, the implications of each of the two provisions are examined under the theoretical assumption that the other measure were not introduced, looking at the effective average tax rate reduction compared to the ordinary one (36%) implied by the tax relieves. The DIT, as it had originally been introduced before the September 2002 Decree, reduces the fiscal burden by about 2.6 percentage points, while the second Tremonti Law by more than 4 points. By analysing the percentage of firms which can benefit from both provisions (as they increase their own capital - in the case of the DIT - or invest more than average in the last five years - in the case of the *Tremonti-bis*), one observes that in both situations the frequency grows as the firm size rises. While slightly more than half of firms may draw an equal benefit from each of the two provisions, in the case of large firms, the percentage of advantaged firms becomes 74% in the case of the DIT and 65% in the case of the second Tremonti Law. However, if one considers the co-existence of both provisions and the prohibition to cumulate them, the share of firms which find it convenient to opt for the DIT falls down to 17% (12% with the provisions introduced by the September Decree) and those preferring the *Tremonti-bis* rise up to 30% (32% with the Decree). In this new framework, the percentage of firms rises as the firm size grows only for the *Tremonti-bis*.

As the fourth Chapter shows, a comparative analysis of the average education level of all EU countries highlights considerable differences in the human capital endowment. Northern countries (in particular, the United Kingdom) and Central-European countries rank

on the top positions, while Mediterranean countries show a relative disadvantage. Italy is among this last group, followed by Portugal. The only positive element is the overcoming of the gender gap. By observing the inter-generational dynamics, one notes that countries with a relatively low average education level (particularly Southern Europe) reach higher education targets in the younger cohorts and with reference to the higher levels of education; therefore the path to improve educational level has been followed. Italy is an outlier, showing a particularly worrying signal, as the inter-generational dynamics seems limited and it is even negligible for tertiary education. Even the analysis of the convergence between educational attainments in the European countries shows that Italy is the only country associating a modest average education stock with a limited flow of new graduates. This unusual trend concerns Italy as a whole, with no differences between areas, which are indeed very homogeneous from this viewpoint. Except Italy, all other countries are indeed converging. The educational level of population highlights that the situation in Italy is significantly worse than in other countries, particularly in tertiary education degrees. It is worth observing that the distribution of the population among secondary and tertiary education is also influenced by different course lengths in the countries. In most cases, the tertiary programmes comprise non-university tertiary education, two kinds of undergraduate university courses (a short-term one and a long-term one) and a postgraduate specialisation.

Italy has a rigid post-secondary education supply, that consists only in the traditional long-term undergraduate programmes, which discourages people from entering university courses. Indeed, the creation of short-term undergraduate courses is recent and scarcely diffused, at least up to now. Similarly, the diffusion of non-university tertiary education is still limited. Hence the gap between countries in the share of educated population is smaller if one looks at upper secondary education diplomas, and much wider for tertiary education degrees. With reference to secondary education, it is worth mentioning that the compulsory school age in Italy was between 6 and 14 years of age up to 1999. Conversely, in Europe the compulsory school and training age goes up to 15-18 years in the various countries. From this viewpoint, the recent draft schooling system reform (the *Moratti Reform*) aims at increasing homogeneity between schooling systems in

Europe. Both the proposal to raise the compulsory training age to 18 years - which was also advocated by the previous school system reform (the *Berlinguer-De Mauro Reform*) - and the voluntary advance by one year of the pupils' access to the primary school go in this direction.

The analysis of the institutional organisation is completed by an exam of the process of territorial decentralisation of the schooling systems. The delegation of responsibilities to local Authorities prevails in the education systems of the United Kingdom and of Northern countries, while in Italy the responsibilities are divided between the State and local Authorities. In addition, countries with high educational and organisational autonomy show also high financial autonomy. Netherlands and United Kingdom has the maximum level of school autonomy (computed through a specific indicator); Italy ranks in the middle group, with a relatively high educational and organisational autonomy (after the 1997 reform) and a very low financial autonomy.

The extension of school autonomy is part of the reforms aimed at enhancing competition in the educational sector. As it is a strongly regulated sector, competition cannot be based on prices, but on quality. However, if the (legal) value of diplomas is set by the State and not by market, the risk emerges that the competition process follows a downward trend (through the supply of easier and shorter courses to obtain certificates) rather than an upward trend (through a higher education level). Also households' choices are difficult and limited by the timing and costs of transportation, which give rise to a problem of equity as well, because the introduction of competition mechanisms might further diversify the education supply. To conclude the comparative analysis, one may observe that Northern countries, together with Austria, France and Portugal, are characterised by a higher-than-average public expenditure level as a percentage of GDP, while Italy remains on the average figure.

The Chapter then investigates some of the reasons why people wish to improve their education levels. The investment in human capital increases individual earning capacity through a rise in labour productivity.

