INTERNATIONAL MONETARY FUND

ITALY

Selected Issues

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Approved by European Department

January 14, 2005

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I. INTRODUCTION AND OVERVIEW

1. **Concern about medium-term growth prospects has been an increasingly common theme of public policy debate in Italy**. It has also been a theme of past Article IV discussions, *inter alia* because of its critical implications for medium- and long-term fiscal trends.. The policies needed to support faster medium-term growth were a major focus of the 2004 Article IV consultation, as well, as reflected in the following chapters. The first uses new techniques to update estimates of Italy's potential growth rate, and underscores that stagnant productivity is at the root of the disappointing growth performance of the last decade. A number of commentators have pointed to concerns about the implications of Italy's business environment for growth, and the next chapter, building on work undertaken by the World Bank and other institutions, provides empirical support for these worries, with special attention to the role of the legal system. Chapter IV focuses on another aspect of the business environment, providing an assessment of an area—corporate governance—that has important implications for not only for trend growth but also for macrofinancial developments . Finally, in response to a request at the Executive Board discussion of the 2002 Article IV consultation, Chapter V reviews developments in fiscal federalism in Italy and draws on cross-country experience to offer suggestions on how the decentralization process now under way can be most effectively managed.

2. **Chapter II presents updated estimates of potential growth, using new techniques that draw on comovements of output, employm entand inflation over the business cycle to distinguish trends from cycles**. One puzzling aspect of Italy's growth performance over the last several years has been the limited response of output growth to the steady increase in labor supply that has accompanied structural reforms. The chapter's results indicate that, even after correcting for cyclical factors, trend productivity growth—already on a downward slope for decades—has declined further since the mid-1990s, and it remains a drag on growth going forward. Nevertheless, there is also evidence that a significant portion of the very sharp fall in labor productivity over the current downturn is cyclical rather than structural, with capacity utilization falling despite the rise in the labor input. This provides a basis to hope for some modest improvement in growth in the near future, as cyclical conditions improve and firms seek to maximize labor efficiency.

3. **Chapter III uses cross-country data compiled by the World Bank and other sources to explore the implications of a country's business environment for output growth**. A number of recent studies have explored these links, but they have typically relied on subjective surveys to document the quality of a country's institutions. One advantage of the World Bank dataset used in this chapter is that it provides objective measures—such as the financial costs involved in starting a new business or the number of days required to settle a particular type of legal claim—that may be a more accurate gauge of the quality of the business environment. The results provide additional evidence of the importance of institutional factors for growth. Given that a number of surveys point to concerns about the quality of the business environment in Italy, this suggests the potential for reforms to increase medium-term growth.

4. **Two high profile corporate bankruptcies have prompted the government to propose changes to Italy's corporate governance system**. Chapter IV—produced as an outgrowth of the recent Financial Sector Assessment Program mission to Italy—reviews the current state of the system and evaluates the proposed reforms. The study gives a positive overall assessment of corporate governance in Italy. While it does identify some weaknesses in investor protection, it finds that these would largely be rectified by the proposed reforms (which, as of early-January 2005, remained under parliamentary debate). The chapter goes on to note some additional measures that could further strengthen corporate governance, including regarding protections for minority shareholders.

5. **Italy has been engaged in a process of fiscal devolution for many years, but progress has generally been slow**. Chapter V reviews developments over the years, and draws on experience in other countries to offer some guidance on how to design a framework to implement the planned decentralization. While recognizing that political choices are by necessity central to the process, ruling out a "one-size-fits all" approach, the review of experience highlights the importance of transparent and stable rules, effective monitoring, and credible enforcement mechanisms.

II. Underlying Trends and Cyclical Fluctuations: Pieces of the Same Puzzle[1]

Core Questions, Issues, and Findings

- **What are the main stylized facts regarding *trends* in Italy's growth performance?** Potential growth has slowed since the early 1970s, in line—until the mid-1990s—with an enduring deceleration in total factor productivity (TFP) and a secular thinness of the labor contribution. Over the last decade, however, trend growth in both employment and labor participation have been drifting up, more than offsetting the sharp decline in underlying factor efficiency. As a result, potential output growth has progressively recovered from the downfall of the early 1990s, while productivity growth has tumbled since then.

- **Does the exceptionally low *productivity growth* over the current protracted downturn point to a reversal in potential growth?** Not necessarily. Even in the absence of market distorsions (such as imperfect competition or increasing returns), productivity—whether measured as labor productivity or TFP—is likely to rise in booms and fall in recessions, because of variable utilization of resources. Indeed, we find evidence that part of the disappointing productivity performance observed since 2002 reflects idling capacity.

- **Are the estimated shifts in growth trends consistent with measures of *demand pressures* in labor and product markets?** Yes. Temporary (demand) shifts are disentangled from permanent (supply) shifts to growth by exploiting additional information about the short-run output-unemployment and output-inflation trade-offs. To the extent that these processes are well-identified, a multivariate filter ensures consistency among estimates of potential output, the NAIRU, and underlying inflation. As a by-product, a congruent measure of trend labor productivity is also derived.

- **What are the main *sources of growth variation* over the long- and over the short-run?** The major source of trend growth variation is likely to be associated with changes in labor participation, confirming the permanent (i.e. structural) nature of the latter. Shifts in productivity, instead, are found to account for the bulk of business cycle fluctuations.

- **Which are the *policy implications* of this chapter's findings?** From a normative viewpoint, it is important to address not only factors preventing further employment growth, but also those constraining factor efficiency. Stagnant productivity growth might in fact disguise the need to reduce distorsions in product markets, including inadequate competition in key sectors and overhead costs.

[1] Prepared by Silvia Sgherri (EUR).

A. Introduction

6. **This chapter attempts to disentangle cyclical fluctuations from permanent shifts in Italy's potential output, using both statistical- and model-based detrending techniques**. Potential output can be defined as the equilibrium level of economic activity where no inflationary pressures emerge from the utilization of resourses and the resulting price setting behavior. The output gap identifies business cycle fluctuations as deviations of actual output from its potential. Intended to serve as summary indicators of (structural) supply conditions and (transitory) demand pressures, potential output and the output gap are used as diagnostic devices for a variety of purposes—such as inflation forecasting, monetary policy setup, and evaluation of cyclical sensitivity of budget policies. Unfortunately, such basic variables for economic analysis and policy are unobservable and need, therefore, to be "extracted" from observable aggregates, such as real GDP. To this end, different procedures have been developed by the literature.

7. **Among statistical agencies, a popular method for measuring potential output is the production function approach (PFA).**[2] Its rationale is to obtain potential output from the *trend* levels of its structural determinants, such as productivity and factor inputs, given an existing technology that is used to appropriately weight the components. Estimates of factor inputs' trend levels are commonly based on an *extended* version of the Hodrick-Prescott (HP) filter, to overcome the "end-point" problem intrinsic to the two-sided moving average smoothing procedure. Measures of potential output based on extended HP trends may prove, however, unreliable if a prolonged recession—or boom—occurs at the end of the sample (Box 1).

8. **Based on the traditional PFA—and using annual data up to 2001—previous staff forecasts pointed to a decline in Italy's potential growth**.[3] Trend growth was revised down to around 1.9 percent in 2001, though it was expected to rise steadily to 2.1 percent by 2007. In light of Italy's disappointing growth performance since 2001, however, existing growth projections had implied a sizeable degree of slackness in the economy. With the aim of closing the output gap by 2009, updates of staff estimates relying on the same approach (and on quarterly data up to 2004Q2) would call for further deceleration in potential growth (Figure 1)—unless growth is expected to rebound sharply and steadily over the whole forecast horizon. The implied trend growth decline would be associated with a sharp dip in both total factor productivity (TFP) growth—as measured by the Solow residual—and in labor productivity growth, in the face of an enduring upturn in labor utilization, following wage moderation policies and structural reforms in the Italian labor market.

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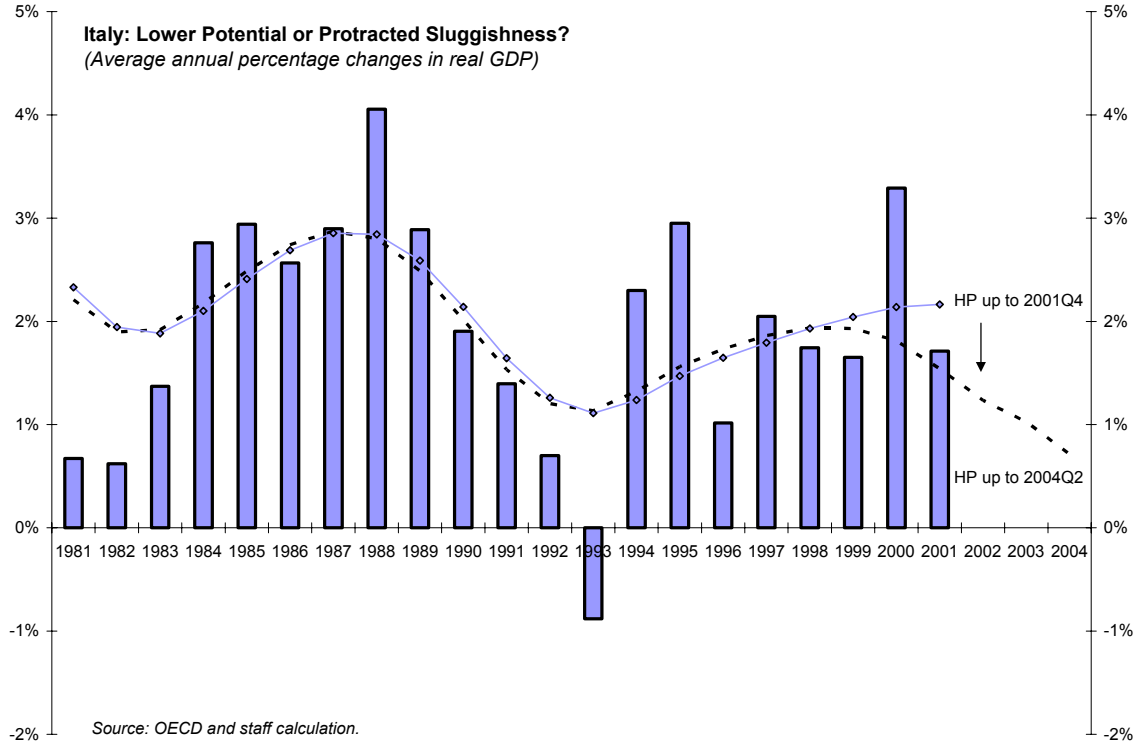
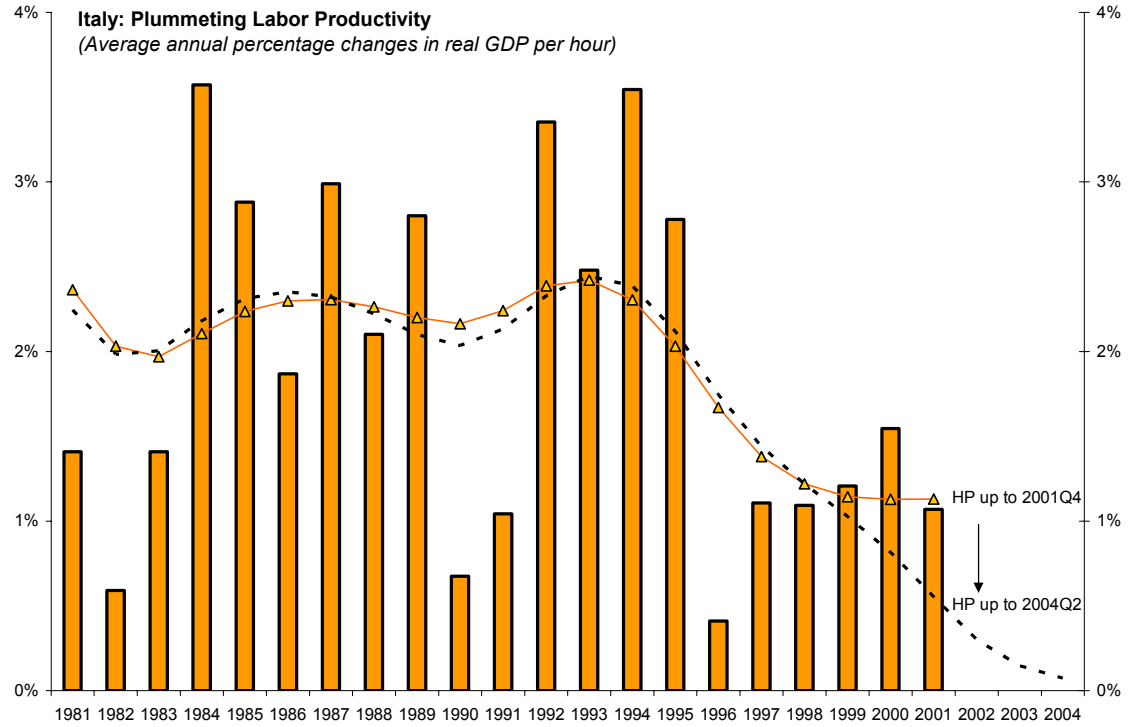
[2] The PFA is employed by the OECD (see Giorno, Richardson, Rosevear, and van den Noord, 1995), the IMF (see De Masi, 1997), the CBO (1995) and, as of recently, the EC (2004).

[3] IMF (2002).

Figure 1: Looking at Potential and Labor Productivity Growth Using HP Trends





Source: OECD and staff calculation.

Box 1: Features and Pitfalls of the HP Filter

The Hodrick-Prescott filter (HP, henceforth) is derived by minimizing the sum of squared deviations of the log variable (e.g. *y,* in the case of GDP) from the estimated trend τ, subject to a smoothness constraint that penalizes squared variations in the growth of the estimated trend series. Thus, HP trend values are those that minimize:

$$\sum_{t=1}^{T}\left(y_t-\tau_t\right)^2+\lambda\sum_{t=1}^{T-1}\left(\left(\tau_{t+1}-\tau_t\right)-\left(\tau_t-\tau_{t-1}\right)\right)^2$$

The estimated trend variable τ is a function of λ and both past and future values of y. Higher values of λ imply a large weight on smoothness in the estimated trend series (for very large values the estimated trend series will converge to a linear time trend; as λ tends to zero, the trend is coincident with the series). Apart from the arbitrary choice of the λ parameter (set to the standard value $100*s^2$, where s denotes the number of observations per year in the series), the decomposition of cycle and trend estimated by an HP filter turns out to be inaccurate under two circumstances:[1]

- **At the end of the sample—**when the HP filter suffers from an in-sample phase shift problem—as it needs to rely on *future* information about the series. The end-period problem can be tackled by extending actual data out of the sample using the information carried by the average historical growth rate or autoregressive forecast models. However, if past growth rates are not reasonable proxies for future growth patterns, this extension may lead to a bias at the end of the filtered series. An alternative method of extending the data so as to better anchor the smoothed series is to use *ad-hoc* out-of-sample growth projections.[2]

- **When cyclical fluctuations are highly persistent** or when underlying trends are subject to temporary stochastic shocks with greater variance than that of the business cycle. Implicit in the choice of λ is, in fact, a strict assumption about the relative importance of supply and demand shocks: e.g., trend fluctuations account for 2 ½ percent of cyclical fluctuations in quarterly data (or 1 percent in annual data). Although, on average, such an estimate fits output data for industrial countries reasonably well, over relatively short periods this may not be the case.

For both reasons, analyzing macroeconomic fluctuations regarding Italy's on-going prolonged slowdown using HP trends could prove misleading.

[1] See, e.g., Harvey and Jaeger (1993); and Conway and Hunt (1997).
[2] In the context of its bi-annual *World Economic Outlook* exercise, the IMF produces a set of annual projections, looking out five years. These projections assume that at the end of the forecast horizon output will be at its potential and unemployment will reach its equilibrium level. Existing staff estimates of Italy's potential output use most recent WEO growth projections to extend output data beyond 2001.

9. **Against this background, this chapter derives estimates of Italy's key unobservable variables in the context of a modified production function framework, using stochastic components**. This innovative approach has the advantage of allowing joint tests of hypotheses about the sources of long-run growth and business cycle fluctuations within models grounded in economic theory and based upon available information. The accuracy and suitability of resulting potential output and output gap measures are assessed against (i) univariate statistical filters for real GDP and (ii) multivariate unobserved component models exploiting additional information about the short-run unemployment-inflation trade-off. As by-products, mutually consistent estimates of trend labor productivity, the equilibrium unemployment rate, and underlying inflation are also obtained.

10. **Results indicate that, even after correcting for cyclical factors, productivity growth—already on a downward slope for decades—has declined sharply since the mid-1990s, and it remains a drag on growth going forward**. Potential growth slowed from the 1970s until the mid-1990s, in line with a secular weakness in labor utilization and an enduring deceleration in TFP growth. Over the last decade, however, trend growth in both employment and labor participation has been drifting up, more than offsetting the weakening in underlying factor efficiency. As a result, potential output growth has progressively recovered from the downfall of the early 1990s, even as productivity growth has tumbled.

11. **Part of the disappointing productivity performance over the current downturn reflects cyclical factors.** The fall in productivity partly mirrors a contraction in capacity utilization, notwithstanding a rising number of employees in the economy and a moderate acceleration in capital accumulation. Shifts in productivity are, indeed, found to account for the bulk of business cycle fluctuations and to be highly procyclical. Conversely, the major source of trend growth variation is likely to be associated with changes in labor participation, confirming the permanent (i.e. structural) nature of the latter. Results are robust across model specifications and essentially in line with recent findings for the euro area.[4]

12. **The chapter is organized as follows.** The next section outlines the main stylized facts regarding trends in Italy's growth performance and investigates the factors behind them. Section C presents alternative model-based frameworks to estimate the relative importance of transitory and permanent shifts in Italy's real GDP. The robustness of the output decomposition results is assessed by exploiting additional information about comovements of output, employment and inflation over the business cycle. Section D concludes the chapter by discussing the findings' implications for policy.

[4] IMF (2004); Fabiani and Mestre (2001); Rünstler (2001); and Musso, Proietti, and Westermann (2002).

B. The Puzzle: What's Behind the 1990s Productivity Slowdown?

Stylized Facts

13. **Annual GDP growth averaged almost 6 percent in the 1960s, but fell below 2 percent in the 1990s.** Breaking down GDP growth into labor, capital, and TFP contributions shows that the significant slowdown in real growth observed in Italy over the period 1960-2001 is explained almost completely by the decline in TFP growth—as measured by the Solow residual within a standard production function framework based on period averages of aggregate OECD data (Table 1A). [5] In particular, over the 1990s, factor productivity growth has fallen by half with respect to the 1980s—from an annual average of 1.2 percent to 0.6 percent—to further decelerate to a mere 0.2 percent after 1995.

14. **Employment and average hours per employee have historically been a drag on growth.** However, over the last decade, reforms to liberalize part-time and fixed-term labor contracts, tax incentives for permanent contracts, the creation of private employment agencies, pension reforms to discourage early retirement, and significant wage moderation have led to sizable increases in the employment ratio and in labor participation. As a result, the unemployment rate fell to 8.1 percent in 2004Q2 (seasonally adjusted)—below the euro area average—and labor factor services accounted to one fourth of GDP growth over the second half of the 1990s. Nonetheless, hours per employee have continued to decline and the employment ratio remains—at 56 percent—the lowest in the euro area.[6]

15. **Capital accumulation has reliably contributed to growth over time.** In particular, since the 1980s, its contribution to GDP growth has fluctuated just above 1 percent, without losing pace in the second half of the 1990s. Recent labor market developments have resulted into a slight moderation in capital deepening after 1995, as measured by the rate of increase in the capital-labor ratio. However, the deceleration in capital deepening was modest and accounted for only one third of the substantial fall in labor productivity growth.

16. **The opposite movements of employment rates and labor productivity during the second half of the 1990s suggest that some of the recent decline in Italy's factor productivity growth may be related to the reinsertion into jobs of lower-productivity workers**. As firms responded to labor market reforms by shifting to less capital-intensive production methods, a somewhat reduced rate of capital deepening had hence to be expected.

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[5] This approach attributes real GDP growth to the contribution of three factors: labor (proxied by the total number of hours) weighted by the labor income share in total domestic income, capital (proxied by the capital stock) weighted by the capital income share, and TFP. In Table 1A, calculation is based on aggregate OECD quarterly data for the business sector.

[6] Recent changes to the employment survey to bring it in line with EU norms have resulted in upward revisions to employment and, to a lesser extent, the labor force. Historical time series have been revised backward consistently.

Nevertheless, it is striking that the drop in the growth of TFP observed since the mid-1990s has been so sharp as to neutralize most of the positive contribution to growth from the increase in labor supply that has accompanied structural reforms.

17. **The exceptional sluggishness observed in TFP growth raises a number of relevant questions.** What is the Solow residual accounting for? Does it strictly measure Hicks-neutral technological changes? Otherwise, what has been driving an equal deceleration in the marginal productivity of all factor inputs over the last decade?

Hypotheses

18. **Many studies have looked into the factors accounting for Italy's productivity slowdown over the 1990s.** Among the explanations offered are the following:

- **Mismeasurement of factor quality changes.** Estimates of TFP growth are often used to proxy technological progress. They are obtained as the residual output growth once the weighted contributions of changes in capital and labor inputs are accounted for. Therefore, TFP growth estimates involve a number of assumptions concerning the measurement of output and inputs.

  - **In the case of capital, quantities and prices should be adjusted for changes in quality.** Table 1B shows growth decomposition results using available annual data from the Italy-specific *total economy* Groningen Growth and Development Center (GGDC) database, which takes into account price and quality changes in different categories of capital (for convenience grouped here into ICT and non-ICT). Compared with results obtained using unadjusted OECD data (Table 1A), it appears that quality improvements in capital are indeed absorbed by the Solow residual, roughly accounting for some 0.1 percent of TFP growth throughout the sample (Figure 2A). However, changes in the quality of capital do not seem to be able to explain the fall in productivity growth characterizing the second half of the 1990s.

  - **In the case of labor, changes in skills and educational attainment need to be explicitly taken into account.** Brandolini and Cipollone (2001) adjust the labor contribution to value added growth in Italy's industrial sector by correcting for changes in the composition of the employed labor force using wage differentials, as well as effective hours worked and capacity utilization. Overall, they find that a sizeable part of the growth in the Solow residual vanishes after the adjustment, although the latter is not sufficient to overturn the evidence of a productivity slowdown in the second half of the 1990s (Figure 2B).

  - **Measures of growth rates of TFP can also be sensitive to aggregation methods.** This may be the case particularly when quantities and user costs of some disaggregated inputs evolve along different patterns than those of the

aggregate. This is the case, for example, when quality improvements in some particular capital inputs (such as ICT) are faster than those in others. A measure of TFP growth that fully accounts for changes in the composition and quality of both labor and capital inputs captures "disembodied" technological and organizational improvements that increase output for a given amount of inputs. Table 1C reports results from a very recent study looking at this issue using Italian data:[7] once compositional and quality changes are properly measured, TFP is left to explain less than ¼ of output growth. However, on average, compositional changes in capital accumulation seem to play a limited role—another 0.1 percent—in explaining the recent productivity deceleration in the Italian economy.

- **It may also be interesting to assess the extent to which improvements in the quality of capital and labor have boosted productivity in industries and countries that have invested in them.** For example, the shift towards ICT assets, whose relative prices have been falling, implies that with the same amount of resources it is possible to acquire a greater amount of productive capital services. This suggests that there is also an "embodied" element of technological change due to the expansion of the productive capacity from the shift toward ICT assets.[8] Bassanetti and others (2004) estimate that the major contribution to Italy's TFP growth over 1981-2001 has come from the service sector—in particular transport, communication, and financial intermediation—where the ICT capital accumulation has been the largest. Net of "embodied" technological change—the authors conclude—the productivity slowdown in the second half of the 1990s would have been even larger.

- **Variable factor utilization.** Solow's (1957) original contribution presumed that variations in capacity were a major reason for the procyclicality of measured productivity, a presumption widely held thereafter.[9] In essence, the problem is one of *cyclical mismeasurement*: true inputs services are more cyclical than measured inputs services. As a result, productivity—as measured by the Solow residual—is spuriously cyclical. Within a cost-minimizing framework, variable factor use can be due to swings in marginal factor costs. According to this hypothesis, the decline in labor productivity over the second half of the 1990s may reflect a fall in the marginal cost of labor. If labor has become particularly cheap, firms will work existing employees for shorter periods (decreasing observed hours per worker) and less strenuously (thereby decreasing unobserved productivity).

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[7] Bassanetti, Iommi, Jona-Lasino, and Zollino (2004).

[8] See, among others, Greenwood, Hercowitz, and Russell (1997) and Hercowitz (1998).

[9] See Abbott, Griliches, and Hausmann (1998); Basu (1996); and Basu and Kimball (1997).

Figure 2A: Looking at TFP Adjusting for Compositional and Quality Changes in Capital

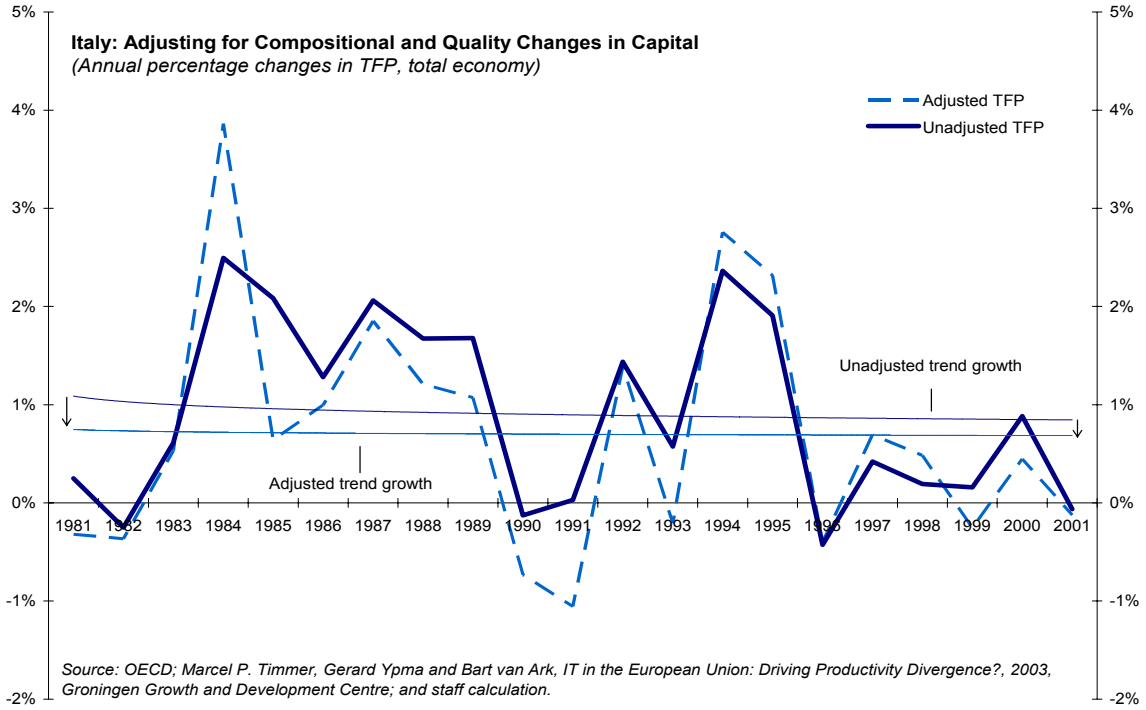
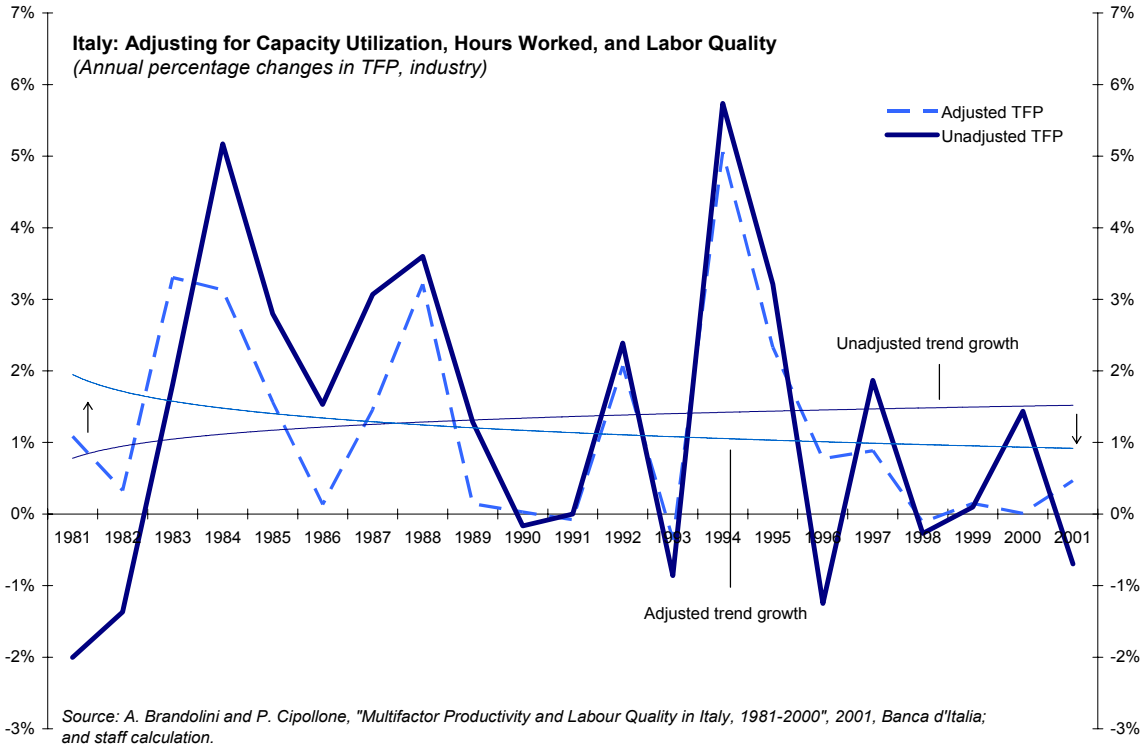


Figure 2B: Looking at TFP Adjusting for Compositional and Quality Changes in Labor



- **Distorsions and markets imperfections.** Productivity and technology may also differ because of distorsions, such as imperfect competition, the presence of increasing returns, etc. In general, if firms are not all perfectly competitive, then it is not appropriate to use a standard production function framework and, consequently, to use the Solow residual as measure of exogenous technology shifts, since the Solow residual becomes endogenous.[10] Following are few examples of distorsions and imperfections characterizing the Italian market structure, whose effects on factor efficiency might have been incorrectly captured by measures of the Solow residual.

