Sandro Momigliano-Pietro Rizza: Temporary measures in Italy: buying or losing time?

In this paper we examine the effects of temporary measures on the Italian budget in the period 1997-2006 and assess their appropriateness. We also analyse the role of extraordinary operations which reduced the level of public debt in the same time frame while leaving the net worth of the public sector broadly unchanged. Our analysis suggests that temporary measures and extraordinary operations were used mainly to comply formally with EU fiscal rules without incurring the economic and political costs of more structural adjustment. Policy-makers bought time in a worsening cyclical context, expecting the recovery to be imminent. Ex post information reveals that the timing of this strategy was wrong. In a broader temporal perspective, the use of extraordinary operations has made it possible to postpone more permanent actions which would have improved the sustainability of Italian public finances. It is difficult not to conclude that precious time has been lost designing an equitable distribution across generations of the expected costs of the upcoming demographic transition.

JEL classification: H62, H20, H50, E69.

Keywords: temporary measures, economic cycle, budgetary policies.

1. INTRODUCTION

Temporary measures are not new in Italy (Sartor, 1998; Locarno and Staderini, 2007) but they have constantly played a crucial role in the design of Italian fiscal policy only since the Maastricht Treaty in 1992. The Treaty (Art. 104c) requires member states to avoid deficits in excess of 3 per cent of GDP, making this one of the convergence criteria for the adoption of the euro. It does not prevent member states using temporary measures to comply with the threshold.

Without temporary measures it is unlikely that the Italian fiscal consolidation of the 1990s would have achieved its main objective, i.e. Italy's participation in EMU from the beginning: in 1997 the deficit would probably have been over the threshold of 3 per cent of GDP² and it is very unlikely, had that been the case, that the list of EMU participants drawn up in the spring of 1998 would have included Italy. As we will show in this study, there has been no waning of the role of temporary measures since.

Of course, other EU countries that have had difficulty keeping the deficit below 3 per cent of GDP have also commonly resorted to temporary measures (Koen and van den Noord, 2005). Since their systematic use may contrast with the objective of achieving a sound fiscal position, the reform of the Stability and Growth Pact (SGP) in 2005 excluded the effects of temporary measures when determining the budget balance relevant for the multilateral surveillance procedure. Before the reform, the relevant balance excluded only the effects of the cycle.

In this paper we examine the effects on the budget balance of the temporary measures introduced by the Italian government in the period 1997-2006. We also assess whether it was appropriate to resort to them, as they were often aimed at formally respecting the EU fiscal rules while postponing the necessary structural adjustment. The starting year of our analysis reflects the availability of data.³ Each temporary measure has had its specific motivations, independent from its immediate impact on the balance. An evaluation of these aspects is beyond the scope of this study.

After 1997, the Government planned to progressively replace temporary measures with more structural measures. This was also consistent with Italy's commitment, alongside the other European partners in the SPG, to reach a budgetary position in balance or in surplus in the medium term. This was true

Bank of Italy, Structural Economic Analysis Department, Public Finance Division. The views expressed in this paper are those of the authors and do not necessarily reflect those of the Bank of Italy. We wish to thank Daniele Franco and Stefania Zotteri for very helpful comments, and Renzo Pin for technical support. The opinions expressed do not necessarily reflect those of Bank of Italy.

²The decision to speed up the consolidation process and target a deficit lower than 3 per cent of GDP in 1997 was taken relatively late, in the autumn of 1996. Given the short time available and the large gap that had to be closed (in 1996 the deficit was still 7.0 per cent of GDP), it would have been extremely difficult for the Italian Government to reduce the deficit below 3 per cent of GDP with structural measures alone.

³ Since 1997 the Bank of Italy has systematically provided information, in its official publications, on temporary measures affecting the budget balance. To extend the analysis of temporary measures backwards, capital taxes can be used as a proxy for a major component of temporary measures, which includes tax amnesties and extraordinary levies. Their average ratio to GDP is 0.2, 0.4 and 0.3 respectively in the 1980s, 1990s and in the years 2000-06.

until 2000.⁴ After that year, substantial use was again made of temporary measures.

In the theoretical literature and in policy practice different reasons have been given to justify the use of temporary measures.5 At macro level, they may allow fiscal rules to be complied with in years of political or economic emergency.6 In periods of economic downturn, their non-permanent nature may sometimes help fiscal authorities avoid hampering a cyclical recovery.7 At micro level, they can be used to attain specific goals, such as inducing taxpayers to declare hidden assets (Das-Gupta and Mookherjee, 1996 and 1998), correcting distortions caused by tax rules, or temporarily patching up a defective regulation.8 With particular regard to tax amnesties, other arguments have been offered in the literature, including self-selection (Franzoni 1994; Cassone and Marchese 1995), insurance effects (Andreoni 1991, Franzoni 1994 and 1996), and economizing on prosecution costs (Chu, 1990, Kaplow and Shavell 1994).

