1 – Introduction and summary

In the last decade Italy has experienced a gradual process of fiscal decentralisation. The reforms implemented in past years changed the structure of the Italian system of public finance substantially.

Until the beginning of the '90s the local governments were responsible for important sectors of public expenditure (e.g. health) but they were financially dependent on grants from the central government.

The system suffered serious inefficiencies.

The reforms implemented in the '90s increase the autonomy of local governments on both the expenditure and the revenue side. The central government devolves to local governments a large share of its tax revenue and new local taxes are introduced. A new system of equalising grants is designed to support regions with small tax bases.

We provide an evaluation of the Italian experience by focusing on the following critical issues:

a) the consistency between the objective of enhancing efficiency through fiscal decentralisation and the objective of ensuring reasonable uniform standards for essential public services (e.g. health) in every local community;

b) the trade-off between interregional redistribution and the incentives of local governments to pursue active tax policies;

c) the effects of local governments fiscal autonomy on the North-South dualism.

In our paper we deal mainly with the regional level of government in relation to the central or national one. The case of municipal and provincial governments is touched on very quickly. The main reason is that presently in Italy fiscal federalism - a quite relevant and hotly debated issue – means mainly decentralisation at the regional level while solutions for the lower ones are supposed to be less relevant and certainly less debated.

2 – Central and Local Governments in Italy

The present situation is the outcome of a quite long process of both political and economic transformations that have marked Italy in the past 25 years or so. The roots of this process can be traced back to the pre-WWII regime.

It is therefore useful in order to understand why and how the different solutions and reforms have been adopted – in particular for an audience that has not lived the Italian events - to recall the main points of this rather bumpy process.

According to the Italian Basic Law or *Costituzione* – in force since January 1 1948 – Italy is a republic with strong elements of federalism. Five regions (out of 20) were given extensive powers from the very beginning by the way of special statutes (some of which were passed even before the *Costituzione*) and all the others had legislative powers over a number of problems – from local transports to urban planning, to agriculture, to health. The five regions account for just over 15 % of the total population.

This new level of government with rather large autonomy was a reaction to the previous quite rigid and centralist structure modelled on the French system.

The other, traditional levels are the Provinces (in number of 104: two of them – Trento and Bolzano/Bozen – with the powers given to the Special Statute Regions) and the Municipalities (about 8,100). More recently large towns have been divided into wards or boroughs with some responsibilities.

All these institutions are very different in size, population, income per person and even electoral systems.

While the Special Statute Regions were established immediately after the WWII (with one exception) only at the beginning of the seventies the ordinary regional governments came into existence and this part of the Italian Basic Law was at last implemented.

Almost at the same time – end of the '60s beginning of the '70s - economic policies changed deeply because of the labour and, more generally social, unrest that was typical of many European countries in those years and of the national and international macroeconomic scenario.

The Italian governments proposed and the Italian parliament passed many laws increasing social benefits to large sections of the population. According to the Italian Basic Law any additional public expenditure must be covered by some source of public revenue, in the annual budget. Very often the provisions in the first year of the reforms were rather limited, but the effects in the long run were much bigger.

This was one the reasons of public deficits during the '80s, which resulted in a rather large public debt: from about 60 % of GDP to over 100 %.

The first relevant fiscal reform in the first half of the '70s abolished almost all sources of local revenue and substituted a system of grants from the central government for them. This originated a sort of fiscal irresponsibility of all local governments: they could spend without taxing; bank credit and eventually special grants often covered deficits when they became too big.

3 – Reasons for a Reform

With the '90s the situation became untenable. The Maastricht Treaty signed in February 1992 set a goal – the single currency – and some convergence criteria to be met in order to be part of the new monetary system.

For a while in Italy there was uncertainty whether to be "in" – that is in the group of the first entrants – because almost everybody thought that it was impossible to meet the criteria. Eventually the decision was taken to make any effort in order to be part from the very beginning of the Economic and Monetary Union.

To many decision makers – both in the political and economic sectors – one very important argument behind this decision was the possibility of proposing and enacting unpopular reforms under the justification of the EMU: Europe was used as an external pressure in order to break political and social opposition to change.

Many were the causes of the public deficits and mounting public debt. Some of them were of a general, national nature and possible solutions did not involve any kind of decentralisation or federalism. Others on the contrary were linked to the characteristics of the Italian administrative and political set-up. We are specifically interested in these and will present them briefly.

3.1 – Local Government Financial Accountability

One of the factors causing public deficits was the quite peculiar situation of regional, and more generally local, governments: they were given many responsibilities by the mere activation of all the provisions listed in the Italian *Costituzione*. In order to fulfil these duties Italian regions did not have any relevant taxation power and relied on transfers from the central government; at the same time the budget constraints were very soft because almost every time their deficits were covered by additional resources granted by Rome, the central government.

In many cases there was a perverse incentive to spend more and more because transfers were determined on a historical basis: so the biggest spenders were also the biggest receivers. Almost no fiscal responsibility existed, regions could spend without any economic or political cost: they were not required to make their citizens pay for the services received.

The result was even worse because the implementation of the regional government reform coincided with the fiscal reform - which abolished almost all local revenue sources.

By the beginning of the '90s this anomaly became so evident that a vast majority was in favour of abolishing it and making regions more accountable to their citizens. Of course there were groups or local authorities that were very lukewarm about any change: after all it was quite convenient to provide services and protest against central government taxation. In addition some regions feared the inevitable reduction in resources, being rather poor. Moreover the prospect of fiscal competition between regions was rather new to everybody and costs seemed bigger than benefits.

Eventually the Italian Parliament had to pass legislation setting specific constraints on local and regional governments' deficits (the so-called "internal stability pact").

3.2 – Efficiency in the Local Public Sector

The Italian public sector expenditure is not (and was) out of line with most countries of the (now) European Union - contrary to a commonly held view. The real problems were on the one hand public deficits and on the other hand the inefficiencies of the bureaucracy and the low quality of the services provided.

The first problem dates back many decades and is due to the rather low wages and salaries paid to civil servants (at least compared to the private sector payments) and to the selection and training processes: the former was biased by political patronage and the second almost non existent.

In addition the main responsibility of a bureaucrat was supposed to be the interpretation of law and by-laws, very often quite complex and ambiguous, not the implementation of given policies.

With time the influence of the trade unions grew and it became almost impossible to discipline any bureaucrat even guilty of rather serious crimes: this was widely accepted by people and institutions involved because it made void the idea of personal responsibility.

The general public had very few chances of getting redress from inefficient - or even unfair – behaviour of a civil servant.

The quality of the services produced by the public sector was generally quite low. Here too there was little that could be done: competition by private producers was difficult or prohibited, even if people ingenuity was sometimes able to make the difference.

The situation was quite similar for the central and the local governments: the behaviour of the two did not differ in a significant way because the kind of controls and political pressure by citizens were almost the same. Of course there were a few "islands" of efficiency concentrated

mainly in northern areas of Italy because of the historical tradition of local autonomy and good government.

As some sort of compensation taxation in Italy was lighter than in other European countries and even more tariffs for public goods or services. Evasion too was quite relevant, in particular for some specific groups or taxes: income taxes for self-employed people or VAT in some productive sectors or with small and medium firms.