  - **Relatively high tax ratios**, deemed to have undercut Italy's growth performance by discouraging labor supply and investment;[11]
  - **A heavy regulatory burden** in labor and product markets and bureaucratic red tape, likely to have hampered competition and stifled incentives to invest;[12]
  - **The resilience of the intra-sectoral structure** of the Italian economy, echoing an inability of reallocating resources towards sectors with higher-than-average factor productivity;[13]
  - **A large share of small and medium enterprises**, which might have hobbled productivity growth by limiting the scope for economies of scale and technology transfers.[14]

19. **A rigorous analysis of the mechanisms triggering suboptimal productivity performances in Italy over the last decade is clearly beyond the focus of this paper.** We limit the analysis to arguing that any reasonable explanation of the productivity puzzle should account for key stylized facts across four dimensions. Namely: (i) the cross-country dimension, e.g. changes in comparative performance with respect to other industrial countries; (ii) the cross-sector dimension, e.g. changes in comparative performance across inputs and product markets; (iii) the structural dimension, e.g. changes in macroeconomic responses to structural shifts; and (iv) the cyclical dimension, e.g. changes in business cycle comovements among relevant aggregates.

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[10] See Rotemberg and Woodford (1995) for a survey of DGE models with imperfect competition.

[11] See, for example, ISAE (2003) and references therein.

[12] The papers in ISAE (2001 and 2004) examine in detail the impact of the quality of the business environment on growth.

[13] Bugamelli and Rosolia (2004) and other papers in Banca d'Italia (2004) look at the relation between industrial structure, efficiency, and competitiveness of Italian firms over the 1990s.

[14] See, for example, the papers in ISAE (2003 and 2004) and references therein.

20. **Considering the vastness of the problems raised in this section, the focus of the rest of this chapter is modest.** The next section is a first attempt to explore dimensions (iii) and (iv) of Italy's productivity puzzle. The approach is agnostic. To measure the relative importance of structural and cyclical components in explaining growth variations, (the log of) real GDP is decomposed into a stochastic trend component characterized by a time-varying growth rate (i.e., potential output) and a stationary component exhibiting cyclical fluctuations (i.e., the output gap), using univariate and multivariate detrending techniques. *Inter alia*, we will look at model-based implementations of the production function growth accounting framework, to analyze structural shifts in factor input trends and business cycle comovements among macroeconomic aggregates of interest—such as output and productivity, output and unemployment, and productivity and hours.

C. The Pieces: Unobserved Components for Growth Accounting

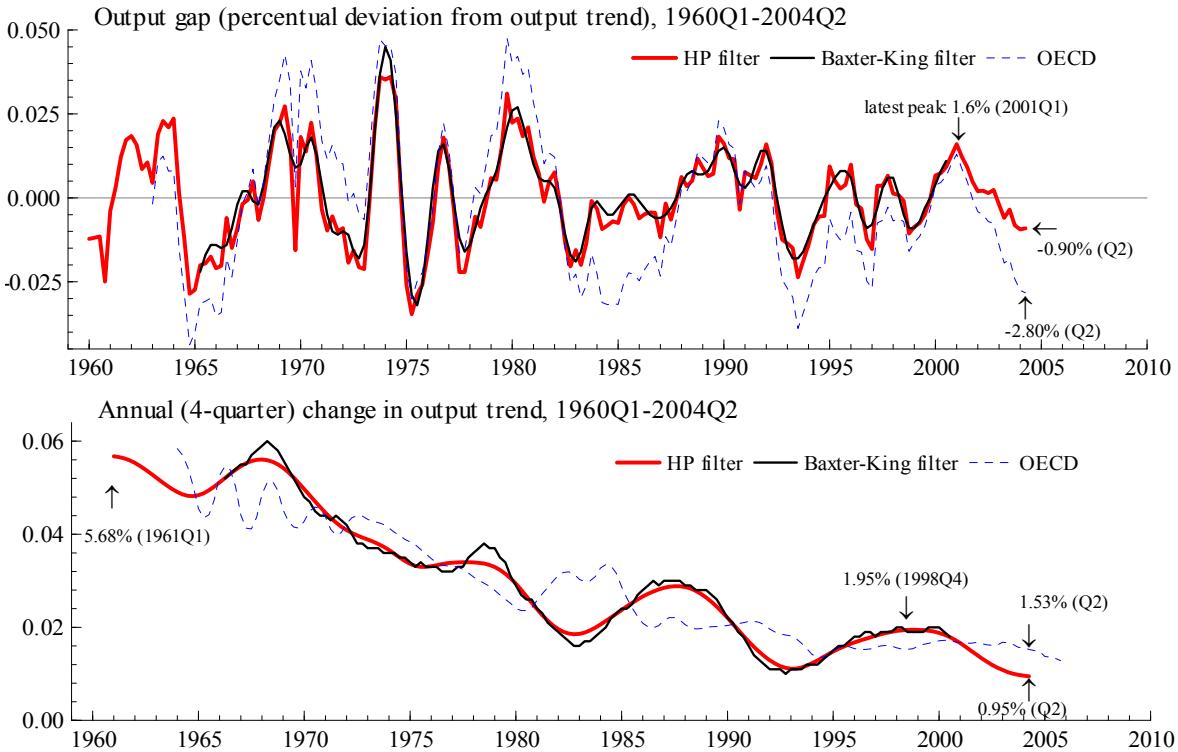
The Business Cycle Revisited

21. **Real Business Cycle macroeconomics traditionally identifies aggregate business cycle fluctuations with "those movements in the series associated with periodicity within a certain range of business cycle duration"**.[15] In conformity with the classical NBER definition of business cycle, this range of business cycle periodicities is assumed to be between 6 quarters and 8 years. Drawing on the theory of spectral analysis, Baxter and King (1999) proposed a univariate two-sided moving average filter able to "extract" from the data only fluctuations within this range of frequency—the Baxter-King filter (BK, henceforth). In this way, both high frequency fluctuations (lasting less than 6 quarters and mainly associated with measurement errors and seasonality) and low frequency fluctuations (lasting more than 8 years and possibly associated with variations in trend growth) are removed from the data.[16] On this ground, macroeconomic series are decomposed into irregular, cycle, and trend components, respectively corresponding to the high, business cycle, and low frequency parts of the spectrum. Juxtaposing detrending outcomes obtained using the BK filter with those previously derived using the HP filter highlights that differences between these two approaches are, by and large, negligible (Figure 3). The robustness of the results holds with respect to both business cycle (top panel) and potential growth (bottom panel) estimates.

[15] Stock and Watson (2000).

[16] The ideal filter would require an infinite number of past and future values of the series. We truncate the band pass filter (e.g. the two-sided moving average) with 12 lags and leads, thereby reproducing the optimal finite-order approximation suggested by Baxter and King (1999). In this way, the first and last 12 observations of the series are automatically lost.

Figure 3: Two-sided moving average filters of output gap and potential growth



Source: OECD and staff calculation.

22. **Spectral density analysis reveals that the Italian business cycle is characterized—on average—by 4½ years duration, just slightly shorter than the 5-year business cycle typifying the euro area**.[17] The standard deviation of output is estimated at 1.35 percent, suggesting that the Italian business cycle is somewhat more volatile than the euro area's (0.84 percent), but comparable to that of the US (1.34 percent).[18] Over the sample period, trough-to-peak expansions have an estimated average duration of 13 quarters and are longer than recessions, with 9-quarter average duration. This asymmetry is quite common in post-war data for industrial countries and it is generally associated to positively sloped output trends. Dating the business cycle indicates that the most severe recession occurred over the period 1974Q1-1975Q3 followed, in terms of amplitude, by those in 1963Q4-1965Q1, 1980Q2-1983Q1, and 1969Q1-1972Q4. The recessions of 1990Q1-1993Q3 and 1976Q4-1977Q4 had, instead, somewhat smaller amplitude.

[17] Results for the euro area refer to Agresti and Mojon's (2001) findings.

[18] While we report results using data from 1960Q1, Agresti and Mojon (2001) compare stylized facts for the US and the euro area cycles using a shorter sample period, starting in 1970Q1. However, dropping the sixties from our sample does not seem to affect much reported properties of the Italian business cycle.

23. **Although its cycle was highly synchronized with that of the euro area cycle throughout the sample period, Italy experienced much larger fluctuations in the 1970s.** This is likely due to the heavy Italian reliance on imported oil. The Italian fluctuations subsequently decreased, as the share of energy related imports declined (by around 40 percent) during the 1980s. However, as it is the case for other industrial countries, the fall in volatility of fluctuations experienced in Italy since the mid-eighties may also be the result of a combination of other factors, such as better policies and shifts in output composition.[19]

24. **Comovements—as expressed by correlations—between the overall business cycle and corresponding fluctuations in labor market indicators show that aggregate employment, average hours worked, capacity utilization, and labor productivity are strongly procyclical.**[20] Interestingly, this is also true for participation in the labor market, a component that is hardly assumed to be subject to short-run shifts. Employment, labor force and labor participation lag the business cycle, whereas capacity utilization and labor productivity are coincident with it. There is also evidence that movements in the number of hours worked per employee in the business sector are a genuine predictor of the Italian business cycle, leading the cycle by approximately one quarter. In contrast, fluctuations in unemployment rate are only weakly countercyclical and lag the cycle by one year. Preliminary data analysis hence provides some evidence in favor of the existence of short-term frictions in the labor market—a hypothesis that justifies swings in labor efficiency to echo the business cycle, as firms would hire a more-than-optimal number of working hours for a given decline in production.

25. **However, productivity responses in the current (i.e. post-2001) downturn seem to signal a greater degree of idling capacity with respect to productivity responses observed over the 1992-93 recession.** Over the first half of the 1990s, the drop in total hours worked (and the reduced contribution from capital) more than offset the contraction in growth, while average hours work had remained roughly unchanged. Labor efficiency actually *rose*, as adjustments in the labor market occurred via downward shifts in the *supply* of labor. Over the recent slowdown, however, labor productivity has dropped sharply, with declines in average hours and spare capacity carrying the burden of the adjustment in the labor market. Such a correction, however, has not been sufficient (so far) to offset the exceptional upturn in labor supply resulting from structural factors such as the effects of pension and labor market reforms, wage moderation, and the emergence of underground

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[19] Blanchard and Simon (2001) show that there is a strong correlation both between output volatility and the level of inflation and between output volatility and inflation volatility across G-7 countries. Stock and Watson (2002) question the hypothesis that "great moderation" in G7 countries is a byproduct of improved monetary policy, while suggesting that more than half of the decline in output volatility is the result of smaller common international shocks. Other possible causes pointed by the literature for the output volatility decline include improvements in inventory management (McConnell and Pérez-Quirós, 2000) and shifts in output composition (Alcalá and Sancho, 2003).

[20] Results are available upon request.

economy.[21] However, given that two-sided moving average filters are inapt to characterize economic developments after 2001 (Box 1), evidence of cyclical fluctuations over the recent slowdown has remained—so far—anecdotical.

Decomposing Real GDP

26. **Attention is, hence, turned to real-time estimates of the output gap and potential output using unoberved components (UC) models.** The attractiveness of the UC approach lies in the fact that it combines positive aspects of purely statistical and purely structural estimation methodologies. Moreover, it does not suffer from the end-point problem, as the filters implicitly defined by the model automatically adapt to the end of the sample. To this end, a quite flexible univariate UC model is specified in order to evaluate the relative importance of short-run variations in the degree of capacity utilization and permanent changes in the potential capacity of the economy in real time.[22] The general form of the system can be written as follows:

$$\begin{cases} y_t = y_t^* + y_t^c \\ \varphi(L) y_t^c = \varepsilon_t^y, & \varepsilon_t^y \sim \text{i.i.d.} N(0, \sigma_{\varepsilon^y}^2), \\ y_t^* = y_{t-1}^* + g_{t-1} + v_t, & v_t^y \sim \text{i.i.d.} N(0, \sigma_{v^y}^2), \\ g_t = (1-\rho^y) g_0 + \rho^y g_{t-1} + \omega_t, & \omega_t^y \sim \text{i.i.d.} N(0, \sigma_{\omega^y}^2), \end{cases} \tag{1}$$

where y is the log of real output, y^* is potential output—with time-varying growth rate g_t — and y^c is the output gap following a stationary autoregressive process of second order, $\varphi(L)$. Here, ε_t^y, v_t^y, and ω_t^y denote the shocks to the output gap, the level of potential output, and the trend growth rate, respectively. The shocks are assumed to follow independent identically distributed processes, with standard deviations $\sigma_\varepsilon, \sigma_v$, and σ_ω, respectively.

27. **In this model, potential output follows a random walk with drift, and the growth rate can take different shape, depending on the value of ρ^y**. For instance, if ρ^y=1 real output is an integrated series of second order, i.e. I(2), while if $0<\rho^y<1$ its growth rate varies over time but converges back to a steady-state rate, g_0. The dynamics of potential output and the output gap depend on the nature of the shocks, that is, on the relative importance of supply and demand shocks. This relative importance, which determines the smootheness of the trend component, is the ratio of the variance of the cycle to the variance of the trend

[21] The effects of an underground economy within a real business cycle model are analyzed in Busato and Chiarini (2004) and Conesa, Diaz-Moreno, and Galdon-Sanchez (2002).

[22] See, for example, Clark (1987), Harvey and Jäger (1993), Kuttner (1994), Gordon (1997).

fluctuations. A small ratio—denoted as λ in Box 1—implies that shocks to the economy are mainly supply shocks, where potential output moves nearly with the data, and hence a small output gap is expected. On the contrary, a larger weight on the smoothness of the trend means that shocks to the economy are primarily shocks to aggregate demand. Such a parameter λ can either be selected a priori—as it is with the HP filter—or jointly estimated with other parameters of the model—as it is the case with UC models. In this sense, UC models somewhat encompass the HP filter.

28. **Once model (1) is cast in the state space form, the Kalman filter and the associated smoothing algorithm enable maximum likelihood estimation of the model parameters and signal extraction of the unobserved components, conditional upon a discretionary set of starting values**.[23] Table 2 reports estimates and standard errors of the model parameters, equation diagnostics, and the predicted final state for potential growth and the output gap. Estimates of the unrestricted univariate model (not reported) provide a poor representation of the Italian business cycle, featuring a very short cycle first-order autoregressive cycle with small disturbance variance coupled with non-stationary and highly volatile underlying output growth. Restricting the variance of the drift to zero reduces potential output to a random walk process with constant drift (also not reported)—a specification consistent with the stationarity of the GDP growth rate. However, ρ^y appears to be insignificantly different from unity, so that the model is actually forcing convergence towards the rate of trend growth at the end of the sample. Compared to unrestricted estimates, cyclical variability is slightly increased at the expenses of the trend.

29. **When the variance of the trend is restricted to zero, potential output becomes a local linear trend, with changes in the trend fully captured by changes in the slope, which evolves smoothly over time** (model "UNI_s" in Table 2). Under the current specification, changes in potential output become overly "cyclical", with swings in potential reflecting an interaction of the trend and the cycle component. The output gap follows a stationary second-order autoregressive process, with roots equal to 1.11 and -0.26 respectively, yielding a cycle with a period of 4 ½ years. The fit is satisfactory and there is no evidence of significant misspecification. At the end of the sample, potential growth is estimated to be around 1 ¼ percent, with output being below potential by some 1 percent. Uncertainty around the estimates is high, with predictive standard errors of 0.9 percent. Out of total uncertainty, about two thirds is due to uncertainty about disturbances, whereas only one third is associated with parameter uncertainty.

30. **Finally, we restrict model (1) to yield HP estimates of the trend** (model "UNI_hp" in Table 2). This amounts to setting the level shock to zero, a smoothing parameter to 1600, a

[23] For illustrative purposes, an example of models' state space representation is provided in the Appendix. For a thorough exposition of the state space methodology, the reader may refer to Harvey (1989) and Kim and Nelson (1999). Estimation was carried out in Gauss 6.0.

random walk trend growth rate with nonzero variance, and a serially uncorrelated output gap. Under these conditions, only one parameter is to be estimated, namely the variance of the drift. Both the relatively low value of the likelihood and the diagnostics strongly reject these restrictions.

Conditioning on Okun's Law...

31. **In general, univariate methods lack important economic content.** Accordingly, in this section, the detrending methodology presented above is extended to ensure theoretical consistency among fluctuations of relevant macroeconomic aggregates—such as output, unemployment, and inflation—over the business cycle.

32. **Estimates of the output gap (and related potential growth) should ideally be consistent with estimates of deviations of unemployment from their corresponding *equilibrium* paths.** To this aim, specification (1) is first augmented with a version of Okun's law, thereby extending the original univariate model with smooth trend into a bivariate unobserved component model of real GDP and unemployment rate, where the unemployment rate is decomposed into a trend and cyclical component as well.[24]

33. **Specifically, bivariate estimates of the output gap employ the additional information contained in the comovement of output and unemployment over the business cycle.** By imposing a general version of Okun's law linking the transitory components of unemployment to the output gap, unemployment can be defined as follows:

$$\begin{cases} u_t = u_t^* + u_t^c \\ u_t^c = \theta(L) y_t^c + \varepsilon_t^u, & \varepsilon_t^u \sim \text{i.i.d.} N(0, \sigma_{\varepsilon^u}^2), \\ u_t^* = u_{t-1}^* + \delta_{t-1} + v_t^u, & v_t^u \sim \text{i.i.d.} N(0, \sigma_{v^u}^2), \\ \delta_t = (1-\rho^u)\delta_0 + \rho^u \delta_{t-1} + \omega^u{}_t, & \omega_t^u \sim \text{i.i.d.} N(0, \sigma_{\omega^u}^2), \end{cases} \tag{2}$$

where u is the unemployment rate, u^* is the non-accelerating inflation rate of unemployment (NAIRU), and u^c is the transitory component of the unemployment rate that is assumed to be a function of the current and lagged output gaps with loading factors θ_i. Remaining notation is analogous to the univariate output model. The corresponding bivariate UC model can be obtained by combining the ouput equations (1) with the unemployment rate definition given by (2), under the assumption that disturbances are mutually independent and independent of any other disturbance in the output equation.

[24] See Clark (1989) for a bivariate model of the United States; Apel and Jannson (1999) and Fabiani and Mestre (2001) for applications to the euro area; and Zezza (2004) for Italy.

34. **Estimates of the preferred UC bivariate model yield local linear trends for both unemployment and output, with changes in their respective slopes evolving smoothly over time** (model "BIV_s" in Table 2). The transitory component of unemployment loads negatively and significantly on the common cycle, though with a small and lagged response. It indicates that a 1 percentage point increase of output over potential, decreases short-run unemployment by less than 0.05 percent in the next quarter. Both parameter estimates and the final states of unobserved components are in line with the output decomposition implied by the univariate specification (Figure 4A and 4B), yielding a NAIRU of about 8 ½ percent at the end of the sample.

35. **Results are also remarkably consistent with observed business cycle stylized facts, confirming that dynamics in the unemployment rate are essentially permanent.** The fit is satisfactory with no significant evidence of misspecification. With respect to the univariate UC model, the uncertainty surrounding output gap and potential output estimates is reduced, a consequence of imposing a common cycle. Overall, accounting for labor dynamics affects only marginally our univariate estimates of the output gap, which remain largely dependent on the nature of idiosyncratic shocks. In other words, the unemployment rate has little informational content for the evaluation of the relative importance of cyclical components of economic activity (e.g. demand pressures).

... and a Phillips Curve

36. **In line with the notion that potential output is the level of output ensuring stable inflation,** we hence attempt to condition the decomposition of output on the information contained in models (1)-(2) *and* on the ability of the output gap to explain inflation within a short-run Phillips curve relationship:

$$\begin{cases} \pi = \pi_t^* + \gamma(L) y_t^c + \zeta z_t + \varepsilon_t^\pi, \\ \pi_t^* = (1-\rho^\pi)\pi_0^* + \rho^\pi \pi_{t-1}^*, \end{cases} \tag{3}$$

where π is 4 times the quarterly difference in the log of consumer prices; π^* is the underlying (expected) annualized level of inflation—which is defined as a stationary autocorrelated process converging to a steady-state level π^0; $\gamma(L)y^c$ are demand pressures—expressed as a function of the output gap previously defined. Finally, z captures exogenous factors affecting headline inflation (e.g., changes in the nominal effective exchange rate of the euro and in oil prices), whereas v_t^u represents shocks to inflation. Note that the effect of changes in oil prices is immediate, but inertia in the inflation process is taken into account via the autoregressive processes characterizing both the output gap and underlying inflation. In this respect, ρ^π can be viewed as the degree of backward-lookingness intrinsic in agents' expectations formation process, so that π^0 would be the authorities' long-term inflation objective. Parameter estimates of the preferred trivariate (labeled "TRI") model (1)-(2)-(3) are reported in Table 2 for comparison with previous models.

Figure 4A: Real-time Estimates of the Output Gap

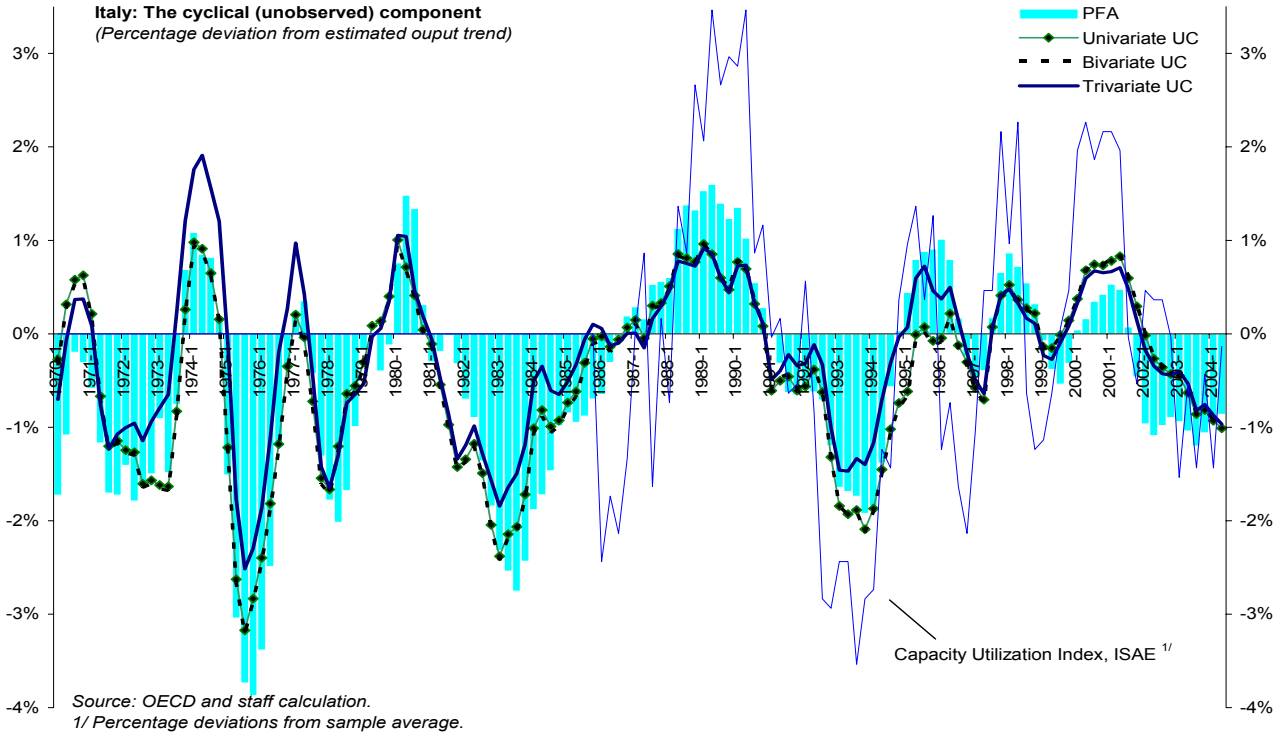
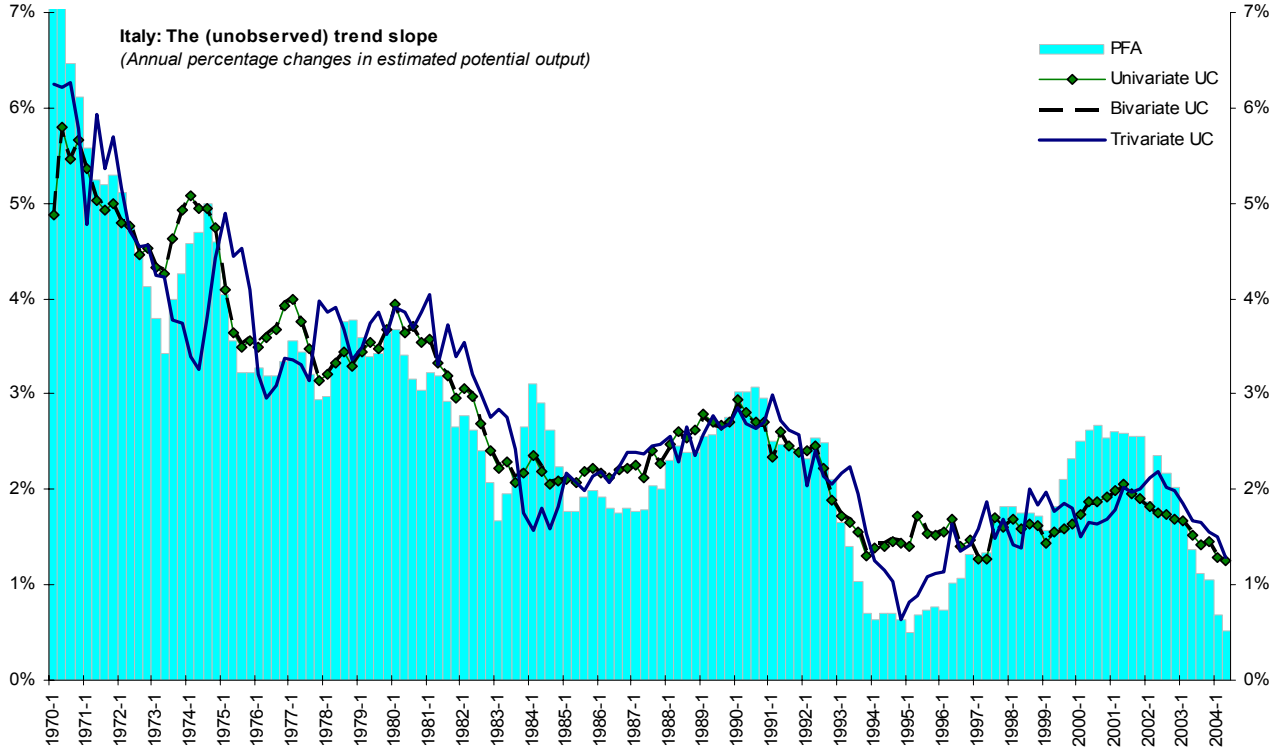


Figure 4B: Real-time Estimates of Potential Growth



Source: OECD and staff calculation.

37. **The ouput gap enters the Phillips curve positively, significantly, and with a large coefficient,** implying that a 1 percent increase of output over potential raises actual inflation by about 0.4 percent. In line with previous estimates, transitory unemployment is likely to fall by more than 0.04 percent in response to a 1 percent increase in the output gap. The response of inflation to changes in oil prices is expected to be very low (around 0.02), but subject to high uncertainty. The degree of inflation persistence is quite high, with a coefficient on backward-looking inflation likely to be above 0.5, with full pass-through taking longer than 3 years. However, the large confidence interval around this estimate suggests that a model with time-invariant inflation persistence may be inappropriate.

38. **Potential growth is estimated around 1.3 percent by the end of the sample, whereas the size of the output gap is expected to be just below 1 percent.** Corresponding final state estimates for the NAIRU are above 8½ percent. The long-term inflation objective is forecasted around 2 percent, although the estimate is also surrounded by high uncertainty. In spite of the similarity of parameter estimates provided by previous model specifications, the trivariate model implies greater variability of the output gap, especially over the 1970s (Figure 4A). Conditioning output decomposition on the ability of the output gap to predict inflation implies upward revisions of the measure of inflationary pressures over periods in which supply-side shocks have been predominant.

The Production Function Approach Revisited

39. **In order to compare real-time estimates of potential output derived from UC models with corresponding measures based on traditional PFA, the output decomposition is then carried out within a revised production function framework.** The rationale is to obtain estimates of potential output from the trend levels of its structural determinants, such as productivity and factor inputs. If technology has the usual Cobb-Douglas representation with constant returns to scale, the aggregate production function takes the general form:

$$Y_t = A_t (L_t)^{\beta} (C_t K_t)^{1-\beta} \tag{4}$$

where β is the labor share, L denotes total hours worked in the economy, K is the capital stock adjusted for the degree of capacity utilization C, taking values over the interval (0,1]. Taking logs of both side of equation (4)—here denoted by small caps—yields:

$$y_t = a + \beta l_t + (1-\beta)(c_t + k_t) \tag{5}$$

40. **All factor inputs in equation (5) can be additively decomposed into their potential and transitory components, with the exception of the capital stock, which is assumed to be fully permanent and, hence, to contribute only to potential.** Under the assumption of full capacity utilization, e.g. if c is fixed at 0, the cyclical component of the

Solow residual is likely to absorb transitory swings in the intensity of capital use, hence displaying more business cycle variability than strictly defined TFP. Algebrically:

$$a = a^* + a^c,\ l = l^* + l^c,\ k = k^*,\ c = 0. \tag{6}$$

41. **The log of total hours (*l*), in turn, can be additively decomposed into its determinants, e.g. working-age population (*wpop*), participation ratio (*pr*), the unemployment rate (*u*) and the average number of hours per employee (*h*).**[25] These determinants can be also disentangled into their own permanent and cyclical components, so that the permanent and cyclical labor contributions can be written as:

$$l^* = wpop + pr^* - u^* + h^*,\ l^c = pr^c - u^c + h^c. \tag{7}$$

The intuition is that population dynamics are fully permanent, whereas labor force participation, employment, and average hours contain also cyclical information.

42. **Combining identities (5)-(6)-(7) yields the required model-based output decomposition, where the reference cycle—$\boldsymbol{\psi}_t$, an autoregressive process of second order that is here constrained to be common across factor inputs—is driven by fluctuations in the industrial production index, *ip*.** As such, the four transitory components, e.g. the Solow residual, a^c, the participation ratio, pr^c, the unemployment rate, u^c, and the average hours, h^c, can be expressed as linear combinations of current and lagged values of the reference cycle. Corresponding factor inputs trends—denoted by vector $\boldsymbol{\mu}_t$—are assumed to follow random walk processes with stochastic drifts—denoted by vector $\boldsymbol{\kappa}_t$. The growth rate of each factor trend can thus take a different shape, depending on the value of the corresponding element in the vector ***P***. For instance, if the first element in ***P*** is estimated to be insignificantly different from 1, then TFP is an integrated series of second order; else, if $0<P_1<1$ the time-varying TFP growth rate converges back to a steady-state rate, κ_1^*. The resulting multivariate UC model (8) –labeled "PFA" in Table 2—can be represented as follows:[26]

[25] To maintain log-linearity, while enabling modeling the NAIRU, we use the first order Taylor approximation for the employment rate, so that $e_t = \ln(1-u_t) \approx -u_t$.

