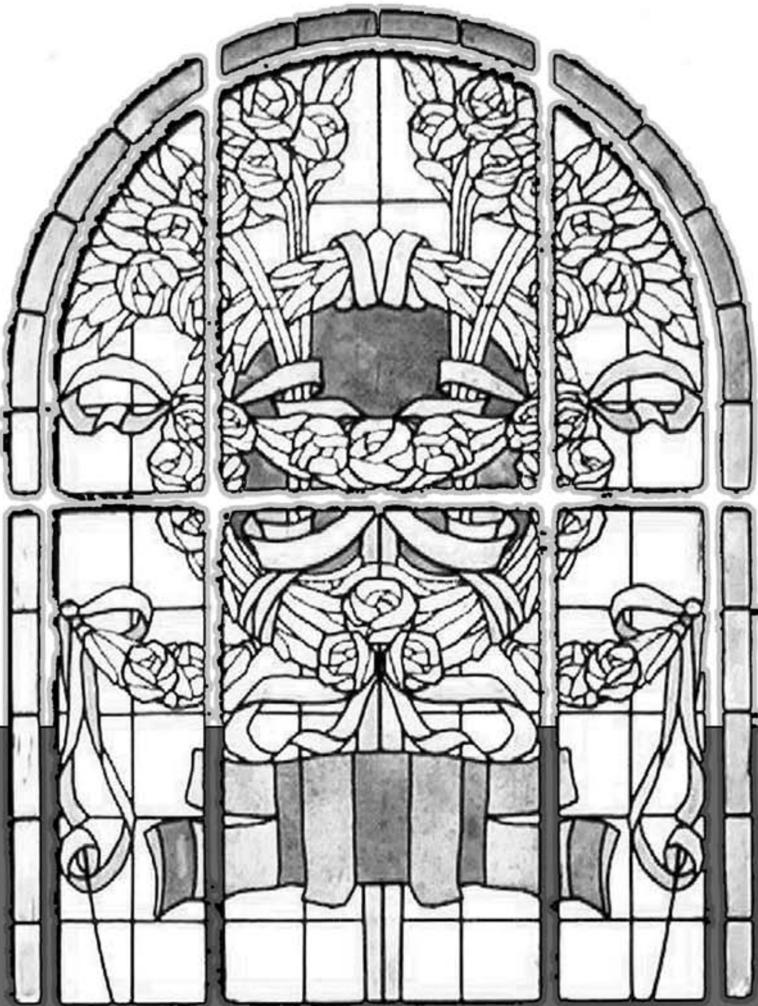

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MEASURING THE RESULTS OF PUBLIC INTERVENTION: DATA FOR EVALUATING THE TERRITORIAL IMPACT OF POLICY

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The *Public Investment Evaluation Unit* (UVAL) provides technical support to public administrations, by developing, testing and disseminating ex-ante, ongoing and ex- post evaluation methods for public investment projects and programmes. One of the aims is to improve effective spending and better performance of European structural funds. The Unit is part of the network of national and regional evaluation units.

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Measuring the results of public intervention: data for evaluating the territorial impact of policy

Abstract

The reliability of territorial analysis of public spending has significantly improved over recent years, due to the investments in improving the availability and quality of information. In particular, it is now possible to analyse the strengths and weaknesses of the recent increase in capital expenditure in the South of Italy. The share of such spending in the South is greater than the area's share of total population, in line with the goal of fostering development and partially correcting the trends of current expenditure, which tend to reinforce the persistence of regional disparities. However, a more detailed analysis of the different components of current expenditure - including investment and transfers to public and private enterprises and households - shows that although the proportion or resources devoted to investment has increased in line with the policy objective, it remains insufficient for narrowing the disparities of infrastructures, services to citizens and enterprises. Drawing on the wealth of information available in the Department for Development Policies' database on the Regional Public Accounts (RPA), which measure public financial flows at the territorial level, the paper analyses spending by region, level of government, sector and economic category. The analysis is enriched by the availability of timely data and the coverage of a particularly broad universe. In particular, the analysis is based on both the public capital expenditure Indicator, a statistical tool which reduces the lag in data availability to only six months, and on data on the wider public sector at both the central and local level, a feature that distinguishes RPA data from the other components of the system of public finance statistics.

Misurare i risultati dell'intervento pubblico: i numeri per valutare gli effetti territoriali delle politiche

Sommario

L'analisi territoriale della spesa pubblica, possibile oggi con un grado di attendibilità assai superiore al passato grazie agli investimenti compiuti nel miglioramento dell'informazione, consente di analizzare i punti di forza e i limiti della crescita recente della spesa in conto capitale del Sud. La quota di tale spesa è superiore nel Sud rispetto alla quota della popolazione, coerentemente con l'obiettivo di sviluppo dell'area e a parziale correttivo all'andamento della spesa corrente, che contribuisce invece alla persistenza di squilibri territoriali. Un'analisi più approfondita delle componenti di tale spesa - investimenti e trasferimenti a imprese e famiglie - mostra tuttavia come la quota destinata a investimenti, pur essendosi accresciuta come da obiettivo di *policy,* resta ancora troppo bassa rispetto all'obiettivo di ridurre il divario infrastrutturale e di servizi per cittadini e imprese. Il lavoro articola l'analisi per regione, livello di governo, settore e categoria economica attraverso i Conti Pubblici Territoriali (CPT) del Dipartimento per le Politiche di Sviluppo. La disponibilità di dati tempestivi e la possibilità di riferirsi a un universo particolarmente ampio arricchiscono le analisi proposte, potendosi queste avvalere sia dei risultati dell'Indicatore anticipatore, uno strumento statistico che riduce il ritardo temporale a soli sei mesi, sia dei dati relativi alla componente allargata del Settore Pubblico a livello centrale e locale, caratteristica distintiva dei dati CPT rispetto alle altre componenti del sistema delle statistiche di finanza pubblica.

A previous version of this paper has been presented at the XXVI Conference of the Associazione Italiana di Scienze Regionali (AISRE), Naples, Italy, October 17 – 19, 2005

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I. Public expenditure at the regional level: objectives and comparison between Italy and United Kingdom

The Government and other public policy-makers, as well as the analysts who investigate and interpret the public economy, have been expressing an increasingly explicit need for accurate data on public expenditure flows at the regional level.

Knowing not only *how much is spent* but also *where it is being spent* is essential to ensure the transparency of public action and to verify that economic efficiency and equity are preserved. Decision-makers often have access to estimates of the overall amount of expenditure, but they have much less precise information and insight into how much is being spent in any given region. The territorial detail of public expenditure data is therefore an essential tool for a) measuring inequalities within and between regions and b) developing the capacity to analyse the regional impact of a vast range of policies.

The availability of systematic and methodologically rigorous data on regional expenditure flows enables analysts and policy-makers to:

- establish reference values for public inputs to use in assessing the outputs and outcomes of expenditure and policy-making;
- ascertain whether policies have been pursued appropriately where expenditure or certain components of expenditure are the result of policy decisions;
- identify the types of expenditure that are most successful in generating synergies among financing from different sources;
- undertake initiatives to analyse flows at the sub-regional level.

A knowledge of regional expenditure flows is also indispensable for understanding the variables behind the territorial distribution of expenditure, i.e. identifying the determinants of expenditure levels. Public expenditure can differ from region to region for three main reasons:

- different levels of need;
- different costs for public services;
- policy decisions to spend relatively more or less in a given area.

In most cases, ignorance of expenditure flows makes it impossible to understand the rationale behind the differences.

Regional information on public financial flows also improves the quality and availability of government statistics to:

- support the basic policy objective of increasing growth in all regions and reducing persistent growth gap between areas;
- adequately reflect the changes under way at the territorial level, providing data appropriate to information needs and sufficiently frequent updating;
- meet the requirements of the relevance, integrity, quality and accessibility of information.

Pursuing and achieving these objectives is not a simple matter. It is no coincidence that they appear in the international discussion of these issues as key policy drivers and long-term goals. The actual reconstruction of the territorial distribution of expenditure flows is essentially an adaptation to these objectives, even in countries that pay considerable attention to these issues and have been most active in addressing them.

BOX A – Analysing public expenditure at the regional level in the United Kingdom

In the United Kingdom, for example, although there is a thriving theoretical debate (Short 1978, 1981, 1982; McLean 2003; McLean *et al.* 2003; Bramley *et al.* 2000; Bramley - Evans 2000; Cameron *et al.* 2004) and the use of regionalised data for planning purposes has a long history (HM Treasury, various years; ONS, various years), the actual reconstruction of flows uses a top down approach.

The total amount of public expenditure is allocated among the regions using estimations. The various government departments responsible for the regional allocation of expenditure play a significant role in this exercise. Each department breaks down the spending figures by assigning a value to each of the nine regions, using criteria based historical expenditure trends, regional population, regional GDP, specific indicators associated with programmes or proprietary data held by the department itself. The exercise is clearly bound by the total expenditure of each department and the overall expenditure of central government.

In order to reduce the inevitable discretionary scope of this approach, a number a major studies (McLean 2003, Bramley 2000, Bramley, Evans 2000) have been conducted to improve the availability of existing data, standardise the criteria used and develop methodologies to refine the estimates. These investigations – one-off analytical studies – produced operational guidelines to improve the criteria for attributing expenditure flows and made specific recommendations for the Treasury, the government departments involved and politicians. Particulary there are two key studies. The first was commissioned by the Office of the Deputy Prime Minister (ODPM), with the support of HM Treasury and the Department of Environment, Food and Rural Affairs (DEFRA), and carried out by the Politics Group of Nuffield College and experts from the Treasury in 2003. The second was conducted for the Department of Environment, Transport and the Regions (DETR) by Bramley *et al.* The latter attempts an initial, partial reconstruction using a bottom up approach. In reality, however, the study is aimed at reconstructing flows on a local rather than regional basis, and seeks to allocate the cost of services to their immediate beneficiaries. Only three major urban areas are covered: London, Liverpool and Nottingham. In essence, the approach is closer to an analysis of public services and therefore differs in key respects from efforts to reconstruct financial flows.

II. The Italian experience: The Regional Public Accounts database

Italy's experience with measuring public expenditure on a regional basis is sponsored and supported by the Department for Development Policies (DPS) of the Ministry for the Economy and Finance, with the direct technical and methodological contribution of all the regions and autonomous provinces. The project employs a bottom up approach, based on the reconstruction of financial flows in the individual territorial areas, which are then aggregated to form the total for the country as a whole.

The information on expenditure flows available in the Regional Public Accounts (RPA) database[1] is the product of a reconstruction based on the final accounts of government departments and other public entities. It therefore takes account of the definitive accounting data for actual expenditure. Each entity is considered as a final expenditure unit, using consolidation techniques to eliminate flows between the various levels of government. The RPA database can be used to analyse different two reference universes: general government and the public sector (which comprises general government plus enterprises subject to the direct or indirect control of public entities).

In view of the time required to prepare the accounts of the various entities, the data is available with a lag of about 12-18 months with respect to the reference period. However, a statistical tool developed by the DPS, known as the public capital expenditure indicator, is used to formulate an estimate that reduces the lag in the availability of data for a number of aggregates of special interest to policy-makers. The indicator provides an estimate of general government capital expenditure at the regional level with a lag of just six months with respect to the reference period[2].