There was a balance, even if a perverse one: the services are bad but the price one pays is low. For example local (and rail) transports were slow and unreliable but tariffs were very low (trains in Italy were two thirds cheaper than in UK or Germany and one half than in France).

3.3 – Interregional Equalisation

Another problem that became acute during the '80s and the beginning of the '90s was the interregional redistribution of resource operated by the central government.

The most relevant and criticised feature was the huge transfer of resources from the North (and the Centre) to the South of Italy. When budget constraints were soft and growth rates not negligible it did not raise much opposition but with harder times (and a changing political situation – as we shall see in the next paragraph) dissatisfaction grew.

The interregional redistribution was partially justified by the much lower income per head in most Southern areas but the lack of positive effects – the gap did not narrow – was (rightly) interpreted as misuse of the funds due to inefficiency and corruption.

The problem was made more acute by the fact that other kinds of unequitable, or at least unexplainable, transfers happened: from ordinary statute regions to special statute ones, from large regions to small ones – even at similar income per head levels.

The biases could not be explained by the aim of providing every person an equal amount of (public) goods and services.

Other redistributive aspects are quite important – the intergenerational one and the one between social groups. The former operates mainly through state pension schemes and is now at the centre of the political debate. There is a widespread opinion that state pensions are too generous with old workers and recently retired people (in particular female ones) because the prevailing system was a redistributive one and the

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benefits were fixed in times when the ratio of retired to active workers was low. With the ageing of the population and longer life expectancy younger generations will have to bear an excessive burden.

The second aspect too is geared against younger generations or better against people asking for a job because labour laws and by-laws protect employed persons against unemployed ones.

These aspects are now quite hotly debated but were not so sensitive up to the beginning of the '90s.

3.4 – Changes in the Political Scene

At the same time the collapse of communist regimes in Soviet Union and other East European countries modified deeply the Italian political scene.

Since mid-'70s many laws were enacted and policies adopted with a large "bipartisan" support: opposition parties voted for (or abstained over) most bills after a quite intense bargaining process that led to some modifications of the original draft proposed by governments. The boundary between government political parties and opposition ones on the left became blurred; the result very often was compromise not reform, delay not action.

At the same time there was some sort of a veto for the (then so called) Communist Party to enter government. With the disappearance of the world bipolarisation between West and East the veto too lapsed.

Politics in Italy became more flexible meaning that there was for the first time after WWII a real possibility of an alternative in government.

A second important element appeared: the rapid growth of many regional parties in the North (the most important area from an economic point of view) among which one based mainly in Lombardy – *Lega Nord* o Northern Alliance - got the greatest support. The main reason for the success of these political parties was a growing dissatisfaction with the inefficiencies of the central government and more specifically with the low quality of the public services and goods provided coupled with the transfer of relevant amounts of resources from the northern regions to the southern ones.

In particular the latter reason played an important role in winning votes for these parties. The '90s saw a reversal of previous attitudes and preferences in European public opinions, from a marked concern for social issues and in particular a more equalitarian personal income distribution to rather individualistic if not selfish behaviours. In many European countries – Germany, Switzerland, among others – richer social groups and regions objected to equalising transfers by central governments.

In Italy this happened simultaneously with the decline of the two main political parties (the Christian Democratic and the Socialist ones) due to bribes and corruption charges, in a quite novel but effective activity by the judiciary in order to make politics cleaner.

The regional political parties became essential in forming local governments in the northern regions and fluctuated between federalism and separatism. They stressed the inefficiencies of the central government and the excessive (in their opinion) transfer of funds from the North to the South. Another hot point they made was the centralisation in rules and bylaws: everything was decided in Rome, in the same way for every part of Italy. The examples of Germany and Switzerland – with large autonomies given to any *land* and canton – were taken as possible solutions for Italy too.

The mere administrative and operational decentralisation was not any more enough.

No political party could neglect this appeal to federalism and decentralisation. The Northern regions make up about 40 % of the population – and votes – and much more of the GDP – and taxes.

The result was a rather deep change in the *Costituzione* giving regions (but not provinces and municipalities) much wider powers. The shift was essentially from a positive list to a negative list: while previously regions could legislate on a given number of problems now they can decide on everything that is not excluded and reserved to the central government.

4 – Decentralisation and Devolution in the Nineties

The reform implemented in the nineties has radically reshaped the finance of both Regions and Municipalities. Here we focus on Regions as they represent at present the main counterpart of the central government in the political debate on fiscal federalism.

4.1 – The Enlargement of the Fiscal Autonomy of Ordinary Statute Regions

At the beginning of the Nineties Ordinary Statute Regions (*OSR*) have basically no fiscal autonomy. Up to 98% of total revenue are transfers from the central government. Further, nearly all of these grants are conditioned to the financing of the National Health Service (*NHS*) (which represents nearly 80% of total regional expenditure) and of other minor expenditure programs.

During the decade there have been several attempts to increase the fiscal autonomy of *OSR*. We can single out two phases in the reform process. In the first phase, the central government introduces the essential

instruments for fiscal autonomy through the devolution of relevant taxes to the *OSR*.

In 1993, Regions receive the yield of the health pay-roll tax, levied on salaries and on self-employed incomes. As a consequence transfers drop to 54% of total revenue. In 1998, the health payroll tax and some minor regional taxes are abolished and replaced by a new tax, named Irap (Regional business tax), and by a regional surcharge (0.5%) on the personal income tax. Irap is a value-added tax implemented through the subtraction method and levied on basically all business, both in the production of goods and services and in the financial sector. The base rate is 4.25%. The tax operates under the origin principle of taxation: the yield accrues to the Region where the value added is produced. [1] The actual Irap yield has been far lower than government's estimates (29 billions against the expected 34 billions of Euro). This explains why own revenues as a share of total regional revenues drop from 50% in 1997 to 44% in 1998.

In practice, this first phase of reforms has a small, if any, effect on Regions' fiscal autonomy. As to the health payroll tax, Regions have no control upon either the base or the collection procedures. They just receive the tax yield from the central government Treasury accounts as a part of a conditional grant, equal to each Region's health need. Actually, Regions do have the power to change the tax rate, in a given range around the base rate, but regional politicians have no incentive to propose unpopular tax increases given that health financing is secured by government transfers.

This state of affairs is only partially affected by the introduction of Irap. In theory, Regions have wide powers upon collection and auditing but, in fact, regional administrations lack the technical skills to manage any of the procedures involved and passively rely on the central government. As a consequence, all the information from the tax returns is in the hands of the Treasury, and is released quite parsimoniously in order to curb the call for greater political autonomy that comes from the Northern Regions. As to the tax rates, the 1998 reform confirms the right of the Regions to increase or reduce them[2] but it does not remove the disincentives to fiscal effort. On the one hand, the entire revenue from the personal tax surcharge and 90% of the Irap yield are still conditional to health financing. On the other hand, any gap between Regions' own revenue and health expenditure is filled by grants from the central government.

The second phase of the reforms, completed in March 2000, aims at introducing the right incentives to encourage active tax policies. As previously remarked, it was widely acknowledged that regional politicians

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[1] The total value added of a firm is apportioned to Regions where the production plants are located on the basis of labour cost.