[26] Alternative specifications have been estimated, including with (i) a fixed labor income share derived from national accounts, (ii) a time-varying income share, (iii) an index of capacity utilization. On the basis of residual diagnostics and forecasting performance, the final preferred model allows for the estimate of a constant β and finds P to be indistinguishable from an identity matrix.

$$
\begin{cases}
y_t = \left(\beta wpop_t + (1-\beta)k_t + \mathbf{y}_t^*\right) + \mathbf{y}_t^c \\
\mathbf{y}_t^* = \begin{bmatrix}1 & \beta & -\beta & \beta\end{bmatrix}\boldsymbol{\mu}_t, & \boldsymbol{\mu}_t = \begin{bmatrix}a^* & pr^* & u^* & h^*\end{bmatrix}', \\
\mathbf{y}_t^c = \begin{bmatrix}1 & \beta & -\beta & \beta\end{bmatrix}\boldsymbol{\psi}_t, & \boldsymbol{\psi}_t = \begin{bmatrix}a^c & pr^c & u^c & h^c\end{bmatrix}', \\
\boldsymbol{\mu}_t = \boldsymbol{\mu}_{t-1} + \boldsymbol{\kappa}_{t-1} + \mathbf{v}_t^{\mu}, & \mathbf{v}_t^{\mu} \sim N(0, \boldsymbol{\Sigma}_{v^{\mu}}), \\
\boldsymbol{\kappa}_t = (\mathbf{I} - \mathbf{P})\boldsymbol{\kappa}^* + \mathbf{P}\boldsymbol{\kappa}_{t-1} + \boldsymbol{\omega}_t^{\kappa}, & \boldsymbol{\omega}_t^{\kappa} \sim N(0, \boldsymbol{\Sigma}_{\omega^{\kappa}}), \\
\boldsymbol{\psi}_t = \boldsymbol{\tau}\psi(L)ip_t^c, \\
\psi(L)ip_t^c = \varepsilon_t^{ip}, & \varepsilon_t^{ip} \sim N(0, \sigma_{\varepsilon^{ip}}).
\end{cases}
\tag{8}
$$

43. **Overall, cyclical fluctuations in productivity and factor inputs load significantly on the common cycle and with expected signs**. In particular, the cyclical behavior of TFP is found to be remarkably in line with the business cycle. Both have dramatically plunged below trend since 2002 and displayed a substantial increase in the degree of cyclical volatility since 1999. The unemployment rate is found to be significantly countercyclical and—consistently with previous model estimates—to fall by about 0.04 as ouput rises 1 percent above potential. Interestingly, labor participation variations are found to be broadly acyclical, whereas there is evidence of positive comovements between average hours worked per employee, output, and productivity, once structural shifts in factor trends have been identified. Implied output gap estimates tend to exhibit higher volatily than corresponding estimates from the univariate UC model specification (Figure 4A). Nonetheless, there is no evidence of significant residual misspecification.

44. **At the end of the sample, potential growth is estimated to be lower than in previous models, reflecting a sharp drop in the permanent contribution of total factor efficiency.** Interestingly, the structural behavior of real output and TFP is found to be markedly different, while comoving over the cycle. A structural break in cyclically-adjusted TFP trend growth is identified in the mid-1990s. The drift component of TFP has shifted down significantly since then, reducing the average rate of TFP growth from one percent to zero (Figure 5A). On the contrary, potential growth is found to have progressively recovered from the end of 1993 to the end of 2001, rising from an annual rate of 0.7 percent at the end of the 1992-93 recession to over 2 percent just before the current slowdown—a growth rate analogous to that of the early 1990s (Figure 5B). Finally, there exists a constant wedge between trend growth in labor and in factor productivity, confirming the idea that the rate of capital deepening has remained stable over time, at around 1 percent.

Figure 5A: Looking at Cyclically-Adjusted TFP

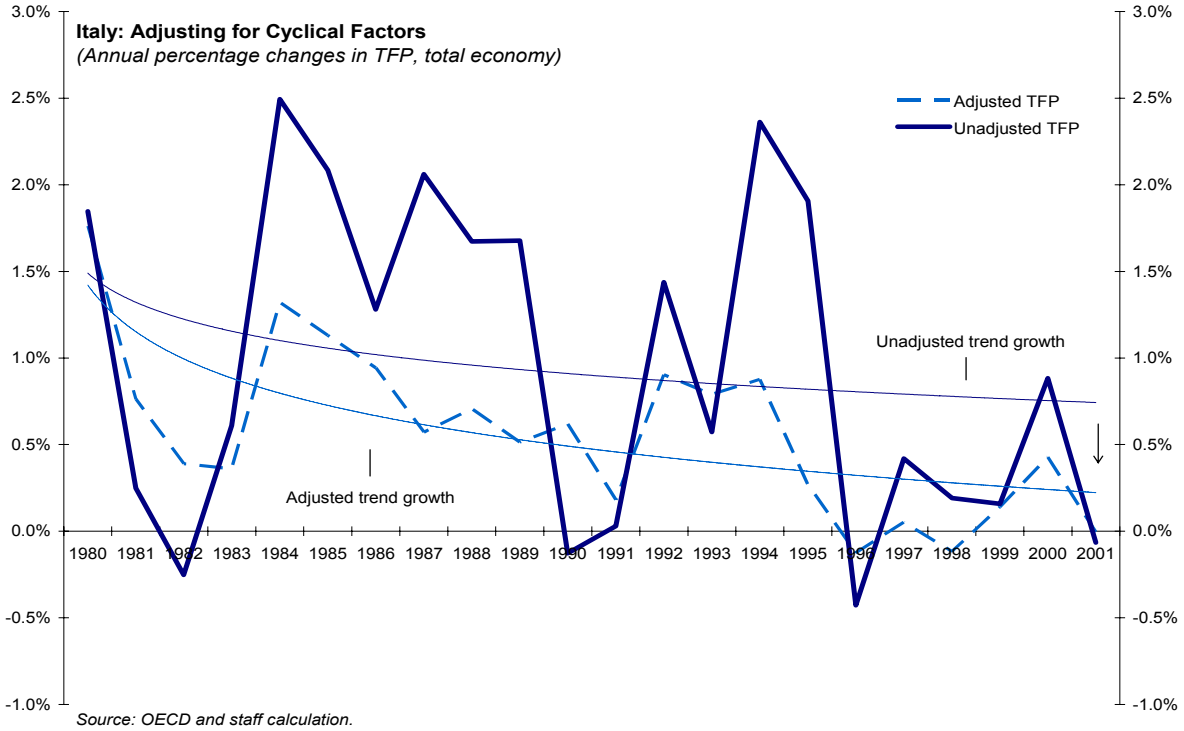
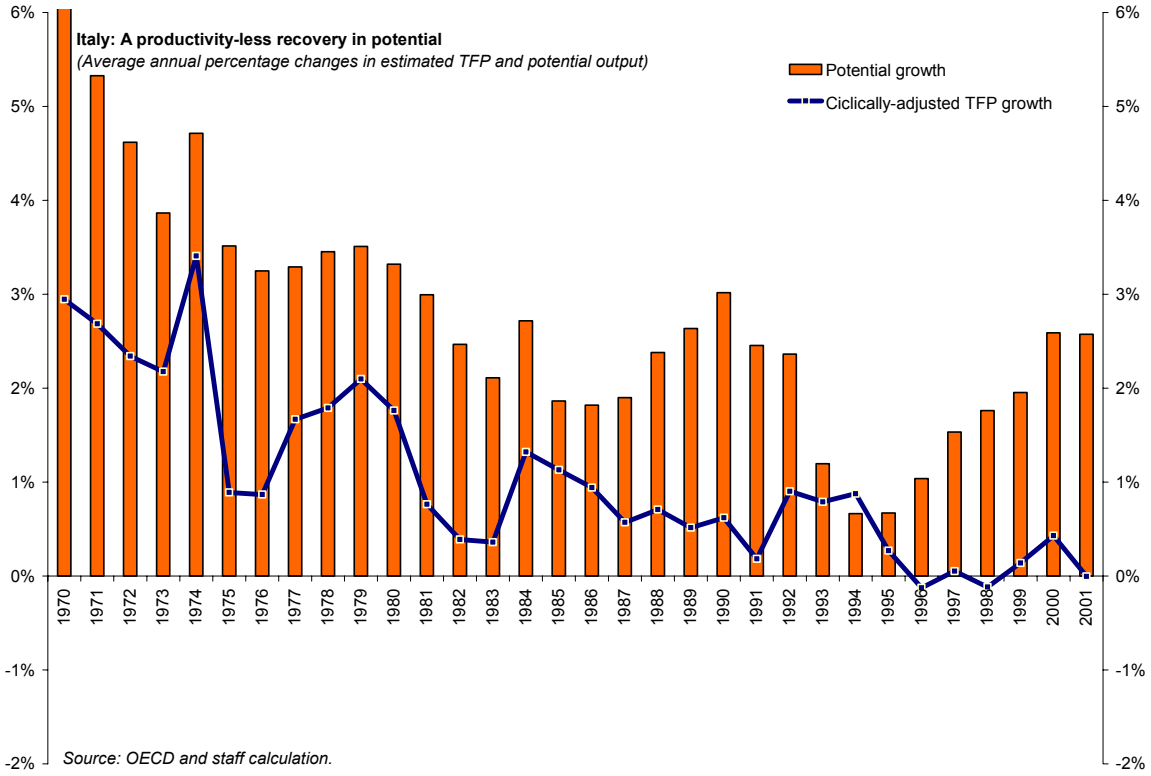


Figure 5B: Looking at Potential and TFP Productivity Growth Using UC Models



45. **Interesting information can be extracted by decomposing the covariance matrices of trend slope and cyclical disturbances.** The bulk of the permanent variation in output is found to be driven by shifts in labor trends, namely labor participation and employment. Conversely, the Solow residual appears to absorb almost 90 percent of the cyclical variation in real GDP. In other words, changes in employment are likely to respond very little to business cycle fluctuations, which have been largely associated with shifts to productivity and, to a much smaller extent, variations in per capita hours worked.

46. **Overall, the robustness of the results is encouraging.** In line with previous studies for Italy and the euro area, the chapter finds that a sizeable part of the growth in the Solow residual vanishes after adjusting for cyclical factors, although the adjustment actually reinforces the evidence of a slowdown in trend TFP growth over the second half of the 1990s. The chapter also provides evidence that the major source of potential growth variation is likely to be associated with changes in labor participation, confirming the permanent (i.e. structural) nature of labor market dynamics. Shifts in productivity, instead, are able to explain the bulk of business cycle fluctuations and are positively correlated with transitory movements in average working hours and capacity utilization. Because of the high volatility of the Solow residual, conditioning real-time output decomposition upon indicators of demand pressures in product and labor markets provides smoother estimates of potential growth than unobserved component models relying on a production function approach (Figure 4B).

D. Concluding Remarks

47. **This chapter presents updated estimates of potential growth and the output gap, using new techniques that draw on comovements of output, employment and inflation over the business cycle to distinguish trends from cycles.** One puzzling aspect of Italy's growth performance over the last several years has been the limited response of output growth to the steady increase in labor supply that has accompanied structural reforms. The chapter's results indicate that even after correcting for cyclical factors, trend productivity growth—already on a downward slope for decades—has declined sharply since the mid-1990s, and it remains a drag on growth going forward.

48. **There is nonetheless evidence that a significant portion of the sharp decline in labor productivity over the current downturn is cyclical rather than structural, with capacity utilization falling despite the rise in the labor input.** For this reason, the exceptionally low productivity growth over the current protracted downturn does not necessarily point to a deceleration in potential growth. It rather provides empirical basis to hope for some recovery in growth in the near future, as cyclical conditions improve and firms seek to maximize labor efficiency.

49. **From a normative viewpoint, this chapter's analysis carries noteworthy policy implications.** It stresses the importance to address not only factors preventing further employment growth, but also those constraining factor efficiency. Evidence of stagnant and

procyclical productivity growth may support the hypothesis of a (negative and persistent) demand shock within an economy featuring a (structural) increase in wage flexibility.[27] At the same time, however, the enduring sluggishness in factor efficiency may conceal the need to reduce distorsions in product markets, including inadequate competition in key sectors and overhead costs. The negative link between long-term TFP performance and the degree of frictions and imperfections in the economy—such as imperfect competition or costs of reallocating inputs—has been widely recognized by the literature both on theoretical and empirical grounds.[28] Further research is, however, warranted to assess whether this channel could explain the significant slowdown in Italy's productivity growth over the second half of the 1990s.

[27] In Italy, the share of fixed-term contracts among new hires grew from 34 to 42 percent between 1995 and 2003. Cipollone and Guelfi (2004) evaluate that the labor cost reduction associated with this expansion amounted to about 16 percent.

[28] For theoretical models linking distorsions to productivity performances, see among others, Rotember and Woodford (1991), Ramey and Shapiro (1998). OECD (2003) presents interesting cross-country evidence on the issue.

Table 1A: Growth Accounting: Period Averages

Looking at contributions to growth...

		Labor							
	Labor	Avg. hours worked in business sector	Share of Labor in Business Sector	Employment	Labor force	Population	Capital	TFP	GDP
61-70	-0.9%	-0.4%	-0.2%	0.0%	-0.7%	0.4%	1.9%	4.8%	5.7%
71-80	-0.5%	-0.6%	-0.4%	-0.1%	0.2%	0.4%	1.4%	2.8%	3.6%
81-90	0.2%	-0.2%	0.2%	-0.3%	-0.2%	0.5%	0.9%	1.2%	2.3%
91-01	0.0%	-0.2%	0.0%	0.0%	0.0%	0.1%	1.1%	0.6%	1.7%
of which:									
81-85	-0.2%	-0.4%	0.3%	-0.5%	-0.4%	0.8%	0.9%	1.0%	1.7%
86-90	0.5%	0.1%	0.2%	-0.1%	0.1%	0.2%	1.0%	1.3%	2.9%
91-95	-0.9%	-0.3%	0.2%	-0.4%	-0.5%	0.1%	0.9%	1.2%	1.3%
96-01	0.5%	-0.2%	0.0%	0.2%	0.5%	0.0%	1.2%	0.2%	1.9%
61-01	-0.3%	-0.4%	-0.1%	-0.1%	-0.1%	0.3%	1.3%	2.3%	3.3%
71-01	-0.2%	-0.3%	0.0%	-0.1%	0.0%	0.3%	1.2%	1.5%	2.5%
81-01	0.0%	-0.2%	0.1%	-0.1%	0.0%	0.3%	1.0%	0.9%	1.9%
91-01	0.0%	-0.2%	0.0%	0.0%	0.0%	0.1%	1.1%	0.6%	1.7%

Source: OECD data and staff calculation.

Looking at capital deepening...

	Capital Deepening	TFP	Labor Productivity
61-70	2.3%	4.8%	7.1%
71-80	1.7%	2.8%	4.4%
81-90	0.9%	1.2%	2.0%
91-01	1.1%	0.6%	1.7%
of which:			
81-85	0.9%	1.0%	2.0%
86-90	0.8%	1.3%	2.1%
91-95	1.4%	1.2%	2.6%
96-01	0.9%	0.2%	1.1%
61-01	1.5%	2.3%	3.8%
71-01	1.2%	1.5%	2.7%
81-01	1.0%	0.9%	1.9%
91-01	1.1%	0.6%	1.7%

Source: OECD data and staff calculation.

Table 1B: Growth Accounting: Adjusting for Factor Quality Changes

Looking at contributions to growth...

			Capital			
	Labor	Capital	IT	Non-IT	TFP	GDP
61-70	...	...	...	...	...	...
71-80	...	...	...	...	...	...
81-90	0.4%	1.1%	0.3%	0.8%	0.6%	2.2%
91-01	0.1%	1.1%	0.3%	0.8%	0.4%	1.6%
of which:						
81-85	0.2%	1.0%	0.3%	0.7%	0.4%	1.6%
86-90	0.7%	1.3%	0.4%	0.9%	0.9%	2.8%
91-95	-0.7%	0.9%	0.2%	0.6%	1.0%	1.2%
96-01	0.5%	1.3%	0.4%	0.9%	0.2%	1.9%
61-01	...	...	...	...	...	...
71-01	...	...	...	...	...	...
81-01	0.2%	1.1%	0.3%	0.8%	0.6%	1.9%
91-01	0.1%	1.1%	0.3%	0.8%	0.4%	1.6%

Source: Marcel P. Timmer, Gerard Ypma and Bart van Ark, "IT in the European Union: Driving Productivity Divergence?", 2003, Groningen Growth and Development Centre. Mimeo. Downloadable at http://www.ggdc.net/pub/online/gd67(online).pdf

Looking at capital deepening...

		Capital Deepening			
	Capital Deepening	IT	Non-IT	TFP	Labor Productivity
61-70	...	...	...	...	...
71-80	...	...	...	...	...
81-90	0.9%	0.3%	0.6%	0.6%	1.6%
91-01	1.1%	0.3%	0.7%	0.4%	1.5%
of which:					
81-85	0.9%	0.3%	0.6%	0.4%	1.3%
86-90	1.0%	0.3%	0.6%	0.9%	1.9%
91-95	1.2%	0.3%	0.9%	1.0%	2.2%
96-01	1.0%	0.4%	0.6%	0.2%	1.1%
61-01	...	...	...	...	...
71-01	...	...	...	...	...
81-01	1.0%	0.3%	0.7%	0.6%	1.6%
91-01	1.1%	0.3%	0.7%	0.4%	1.5%

Source: Marcel P. Timmer, Gerard Ypma and Bart van Ark, "IT in the European Union: Driving Productivity Divergence?", 2003, Groningen Growth and Development Centre. Mimeo. Downloadable at http://www.ggdc.net/pub/online/gd67(online).pdf

Table 1C: Growth Accounting: Adjusting for Compositional and Factor Quality Changes

Looking at contributions to growth...

			Capital			
	Labor	Capital	IT	Non-IT	TFP	Value Added
81-85	0.7%	0.9%	0.2%	0.6%	-0.1%	1.4%
86-90	0.8%	0.9%	0.3%	0.6%	1.1%	2.9%
91-95	-0.2%	0.5%	0.1%	0.4%	0.9%	1.2%
96-01	0.9%	0.9%	0.3%	0.6%	0.3%	2.1%
81-01	0.6%	0.8%	0.2%	0.5%	0.5%	1.9%

Source: A. Bassanetti, M. Iommi, C. Jona-Lavinio, F.Zollino, "La Crescita dell'Economia Italiana negli Anni Novanta tra Ritardo Tecnologico e Rallentamento della Produttivita'", 2004, ISTAT and Banca d'Italia. Mimeo.

Looking at capital deepening...

	Capital Deepening	Capital Quality Changes	Labor Quality Changes	Output Composition	TFP	Labor Productivity
81-85	0.6%	0.2%	0.5%	0.0%	-0.1%	1.3%
86-90	0.6%	0.2%	0.3%	-0.1%	1.1%	2.1%
91-95	0.7%	0.0%	0.5%	0.0%	0.9%	2.1%
96-01	0.4%	0.2%	0.1%	-0.1%	0.3%	1.0%
81-01	0.6%	0.1%	0.4%	0.0%	0.5%	1.6%

Source: A. Bassanetti, M. Iommi, C. Jona-Lavinio, F.Zollino, "La Crescita dell'Economia Italiana negli Anni Novanta tra Ritardo Tecnologico e Rallentamento della Produttivita'", 2004, ISTAT and Banca d'Italia. Mimeo.

Table 2: Real-time estimates from unobserved component models (1960q1-2004q2)[1/ 2//]

Parameters	UNI_s		UNI_hp		BIV_s		TRI		Parameters	PFA	
σ_ε^y	.0084	(.0005)	.0157	(--)	.0084	(.0005)	.0094	(.0006)	$\sigma_\varepsilon^{\psi ip}$	.0090	(.0005)
σ_ν^y	0	(--)	0	(--)	0	(--)	0	(--)	$\sigma_\varepsilon^{\psi a}$	.0073	(.0005)
σ_ω^y	.0005	(.0002)	.0004	$(2\cdot 10^{-5})$	.0005	(.0002)	.0007	(.0007)	$\sigma_\nu^{\mu a}$	0	(--)
φ_1	1.1147	(.0342)	0	(--)	1.1099	(.02085)	1.1373	(.0668)	$\sigma_\omega^{\kappa a}$	.0009	(.0003)
φ_2	-.2625	(.0268)	0	(--)	-.2550	(.01708)	-.3233	(.0383)	$\sigma_\varepsilon^{\psi pr}$	.0039	(.0003)
g_0	--	(--)	--	(--)	--	(--)	--	(--)	$\sigma_\nu^{\mu pr}$	0	(--)
ρ^y	1	(--)	1	(--)	1	(--)	1	(--)	$\sigma_\omega^{\kappa pr}$	.0011	(.0003)
σ_ε^u	—	—	—	—	.0016	(.0001)	.0016	(.0001)	$\sigma_\varepsilon^{\psi u}$	.0015	(.0001)
σ_ν^u	—	—	—	—	0	(--)	0	(--)	$\sigma_\nu^{\mu u}$	0	(--)
σ_ω^u	—	—	—	—	.0009	(.0001)	.0009	(.0002)	$\sigma_\omega^{\kappa u}$	.0010	(.0001)
θ_0	—	—	—	—	-.0006	(.0013)	0	(--)	$\sigma_\varepsilon^{\psi h}$	.0037	(.0003)
θ_1	—	—	—	—	-.0481	(.0011)	-.0408	(.0248)	$\sigma_\nu^{\mu h}$	0	(--)
σ_ε^π	—	—	—	—	—	—	.0211	(.0023)	$\sigma_\omega^{\kappa h}$	.0018	(.0004)
σ_ν^π	—	—	—	—	—	—	.0013	(.0027)	j_1	1.2756	(.0649)
γ_0	—	—	—	—	—	—	.3937	(.2037)	j_2	-.4068	(.0413)
γ_1	—	—	—	—	—	—	0	(--)	τ^a_0	.6541	(.0785)
ζ	—	—	—	—	—	—	.0170	(.0112)	τ^a_1	-.1678	(.0734)
ρ^π	—	—	—	—	—	—	.5849	(.061)	τ^{pr}_0	.0455	(.0461)
π_0	—	—	—	—	—	—	.0052	(.0118)	τ^{pr}_1	.0651	(.0451)
									τ^u_0	-.0400	(.0214)
									τ^u_1	.0238	(.0222)
									τ^h_0	.0831	(.0417)
									τ^h_1	-.0007	(.0290)
									β	.6225	(.1186)
Log-likelihood	519.76		414.57		1373.36		1924.94		3076.53		
SEE	0.90%		0.35%		0.90%		0.92%		0.93%		
AR(5)	0.59	[0.71]	71.5	[0.00]*	0.57	[0.72]	0.87	[0.50]	1.02	[0.41]	
$\Delta y^*_{t+1\|t}$	1.25%		0.95%		1.26%		1.29%		0.52%		
$y^c_{t+1\|t}$	-1.01%		-0.91%		-1.01%		-0.97%		-0.86%		
$NAIRU_{t+1\|t}$	—		—		8.52%		8.98%		8.45%		

[1/] *Standard errors are in parentheses. (--) indicates restricted estimates.*

[2/] *P-values are provided in square brackets. Starred probabilities indicate significance at 1 percent level.*

State-Space Models' Representation

In general, for Kalman filter estimation, a linear dynamic model involving unobserved state variables needs to be expressed in its state-space representation. The latter consists of two sets of equations: the measurement and the transition system. In this appendix an example of such systems is provided, with reference to the bivariate model defined by equations (1)-(2) in the main text. The Kalman filter estimation of its parameters is also discussed.[29]

Model (1)-(2) can be represented by two measurement equations linking real GDP and the current unemployment rate to six unobserved state variables, where the subscripts *t* reflect the fact that these unobserved components are assumed to vary over time. The notation is the same as in the main text:

$$\begin{bmatrix} y_t \\ u_t \end{bmatrix} = \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 \\ 0 & \theta_0 & \theta_1 & 1 & 0 & 0 \end{bmatrix} \begin{bmatrix} y_t^* \\ y_t^c \\ y_{t-1}^c \\ u_t^* \\ g_t \\ \delta_t \end{bmatrix} + \begin{bmatrix} 0 \\ \varepsilon_t^u \end{bmatrix}.$$

The first measurement equation is an identity, stating that observed real GDP is given by the sum of two independent unobserved components, potential output and the output gap. Similarly, the second measurement equation defines the unemployment rate as the sum of a stationary (unobserved) component—the unemployment gap—and a non-stationary (unobserved) component—the NAIRU. Specifically, the unemployment gap is assumed to be a function of current and lagged output gaps, with loading parameters θ_0 and θ_1, respectively. The dynamics of the time-varying unobserved stochastic processes are described in the transition system below:

$$\begin{bmatrix} y_t^* \\ y_t^c \\ y_{t-1}^c \\ u_t^* \\ g_t \\ \delta_t \end{bmatrix} = \begin{bmatrix} 1 & 0 & 0 & 0 & 1 & 0 \\ 0 & \varphi_1 & \varphi_2 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 1 \\ 0 & 0 & 0 & 0 & \rho^y & 0 \\ 0 & 0 & 0 & 0 & 0 & \rho^u \end{bmatrix} \begin{bmatrix} y_{t-1}^* \\ y_{t-1}^c \\ y_{t-2}^c \\ u_{t-1}^* \\ g_{t-1} \\ \delta_{t-1} \end{bmatrix} + \begin{bmatrix} v_t^y \\ \varepsilon_t^y \\ 0 \\ v_t^u \\ \omega_t^y \\ \omega_t^u \end{bmatrix} + \begin{bmatrix} 0 & 0 \\ 0 & 0 \\ 0 & 0 \\ 0 & 0 \\ 1-\rho^y & 0 \\ 0 & 1-\rho^u \end{bmatrix} \begin{bmatrix} g_0 \\ \delta_0 \end{bmatrix}.$$

[29] See Kim and Nelson (1999) for details.

Note that $\varepsilon_t^u, \varepsilon_t^y, v_t^y$, and ω_t^y denote the shocks to the unemployment gap, the output gap, the level of potential output, and the trend growth rate, respectively. These shocks are assumed to follow independent identically distributed processes, with standard deviations $\sigma_\varepsilon, \sigma_v$, and σ_ω, respectively. It is thus possible to identify the portion of uncertainty arising from the use of predicted values associated to each of these unobserved components, whenever *n*-step-ahead values of output and unemployment are forecasted.

Once a dynamic linear model is written in state-space form, a recursive procedure—e.g. the Kalman filter—allows the optimal estimate of the vector of unobserved components—e.g. potential output, the output gap, the NAIRU, and the two trend slopes—conditional upon an initial set of initial parameters and the appropriate information set. Hence, the Kalman filter provides the minimum mean squared error estimate of the unobserved state vector, given the appropriate information set. More specifically, the *basic filter* provides an estimate of the unobserved state vector conditional upon the information available up to time *t*. The *smoothing* provides a more accurate estimate on the vector, by using all the available information in the sample through time *T*.

Under the assumptions of model linearity and Gaussian disturbances, the *conditional distribution* of the observed variables—e.g. real GDP and unemployment—is also Gaussian. As such, the sample log-likelihood function can be maximized with respect to the unknown parameters of the model and the set of parameters can be estimated using a maximum-likelihood estimator. Iterating the basic filter starting from t=1 to T, while evaluating the log likelihood function from observation τ+1 (where τ is large enough) to T, minimizes the effects of some arbitrarily chosen initial values on the log-likelihood value. On the other hand, the last iteration of the basic filter provides the initial values for the smoothing.

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III. Business Environment, Legal Institutions and Economic Performance: Cross-Country Evidence and the Case of Italy[30]

Core Questions, Issues, and Findings.

- **How robust and applicable are the insights from the fast-growing literature on the role of institutions in economics?** Despite many studies of the links between institutions and economic performance, data imperfections elicit fundamental concerns. The subjective nature of many institutional measures is one key problem. The World Bank's "Doing Business in 2005" dataset may overcome some of these concerns.

- **What do the latest business environment data suggest about the links between institutions and growth?** Slower, costlier, and more rigid procedures are correlated with lower levels of per capita income, across both high-income and all countries. While the correlations between institutions and income (and long-term growth) could reflect reverse causality, the pattern of relative strengths of the relationship between growth and different elements of the business environment suggests this may not be the case.

- **What do the new data say about Italy?** A number of the indicators included in the World Bank data set raise concerns about aspects of Italy's business environment. In particular, the data suggest that some types of legal procedures in Italy take much longer to conclude than in other advanced economies. Although it is possible that the limited number of indicators included in the data set do not accurately summarize the overall state of the business environment, they are broadly consistent with the findings of surveys conducted by other entities. The results suggest that reforms to strengthen the business environment in Italy could have an important growth dividend.

A. Introduction

50. **This chapter will investigate the role of institutions and the judicial system in overall economic performance,** with special reference to the case of Italy. Despite a general consensus that institutions have important implications for aggregate economic activity, demonstrating this has proven difficult, both theoretically and empirically. The chapter will focus on the growing global and Italy-specific academic literature on these linkages and will explore some empirical issues, including the role of cross-country evidence in general and in explaining developments in Italy.

51. **More substantively, the paper will advance the following arguments.** First, the recent comparative literature on the role of institutions may benefit from systematization.

[30] Prepared by Bogdan Lissovolik.

The paper will review the main contributions, qualifying the tentative agreement that institutions cause growth outcomes. Second, it will examine the empirical side of the problem in a cross-country setting (with reference to Italy), by using the World Bank's "business environment" data. This section will illustrate the interaction of specific institutions with economic performance, emphasizing the dimensions of time, rigidities, and cost. Third, given evidence that Italy is an outlier in terms of some of the characteristics of its legal system, the paper will review some properties of that system. The conclusion will draw some policy implications.