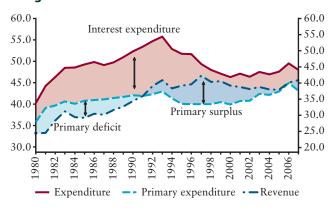
In spite of these potential benefits, temporary measures are a source of major concerns. First, their use reduces government accountability as they can contribute to window-dressing and reduce budget transparency. Second, in a situation of fiscal imbalance, temporary interventions might delay the necessary structural adjustment, which may prove to be very costly. Moreover, at micro level, the use of temporary measures can itself introduce new distortions in the economy and have perverse effects on taxpayers' expectations; a typical example of this is given by tax amnesties, which might encourage greater tax evasion in the future, as some studies of the Italian experience have also shown (Marchese, 1997; Fiorentini and Marchese, 1997).

Identifying temporary measures and assessing their effects is not always straightforward. In the paper we use the criteria adopted by the Bank of Italy and compare them with the guidelines for identifying these measures recently provided by the European Commission. We also analyse the role of extraordinary operations that have reduced the level of public debt while leaving the net worth of the public sector broadly unchanged. As in the case of temporary measures, it appears that these operations have been at least partly motivated by the wish to comply with the Maastricht Treaty rules¹⁰ without incurring the political or economic costs of more structural adjustment.

The Italian government's use of temporary measures and extraordinary operation needs to be assessed in relation to the overall development of Italy's public finances. In the years 1998-2006 these deteriorated rapidly and uninterruptedly. The primary balance, at 6.6 per cent of GDP in 1997, shrank to virtually nil in 2006 (Figure 1). The extent of this deterioration was not immediately clear in the public debate. In the early years, the worsening of the primary balance was offset by the reduction in interest payments. Moreover, initial estimates of the yearly balance (made public by the National Institute of Statistics in the spring of the following year) were systematically more favourable than later assessments. Only in 2005 did the European Council identify the presence of an

Figure 1

General government expenditure, revenues and budget balance



Source: National Institute of Statistics (Istat). Data for 2007 are government forecasts from the DPEF update for the years 2008-2011, presented in September 2007.

⁴ In this paper we report the budget balance in 2000 net of UMTS receipts, as this aggregate was the focus of the policy debate. In particular, the European Council referred to it in its Opinions concerning the developments in public finances in member states. The European Commission also reported the deficits net of UMTS receipts in its official publications (see e.g. European Commission, 2001, page 11). Accordingly, UMTS receipts are not included in the temporary measures.

⁵ A review of the literature and a summary of the main results can be found in the section "Tax policy and administration" of the World Bank website.

⁶This role for temporary measures is a consequence of the fact that fiscal rules need to be relatively simple. For a discussion see Kopitz and Symansky (1998).

⁷Temporary measures do not necessarily have less impact on the cycle than structural ones, especially if the latter have a positive impact on expectations or, for example, enhance the system of incentives to work.

⁸ A typical example of this might be a real-estate tax amnesty in the case of residential areas that are not recognized as such because of bureaucratic delays. However, real-estate tax amnesties risk encouraging economic agents to build without a licence in protected areas in the belief that they can take advantage of the next general amnesty.

⁹ A number of studies of the impact of one-shot and intermittent amnesties exist, including Alm and Beck (1991, 1993), Cassone and Marchese (1995), Crane and Nourzad (1992), Das-Gupta and Mookherjee (1998), Dubin, Graetz and Wilde (1992), Graetz and Wilde (1993), Mikesell (1986), Stella (1989) and Uchitelle (1989). There appears to be no rigorous empirical work, as yet, evaluating permanent tax amnesties. Broadly, these studies find that the impact of one-shot amnesties, when preduring and post-amnesty effects have been considered, is highly context-dependent. However, all empirical studies that examine intermittent amnesties found that they had negative revenue effects.

¹⁰ The Treaty requires that the debt ratio be "sufficiently diminishing and approaching the reference value [60 per cent of GDP] at a satisfactory pace".

excessive deficit and ask the Italian government to redress the situation by 2007 at the latest.

In terms of the structural primary balance, i.e. the primary balance net of the effects of the economic cycle and temporary measures, there is a rapid worsening in the first six years of the period considered (more than 6 percentage points of GDP) and a sizeable improvement (almost 2 percentage points) in the following three years (see Marino et al., 2007; Kremer et. al., 2006).

2. DEFINITION AND IDENTIFICATION

Temporary measures and the budget balance

Since 1997 the chapter "The Public Finances" in the Bank of Italy's Annual Report has included information on temporary measures affecting the budget balance. The criteria followed to identify these measures have evolved slightly over time, due also to the appearance of new types of operations.

In this Section we provide an updated description of these criteria, and brief discussion of them. They are generally in line with the recommendations of the European Commission for identifying temporary measures in the context of multilateral budgetary surveillance (European Commission, 2006). A measure is considered temporary if its impact on the budget balance is deployed for no longer than three years or if it shows a high degree of uncertainty. Deficitincreasing temporary measures are usually not taken into account. This caution reflects the fact that the aim of the analysis is to define a *prudential* structural balance to highlight potential risks for the public finances.

Whether to account for deficit-increasing temporary measures and how to do it often require some arbitrary judgments. An important example is the Italian government's decision in 2006 to cancel the State Railways' debt towards the State for the creation of the high-speed rail infrastructure. According to ESA95, the entire amount written off (0.9 per cent of GDP) was treated as a capital transfer and attributed to 2006 (the year of the cancellation), although it helped to finance investment for some years.

The European Commission considered this operation a temporary measure (European Commission, 2007). This solution has the drawback of excluding from the structural balance a component of public expenditure only because it would be unreasonable to attribute it fully to 2006. Note that the high-speed rail programme is still in progress and will require additional resources to be transferred to the State Railways in the future.