With regard to returns to education, ISAE has elaborated the Eurostat data from the ECHP Surveys. In low-education countries the returns are high and the other way round. Countries with a disadvantage in the average education level have also a relative

shortcoming, due to factors different from returns, in the high-qualification supply. Countries with modest average education level and high returns to education show also below-average education indicators. The indicator derived from the recent OECD Programme for International Student Assessment (PISA) ranks Mediterranean countries - and Italy - at the bottom of the list. It is however worth observing that the comparability of the tests drawn up in different languages and the robustness of that indicator have to be verified.

AVERAGE EDUCATION IN EUROPEAN COUNTRIES  
(population between 25 and 59 years of age - total)

Countries	2001	1996	1992
Belgium	1.91	1.86	1.75
Denmark	2.09	2.08	1.96
Germany	2.08	2.03	2.03
Greece	1.74	1.64	1.53
Spain	1.66	1.53	1.39
France	1.89	1.80	1.51
Ireland	1.86	1.75	1.62
Italy	1.57	1.48	1.43
Luxembourg	1.80	1.65	1.49
Netherlands	1.93	1.87	n.a.
Austria	1.94	1.81	n.a.
Portugal	1.31	1.36	1.33
Finland	2.10	1.93	n.a.
Sweden	2.10	2.04	n.a.
United Kingdom	2.11	n.a.	n.a.
EU	1.87	1.77	1.60
Norway	2.22	n.a.	n.a.

Source: ISAE elaboration on New Cronos (2002a) data.  
n.a. = not available.

The fifth Chapter provides an overall historical overview of the different provisions introduced in Italy on migrant workers, from the *Testo Unico di Pubblica Sicurezza* (Single Text of Public Security) of 1931 to the so-called Bossi-Fini Immigration Law, and the last provision to regularise illegal migrated workers. It is worth outlining the change of the approach to immigration from a public order problem to an effort in favour of the integration in the labour market and in the social context - a change which is also underlined by the division of tasks between the Ministry of Labour and the Ministry for Internal Affairs -. Thus, the Chapter points out that, after the positive net

immigration balance of the early-seventies, provisions were introduced to control immigration flows so as to respond to international commitments first (such as Convention n. 143 held in 1975 by the International Labour Organisation) and then to the growing labour market needs. In the meantime, the measures introduced focus on migrant workers' social integration. On one side, the right to equal treatment and opportunities of extra-Community workers legally resident in Italy were stated by introducing provisions on families' reunification and recognising their right to social security and health care coverage. On the other side, minimum means for residence in Italy and for eventual repatriation are required. However, Italian measures seem to lag behind migration flows, as shown by the wide range of fiscal amnesties introduced through the years. The Bossi-Fini Immigration Law closely links the presence of migrant workers in Italy to labour market needs: entry for job search is no longer allowed, quota restrictions are revised, the need to test the unavailability of national workers for vacancies is introduced again and possibilities of family reunification are somehow limited. With reference to the two provisions to legalise the positions of housekeepers and carers, on one side, and firms' employees, on the other side, ISAE estimates that the impact on the public accounts will amount to 190 millions of euros in 2002 and 380 millions in 2003. It will occur under the assumption of 300,000 legalizations and taking into account both the lump-sum payment for regularisation and the higher net contribution and tax revenues due to the coming out from black economy.

Turning to Europe, even though the Treaty of Amsterdam (1997) states that common migration policies fall within the competence of the European Institutions, at present the European-level regulation only concerns the rules on visas and on the circulation of extra-Community workers (Schengen Treaty). Policies on residence and integration of migrant workers remain heterogeneous, particularly between "young" and "old" destination countries (such as Germany, France, the United Kingdom and Sweden). Immigration laws of the old destination countries are more focused on social integration, particularly in guaranteeing housing, public services and language teaching to migrant workers and to their families and tend to regulate entries according to selection mechanisms based on skills. The Chapter then hinges on the results of a survey carried out by ISAE on a sample

of 4,000 manufacturing firms. About one third of Italian firms hire migrant workers and almost half of them are located in the North-east. The percentage falls in the North-west and in the Centre, though it remains above 30%, while in the South the phenomenon is marginal (less than 10% of the Southern sample). Migrant workers are more diffused in large and medium-sized firms, which are the only ones to hire highly-skilled non-natives (white collars and managers). The propensity to hire migrant workers estimated by ISAE is smaller both for small and high-technology firms. Besides, the propensity to hire migrant workers seem to be affected by their social integration degree (being a proxy of workers' reliability) and on the local unemployment rate. This is confirmed by the fact that the main declared reason to hire migrant workers is the lack of national labour force (59% of cases) and this holds true particularly for the North and the Centre. The second reason is due to migrant workers' higher willingness to accept diversified working time and tasks, which is particularly appreciated in the South and in the Islands.