[2] The Irap tax rate can be increased or reduced by one percentage point, the regional surcharge on the personal income tax by 0.5 percentage points.

had no incentive to manage the taxes assigned to them for two reasons. First, they faced a soft budget constraint, as any deficit in the health sector was ex-post financed through State transfers. Second, almost all revenues were conditional to health financing.

Furthermore, the Regions claimed that the uncertainty surrounding the amount of transfers (recall that the transfers were discretionary determined by the central government, year by year, in the budget law) hindered any serious financial planning.

The 2000 reform tackles these issues by abolishing almost all existing grants and replacing them through the sharing of national VAT and the increase of the base rate of some other minor surcharges (personal income tax, excise on gasoline). The VAT sharing rate is fixed at 38,55% in order to leave unchanged the total amount of resources in regional budgets. The VAT is apportioned to Regions in proportion of the estimated consumption of their residents. Clearly, the distribution of the abolished grants is different from that of consumption. Therefore the substitution of the grants with the VAT sharing generates large fiscal imbalances in almost every Region. To correct these imbalances the reform draws a new system of equalisation transfers. In the first year (2001) the transfers simply redistribute regional resource in order to guarantee at each single Region the same resources it would have received from the old grants. After a long transition period, which will end in 2013, the new system of transfers will equalise resource across Regions according to a formula that takes into account fiscal capacity and health needs. In theory, the equalising transfers are horizontal: "rich" Regions give up some of their revenue to finance "poor" Regions.

Overall, the new system of regional finance should guarantee a hard budget constraint, as the central government does not finance anymore the Regions through discretionary transfers. Furthermore, in order to strengthen the incentives to autonomous tax effort, the reform abolished every constraint to the use of revenue: the additional yield generated by an autonomous tax increase can be spent freely to finance any regional expenditure programs.

Through the abolition of discretionary transfers, the new system of finance allows a normal financial planning as each Region can estimate future revenues, that depend on the dynamics of the tax bases and on the equalising formula.

4.2 – Equalising Transfers

As previously highlighted, the 2000 reform draws a long transition period from the present system of equalising transfers (which basically redistributes the regional VAT in order to meet historical expenditure in

each Region) to a new system where the transfers are determined according to a formula that takes into account the fiscal capacity, the health need and the economies of scale in the provision of public services. In particular, at the end of the transition period, the transfer to Region i, T_i, will be determined as the difference between the amount of VAT assigned according to an equalising formula ($EVAT$) and the VAT assigned to the Region on the basis of the estimated consumption of Region's residents ($CVAT$). Formally:

$$T_i = EVAT_i - CVAT_i \tag{1}$$

and

$$EVAT_i = n_i \left[\frac{RVAT}{\sum_i n_i} + \beta \sum_j \overline{\tau}_j \left(\overline{b}_j - b_{ij} \right) + \left(g_{hi} - \overline{g}_h \right) + \gamma \left(p_i - \overline{p} \right) \right] \tag{2}$$

where n_i is Region's i population, $RVAT$ is the regional share of national VAT, $\overline{\tau}_j$ is the base rate for regional tax j, b_{ij} is the base of regional tax j in Region i, $\overline{b}_j$ is the average base of tax j over all OSR, g_{hi} is the expenditure required to meet the health need of Region i, $\overline{g}$ is the average expenditure to meet the overall health need of the OSR, p_i is an estimate of the standard expenditure but for health in Region i and $\overline{p}$ is the average of the p_i among the OSR. All variables inside the square brackets are in per-capita terms. The parameters β and γ are equal to 0,9 and 0,7 respectively.

By substituting (2) into (1) we get:

$T_i =$

$$n_i \left[\underbrace{\left(\frac{RVAT}{\sum_i n_i} - \frac{CVAT_i}{n_i} \right) + \beta \sum_j \overline{\tau}_j \left(\overline{b}_j - b_{ij} \right)}_{\text{Fiscal capacity}} + \underbrace{\left(g_{hi} - \overline{g}_h \right)}_{\text{Health need}} + \gamma \underbrace{\left(p_i - \overline{p} \right)}_{\text{Economies of scale}} \right] \tag{3}$$

This formula highlights the three criteria that determine the size of the transfer received or paid by Region i.

The first two terms equalise fiscal capacity among Regions, the third redistributes resources according to the health need and the fourth corrects the distribution of resources in order to compensate smaller Regions that cannot fully exploit economies of scale in the provision of their services.

To evaluate the final impact of the equalisation formula on the distribution of revenues among Regions it is expedient to consider each of

the three corrections separately. Assume that Region i keeps its tax rates at base levels. The Region's own revenues are equal to

$$R_i = n_i \sum_j \bar{\tau}_j b_{ij} + CVAT_i.$$

If the region receives (or pays) a transfer, T^I_i, truncated to the first two terms in (3), total revenues are:

$$G_i^I = R_i + T^I_i =$$
$$n_i \left[\frac{RVAT}{\sum_i n_i} + \beta \sum_j \bar{\tau}_j \bar{b}_j + (1-\beta) \sum_j \bar{\tau}_j b_{ij} \right] \quad (4)$$

If β were equal to 1 each Region would have total per-capita regional revenue equal to the average per-capita yield of the VAT sharing and of regional taxes (e.g. Irap, regional surcharge on personal income tax) when levied at the base rates. In fact fiscal capacity is completely equalised only with respect to VAT, while the differences in all remaining regional revenue are equalised up to 90%, as β=0,9.

In order to describe the effect of the third component of (3) on regional total revenue it is convenient to rewrite equation (4) taking into account that the VAT sharing rate has been chosen in order to leave the total amount of resources that flows in regional budgets unchanged. Therefore, in the year when the reform is first implemented (2001), the following equality holds:

$$\frac{RVAT}{\sum_i n_i} + \sum_j \bar{\tau}_j \bar{b}_j = \bar{g} + \bar{p}. \quad (5)$$

In fact, as we will clarify in section 5.1, the reform is based on the implicit assumption that this condition will be nearly met also in subsequent years. We may therefore substitute (5) into (4) to get:

$$G_i^I = n_i \left[\bar{g} + \bar{p} + (1-\beta) \sum_j \bar{\tau}_j \left(b_{ij} - \bar{b}_j \right) \right]. \quad (6)$$

When we add the transfers generated by the corrections for health need, total revenue becomes:

$$G_i^2 = n_i \left[g_i + \overline{p} + (1-\beta) \sum_j \overline{\tau}_j \left(b_{ij} - \overline{b}_j \right) \right]. \tag{7}$$

Were $\beta=1$ any Region would receive, at base rates, revenue equal to its health need plus the average per-capita expenditure of all *OSR* in programs different from health.

Finally, by adding the fourth component, we get:

$$G_i = n_i \left[g_i + \gamma p_i + (1-\gamma)\overline{p} + (1-\beta) \sum_j \overline{\tau}_j \left(b_{ij} - \overline{b}_j \right) \right].$$

Were $\beta=\gamma=1$, each Region would receive, at base rates, the money needed to finance its health need and standard expenditure in other programs. In fact, being β and γ smaller than 1, some Regions, the ones with tax bases and population larger than average, would enjoy revenue in excess of the amount required to cover health need and standard expenditure, while others, the ones with tax bases and population smaller than average, could not finance health need and standard expenditure at base rates.