The RPA database undergoes constant theoretical and methodological refinement[3], drawing in part on specific analyses (Coppi - Giordani 2005; Malizia 2005), in the belief that the transparency and quality of the Regional Public Accounts is essential to providing assessment exercises and policy-making with a solid foundation.

The process through which the basic information is gathered is an excellent example of capacity building: since its establishment in 1994, the RPA working group has been

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[1] See the Appendix and www.dps.mef.gov.it/cpt

[2] See "L'Indicatore anticipatore della spesa pubblica in conto capitale: la stima regionale annuale", Materiali UVAL, Numero 1, Dipartimento per le Politiche di Sviluppo, Ministero dell'Economia e delle Finanze. The publication is available at www.dps.mef.gov.it /materialiuval

[3] See note 2.

organised into a Central Team – which works at the Public Expenditure Evaluation Unit of the DPS – and 21 Regional Teams deployed in all of Italy's regions and autonomous provinces. It is in essence an *ante litteram federated system,* reflecting a deliberate choice: in theory, the territorial accounts could be produced by a fully centralised system. From the outset, however, our ambition has been to create a database that can also serve as an effective tool for governing the regions, involving regional authorities directly in the construction of the system. The network of Regional RPA Teams is not just a comprehensive physical network: it is above all a shared set of methods.

As regards the fundamental distinction between *expenditure in* and *expenditure for* the regions, first developed by Short (Short 1978) and then adopted in all the subsequent literature (Short 1981, McLean 2003; McLean *et al.* 2003; Cameron *et al.* 2004), the original theoretical criterion adopted in the RPAs is *expenditure in.*

Under this distinction, regional public expenditure can be classified into two ways:

- *expenditure* is *in* a region if it is physically carried out in the region *regardless* of where the benefits of the expenditure are felt.
- *expenditure* is *for* a region if the recipients (individuals and enterprises) in that region are the beneficiaries of the expenditure. In this case, the benefits are calculated *regardless* of where the expenditure inputs are produced.

The concept of *expenditure for* hinges on the concept of *benefit*, while *expenditure in* regards the *financial* structure in which the expenditure is classified and seeks to reconstruct *where* the expenditure was carried out.

The RPA account is a "real" financial account, i.e. without reclassifications or estimations of direct data sources. As noted, expenditure and revenue flows are reconstructed using the final accounts of the public entities involved, taking account of the definitive figures on financial flows actually registered. Any reclassification of the basic data sources is quite limited. A number of changes made during the recent revision with a view to meeting the need (of the European Union and the National Accounts) to emphasise the economic purpose of the expenditure over its accounting nature were undertaken for reasons of accounting clarity and did not alter the *financial* nature of the *data* or the *account* (see Box A).

III. Using the Regional Public Accounts to measure the impact of public intervention

The information in the RPA database and the public capital expenditure indicator is now widely used both for analytical purposes (Bordignon *et al.* 2005 and 2005b; Buglione 2005; Di Palma *et al.* 2005; Marrocu *et al.* 2005; Pigliaru *et al.* 2005; Zanardi - Arachi 2005) and evaluating policy choices (DPS 2003; DPS 2003b; DPS various years).

In this paper, the RPA data used to measure public intervention in the different regions reflect a number of innovations:

- for the public sector, we use the entire RPA time series, consolidated in the light of the recent revision of the database[4], for the years from 1996 to 2003 (the figures for 2003 are not yet final);
- the time series runs to 2004 for general government capital expenditure, for which the indicator estimate is available;
- the series employs constant values, deflating the data to 1999 prices[5]. This was done to exploit the full depth of the time series and enable an accurate reading of developments over time.

Using the rich set of available data, we examine policy choices from a variety of perspectives. The information is organised by region, level of government, sector and economic category, verifying the interpretive stance and testing sensitivity to changes in the region, the level of government or the sector involved.

In Section 4, the paper addresses the general issue of the overall amount of expenditure at the regional level and the territorial effects of the distribution of resources. We then focus on policy issues, examining capital expenditure, which although it is a much smaller aggregate than current spending is also the component over which policy-makers have greatest discretionary control.

Section 5 examines the division of capital account expenditure between investment and transfers to households and public and private enterprises. In this case the policy objective is to reduce the share of transfers to enterprises by supporting public investment, which is the essential condition for narrowing the infrastructure gap

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[4] See note 2.

[5] The data were deflated using the GDP deflator, calculated as the ratio of real GDP at 1999 prices to current GDP.

between regions. At the same time, we attempt to go beyond accounting definitions to examine the actual economic significance of certain items classified under transfers.

Section 6 breaks down capital expenditure by sector, offering insight into the areas on which such spending has actually focused in the last decade and what trends have emerged in recent years. We ask whether the sectoral structure of expenditure reflects regional differences and whether sectors essential to territorial development show significant changes.

In Section 7 the emphasis shifts to levels of government. With the process of administrative decentralization under way, we examine whether trends in public expenditure really reflect the devolution policy adopted The territorial analysis of expenditure contributes to our understanding of the various local contexts and the roles of central government, local authorities and other public sector entities.

IV. How is government expenditure distributed around the country?

The principle of horizontal equity underpins all public policy action: it requires *equal treatment* of *equals*. Clearly, the definition of *equal treatment* and that of *equals* depend on the concept of equity that one uses[6]. This paper essentially adopts the definition under which *equal treatment* regards the amount of public goods and services available to each individual.

The RPA database allows us to come close to the goal of measuring *equal treatment*, and, by appropriately defining the measure of equity, to quantify that treatment with a reasonable degree of certainty. In particular, we can measure the *equity of inputs*, i.e. the possibility that individuals in different areas will receive the same amount of public resources. What the RPA figures clearly cannot measure, given their exclusively financial nature, is the *equity of outputs,* both between individuals and territories. Within these limits, we can assess the territorial impact of expenditure policies using the principle of *equity of inputs* as our interpretive key with the help of a solid body of empirical evidence.

[6] The most elementary concept of equity is that of *equity of inputs*, under which individuals with the same characteristics should receive or be able to receive the same amount of public resources. This does not guarantee *equity of outputs*: an equal division of spending among different individuals does not necessarily produce equal outputs of services, given differences in the quality and efficiency of public services. Nor do equal expenditure and/or equal services guarantee *equity of outcomes*, since the equality of benefits is highly affected by individual characteristics and preferences (see Arrow 1970, Bordignon *et al.* 2005) .

Equity between areas is a prerequisite for pursuing equity between individuals. It calls for the amount of resources available to regions to be reasonably similar, all other things being equal.

For the public sector and overall public expenditure on a regional basis, which came to about €690 billion between 1996 and 2003, 71.6 percent of the total flowed to the regions of the Centre and North and 28.4 percent to the South (see Figure IV.1a). This means that citizens in the Centre-North received an average of €13,546 per capita at constant prices, 43 percent more than the €9,500 received by citizens in the South (see Figure IV.1b).

Fig.IV.1a Public sector: total public expenditure 1996-2003 average, percentages

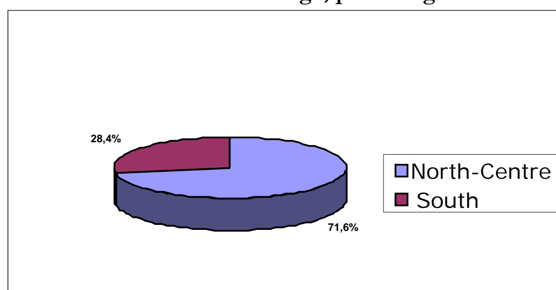
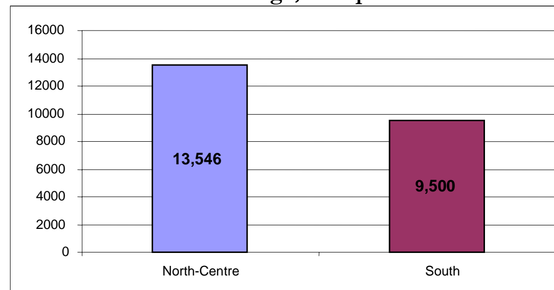


Fig. IV.1b Public sector: public expenditure per capita 1996-2003 average, 1999 prices



Source: DPS – UVAL RPA database

The South's share of expenditure is slightly greater than its share of GDP (24.5 percent) and substantially smaller than its share of population (36.2 percent, see Table IV.1). Conversely, the Centre-North's share of public spending is slightly smaller than its share of GDP and significantly larger than its share of population. The territorial model that the data describe had already emerged in the ongoing debate on this issue (Geri -Volpe 1985, Geri -Volpe 1993; Moro 1994). Nevertheless, the confirmation offered by these figures represents a significant step forward thanks to the quality of the data available for analysis.

Most of the territorial differentiation between the Centre-North and the South is attributable to current expenditure, which in addition to accounting for about 90 percent of the budget is also the most rigid and least manoeuvrable component for policy purposes, since it lags development rather than leading it, essentially helping to maintain the imbalances.

Capital expenditure – especially if considered under the definition adopted for the National Accounts[7] - is composed of public investment and transfers, and the contribution of these items partially offsets (as we will see later) the impact of current spending to produce an overall redistributive effect. However, it should be noted that apart from a portion of capital expenditure allocated geographically on the basis of a clear ex ante criterion developed with defined quantitative methods (Brezzi - Pennisi - Utili 2005), nearly all public expenditure is distributed at the territorial level on the basis of a variety of diverse criteria (per capita, demand led, etc.) for each area of intervention, producing the overall effect seen in Figures IV.1a and IV.1b.

It would therefore be especially interesting to conduct a counterfactual exercise, aimed not at measuring the ex post territorial impact of expenditure initiatives, but rather at analysing the theoretical allocation that would result from the application of an ex ante equalisation parameter to the overall distribution of total public expenditure.

Recent studies (McLean - McMillan 2003, McLean *et al.* 2003) have focused on the inverse of GDP as a robust, non-manipulable and transparent general indicator to guarantee the necessary equity in the allocation of public resources among the regions. In our view, the criterion is not especially sophisticated but it has received much support at the international level. A simulation of the regional gains/losses that would result if all Italian public expenditure were to be distributed on the basis of the inverse of per capita GDP produces a highly intuitive finding: all the regions of the South would benefit to the detriment of those in the North and Centre. However, the Italy that would result would be perhaps too sharply rebalanced, as the weights would not reflect the structural needs of the more advanced regions. The distance between per capita GDP in the two macro-areas is probably too great. Any distribution formula based on inverse GDP would be more appropriately used between areas with less marked

[7] In order to conduct specific analyses of the territorial effects of policy (partly with a view to the implementation of Community cohesion policy and the strategies for defining domestic regional development policies), the information extracted from the database is *aggregated in a manner comparable* with the official National Accounts statistics published by ISTAT, while maintaining the financial nature of the data. The definition of *capital expenditure consistent with the National Accounts* is obtained by excluding the data for loans and advances and equity investments and capital injections from the financial capital account. The items that compose *capital expenditure consistent with the National Accounts* are: real estate assets and works; machinery and equipment; capital transfers (to households and social institutions; and private and public enterprises); and other capital expenditure.

differences and a some degree of uniformity (for example, in the internal distribution of resources among the regions of the South and, separately, those of the Centre-North).

The exercise does demonstrate the strong territorial sensitivity of allocation formula and the significant regional differences that emerge. Italy has experience with the allocation of public resources based on statistical indicators, namely the criteria used in the allocation of additional funding to under-utilised areas. An extensive study of the methods and data used confirms the sensitivity of the territorial impact to the allocation formula adopted (Brezzi - Pennisi - Utili 2005).