B. Survey of the Literature.

General and cross-country studies

52. **The "institutional" determinants of economic performance have attracted increasing attention from researchers over the last decade.** Following widespread recognition of the work by Douglas North in the early 1990s, a number of recent papers (see Acemoglu et al. (2004), Rodrik et al. (2002), IMF World Economic Outlook, April 2003 (WEO, 2003) and references therein) have forcefully made a case for the primacy of institutions in understanding economic growth and income differences across time and countries. In particular, it has been argued that institutional factors appear to be "fundamental" causes of differences in income, compared to the "proximate" causes (such as labor and capital accumulation, technological progress, etc.) emphasized in much of the preceding mainstream theoretical literature on growth (Solow (1956), Barro and Sala-i-Martin (1995)).

53. **Several competing theoretical frameworks for "fundamental" institutional determinants of economic outcomes have been suggested.** In addition to the long-standing, but largely self-explanatory, themes of "efficient institutions" and ideology, two concepts have showed some, albeit still limited, promise recently. The **legal origin** theory (La Porta and others, 1997, 1998, 1999, 2000), and Levine (1997, 1998, 1999) argues that the Anglo-Saxon common law fosters financial – and hence economic – development distinctly better than do other legal systems.[31] This theory has had some empirical validation and may explain why some features of particular economies have persisted for a very long time. However, it cannot explain the substantial and uneven economic and financial progress both within and across countries after the "historical accident" of legal adoption took place. The "**political economy (social conflict)**" theory (proposed, with variations on the theme, by Rajan and Zingales (2003), Pagano and Volpin (2001), and Acemoglu et al. (2004)) rejects the above deterministic view, and instead offers a "theory of institutional change." The latter paper argues that financial and economic development is largely a product of the evolving comparative powers of different political interest groups, with a delicate dynamic balance

[31] According to this view, the French civil law system offers the least support for financial development, with the German and Scandinavian systems falling into an intermediate range.

between "de-jure" and "de-facto" forces. The theory gives a plausible interpretation of historical evolution, including of instances of substantial shifts in legal systems. However, it (i) does not explain persistence of institutions; (ii) has so far focused on only a limited field of institutions (political and economic); and (iii) has been difficult to formalize and test empirically.

54. **Cross-country regression studies of institutional causes of economic performance have grown exponentially since the early 1990s.** The initial motivation was a surge in the focus on growth empirics, whereby variables proxying the "rule of law" and related factors appeared to add explanatory power to cross-country regressions (see Barro (1991), Barro and Sala-i-Martin (1995)). Since then, continual progress has been made in extending research agendas and developing data and analytical tools for such analysis (see WEO, 2003). In addition to the focus on macroeconomic outcomes, a large body of research concentrated on the determinants and effects of specific institutional factors (legal, political, firm-level, etc.), at various levels of detail and disaggregation.

55. **The empirical research on the macroeconomic effects of institutions could be summarized by the following points:**

- **With a few exceptions (legal origin, aspects of political economy),** [32] **the studies have focused on "proximate" rather than fundamental institutional factors.** However, the analysis of some proximate factors (i.e., financial systems) has developed into an influential and policy-intensive body of research. [See Rajan and Zingales (2003)].

- **The more widely-used data for such analysis have been subjective measures of institutional quality** [see Kaufman, Kraay and Zoido-Lobaton (1999), as well as various indexes constructed by EBRD (for transition economies), Transparency International, Heritage Foundation, etc.)]. Many of the indicators are compiled on the basis of surveys or expert panels, whose respondents may – often subconsciously – factor outcomes (including GDP) into judgments on the relative merits of the particular issues in a given economy. Furthermore, some of the data have a limited range of scores, which do not permit differentiation between countries.

[32] Empirical efforts at discriminating between the political-economy and legal origin arguments have not been fully conclusive, highlighting both the pervasive data problems. Kaufman (2004) infers that the legal tradition appears to matter, but the share of cross-country variation explained by the legal origin is low. He concludes that there are important lessons "from a comparison across legal systems that focuses on more than the (admittedly important) distinction between civil and common law systems."

- **These aggregate measures of "institutional quality" have been correlated with indicators of economic performance.** The correlation is positive with economic growth and per capita income, and negative with volatility. Furthermore, available indicators of institutional quality have been correlated among themselves. **There is some evidence of causality between institutions and aggregate economic outcomes, but much of it remains precarious.** While various methods have been used to test for – and have claimed – causality (panel/time-series techniques, two-stage least squares, instrumental variables, and, most recently, identification through heteroscedasticity (Rigobon and Rodrik (2004)), they do not appear to overcome fundamental subjectivity problems with the data on institutions [(see Glaeser et al. (2004)].

- **Cross-country regressions have generally been based on the widest country sample possible, in part for the sake of greater statistical power.** However, it is commonly recognized that the institutional fabric varies enormously across countries, and the profile of this variation has not yet been explored systematically.

Table 1. Selected Literature on the Role and Determinants of Specific Institutions.

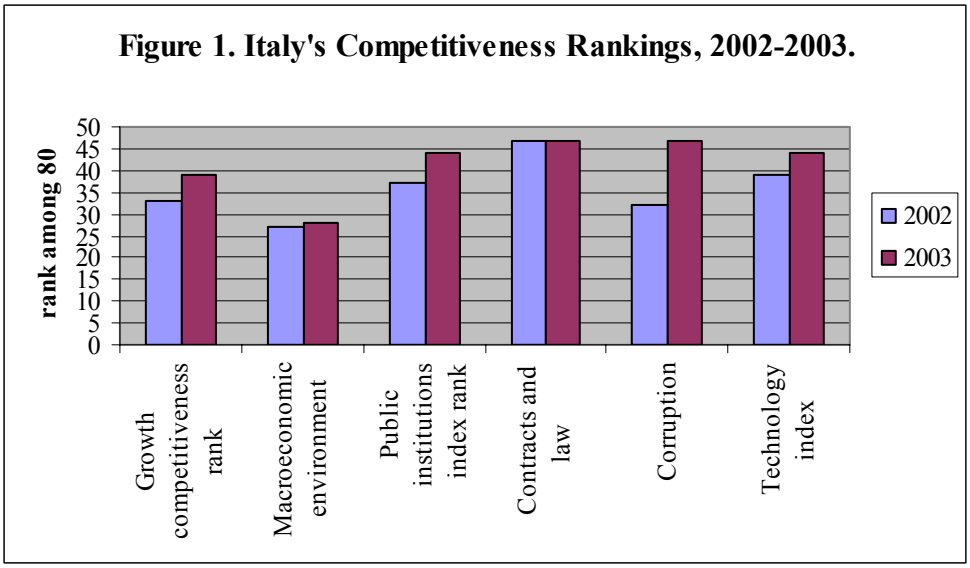
Outcomes	Institutional factors					
	Political economy	Regulatory Quality	Financial system	Corporate governance	Legal "efficiency"	Legal tradition
Macroeconomy/ Growth/Volatility/General economic efficiency	Perotti (1995)	Central Bank Independence; Fiscal rules, etc.			Marchesi (1998, 2003), EBRD, Kaufman,	Levine (1997-1999)
Financial development	Pagano and Volpin (2001) Rajan and Zingales (2001)	Pagano and Volpin (2001)	Zingales (2004)	Pagano and Volpin (2001)	Zingales, Rajan and Kumar (2001)	Levine (1997-1999) La Porta et al. (1997-2000)
Firm structure, behavior and performance	Roe (2003)	Scarpetta et al. (2002) Bartelsman et al. (2003)	Zingales (2004)		Zingales, Rajan and Kumar (1999)	Roe (2003)
Labor markets		Scarpetta et al. (2002)			Ichino, Ichino and Polo (1998)	
Determinants of specific institutions	Botero et al. (2004)	Djankov et al. (2002) Botero et al. (2004)	Djankov et al (2004); La Porta et al. (1998)	Roe (2003)	Djankov et al (2003)	Djankov et al. (2003)

56. **The vast field of analysis of specific institutions** is virtually impossible to summarize in terms of substance. However, in practice it **has been largely confined to a few broad areas, such as macroeconomy, financial development; firm behavior/performance, and labor markets.** Table 1 classifies selected recent cross-country contributions (most are empirical but some are descriptive) by plotting principal economic outcomes against main groups of institutional factors. The analysis is often interdisciplinary, and sometimes the data do not permit separation of single institutional factors. Thus, the empirical studies that use composite "rule-of-law" measures effectively test political, regulatory, and/or legal institutional factors jointly. Similarly, descriptive and empirical literature on financial systems and corporate structures [see references in Pagano and Volpin (2001)] posits interrelationships at the intersection of political, regulatory, and corporate governance factors.

57. **Importantly, the above body of research has examined not only the effects of particular institutions on economic outcomes, but also their determinants, which gave rise to more objective measures of institutions.** The literature on the determinants of specific institutional factors is highlighted in the last row of Table 1. Most of the papers in question have analyzed a given institutional factor in detail, often checking consistency of predictive power through regressions of the relevant measure on a set of exogenous or quasi-exogenous variables, such as legal origin, geographical and country dummies, GDP (which is posited as a proxy for the country's level of development), etc. As an input or by-product of this analysis, more detailed and objective measures of institutions, mostly related to the business environment, have been constructed.

Italy's context.

58. **A number of international surveys report the perception of problems with Italy's business environment.** According to the Global Competitiveness Reports (GCR), published by the World Economic Forum on the basis of a survey of business executives, Italy ranked only 40th on average in 2002-2004 among some 100 countries in terms of the synthetic "growth competitiveness" index, which includes many institutional factors; the country slipped to 47th place in 2004. As Figure 1 shows, subcomponents relating to perceptions about the quality of public institutions (notably contracts and law and corruption) were a drag on Italy's rankings in 2002-2003. (Given that the number of countries has increased in the 2003-2004 report, these rankings have been adjusted to be comparable to those in the 2002-2003 report). At the same time, a number of Italy-specific GCR scores provoke questions. It is puzzling that the assessment of the Italian legislature changes so much between 2002 and 2003, and is probably a result of excessive short-term swings in the judgment of respondents. Also, Italy's 2003 ranking on "red tape" (18) was much better than that on the extent of administrative burden (73) and government favoritism (51), which seems inconsistent. The broad GCR's conclusions are echoed by Transparency International reports, wherein 41 countries are perceived to suffer less from corruption than Italy.



59. **Many economists, within and outside Italy, have argued that institutional factors have contributed to slow growth over the past decade.** The last few years have seen a further intensification of the debate over the main causes of Italy's slow-growth trap (see Ciocca (2003)). A number of recent comprehensive reports, notably by the Bank of Italy, Italy's statistical agency *ISTAT*, *Confindustria*, and various Italian think-tanks, have emphasized a broad range of complementary institutional and economic factors, under the label of "*sistema-paese,*" or factors that affect the country's national "*competitiveness*" in the broad sense of the term. These have included institutional factors behind rigidities in product and labor markets, particular features of the financial system, corporate governance and firm performance, lack of spending on research and development, and other factors, including those related to the pressures on external competitiveness [see Bank of Italy (2004) and ISTAT (2004)].

60. **There is no consensus however on the specific structural factors that may have constrained overall economic performance.** While not long ago the emphasis was placed on the reforms of labor market rigidities [see Decressin (2000)], the persistence of low growth in the last few years against the background of increasing employment and some recent liberalizing labor market reforms have prompted researchers to pay more attention to factors affecting *productivity*. In this respect, much recent research (including by the Bank of Italy) has tended to emphasize supply-side factors (society's "productive fabric"), notably the combination of reasons affecting firm size and incentive structure, quality of infrastructure and investment, level of education, and mechanisms to deal with regional disparities. At the same time, from an operational perspective, there has been a need to put in sharper focus structural aspects related to the quality of institutions, compared to other factors (e.g., external shocks, neoclassical-type analysis of productivity dynamics, etc.).

Table 2. Selected literature on the role of institutions in Italy's economic performance

	Corporate/financial governance	Regulations and laws	Legal system (efficiency)
Financial system	Guiso (2004) Zingales (2004)	Lombardo and Pagano (2000)	Bianco et al. (2002) Fabbri and Padula (2001)
Firm structure/behavior/ performance/size	Guiso (2004) Bank of Italy (2004) ISTAT (2004)	Schivardi and Torrini (2004) Marchesi (2004); Bank of Italy (2004);	Bianco and Giacomelli (2005) Fabbri (2001) Marchesi and Pappalardo (2004)
Labor markets		Decressin (2000)	Ichino, Ichino, and Polo (1998)

61. **Many of Italy's institutional features have been well-documented, including their effect on the economy.** This research has been partly facilitated by the wide regional variations. With substantial oversimplification, Table 2 classifies (a small subset of) Italy-specific literature on the role of institutions along the lines of the sectoral breakdown of Table 1 (note that the "legal tradition" column is obviously not applicable to a single-country case). In particular, some the main themes of this literature have been: (i) interaction of regulatory rigidity and firm characteristics; (ii) the effects of a relationship-based financial system (in part associated with the lack of transparency or political economy) on financial and corporate development; and (iii) aspects of Italy's legal system. In what follows, some of these themes will be further explored through an analysis of Italy's business environment and of some features of its legal system.

C. Analysis of the Business Environment.

Introduction and data.

62. **The analysis of the business environment is becoming an important part of the assessment of institutions.** Some researchers have emphasized this channel between institutions and growth.[33] Promisingly, a number of objective measures of the business

[33] For example, Rodrik and Subramanian (2004) note, in the context of India, that "growth was triggered by an attitudinal shift on the part of the national government towards a pro-business ... approach. (p. 1)" Hausman et al. (2004), interpret their comprehensive cross-country study of growth accelerations as likely pointing in a similar direction (although the hypothesis was not tested directly).

environment have recently become available and have been studied extensively in a series of contributions (most of the entries in the last row of Table 1). As yet, these data have not been combined to evaluate *macroeconomic effects* of the aggregate business environment.

63. **The World Bank's most recent "doing business" dataset offers a broad-brush picture of institutional variations across countries.** The database, available at http://rru.worldbank.org/DoingBusiness/ contains 25 indicators for over 140 economies (although for some countries the list is incomplete). The indicators reflect the situation as of January 2004, with the exception of two "control variables" (informal economy and GNI per capita), which refer to full-year 2003. The dataset includes topics such as business opening and closure, labor markets, property registration, financial development, and contract enforcement, thus covering all but two (broad political economy and corporate governance factors) of the institutional groups of factors highlighted in Table 1. Despite the extensive use of surveys in data compilation, most (but not all) of these indicators are not the outcome of subjective rankings, but rather represent a study of rules and regulations, with outputs being measured in terms of an objective characteristic (time, cost, etc.). Still, these data are far from perfect and sometimes may not be fully representative of the broader institutional processes.[34] However, there is no better set of comprehensive cross-country indicators. **Importantly, most of these data (except, possibly, "cost" indicators) would not have a built-in tendency to be biased by the countries' GDP level,** which could be the case for the other widely-used subjective ranking-based indicators.

64. **This paper proposes to investigate the relationship between institutions and macroeconomic performance based on the characteristics of business environment.** Such approach offers the following relative advantages:

- Reliance on "more objective" measures of institutions would alleviate the apparent bias in existing aggregate measures of institutional quality, potentially rendering results more meaningful.

- While the business environment per se has not been mentioned as part of the "deeper" theories of institutions, as a "proximate" cause it fits well with any of the "fundamentals," by capturing at least some of the effects of political economy and the legal system on society's economic performance.

- Furthermore, the business environment has its own "regulatory" policy dimension, as the indicators permit one to structure the analysis in terms of objective policy-dependent criteria or dimensions, such as the speed and cost of regulatory action, as well as specific rigidities (i.e., hiring/firing in the labor market).

[34] The work underlying the compilation of many indicators has been restricted to, or dominated by, the most populous cities. The indicators also reflect various transaction-specific adjustments to permit comparability, and often are restricted to some specific types of transactions. Several of the indicators are subjective and do not permit a wide range of scores.

- The wide choice of indicators allows the relative influence of each specific indicator (or group of indicators) to be assessed separately.

- One possible drawback of this approach, however, could be that the specific institutional indicators, even if more objective, could be measured too narrowly and prove less useful for interaction with aggregate economic outcomes. Furthermore, by restricting the analysis to a specific type of transactions it could fall prey to pathological cases in some countries.

65. **The literature summary of Table 1 prompts a simple four-sector framework for tracking the significance of the World Bank data.** It is proposed to classify the indicators along four main groups, relating to: (i) firm performance (start-ups and closure); (ii) labor markets (difficulties and costs in firing and hiring); (iii) financial sector (credit, collateral, disclosure); and (iv) legal/contract enforcement. This partly, but not fully, corresponds to the World Bank's own-classification. For simplicity, we subsume issues related to property registration in the financial sector (given the clear relationship to the ability to borrow and claim collateral), although conceivably property registration could also be considered as one of the elements of the legal framework.

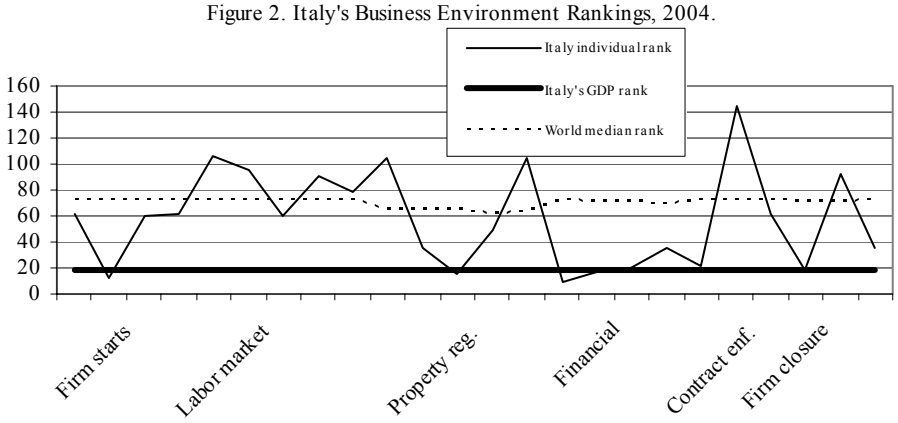
66. **From another standpoint, the indicators could classified according to the objective metric used for their evaluation.** In the case of World Bank data, the groupings would reflect: (i) cost of a given institutional transaction; (ii) time required to complete the transaction; and (iii) bureaucratic rigidity (number of procedures) and (iv) miscellaneous institutional indicators. The latter division proves a convenient organizing framework for presenting the results.

Italy's business environment.

67. **The business environment data reinforce concerns over Italy's business environment arising from the survey-based indicators.** Figure 2 shows Italy's rank (among 145 countries)[35] across the 25 specific indicators of the business environment, highlighting the main aggregate groups of such indicators. In this figure, countries with faster, less expensive, and less bureaucratic environment are ranked ahead of the others. Italy's average rank across all 25 indicators is 58, which is consistent with its placement in most subjective surveys (see below).

[35] Actually, rankings based on the business environment data may have a slight favorable bias, since for many indicators a few country observations are missing.

Figure 2. Italy's Business Environment Rankings, 2004.



68. **At the same time, these indicators reveal significant asymmetries in Italy's relative institutional characteristics, both compared to OECD peers and to all countries in the sample.** Figure 2 and panels in Figure 3 prompt some conclusions. In particular:

- In terms of **broad sectors**, Italy's indicators are somewhat weak in labor markets,[36] as well as in a few key aspects of contract enforcement and firm closure. In firm start-ups, property registration and financial development Italy's scores are generally slightly below those for other OECD countries, but significantly above those of most other countries.

- Regarding **cost indicators**, Italy's results are almost uniformly above the world average, and moderately above those of OECD countries on most measures – notably firm start-ups and closure, workforce firing, and contract enforcement.

- The **speed** of most processes is on par or even slightly shorter than in OECD countries (and thus much better than the world average), with the crucial exception of the number of days to resolve debt-related contracts, whereby Italy comes out as second-longest in the whole dataset, by far Italy's most extreme ranking across the whole realm of business environment indicators.

- Italy's regulations appear more **rigid** (in terms of the number of administrative procedures needed to complete an action) than both the OECD and the world

[36] However, as mentioned in the staff report for this Article IV consultation, other indicators give a more favorable assessment of Italy's labor market environment. As explained below, although the World Bank data refer to January 2004, some of the most recent reforms may not have been captured in the data. Also, the staff report compares Italy to the Euro area, which on average has somewhat lower scores than the whole group of OECD countries.

averages. The exception is contract enforcement, where Italy is on par with the former and much less rigid than the latter.

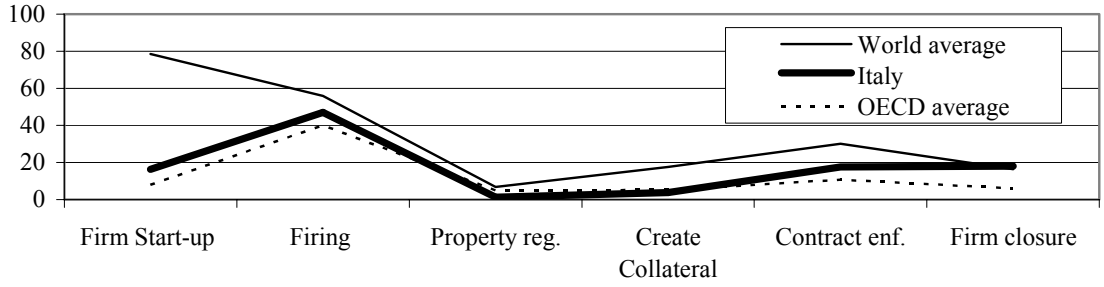
- Regarding available **financial development** and transparency measures, Italy's scores are generally in line with those of other OECD countries, with the notable exception of creditor rights, on which Italy scores below the world and OECD averages.

69. **Italy-specific data issues may qualify some of the conclusions from this analysis of the business environment.** As noted above, many of the indicators in the World Bank's cross-country dataset are compiled only on the basis of the information for the most populous cities. When there are significant differences in institutions across cities, this may give a misleading picture of overall institutional quality. Regional statistics indicate that the average length of civil justice proceedings of the first degree in 2001 (a measure of the speed of contract enforcement) was 1,082 days in Italy. Rome did somewhat better, at 960 days, but in Milan these proceedings took 813 days. In general, for most available law-based indicators of contract enforcement, procedures were longer in Rome than in the Northern provinces and Milan in particular.[37] However, the apparent difference between Rome and the North of Italy on these measures does not seem very large. Other potential data problems with the "doing business" Italy-specific indicators may regard inertia in capturing some of recent reforms, especially in the labor market and in reducing the cost of business start-ups. The dataset is presumably designed to reflect the situation as of January 2004, but it is unclear whether the scores have fully incorporated the substantial improvements in the flexibility of labor contracts undertaken in Italy in the last few years.

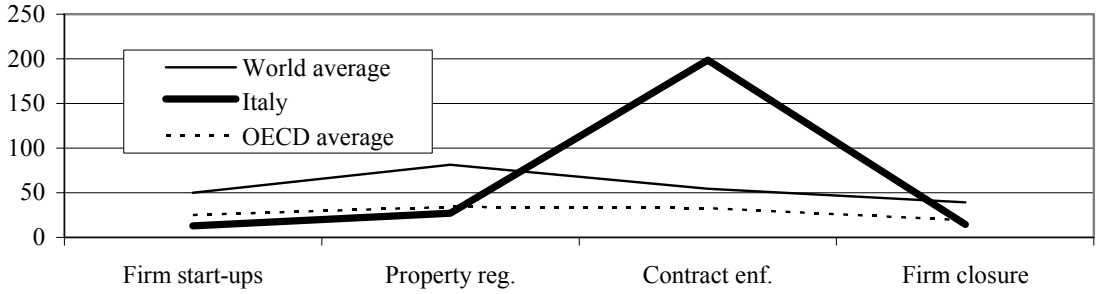
[37] One exception to this pattern has been the time of closing a business, which was shorter in Rome than in much of the country. This may partly explain why Italy's position within the dataset in terms of the time of business closure appeared overly favorable to independent experts.

Figure 3. Italy: Business Environment Indicators, 2004

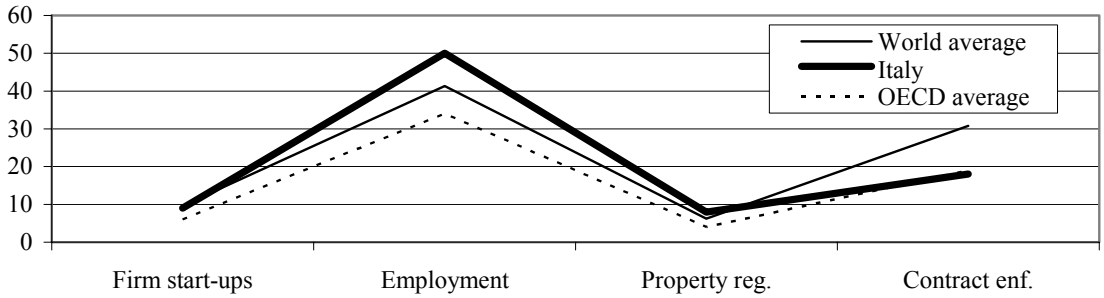
Cost of procedures, percent of GNIpc or asset (measures vary for each indicator)



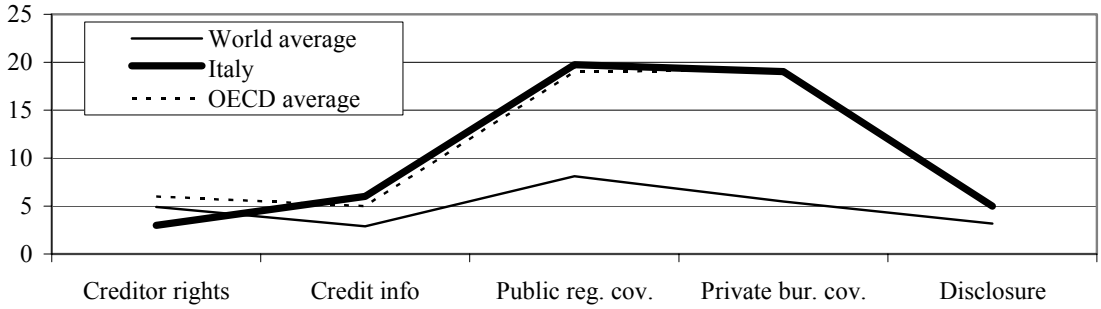
Length of procedures (in time units, normalized for comparison purposes)



Rigidity indicators (number of procedures, except for employment rigidity index)



Financial development and transparency (higher values indicate better scores)



Source: World Bank "Doing Business in 2005" dataset.

Correlations

70. **In view of the many indicators and the limited number of observations (for industrialized economies) and of the lack of a clear theoretical model to link *all* of these variables in a particular relationship, simple correlations offer some clues to the nature and direction of the evidence**. In the following analysis, the sample is split into two parts: (i) all countries in the dataset and (ii) 27 high-income economies. Looking just at the latter offers the advantage of concentrating on a fairly uniform group of economies with reasonably mature and independent institutions.

71. **Table 3 shows the correlation matrix with respect to the "cost" indicators.** As is intuitive, in all sectors the costs of various institutional procedures are positively correlated, while all of the cost indicators are negatively correlated with per capita GDP. [38] The results do not differ in qualitative terms whether measured in terms of the whole sample of 140 countries or 27 high-income nations. Thus, in countries where some institutions are relatively "costly," the other institutions are costlier as well, while GNI per capita ceteris paribus, smaller. Interestingly, the indicator pertaining to the labor market (cost of firing workers) exhibits the strongest negative relationship with per capita GDP, followed by firm start-ups. The correlation between the financial and legal cost indicators on the one hand and per capita GDP on the other is somewhat weaker, but remains non-negligible. Also notable is the significant positive 3-way correlation for high-income countries (all higher than 0.5) between the costs of firm start-ups, firing workers, and creating collateral.

[38] The measurement of costs is indicator-specific, usually it is in terms of the value of the specific asset involved in the transaction, but also in terms of per capita income (i.e, for firm start-ups). It is however possible that the correlation properties may derive from explicit or implicit measurement of most cost indicators in terms of per capita GNI. In this case, if there is a fixed element on the cost side of the indicators across all countries, it could by itself determine the negative correlation with per capita GNI. However, it is not clear that such a fixed-cost element would be present for these cost indicators, it appears that the most cost-intensive procedures related to registration and licencing are non-tradables and thus would not have a fixed cost element.

Table 3. Correlation matrix for the main "cost" indicators (high income/all countries, 2004)

Sectors	Variables	Firm start-ups	Firm closure	Labor markets	Financial sector	Contract enforc.	GNI per capita
Firms	Firm Start-ups	1.00					
	Firm closure	0.25/0.21	1.00				
Labor	Labor markets (firing)	0.66/0.14	0.32/0.24	1.00			
Financial	Financial sector (creating collateral)	0.61/0.49	0.21/0.08	0.54/0.23	1.00		
Legal	Contract enforcement (debt collection)	0.27/0.35	0.23/0.25	0.35/0.27	0.02/0.21	1.00	
Macro	GNI per capita	-0.48/-0.37	-0.17/-0.32	-0.65/-0.31	-0.31/-0.29	-0.33/-0.41	1.00

72. **Table 4 presents the correlation matrix for the "time" indicators, with the results being similar to those of the cost dimension.** There are also some differences in coverage. Still, the indicator relating to firm start-ups appears to be the most negatively correlated with GNI per capita among the other institutional indicators (for both high-income and all countries). The signs for the contract enforcement variable are intuitive, but again its correlation is weaker than that of the other institutional variables with the exception of the variable pertaining to firm closure, with the latter basically uncorrelated with GNI per capita.

73. **With respect to "other" institutional indicators, the correlation matrix (Table 5) shows a similarly intuitive picture.** All pairwise relationships have the "expected" signs. Of note is the strong correlation within the labor market institutional indicators, particularly for the high-income countries, though this is not surprising. As expected, the data denoting "rigidity" (labor market indicators, number of various procedures) are strongly negatively correlated with per capita GDP, which indirectly supports the hypothesis that the same negative relationship between cost and per capita GDP is not driven by the construction of the cost data.

Table 4. Correlation matrix for the main "time" indicators (high income/all countries, 2004)

	Firm start-ups	Firm closure	Registering property	Contract enforcement	GNI per capita
Firms start-ups	1.00				
Firm closure	0.04/0.43	1.00			
Days to register property (financial/legal)	0.28/0.12	0.41/0.02	1.00		
Contract enforcement	0.13/0.21	0.20/0.26	0.44/0.22	1.00	
GNI per capita	-0.45/-0.38	0.02/-0.37	-0.33/-0.20	-0.27/-0.31	1.00

74. **A full table of correlations for the World Bank data (not shown) has also been calculated and is similarly in line with the basic intuition.** Among other things, it helps check any changes in the results if one departs from the sectoral partitions proposed above. For example, one may look at the signs and the relative strength of the "within-sector" relationship between time, cost, and other institutional factors, compared to the "between-sector" linkages investigated above. The within-sector correlations are also intuitive, in that there is positive correlation between the "inefficiency" measures such as time, cost, and those "other" measures that should be inversely related to efficiency (difficulty in hiring, etc.). In particular, the intrasectoral correlation between time and cost is quite large (about 0.5) both for firm start-ups and contract enforcement, but is much smaller for property registration. Dummies for the "legal origin" were added to the correlation matrix; they support the "legal tradition" argument for the superiority of the common law system compared to the French system in terms of supporting growth of GNI. Finally, the share of the informal economy is positively correlated with cost, time and rigidity indicators, and negatively correlated with GNI per capita.