In order to illustrate the impact of the transfers on the distribution of Regions' revenue we simulated the implementation of the new transfer system based on formula (3) in the year 2001. The results are reported in tables 1 and 2.

Table 1 contains data on the interregional transfers. The values in per-capita terms show that the sign and the size of the transfers are mainly driven by the fiscal capacity component due to the large divergence in tax bases across Regions. All Northern Regions, with tax bases larger than average, must give up some of their revenue, while all Southern Regions receive a positive integration to their own resources. The situation of the Regions in the middle of the peninsula is somewhat mixed: roughly, large Regions (like Emilia R. and Lazio) are contributors while small ones (like Marche and Umbria) are beneficiaries. The transfers activated by the correction for health need are in general smaller and they flow in quite different directions. The Southern Regions are now mainly contributors as their health need is lower than average due to a younger population. The main beneficiaries appear to be the Central Regions and Liguria, which is the Region with the higher percentage of aged people in population. The last term in the equalisation formula benefits the small Regions (Liguria, Marche, Umbria, Molise, Basilicata) irrespective of their geographic location.

In absolute terms, the total amount of money transferred from "rich" to "poor" Regions amount to 6,326 millions of Euro (10% of *OSR* total revenue). The flows are extremely polarised: the largest Northern Region, Lombardia, pays out more than half of total contributions and the two

largest Regions of the South, Campania and Puglia, receive nearly 60% of all positive transfers.

Table 2 and figure 1, show the effects of the implementation of the equalisation formula on the distribution of resources among Regions. In particular columns 3 and 6 of table 2 reports the percentage deviations from mean of Regions' total revenue in per-capita terms, respectively in the actual situation and in the simulated case where the equalisation formula is implemented in 2001. It is apparent that the equalisation formula mainly benefits the small Regions that experience an increase of their revenue in per-capita terms. Surprisingly, the largest Southern Regions are worst off, despite they are the main recipient of transfers. This is the final result of the combined effect of partial equalisation of fiscal capacity (β<1), and relatively low health need (as their population is younger than the Italian average). Apart from the small Regions, the new transfer system brings about a strong equalisation of resources, as the divergences from the mean are smaller than 10%.

5 – Open Issues and Perspectives

5.1 – The Uniformity of Health Standards Across the Country

As previously remarked, one of the main innovations of the 2000 reform is the abolition of any constraint on the use of regional revenue. Even if the transfer received or paid by each Region is calculated with reference to its health need g_i, the Region may well spend less or more than g_i in health. However, the reform confirmed the principle of the uniformity of health services provision through the national territory. In fact, Regions are compelled to provide health services up to specified levels, both in terms of quality and quantity. If effective, the control of the performances may provide additional incentives to efficient management of health expenditure. The more efficient Regions, that are able to meet the required standards at a cost lower than g_i may employ the money they have saved to finance other expenditure programs according to the needs and preferences of their constituencies.

Nevertheless the principle of uniformity in health services may be at odds with the new system of regional finance. As explained in sections *4.1,* the 2000 reform has formally abolished all vertical transfers from the central budget to the *OSR*. As a consequence, the Regions should now face a hard budget constraint as their total revenue, at base rates, depend on the evolution of their tax bases only. In the year when the reform was first implemented (2001), the VAT sharing rate has been chosen according to (5) in order to guarantee sufficient resources to finance the sum of all Regions'

standardised needs. When (5) is met the system of transfers redistributes regional resources in order to meet the health need of every Region, as shown in section *4.2*.

Difficulties may arise in subsequent years if the bases of regional taxes grow less than health needs so that regional revenue are no more sufficient to meet the health standards required by the central government. How likely is such a scenario?

At first sight, the experience of the last two decades seems quite reassuring. In 1978, the year when the NHS was set up, public health expenditure as a percentage of GDP was equal to 5.3%. Twenty years later, in 1998, it was just marginally higher at 5.6% of GDP. However, in the same period total expenditure in health rose steadily from 5.9% to 8.4% of GDP. In particular we may distinguish three sub-periods. From 1980 to 1986, both total and public health expenditure remained stable around respectively 5.5% and 7% of GDP. Total health expenditure began to rise in 1987. Up to 1991, public health expenditure rose too, so that the share of public expenditure in total health expenditure stayed at about 76%. From 1992 onwards, public expenditure declined sharply and then stabilised at about 5.5% of GDP. As a consequence, the share of public expenditure in total health expenditure dropped to about 66%.

Overall, these figures may suggest that health needs are actually growing faster than tax bases, as shown by the dynamics of the ratio between total health expenditure and GDP. The stability of public health expenditure over GDP may reflect a reduction in the standards of the *NHS* due to the fiscal adjustment implemented since 1992 to meet the Maastricht criteria.

In order to evaluate the financial consequences of diverging growth rates of health needs and tax bases, we have estimated regional revenue and health needs in 2013.

Ideally, in order to provide sensible projections of health needs one should forecast the quality and quantity of the services offered by the NHS and estimate their cost. Both projections are arduous and open to criticism. In particular, health care costs are affected by population ageing and by a variety of technologic and economic factors such as incentives facing suppliers and patients, changes in price/costs of health care relative to other goods and services and increased underlying demand as incomes rise (Dang et al. 2001). There is no agreement on the relative importance of these factors in shaping the future dynamics of health costs. As to the impact of population ageing there are two opposite approaches (Dang et al. 2001, Roseveare et al. 1996). According to the first one, health needs are strictly linked to age through a "J" shaped relationship: they are high in the first months of life, then decline during youth and adulthood and rise again in old age. As a consequence, health needs should rise as the share of old people in

population grows. In contrast, the second view emphasises that a large share of total lifetime health care costs occurs in the last year or two of life. Hence, population ageing may not lead to an increase in health needs if life expectancy rises too.

We do not cope with all these issues directly. Rather, we provide projections under two extreme scenarios that represent, respectively, the most favourable situation (where health needs grow in line with GDP) and the most adverse one (where health needs grow faster than GDP due to population ageing). In particular, in the adverse scenario we follow the approach that relates health expenditure to the age structure of the population. Hence *per capita* health care expenditures by age group have been projected using the national GDP growth rate and then multiplied by the number of people in each age group. As to the yield of regional own resources, it has been estimated for each single Region on the basis of regional GDP growth rates. The results are reported in figure 1 and 2.

Figure 1 compares the simulated distribution of *per capita* revenue between the *OSR*'s in 2001 (table 2, column 6) with the distribution of projected per capita revenue in 2013 under the two alternative scenarios. The three distributions are quite similar. This confirms that the new system of interregional transfers can achieve a strong equalisation of resources under different dynamics of revenue and needs. The differences among Regions are wider in the adverse scenario. The reason is that Regions with a higher share of old people in population (e.g. Liguria) experience a greater increase in their health need and receive a higher share of resources through the equalisation formula. In contrast, Regions with a relatively young population (e.g. Campania) have lower health need and receive smaller grants.

