

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 ($b < 1$), 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 growth 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 want 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 other 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 makes 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% ($b=0.9$);
- 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

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, foreign 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.