In our analysis of structural developments, the impact of the debt cancellation on the budget has been spread over the years 2003-06, approximately matching the observed surge in investment in high-speed infrastructure carried out by the State Railways (an entity outside the general government). In other terms, in each year of the period 2003-05 the structural balance has been worsened by an amount equal to a quarter of the debt cancelled in 2006, as if the State had transferred resources to the State Railways for that amount. Correspondingly, in 2006 only three quarters of the cancelled debt are considered to be the effect of a temporary measure.

To identify temporary measures it is necessary to define an objective benchmark for the path of the fiscal variable in a no-policy-change context. This is fairly straightforward for revenue items, but it is often difficult for expenditure. Temporary measures are therefore most often identified on the revenue side. The same asymmetric treatment is followed by the Commission and in the literature (see e.g. Koen and van den Noord, 2005).

The effects on the budget balance of events outside the control of the government are usually not counted as temporary measures. In this respect, the indicative list of temporary measures proposed by the European Commission (2006) allows only four categories of events to be taken into account: rulings of the European Court of Justice, decisions of the European Commission, emergency costs associated with major natural catastrophes, and the same with military actions. In the period covered in this study, we include in our definition of temporary measures only the exceptionally large impact on the balance of the European Court of Justice's ruling of September 2006 regarding VAT. In particular, we regard as temporary, and thus exclude from the structural balance for 2006, the entire estimate of the refunds due to

¹¹ A brief description can also be found in Banca d'Italia (2006).

¹² A tentative list of categories of operations that could be considered one-off or temporary measures had already been included in European Commission (2004).

¹³ If a measure is extended repeatedly, it is considered "temporary" until the extension becomes a routine. At that point, the effects of that measure are attributed to non-temporary measures starting back from the year of its first introduction.

¹⁴ In Europe, the exclusion of deficit-increasing temporary measures is justified by the fact that a government may be tempted to present a deficit-increasing permanent measure as temporary in order to improve its structural balance.

¹⁵ Some exceptions are allowed and included in this study. In particular, we include the change in the timing of pension payments and the lengthening of severance payment lags for public employees. Temporary measures also include sales of real estate when their amount is exceptionally large. Sales of real estate are included in the budget among public investments with a negative sign.

Table 1
Estimates of temporary measures and extraordinary operations on the public debt (as a percentage of GDP)

Year	Temporary measures		Extraordinary operations on	
	Bank of Italy	European Commission ²	public debt¹	
1997	1.4	-	0.9	
1998	1.1	-	1.5	
1999	0.1	-	1.4	
2000	0.2³	-	2.2	
2001	0.9	-	0.4	
2002	1.7	-	2.9	
2003	2.2	1.7	2.1	
2004	1.9	1.3	0.7	
2005	0.9	0.5	0.6	
2006	-0.24 / -1.3	1.2	-0.4	
Average	1.0 (d)	1.2	1.2	

¹ Sales of financial and real assets, variations in the deposits held by the Bank of Italy and operations of debt restructuring. Figures in this column have been marginally revised in March 2008 (modifying the version of December 2007) to correct for a computational mistake. ² Calculated as difference between the structural and the cyclically adjusted budget balance published in the 2007 Spring Forecasts. ³ Excluding sales of UMTS licences. ⁴ Excluding the effect of the ECJ ruling on VAT (-1.1 per cent).

taxpayers for unduly paid taxes (1.1 per cent of GDP) for the period from 2003 to September 2006, which will be paid starting in 2008. It was decided to include refunds for 2006 among temporary measures because the ruling, de facto, has no effect in the following years, as the Italian government, while incorporating it into national legislation, also modified fiscal regulations to compensate for the revenue shortfall from 2007. While it is necessary to exclude from the structural balance the effects of this exceptional factor, the latter was not a voluntary action on the part of government and is not included in the analysis of Section 3.

The temporary measures included in our analysis are listed in the Appendix. Table 1 contains our estimates of the total effects of temporary measures on the budget balance. Even if the European Commission guidelines are similar to ours, the estimates tend to be slightly different.

Extraordinary operations and public debt

In recent years the Banca d'Italia's official publications of have provided information on extraordinary operations affecting the public debt when their impact has been particularly large. The analyses have usually focused on sales of real and financial assets and on debt restructuring, as these operations leave the net worth of the public sector broadly unchanged but have a temporary impact on the level of the debt (Table 1). In this respect they can be considered a type of "window-dressing".

3. BUYING TIME AT THE RIGHT TIME?

Temporary measures were used extensively in 1997 (1.4 per cent of GDP) owing to the large adjustment required to join the EMU at a time of still negative cyclical conditions. A sizeable reduction in interest payments was expected in the following years, which should have made up for the phasing out of the temporary measures. However, the use of temporary measures diminished only until 2000, and became once more substantial afterwards. In the whole period 1997-2006, the average impact on the net borrowing amounted to about one percentage point of GDP per year, with a peak value of 2.2 per cent in 2003.

¹⁶ The European Commission, instead, included among the temporary measures only the estimate of refunds of the undue amounts for the years 2003-2005 (0.75 per cent of GDP; European Commission, 2007). The estimate of the refunds for the unduly paid taxes in the first three quarters of 2006 (0.35 per cent of GDP) was not included in the effects of temporary measures and was therefore left in the structural budget.