If we focus on capital expenditure, the most discretionary component of public spending, and hence the preferred instrument for development policy in Italy since 1998 (Bruzzo - Volpe 2001), we note that although volume of such expenditure is of a different order of magnitude than current expenditure[8] it is consistent with the objectives of reducing regional disparities, giving preference to less developed areas and producing a redistributive effect. The South's average share of public sector capital expenditure (under the definition consistent with the National Accounts; see note 7) for 1996-2003 was equal to 37.9 percent (62.1 percent for the Centre and North; Figure IV.2a). Southern residents receive €981 per capita (at constant prices), compared with €911 for those in the Centre and North (Figure IV.2b). In recent years, Southern residents have therefore received €70 per capita annually more than those in the Centre and North (about 7.6 percent more).

Figure IV.2a Public sector: capital expenditure 1996-2003 average, percentages

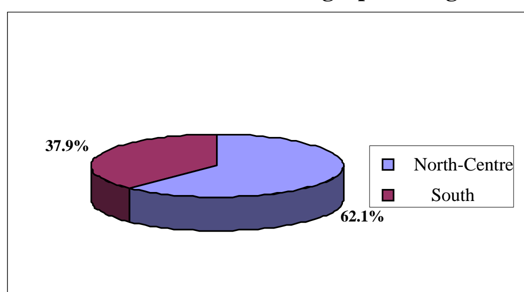
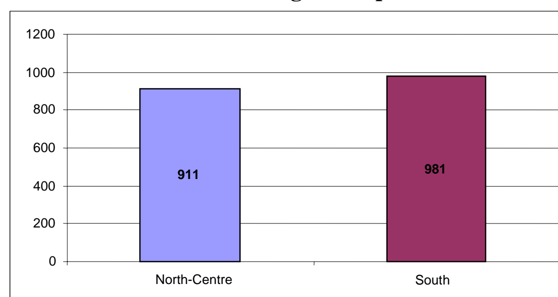


Figure IV.2b Public sector: per capita capital expenditure 1996-2003 average, 1999 prices



Source: DPS – UVAL RPA database

Ensuring an adequate volume of capital expenditure is one of the main objectives of economic policy, especially for the implementation of EU cohesion policy. It also

[8] Capital expenditure accounts for about 8 percent of total public spending.

remains the main lever for achieving growth objectives for the South, as a comparison of key economic indicators shows.

Table IV.1 **Indicators of the territorial distribution of expenditure 1996-2003 average, percentages**

	Population	GDP	Total expenditure	Capital expenditure (National Accounts definition)
Centre-North	63.8	75.5	71.6	62.1
South	36.2	24.5	28.4	37.9
Italy	100.0	100.0	100.0	100.0

Source: ISTAT, DPS – UVAL RPA database

The fact that the South's share of capital expenditure is greater than its share of the population is consistent with the development goals for the area and serves as a partial corrective to current spending, which as we noted contributes to the persistence of territorial disequilibria.

In the years examined here, the development of the South has received strong support from public expenditure designed to rebalance the social and economic situation in the country, financed with additional resources from two main sources:

- the national resources of the Fund for Under-Utilised Areas (FUA) determined annually with the budget authorizations in the Fund (appropriated in Table D of the Finance Act) and subsequently allocated by the CIPE (Interministerial Committee for Economic Planning) through the various legislative instruments available;
- the Community resources provided in implementation of the commitments undertaken in the CSF from the Structural Funds and national co-financing, whose overall amount is determined by the Revolving Fund for the implementation of Community policies.

These two sources allocate 85 percent and 100 percent of their appropriated funds to the South.

The overall redistributive effect of capital expenditure is essentially a consequence of the fact that much of development spending (FUA and Structural Funds) is allocated territorially using an ex ante formula-based criterion (Brezzi – Pennisi - Utili 2005) aimed at increasing redistribution and optimising the balance between expenditure components.

This is consistent with Article 119(5) of the Italian Constitution, which calls for the State to implement *additional* equalisation policies over and above the financial equalisation already envisaged in paragraph 3 of the same article (the Equalisation Fund). Paragraph 5 mandates support for disadvantaged areas with State initiatives to remove structural and growth disparities and to create the minimum background conditions needed to permit effective exercise of citizenship rights. The distinguishing feature of initiatives under paragraph 5 is their *complementary, additional and extraordinary nature* compared with the normal exercise of the functions performed by local authorities, whose financial resources are specified in paragraphs 2 and 3 of Article 119.

At the same time, in order to ensure the effectiveness of regional policy (financed by the FUA and the Structural Funds), the Government's planning commitments for the South also envisage a spending target for national sectoral policies implemented with ordinary funding. This objective, set out in the Economic and Financial Planning Documents (EFPD) and agreements with the European Union, establishes that 30 percent of ordinary capital expenditure for every sector shall go to the South. This level must ensure that the South receives an average of 45 percent of total capital expenditure (ordinary and additional resources). The rule must be implemented and verified both by general government entities and entities in the wider public sector, which participate in capital expenditure initiatives and are subject to controls and sanctions for violations of additionality[9].

It is no simple task to monitor compliance with this resource allocation requirement. The overall share of capital expenditure is still far from the planning objective of 45 percent: it averaged 37.9 percent in 1996-2003. There are numerous issues concerning ordinary capital expenditure, which is not governed by specific rules for territorial allocation and is especially difficult to identify and measure, even ex post, because the accounts of public entities – and consequently the RPA database that uses them as a data source – do not permit identification of the source of expenditure flows.

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[9] Community regulations establish that the resources of the Structural Funds used to achieve the objectives of Community policy shall be additional to the national public expenditure on such objectives. More specifically, additionality means that to achieve a genuine economic impact, the appropriations of the Structural Funds may not replace public expenditure by the Member States. Accordingly, for Objective 1 regions, each Member State shall maintain total public or equivalent structural expenditure at least equal to the amount of average annual expenditure in real terms achieved in the previous programming period. Article 11 of Regulation (EC) 1260/99 governs additionality for the 2000-2006 programming period.

The data on the regional distribution of public expenditure show that systematic and methodologically rigorous information can support and improve policy-making, making it possible both to determine the ex ante allocation of resources and conduct ex post analysis of the actual allocation. However, as we remarked earlier, a close reading of public expenditure at the regional level can shine considerable light on a range of issues. The structure of the macro-components of current and capital expenditure has already shown that the latter plays the greatest role in redistribution policy, and that it is composed of various sources of funding. The following section examines capital expenditure in greater detail, first analysing its weight in overall expenditure, its historical trend and the detailed characteristics of its components: investment and transfers to households and public and private enterprises.

V. Capital expenditure and the territory: the role of investment and transfers

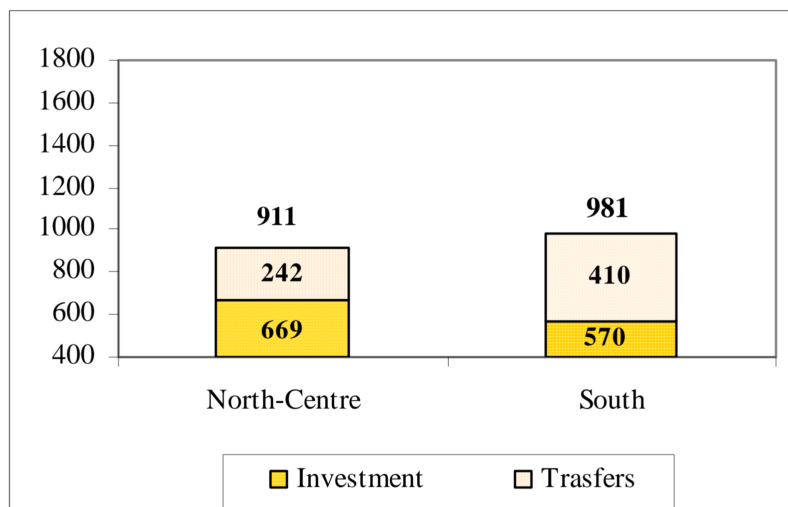
The share of capital expenditure by area (see Table IV.1) is an initial indicator of the intensity of public intervention to narrowing the development gap between the different parts of the country.

The analysis and assessment of actual policy decisions can be significantly enhanced by examining the internal composition of capital expenditure, especially by breaking it down into investment and transfers. In order to reduce territorial differences in development, capital expenditure must not only be supported and increased, it must also be focused on public investments that make it possible to deliver services to individuals and enterprises. The declared policy objective in recent years has been to increase direct expenditure, i.e. public investment in tangible and intangible infrastructure, while reducing the role played by transfers to households and enterprises. So far, the results are only partially satisfactory: the contraction in the share accounted for by capital transfers has not been especially large, although the most recent data do appear to point to an acceleration in the rebalancing process.

Analysing the overall intensity of public action, we can confirm that per capita expenditure on capital account is greater in the South than in the rest of the country (see Figure IV.2b). The overall difference is the result of differences in composition, however (see Figure V.1), with larger transfers and smaller investment in the Southern regions than elsewhere in the country. Per capita investment expenditure is equal to

€570 in the South (1996-2003 average), compared with €669 in the Centre and North, while per capita transfers come to €410 in the South and €242 in the rest of the country.

Figure V.1 **Public sector: per capita capital expenditure (National Accounts definition) 1996-2003 average, constant 1999 prices**



Source: DPS – UVAL RPA database

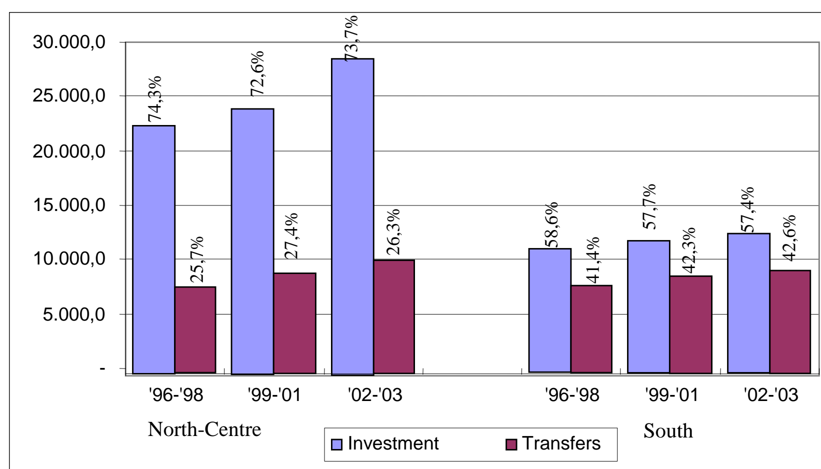
With a less-than-optimal composition of average capital expenditure between 1996 and 2003, it is important to determine whether current developments reveal any shift towards a better allocation of spending now under way. In order to examine this issue, we divided the period into three-year segments, keeping the final year, 2004, separate because the figures are the result of the estimation produced by the public capital expenditure indicator, which only covers general government.

In fact, we must first note that the RPA series for 1996-2003 shows a significantly different pattern depending on whether we consider the broader universe of the public sector or the narrower general government universe, which excludes flows associated with large national public enterprises. These entities are incorporated companies and are not involved in any significant way in transfers[10], which means that the share of investment in total capital expenditure increases when we move from general government to the public sector, regardless of regional differences. Despite the higher proportion of investment spending, the figures for the public sector show a progressive

[10] By definition transfers are unrequited flows: disbursing such resources is not part of the normal activities of an enterprise.