75. **The above evidence is more suggestive than conclusive, but its conformity with intuition is reassuring.** Slower, costlier, and more rigid specific business environment procedures tend to be correlated, across both high-income countries and the full set of countries, between and within different sectors, and are associated with lower levels of per capita output. This suggests that many of the highlighted sectors could potentially be important for economic performance, and possibly indicating complementarities among the reforms in case of very high pairwise correlations, for example between regulations that encourage firm start-ups and labor market regulations. The firm sector and the labor market appear to be the broad fields that have the strongest negative correlations between specific inefficiencies and per capita GDP.

Table 5. Correlation matrix for selected "other" World Bank indicators (high income/all countries, 2004).

	Indicator	Firm min. capital	Diff. hires	Rigid hours	Diff. firing	Creditor rights	Credit inf.	# of proc.	GNI pc
Firms	Firm minimum capital	1.00							
Labor	Difficulty of hiring	0.07/-0.08	1.00						
	Rigidity of hours	0.28/0.09	0.57/0.27	1.00					
	Difficulty of firing	0.20/0.10	0.60/0.34	0.81/0.21	1.00				
Financial	Creditor rights	-0.28/-0.12	-0.70/-0.45	-0.58/-0.43	-0.55/-0.38	1.00			
	Credit information	0.10/-0.26	-0.30/0.09	-0.49/-0.08	-0.32/-0.26	0.41/0.06	1.00		
Legal	Number of procedures for debt collection	0.29/0.24	0.07/0.24	0.40/0.21	0.39/0.21	-0.06/-0.33	-0.39/-0.25	1.00	
Macro	GNI pc	-0.26/-0.15	-0.31/-0.31	-0.35/-0.15	-0.35/-0.38	0.13/0.39	0.28/0.51	-0.38/-0.47	1.00

76. **While causality is not addressed by the correlations, the latter may be meaningful inasmuch as the data capture objective factors.** It is still informative that, even assuming the absence of a causal link from efficiency of institutions to GNI per capita, richer countries deem it worthwhile to devote more resources to making their institutional frameworks speedier and less costly. It is also possible that the data collection process may have introduced additional subjective elements, in view of some particular features of the procedures that were chosen to achieve country comparability. This may in particular concern the coverage of the legal system, since the "contract enforcement" variable may be somewhat narrowly defined, being based on a particular sequence of debt collection transactions, rather than on the workings of the core civil law institutions and processes.

Business environment and growth.

77. **In the absence of a consistent long-term time series, the above business environment indicators do not permit a rigorous and comprehensive investigation of the more fundamental question of causality from institutions to growth.** Although some of the individual indicators have been available for a few years, they were presented in the

current reasonably comprehensive form only during the 2004 exercise. In addition, even where the data existed prior to 2004, there have been some methodological changes in the compilation of individual indicators. Thus, it cannot be ruled out that the causality underlying the high correlation of these indicators with GNI per capita may run in either or both directions. A further complication is that the potential effects of many institutions on growth outcomes are likely long-term, which requires a fairly long time series for formal quantitative tests. When such a series is established on a consistent basis, the business environment data may be a promising avenue for formal empirical research of growth.

78. **However, one may throw some light on the link from business environment data to growth by exploiting the persistent nature of some institutions.** Given that institutional factors are likely differ in the extent of their persistence, it would be reasonable to expect that, at least for the relatively stable factors, the relative data patterns of 2004 would be roughly the same as in the not very distant past. This could be particularly true for such measures as contract enforcement (and perhaps property registration), which depend on the grassroots workings of the legal system more than on short-term policy initiatives. Some other institutions, for example those relating to labor markets or firm start-ups, could be more fluid, whether de-facto or de-jure. (A case in point are the recent rounds of labor market reforms in some countries of the European Union). If so, and assuming the causal link from institutions to growth, in a regression of past growth rates on *current* institutional factors one would expect a greater impact of relatively persistent institutions.

Table 6. 2004 Business environment and past growth: dependent variable: Growth between 1985-2003 (initial level of per capita income included as a control variable, t-ratios in parentheses).

	Time indicators	**Cost indicators**	**Rigidity indicators (number of procedures)**	**Recovery rate**
Firm start-ups	0.00(0.03)	0.001(1.87)*	0.02(1.48)	N/a
Firm closure	-0.02(-0.60)	-0.001(-0.30)	N/a	0.01(4.59)***
Property registration	0.00(0.34)	-0.016(-1.98)*	-0.03(1.81)*	N/a
Contract enforcement	-0.00(-1.66)*	-0.002(-1.26)	-0.01(-2.68)***	N/a
Creating collateral	N/a	-0.004(2.53)*	N/a	N/a
Rigidity of employment	N/a	N/a	-0.00(-0.127)	N/a
R-squared	0.64	0.69	0.67	0.70
# of observations	96	89	100	100

***,** and *** indicate significance at a 10 percent, 5 percent, and 1 percent level respectively.**

79. **Indeed, regression analysis based on these assumptions indicates that longer-term institutional factors such as contract enforcement have a more robust and logical relationship with past growth rates than other factors.** Results reported in Table 6 suggest that all dimensions of contract enforcement (length, cost, and rigidity) have a (small) negative impact on growth, with two dimensions statistically significant.[39] Other "grassroots legal" factors such as burdens associated with property registration and creating collateral also generally have negative and significant signs. The results are much more indeterminate, even in terms of signs, for such factors as firm start-ups and closure and rigidity of employment. This does not mean that these factors do not affect growth, but rather that the regulations and institutions might have changed significantly over the course of the sample period. (We know for a fact that they changed in many European countries during 1985-

[39] In fact, it would be difficult to expect a large value of the coefficient for each separate institutional factor, partly because a given factor refers to a relatively narrow area and partly because the limitations of data availability over time may well weaken the measured statistical link. In any case, we do not want to emphasize the particular elasticities at this point, but rather focus on the signs and the relative strengths of the relationships.

2003). Note that the beginning-of-period level of institutional quality was somewhat controlled for by including the log of the countries' GDP in 1985. Interestingly, the inclusion of the legal origin dummies is insignificant for the regression results (and for the dummies) implying that the latter may affect institutions (as demonstrated by La Porta et al. (1997-2000), but do not appear to directly cause growth outcomes. In essence, these results appear to lessen concerns that the link between institutions and income/growth is driven by reverse causality from growth to institutions, although these issues, including the possible "simultaneity bias" have to be investigated more formally.[40]

80. **The statistical significance is especially strong for the recovery rate variable** (last column of Table 6). This is not surprising, given that it (i) seems a more synthetic, partly outcome-based, indicator of the overall quality of the business environment, possibly reflecting cumulative influences of a number of, but by far not all, factors; and (ii) is mostly related to the long-term workings of contract enforcement, which should interact with (and apply to) the fairly time-consuming process of bankruptcy, rather to the more short-term factors like firm entry or labor regulation. Thus, this result appears consistent with an intuitive story that "broader" business environment factors have a stronger (statistical) relationship to growth than "narrower" factors, implying that cumulative progress on a number of fronts would be most effective in affecting economic outcomes.

81. **The pattern of potential dependence on the recovery rate varies with income level.** An analysis of income-sorted data (e.g., by gradually adding each country observation analogous to the recursive analysis of the time series) indicates that the value of regression coefficient on the recovery rate is ambiguous for a dozen of highest-income economies, but resolves itself and becomes irrevocably positive as countries at Italy's income level are added to regression. The coefficient becomes significant at a 5 percent level after a few more observations (around Greece's and Portugal's income levels) are added. Also, the coefficient *value* roughly stabilizes with a dozen of additional observations (in the vicinity of higher-middle-income countries). Thus, while a few countries (particularly at very high income levels) have selected idiosyncrasies related to role, or measurement, of the recovery rate,[41] this indicator may be important in explaining variation in growth performance between other economies, including for many high-income countries similar to Italy.[42]

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[40] Another important caveat is an empirical verification (based on as yet unavailable time series data) of whether the intutitively "long-term" factors such as contract enforcement and the recovery rate are indeed more "long-term" than such factors as firm start-ups and labor regulations.

[41] For example, it is puzzling why Switzerland appears to have the recovery rate of only 37 cents on the dollar while doing very well on the remainder of World Bank indicators. Brazil is another country for which the measured recovery rate (close to zero) appears highly questionable.

[42] Incidentally, the recovery rate is very high (around 90 percent or higher) for a good share of established "economic miracle" countries, including Korea, Singapore, Ireland, Taiwan, etc. For other

(continued)

82. **Robustness checks indicate that the cross-country link between "long-term" business environment indicators and growth is not dependent on outliers.** Table 7 presents the results by splitting the dataset, in alphabetical order, into two non-overlapping subsets with 50 country observations each. The thrust of results generally carries over to both subsets of data, although the significance is always stronger in the "lower" subsample. An examination of the two subsamples suggests the main reason for the difference: while the upper one tends to have more middle-income countries, the other subsample includes relatively more extreme observations (both very high-income and very low-income countries). Thus, more income (and hence institutional) variation in the data tends to produce stronger statistical results, although the difference in the coefficients between the two subsamples is not very large for most factors. Excluding particular country outliers from the sample does not affect results. In particular, this is the case for two country outliers in terms of length of debt-related contract enforcement (Guatemala and Italy), both of which are, incidentally, in the upper subsample.

83. **To conclude, Italy's rankings by the World Bank "doing business" indicators suggest significant scope to transform aspects of its business environment in line with best practices.** Some institutional changes seem more compelling than others. Italy's most dramatic disparity (among the 25 indicators) is the time required for contract enforcement, which exceeds six times the OECD average. With respect to save other indicators, Italy could benefit from undertaking a broad-based effort to match most OECD countries; while on each individual score the distance is not substantial, it cumulates across the many factors. Italy's overall environment is perhaps best reflected by the "synthetic" indicator of the recovery rate during business closures as this indicator, implicitly or explicitly, incorporates the effects of a number of other variables. At 43.5 cents on the dollar, Italy would rank only 40th in the world, which is roughly consistent with the broader survey-based rankings reported above.

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important miracle cases (China, Thailand, Malaysia) it is not high, but perceptibly higher than for their comparators in the same per capita income group.

Table 7. Robustness checks for the growth regressions of selected "long-term" business environment variables. Dependent variable: Growth between 1985-2003 (initial level of per capita income included as a control variable, t-ratios in parentheses, insignificant ("short term") business environment variables dropped).

	Time of contract enforcement	Cost of contract enforcement	Rigidity of contract enforcement	Recovery rate
Full sample (100 obs.)	-0.000(-1.70)*	-0.003(-1.69)*	-0.010(-2.65)***	0.010 (4.59)***
Upper subsample (50 obs)	-0.000(-1.03)	-0.002(-1.26)	-0.014(-1.92)*	0.009 (2.61)***
Lower subsample (50 obs)	-0.000(-2.34)**	-0.005(-1.56)	-0.016(-3.02)***	0.012 (4.31)***

***,** and *** indicate significance at a 10 percent, 5 percent, and 1 percent level respectively.**

D. The Legal System.[43]

84. **While a number of studies have documented the link between the legal system and economic performance (often in a cross-country setting), the treatment of legal system characteristics has typically been cursory.** In particular, these studies have either been exclusively based only on subjective legal rankings data, or have been mainly limited to the investigation of the role of legal origin, which, ex-ante, appears too coarse for distinguishing among the many essential modern characteristics of legal systems. Furthermore, even if the investigation of the legal origin patterns yields some results, the natural "experiment" of adoption of legal systems clearly did not occur randomly and could also lead to biased results.[44] Some authors have focused on the above "contract enforcement"

[43] In the law and economics literature the term "legal system" has been used ambiguously. On the one hand, as in this paper, it is used to denote the thrust of civil law institutions, mainly the system of basic legal principles and their enforcement (and thus it will be closer to the term "judicial system"). In other contexts, the term "legal system" is understood to also include specific legislation (company law, bankruptcy law, etc.), which generally goes beyond the scope of this paper.

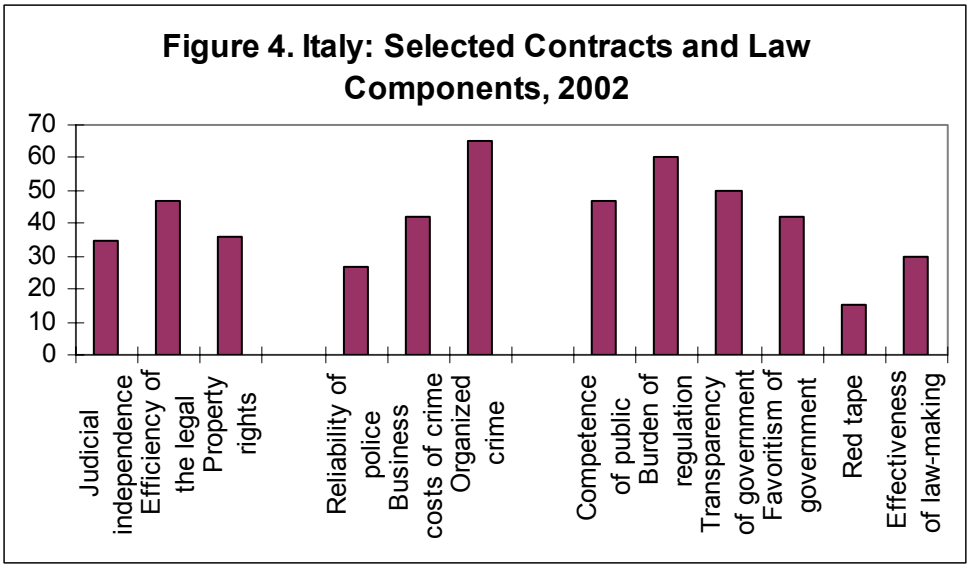
[44] For example, countries with a particular legal system have been disproportionately represented within some geographical regions and cultures (French civil law system in Latin America).

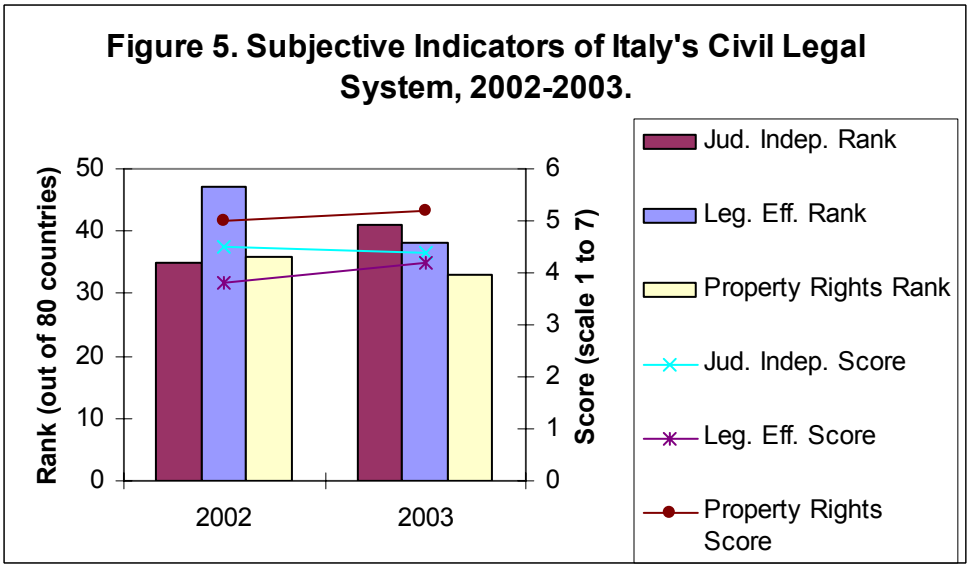
data akin to those contained in the business environment dataset, but, as per above, these refer to debt-related transactions and may not fully capture all aspects of the legal process.

85. **An alternative stylized, albeit also cursory, approach would be to eschew any subjective data and focus only on objective characteristics of the broader legal/judicial system.** In this respect, civil law emphasizes three key dimensions of *legal efficiency* (Zuckerman (1999)): (i) objectivity or correctness of judgment; (ii) length of the legal process; and (iii) cost (public and private). While the degree of correctness of judicial decisions is necessarily a subjective matter, the length and cost could be documented by the data, which may be usefully compared in practice. Moreover, as noted by Marchesi (2003), in countries at a sufficiently high stage of judicial development, where judge impartiality and citizen equality before the law are overriding principles, correctness of judgment is addressed by guaranteeing both sides the right to present all of their arguments for the attention of the judge. For such countries, it is sensible to presume the objectivity of judgment as a rule, with material differences in the judicial systems being largely reduced to the length and cost of the legal process. Although the length and cost may well reflect differences in the legal tradition, focusing on these should permit a richer analysis of system's effects on economic performance, including within a group of countries with the same legal origin.

Selected characteristics of Italy's legal system.

86. **Survey results suggest the perception of problems with Italy's legal institutions.** Figure 4 plots the main components of the GCR's ranking of the "contracts and law" subindex, which is sub-divided into several areas. The first area, comprising the subjective scores for judicial independence, legal efficiency in resolving disputes, and property rights, could be considered a proxy for perceptions about the civil justice process. The second block measures opinions about reliability of police services, the business costs of crime and violence, and spread of organized crime, and is a rough proxy for the respondents' views on the effectiveness of the criminal justice process and enforcement. The third block measures perceptions regarding the extent of regulatory burden, government transparency, favoritism of government officials, and bureaucratic red tape. Figure 4 shows that Italy's subjective civil and criminal law-related rankings were essentially in line with those in other institutional dimensions. Figure 5 indicates an improvement in 2 out of 3 measures of the civil justice process between 2002 and 2003, but Italy's position vis-à-vis other countries has remained basically unchanged.

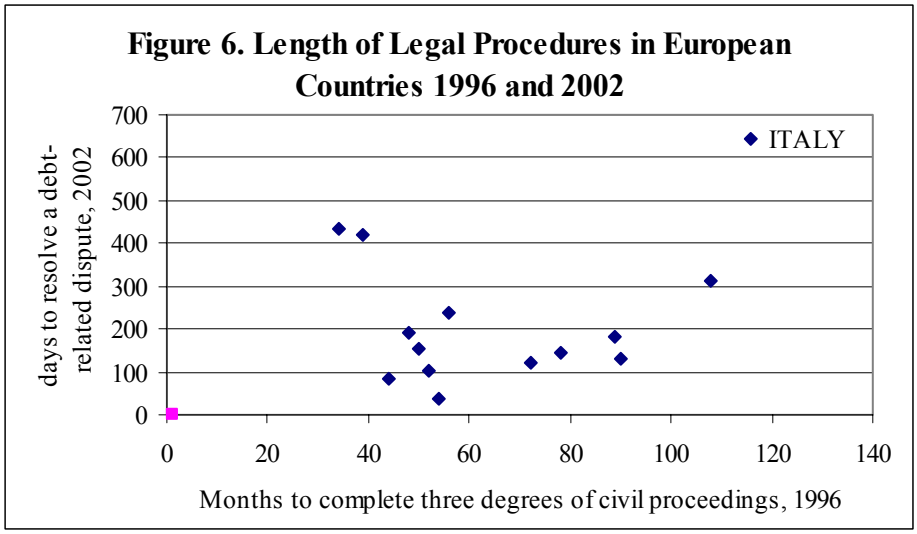




87. **The data on Italy's core civil law system confirm that the lengthy legal procedures are one of its defining characteristics.** Table 8 shows that Italy's ordinary civil judicial inquiries (comprising 3 degrees) were the longest among the European countries in 1996, and averaged some 116 months, compared to 69 for the EU average. Furthermore, as noted by Marchesi (2003), this aggregate indicator likely understates Italy's difference with respect to other countries, in that the gap is particularly significant in the first two degrees of the civil process, which have more general applicability than the third stage.[45] These data on

[45] In France, for example, many agents decide to bypass the Cassation Court (third degree) and refer to alternative means of settling disputes (arbitration, etc.).

the length of the legal process are different -- and more comprehensive -- than the World Bank data, since the latter reflect only the particular category of debt-related disputes.[46] As can be seen from Figure 6, individual country scores may be substantially different on these two measures of the duration of the legal process, but Italy ranks largest on both counts among the European countries. The lengthly legal process has been exacerbated by Italy's backlog of unresolved disputes



88. **Currently, there is a public debate in Italy on the factors accounting for these characteristics of the legal system.** Marchesi (2003), while recognizing some moderate supply-side issues, has argued that the long legal procedures and the backlog of court cases reflect primarily excessive demand rather than insufficient supply. The number of legal professionals in Italy, on a per capita basis, has been among the highest in Europe (third-highest after Germany and Austria in the mid-1990s), and public expenditure on the legal system has grown very rapidly in the course of the last decade. The same author notes that the total financial resources devoted to the operation of the legal system in Italy is not below the European average, while the level of the judges' preparation and productivity does not appear to be a major concern. At the same time, Zan (2003) has highlighted the organizational problems of courts as meriting particular attention in the context of lengthy procedures.

89. **With respect to the costs of legal proceedings, Italy appears to be more competitive, but lower legal costs may not be an unqualified advantage if the legal process is excessively lengthly.** Figure 7 shows that in 1996 the costs of legal assistance and procedural expenses in Italy were on average lower than in the European Union by some 45 percent for disputes with a value of €50,000 and by over 60 percent for disputes with a value

[46] Unfortunately, there have been no consistent cross-country updates of these data, which appear also in part survey-based, but again measured in "objective" time units.

of more than €200,000. As in many countries, the bulk of these costs in Italy are represented by attorneys' fees (93 percent). At the same time, the low costs have co-existed with possibly excessive demand for legal services, as the proceedings involve fairly small contested values on average. Thus, about 60 percent of all first-degree judicial inquiries in economic matters (property and contracts) pertain to disputes with a contested value of less than €5,000, of which only 25 percent regard disputes with a contested value above €2,500. As a result, the Italian judicial system appears to be clogged with small cases, which may contribute to the length of the legal process.

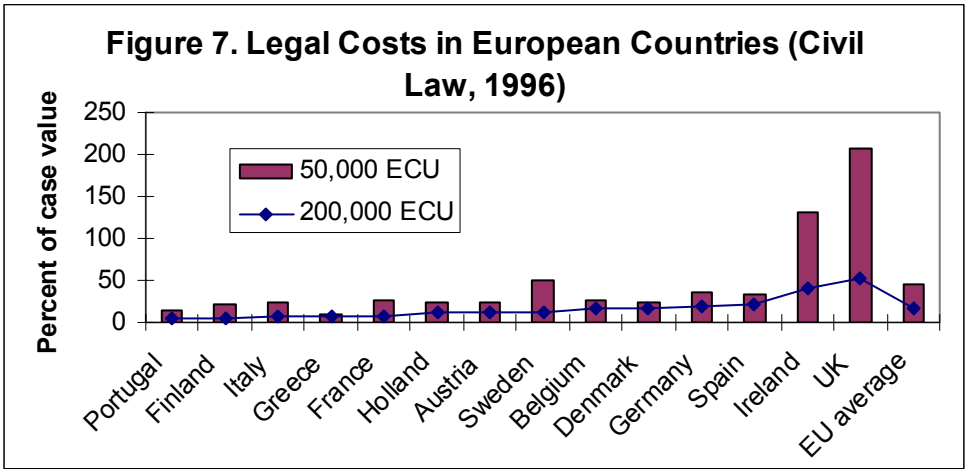


Table 8. Average length of civil proceedings in European countries in 1996 (months).

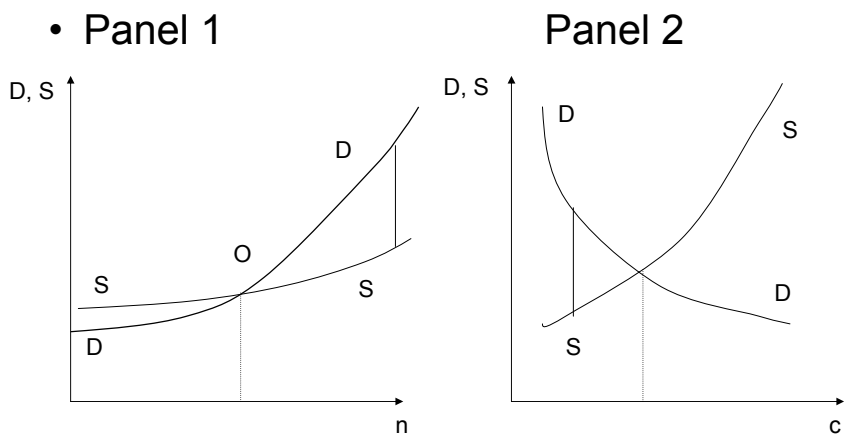
	I degree	II degree	III degree	Total
Austria	12	11	11	34
Portugal	21	9	9	39
Denmark	8	18	18	44
Sweden	12	12	24	48
Germany	8	12	30	50
UK	14	14	24	52
Holland	18	18	18	54
Finland	8	24	24	56
Belgium	12	30	30	72
Spain	18	24	36	78
France	12	12	65	89
Ireland	24	30	36	90
Greece	36	36	36	108
Italy	36	40	40	116
EU average	17	21	31	69

Source: European Commission, quoted in Marchesi (2003)

Some effects of lengthy legal procedures: a conceptual framework.

90. **A simple conceptual framework may account for the stylized set-up of a time-consuming legal system.** The focus is on the length of the legal process and its interaction with costs and other institutional variables. The long legal processes could correlate with poor "enforcement," and some empirical studies (Bianco et al. (2002) and Fabbri (2001)) assume the two are equivalent. The extent of this enforcement/slowness has mostly been assumed as exogenous in these studies. The assumption of exogeneity may be appropriate for some situations, but in general equilibrium this characteristic is endogenous, reflecting the dynamics of demand and supply of legal services.

Figure 8. Supply and Demand for Legal Services



91. **Marchesi (2003) provides some ideas needed for an endogenous derivation of the pace of the legal process, but a comprehensive formal model for the interaction of supply and demand for legal services has yet to be studied carefully in this context.** The supply and demand for legal services could be represented as a function of the length and cost of trials, respectively. Panel 1 of Figure 8 shows a possible (partial equilibrium) relationship with respect to the length of trials (n), whereby both the supply and demand curves would be upward sloping, the latter reflecting "pathological" demand, which stems from the fact that more extended trials, combined with the low rate of legal interest and the de-facto splitting of the legal assistance fees, provide incentives for the losing side to prolong as much as possible the legal process in courts.[47] The supply curve would also be upward-

[47] Total demand for legal transactions would be given by the sum of a downward-sloping normal (physiological) demand for transactions and pathological demand. The final shape of the aggregate

(continued)

sloping, as, other things equal, more resources would be devoted to longer trials. The supply curve could alternatively be assumed flat (for example reflecting the fact that judges operate in a 'fixed market"), but this would actually strengthen the argument. More generally, the argument requires that the supply curve be flatter than the upward-bending demand curve for very long trials.

92. **Panel 2 shows the corresponding supply and demand curves for the legal services with respect to the cost of trials (c).** Here the shape of the curves is more "normal," with supply upward-sloping and demand downward-sloping. The supply curve reflects an assumption that, other things equal, higher cost of trials would attract greater supply of legal professionals (for example through greater remuneration of lawyers, which could well spill over to the rest of the legal profession).[48]

93. **A persistent excess demand for legal services would be consistent with the combination of relatively low legal costs and slow legal procedures.** Thus, the length of the legal process is greater than "optimal" (shift to the right from point O in Panel 1), while cost is lower than that in a would-be equilibrium (leftward shift in Panel 2). The excess demand creates a backlog of unresolved court cases, which exacerbate the imbalance in future periods (not shown in the static set-up of Figure 8). As is apparent from the Figure, a (limited) policy effort to increase the supply of legal services (e.g., judges), represented by an upward shift in the supply curve, may have a relatively minor effect on the degree of disequilibrium if the demand curve is strongly upward bending. Furthermore, to the extent the disequilibrium is not corrected fully, the continued give-and-go between snowballing of court cases and the pathological demand could reverse this progress.

94. **The efficiency impact of the justice system on the economy partly operates through the enterprise sector.** Following Marchesi (2003), one may assume that the economic agents pursue two basic strategies: (i) comply with their contractual obligations, or (ii) "hit and run," (sign contracts with the intention of reneging on their obligations). Those that comply benefit from a good reputation and would be able to stay in the market. Those that renege acquire a poor reputation and have to exit the market, and also incur a penalty through the legal system, which eventually forces them to pay the procedural (legal) costs and deliver on the contractual obligations. Marchesi shows that in a simple setting characterized by perfect competition and rationality, the condition that would induce the agents to comply would be given by:

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demand curve is a difficult and outstanding empirical issue, but in any case it may be reasonable to assume that for very long trials the demand curve would "bend" and become upward-sloping.

[48] Again, if the supply curve were horizontal, for example, assuming that judges could only operate in a "fixed setting," the basic story would not change.

Equation 1

$$n^* \leq \frac{\ln(1+S)}{\ln(1+r)}$$

where n is the length of the judicial proceedings, S is the ratio of the procedural costs to the value of the contractual commitment, and r is the interest (or discount) rate. Essentially, if the legal procedures are slow enough, with the expected length exceeding n*, there would be no incentives to abide by the contractual obligations.