¹⁷ Currently available data suggest that refunds were considerably overestimated and it is very likely that the amount included in the 2006 deficit will be substantially reduced as soon the relevant information is complete.

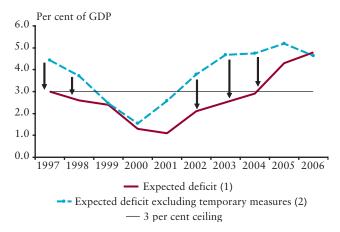
¹⁸ As mentioned earlier, UMTS receipts are not included in temporary measures but are directly excluded from the nominal balance (see footnote 3).

¹⁹ The effects of the ruling of the European Court of Justice are not included in this calculation (see Section 2).

To understand the role of temporary measures in the period under scrutiny, in Figure 2 we plot the government forecast of net borrowing for the year t published in September of the same year²⁰ and the same estimate, net of the effects of temporary measures.²¹ In a similar exercise for some EU countries, Koen and Van der Noord (2004) used the first notification in year t+1 as the real-time proxy of the deficit for year t.²²

In five years out of nine the effect of temporary measures is necessary, according to the government forecasts, to bring the deficit below the 3 per cent ceiling. Moreover, in 1999 and in 2001 they may have been used to achieve this goal, given the uncertainty of fiscal forecasts. It is also worth

Figure 2 "Real time" expected net borrowing and temporary measures



- (1) The source for the expected deficit is the Planning and Forecasting Report for various years.
- (2) Temporary measures in 2001 include securitizations amounting to 0.56 per cent of GDP, which have been excluded from net borrowing in 2002 following a Eurostat decision.

noting that, when the expected deficit is well above the ceiling, as in 2005 and 2006, temporary measures decline.²³

Overall, these findings suggest that temporary measures have been used mainly to buy time, allowing the fiscal authorities to postpone introducing more structural measures while still complying with the fiscal rules. This, in turn, raises the question why the authorities chose to buy time. At least part of the explanation has to do with the notion, mentioned earlier, that for a given budgetary impact temporary measures have less impact on economic activity than permanent actions. Indeed, policy-makers often justified the use of temporary measures to comply with fiscal rules as a means of minimizing the negative impact in a macroeconomic context perceived to be adverse.²⁴

Government statements aside, there is some evidence of temporary measures being used to avoid hampering the desired cyclical recovery.²⁵ Real-time estimates of the output gap indicate that the cyclical position was perceived as negative in every year of the period 1997-2006 (Figure 3). Moreover, there is a negative, although quantitatively small, correlation between the change in the size of temporary measures and the real-time estimates of the output gap, which suggests a weakly counter-cyclical use of such actions.²⁶

It is probably more interesting to check whether, according to current information, the timing of this "buying-time" strategy – i.e. waiting for better economic conditions – has been broadly correct (Figure 3). Clearly, the answer to this question is "no". Temporary measures peaked in 2003, when GDP was still close to potential, and declined afterwards, when the cyclical low was reached. The correlation between the change in the impact on the budget of temporary

We use real-time government estimates for net borrowing instead of the currently available estimates because the two sets of data differ considerably in some years and because the focus here is the analysis of government intentions rather than outcomes. The time of year selected (September) was based on the fact that many temporary measures were not included in the initial budgetary plans but decided in the course of the year, reflecting new information on budgetary developments.

²¹ As government forecasts do not specify the expected impact of temporary measures we use our current estimates, adjusting for specific cases. For example, the figure for 2001 includes the receipts from two securitizations which were only excluded from net borrowing in 2002, following a decision by Eurostat.

²² Koen and Van der Noord (2004) run a logit regression to show that when deficit rules tend to become more binding, recourse to gimmicks is more likely. Similar results are found in Le Borgne (2006).

²³ This evidence confirms the intuition underlying recent models of window-dressing behaviour by policy-makers facing fiscal rules (Buti et. al., 2006; Balassone et. al, 2007). In these models, part of the cost of window-dressing comes from the risk of being caught, which increases with the size of the fiscal gimmickery.

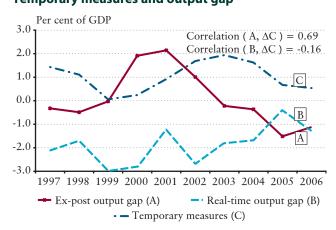
²⁴ The official documents of the government clearly indicate the perception of an adverse macroeconomic context in the years 2001-05 and the willingness not to hamper the cyclical recovery through permanent actions. See, for example, Relazione Previsionale e Programmatica (Economic and Financial Planning Document) for the years 2004-07 (introduction and pages 62-64). The smaller impact of temporary measures on economic activity compared with permanent actions was not only due to the transitory nature of the former but also to the fact that many involved the voluntary participation of private agents (as in the case of amnesties or sales of assets).

²⁵ For example, in the Stability Programme submitted at the end of 2002 the government estimated the negative output gap for the same year and for 2003 at around 2 percentage points of GDP; the years 2002-03 were indicated to be the peak of the economic downturn and the negative cyclical component of the deficit was estimated at around 1 per cent of GDP in both years. Also, for the years 2004-06 the economy was expected "to grow faster than its potential, at around 3 per cent a year, so as to close the output gap accumulated in 2001 and 2002".