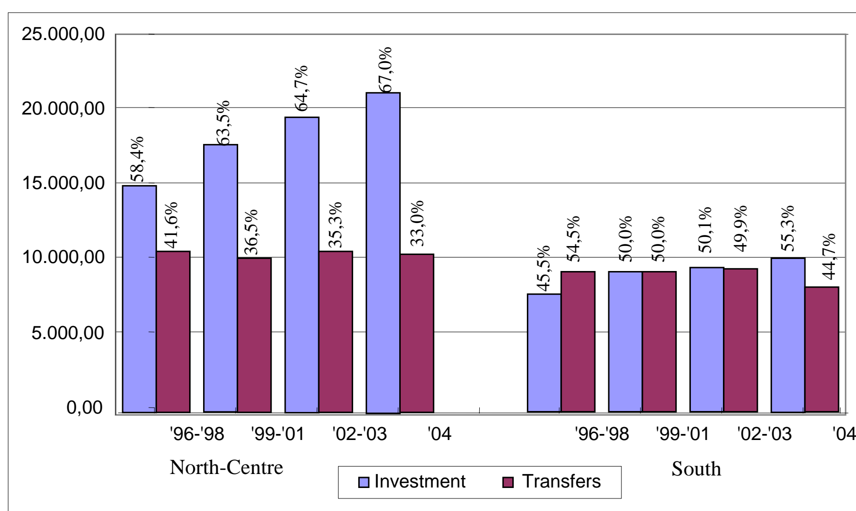
decline in capital account expenditure in the South by national public enterprises, which caused the share of such spending to decrease over the period.

Figure V.2 Public sector: distribution of expenditure between investment and transfers 1999 prices



Source: DPS – UVAL RPA database

Figure V.3 General government: distribution of expenditure between investment and transfers 1999 prices



Source: DPS – UVAL RPA database

For both the public sector and general government, investment in the South grew in absolute terms slowly but progressively over the entire period from 1996 to 2003. However, the two universes display certain differences. In the first three years, general government investment in the South was lower than transfers. By contrast, from 1999

to 2003 the two categories were virtually equal. The information on general government only generated by the indicator signals a further increase in investment expenditure in the South (mainly attributable to local authorities), accompanied by a reduction in transfers, above all those from central government[11]. This pattern changes for the public sector universe, where investment increased by less than transfers in 2002-2003 in the South (see Figure V.2 and Figure V.3).

The figures therefore signal that the imbalance between the two components in the Southern regions is being remedied, at least with regard to general government, which is subject to policy controls. Substantial support has been provided in the form of transfers to enterprises in under-utilised areas in the South, in recent years primarily through the Revolving Fund, tax credits for investment and employment and transfers through Cassa Depositi e Prestiti as part of Territorial Agreements and Area Contracts. These measures have kept the share of transfers in total capital expenditure in the South above that in the other areas of the country.

If we move beyond an internal analysis of the South alone to a comparison with the Centre and North, it is clear that the "virtuous" trend in the reduction in the share of transfers has become more marked in this area as well, falling by six percentage points from 41.6 percent in 1996-1998 to 35.3 percent in 2002-2003 for general government (compared with 4 points in the South).

Focusing more narrowly on individual regions, in the South the amount of per capita capital expenditure is especially high in Molise, Basilicata, Calabria and Sardinia and lags in Campania, Puglia and Sicily. A regional analysis of transfers and investment shows that the latter has had a large impact on the overall trend, as transfers in the South are generally higher than the national average (only Puglia shows a below-average level, albeit by a negligible amount). In the case of investment, the picture is less uniform, with regions such as Basilicata and Sardinia near the top of the national ranking in terms of per capita expenditure, while others, such as Campania, Puglia and Sicily, are near the bottom.

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[11] In particular, between 2003 and 2004 there was a "natural" reduction in expenditure under Territorial Agreements due to the completion of works, to the contraction in subsidies granted under the main legislative instruments included under the Technology Innovation Fund (see note 19) associated with the closure of the original special accounting procedures, and to a decrease in expenditure in respect of tax credits owing to adoption of a procedure requiring prior application to receive the credits. Under the new mechanism, applications are rejected if demand exceeds available resources.

Figure V.4a Public sector: per capita capital expenditure
1996-2003 average, 1999 prices

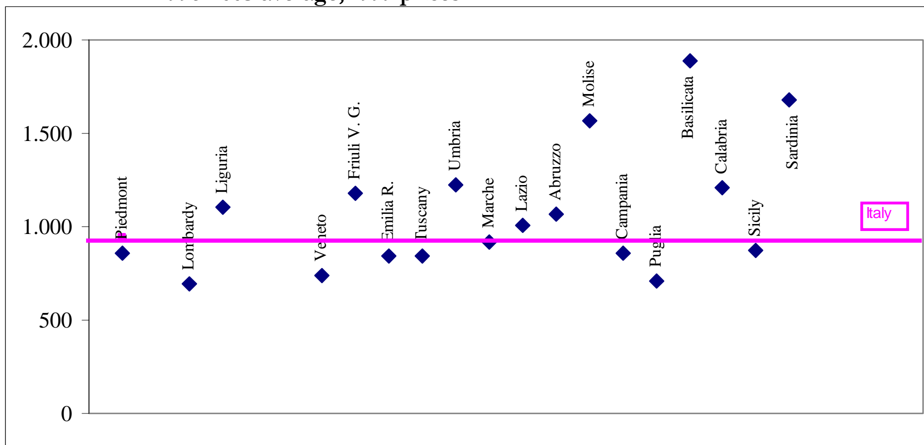


Figure V.4b Public sector: per capita capital expenditure - transfers
1996-2003 average, 1999 prices

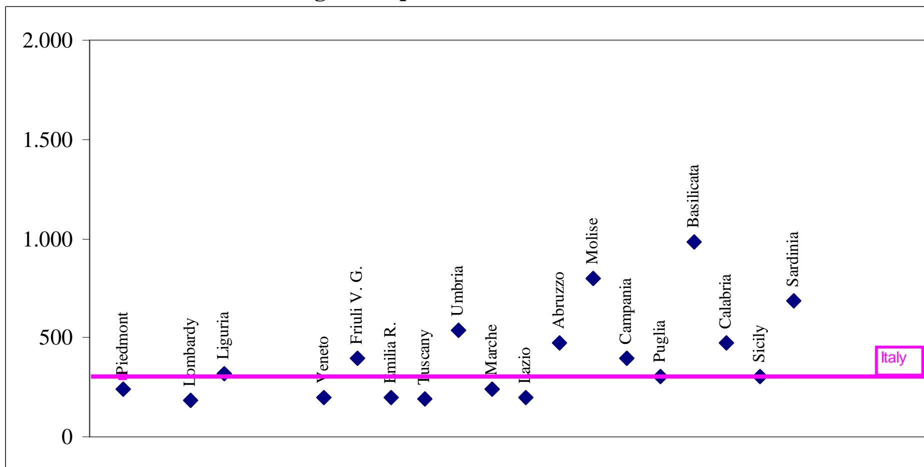
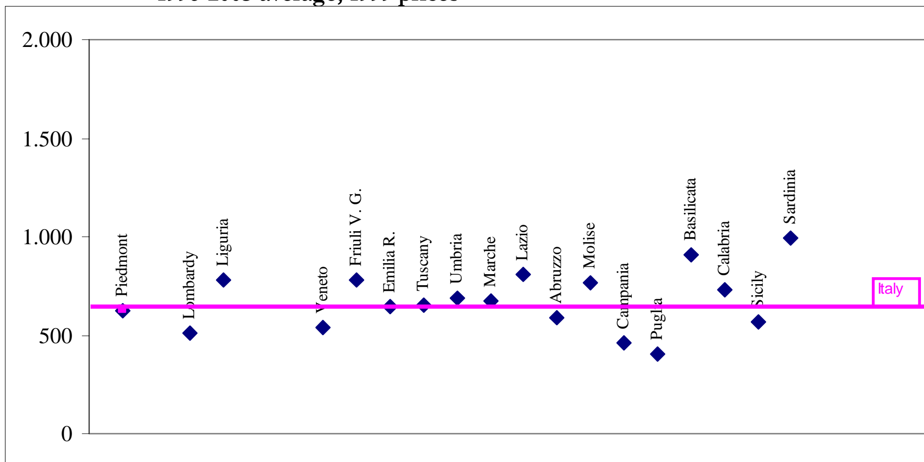


Figure V.4c Public sector: per capita capital expenditure - investment
1996-2003 average, 1999 prices



Source: DPS – UVAL RPA database

The policy stance in the reference period sought to narrow regional disparities, emphasising infrastructure investment and discounting the positive effects of transfers on capital account if they do not make sufficient public goods and services available in the regions.

Capital expenditure can also be analysed on another front. A close reading of the sources used as input by the RPA database enables us to conduct a detailed (although largely qualitative) evaluation of the two components. We can identify different sub-categories of expenditure in investment and, above all, transfers, and rank them according to their "capacity to generate development".

Prior to this exercise, however, we must ascertain whether the classification of capital expenditure adopted by the RPA database actually reflects the theoretical definitions adopted and is consistent with the keys normally adopted in interpreting the data, i.e. avoiding the registration of flows that are not associated with investment and transfers under these items. This examination was the main result of the full revision of the RPA time series[12] completed in the first half of 2005. The exercise included the reclassification of public expenditure through the evaluation of the actual content of some of the items in the sources on which the RPA database draws (see Box B).

[12] The revision increased the standardisation of the methodologies used for the entire time series and improved the representation of economic events, while leaving the reference universe unchanged. A second stage of revision is currently under way with a view to expanding the public sector universe at both the local level (entities used for various purposes by the regions, consortiums, enterprises, institutions and foundations) and national level, extending the list of national public enterprises included. This phase is scheduled to be completed by the end of 2005. See the Appendix.

BOX B – Adjustments to items in investment and transfers on capital account as part of the revision of the time series of the Regional Public Accounts

The prime objective of the recent general revision of the criteria adopted in the construction of the RPAs, which was completed in 2005, was to ensure the accurate representation of economic events while maintaining the distinguishing characteristics of the database. Of these, the most important is perhaps the nature of the data itself: the RPA database is essentially based on accounting data. The classification of flows under the various economic categories is consistent with the classifications adopted in the accounts of public entities, with little reclassification of the basis data sources.

The revision did not alter this approach, but it did introduce a number of reclassifications of basic data to eliminate double accounting of flows or – especially for capital expenditure – to enhance the information content of data by eliminating distortions (changes over time in the criteria for registering data, erroneous classifications, etc.) that would have compromised the analysis of the underlying economic phenomena.

Limiting our examples to the changes in capital expenditure items, the revision included:

1) the recognition of the tax credits introduced by Law 388/2000 (tax credit for investment in disadvantaged areas and tax credit for hiring), which were reclassified under capital transfers to enterprises, even though they are classified in the State accounts as adjustments to revenues, given that they are subsidies. This treatment was adopted for the State accounts as for fiscal year 2003, confirming the soundness of the choice;
2) the decision to no longer consider the transfer from the State to Cassa Depositi e Prestiti for Territorial Agreements and Area Contracts as expenditure. Now, the actual amount disbursed by the Cassa to enterprises is registered, as it represents the true benefit to the economy;
3) the exclusion of military spending from investment expenditure. The item was reclassified under current expenditure, partly in consideration of its controversial definition as "development spending".