95. **There are two main reasons why a market economy could support contractual transactions in countries with very slow legal systems, but both may involve governance and competitive inefficiencies.** The first channel, emphasized by Marchesi (2003) is the recourse to "alternative justice," for example in the form of arbitration. This would effectively reduce the average time spent on the legal process, i.e., the value of n.[49] Marchesi and Pappalardo (2004) analyze some of the implications of such alternative justice in the context of Italy's industrial districts. However, recourse to "alternative justice" mechanisms is not a panacea and in certain situations may interfere with an orderly administration of justice as a public good. For example, the general scope for alternative justice could be exploited by organized crime. The second channel is acceptance of some competitive inefficiency in the system, whereby prices charged by producers would be higher than those under perfect competition. Established enterprises enjoy a reputational advantage that corresponds to the premium they can charge in the market, and which also operates as a barrier to entry. In this respect, lengthy legal procedures could be a factor deterring entry and limiting competition. Lack of competition is widely regarded as a substantial problem for Italy, especially in the services sector. Demirguc-Kunt and Maksimovic (1998) provide some indirect cross-country evidence on the negative effect on competition, showing that the return on capital depends negatively on the "law and order" variable.[50]

96. **According to researchers, a situation of a lengthy legal process due to excess demand could be alleviated through a number of low-cost policy measures.** While the diagnosis of Italy's overall situation in terms of the relative importance of supply and demand factors is a difficult empirical issue, there is evidence of some instances of excess demand (Marchesi (2003)). Work by the author suggests that Italy could still benefit from some specific reforms, including: (i) unification of the legal interest rate with that of the

[49] In practice, alternative justice arrangements are asymmetric, as they affect certain stages of the legal process more than others. In particular, it is believed that they would mostly concern enterprise bankruptcies, which are by far the most time-consuming among all civil procedures.

[50] A firm-level cross-country study by Klapper et al. (2004) emphasized Italy's bureaucratic barriers to entrepreneurship as another causal reason. A deeper investigation of the empirical evidence (i.e., firm turnover) is hampered by the data. In particular, the information on enterprise entry and exit does not generally permit to discriminate between various specific reasons for these activities (reorganization due to tax reasons versus genuine entry/exit).

market and (ii) de-linking attorneys' compensation from the number of "activities" such as court sessions, in favor of a flat-fee principle. A broader simplification of legal and administrative procedures related to the legal process, including in the context of specific laws (e.g., bankruptcy procedures), would also be consistent with the objective of rationalizing the demand for legal services and speeding up transactions. "Supply-side" issues such as incentives for judges to boost productivity and/or work hours should also not be neglected. However, the merits of particular proposals should be assessed by experts, and is beyond the scope of this paper.

Cross-country evidence on the European Union.

97. **Several applied studies have examined empirical evidence on adverse effects of the length of Italy's legal processes on its financial and aggregate economic activity.** Thus, Fabbri (2001) has shown, on the basis of panel data for 1970-1995, that Italian regions with lengthier legal enforcement have had lower capital stocks and lower value added. The author traces this effect to the enterprise level, as in regions with lengthier legal enforcement firms face tighter financing constraints. The latter conclusion is shared by Bianco, Japelli and Pagano (2002), who demonstrate that lending-to-GDP ratios are negatively related to the length of trials, based on panel data for 95 Italian provinces from 1984 to 1995. In what follows, we explore the length of legal enforcement in a **cross-country setting**, but, as distinguished from the above business environment analysis, focus on the length and costs dimensions of the broader legal system instead of the narrower "debt contract enforcement."

98. **We illustrate some tentative relationships between "objective" legal and other institutional factors, as well as economic performance, for a cross-section of European countries.** In addition, we compare results obtained with the widely-used subjective indexes on the quality of the legal process with "objective" indicators derived from the length and cost of the legal proceedings as compiled by the European commission (see above). We focus on the long-term indicators, assuming that the characteristics of the legal system are relatively stable over time. The underlying data are taken from a variety of sources, including from various academic publications by La Porta et al. (1997-2000) and Beck et al. (2001). The subjective indicators have been mostly drawn from the World Economic Forum's Global Competitiveness Report. The small number of country observations for the legal data do not allow meaningful statistical tests, but permit consideration of some broad patterns.

99. **In European countries, the legal system's efficiency in terms of cost and length of proceedings is correlated with indicators of economic and financial performance.** The first panel in Figure 9 shows that there is a negative, albeit weak, relationship between market capitalization[51] and the length of civil legal proceedings. Interestingly, this negative relationship becomes much stronger (Figure 9, second panel) if the "length" variable is

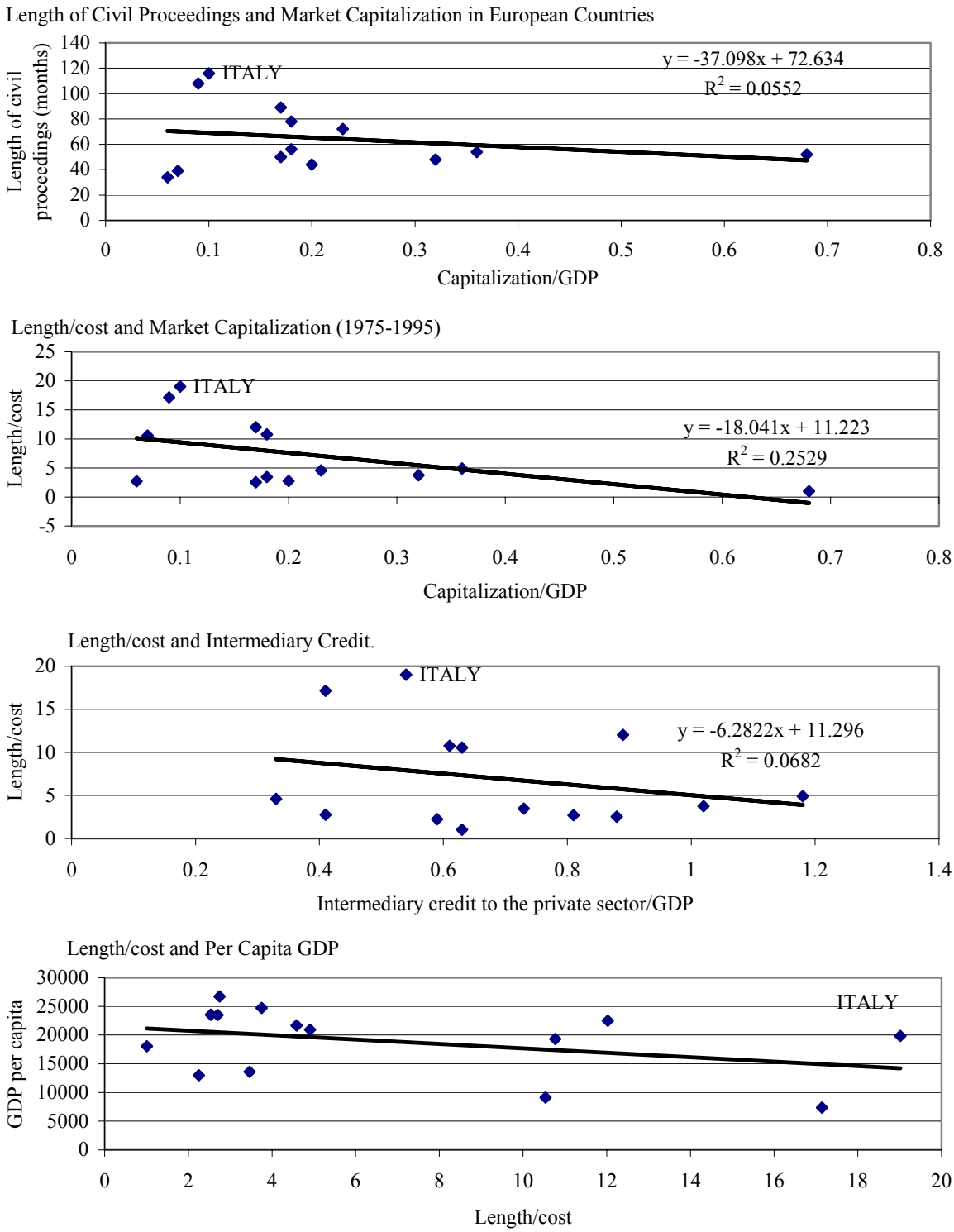
[51] Market capitalization equals the value of listed equity shares divided by GDP over 1975-1995 (from Beck et al. (2001)).

replaced with the ratio of length to cost (expressed as a percentage of case value, including legal assistance and procedural expenses). As argued above, increasing the cost of legal proceedings decreases the total demand for legal services, including "pathological" or "petty" demand. To the extent higher legal costs deter pathological demand, the higher cost may be "efficient." The above evidence appears to suggest that this "efficiency" effect may be pertinent to the cross-country variation, in that for a substantial subset of countries the legal procedures may be "long enough" for higher costs to be "efficient." A similar negative relationship emerges between the length/cost ratio and intermediary credit (Figure 9, third panel). Given only 14 observations, it is pointless to examine statistical significance or more complex relationships. However, the nature and the basic strength of these relationships is not dependent on any single outlier observation.

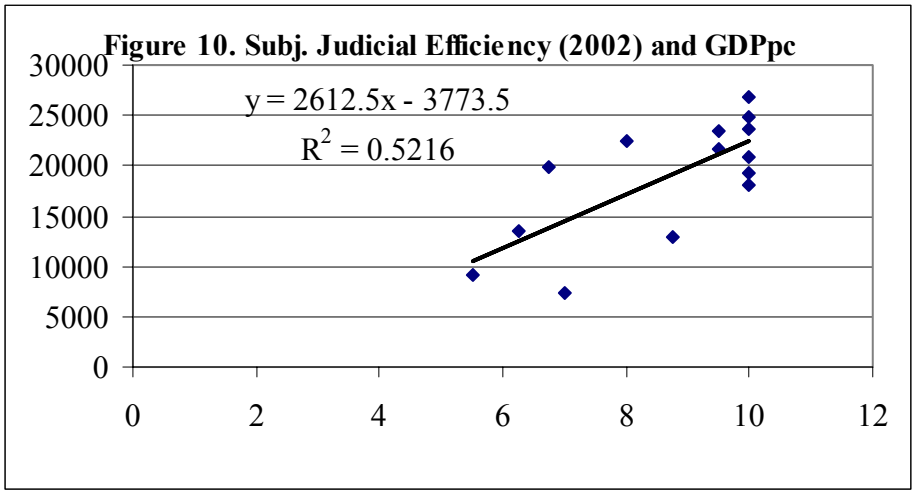
100. **There is also a negative relationship between the length/cost ratio and per capita GDP (bottom panel of Figure 9).** As with the above analysis of the business environment indicators, there are no clues about causality, but it is still instructive that higher-income countries in practice tend to have a fairly small ratio of the length of legal proceedings to their costs.

101. **For the same sample of European countries, the subjective indicators of the legal system appear to play a similar role than that of objective indicators.** The positive relationship of the GCR's "judicial efficiency" and the "rule-of-law" variables, as well as the extent to which cross-country variation is accounted for, is similar for these subjective variables with respect to market capitalization and intermediary credit (results not shown). At the same time, the correlation with GDP per capita (Figure 10) is greater for the subjective judicial indicators than for the objective ones. Again, this may be coincidental, but if not, one possible reason is the suspicion that economic outcomes like GDP are implicitly factored into subjective data.

Figure 9. Judicial Efficiency (1996) and Long-term Financial and Economic Indicators



Sources: European Commission quoted in Marchesi (2003), Beck et. al. (2001).



102. **These correlations suggest that the evolution of objective legal system characteristics could be pertinent to understanding the relationship between institutions and economic performance.** Obviously, no statistical significance or causality can be established on the basis of a small sample and lack of consistent time series data. Still, the evidence is suggestive and, importantly, not very sensitive to the timing of particular cross-country comparisons, as most of these relationships tend to be stable over time. Further research on this matter is intuitively promising in view of (i) robust empirical results yielded by the "legal tradition" and (ii) the more long-term nature of the legal system compared to other institutional factors, as suggested in the arguments above. As a practical matter, Italy's very lengthy legal processes could thus be quite taxing in terms of economic performance, not least with respect to its EU peers.

E. Conclusions.

103. **This chapter has investigated the role of Italy's institutional and business environment, including the legal system, in its broad economic performance,** against the background of a recent surge in academic contributions. A literature survey has been necessary to put the problem in context, as the theme is becoming ever more "macro-relevant." The survey prompts the following conclusions: (i) despite growing interest, so far the studies have yet to converge on a mechanism linking institutions and aggregate economic outcomes; (ii) at a theoretical level, the political economy view appears the most plausible, but is not operational, (iii) the "legal tradition" view has had some empirical validation, but it underestimates even the legal system's role in economic performance; (iv) for a better understanding of this role, one at the very least needs also to capture the dynamics and modern characteristics of various institutions, not least the business environment and the legal system; (v) in doing the latter, more empirical work is necessary, which should be based on objective data and cover as wide a field of institutional issues as possible.

104. **An analysis of the recent cross-country data highlights the importance of institutions related to the business environment.** It is generally the case that slower and

costlier procedures tend to be correlated across all, as well as among high-income, economies between and within different sectors, and are associated with lower levels of per capita output. The effect of the negative role of "contract enforcement" inefficiencies is also detectable, but is somewhat weaker. There is also some evidence that, while the business environment depends on exogenous fundamentals such as the legal origin (see La Porta et al. (1997-2000)), it may also affect growth outcomes regardless of the legal origin. For example, "more stable" business environment factors appear to have some statistical power in explaining cross-country variation in past growth rates, which is clearly not the case for more "short-term" factors. The causality issue and the particular elasticities still need to be approached formally as time series data become available.

105. **Measures of Italy's business environment suggest there is a case for progress in some areas.** Given the cross-country evidence of the link between the business environment and economic performance, Italy could gain from institutional reforms. Progress is needed in many directions, partly in view of the likely complementarities, with the length of contract.

106. **Italy's civil legal procedures are characterized by their extreme length.** In the European Union, the ratio of length to the cost of trials is negatively correlated with various measures of economic and financial development. The evidence is not compelling due to data availability problems, but to the extent there was a causal link from legal institutions to economic performance, the data would enhance arguments for giving policy priority to reducing the length of trials while preserving the rights of participants and other core principles. Among other things, progress in this area could limit "pathological" demand for legal services. The difficult empirical issues of the relative weights of normal and pathological demand for justice, as well as feasibility of steps to speed up legal proceedings, would need to be addressed carefully by experts to assess particular trade-offs in this context.

107. **A number of specific and generally low-cost reforms in all areas (some of which are ongoing) could help improve Italy's economic potential.** Regarding the **business environment,** a key issue is a sweeping simplification of administrative procedures. Such steps may build on progress made with the three "Bassanini laws" of 1997-1998. The forthcoming discussion of the draft "competitiveness" legislation anticipated in the 2005-2008 *Documento di Programmazione Economica e Finanziaria* provides a valuable opportunity to advance and complete the substantial legislative agenda. In addition, a draft "simplification" law would include important measures to liberalize many firm-related procedures, while the second part of the Biagi reform would solidify progress in the labor market. Another critical issue is the adoption of a long-delayed modern bankruptcy law that would speed up and streamline firm closure procedures. Regarding the **legal system**, work by a number of researchers, including Marchesi (2003) – mostly focused on the demand side – and Zan (2003) on the organizational side, suggests some specific options to deal with inefficiencies at various levels, although an evaluation of their merit and the likely impact must be left to the domain of legal scholars.

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IV. INVESTOR PROTECTION AND CORPORATE GOVERNANCE IN ITALY[52]

Core Questions, Issues, and Findings

- **From an investor protection perspective, are there measures that the Italian authorities could take to strengthen corporate governance?** Italy's legal and regulatory system incorporates a significant number of investor protections. These include the concept of the Board of Statutory Auditors, which gives shareholders a formal, legally-required check on the activities of the Board of Directors; provisions for strict accounting and auditing oversight; and rigorous legal requirements for financial reporting and disclosure.

- **In practice, however, the potential for investor protection that is built into the legal and regulatory framework is not fully realized.** Due to heavily concentrated ownership, cross-shareholding and other factors, it may be difficult to ensure the proper monitoring of directors' independence, particularly in the absence of a legal requirement for Board independence. Similarly, the effectiveness of the Board of Statutory Auditors in conducting its oversight role may be reduced because of requirements limiting the ability of members to act unilaterally. This difficulty is compounded by the Italian legal system, which creates disincentives for minority shareholders to enforce their legal rights.

- **The effectiveness of legal requirements for financial reporting and disclosure in deterring wrongdoing and protecting investors has been limited.** While Consob has strong investigative powers, it has had to call upon the Minister of Finance to impose pecuniary sanctions. Moreover, those sanctions may not themselves be sufficiently onerous so as to have a deterrent impact on the behavior of the corporate community.

- **The draft Law on Market Abuse addresses these issues, as it gives Consob more resources, more staff, and the power to act independently of the Minister of Finance.** It also substantially increases the maximum size of the pecuniary sanctions that can be imposed. If adopted, these provisions should enhance Consob's ability to deter bad behavior and improve its ability to monitor and oversee the market.

- **Other legal and regulatory reforms could strengthen the existing protections in practice.** For example, legal requirements mandating a majority of independent directors may be warranted and, more generally, the provisions of the Preda Code could be incorporated into legal or regulatory requirements. Consideration could also be given to requiring that the Board of Directors include a representative of minority shareholders. In addition, it may be possible to strengthen existing auditor rotation requirements.

[52] Prepared by Paulo Drummond (EUR) and Felice Friedman (The World Bank).

A. Overview

108. **This paper reviews selected issues related to investor protection and corporate governance in Italy.** It examines whether, from an investor protection perspective, there are vulnerabilities in the corporate governance framework in Italy and, if so, how to strengthen the system. The paper focuses on three areas: company structure and governance; accounting and auditing oversight; and the broader legislative and regulatory framework.[53]

109. **On December 24, 2003, Parmalat Finanziaria SpA, the fourth largest food products group in Europe, shocked financial markets by filing for bankruptcy protection after announcing that a $4.8 billion account that it purportedly held at Bank of America did not in fact exist.** The collapse of Parmalat[54] followed the bankruptcy of another Italian food manufacturer, Cirio Finanziaria SpA. Together, the bankruptcy of the two companies reportedly wiped out € 3 billion in savings of Italian bond and shareholders.[55]

110. **However surprising the failures of Cirio and Parmalat, they were not unprecedented.** Indeed, as a result in part of other spectacular financial frauds outside of Italy, notably Enron and Worldcom in the United States, and Royal Ahold in the Netherlands,[56] as well as of initiatives by the European Commission, the Italian authorities had taken steps in the years preceding the Parmalat failure to strengthen Italy's corporate governance framework..Many of these built on the 1998 Consolidated Law on Financial Markets,[57] which itself was a major overhaul of the Italian financial system.

111. **After providing some background on the Italian financial system (Section B), the plan of the paper is as follows:**

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[53] This paper is based on information gathered in connection with an assessment conducted in Italy in November 2004 by the International Monetary Fund pursuant to the Financial Sector Assessment Program. As such, it is based on the laws and regulations in effect at that time. In addition, the paper does not purport to be a formal or comprehensive assessment of corporate governance in Italy. While it draws on the Corporate Governance Principles of the OECD where relevant, it does not attempt to apply these Principles in any kind of systematic manner.

[54] Parmalat reportedly had more than 14 billion euros worth of debt at the time of its collapse.

[55] *Italy Needs More Changes to Bankruptcy Law, Fitch Ratings Says,* Bloomberg, September 21, 2004.

[56] Since the end of 2003 when the Parmalat facts first emerged, other financial frauds have come to light, including those involving Hollinger International and Royal Dutch/ Shell.

[57] Legislative Decree 58 of February 24, 1998. The Consolidated Law is known informally as the Draghi Law.

- **First, the paper looks at the internal controls in a company, examining some special aspects of company ownership in Italy,** including the structure of the Board of Directors, the role of the Board of Statutory Auditors (Collegio Sindacale), responsibility at the corporate level for disclosure and financial reporting, and protections for shareholder rights (Section C). These issues are examined in light of the typical composition of Italian listed companies, which frequently have a single shareholder or a few shareholders with majority control.

- **Second, the paper examines accounting and auditing oversight (Section D)**. In a number of respects Italy has for many years had a stricter level of oversight of the accounting and auditing profession than many other countries, including, for example, rules mandating auditor independence and rotation. This paper considers whether further strengthening is essential.

- **Third, the paper examines the legal and regulatory framework in which the oversight of issuers takes place, focusing particularly on the roles and responsibilities of Consob, Banca d'Italia, and Borsa Italiana (Section E)**. The paper looks particularly at the enforcement of the existing investor protection and corporate governance framework.

- **Fourth, the paper then considers draft legislation which the Italian Parliament is examining**, for the purpose of addressing the shortcomings that the recent corporate failures revealed (Section F) [58].

- **Fifth, the paper concludes with some observations about investor protection and corporate governance in Italy (Section G)**.

B. Background

112. **An analysis of investor protection and corporate governance in Italy must take into account the unique features of the financial system.**[59] Until the 1990s, the development of formal stock and bond markets was limited, families retained control of most private firms and the State owned a significant share of some large firms. Also, deposit-taking banks were precluded from acquiring significant shareholdings in non-financial companies.

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[58] The paper considers the provisions on market abuse which have been segregated from the draft Law on Savings and included in the Community law. These provisions were approved by the Chamber of Deputies on December 4, 2004, and they were being examined by the Senate when this paper was written. Parliament continues to debate the "Law on Savings," which incorporates a far-reaching reform of financial sector supervision, but it is unclear to date what final form the Law will take.

[59] This is necessarily a very brief overview and is not intended to give a comprehensive picture of the Italian financial system but, rather, to highlight certain salient aspects that are important from the investor protection and corporate governance perspective.

While the Bank of Italy possessed very broad supervisory powers, the powers of the securities regulator, Commissione Nazionale per le Societa e la Borsa (Consob) were quite weak.

113. **Beginning in the 1990s, however, massive changes took place.** In large part, these changes were ignited by the government's enormous privatization program, which generated total gross proceeds of nearly 8 percent of GDP, between 1993 and 2001.

114. **Privatization was accompanied by legal and regulatory changes to modernize the Italian market,** including the adoption of a consolidated banking law in 1993, which abolished the previously-existing "specialization" of banks[60] and enabled ordinary banks to invest in shares of non-financial companies within limits set by the authorities. The EC Investment Services Directive was transposed into Italian law in 1996, Borsa Italiana was privatized, and, most importantly, the government issued a legislative decree implementing the Consolidated Law on Financial Markets (the Consolidated Law) in 1998. The Consolidated Law dramatically enhanced protections for minority shareholders by, among other things, increasing the scope of reporting requirements and corporate disclosure, lowering the threshold for reporting equity holdings to Consob, and rationalizing the roles and responsibilities of the Board of Statutory Auditors and the external auditors for listed companies.

115. **Despite these significant developments, most listed companies in Italy remain largely family-owned.**[61] They frequently are characterized as well by cross-shareholdings and pyramidal group structures through which the shareholder/manager exercises leveraged control.[62] Parmalat, in fact, was an example of such a corporate structure, 51 percent family-owned and consisting of numerous companies, many of which were incorporated outside of Italy. As discussed below, a key question is whether existing shareholder protections are sufficient in light of the prevalence of this type of corporate structure.

C. Company Governance

116. **Traditional Italian companies have a somewhat unusual corporate structure.** They follow neither the Anglo-American model of a unitary board elected by the

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[60] Pursuant to the 1936 Banking Law, the Bank of Italy set specific limits on the purchase of shares of non-financial companies by different categories of banks.

[61] According to Moody's, "ninety percent of all businesses and nearly half of the top 200 companies in Italy are owned and managed by families." *Analysis,* Moody's Investors Service, October 2004.

[62] Pyramid structures have been defined as "organizations where legally independent firms are controlled by the same entrepreneur (the head of the group) through a chain of ownership relations." M. Bianco and P. Casavola, *Italian Corporate Governance: Effects on Financial Structure and Firm Performance,* European Economic Review, Vol. 43, 1999, page 1059. While pyramid structures are frequently less than fully transparent to the market and the authorities, in Italy there are strict provisions requiring disclosure of ownership (2 percent threshold) and shareholder agreements.

shareholders, nor the German model of a shareholder-elected supervisory board, which itself appoints a management board. Rather, the shareholders of traditional Italian companies elect two boards: a Board of Directors and a Board of Statutory Auditors. New legislation, which took effect at the beginning of 2004,[63] now permits Italians companies much greater flexibility in their organizational structures, allowing them to select either a unitary board, a two-tier board, or the traditional Italian model. To date, however, virtually all listed companies continue to retain the traditional Italian model and it will therefore be the focus of discussion in this Paper.

Board of Directors

117. **A Board of Directors that is independent of company management is one of the key mechanisms to protect shareholder interests.** In Italy, there are no legally mandated requirements for Board independence.[64] In addition, apart from privatized companies, listed companies are not required to include representatives of minority shareholders or other stakeholders on the Board of Directors, and, indeed, very few Italian companies provide for such representation in their by-laws. As underscored by the Chairman of Consob in his annual speech to the market in 2004, "mechanisms for electing the board of directors that permit minority shareholder representation are found in little more than one tenth of listed companies, in compliance with the rules for the privatizations; in only a few cases have companies made them part of their bylaws of their own volition.[65]

118. **While the Consolidated Law did not make any changes in the structure of the Board of Directors, Borsa Italiana addressed this issue in October 1999, when it adopted a code of corporate governance.** The Preda Code, which was revised in July 2002 and is expected to be revised again to reflect the recent changes in Italian company law, was adopted

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[63] Legislative Decree 6/ 2003. This legislation was adopted partly in response to European developments, including the creation of a single market and the reform of company law in other EU countries, which increased the competitive pressures on Italian companies. It also updates the Civil Code requirements for small closely held firms so as to better address their particular needs as distinct from those of larger, publicly held companies.

[64] Article 2387 of the Civil Code permits companies to include independence requirements in their by-laws. Article 2391 prohibits members of the Board of Directors from acting in conflict with the interests of the company.

[65] *Annual Speech of the Chairman of Consob to the Market,* 1994. While privatized companies constitute only about 10 percent of listed companies, they comprise approximately 40 percent of market capitalization. Law 474/ 1994 provided the legal framework governing privatization. Among other key provisions, the law permitted the Italian government to maintain special powers (the so-called "golden share") in privatized companies. These included having the right to approve the main shareholders, as well as the right to have representatives on the board of directors and other corporate bodies. The law gave small shareholders a voice on the board of directors by mandating proportional voting.

in an effort to improve the performance and competitiveness of Italian listed companies.[66] It is a voluntary code, taking a "comply or explain" approach to issuers' compliance with its corporate governance recommendations. Thus, issuers can choose either to comply with the Code's guidelines, or disclose their reasons for not doing so.[67]

119. **The Preda Code recommends that the Board of Directors have an "adequate number" of non-executive and independent directors to ensure that management is properly monitored.** While the "number and standing of the non-executive directors shall be such that their views can carry significant weight in taking board decisions," what constitutes an adequate number is not defined.[68] The Board is supposed to assess the independence of the directors on a periodic basis and communicate the results to the market.

120. **The Preda Code highlights the special importance of independent directors in a company where ownership is concentrated, as is the case in many Italian listed companies.** The Code states that, "where the ownership is concentrated, or a controlling group of shareholders can be identified, ...there emerges the need for some directors to be independent of the controlling shareholders too, so as to allow the board to verify that potential conflicts of interest between the interests of the company and those of the controlling shareholders are assessed with adequate independence of judgment."[69]

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[66] The Preda Code, which was based on the work of an ad hoc Committee for the Corporate Governance of Listed Companies, covers a number of different areas relating to the constitution and the operation of Boards of Directors, the establishment of special Board committees including audit, nomination and remuneration committees, special procedures to deal with price-sensitive information, and shareholder meetings, among others.

[67] Borsa Italiana's instructions specify that listed companies are to provide the market and shareholders with information on their corporate governance systems and their compliance with the Code. Companies are to provide this information in a special report made available for shareholders' meetings and simultaneously conveyed to the Borsa, which is responsible for its broader dissemination.

[68] The Code defines the term "independent" to mean a person who: (i) does not entertain, directly, indirectly or on behalf of third parties [or has not recently entertained], with the company, its subsidiaries, the executive directors or the shareholder or group of shareholders who control the company, business relationships of a significance able to influence his autonomous judgment; (ii) does not own, directly or indirectly or on behalf of third parties, a quantity of shares enabling him to control the company or exercise a considerable influence on it nor participate in shareholders' agreements to control the company; (iii) is not an immediate family member of executive directors of the company or of persons in the situations referred to above.

[69] According to Parmalat's 2003 corporate governance report, five of its 13 member Board of Directors were considered to be non-executive members. Along with Parmalat's Chairman (and

(continued)

121. **Neither Italian law nor the Preda Code addresses the issue of representation of minority shareholders on the Board of Directors for the large majority of Italian listed companies.**[70] While the Board is legally required to represent the interests of the entire company,[71] when ownership is concentrated, as it is for the large majority of listed companies in Italy, the Board will necessarily consist entirely, or nearly entirely, of Directors selected by the majority shareholders. With such a set-up, it may be difficult to ensure the proper monitoring of Directors' independence, particularly in the absence of mandatory legal requirements. In addition, the ability of Consob to monitor the independence of the members of the Board of Directors is limited. This may have particularly unfortunate consequences in a financial system such as Italy's where there is often little separation between the majority shareholders and the management of a company.

Board of Statutory Auditors

122. **The traditional Italian corporate structure is unique in the oversight role it assigns to the Board of Statutory Auditors.** The Board of Statutory Auditors exercises broad control of the whole management of the company. It monitors the performance of the Board of Directors and checks its activities for compliance with the law and the company's bylaws; it reviews the adequacy of the company's internal controls, including its administrative and accounting systems; and it ensures that the company has adequate procedures to provide its subsidiaries with the information needed for compliance purposes.[72] Members of the Board of Statutory Auditors are individually liable for their activities, and infringements may be prosecuted criminally.[73]

123. **In performing their functions, the members of the Board of Statutory Auditors have wide-ranging powers to obtain information from the Directors and other company**

Managing Director), there were 12 members of the Board of Directors, of which the large majority had close ties to the Chairman.

[70] While Italian law requires that the boards of privatized companies include at least one representative of minority shareholders, the *2003 OECD Survey* reported that only ten percent of listed companies have cumulative voting systems such that minority shareholders are able to elect at least one Board member. See, also, *Annual Speech of the Chairman of Consob to the Market,* 1994.

[71] Articles 2392-2395, Civil Code.

[72] A key area of focus of the Consolidated Law was to clarify and enhance the oversight role of the Board of Statutory Auditors. The shareholder protections that in traditional Italian companies are built into the roles and responsibilities of the Board of Statutory Auditors are being incorporated into the other two corporate models that now exist under the new 2003 legislation. Thus, regardless of the particular form of organization selected, the oversight role vested in the Board of Statutory Auditors in the traditional model is preserved.

[73] Article 2407, Civil Code. See, also, paragraph 37, infra.

officials. They are required to attend meetings of the Board of Directors, and may conduct inspections at any time, using employees of the company if necessary. The Board is required to report to the shareholders' meeting on its oversight activities and on any omissions or irregularities it has found.[74] If the Board discovers irregularities, it is required to notify Consob without delay. Individual Board members also may notify Consob of their concerns.