²⁶ Real-time estimates of the output gap for each year are taken from the OECD Economic Outlook of the previous year, as in Forni and Momigliano (2004). Similar results can be obtained using other sources.

Figure 3

Temporary measures and output gap



Sources: for ex post output gap, European Commission (2007, AMECO); for real-time outpug gap, Forni and Momigliano (2004).

measures and the ex-post estimates of the output gap²⁷ is fairly large and positive indicating that, ex-post, their use by the fiscal authorities has been pro-cyclical.²⁸

The wrong timing of the "buying-time" strategy may be largely attributed to the unexpected persistence of the

downturn that began in 2001. Policy-makers, as well as virtually all forecasters (including international institutions), expected the economy to rapidly return to a favourable growth path, whereas the low rate of increase in GDP lasted for five years.

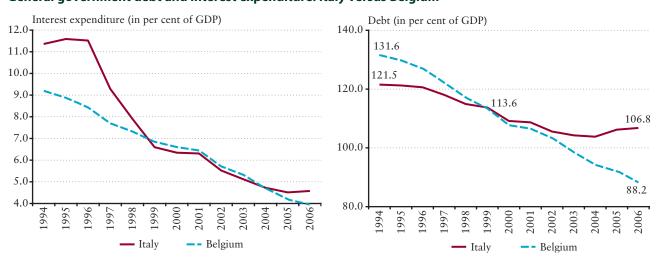
4. PRECIOUS TIME LOST?

In the period 1997-2006 public debt declined from 118.1 to 106.8 per cent of GDP. This outturn is very different from the objectives set in the government plans for the period. In particular, in the various stability programmes submitted between 1998 and 2003 the debt-to-GDP ratio was targeted to fall by more than 3 percentage points per year on average. Had this happened, the debt would already have fallen below the level of GDP in 2003.

The goal of rapidly reducing the debt was, and still is, highly justified by the expected demographic development in the next decades, which will entail a substantial increase in expenditure on pensions, health and long-term care.²⁹ There is a large consensus that the appropriate strategy to cope with these tendencies includes, along with structural reforms, a sizeable reduction of the debt, leading to lower interest payments.³⁰

Figure 4

General government debt and interest expenditure: Italy versus Belgium



²⁷ Ex-post estimates of the output gap are those of the European Commission (AMECO Database, November 2007).

²⁸ If we include in our estimates of temporary measures the effects of the securitizations carried out in 2001 (see footnote 20), the positive correlation with the ex-post output gap becomes stronger (0.78), while the correlation with real-time data almost disappears (-0.07).

³⁹ According to the latest official forecasts by the State Accounting Office, the impact of demographic changes on the primary balance can be estimated at between 3 and 4 per cent of GDP by 2030 (Ragioneria Generale dello Stato, 2007). These projections do not take into account the risks associated with other factors, such as the rising cost of medical treatment, which has significantly increased health spending in recent decades throughout the industrial world, and the changes in family structure and in female employment, which could prompt greater demand for long-term care.

³⁰ At least since the late 80s, Italian policy-makers have been aware of the need to reduce public debt, as the following citation shows, "We achieved the mission [...] to free the Italian economy from inflation. We have now another [mission][...]; it requires the same energy, braveness[...]it is the mission to free this economy from the public debt", speech of the Treasury Minister G. Amato, July 15 1988, cited in Amato (1990), page 48.

In the end, the small decrease in the debt ratio suggests that time has been lost in preparing for the effects of population ageing and, in particular, in designing an equitable distribution of their expected costs across the generations.³¹

This conclusion is somehow reinforced by looking at the recent experience of another high-debt country, Belgium, which faces similar demographic challenges. Throughout the 1990s, the ratio of general government debt to GDP was higher in Belgium than in Italy until 1999, when the two values almost coincided. Both countries had substantially reduced their debt in the previous years as a result of consolidation in order to join the EMU. However, between 1999 and 2006 Belgium continued to reduce its debt rapidly, with the debt ratio falling by around 25 percentage points. Approximately the same result could have been achieved in Italy if the targeted annual reduction had been implemented; by contrast, the actual decline amounted to only 7 points (Figure 4).³²

The different pace of debt reduction in Italy and Belgium affected the rate of increase in their interest expenditure. In 1999, interest payment in Belgium was higher than in Italy as a ratio of GDP (6.8 against 6.6). Thanks to the large debt reduction, interest expenditure in Belgium declined to 4.0 per cent of GDP in 2006, compared with 4.6 per cent in Italy. Considering the average cost of Italy's debt in 2006 (4.5 per cent), if the debt ratio had been reduced by the same amount as in Belgium, approximately 0.8 per cent of GDP in interest expenditure would have been saved in 2006 compared with the actual outturn.

The assessment of the progress made towards sustainable public finances in Italy between 1997 and 2006 worsens if we consider the effects of some extraordinary operations concerning debt restructuring and the sale of assets. These operations have reduced the stock of public debt, leaving the net worth of the public sector largely unchanged. In other terms, they have lowered the debt at the cost of raising future flows of payments or reducing future flows of revenue.