It is clear that the analysis of the composition and dynamics of capital expenditure would have produced partially distorted results without these modifications, some of which regarded the main instruments of enterprise incentive policy used in recent years.

Based on the results of the revision of the time series, a detailed analysis of the content of the capital expenditure items was undertaken, with a focus on transfers, given their diversity. For example, they include expenditure items that are essentially contributions to investment (expenditure expressly intended to finance infrastructure) that directly increases the country's infrastructure endowment, expenditure associated with business incentives, whose capacity to "generate development" depends on a larger number of variables (the efficiency of the incentive mechanism, the conduct of the beneficiary, etc.) and expenditure for interest subsidies, whose classification as capital expenditure is debatable[13]. The analysis, which was restricted to State expenditures for which we have sufficiently detailed data sources,[14] led to the identification the following macro-categories of intervention under capital transfers (for more details, see Box C): grants for the construction of infrastructure and plant, expenditure to repay loans taken out by private entities but charged to the State, expenditure to restore and valorise the country's artistic and cultural heritage, expenditure on research and education, tax credits for investment, tax credits for creating employment and other tax credits, expenditure for the Revolving Fund for enterprises and negotiated planning, interest

[13] Contrary to the practice adopted in the public accounts, in the National Accounts the expenditure chapters for this expenditure are classified under the current part of the general government account.

[14] The data source used by the Regional Public Accounts in this case is the *Rendiconto Generale dello Stato* (General State Accounts).

subsidies for enterprises and other expenditure for enterprises. This classification can be considered the first result of this line of analysis. The ultimate objective is to provide – once the analysis has achieved a greater degree of detail and additional quantitative assessments are made – a more accurate understanding of the amount of capital expenditure, its composition and dynamics in recent years.

BOX C – The classification of transfers and a number of preliminary findings

The examination of capital transfers reported in the *Rendiconto Generale dello Stato* (General State Accounts) led to the identification of a number of macro-categories to which the individual spending chapters can be allocated. The following list offers a brief description of the policy initiatives in each category and a rough indication of their share in total State transfers during the period.

- *Expenditure in respect of the Revolving Fund for enterprises, Negotiated Planning, etc.*
  This category, the largest in terms of funding, includes the main incentives for enterprises (e.g. Law 488/1992, Negotiated Planning, etc.);
- *Tax credits for investment*
  Firms that operate in specific sectors for investment carried out in disadvantaged areas receive tax benefits;
- *Tax credit for creating employment and other tax credits*
  The tax credit for employment is granted for each new permanent job created in Italy, with an additional credit for each new job in the South. Another incentive, introduced in 2002, is directed at companies that carry out advertising investment. Over the period examined, tax credits and the Revolving Fund accounted for more than 50 percent of all transfers.
- *Expenditure to repay loans taken out by private entities but charged to the State*
  Under specific legislation, private entities can take out commercial loans that are repaid in whole or in part by the State. In many cases, the loans are used to finance infrastructure works (e.g. loans to Autostrade S.p.A. or railways operated on a concession basis). This category accounted for about 15 percent of total transfers;
- *Grants for the construction of infrastructure and plant*
  These are investment grants in the narrow sense of the term, i.e. grants to enterprises and households expressly intended to finance gross fixed investment such as the construction, extraordinary maintenance or acquisition of infrastructure or machinery, equipment and transport equipment. This item represented about 5 percent of all transfers;
- *Expenditure to restore and valorise artistic and cultural heritage*
  This heading mainly includes funding for projects to restore and valorise monuments, buildings and private property of such cultural value as to merit public support;
- *Expenditure for research and education*
  This primarily includes transfers for research incentives;
- *Interest subsidies*
  This category regards government subsidies for interest expense on loans granted to private entities;
- *Other expenditure for enterprises*
  This item includes generic financial support for firms operating in various sectors of the economy that is specifically earmarked for infrastructure or plant. It accounts for about 20 percent of total transfers.

Some groups of expenditure are more obviously “virtuous”: for example, *grants for the construction of infrastructure and plant* (assuming of course that the works financed are actually carried out), or the repayment of loans, where regardless of the timing of the repayments of the loan, the work financed may already be nearing completion or even finished. At this stage of the analysis, the verdict is less clear for other categories, which have evolved over time as a result - for example - of the gradual refinement of certain instruments after their introduction.

The analysis paints a differentiated territorial panorama, in which policies have not yet been fully implemented and regional disparities persist. At the same time, they also reveal the careful attention that must be paid to the quality of the available information, to the criteria and methods used to classify expenditure and to the differences (open to interpretation) within any given account. The overall framework of measuring public

action at the regional level can therefore be enhanced by examining the data on capital expenditure from additional perspectives.

VI. Capital expenditure and areas of intervention: priorities

The sectoral analysis of public expenditure, based on a 30-heading classification[15] adopted by the RPAs, addresses of number of key issues in the reading and interpretation of public regional intervention. The selection of the sectors on which to focus our attention is based on two fundamental criteria: the sectors that account for the largest proportion of resources for capital expenditure and those that appear to play the largest strategic role in achieving development objectives. These aggregates overlap only partially. Pursuing these two lines of enquiry, the section focuses on the search for and interpretation of existing territorial differences and suggests other issues for consideration concerning the role of investment and transfers in structuring public expenditure. The six main sectors account for 57.4 percent of total public sector capital expenditure. The fact that they receive such a large volume of resources enables us to conduct an ex post examination of the actual regional distribution of expenditure.
The sectors involved are:

- Industry and services
- Residential building and urban development
- General administration
- Energy
- Roads
- Other transport

A thorough understanding of the nature of the expenditure accounted for in these sectors offers us valuable material for correctly interpreting public intervention. It should be noted that there are sharp differences within these sectors in the roles assigned to investment and capital transfers.

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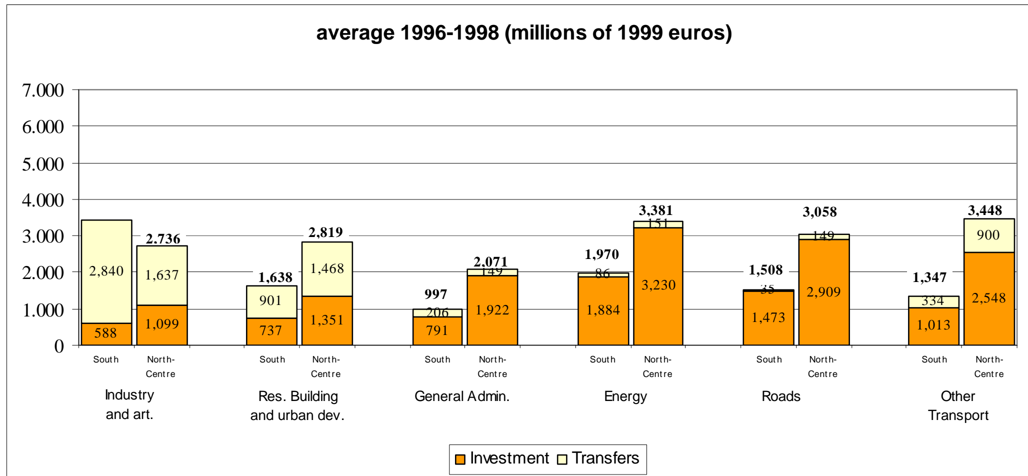
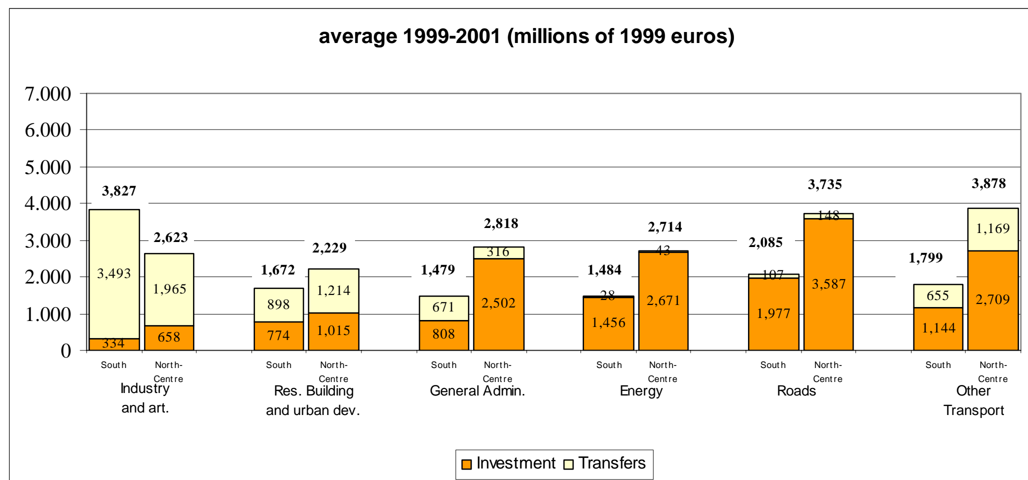
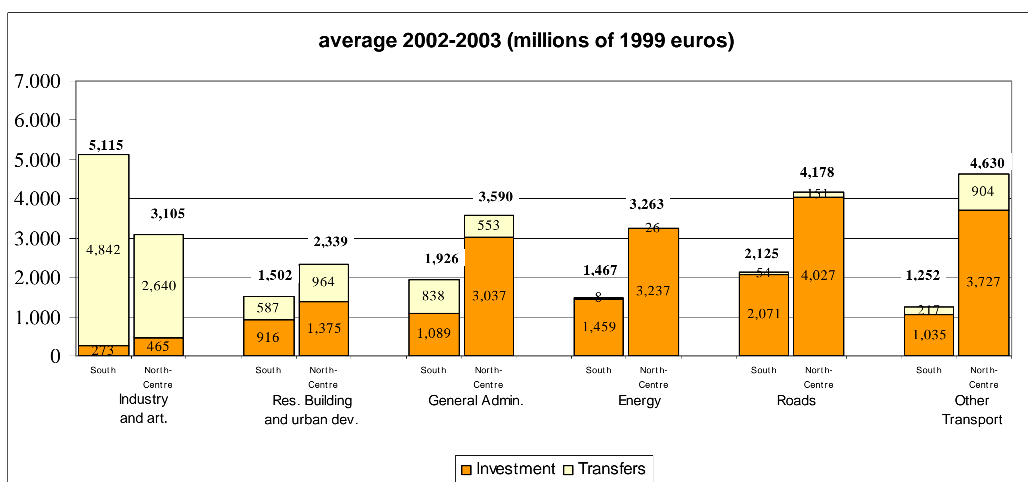
[15] The sectoral classification adopted, which is based on the information drawn from the accounts of the entities involved, is consistent with the classification of the functions of government (COFOG) adopted for the public accounts. In its Annual Report, the Department for Development Policies provides a sectoral analysis based on a reclassification into 23 sectors, which is better suited to expenditure planning and analysis than the accounts of the entities surveyed. The web page *www.dps.mef.gov.it\cpt-eng\cpt_classification.asp* describes the classification system of the RPAs and provides a reconciliation of the sectors given in the accounts and their riaggregations.