124. **The Board of Statutory Auditors also has responsibility for monitoring the external auditing firm.** It must express its opinion on the suitability of the appointment of the external auditor, including an evaluation of the firm's independence. On an ongoing basis, the Board of Statutory Auditors may obtain relevant information from the external auditor, and is required to examine the work of the external auditor and to be in a position to comment to the shareholders on any qualifications or relevant issues included in the external auditor's report. If the external auditor discovers serious irregularities in the course of its work, it must inform both the company's Board of Statutory Auditors and Consob.

125. **The qualifications to become a member of a Board of Statutory Auditors are specified by law.** Members of the Board of Statutory Auditors must be selected from a pool of chartered public accountants who have exercised audit activities for at least three years (at least one member is required to comply with this condition and to be entered in the Register of Auditors maintained by the Ministry of Justice),[75] experienced directors, managers, and academics in company-related sectors as specified in the company by-laws. They also must be independent of the corporate directors and management, and of its subsidiaries or parent companies.[76] The position of Statutory Auditor is frequently, however, not a full-time position and members of the Board often serve on the Boards of other companies.

126. **While Italian law as implemented by Consob regulation contains the building blocks for a strong supervisory role for the Board of Statutory Auditors as the representative of the shareholders, a potential weakness exists in the operation of the Board in practice**. Although legally the Board is required to be independent and to include at

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[74] Consob has established detailed rules governing the contents of this report. Among other things, it must include specific comments on the adequacy of the company's internal controls, the activities of the internal auditors and any action deemed necessary to rectify problems in the internal controls. Consob Communication 10255564/ 2001.

[75] If the Board of Statutory Auditors consists of five members, then two of them must satisfy this requirement.

[76] For listed companies, a members of the Board of Statutory Auditors may not include "spouses, relatives and the like up to the fourth degree of kinship of the directors of the company, the directors, spouses, relatives and the like up to the fourth degree of kinship of the directors of the companies it controls, the companies it is controlled by and those subject to common control [and] persons who are linked to the company, the companies it controls, the companies it is controlled by and those subject to common control by self-employment or employee relationships or by other relationships of an economic nature that compromise their independence." Articles 148.3b and 148.3c, Consolidated Law.

least one member appointed by the company's minority shareholders, in practice the effectiveness of this provision can be limited.[77] Certain key actions may only be undertaken by two or more members of the Board of Statutory Auditors, acting together.[78] Thus, the ability of any one of them to act unilaterally is constrained. More generally, the representative of the minority shareholders may, particularly in a company with concentrated share ownership, be influenced by the dominant controlling shareholder. Finally, there is the question of monitoring and enforcement. As will be seen below, the minority shareholders have little incentive to bring an action against the Board of Directors even when they may be legally entitled to do so (see para.31 below).[79] Equally importantly, Consob has had limited resources to monitor corporate behavior and the pecuniary sanctions that it can propose for malfeasance are limited, and have to be imposed by the Ministry of Finance. As discussed below, the draft law currently before the Italian Parliament is a response to these shortcomings.

Disclosure and Financial Reporting

127. **Although the disclosure and financial reporting requirements applicable to listed companies in Italy are quite rigorous, the pecuniary sanctions that could be imposed on issuers or management for breaches of these requirements have been minimal.** They therefore have not served as an effective deterrent for wrongdoing.

128. **Financial reporting and disclosure requirements in Italy are quite rigorous, particularly in comparison with other European countries.** In recent years, the European Commission has taken a much more active role in establishing disclosure and reporting requirements, in order to promote a harmonized market across Europe for securities offerings

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[77] Some analysts allege that the Board of Statutory Auditors failed to fulfill its responsibilities in the Parmalat case. "The Parmalat Finanziaria board of statutory auditors never sent any alert in their reports, nor reported anything to courts or to C.O.N.S.O.B." G. Melis, A. Melis, *Financial Reporting, Corporate Governance and Parmalat: Was it a Financial Reporting Failure?,* Conference at Queens' University, Belfast, September, 2004.

[78] For example, only two Statutory Auditors, acting jointly, may convene a shareholders' meeting, or a meeting of the Board of Directors.

[79] "Looking at the experience of listed corporations after the 1998 Reform, it should be noted that in six years, even with the lower 5 percent threshold, this instrument was never used. The reasons are relatively straightforward. First and foremost, the economic incentives for minority shareholders to bring the lawsuit are relatively low ...In addition, Italian rules of civil procedure and professional regulation of attorneys do not provide for instruments that might encourage the use of such derivative actions. ...Finally, the average length of a civil lawsuit in Italy seriously discourages resort to the courthouse as a means for protecting minorities." M. Ventoruzzo, *Experiments in Comparative Corporate Law: The Recent Italian Reform and the Dubious Virtues of a Market for Rules in the Absence of Effective Regulatory Competition,* Working Draft presented at Conference at Bocconi University, Milan, June, 2004.

and transactions. In particular, the recently adopted European Directive on Transparency [80] addresses the reporting obligations of listed companies. The legislative framework for financial reporting and disclosure in Italy described below is largely consistent with, and even more stringent than, the requirements of the Transparency Directive. Thus, little change is expected from the transposition of the Directive into Italian law.

129. **Italian companies must publish financial statements on an annual basis.**[81] These are published together with a report from management,[82] which is intended to provide management's perspective on the key events of the year. Where companies exercise control over one or more subsidiaries, consolidated annual financial statements must also be approved and published.[83] The Chairman of the Board of Directors signs the financial statements as the legal representative of the company, and is responsible, along with the other Directors, for any damages that result from a failure to carry out their duties properly.[84]

130. **Both EU Accounting Directives and Italian legislation require individual and consolidated financial statements of listed companies to be audited by an external auditor.**[85] The external auditor must be registered with the Consob and is subject to its supervision. Annual financial statements also are submitted to the company's Board of Statutory Auditors.

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[80] The Transparency Directive was adopted in December 2004, and member states will have two years to transpose it into national legislation.

[81] Beginning in 2005, all listed companies are required to prepare their consolidated accounts using international accounting standards (IFRS) issued by the International Accounting Standards Board. As for individual company accounts, Consob regulations mandate the use of IFRS and national accounting standards. Consob Regulation DAC/99088450/ 1999.

[82] Article 2428, Civil Code.

[83] Legislative Decree 6/ 2003 mandates increased disclosure by financial groups. Under Legislative Decree 6/ 2003, financial reports of subsidiaries must disclose information about leading financial officers of the parent company, intra-group group relationships and the effects of the group' policies on the subsidiary. In addition, directors of a subsidiary must justify any decision effected by the parent company, and disclose this information in the annual report.

[84] When the Transparency Code becomes effective in Italy, the Chief Financial Officers of listed companies also will be required to sign the financial statements. Under the Civil Code, external auditors may be jointly liable with members of the Board of Directors for damages caused by the Directors' actions, if the damages would not have occurred had the auditors performed their duties properly. Article 2409, Civil Code.

[85] Starting with the audits of companies' financial statements for the year ended 31 December 2002, Consob has recommended the adoption of a new set of auditing standards based on the International Standards on Auditing (ISA), as supplemented by Italian national audit standards.

131. **Listed companies are required to prepare quarterly, semi-annual and annual reports.** Consob regulations require such reports to be accompanied by remarks of the Board of Statutory Auditors, if any, and a report from the company's external auditor, if available.[86] At present, all listed companies submit their semi-annual reports on a voluntary basis to a limited review by external auditors. Quarterly reports are not audited.

132. **Consob exercises substantial authority over issuer disclosure.** It carries out a systematic review of compliance with financial reporting standards, using a risk-based approach. Consob may seek additional disclosure from a company at any time, and request an issuer to restate its financial statements. If Consob is not satisfied with an issuer's disclosure, and believes that a material violation has occurred, it may take action in civil court. Where it believes that a criminal violation has occurred, Consob must refer the matter to the criminal prosecutor. In addition, Consob has direct authority to sanction auditors, including suspending the activities of an auditor responsible for an audit in which irregularities were found for up to two years, and even deleting an audit firm from its Special Register.

133. **The Civil Code establishes administrative penalties for the violation of disclosure obligations.**[87] However, the size of these sanctions has been quite limited, with the maximum sanction being only € 100,000. The Ministry of Finance reviews Consob's proposed sanctions for their legality and fairness, and may request clarification, and even information from the persons to be sanctioned, although this has rarely occurred.

134. **Criminal sanctions also are possible.** Directors, general managers, members of the Board of Statutory Auditors and liquidators are all potentially subject to criminal sanctions, including imprisonment for up to 18 months, or longer if the shareholders or creditors incur losses.[88] External auditors are also subject to sanction for false statements in their reports and other communications, and their potential liability for damages is unlimited.[89]

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[86] Consob recommends a limited review by the external auditor of the semi-annual report. Consob Communication 97001574/ 1997. It is performed on the basis of the criteria established in Consob Resolution 10867/ 1997.

[87] Articles 191–193, Civil Code.

[88] Article 2621, Civil Code. Criminal sanctions may be imposed on persons who, with the intent of deceiving the shareholders or the public with a view to making an unjust profit for themselves or others, in financial statements, reports or other corporate disclosures provided for by law, directed to the shareholders or the public, set forth untrue material facts, even if the result of valuations, or omit information whose disclosure is provided for by law on the profit and losses, assets and liabilities or financial position of the company or the group to which it belongs, in a way that is likely to mislead recipients.

[89] Article 2624 of the Civil Code establishes criminal penalties for persons responsible for an audit who, "with a view to making an unjust profit for themselves or others, in reports or other communications, aware of the falsehood and with the intention to deceive the recipient thereof, make a

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135. **Thus, while the requirements for financial reporting and disclosure are comprehensive, the administrative sanctions that could be imposed on issuers and management have been limited in practice.** Moreover, Consob can not impose penalties directly, but has to act through the Ministry of Finance. Although there is no clear evidence this prevented sanctions from being imposed, in principle, it could hamper the effectiveness of sanctions as a deterrent of malfeasance. As discussed below, these issues have been addressed in the new legislation currently before the Italian Parliament. While criminal sanctions are also possible, in practice, they are more difficult to pursue. They require Consob to make a recommendation to the public prosecutor, who is then legally required to make a formal determination as to whether to pursue the case.[90] The legal standard for criminal prosecution is quite high and therefore can be difficult to meet.[91] Moreover, securities fraud cases must compete with other criminal matters for prosecutorial resources.

Shareholder Rights

136. **The Consolidated Law was particularly important in introducing some significant protections for minority shareholders.** For example, shareholders who have an interest that conflicts with those of the company must abstain from voting in shareholders' meetings. Shareholders who believe that resolutions were adopted in violation of this provision can bring a challenge in Civil Court to claim compensation for damages suffered.[92]

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false statement or conceal information concerning the profits and losses, assets and liabilities or financial position of the company, entity or person subject to audit in a way that is likely to mislead the recipients of the communications." The Civil Code also provides for criminal penalties for certain persons who willfully obstruct a Consob investigation. Article 2638, Civil Code.

[90] In 2003, Consob reported 159 matters to the public prosecutor.

[91] In order for the criminal sanctions to apply, the misrepresentation of the profit and losses, assets and liabilities or financial position of the company must be considered to be material. In addition, criminal sanctions will not apply if the falsehoods or omissions caused a variation of 5 percent or less in the profit of the company for the year (before tax) or of 1 percent or less in the shareholders' equity. In addition, criminal sanctions cannot apply if the misrepresentations result from valuation estimates that, taken individually, do not differ by more than ten percent from the correct one. Articles 2621-2622, Civil Code.

[92] "But a comprehensive analysis of the case law in this area shows that in only one instance has the court invalidated a board resolution challenged by a minority shareholder, suggesting that this is not a very effective remedy." L. Enriques, *Off the Books, But on the Record: Evidence from Italy on the Relevance of Judges in the Quality of Corporate Law,* Global Markets, Domestic Institutions: Corporate Law and Governance in a New Era of Cross-Border Deals, Curtis J. Milhaupt, ed., Columbia University Press, October 2003.

Shareholders can also make complaints to Consob about disclosure at shareholders' meetings.[93]

137. **As noted above, the Board of Directors is required to act in the interests of the entire company, including the minority shareholders.** The Consolidated Law for the first time introduced a provision permitting shareholders of listed companies to bring a collective action against the members of the Board of Directors for breach of their legal duties.[94] Any damages that are awarded, however, are paid to the company. The shareholders may also, along with the Board of Statutory Auditors, ask the Civil Court to order an inspection of the Company and to replace or suspend members of the Board of Directors, or appoint an administrator.[95]

138. **In practice, the legal protections that exist for minority shareholders are not fully realized**.[96] Although minority shareholders who represent 5 percent of the issued capital of a company may bring a collective action for misrepresentation against the members of the Board of Directors, in practice they are unlikely to do so.[97] Such actions are costly, and the

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[93] The Civil Code contains a number of additional protections for minority shareholders. Article 126 of the Consolidated Law provides that certain key resolutions must be approved by two-thirds of the shares represented at the meeting. In this way, shareholders were given the potential ability to block transactions promoted by the controlling majority shareholders.

[94] Individual shareholders who have suffered damages also are entitled to initiate legal action; however, the expense and other difficulties in doing so have motivated the creation of derivative and other types of collective actions. In Italy, "this action is rarely brought and even more rarely successful." Rucellai & Raffaelli, *Directors and Officers Liability in Italy.*

[95] Article 2409, Civil Code. Threatening an Article 2409 action could be a useful bargaining tool for minority shareholders.

[96] *See* L. Enriques*, supra,* in which it is argued that none of the four types of possible shareholder suits against the boards of directors of listed companies has been effective in practice for minority shareholders of listed companies.

[97] There also may be a question about potential conflicts faced by a minority shareholder considering a possible action. For example, in Italy, mutual funds are frequently owned by banks and may be reluctant to express an interest contrary to that of the controlling shareholder of a company with whom the bank does significant business. While the Consolidated Law provides that funds owned by banks are to be managed independently, practice may in fact vary. "And Italian fund managers rarely take issue with company management [because], and perhaps more important, banks have a conflict of interest since they conduct considerable business (i.e., lending) with the corporate clients in which their funds also invest. Thus banks and their mutual funds do not have an unambiguous interest in controlling firm managers in the interest of minority shareholders." R. Deeg, *Remaking Italian Capitalism? The Politics of Corporate Governance Reform,* forthcoming in *West European Politics*. *See, also,* M. Ferrari, *The State of the Art of Corporate Governance in Italy from a Multiperspective Point of Views and Some Key Point to Achieve a Real Turning Point:* "…the actions taken by

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losing party is required to pay the costs of the other side. In addition, any damages that are awarded accrue to the benefit of the company (not the individual shareholder plaintiff). Consequently, the majority shareholder is likely to benefit most from such an action. Finally, the legal system is difficult and expensive to navigate, the concept of class actions (and contingency fees) does not exist, and there are no established procedures for investors to recover funds lost through corporate malfeasance.[98] The absence of any kind of discovery system, which would afford shareholder plaintiffs access to basic information necessary to build their case, has greater repercussions when the majority shareholder also controls the management of the company – and thus access to relevant information. Given these obstacles to success, "a small investor, who has limited investments in the corporation and lacks the financial resources to face a prolonged and tenuous litigation (which in the Italian judicial system can be very prolonged [99]) has little incentive even to pursue strong cases involving clear misconduct."[100] It is thus perhaps not surprising that, to date, there have been no cases recorded whereby shareholders representing 5 percent of a company's capital have brought an action against its Board of Directors.[101]

D. Accounting and Auditing Oversight

139. **Even prior to the tremendous changes of the past few years, Italy had in place some of Europe's strongest provisions for regulating the accounting and auditing**

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institutional investors [were] inadequate [because] in Italy almost all the institutional investors are part of the big banking and insurance groups, while important independent asset managers do not exist."

[98] "This unsettled regulatory framework, which affects such key issues as the division of the burden of the proof between investors and the issuer, the measure of damages, the statute of limitations and so on, is in itself a disincentive to pursue civil litigation in cases of misinformation." L.A. Bianchi, C. A. Rogers, M. Ventoruzzo, *Legal Recourses to Protect Shareholders' Interests,* paper presented at International Corporate Governance Network, 8th Annual Conference, Milan July 2002.

[99] For a broader discussion of the legal system in Italy and its economic impact, see the chapter III, "Institutions,Business Environment and Economic Performance: Cross-Country Evidence and the Case of Italy".

[100] *Id.,* page 6.

[101] Limited shareholder activism may be a contributing factor as well. Nevertheless, as noted by the Chairman of the Consob in his 1994 Speech to the Market, "Investor activism is discouraged by the limited scope afforded by the concentration of ownership of listed companies." The Chairman goes on to note that, while recent years have shown a trend towards more widely distributed ownership in larger companies and in the banking sector, "even in these cases the real opening of control to the market remains limited by shareholders' agreements and legislative restrictions on the contestability of control."

profession throughout Europe.[102] Unlike many securities regulators worldwide, Consob has direct authority to supervise the accounting and auditing profession. All listed companies in Italy must be audited by one of the (currently) 20 external auditing firms included in the Special Register maintained by Consob.[103]

140. **As noted above, a company's Board of Statutory Auditors must render an opinion on the appointment of the external auditor.** This opinion, which is submitted to the shareholders meeting,[104] contains an assessment of the audit firm's independence and technical suitability, with particular regard to the adequacy and completeness of the audit plan and of the firm's organization in relation to the size and complexity of the audit engagement. The Board of Statutory Auditors is required to send to Consob a copy of the shareholders' resolution appointing the external auditor, the audit firm's proposal for the engagement, the Board's opinion which it had submitted to the shareholders, as well as the attestations of the company and the external auditor, described below, regarding any potential conflict of interest.[105]

141. **As part of its regular supervisory responsibility, Consob has the authority to monitor auditing firms on the Special Register on a continuous basis, to verify their compliance with licensing requirements.** To this end, Consob has introduced a compliance program to carry out quality assurance reviews on a regular basis.[106] Consob collects periodic information from the audit firms on their internal quality assurance systems, which it then collates with other information to select specific audit firms for review.[107] Consob aims to

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[102] The conduct of audits in Italy is governed by Legislative Decree 88 of January 27, 1992, the Consolidated Law, and Consob Regulation 11971/ 1999, implementing provisions of the Consolidated Law.

[103] When a firm applies to be included in the Special Register, Consob conducts an inquiry to determine whether the firm would be capable of performing the audit activity adequately. This includes checking the previous activity of the firm to verify compliance with both auditing standards and with standards of independence.

[104] Article 159, Consolidated Law.

[105] Consob Regulation 11971/ 1999.

[106] The European Commission has proposed a new Directive on Statutory Audit that would, among other things, introduce a requirement for external oversight or quality assurance at the national level, and set out common criteria for the constitution of oversight bodies. While the Directive seems to envision an independent stand-alone oversight entity at the national level, it is possible that, if Consob meets the Directive's criteria for the composition of the oversight body, it may well be that the current arrangement could continue largely unchanged.

[107] The information required to be provided to Consob as part of this process is contained in Communication 3047871/ 2003, and is posted on Consob's website.

achieve full coverage of the 20 registered firms within a six-year cycle, unless circumstances dictate different priorities for review.

142. **As part of its oversight responsibilities, Consob may compel auditing firms and their partners, directors and general managers, to produce information, records and other documents, both on a periodic basis as indicated above and for cause.** When Consob finds serious irregularities in the performance of audit activity, it may: (i) order the auditing firm not to employ the person responsible for the audit in which the irregularities were found for up to two years; or (ii) prohibit the firm from accepting new auditing engagements for a period of up to one year. Consob also can delete the auditing firm from its Register. Consob is required to report to the Public Prosecutor any instances of irregularities that could constitute criminal offenses. In the past 10 years, Consob has issued 24 sanctions against audit firms, of which 22 consisted of item (i) above.

143. **Consob's audit quality assurance system is quite comprehensive and, therefore, requires, substantial staff resources to conduct such intensive, on-going reviews.** Currently, Consob dedicates approximately 20 staff members full time to this activity. Additional staff members are needed to enhance Consob's ability to conduct effective oversight in a proactive manner.

Auditor Independence

144. **Italian law prohibits audit firms from accepting or performing any audit engagement in which their independence could potentially be impaired.**[108] In addition, national audit standards require external auditors to be independent in both fact and appearance from the company being audited. Auditing firms are required to confirm their independence to the company when they submit their proposal for the audit engagement.

145. **To protect their independence, audit firms are prohibited from accepting or performing audits when certain conflicts exist.**[109] These could involve the firm itself, or its partners, directors, Supervisory or Statutory Board members, or general managers. The law also provides as a general principle that audit firms should not accept any engagement in any situation in which the independence of the firm or any of its partners, directors, Supervisory or Statutory Board members or general managers may be compromised. Consob requires the directors of the client company and the directors of the audit firm to attest to the absence of

[108] Article 3 of the Decree of the President of the Republic, 136/1975.

[109] A conflict would include having an equity interest or contractual relationship with the client company, having a personal or employment relationship with the client company or its parent, or holding an appointment as a director or member of the Board of Statutory Auditors of the client company or its parent.

conflicts at the time that the audit engagement is conferred.[110] The client company and the audit firm must immediately notify Consob if conflicts are found.[111]

146. **Audit firms must limit their activities to auditing or other services strictly related to the audit.** Therefore, they are prohibited from providing non-audit services, such as consulting services, to any client. They must disclose annually the breakdown of revenues they received during the year by type of activity, e.g., statutory audits, other audits, and other services strictly related to the audit. In an effort to prevent audit firms from circumventing this requirement by setting up affiliated entities to offer consulting services, Consob prohibits audit clients from acquiring non-audit services from entities related to the audit firm.[112]

Auditor Rotation

147. **Italy is the only country among the G-7 to have adopted mandatory audit firm rotation.**[113] Listed companies in Italy may appoint an external auditor for a three-year term, which may then be renewed up to two times. Thus, an audit firm can serve as lead auditor for a maximum of nine years. The same auditing firm can only be appointed again following a three-year hiatus.

148. **It may be that nine years is a long time for an auditor to be associated with an audit client without succumbing to pressures on its independence.** In its proposed Directive on Statutory Audit, the EC would give member states the "option of requiring either a change of key audit partner dealing with an audited company every five years, if the same audit firm keeps the work ("internal rotation"), or a change of audit firm every seven years ("external rotation"). The Commission believes that mandatory rotation will contribute to avoiding conflicts of interest."[114]

149. **While auditor independence and auditor rotation requirements in Italy are quite strict, with active oversight by Consob, one key issue may be the application of the**

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[110] These statements must be updated annually, and in the event of key changes in personnel. Consob Communication 94006824/ 1994.

[111] Italian law also prohibits the above-mentioned persons and the staff of audit firms from accepting any kind of engagement or employment in client companies for three years from the end of the audit engagement or from the termination of their employment with the audit firm.

[112] Consob Communication 96003558/ 1996.

[113] *See* US General Accounting Office, *International Experience with Mandatory Audit Firm Rotation,* Appendix V, Public Accounting Firms: Required Study on the Potential Effects of Mandatory Audit Rotation, November, 2003.

[114] *European Commission Proposal for a Directive on Statutory Audit: Frequently Asked Questions. See* Article 40 of the proposed Directive.

auditor rotation requirement only to listed companies that are organized in Italy.[115] Thus, the subsidiaries of an Italian listed company, if they are not themselves organized in Italy, are not subject to the auditor rotation rules. They may therefore continue to be audited by the same audit firm.[116] In addition, the effectiveness of the Italian requirement on audit rotation may be limited when a listed company is part of a large family of companies organized in many different countries. In such a case, the lead auditor, although legally responsible for the audit of the group, in practice often relies on the opinion of one or more other auditors as to the accuracy of the financial statements of the listed company's subsidiaries. Consob has tried to address this problem by requiring the lead auditor of an issuer to take responsibility for reviewing the audits of subsidiaries with significant risks that have been audited by other audit firms.[117] Under the proposed EC Directive on Statutory Audit, the auditor of the group would bear full responsibility for the audit report on consolidated accounts.

E. The Legal and Regulatory Framework for Investor Protection

150. **Investor protection in Italy takes place within a legal framework in which Consob, the Bank of Italy and Borsa Italiana each exercise significant roles, with Consob taking the lead.**

Consob

151. **Consob was established in 1974 as an independent statutory agency principally in charge of ensuring investor protection and market transparency.**[118] Generally speaking, Consob has responsibility for the protection of investors and the orderly functioning of regulated markets, the efficiency and transparency of the capital market and the market in corporate control, and the proper conduct of business by intermediaries. Among other things,

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[115] Under Legislative Decree 6/ 2003, listed companies may issue corporate bonds in an amount up to twice the amount of paid-in net capital, thus eliminating at least some of the incentive for listed companies to incorporate subsidiaries outside of Italy with the purpose of issuing corporate bonds to finance the needs of the controlling parent. The new law also for the first time assigned liability to a parent company if it causes damage to minority shareholders or creditors of a controlled corporation through its mismanagement of the controlled corporation. This is likely to be a difficult standard to meet and it will apply only where the controlling parent is itself a company or legal entity.

[116] This was in fact the situation with Parmalat, where after nine years, the company switched its lead audit firm from Grant Thornton S.p.A. to Deloitte & Touche S.p.A. However, Grant Thornton continued to audit certain subsidiaries of Parmalat, including Bonlat Financing Corporation, a Cayman Islands corporation, which held the purported Bank of America account.

[117] Consob Resolution 14186, July 2003. This regulation is at issue in the post-Parmalat litigation.

[118] Consob's powers and responsibilities are set forth in Law 216/ 1974 (as amended) and in the Consolidated Law.

Consob regulates: (i) solicitations to the public, the preparation and publication of prospectuses and other documents pertaining to offers, and the procedures for making offers; (ii) the disclosure requirements for issuers listed on regulated markets, including periodic reporting obligations and disclosure of price sensitive information; (iii) the transparency of the ownership structure of listed companies; and (iv) auditing firms and the performance of auditing services.

152. **As part of its responsibility for regulating public offers and disclosure requirements, Consob reviews the offering documents and the publication of financial statements by companies seeking to make a public offering of either debt or equity securities and of companies that are listed on Borsa Italiana.**[119] Consob reviews compliance with the financial reporting requirements discussed above, using a "risk assessment" approach. Thus, Consob places listed companies with significant "risk" factors under regular review. Risk factors include both objective standards such as financial criteria as well as other facts that come to Consob's attention in the course of its activities or as a result of external information that causes it to be concerned about the financial health of an issuer or the quality of its financial statements. As part of this process, external auditors are required to send to Consob an annual report on every listed company, summarizing the main information regarding the issuer and any significant accounting issues that have arisen during the auditing process. Consob reviews each of these reports and, if problems are detected, conducts a review. On average, about 18–20 percent of listed companies are selected for review annually. Approximately 20 companies are on a special "watch list," requiring them to publish certain financial information on a monthly basis.

153. **Consob does not conduct merit reviews but, rather, checks to ensure that disclosure requirements are met.**[120] Consob has the authority to request that a company disclose additional information if it believes necessary, either before or after the company's financial statements have been published. Since the beginning of this year, Consob has required 13 companies to supply additional information to the market, by means of explanatory notes in the financial statements or special press releases. In some cases, the issuer may decide to restate its financial statements on a voluntary basis. If an issuer fails to

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[119] Currently, banks that issue corporate debt are not required to issue a prospectus subject to Consob's review, but are subject to the review by Banca d'Italia (see paragraph 53). The latter, though, is quite minimal and it is not comparable to a disclosure-based review as carried out by Consob. With the implementation in Italy of the EC Prospectus Directive, expected in July 2005, this exception from the prospectus requirement will be eliminated.

[120] The International Organization of Securities Commissions recognizes that most regulators review financial and non financial information disclosed by issuers to determine whether information that is required to be disclosed is disclosed. Merit-based regulation, in which the regulators takes some responsibility for the quality of the offering, is generally associated with emerging markets and is not considered necessary in more developed markets. *IOSCO Objectives and Principles of Securities Regulation,* Footnote 44, May 2003.

comply with an order to disclose information, Consob is authorized to publish the information at the expense of the issuer. If it is not satisfied with the issuer's explanation and the disclosure violation is material, Consob may submit the matter to the civil court. In each of 2004 and 2003, Consob submitted four cases to the civil court.

154. **Consob also is responsible for ensuring that listed companies inform the market on a timely basis of material developments.** Listed issuers and their controlling shareholders must publicly disclose any development (including those relating to the listed companies' subsidiaries) that would be likely to have a significant effect on the price of the listed securities.[121] Disclosure must be made to Borsa Italiana, which then disseminates the information publicly, as well as to Consob and to at least two news agencies.[122] Issuers frequently discuss with Consob press releases concerning their most important price sensitive information prior to their release. Consob also may require an issuer to disclose additional information if necessary, even after the release has been issued. Consob's demands are generally aimed at clarifying the characteristics and the financial impact of the price sensitive information that is being disclosed.

155. **Consob may suspend a public offering for up to 90 days if it suspects a violation of law or regulation, and prohibit the offering altogether if a violation is found.** Similarly, Consob may suspend dissemination of an offering advertisement for up to 90 days if it suspects a violation of law or regulation, prohibit the dissemination of the advertisement if such a violation is ascertained, and prohibit a public offering in the event of failure to comply. The Minister of Finance can impose sanctions, upon Consob's suggestion, for violation of disclosure obligations. Criminal sanctions, including imprisonment, are also possible.

156. **While in many ways Consob has a great deal of authority, particularly in the area of investigative powers and auditor oversight, Consob nevertheless has suffered from some limitations on its ability to deter bad behavior in the market.** Consob has in place an effective system for monitoring disclosure and reporting by issuers, which relies on both objective risk-based criteria as well as information that may come to its attention. Consob also has the authority to investigate any potential malfeasance that it discovers. However, Consob's ability to sanction the malfeasance has been limited, as noted earlier. Consob has not been able to impose administrative pecuniary fines directly, but had to act via the Minister of Finance. Moreover, as noted above, the maximum size of the fines has been so

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[121] Article 114 of the Consolidated Law, and Consob Regulation 11971/ 1999.

[122] European Commission Directive 2003/6 requires the disclosure of all price-sensitive information unless the issuer claims a legitimate interest in delaying the publication of confidential information. In Italy, the issuer may only delay publication if it is authorized to do so by Consob. In addition, Consob currently receives the information shortly before the market. These regulations are likely to be changed so as to be consistent with the EC Directive.

small as to limit their effectiveness as a deterrent. As explained below, the Italian Parliament is currently considering reforms to address these weaknesses.