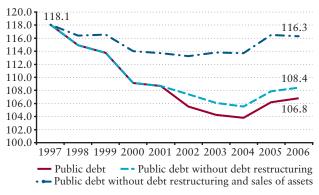
Over the period 1998-2006, these operations determined an average impact of approximately 1 percentage point of GDP per year. Excluding the effects of such operations, the debt to GDP ratio in 2006 would have reached approximately 116 per cent, a reduction of only 2 percentage points with respect to the almost 11 points of the actual figure (Figure 5; see footnote 1 in Table 1). If the government had replaced the

extraordinary operations undertaken in 1998-2002 by permanent measures, in 2003 it would have achieved its goal of bringing the debt level below GDP.

These highly simplified exercises suggest that the use of extraordinary operations may have allowed the Italian government, in the face of European pressures to reduce the debt ratio, to formally satisfy the latter while postponing any lasting adjustment.

Figure 5

The evolution of public debt without extraordinary operations*



* See footnote 1 in Table 1.

5. CONCLUSIONS

This paper examines the effects on the Italian budget balance of temporary measures taken in the period 1997-2006, as well as the effects on the debt of a few extraordinary operations that left the net worth of the public sector broadly unchanged. After outlining the criteria followed to identify these actions, we assess the appropriateness of their use to achieve budgetary targets.

Our analysis suggests that temporary measures played a major role in reducing the deficit in most years during the period considered and helped in formally complying with EMU fiscal rules. In 1997 the use of temporary measures was essential in order to meet the convergence deficit criterion set in the Maastricht Treaty for the adoption of the Euro. Recourse to temporary measures decreased until 2000, becoming substantial again afterwards and peaking in 2003.

Policy-makers bought time at the beginning of the downturn, assuming it to be relatively short. Based on ex-post information, the timing of this strategy does not seem to have

³¹ The potential generational imbalance is assessed in Cardarelli and Sartor (1999). The following citation shows the awareness of this problem among policy-makers: "The reduction of the debt needs to be the first investment of the State in favour of the young people and of the future generations". Letter of transmission of the Relazione Previsionale e programmatica for the years 2008-11 to the Parliament by Prime Minister R. Prodi and Treasury Minister T. Padoa-Schioppa, page V.

³² The determinants of the different dynamics of the debt ratio in the two countries are examined in Artoni and Ceriani (2007).

been appropriate. Focusing on the last years, temporary measures increased sizeably in 2001 and 2002, when cyclical conditions were worsening but were still above potential, and declined in 2004 and 2005, when conditions deteriorated further (the negative peak of the cycle was reached in 2005). This pro-cyclicality can be attributed to the unexpected persistence of the downturn that started in 2001; Italian policy-makers, as well as virtually all forecasters, expected a rapid recovery, whereas the low growth lasted for five years.

Our analysis also suggests that the use of extraordinary operations and temporary measures has been short-sighted. There is a broad consensus that the appropriate strategy to cope with the upcoming demographic pressures requires a structural increase in the primary surplus and a drastic decline in the debt-to-GDP ratio. By contrast, extraordinary operations have allowed more permanent actions to be delayed while formally complying with the European fiscal rules.

REFERENCES

ALM, J. AND W. BECK (1991): "Wiping the Slate Clean: Individual Response to State Tax Amnesties", *Southern Economic Journal*, pp. 1043-1053.

ALM, J. AND W. BECK (1993): "Tax Amnesties and Compliance in the Long Run: A Time Series Analysis", *National Tax Journal*, 46(1), March, pp. 53-60.

Andreoni, J. (1991): "The Desirability of a Permanent Tax Amnesty", *Journal of Public Economics*, pp. 143-159.

ARTONI, R. AND L. CERIANI (2007): "Il debito pubblico in Italia e in Belgio", Università Bocconi, Econpubblica – Short notes series, no. 21.

BALASSONE, F., D. FRANCO, S. MOMIGLIANO AND D. MONACELLI (2002): "Italy: Fiscal Consolidation and its Legacy", in Banca d'Italia "The impact of fiscal policy", papers presented at the Workshop organized by the Banca d'Italia in Perugia on 21-23 March 2002.

Balassone, F., D. Franco and S. Zotteri (2007): "The reliability of EMU fiscal indicators: Risks and safeguards", Banca d'Italia, Temi di discussione, No. 633, June.

BANCA D'ITALIA (2006): "Annual Report".

BERNASCONI, M AND F. LAPECORELLA (2006): "I condoni nel sistema tributario Italiano", in La finanza pubblica Italiana: Rapporto 2006, eds. M. C. Guerra and A. Zanardi, Il Mulino.

BUTI, M., J. NOGUERA MARTINS AND A. TURRINI (2006): "From deficit to debt and back: political incentives under numerical fiscal rules", in Banca d'Italia, Fiscal Indicators, Papers presented to the Workshop organized by the Banca d'Italia in Perugia on 30 March – 1 April 2006.

CARDARELLI, R. AND N. SARTOR (2000): "Generational Accounting for Italy", in Fiscal Sustainability papers presented at the Workshop organized by the Banca d'Italia in Perugia on 20-22 January 2000.

CASSONE, A. AND C. MARCHESE (1995): "Tax Amnesties as Special Sales Offers: The Italian Experience", *Public Finance* 50(1), pages 51-66.

CHU, C. Y. C. (1990): "Plea Bargaining with the IRS" 41, *Journal of Public Economics*.