However, as previously remarked, the problems may come not from the distribution of regional resources but from their absolute level. As shown in figure 2, in the adverse scenario total health needs are slightly higher than total resources at Regions' disposal. As a consequence many Regions cannot cover their health need with the resources they get at base rates. The worst situation is that of Campania with total resources equal to 94% of its health need.

In such a case how can the equality between resources and needs be restored? The central government might follow two different strategies: it can either increase the resources at Regions' disposal, by raising the VAT sharing rate, or reduce the uniform standards of the *NHS*. Both strategies have serious shortcomings.

The periodic revision of the VAT sharing rate may weaken the budget constraint and foster the opportunistic behaviour of regional politicians. As shown by the history of Italian intergovernmental relationship of the last twenty years, it may be quite hard to establish

whether an increase in health expenditure has been caused by the inefficient behaviour of regional politicians and managers, or by an increase in health needs due to demographic, technological or economic factors. As a consequence, regional politicians will have the incentive to increase health expenditure and to claim that this is due to the grow of health needs in order to receive more money through the increase of the VAT sharing.

The alternative strategy at government's disposal is a reduction of the health standards guaranteed all over the national territory. The regions that value health care most and wants to keep high standards in public services will be forced to raise their tax rates to get additional revenue or to reduce expenditure in other programs. In this scenario the risk is a slow disintegration of the *NHS*. Large inter-regional differences in health standards will foster a high mobility of patients from "poor" to "rich" regions. It is therefore likely that the regions with high standards will restrict the access to health services for non-residents.

Supposedly, the central government could hardly resist this behaviour as it has no control on regions' financial resources after the abolition of all vertical transfers. However, the financial autonomy of the *OSR* is merely apparent, as the VAT sharing is de facto a vertical transfer. The Regions do not have any power on VAT collection procedures. The entire VAT yield flows into the central government Treasury accounts. The Regions receive from the Treasury a transfer equal to *EVAT* calculated as in (2). Nonetheless, the Treasury must publish each year the values of *CVAT* and of the transfers T_i calculated according to (1). In order words, the real effect of the 2000 reform is not the complete abolition of any vertical transfers but rather the implementation of a procedure which make apparent the amount of resources implicitly transferred from rich to poor Regions. Hence, the central government still maintains an important handle to impose some discipline on regional policy makers.

5.2 – Incentives to Undertake Active Tax Policies

Besides the formal abolition of all vertical transfers and the elimination of any constraint to the destination of regional revenue, the 2000 reform tries to foster the incentives to active tax policies in several ways:
a) the equalisation of fiscal capacity is limited to 90% (β=0.9);
b) the Regions have auditing and collecting powers for most shared taxes;
c) there is no equalisation of the yield of autonomous tax effort above base rates.

The complete equalisation of fiscal capacity would have removed any incentive both to pursue policies aimed at enlarging the tax bases, by sustaining the growth of the regional economy, and to exert effort in

auditing and collecting procedures. Nonetheless, the actual scope for regional policies that may broaden the tax bases is quite limited. It is evident that the ability to retain the 10% of the yield produced by an increase in the tax bases is a rather weak motivation for regional policy makers. Further, tax auditing and collection are quite difficult tasks for regional administrations. Firstly, as previously remarked, they lack, at present, the essential technical skills. Secondly, regional tax auditing is limited by the very nature of the main taxes involved. [3] As to Irap, the difficulties stem from the fact that the taxpayer may reside outside the Region where the value added is produced. In order to calculate the tax due by a non-resident the Region must first assess the total tax base of the taxpayer (i.e. the value added in all Regions where the taxpayer is doing business) and then apportion it according to labour costs. In the absence of interregional information sharing, it is quite hard for a single Region to gather the required information. Further, tax auditing implies an externality: if a Region detects the tax evasion of a particular taxpayer, it benefits all Regions where the taxpayer is doing business. This reduces the incentives to actively contrast tax evasion. Information gathering is also an obvious obstacle for the auditing of the personal income tax by regional administrations.

What about the incentives to vary the tax rates? The absence of any equalisation of the revenue stemming from an increase of tax rates above the base level leaves the motivation for tax effort completely unaffected. This may be a problem in the light of the huge differences in Regions' tax bases. Table 3 reports the values of the additional revenue that each Region obtains by raising both the rate of Irap and the surcharge of the personal income tax at their maximum levels. Total *OSR's* revenues raise of about 10% equal to 128 euro per-capita. The distribution of this additional yield is extremely uneven. On average, the Southern Regions collect less than half the revenue of the Northern Regions. The poorest Region, Calabria, sees its total resources increased by less than 5%.

These figures suggest that the Southern Regions will hardly exert any tax effort. This raises two concerns. First, fiscal autonomy could reinforce the Italian dualism if the richest Regions will use their fiscal autonomy to increase productive public expenditure to foster their economy. Second, if population ageing will lead to a reduction of the standards offered by the NHS, it would be quite difficult for Southern Regions to cover their health needs through a tax increase. This will strengthen the drive to the disintegration of the NHS described in the preceding section.

There is however a different and positive view regarding this asymmetric distribution of the incentives to tax effort. The literature on tax

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[3] Recall that VAT is equalised at 100%.

competition suggests that Southern Regions may benefit from low taxes: by keeping their rates below those of Northern Regions they may be able to attract new investments to promote their economic development. At the moment there is no evidence of this "positive" tax competition. In contrast, there are signs of some "harmful" tax competition among relatively "rich" Regions. Only three *OSR* (Liguria, Veneto and Toscana) have changed the rate of Irap. They all *reduced* the tax rate for selected categories of taxpayers, such as newly established firms.

5.3 – Fundamental Devolution

While *OSR* financing has been completely renovated through several reforms in the Nineties, the devolution of expenditure responsibility is still at an early stage. In March, after years of heated but sterile debate and just before the general elections, the parliament has introduced the subsidiarity principle in the Italian Constitution through an amendment supported by the center-left majority. All legislative powers have been attributed to the Regions but for a limited list of matters of national interest (such as defence, foreing and monetary policy, social security, etc.). However regional powers will be limited within a framework of common rules set by the national legislation.

The practical effects of this reform are still unclear. Under the pressure of the northern party "Lega Nord", which is part of the coalition that won the last general elections, the new government declared its commitment to submit a new constitutional amendment for parliamentary approval. This proposal should be characterised by an even more radical devolution to Regions although its exact contents are still unknown. Some suggestions may come from the proposals recently made by the Minister for Institutional Reforms and Devolution and leader of the "Lega Nord", Umberto Bossi. He suggested to give at each single Region the choice between the status quo or the complete autonomy in the field of health, education and local police. Furthermore, the new "autonomous" Regions should be let completely free in the choice of their institutional arrangements (e.g. public vs. private provision, direct public production vs. public financing, direct public financing vs. quasi-markets).