FigureVI.1 Public sector: distribution of capital expenditure among selected sectors; investment and transfers by geographical area







Source: DPS – UVAL RPA database

In some cases the disparity between the two components of capital expenditure are easily explained: in the sector *industry and artisans*, transfers to the South averaged about €4,800 million, compared with €273 million of investment, in 2002-2003. Between 1996 and 2003 the proportion of transfers in the sector increased, mainly as a result of two factors: the introduction in 2001 of the tax credit for enterprises (which in 2002 accounted for 37 percent of total transfers) and the contribution of the Technology Innovation Fund[16] (about 38 percent of the total in 2002). The large contribution made by transfers implemented under legislation financed with additional resources (for example, Law 488/1992, whose expenditure is accounted for under the budget chapters for the Technology Innovation Fund[17]) can explain the redistributive effects in the sector: the Centre and North receive about half the level of transfers channelled to the South.

All the other sectors show a more favourable ratio for the Centre and North. A more detailed analysis, which is not shown in the figures above, indicates that municipalities throughout the country shoulder the largest share (75 percent of the total) of investment in the building sector, which includes public residential building, urban development works, the preparation of zoning plans and expropriations for works in the public interest. Conversely, transfers to households and enterprises are mainly administered by the regional governments (about 70 percent).

Under *general administration* (capital expenditure for institutional bodies, ordinary maintenance, management and conservation of assets), spending is highly concentrated under investment and shows a rising trend over the entire period, especially in the Centre and North. Once again, municipalities manage the largest share of investment

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[16] The Technology Innovation Fund comprises the main legislation for State incentives to enterprises. These include Law 488/1992, Law 46/1982 (technological innovation), Law 64/1986, Law 219/1981 and Law 215/1992 (female entrepreneurship) as well as - since the reorganisation of the responsibilities of the ministries in 2001 - a number of Negotiated Planning instruments formerly managed directly by the Ministry for the Economy and Finance (1st-generation Territorial Agreements and Programme Contracts). The TIF is currently financed through the Fund for Under-Utilised Areas established with the 2003 Finance Act.

[17] As regards certain expenditure recognised in the Technology Innovation Fund and entirely attributed in the RPAs to the industry and artisans sector, it should be noted that as part of the methodological refinement of the database consideration is being given to allocating certain amounts on a sectoral basis using criteria that are more consistent with areas in which the beneficiaries actually operate. The scope for implementing this change depends heavily on the availability of more detailed information than that reported in the State accounts. This is the case, for example, with the calls for applications under Law 488/1992 for the tourism sector, which could be more appropriately allocated to that sector rather than to industry and artisans.

(about 68 percent on average from 1996 to 2003) and, at least in the South, are also the biggest source of transfers (in the Centre-North, this role is played by the regions).

The *energy* sector essentially regards two entities in the wider public sector, Enel and Eni, both of which are direct expenditure bodies that do not carry out capital transfers. Investment in the sector, which show a slight decline only in 1999-2001, appear directly associated with demand (electricity for Enel and gas for Eni), with a distribution that reflects the structural reality of the various areas of the country. The ratio between the two macro-areas of the country is the same as the ratio of population, although the proportion moves against the South over the period against a background of an overall increase in expenditure.

Municipalities also have a major role in expenditure on *roads* (the construction and maintenance of state, provincial and municipal roads, public lighting and infrastructure for ground transport). In a sector in which capital expenditure comes almost exclusively in the form of investment, municipalities account for 47 percent of the national total, followed by ANAS (State Road Agency) with 36.3 percent. Regional governments have only a marginal role in this area, with just 3.7 percent of total investment. Expenditure increased steadily over the period in the Centre and North, but declined in the South due to a contraction in spending by municipalities. The share of investment attributable to ANAS does not vary significantly over the period, with the proportion going to the South rising from 33 percent in 1996-1998 to 39 percent in the last period considered.

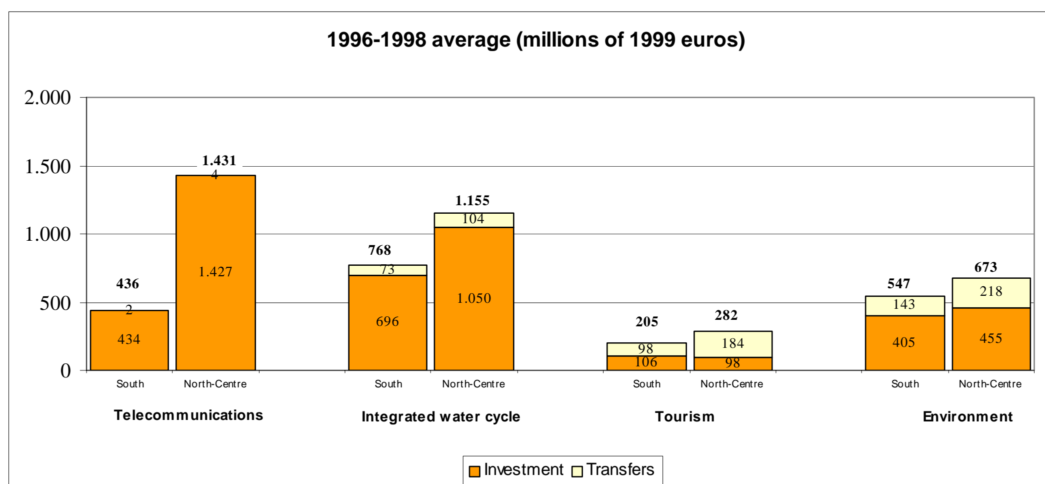
The opposite pattern was registered in *other transport* (capital expenditure to manage and build infrastructure for land, water and air transport infrastructure, including ports and airports, subsidies for railways managed on a concession basis, public transport and contributions to transport companies), where the ratio of resources going to the South averaged 25.9 percent in 1996-2003. Investment spending mainly regards the State Railways (about 75 percent), followed by Alitalia and Aeroporti di Roma, the Rome airport operator (18 percent), municipalities (12 percent) and the State (7 percent). The largest share of transfers is borne by the State, which accounted for an average of 51 percent in 1996-2003, followed by the companies formerly controlled by the Institute for Industrial Redevelopment (IRI) with 41 percent.

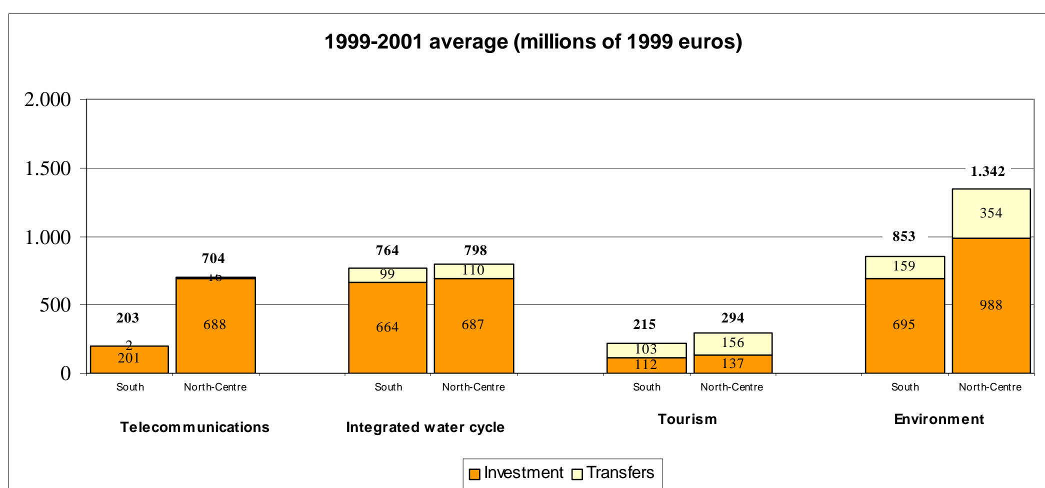
As noted earlier, the analysis of developments of the time series that account for the larges proportion of total public capital expenditure provides insight into the territorial impact of allocation choices by policy-makers but it can also be distorted by the very

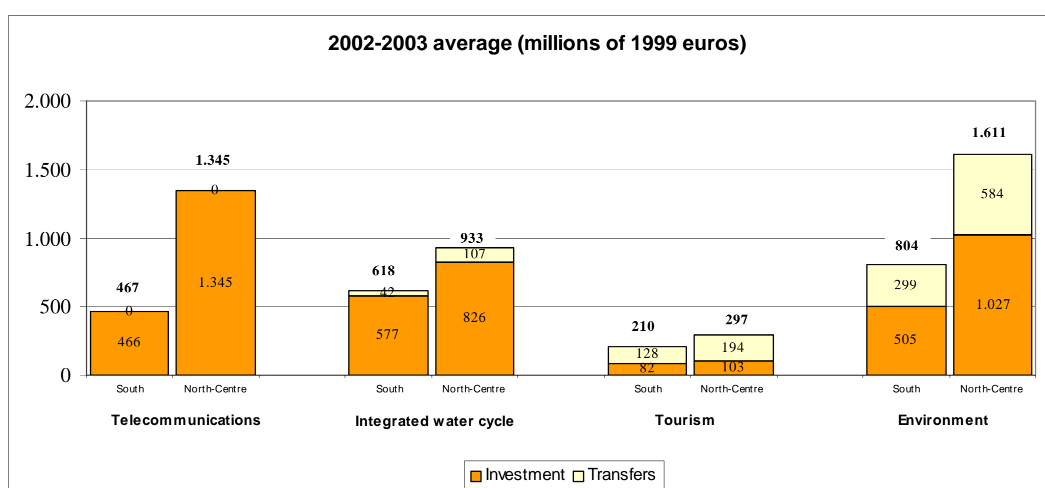
nature of initiatives to provide public services. The examination that follows offers a different perspective on the sectoral breakdown of capital expenditure. We interpret the impact of policy for the sectors that account for a smaller part of total spending but play a strategic role as potential drivers of regional development and are therefore the object of specific policies. Apart from transport, which we looked at above, the focus now shifts to:

- Telecommunications
- Integrated water cycle
- Tourism
- Environment

Figure VI.2 **Public sector: distribution of capital expenditure among selected sectors; investment and transfers by geographical area**







Source: DPS – UVAL RPA database

These four sectors represent different policy approaches. They include innovative sectors (such as telecommunications) receiving increasing attention from public policy-makers where public sectors entities (the public enterprises that differentiate the universe from general government) play a large, if not exclusive, role. They also include more traditional sectors (tourism) that are the focus of considerable policy attention with a view to reducing regional disparities, or sectors (the environment and water) that are the beneficiaries of considerable additional resources on capital account (EU Structural Funds and domestic resources).

In the *telecommunications* sector, where nearly all expenditure is for investment, spending is highly concentrated in the northern part of Italy. The entire country is witnessing strong growth, the introduction of new technologies, major private investment and the liberalisation of a former monopoly sector. In the early part of the period, the sector was almost exclusively accounted for by IRI, operating through Telecom, whose privatisation caused a decrease in the subsequent years, while in 2002-2003 ENEL, through Wind, administered the largest share of public resources. The remainder of the expenditure was carried out by the Post Company and RAI (the State broadcaster). In short, the sector is dominated by enterprises in the public sector, which therefore do not pursue any explicit goal of reducing regional differences.