REASONS FOR HIRING EXTRA-COMMUNITY WORKERS  
(percentage values)

Extra-Community workers	North-west	North-east	Centre	South	Islands	Total
Offset shortcoming of national workers	59.3	78.2	59.8	34.3	46.1	59.0
Are more willing to adapt to working time and task requirements	12.9	6.7	6.5	18.9	16.1	10.9
Are less influenced by trade unions	0.8	0.3	0.3	1.1	0.4	0.5
Accept lower wages	1.6	0.8	2.3	7.3	9.0	3.2
Accept irregular jobs	0.1	0.2	0.5	1.1	1.1	0.5
Accept roles below their competence	2.6	1.4	2.7	5.4	4.9	3.0
Other reasons	5.5	4.3	2.7	8.5	5.2	5.0
No reply	17.0	8.1	25.1	23.5	17.2	17.9
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

Source: ISAE Survey on Manufacturing and Extractive Firms, 2002.

The last part of the ISAE Survey investigates the modalities of migrant workers' hiring, also in relation to the recently changed rules on this matter. Almost 30% of firms reporting to hire migrant workers has hired them from abroad, but in 75% of cases the firm bases its decision on the direct or indirect knowledge of the worker, even though specialised agencies start to play a non-negligible role as intermediaries (11%). With regard to the appreciation of the new

Bossi-Fini Immigration Law, 37% of respondents does not answer, maybe because the Italian Parliament was still discussing the law when the survey was carried out, but 60% of answering respondents declares they trust that the new provisions facilitate the hiring of migrant workers and the positive assessments is higher in small firms and in the South.

The last Chapter focuses on the households' tax records data, aggregated and published by the Ministry of Finance; the analysis aims at investigating the long-term income dynamics in Italy over the period 1974-1995. The use of this statistical source presents some drawbacks which must be explicitly taken into account when interpreting the results. First, by definition tax evasion, elusion and erosion cannot be identified; secondly, information are markedly heterogeneous from one year to the other, due to different taxation rules and to the different computation criteria followed through time. However, also with these limitations in mind, it remains an extremely rich source of information, useful to integrate other statistical sources.

The first evidence provided by the households' tax records concerns the dynamics of the overall average income statements which - apart from some fluctuations mainly due to data heterogeneity - substantially mirror the cyclical phases of the Italian economy. With reference to the number of taxpayers, the share of employees reduced over time, while the relative weight of self-employed gradually increased; the weight of corporate incomes has been reducing since 1982, against the growing role of incomes coming from partnerships and capital.

The Gini coefficient, computed on both the overall income and the taxable net income - which approximates the disposable income - shows the decrease of inequality experienced in the seventies, the rise of the following decade and the further increase beginning from 1993. The indicator computed on the disposable income is significantly smaller than the other throughout the whole period, showing a lower degree of concentration in post-taxation income and therefore the considerable distributive impact of the progressive households' taxation.

OVERALL INCOME, CONCENTRATION INDEX (1)

Years	Overall income	Net income
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	Value	Absolute variation	Average	Value	Absolute variation	Average
1977	38.0			34.4		
1978	38.0			34.5		
1979	38.4			34.8		
1980	37.7	-1.1	37.6	33.5	-3.0	33.5
1981	36.8			32.8		
1982	36.9			31.4		
1983	37.3			32.2		
1984	38.3			32.8		
1985	38.3			32.4		
1986	39.0	6.3	39.9	33.4	7.1	35.0
1987	39.9			34.1		
1988	40.4			36.2		
1989	40.8			36.8		
1990	41.4			37.5		
1991	-			-		
1992	43.6			39.3		
1993	43.1			37.4		
1994	43.7	1.8	43.9	37.9	2.0	38.2
1995	44.9			39.4		

Source: ISAE elaboration on data of the Ministry of Finance.  
(1) Percentages.

Besides, the Gini coefficient is also presented with reference to the subgroup of dependent workers. It shows a reduction in earnings' dispersion - alongside with the rise in the average income up to the early-eighties, partly as a result of the trade unions' pressure towards the more egalitarian distribution observed during the seventies; the rising income differentials in the following period, after the "*marcia dei 40,000*" mentioned above, combined with the growth in earnings that took place in a period of firings in industry and changes in the sectoral composition of employment. Finally, the negative correlation characterizing the period between 1993 and 1995, with higher concentration and moderate gross earnings' dynamics.

As a further step, the analysis has been extended to the quintiles of the income distribution; more precisely, the income threshold values between quintiles (all expressed in real terms) are estimated. Unfortunately, the same computation cannot be performed on income net of taxation. The ratio between the threshold referring to the top 20% (the richest taxpayers) and the bottom 20% (the poorest) confirms the dynamics shown by the concentration ratio, in particular an increase in gap over the two decades. In order to analyse the highest incomes (in the absence of data on the top income bracket, which is open), a more thorough analysis of the last percentile and its evolution over time is required. The top tail distribution highlights the more-

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than-proportional growth of the highest incomes in the latest years of the range period, which becomes more and more evident when focusing on a progressively smaller share of taxpayers.