In this complex and incomplete scenario it is quite hard to articulate any meaningful speculation on the future evolution of regional finance. However, some useful insights may come from the evaluation of the effects of the devolution of a limited number of expenditure responsibilities in a simplified framework. In particular, it is expedient to consider the case of the complete and symmetric devolution of education, health and local police (the functions indicated by Umberto Bossi) to all *OSR*. Table 4 reports the results of an estimate of the financial needs generated by this particular kind of devolution (Arachi and Zanardi 2001). The total amount of resources to

be transferred to the OSR is equal to about 41 billions of euro, approximately the 65% of actual Region total revenue. Obviously, expenditure in absolute terms is higher in the larger Regions (Lombardia, Lazio, Campania). In contrast, expenditure in per-capita terms is higher in the Regions located in the Center and South of the peninsula (e.g. in Calabria the expenditure is about one thousand euro per-capita) and in the small Regions (e.g. 829 euro per-capita in Liguria). The differences in per-capita expenditure are mainly due to two factors. First, the small Regions face higher costs, as they cannot fully exploit economies of scale. Second, expenditure for education is greater in the Regions with a higher share of the population in the age range 3-18 years.

How the new regional needs could be financed? It is expedient to verify whether the additional resources could be transferred to Regions by increasing the existing VAT sharing or the surcharge to the personal income tax. Table 5 allows a comparison of these two alternatives by reporting the fiscal imbalances that would arise in the two cases.

In order to finance the devolution through the personal income tax, the regional surcharge should be raised from 0,9% to 10,87%. Given the uneven distribution of income among Regions, this source of financing would generate large fiscal imbalances. The transfers needed to correct these imbalances are equal to about 8 billions of Euro (25% higher than the amount of transfers activated by the 2000 reform). As for the equalising transfers implemented by the 2000 reform, the flows are extremely polarised between two Regions: Lombardia and Campania.

When VAT is used in place of the personal income tax, the sharing rate should be set at nearly 100% (96.5%). If the yield is assigned to Regions according to the consumption of their residents, the total amount of the transfers needed to correct fiscal imbalances is quite lower (about 6 billions of Euro). This reflects the more uniform geographical distribution of consumption with respect to income.

These data show that the actual system of OSR financing may accommodate a large devolution of expenditure responsibilities. VAT seems the best resource to rely on as it reduces the size of interregional redistribution even if, at the limit, it could become a regional tax.

5.4 – The North-South Dualism

Most of the drawbacks of the Italian system of intergovernmental relationships stem from the sharp economic dualism between the North and the South of the country. The economic differences translate into asymmetric incentives for regional politicians to an efficient use of resources. We have shown that policy makers in the rich Northern Regions may have some incentive to actively manage the taxes they have power on,

while the poor Southern Regions have very limited tax autonomy and find convenient to passively rely on grants.

The future evolution of the Italian federalism depends crucially on whether the Southern Regions will catch up the rest of the Italian economy. The support to the economy of the southern Regions is one of the priorities of the new government. In the Economic and Financial Planning Document it has forecasted that in next years the rate of growth of the Southern Regions will be one percentage point higher than the rate of growth of the rest of the country. It is therefore expedient to analyse the effect of a differential growth of the South on interregional financial flows. To this end, we projected regional tax bases and needs to 2013 and calculated the ensuing equalising transfers in four different scenarios.

The first two scenarios have been already described in section *5.1* and figures 1 and 2. The first assumes that the tax bases grow as regional GDP whilst per-capita regional needs follow the average rate of growth of GDP among *OSR*. The second considers the additional effects of population ageing on regional needs. The third and fourth scenarios are analogous to the first two but for the assumption that the GDPs of Southern Regions grow one percentage point faster.

Table 7 reports the results of the four projections. The comparison between the data in the first part of the table and those in second show that even a long-lasting period of catching up will not radically reduce the scale of interregional redistribution. The total amount of transfers in favour of the "poor" Regions would be reduced by about one fifth.

It is interesting to see that population ageing does not increase the distance between "poor" and "rich" Regions. This is due to the fact that the main recipients, Campania and Puglia, have relatively young populations. Hence their health needs, and the ensuing transfers, do not grow much. The opposite is true for "old" Regions like Liguria and Toscana where health needs rise drastically bringing about a significant increase (reduction) of transfers received (paid) in per-capita terms. However, given that these Regions are relatively small, the total transfer they receive (pay) does not change a lot.

Additional insights may come by projecting the equalising transfers under the assumption that education, health and local police are devolved to the Regions. In order to forecast regional revenue one has to specify the source of financing and the formula for equalising the additional resources. We consider the case where the new regional functions are financed by increasing the VAT sharing at 96.5%. As to the equalising formula we have introduced an additional term to equalise education needs. This term redistributes the resources towards Regions with an education need, in per-capita terms, higher than average (i.e. Regions with a higher share of population in the age range 3-18 years).

Table 8 reports the results of four projections in the scenarios previously described. The comparison between the first columns of tables 7 and 8 shows that the devolution enlarges the scale of interregional redistribution of about 50% as the total amount of equalising transfers grows from 10 to 16 billions of Euro. As described by table 9, the increment is due entirely to the component that equalises fiscal capacity: the enlargement of the VAT sharing emphasises the effect of the uneven distribution of consumption among Regions. Quite interestingly the introduction of a new correction for education need in the equalisation formula reduces the interregional transfers.

As shown by table 9 the corrections for health and education need are negatively correlated. This is easily explained as the older the population is, the higher the health need and the lower the education need are.

Overall, the devolution strengthens the polarisation of financial flows between the Northern Regions, which have high consumption and low education need, and the Southern Regions, where consumption is low but the education need is high due to a relatively young population.

As to the effects of higher economic growth in the South, the devolution does not change significantly the results: the total amount of transfers is reduced by about one fifth.

6 – Concluding Remarks

Since the Seventies, local governments in Italy were financially dependent on grants from the central government. The lack of fiscal autonomy was the source of several inefficiencies and the main reason of large budget deficits at the local level. During the '90s the fiscal autonomy of local governments has been substantially increased: local governments now have the power to raise own taxes and receive a large share of revenue from national taxes. A new system of equalising grants has been implemented to support regions with small tax bases.

This fundamental reform has removed many deficiencies of the past system of local public finance. Yet, there are many issues that must be dealt with in the future. First, the principle of uniformity in health standards across the country, might be at odds with the decision of eliminating any kind of ex-post financing in order to foster the financial responsibility of local government. Second, the incentives to implement autonomous tax policies at the local level might be hindered by the new mechanism of interregional redistribution. Finally, the viability of the entire system in the medium-long run is conditional on the evolution of the North-South dualism.