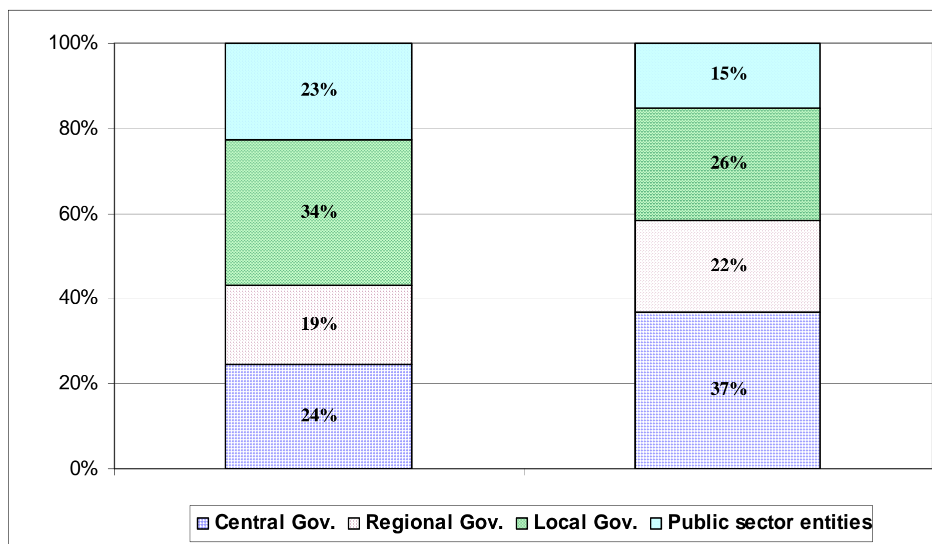
Our analysis of expenditure for the *integrated water cycle* (supply, reservoirs, aqueducts, waste water treatment and sewers) is important because it is an area in which certain regions trail the rest of the country by a large margin, with major policy initiatives dedicated to closing the gap (e.g., Community policy implemented through the 2000-2006 Community Support Framework). Resources have mainly concentrated on waste water and sewer infrastructure, with municipalities leading the way in funding such work. These initiatives go hand in hand with those for the *environment,* another priority of Community policy being pursued in the South. However, the expenditure financed by the Structural Funds has been channelled to projects under a broader definition of the sector and so has flowed to sectors that are treated separately in the accounts. Initiatives in this area are still highly unbalanced in terms of regional distribution. The Centre and North received 69 percent of capital expenditure in the 2002-2003 period. However, this also included hydrological protection and soil conservation, pollution abatement, safeguarding biodiversity and the landscape; rural development and the mountain economy and support for agriculture and forestry.

The volume of expenditure for *tourism* may be underestimated, perhaps more so than other areas given tourism's links with other sectors. For example, the amount for the sector recorded by the Regional Public Accounts on the basis of the classification in the accounts of public entities does not reflect a number of initiatives to support the tourism industry that are mainly financed with additional resources (e.g. the tourism calls under Law 488/1992 or tourism spending under Territorial Agreements or Framework Programme Agreements, which is allocated to industry or to other economic expenditure on the basis of prevalence). Among the four sectors selected, it shows the narrowest gap between resources for the South and the rest of the country. Moreover, transfers and investment in both areas of the country are also broadly in balance, with stable funding levels. Local authorities, especially the regions and municipalities, administer the lion's share of expenditure.

VII. Capital expenditure and levels of government: who, how and how much

Examining capital expenditure by level of government offers an additional confirmation of the interpretations set out earlier. Above all, it provides a glimpse of the role that the various government entities play in the two areas of the country. From a structural point of view, the weight of central government differs in the public sector universe for the two regions (see Figure VII.1): whereas central government expenditure amounted to 37 percent of the total in the South for 1996-2003, in the Centre and North it averaged just 24 percent. This confirms once again the different role of the State in the two macro-regions, which is aimed at stabilising and narrowing the North-South divide. If we examine the data in even greater detail, it becomes clear that it is central government policies (tax credit, Technology Innovation Fund, Territorial Agreements and Area Contracts) that sustain development spending in the South.

Figure VII.9 **Public sector: consolidated capital account expenditure by geographical area and level of government; 1996-2003 average - percentages**



Source: DPS – UVAL RPA database

Regional governments account for a larger share in the South (22 percent) than in the North (19 percent). However, in this case we need to account for the role of an exogenous component: Community funds. Although it is currently not possible to break down the RPA data by source of funding, we can affirm that Community resources mainly flow through the budgets of the South's regional governments (which are considered final expenditure units and managers of the measures under the Operational Programmes implementing the 2000-2006 CSF), increasing the volume of capital expenditure of the South and underscoring once again the rebalancing role of State and Community intervention.

The situation is reversed for the other two segments, as the share of local authorities and entities in the wider public sector is greater in the Centre and North than in the South. For the local authorities, the ratios in the North and South come to 34 percent and 26 percent respectively, while those for public sector entities are 23 percent and 15 percent.

Additional analysis of the data for local authorities shows that the effect is mainly generated by municipalities and universities.

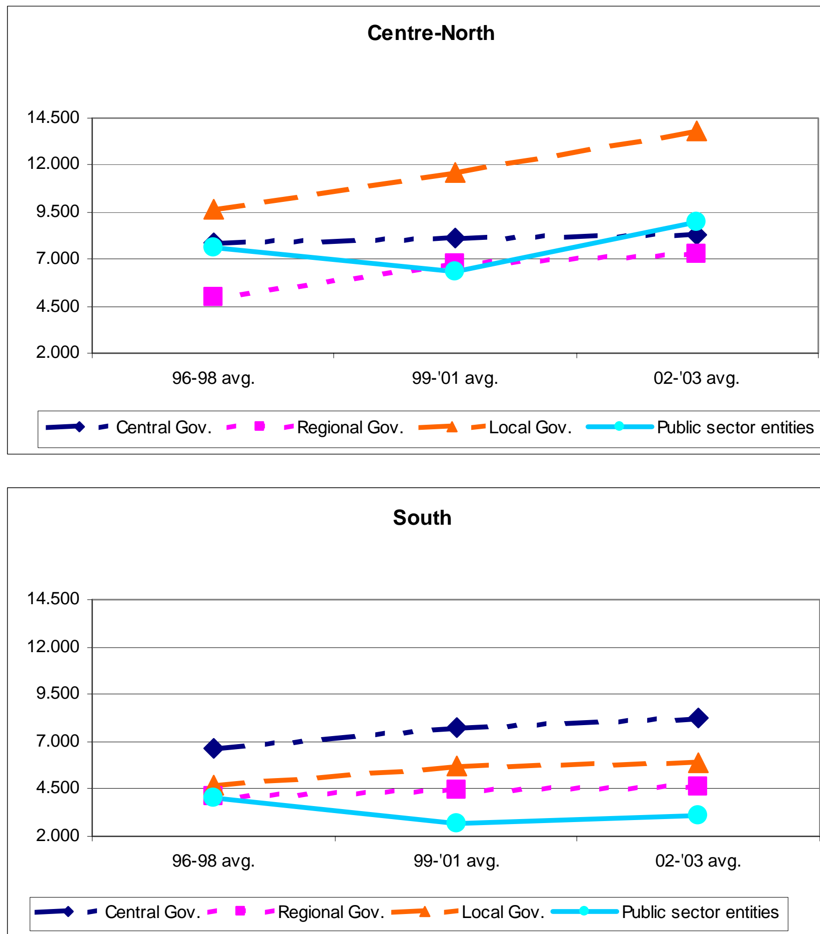
As regards the larger share for public sector entities in the North, the difference can be attributed to the fact that since these bodies are in fact commercial enterprises, they do

not pursue any express objective of redressing regional imbalances despite the actions of policy-makers. This effect is flanked by contingent circumstances, such as the upgrading of the busiest rail lines in the central and northern part of the country; or activities such as those of Fintecna, which mainly operates in the more industrialized areas of the country since it operates in the rationalisation and restructuring of companies struggling with industrial, financial and organisational difficulties; or Alitalia's investment in Lazio, where it is headquartered, and Lombardy, home to Italy's most important airport hub (Malpensa-Linate).

These structural aspects for the 1996-2003 period as a whole tell us little about how spending has evolved during that time and how the effects of the federalist policies implemented in the middle years of the period have manifested themselves. The figure below (Figure VII.2) offers a number of indications, reporting the overall average values for the three sub-periods for the two areas.

Taking account of the different level of capital expenditure in the two areas attributable to the different size of the territory they cover, central government increased its expenditure in the Centre-North from €7,869 million at constant prices in 1996-1998 to €8,329 million in the last two-year period, with an average annual rate of increase of about 6 percent. In the South, the same expenditure rose from €6,613 million in the first period to €8,223 million in 2002-2003 (again at constant prices), with a growth rate of around 24 percent, chiefly due to a sharp increase in the middle period. The large rise in development spending in the South confirms policy-makers' devotion to narrowing regional disparities through initiatives designed to boost the infrastructure endowment of the region.

Figure VII.2 Public sector: capital expenditure by level of government; millions of euros at 1999 prices



Source: DPS – UVAL RPA database

By contrast, the largest rise in expenditure by the regions came in the Centre-North: outlays rose from €4,951 million in the first three-year period to €7,314 million at the end of the overall period, a rise of 48 percent; in the South, they increased from €4,150 million to €4,635 million, or 12 percent.

Local government expenditure shows a similar pattern, rising by 44 percent in the North (from €9,621 million to €13,831 million) and 25 percent in the South (from €4,703 million to €5,889 million). Note also that in the South expenditure accelerated most rapidly between the first and second periods, when the growth rate reached 21 percent.

Reading the findings for the various levels of government jointly, two aspects emerge:

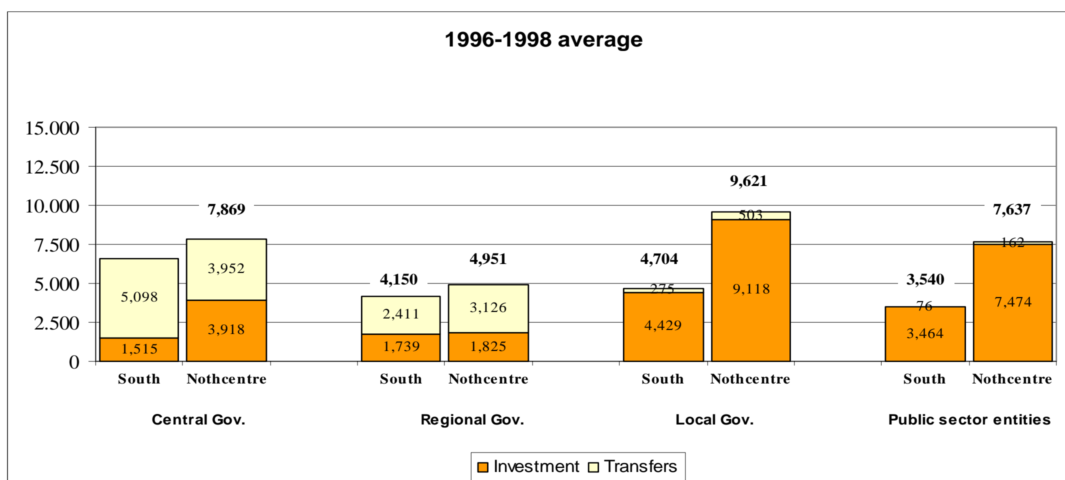
- local authorities spend nearly twice as much as regional governments. This does not mean that the latter play a secondary role. Rather it reflects the principle of subsidiarity now enshrined in Title V of the Italian Constitution, which establishes that capital expenditure shall be carried out through local authorities and that higher-level government shall mainly operate through transfers to municipalities and provinces;
- the policy of devolution has been implemented more fully in the Centre and North, confirming the fact that decentralisation is highly influenced by an area's level of economic and administrative development.