CHU, C. Y. C. (1992): "Analyzing Income Tax Evasion Using Amnesty Data with Self Selection Correction: The Case of the Michigan Tax Amnesty Program: Commentary" in Slemrod J. ed. Why people pay taxes: Tax compliance and enforcement, *University of Michigan Press*, pp. 167-89.

CRANE, S. E. AND F. NOURZAD (1992): "Analyzing Income Tax Evasion Using Amnesty Data with Self Selection Correction: The Case of the Michigan Tax Amnesty Program", in Slemrod J. ed. Why people pay taxes: Tax compliance and enforcement, *University of Michigan Press*, pp. 167-189.

DAS-GUPTA, A. AND D. MOOKHERJEE (1996): "Tax Amnesties as Asset Laundering Devices" Journal of Law, *Economics and Organization*, 12, 407-409.

DAS-GUPTA, A. AND D. MOOKHERJEE (1998): "Incentives and Institutional Reform in Tax Enforcement", Oxford University Press.

DUBIN, J.A., M. GRAETZ AND L. WILDE (1992): "State Income Tax Amnesties: Causes" *Quarterly Journal of Economics*, 107(3), August, pp. 1057-1070.

EUROPEAN COMMISSION (2007): "Autumn Forecasts".

EUROPEAN COMMISSION (2001) "Public finances in EMU".

EUROPEAN COMMISSION (2004) "Public finances in EMU".

EUROPEAN COMMISSION (2006) "Public finances in EMU".

FIORENTINI, G. AND C. MARCHESE (EDS) (1997): "Il fisco indulgente: amnistie e concordati nei moderni sistemi fiscali", Torino, Giappichelli.

FORNI, L. AND S. MOMIGLIANO (2004): "Cyclical sensitivity of fiscal policies based on real-time data", in Applied Economics Quarterly, vol. 50, no. 3, pp. 299-326.

FRANCO, D. (2005): "Il consolidamento interrotto", in La finanza pubblica italiana – Rapporto 2005, Il Mulino.

Franzoni, L. A. (1994): "Costly Prosecution, Tax Evasion and Amnesties" Economic Notes 23(2), pp. 248-65.

Franzoni, L. A. (1996): "Punishment and Grace: On the Economics of Tax Amnesties" Public Finance, 51(3), pages 353-68.

GRAETZ, M. AND L. WILDE (1993): "The Decision by Strategic Non-filers to Participate in Income Tax Amnesties" *International Review of Law and Economics*, 13(3), pp. 271-83.

KAPLOW, L. AND S. SHAVELL (1994): "Optimal Law Enforcement with Self-Reporting of Behaviour" 102, *Journal of Political Economy*, pp. 583-606.

KOEN, V. AND P. VAN DEN NOORD (2005): "Fiscal gimmickry in Europe: one-off measures and creative accounting", in OECD Economics Department Working Paper, no. 417.

KOPITZ, G. S. SYMANSKY (1998): "Fiscal Policy Rules", *IMF Occasional Paper* no. 162.

KREMER, J., C.R. BRAZ, T. BROSENS, G. LANGENUS, S. MOMIGLIANO AND M. SPOLANDER (2006): "A disaggregated framework for the analysis of structural developments in public finances", *ECB Working Paper*, no. 579.

LA BORGNE, E. (2006): "Economic and Political Determinants of Tax Amnesties in the U.S. States", *IMF Working paper series*, September (WP/06/222).

LOCARNO, L. AND A. STADERINI (2007): "Le entrate tributarie: sviluppi recenti e dinamiche di medio periodo", Banca d'Italia Temi di discussione, forthcoming.

MALIK, A. S. AND R. M. SCHWAB (1991): "The economics of tax amnesties", *Journal of Public Economics* 46, 29-49.

MARCHESE, C. (1997): "Le conseguenze dei condoni: un'analisi empirica", in Fiorentini e Marchese (eds.). "Il fisco indulgente: amnistie e concordati nei moderni sistemi fiscali", Torino, Giappichelli.

MARINO, M.R., S. MOMIGLIANO AND P. RIZZA (2007): "A structural analysis of Italy's fiscal policies after joining the monetary union: are we learning from our past?", *Public Finance and Management*, forthcoming.

MIKESELL, JOHN L. (1986): "Amnesties for State Tax Evaders: The Nature of and Response to Recent Programs", *National Tax Journal*, 39(4), December 1986, pp. 507-25.

OECD: "Economic Outlook", years 1997-2006.

RAGIONERIA GENERALE DELLO STATO (2006): "Le tendenze di medio-lungo periodo del sistema pensionistico e sociosanitario".

SARTOR, N. (ED.) (1998): "Il risanamento mancato. La politica di bilancio nella seconda metà degli anni ottanta", Rome, Carocci ed.

SPAVENTA, L. AND V. CHIORAZZO (2000): "Astuzia o virtù? Come accadde che l'Italia fu ammessa all'Unione Monetaria", Donzelli ed.

STELLA, P. (1989): "Do Tax Amnesties Work?" Finance and Development, 26(4), pp. 38-40.

STELLA, P. (1991): "An Economic Analysis of Tax Amnesties" *Journal of Public Economics*, vol. 46, pp. 383-400.

UCHITELLE, E. (1989): "The Effectiveness of Tax Amnesty Programs in Selected Countries", Federal Reserve Bank of New York Quarterly Review, 14(3), Autumn, pp. 48-53.