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Tables and figures

Table 1 Simulated transfers among OSR according to the equalisation formula - year 2001									
	Per-capita (Euro)					Absolute values (millions of Euro)			
	Fiscal capacity		Health need	Economies of scale	Total transfer	Fiscal capacity		Health need	Econom of sca
	VAT	Other taxes				VAT	Other taxes		
	1	*2*	*3*	*4*	*5=1+2+3 +4*	*6*	*7*	*8*	*9*
Piemonte	-39	-91	43	-5	-92	-166	-391	185	
Lombardia	-86	-260	-9	-34	-389	-778	-2337	-83	
Veneto	-53	-96	-9	-8	-166	-236	-428	-40	
Liguria	-87	65	128	59	165	-143	106	211	
Emilia R.	-101	-165	69	0	-197	-400	-650	271	
Toscana	-46	-21	60	8	1	-163	-73	213	
Marche	-7	28	24	67	112	-10	41	35	
Umbria	19	66	57	104	247	16	55	48	
Lazio	-29	-104	-23	-19	-175	-150	-546	-120	
Abruzzo	70	152	11	75	309	90	194	14	
Molise	122	243	27	166	558	40	80	9	
Campania	164	312	-62	-26	388	950	1810	-361	
Basilicata	176	294	-32	125	563	107	180	-19	
Puglia	133	320	-63	-3	388	544	1312	-258	
Calabria	143	311	-51	43	446	297	644	-107	
Sum of positive values						2045	4421	987	

Table 2: Distribution of total revenue - year 2001						
	Actual revenue			Simulated revenue using equalisation formula		
	Total revenue (millions of Euro)	Total revenue per-capita (Euro)	Total revenue (deviation from mean)	Total revenue (millions of Euro)	Total revenue per-capita (Euro)	Total revenue (deviation from mean)
	1	2	3	4	5	6
Piemonte	5709	1331	2.0	5804	1353	3.7
Lombardia	11688	1299	-0.5	11621	1292	-1.1
Veneto	5792	1296	-0.7	5805	1299	-0.5
Liguria	2386	1453	11.3	2439	1485	13.8
Emilia R.	5564	1409	7.9	5499	1393	6.7
Toscana	4844	1374	5.2	4851	1376	5.4
Marche	1896	1306	0.0	2024	1394	6.7
Umbria	1193	1433	9.7	1215	1460	11.8
Lazio	6752	1289	-1.2	6679	1275	-2.3
Abruzzo	1725	1352	3.5	1756	1376	5.4
Molise	471	1427	9.3	486	1471	12.7
Campania	6927	1195	-8.5	6856	1183	-9.4
Basilicata	813	1332	2.0	834	1366	4.6
Puglia	4947	1208	-7.5	4932	1204	-7.8
Calabria	2715	1310	0.3	2618	1263	-3.3
Total	63418			63418		

Table 3: Additional revenue from tax effort

	Percentage of total revenues	Euro per-capita
Piemonte	11.0	146
Lombardia	14.4	187
Veneto	11.2	145
Liguria	7.6	111
Emilia Romagna	11.3	160
Toscana	9.2	127
Marche	9.0	118
Umbria	7.3	105
Lazio	11.9	153
Abruzzo	6.8	92
Molise	5.1	73
Campania	5.5	65
Basilicata	5.0	66
Puglia	5.3	63
Calabria	4.8	63
Total	9.8	128

Table 4 Financial needs generated by devolution - year 2001

	Absolute values (millions of Euro)					Per-capita values (Euro)				
	Public order and safety	Education	University	Health	Total	Public order and safety	Education	University	Health	Total
Piemonte	490	2090	416	24	3020	114	487	97	6	704
Lombardia	758	4228	874	82	5942	84	470	97	9	660
Veneto	353	2278	445	46	3122	79	510	100	10	699
Liguria	241	749	322	51	1362	147	456	196	31	830
Emilia Rom.	401	1818	658	104	2980	102	460	167	26	755
Toscana	478	1911	717	63	3170	136	542	203	18	899
Marche	160	865	168	29	1222	110	596	116	20	842
Umbria	107	526	183	11	827	129	631	220	13	993
Lazio	1405	3613	1003	250	6271	268	690	192	48	1198
Abruzzo	164	838	121	19	1143	129	656	95	15	895
Molise	63	234	19	4	320	192	709	57	12	970
Campania	774	4164	705	150	5793	134	719	122	26	1000
Basilicata	77	520	18	6	620	126	851	29	10	1016
Puglia	450	2577	289	52	3368	110	629	71	13	822
Calabria	343	1643	77	39	2101	165	792	37	19	1014
Total	6265	28053	6016	929	41263	129	578	124	19	850

Source: Arachi and Zanardi (2001)

Table 5 Alternative financing in case of fundamental devolution - year 2001

| | Absolute values (millions of Euro) | | | | | Per-capita values (Euro) | | | | |
| | | Personal income tax surcharge: rate 10,37% | | VAT sharing: rate 96,5% | | | Personal income tax surcharge: rate 10,37% | | VAT sharing: rate 96,5% | |
	Total needs	Revenue	Fiscal imbalances	Revenue	Fiscal imbalances	Total needs	Revenue	Fiscal imbalances	Revenue	Fiscal imbalances
Piemonte	3020	4304	-1284	3892	-871	704	1004	-299	908	-203
Lombardia	5942	9867	-3925	8812	-2870	660	1097	-436	979	-319
Veneto	3122	4255	-1133	4151	-1029	699	952	-254	929	-230
Liguria	1362	1553	-190	1610	-248	830	945	-116	980	-151
Emilia Romagna	2980	4292	-1311	3955	-975	755	1087	-332	1002	-247
Toscana	3170	3277	-107	3240	-71	899	929	-30	919	-20
Marche	1222	1210	12	1249	-27	842	834	8	860	-18
Umbria	827	665	162	683	144	993	799	195	821	172
Lazio	6271	4659	1613	4675	1597	1198	890	308	893	305
Abruzzo	1143	831	311	949	194	895	651	244	744	152
Molise	320	183	137	220	101	970	555	415	665	305
Campania	5793	2837	2957	3494	2299	1000	489	510	603	397
Basilicata	620	306	315	357	263	1016	501	515	585	431
Puglia	3368	2091	1277	2660	708	822	511	312	650	173
Calabria	2101	917	1184	1314	787	1014	442	571	634	380
Total	41263	41247	0	41261	0	850	849	0	849	0
Sum of positive values	0	0	7967	0	6092	0	0	0	0	0

Table 6 Projected transfers in 2013 according to equalisation formula

| | Baseline scenario for regional GDP growth rates | | | | Higher growth in Southern regions | | | |
| | Needs grow as GDP | | Needs grow faster than GDP due to population ageing | | Needs grow as GDP | | Needs grow faster than GDP due to population ageing | |
	Absolute values	Per-capita	Absolute values	Per-capita	Absolute values	Per-capita	Absolute values	Per-capita
Piemonte	-408	-96	-270	-63	-210	-49	-72	-17
Lombardia	-4568	-487	-4446	-474	-3972	-424	-3851	-411
Veneto	-1055	-225	-1024	-218	-828	-176	-798	-170
Liguria	243	160	348	228	305	200	409	269
Emilia Romagna	-1437	-350	-1332	-325	-1179	-287	-1075	-262
Toscana	-314	-88	-182	-51	-147	-41	-15	-4
Marche	344	227	461	304	383	253	501	330
Umbria	348	407	385	449	365	425	401	468
Lazio	-1911	-352	-1997	-368	-1617	-298	-1703	-314
Abruzzo	696	533	731	559	511	391	545	417
Molise	291	906	300	933	252	784	261	812
Campania	3384	577	2722	464	2612	446	1951	333
Basilicata	540	910	557	939	472	795	489	824
Puglia	2449	597	2383	581	1913	466	1848	450
Calabria	1375	682	1364	677	1120	556	1109	550
Sum of positive values	9671		9252		7933		7514	