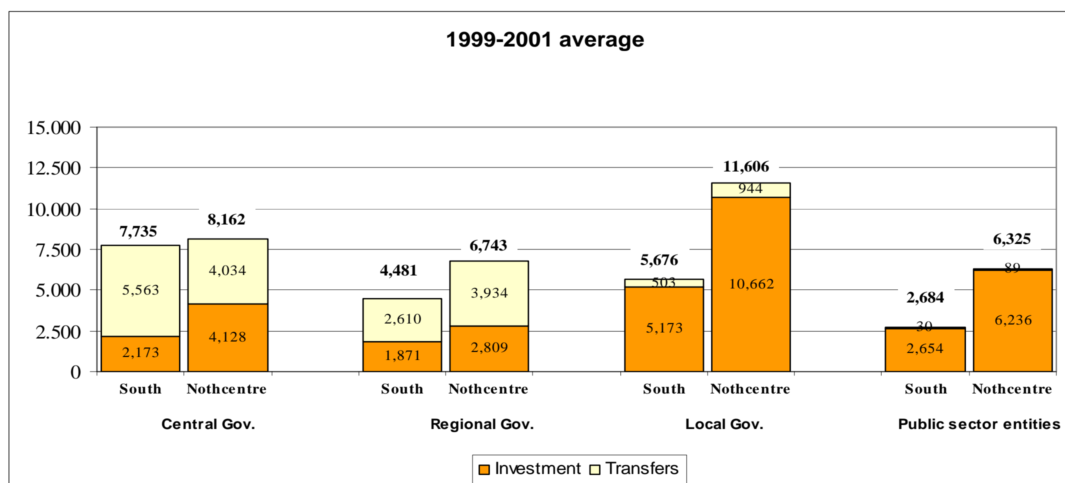
Developments in expenditure by non-general government entities are unfavourable for the under-utilised areas of the country: in the Centre-North expenditure rose by 18 percent over the entire period (from a higher starting point), while in the South it dropped by 13 percent, further evidence of that these organisations do not play a role in rebalancing regional differences.

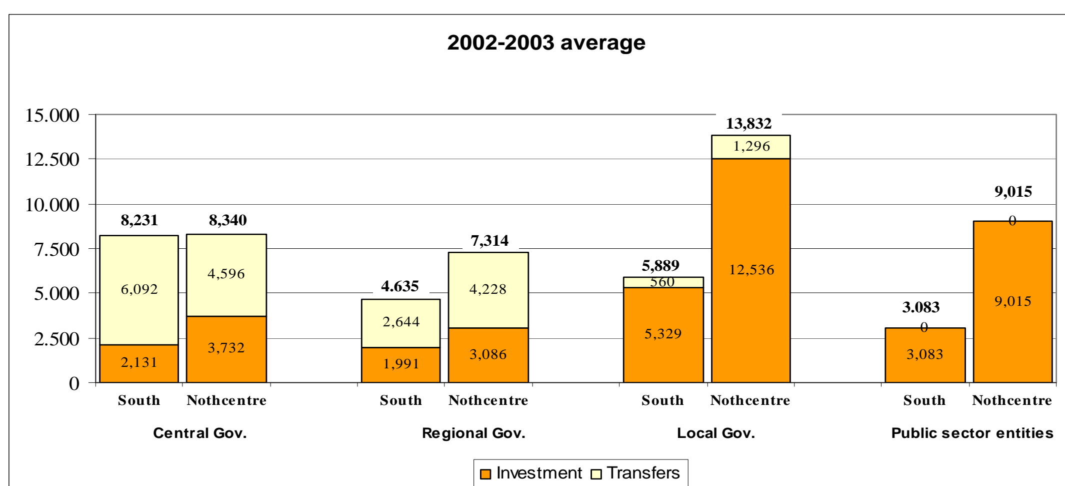
We have examined who is spending and how much is being spent, but it would also be interesting to know how the money is being spent. In other words, we would like to investigate (as we did for total expenditure) how the different levels of government divide their resources between investment and transfers on capital account, and how these sub-aggregates evolved over the period (see Figure VII.3).

Figure VII.3 shows that central government disburses most of its expenditure in the form of transfers: out of an annual total of about €7,400 million in 1996-2003, no less than €5,500 million (74.2 percent of total central government spending) are classified as transfers through the development policies for disadvantaged regions, the key instruments of which are tax credits, Territorial Agreements and the Technology Innovation Fund.

Figure VII.3 Public sector: distribution of capital expenditure (National Accounts definition) among levels of government, investment and transfers by geographical area (1999 prices)







Source: DPS – UVAL RPA database

These economic policy initiatives also explain the rising trend over the three periods. Certain instruments were first introduced between 1999 and 2001, and the launch and consolidation of their deployment is reflected only in the final years of the period. The distribution between investment and transfers is more balanced in the Centre-North, where out of an annual total of about €8,100 million, transfers account for about €4,100, or 51 percent. On the investment side, it is important to note that 28 percent of the total for the northern part of the country (equal to 19 percent of the country total) is concentrated in Lazio owing to the fact that the main central government offices are located in that region.

Regional governments also display a marked preference for capital transfers: 59 percent of the €10,600 million spent in Italy by those authorities was disbursed in the form of transfers to enterprises and households. Although the share of transfers in the two macro-areas is very similar on average (58 percent for the South, 60 percent for the Centre-North), a dynamic analysis of developments shows the amount of transfers rising substantially in the Centre-North, from about €3,100 million to about €4,200 million between 1996 and 2003. This pattern is not visible in the data for the South, where the figure rose more moderately, from €2,400 million in the first sub-period to €2,600 million in the final two-year period.

Unlike the levels of government just examined, local government (which among other entities includes municipalities and provinces) spends about 92 percent of its resources in investment in both the South (an annual average of about €5,400 million between 1996 and 2003) and the Centre and North (€11,400 million). The rising trend over the period is also similar in the two parts of the country. These findings are fully explained by the responsibilities assigned to these authorities, which as we saw in greater detail in the previous section include the following range of activities: construction and operation of the facilities of the various entities in the segment (classified as general administration costs), school and university building, residential building, the integrated water cycle, environmental rehabilitation, sports and recreation, safeguarding and developing artistic and cultural heritage and local road management.

The predominance of investment expenditure by the entities in the broader public sector is no surprise, given that they must carry out major investment in infrastructure in order to deliver public services such as transport, roads, energy and telecommunications.

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APPENDIX: The database of the Regional Public Accounts

The database of the Regional Public Accounts produces a consolidated account for the public sector[18] at the regional level of financial flows on current and capital account. The data can be aggregated in a number of ways: by year (from 1996), economic category, sector of intervention and entity. This variety lends the database extraordinary flexibility, enabling the generation of data for each aggregate for both universes (general government and the public sector) and, at the same time, making it possible to cross territorial data with other information.

The RPA working group consists of a Central Team under the Public Investment Evaluation Unit at the Department for Development Policies and 21 operational units located in each region or autonomous province. In essence, the network is not only an extensive physical network but also a set of shared methods.

In 2003 the timeliness of the information on capital expenditure improved with the development of the public capital expenditure indicator. This tool provides information on the geographical location – by macro-area and region – of general government capital expenditure with a lag of just six months, consolidating the RPA-indicator system[19] to improve the timeliness of information on capital expenditure.

A variety of activities were undertaken and implemented in 2004: the opening of the database to scholars and researchers with the launch of a research project ("The use of the RPA database: a package of applied research studies") aimed at using the available data to investigate a selected range of issues and themes; the transformation of access to the database from an "experimental, mediated service" to a "direct-access public service" while strengthening the logical, technical and management structure of the RPA system; and inclusion of the system in the National Statistics System (SISTAN) as from the National Statistics Programme for 2005-2007.

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[18] In addition to general government entities, the public sector includes the State Railways, the Post Office Former, State Monopolies Authority, Special/Municipalised Companies, the National Air Navigation Authority, ENEL, ENI, Italian Tobacco Authority, former IRI companies and companies owned by the regional governments.

[19] This comprises the integrated information from the RPAs and the estimate generated by the indicator. The indicator was developed by the DPS to provide regionalised estimates of general government capital expenditure with a lag of just six months from the reference period. For methodological details, see "L'Indicatore anticipatore della spesa pubblica in conto capitale: la stima regionale annuale" (various authors), Materiali UVAL, Numero 1, September-October 2004. The publication is available at www.dps.mef.gov.it /materialiuval/ml.asp.

The database is also undergoing revision[20], in a two-stage process:

- **stage 1**, completed at the end of December 2004, involved the reconstruction of the time series of revenues and expenditures, with uniform methodological treatment of the sources, for the period 1996-2002, with an unchanged universe. As regards the universe of entities in the broader public sector, work has focused on ensuring the full consistency of time series at: the individual entity level by defining a consistent methods (using the same methodologies for the entire time series), between entities by setting clear rules for classification in the RPA categories and sectors, often analogous for entities belonging to the same segment of the universe), and between levels of government by developing recognition rules to ensure uniformity of treatment of analogous flows generated by entities operating at the supra-regional level or by entities operating at the local level. Finally, the process also refined the methodology for producing provisional estimates, which are necessary when the final figures are not available with the speed required by the RPA database.

- **stage 2**, which will be completed by the end of 2005, is devoted to expanding both the central and local components of the universe.

  The reference universe of public-sector enterprises, which has been included in the database since its inception, was originally defined on the basis of EU criteria[21]. The revision seeks to expand the coverage of the database, adopting a flexible approach under which the various uses of the RPA data call for different perimeters for the public sector.

  One important development is the inclusion of the local public sector in the database, which is recorded at a detailed territorial level by the Regional Teams. Previously, it had only been implicitly covered in the database through the data on transfers to them from higher-level entities.

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[20] For more details on the revision of the RPA time series, see chapter III and the methodological appendix on the Regional Public Accounts in DPS, *Rapporto annuale 2004*.

[21] The definition of the public sector is in line with the requirements of the verification of the principle of additionality of Community funding over national spending. In this case, in addition to general government the public sector includes entities that: operate in the public services segment; formally belong to the public sector, in that public-sector bodies exercise direct or indirect control over their management and/or provide financing to these entities; have in the past or may in the future be eligible to obtain Structural Funds.

The inclusion of this component, which is not examined in a comprehensive manner by any other source, was only possible thanks to the extensive coverage of the territorial network. The component is affected by the extreme variability of sub-regional contexts and is therefore highly varied, both in terms of the type of entity and their coverage by the Regional Teams

This variety required the careful conversion of the economic accounts that typified most these bodes to the financial accounts used in the project as a whole. It also called for a detailed analysis of the types of expenditure in order to permit uniform classification by the various regions.

In December 2005, the timetable of RPA series revisions will be fully implemented. It will involve the publication in year t of the provisional series for year t-1 and the concomitant updating of the series for the last three available years on the basis of the updates for the first and second stages. On a regular basis (every 5 years) the entire time series will be revised to incorporate and standardise methodological improvements and changes in the universe.

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