APPENDIX

Table 2

Effects of the main temporary measures*

(as a percentage of GDP)

(as a j	percentage of GDP)	
1997	Surcharge on personal income tax	0.24
1997	Tax and social security amnesty	0.04
1997	Shortening of payment lags for oil, methane and electricity taxes	0.15
1997	Lengthening of severance payment lags for public employees	0.15
1997	Advances on indirect tax revenue collection	0.14
1997	Bringing forward of taxation on severance payments	0.32
1997	Taxes paid by the Bank of Italy on extraordinary operations and by UIC on capital gain on the sale of its gold reserves	0.31
1997	Others	0.08
	Total	1.43
1998	Increase in the withholding tax for self-employed	0.09
1998	Taxes and social security amnesty and withholding tax on the re-evaluation of corporate fixed assets	0.09
1998	Bringing forward of taxation on severance payments	0.21
1998	Change in the timing of pension payments ¹	0.31
1998	Swaps and forward rate agreement operations 0.28	
1998	Partial reimbursement fund of the surcharge on personal income tax	-0.07
1998	Advances on indirect tax revenue collection	0.21
	Total	1.11
1999	Withholding tax on capital gains from transfers of enterprises	0.09
1999	Swaps and forward rate agreement operations	0.04
1999	Partial reimbursement fund of the surcharge on personal income tax	-0.09
1999	Tax amnesty	0.01
	Total	0.06
2000	Securitization and sales of public real estate assets	0.09
2000	Withholding tax on capital gains from transfers of enterprises	0.12
2000	Tax amnesty	0.01
2000	Swaps and forward rate agreement operations	0.03
2001	Total Sequition and calca of mubic year actors	0.24
2001	Securitization and sales of public real estate assets	0.16
2001	Withholding tax on capital gains from transfers of enterprises	0.33
2001 2001	Withholding tax on the revaluation of corporate fixed assets Tax amnesty	0.40
2001	Swaps and forward rate agreement operations	0.01
2001	Total	0.92
2002	Securitization and sales of public real estate assets	0.85
2002	Withholding tax on capital gains from transfers of enterprises	0.19
2002	Withholding tax on the revaluation of corporate fixed assets	0.16
2002	Withholding tax on the revaluation of corporation equities and land properties held by individuals	0.10
2002	Scheme for the repatriation and regularization of assets held abroad	0.11
2002	Tax amnesty	0.06
2002	Increase in the payment on advance due by tax collectors	0.12
2002	Repayment by banks of reliefs obtained under Law 461 of 23 December 1998	-0.05
2002	Swaps and forward rate agreement operations	0.15
	Total	1.69
2003	Securitization and sales of public real estate assets	0.21
2003	Withholding tax on capital gains from transfers of enterprises	0.18
2003	Withholding tax on the revaluation of corporate fixed assets	0.14
2003	Withholding tax on the revaluation of corporation equities and land properties held by individuals	0.05
2003	Scheme for the repatriation and regularization of assets held abroad	0.05
2003	Increase in the payment on advance due by tax collectors	0.01
2003	Repayment by banks of reliefs obtained under Law 461 of 23 December 1998	-0.02
2003	Swaps and forward rate agreement operations	0.05
2003	Tax amnesty	1.27
2003	Cancellation of the State's claims on TAV spa	0.24
	Total	2.18

Table 2

Effects of the main temporary measures* (cont'd)

(as a percentage of GDP)

(
2004	Securitization and sales of public real estate assets	0.32
2004	Withholding tax on capital gains from transfers of enterprises	0.22
2004	Withholding tax on the revaluation of corporate fixed assets	0.28
2004	Withholding tax on the revaluation of corporation equities and land properties held by individuals	0.08
2004	Swaps and forward rate agreement operations	0.09
2004	Tax amnesty and regularization of building offences	0.55
2004	Cancellation of the State's claims on TAV spa	0.23
2004	Tax advances on insurance company	0.05
2004	Others	0.04
	Total	1.86
2005	Securitization and sales of public real estate assets	0.22
2005	Withholding tax on the revaluation of corporate fixed assets	0.08
2005	Withholding tax on the revaluation of corporation equities and land properties held by individuals	0.05
2005	Swaps and forward rate agreement operations	0.17
2005	Regularization of building offences	0.09
2005	Cancellation of the State's claims on TAV spa	0.23
2005	Sectoral studies	0.07
2005	Tax advances on insurance company	-0.05
2005	Others	0.04
	Total	0.90
2006	VAT reimboursement consequent to ECJ sentence (September 2006)	-1.08
2006	Cancellation of the State's claims on TAV spa	-0.65
2006	Securitization of agricoltural credits	-0.05
2006	Securitization and sales of public real estate assets	0.09
2006	Withholding tax on the revaluation of corporate fixed assets	0.29
2006	Withholding tax on the revaluation of corporate equities and land properties held by individuals	0.08
2006	Withholding tax on the revaluation of building sites owned by corporations not yet built	0.02
2006	Swaps and forward rate agreement operations	0.04
2006	Regularization of building offences	0.01
	Total	-1.25

^{*} A positive sign is assigned to deficit-reducing measures.

¹ Net effect of a lower pension expenditure and a lower revenue from withholding taxes on pension income.