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Table 7 Projected transfers in 2013 according to equalisation formula in case of fundamental devolution

| | Baseline scenario for regional GDP growth rates | | | | Higher growth in Southern regions | | | |
| | Needs grow as GDP | | Needs grow faster than GDP due to population ageing | | Needs grow as GDP | | Needs grow faster than GDP due to population ageing | |
	Absolute values	Per-capita	Absolute values	Per-capita	Absolute values	Per-capita	Absolute values	Per-capita
Piemonte	-1057	-248	-872	-205	-689	-162	-511	-120
Lombardia	-6067	-647	-5809	-620	-5067	-541	-4830	-515
Veneto	-1600	-341	-1538	-328	-1176	-250	-1123	-239
Liguria	-519	-341	-392	-257	-372	-244	-248	-163
Emilia Romagna	-2940	-716	-2750	-670	-2469	-601	-2290	-558
Toscana	-1363	-384	-1191	-336	-1028	-290	-863	-243
Marche	335	221	449	296	429	283	541	357
Umbria	341	398	375	438	387	452	420	490
Lazio	-2286	-421	-2346	-432	-1756	-323	-1826	-336
Abruzzo	994	760	1006	770	655	501	675	517
Molise	383	1192	385	1197	308	958	312	969
Campania	6611	1128	5783	986	5210	889	4411	752
Basilicata	850	1432	851	1434	720	1213	724	1219
Puglia	4082	995	3908	952	3090	753	2937	716
Calabria	2215	1100	2141	1063	1737	862	1672	830
Sum of positive values	15811		14898		12537		11691	

Table 8 Projected transfers among OSR according to the equalisation formula – year 2013, millions of euro

	Without devolution					With devolution					
	Fiscal capacity		Health need	Economies of scale	Total transfer	Fiscal capacity		Health need	Education need	Economies of scale	Total transfer
	VAT	Other taxes				VAT	Other taxes				
	1	2	3	4	5=1+2+3+4	6	7	8	9	10	11=6+7+8+9+10
Piemonte	-145	-501	313	-74	-408	-364	-501	313	-431	-74	-1057
Lombardia	-656	-3102	-146	-663	-4568	-1641	-3102	-146	-514	-663	-6067
Veneto	-280	-603	-71	-101	-1055	-702	-603	-71	-123	-101	-1600
Liguria	-331	57	334	184	243	-829	57	334	-264	184	-519
Emilia R.	-733	-1191	481	6	-1437	-1834	-1191	481	-402	6	-2940
Toscana	-442	-324	366	87	-314	-1107	-324	366	-384	87	-1363
Marche	20	108	63	153	344	49	108	63	-38	153	335
Umbria	26	90	84	149	348	64	90	84	-46	149	341
Lazio	-406	-1152	-212	-142	-1911	-1016	-1152	-212	235	-142	-2286
Abruzzo	171	345	25	155	696	429	345	25	39	155	994
Molise	60	124	15	93	291	150	124	15	2	93	383
Campania	1364	2821	-622	-179	3384	3415	2821	-622	1176	-179	6611
Basilicata	163	278	-32	131	540	408	278	-32	65	131	850
Puglia	788	2080	-441	22	2449	1973	2080	-441	448	22	4082
Calabria	402	969	-177	180	1375	1006	969	-177	236	180	2215
Sum of positive values	2993	6873	1680	1159	9670	7494	6873	1680	2201	1159	15811

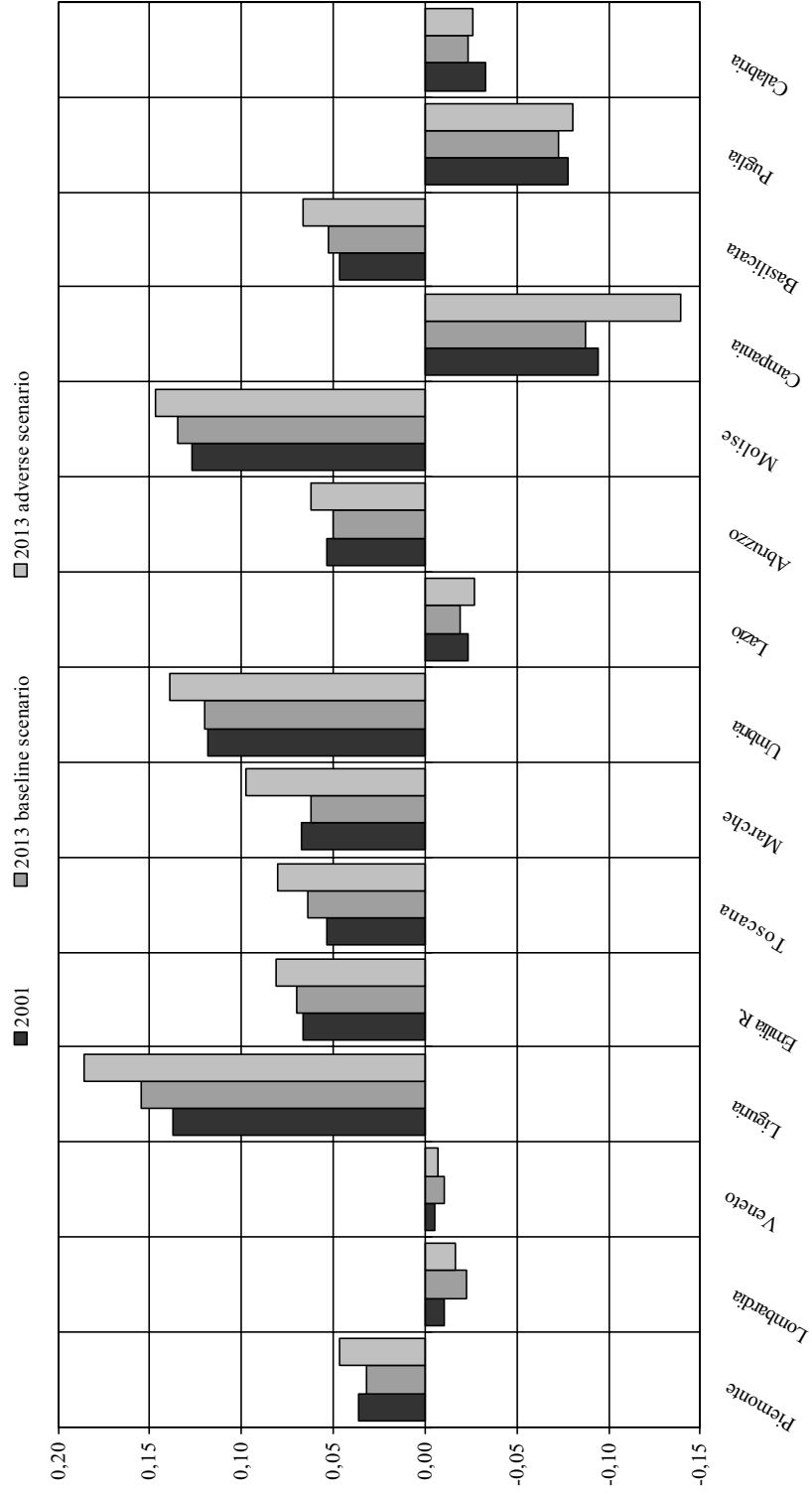*Figure 1 Per capita revenue in 2001 and in 2013 under alternative scenarios (percentage deviations from mean)*

Figure 2 Total revenue/ health need - year 2013

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