Bank of Italy

157. **The Bank of Italy was established as an independent institution under public law.** Its autonomy and independence are guaranteed by Italian legislation and specifically by provisions relating to, among other things, the appointment of the members of its governing bodies, the self-financing of its activity, and its internal organization and rules of operation. The shares of the Bank of Italy are registered, and may be held only by commercial banks, social security institutions and insurance companies, and by "banking foundations." The majority of the Bank's capital must be retained by public institutions or by companies in which the majority of the voting shares are held by public institutions.

158. **The Bank of Italy has had responsibility for supervising the stability of Italian banks since 1936.**[123] Under the Consolidated Law, the Bank is responsible for all matters relating to financial stability and risk limitation. Thus, the Bank has wide-ranging supervisory powers, including responsibility for the prudential supervision of investment firms and asset management companies as well as of banks. It issues regulations relating to capital adequacy, limitation of risk, permissible shareholdings, and administrative and accounting procedures and internal control systems. The Bank also supervises the wholesale government securities market, and monitors the efficiency and proper operation of organized trading of inter-bank funds. Along with Consob, the Bank of Italy is responsible for the regulation of collective investment schemes, and for custody, clearing and settlement systems, including central counterparties.

159. **While the Bank of Italy has extensive supervisory and enforcement powers relating to so-called "authorized persons," that is, the entities that it supervises, it has no supervisory powers in connection with non-financial firms.** Therefore, the Bank has direct access only to the published disclosure and financial reports of such issuers, and it has no power to request information of any kind from such firms.

160. **Article 129 of the Consolidated Law on Banking (1993) requires that the Bank of Italy be notified prior to an offering or issuance in Italy of debt securities by domestic and foreign issuers in an amount that exceeds certain thresholds.**[124] The Bank has up to

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[123] The Bank of Italy also has the legal responsibility to promote competition in the banking sector in Italy. While this would seem to present potential conflicts with its objective of preserving financial stability, the Bank of Italy views the issue of mergers among banks as relevant to the goals of sound and prudent management of banks and of systemic stability. One iteration of the draft Law on Savings would have removed this function from the Bank of Italy and given it to the Anti-Trust Authority.

[124] Mutual funds and government securities of OECD member countries are not subject to this requirement.

20 days following receipt of the notification to postpone or prohibit the issuance. An issuance may be postponed when the Bank determines that it is too large for the market to absorb. The Bank also can prohibit a transaction if it includes features that are extremely complex or non-transparent. The Bank of Italy prohibited two securities offerings in 2002 and three in 2003. In those years, 50 and 55 proposals, respectively, were withdrawn in response to comments of the Bank.

161. **The Bank of Italy is unusual for a central bank or bank supervisor in that it invests both a portion of its ordinary reserves as well as a percentage of its employees' pension funds in Italian equities.**[125] Because of the potential conflict, the Bank has a series of firewalls in place. Internal regulations prevent the Bank from using supervisory information in its investment decisions. Moreover, the Bank invests only in Italian blue-chip companies, and is largely a passive investor. The Bank also states that it does not hold stocks of commercial banks nor of any entity that it supervises.[126]

Cooperation between Consob and the Bank of Italy

162. **The Consolidated Law requires Consob and the Bank of Italy to cooperate in a coordinated manner in the areas in which they share authority, with a view to minimizing costs to those they regulate.** In 1997, Consob and the Bank of Italy signed an agreement governing cooperation and exchange of information with respect to the authorization and registration of investment firms and asset management companies, and the marketing in Italy of units of foreign harmonized collective investment schemes. This agreement was updated in 2001. Pursuant to this agreement, Consob and the Bank notify one another of inspections of investment firms and asset management companies, and can satisfy their informational needs by requesting that the other undertake an inspection.

163. **In addition to cooperation where they share formal authority, the Consolidated Law provides that Consob and the Bank of Italy are to cooperate "by exchanging information or otherwise for the purposes of facilitating their respective functions."**[127] They therefore may not invoke professional secrecy in their mutual relations. While the arrangements for cooperation between Consob and the Bank of Italy are not made public, in practice they appear to cooperate well on a regular basis.

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[125] G Di Giorgio, C. Di Noia, L. Piatti, *Financial Market Regulation: The Case of Italy and a Proposal for the Euro Area,* The Wharton School, University of Pennsylvania, June 2000.

[126] However, at the end of 1999, the Bank of Italy owned more than 2 percent of the capital of 10 listed issuers including a bank, a financial holding company, and many insurance companies that were themselves controlled by or involved in the control of Italian banks. G. Di Giorgio, C. Di Noia, L. Piatti, supra. Currently, the Bank owns more than 2 percent of the capital of eight listed issuers.

[127] Article 4(1)/1998.

Borsa Italiana

164. **Borsa Italiana S.p.A. is responsible for the organization and management of the Italian stock exchange.** The company, which was founded in 1997 following the privatization of the exchange, and has been operational since the beginning of 1998, is responsible for defining and organizing the function of the markets; establishing the rules and procedures for admission and listing on the market; managing and overseeing the market; and supervising the disclosure of listed companies.

165. **Borsa Italiana is responsible for regulation and market management while Consob is responsible for supervision.** Thus, while Borsa Italiana sets listing standards, which vary according to the particular market segment involved, it is Consob that establishes disclosure and financial reporting requirements. All listing requirements as well as market rules are subject to Consob's approval. Borsa Italiana and Consob work closely together, including with regard to ensuring the timely disclosure of price sensitive information.

166. **In 2002, Borsa Italiana sponsored a Forum on Corporate Disclosure following which it issued a number of recommendations contained in a Guide to the Disclosure of Information to the Market.** The Guide is voluntary but serves to complement Consob disclosure requirements for listed companies.[128]

167. **In addition to its efforts to provide guidance to enhance the disclosure by listed companies, Borsa Italiana also adopted a code of corporate governance, as described above.** While the Preda Code is voluntary, it appears to have been instrumental in increasing disclosure by listed companies. The Code serves as a complement to Italian law and regulation. Since the adoption of the Code, listed companies are reported to have significantly improved the quality and quantity of information they disclose about their corporate governance practices. Indeed, by the end of 2003, almost all listed companies had in theory adopted the general principles of the Code. In particular, disclosure about the composition of boards of directors, nomination procedures for directors and statutory auditors, powers of managing directors, and the functioning of internal committees is reported to have improved, particularly in certain segments of the market, such as the Star[129] segment, for which elements of the Code are mandatory in practice.

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[128] For example, Recommendation 2 concerning information likely to have a significant effect on the price of listed financial instruments states that "issuers and the persons controlling them should disclosure material information promptly to the market." The term "material information" is defined and the Recommendation provides a non-exhaustive list of events that are likely to be considered material.

[129] The Star segment is the "high standard, mid-cap" market segment dedicated to companies with a market capitalization lower than € 800 million euros, and complying with specific requirements for liquidity, transparency and corporate governance.

F. Response of Authorities

168. **Following the collapse of Parmalat, the Italian authorities determined to review the supervisory framework to see if it could be strengthened to reduce the likelihood of other financial collapses.** In his testimony before Parliament on 27 January 2004, the Governor of the Bank of Italy, made some recommendations for legislative and regulatory changes based on his analysis of the vulnerabilities revealed by the Parmalat failure. His recommendations also reflected the measures taken in the United States following the failure of Enron and Worldcom. Among other things, he recommended that Consob be given extra powers and resources to permit it to take prompt action to verify the quality and reliability of financial statements. He also recommended that the penalties for fraud be increased, as well as for serious irregularities and violations of the rules in corporate reports. The Chairman of Consob made similar proposals, which he subsequently summarized in his Speech to the Market in June 2004.

169. **The draft Law on Market Abuse, now in Parliament, adopts much of the approach that the Bank and Consob originally recommended, which focused on strengthening Consob. T**he draft law preserves Consob as an independent agency and gives it enhanced powers and authority. In particular, Consob is granted increased power to impose sanctions directly, without the need to involve the Ministry of Finance. Moreover, the administrative sanctions that are available to Consob are greatly increased, and thus would be more likely to serve a detterent function.Finally, the draft Law provides an additional 150 staff persons for Consob, which would increase its size by approximately one-third, thus permitting it to conduct the pro-active auditor oversight program that it has introduced.

G. Concluding Remarks

170. **The OECD Principles of Corporate Governance state that, "[t]he corporate governance framework should promote transparent and efficient markets, be consistent with the rule of law and clearly articulate the division of responsibilities among different supervisory, regulatory and enforcement authorities."** As can be seen from the above discussion, in many ways the corporate governance framework in Italy achieves these goals. The legal and regulatory requirements that affect investor protection are clear and transparent, and the division of responsibilities among the relevant authorities is clearly articulated and well understood. Indeed, the authorities seem to cooperate in practice at all levels.

171. **Italy's legal and regulatory system incorporates a significant number of investor protections.** Most notably, the concept of the Board of Statutory Auditors gives shareholders a formal, legally-required check on the activities of the Board of Directors. This feature of the Italian Civil Code was further strengthened when the Consolidated Law mandated that the Board of Statutory Auditors include a representative of the minority shareholders.

172. **In practice, however, due to heavily concentrated ownership, cross-shareholding and pyramid structures, the potential for investor protection that is built into the legal and regulatory framework is not fully realized.** Thus, for example, even though Borsa Italiana's corporate governance code recommends an "adequate" number of independent

directors, when ownership is heavily concentrated and the Board consists of directors selected entirely by the majority shareholders, it may be difficult to ensure the proper monitoring of directors' independence. Similarly, the effectiveness of the Board of Statutory Auditors in conducting its oversight role is reduced because of requirements mandating that certain key actions be taken only by two or more members, acting together. Thus, the ability of any one of them to act unilaterally is constrained. This difficulty is compounded by the Italian legal system, which creates disincentives for minority shareholders to enforce their legal rights.

173. **Similarly, while the legal requirements for financial reporting and disclosure are quite rigorous, and often more stringent than the requirements of the newly adopted EU Transparency Directive, the effectiveness of these provisions in deterring wrongdoing and protecting investors has been limited.** While Consob has strong investigative powers, it has had to call upon the Minister of Finance to impose pecuniary sanctions, which has weakened the credibility of Consob as an independent regulator and gave those being sanctioned a potential second avenue of appeal. Moreover, those sanctions have not not themselves been sufficiently onerous so as to have a deterrent impact on the behavior of the corporate community.

174. **The draft Law on Market Abuse addresses these issues, as it gives Consob more resources, more staff, and the power to act independently of the Minister of Finance.** It also substantially increases the maximum size of the pecuniary sanctions that can be imposed. If adopted, these provisions should enhance Consob's ability to deter bad behavior and improve its ability to monitor and oversee the market. Thus, the draft law is an important response that should bring increased credibility and effectiveness to Consob.

175. **Consob has had authority over auditors and auditing activity since its establishment more than 25 years ago.** Unlike many countries, Italy has requirements in place governing the conduct of external audits of listed companies, including requirements for auditor independence and auditor rotation. More recently, Consob has put in place a comprehensive system for quality assurance review. Thus, Consob should be seen as being in the forefront among regulatory agencies in this area.

176. **Pro-active auditor oversight that depends on comprehensive quality assurance reviews is highly resource-intensive.** For it to be effective, Consob must have the staff, both in terms of numbers and skills, to carry out these responsibilities in a meaningful way. The new draft Law, by significantly increasing the size of Consob staff, should help in this regard.

177. **Auditor independence and auditor rotation requirements were changing as this paper was being drafted.** While Consob has rigorous requirements in place, consideration needs to be given to how effective they are in a financial system where listed companies are frequently just the apex of a large cross-border family of affiliated companies. This issue is applicable in many other countries as well, and is currently the subject of intense discussions among securities regulators internationally.

178. **The Italian authorities may wish to give consideration to legal and regulatory reforms that could strengthen the existing legal protections in practice.** For example,

given the prevalence of family ownership of listed companies, legal requirements mandating a majority of independent directors may be warranted and, more generally, the provisions of the Preda Code could be incorporated into legal or regulatory requirements. Consideration could also be given to requiring that the Board of Directors include a representative of minority shareholders. In addition, it may be possible to strengthen existing auditor rotation requirement by, for example, extending it to the consolidated subsidiaries of a company as a condition for listing its securities.

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V. Fiscal Decentralization in Italy: Issues and Prospects[130]

Core Questions, Issues, and Findings

- *Italy has been reforming its intergovernmental fiscal relations over the last three decades, to give local governments more autonomy over taxation and spending. However, the reform process has been slow, reflecting political difficulties and concerns about the possible impact of a reform on overall fiscal discipline.*
- *While recognizing that the design of intergovernmental fiscal relations must inevitably reflect political choices, this paper focuses on aspects that are key to the successful implementation of any federal fiscal framework: stability of norms and regulations, monitoring mechanisms, and the credibility of enforcement. To put these issues in perspective, the paper reviews experiences in other advanced countries.*
- *The main recommendations call for strengthening mechanisms for coordinating budgetary policies and management across levels of government; ensuring appropriate recording and reporting of all subnational government operations; improving transparency and stability of rules and regulations; and backing rules with clear and effective sanctions for non-compliance.*

A. Introduction

179. **Over the last three decades, Italy has gradually implemented a process of fiscal decentralization**. This process appears to be part of a general trend experienced in many countries as a result of a desire for greater government accountability (Ter-Minassian, 1997, Reforme, 2004). Therefore, the Italian experience with fiscal decentralization is not unique.

180. **In 2001, a major constitutional reform dramatically changed the design of intergovernmental fiscal relations.** [131] The main guiding principles of the reform are codified in the new Title V of the Constitution, which delegates a number of functions to regions; it also sets the legal basis for widening regions' fiscal autonomy by assigning tax and spending powers to them—a clear break from the centralist experience of the past.

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[130] Prepared by Annalisa Fedelino (FAD)

[131] Local governments are defined to include regions, provinces, municipalities and metropolitan cities. In this paper, we focus on regional governments for sake of simplicity.

181. **Three years into the constitutional reform, however, the legislative framework for its implementation is not complete**. Comprehensive implementing regulations have yet to be formulated—most importantly regarding the financing mechanisms of local governments, whose spending responsibilities will be significantly expanded. Meanwhile, proposals for another round of constitutional amendments that would further deepen the role of local governments are on the table.

182. **Progress toward establishing the fiscal autonomy of local governments has been slow.** This reflects in part the legislative delays noted above, but also concerns over widening of regional disparities and loss of fiscal discipline possibly induced by fiscal decentralization. Previous experience with decentralization in Italy, especially with the devolution of health expenditure in the 1970s, resulted in spending systematically and significantly exceeding budgetary allocations; ex post, the central government had to bail out local governments.

183. **The possible costs associated with implementing fiscal decentralization have also been a source of concern**. Over the medium term, Italy already faces daunting spending needs associated with an ageing population. Initiatives that may exacerbate spending pressures, threaten adherence to the commitments under the Stability and Growth Pact (SGP), and contribute to further increases in public debt (which already exceeds 100 percent of GDP) therefore need to be carefully assessed.

184. **This paper reviews key issues emerging from Italy's experience with fiscal decentralization.** There is a vast literature on the normative approach to fiscal decentralization in Italy, focusing in particular on the appropriate design of tax assignments, expenditure mandates, and equalization systems.[132] As this is well documented, the paper will discuss the framework of fiscal decentralization, focusing on aspects that have received less attention—but appear crucial for success, namely the stability of norms and regulations, the monitoring mechanism, and the credibility of enforcement. To put these in perspective, experiences in other advanced countries in these areas will also be reviewed.

185. **The paper is organized as follows.** Section B presents some main stylized facts about fiscal decentralization in Italy, and reviews the main legislative steps. Section C focuses on the key challenges highlighted above. Section D concludes.

B. Key Stylized Facts about Fiscal Federalism in Italy

186. **Initial steps toward fiscal federalism were taken in the 1970s.** Although "ordinary statute" regions were established in the 1948 Constitution, they began operating only during

[132] See, among others, Bordignon, Manasse and Tabellini (1996), Balassone, Franco and Zotteri (2002), ISAE (2003 and 2004), Bordignon and Cerniglia (2004), Giarda (2004), Reforme (2004), Franco, Messina and Zotteri (2004), and Vitaletti (2004).

the 1970s.[133] The transfer of limited administrative functions to regions started in 1972. By 1978, regions carried out most functions related to health care administration; however, the central government retained effective control over the design of health care policies. Over the same period, a tax reform vastly centralized revenue (see Box 1).

187. **Reflecting these developments, expenditure by regions increased while their own revenue remained flat**. Over the two decades starting in 1970, regional expenditure increased from 11 to 14.8 percent of GDP; own revenue remained relatively unchanged at under 3 percent of GDP. The deficit was covered by central transfers, mostly earmarked for health spending undertaken by regions.

188. **During the 1990s, considerable progress was made in the decentralization of expenditure functions**. Responsibilities in crucial sectors like health were assigned to regions, according to the so-called Bassanini-laws (for more detail, see IMF, 2000). As regions continued to be financed overwhelmingly by central government transfers, frequent spending overruns continued to be covered by the center (thus creating a perception of soft budget constraints).

[133] Italy comprises 15 ordinary statute regions and five special statute regions; the latter were activated in 1948 and enjoy special autonomy and powers. In this paper, “regions” refers to ordinary statute regions only.

Box 1. Italy: Main steps to regional fiscal decentralization

1948: The Constitution foresees the creation of regions; special powers are granted to five special statute regions.

1972-1977: "Ordinary statute" regions are set up. The tax reform of the early 1970s heavily centralizes revenue against the significant decentralization of expenditure.

1978: Health expenditure is largely decentralized to regions.

1992: Health service contributions and automobile taxes are attributed to regions.

1995: Specific state transfers are abolished and replaced by a share of the excise on gasoline; a new equalization fund is set up.

1997: A new tax on productive activities (IRAP) is introduced and assigned to regions; its yield more than replaces the abolished health social contributions.

1998: A surcharge on the personal income tax (IRPEF), by 0.5 percentage points, is introduced (offsetting an equal reduction in the national IRPEF).

2000: Legislative decree 56 replaces central transfers with tax revenue sharing (the most significant share is based on a time-varying formula for VAT to be assigned to regions).

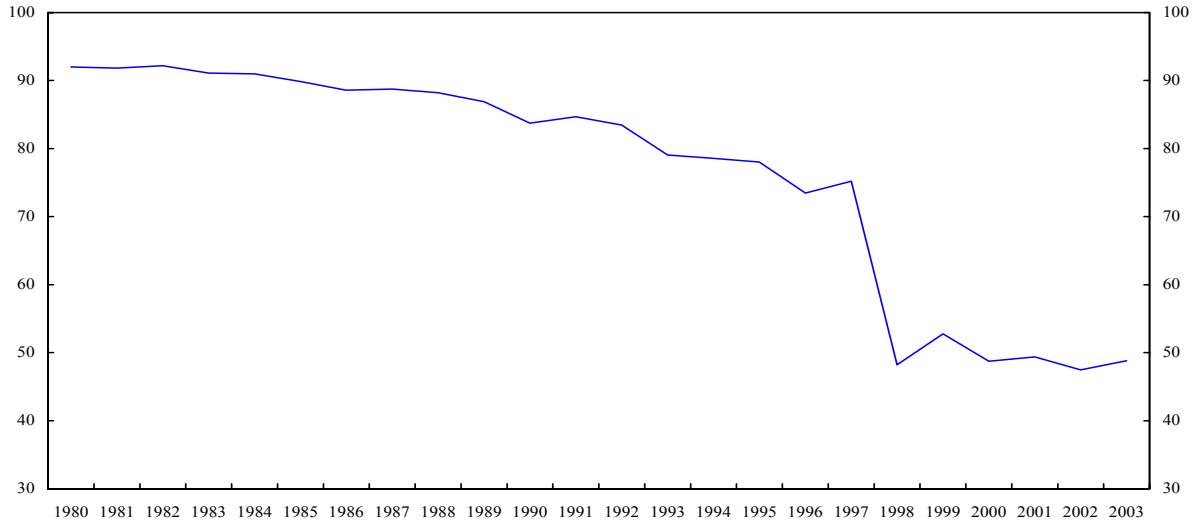
2001: Law 3/2001 reforms Title V of the Constitution; a national vote ratifies it in October.

2002-to date: A number of legislative initiatives are put forward. In 2001, the "Bossi proposal" aims to significantly strengthen regional autonomy—procedures for its ratification are not followed up after the 2001 administrative elections. In 2003, the "La Loggia Law" (131/2003) delegates the government to define the "fundamental principles" delimiting regional legislative jurisdiction. In the spring of 2004, the Senate passes a new proposal for constitutional reform that would, among other things, radically change the reformed Title V.

189. **A few local taxes were also introduced, although with limited regional authority to set tax bases and rates**. The ability to impose taxes marked a shift from "derived" financing, with all financing provided via earmarked transfers from the center, to more "autonomous" financing, with block (not earmarked) grants, some regional sharing of central government taxes (such as the VAT) and own taxes; allocation of these funds was left to regional decision. Hence, regions' own revenue significantly increased, from 2.8 percent in 1990 to 7 percent of GDP in 2000, in part replacing lower central transfers.

190. **As a result, vertical fiscal gaps (defined as the ratio of central transfers to total regional revenue) declined** (Figure 1). However, lower vertical fiscal gaps may not be a sign of deeper fiscal autonomy of regions, as these have continued to rely on the center for financing (Giarda, 2004). Despite higher own revenue, regions could not match spending increases, particularly for health care. Moreover, as most equalization mechanisms were defined in terms of spending (where spending limits were set by the central government), revenue from own taxes were deducted from "admissible" spending to compute the size of the equalization transfers—thus effectively curtailing the regions' already limited financial autonomy and possibly creating a disincentive to raise own revenue.

Figure 1. Italy: Regions' Vertical Fiscal Gaps, 1980-2003 1/



Source: Staff calculations, based on data from Franco, Messina and Zotteri (2004).
1/ Computed as the share of transfers received by regions over regions' total revenue.

191. **The need to enhance regions' fiscal discipline induced a rethinking of the system of intergovernmental fiscal relations**. Persistent financial difficulties called for increasing accountability of local administrators by assigning wider responsibilities and strengthening the financial means to undertake them. Backed by a reform in the electoral system—with direct election of regional governors and municipal mayors bringing local authorities closer to their electorate—time was ripe for a reform of intergovernmental relations. A first major step was the passage of a legislative decree in February 2000 (Law 56/2000) which replaced most of the previous central transfers with sharing of central taxes, most notably the VAT.

192. **The process culminated in the reform of Title V of the Constitution in 2001**. This reform moved further toward a federal structure based on the subsidiarity principle—functions shall be allocated to the lowest level of government with the exception of services that cannot be performed at the local level. Only the functions explicitly stated in the constitutional law remain exclusive jurisdiction of the central government—according to Article 117, these cover some strategic areas, such as foreign affairs, justice, defense, monetary policy, electoral rules, social security, and other sectors that have to be dealt with nationwide. In a number of areas, the central government and regions have "shared" jurisdiction—where the regions can legislate within the "fundamental principles established

by the law of the state." All other functions not explicitly mentioned in the Constitution were transferred under regional jurisdiction.[134]

193. **The new Article 119 establishes revenue raising and spending autonomy for regions within the framework of general principles set by the state**.[135] It also allows local governments to borrow—without state guarantee—to finance investment. It mandates both "an equalization fund, without allocation commitments, for territories having lesser fiscal capacities per inhabitant" as well as the possibility for the government to allocate "additional resources" to specific areas.

194. **In 2002, a High Commission was mandated to design mechanisms for the implementation of Article 119**. While it was initially envisaged that the Commission would complete its work by end-March 2003, due to procedural delays it did not start working until the summer of 2003. The 2004 Budget Law extended the mandate of the High Commission to end-September 2004, in October 2004, the mandate was further extended through end-September 2005. In the meantime, the government would not propose any reform to implement Article 119; and the freezing of all subnational powers over their own taxes, initiated in 2003, was extended to 2004.

195. **After two years and three extensions of its mandate, the High Commission has yet to publish its work**. Although the Commission stands ready to do so, the key challenge is the political will to come to a firm conclusion on these issues—exacerbated by the current political spectrum and the differing views across parties.[136] The possible costs of implementing fiscal decentralization have also been a main concern (Box 2).

196. **A number of new legislative initiatives have further complicated the legal framework**. In June 2003, the "La Loggia law" (131/2003) authorized the government to define the "fundamental principles" delimiting the regional legislative jurisdiction. However, in the spring of 2004 a new proposal was passed by the Senate for constitutional reform (Senate Act 2544) radically changing once again the structure of intergovernmental relations (among other things, regions would have been assigned exclusive jurisdiction over health,

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[134] Bordignon and Cerniglia (2004) present a detailed comparison between the old and reformed text of the Constitution and a commentary. See also the link under "federalismo fiscale" in www.lavoce.info, which contains a number of articles in Italian on these issues.

[135] This also applies to municipalities, provinces, and metropolitan cities.

[136] The reform of the Constitution was confirmed by a referendum where only about 33 percent of the eligible voters participated, and 60 percent of them voted in favor (thus making it approximately a thin 20 percent of the electorate). Since mid-2001, the central government majority has changed (from center-left to center-right); but about 75 percent of local administrations are currently run by the center-left.

education, and local police). The proposal was amended by the Chamber of Deputies in the fall of 2004, thereby further lengthening the reform process.[137]

Box 2. The costs of fiscal decentralization

According to the 2001 reformed Constitution, the reform of the intergovernmental fiscal relations would increase local governments' spending, in principle to be matched by central government's savings. As additional local spending responsibilities are to be devolved from the center, there would be no additional expenditure at the general government level. Existing estimates put the additional spending for local governments within a range that could be as high as € 91 billion (6.7 percent of 2004 GDP) on a gross basis.

There are, however, significant risks that fiscal decentralization will translate into additional net costs at the general government level. Additional costs could emerge from duplication of functions; overall higher wages, as the wage structure and career progression are generally higher/faster at the regional than the central level; and additional new staff, to the extent that economies of scale are broken up (ISAE, 2004).

Past experience with decentralization also suggests that the transfer of functions may imply higher overall spending. When functions were transferred from the center to the regions during the 1990s, the latter created strong pressures to augment resource envelopes relatively to what they viewed as insufficient spending margins; at the same time, there was a need to placate central agencies that would have lost from the transfer of functions. This resulted in additional funds from the national budget and additional net spending (Giarda, 2004).

197. **Absent a clear legal framework, the Constitutional Court has been called to deliberate on the "directions" of fiscal federalism**. The Court has so far been very cautious, by providing, in its deliberations, a "centralistic" interpretation of various legislative provisions. For example, it has recently ruled that IRAP—a regional tax on business activities that is seen as the main own regional tax—is a "state" tax, since the state established it (while the regions, to which the proceeds from this tax are transferred in their totality, manage it).

C. The Current Challenges

198. **Successful fiscal decentralization requires a sound and stable legislative and institutional setup**. The "rules of the game" need to be transparent and unchanging, to ensure buy-in into the reform from all interested parties. In addition, mechanisms are needed

[137] Constitutional amendments require a rather complex and lengthy legislative procedure: each chamber of parliament (Chamber of Deputies and Senate) needs to read and approve twice the proposed amendments without modification. A national vote ("referendum") may also be needed

to coordinate fiscal policy across government tiers and detect and correct possible noncompliant behaviors. These issues are covered below.

Stability of norms and regulations: the Domestic Stability Pact

199. **Since 1999, the Domestic Stability Pact (DSP) has set fiscal constraints on local governments**. The DSP was originally intended to engender commitment to fiscal discipline at all levels of government (reduction of both budget deficits and debt levels) within the SGP limits.[138] By setting common objectives, the DSP aimed to establish common standards and transparent monitoring mechanisms to asses local governments' fiscal behavior in a cooperative manner. By virtue of these features (some more notional than real, see below), the DSP has become an integral part of annual budget laws and serves as an instrument to guide and influence the dialogue among levels of government on fiscal matters (Goretti and Mercuri, 2004). However, the DSP has lost some of its effectiveness; for regions, it has been replaced by discretionary negotiating mechanisms for health spending.

200. **The definition of the DSP has varied over time**. For ordinary regions, while initially the DSP aimed to cap increases in the current primary balance, targets progressively moved to exclude various spending and revenue components; as of 2002, targets have focused only on spending levels (Table 1). Health spending—accounting for about 70 percent of regions' expenditure, mostly in the forms of transfers to health care units and hospitals—has been excluded since 2000. On the other hand, the DSP for provinces and municipalities has been based on various definitions of budget balances (for details, see Franco, Messina and Zotteri, 2004).

201. **More generally, the DSP has suffered from a number of drawbacks that hamper its effectiveness**:

- *Lack of consistency with the SGP targets*. While the SGP caps the overall budget position of the general government, the DSP targets a subset of the overall budget position (as most spending is excluded, most notably health) of a subset of the general government (as only ordinary regions and local governments are included, see below). Thus, targeting different budget variables precludes mapping local government targets into SGP rules.

- *Frequent amendments to the DSP rules*. As DSP targets have been subject to frequent changes, subsequent amendments have redefined budgetary targets and allowed higher deficits than originally mandated (Balassone, Franco, and Zotteri, 2002), thus limiting the effectiveness and credibility of the DSP rules.

[138] Law 281of 1970 limits local governments' borrowing to 25 percent of own revenue.

Table 1. Domestic Stability Pact for Regions, 1999-2004 1/

	Definition (for regions)	Target	Incentives and sanctions
1999	(R-T)-(E-I-Int)	Improve trend balance by 1 percent relative to 1998 primary current expenditure (E-I-Int)	Sanctions: monetary (proportional to the size of the slippage) if Italy is fined at EU level.
2000	(R-T-ExR-FinR-HealthR)-(E-I-Int-ExE-HealthE) Difference from 1999 Revenue side: (ExR+FinR+HealthR) Expenditure side: (ExE+HealthE)	As for 1999, but compensating for slippages occurred in 1999.	Sanctions: monetary (proportional to the size of the slippage) if Italy is fined at EU level. Incentives: for complying governments, reductions of costs for getting financial resources from Cassa Depositi and Prestiti (CDP).
2001	(R-T-ExR-FinR-HealthR)-(E-I-Int-ExE-HealthE) Difference from 2000: None	The budget balance cannot worsen by more than 3 percent of the 1999 outcome.	Sanctions: monetary (proportional to the size of the slippage) if Italy is fined at EU level. Incentives: for complying governments, reductions of costs for getting financial resources from CDP.
2002	(E-I-Int-HealthE) Difference from 2001: Spending limit applied	Expenditure cannot exceed 104.5 percent of its 2000 level.	Sanctions: monetary (proportional to the size of the slippage) if Italy is fined at EU level. **Regions**: In case of noncompliance, no additional resources for the health relative to the August 2001 agreed level. **Other local governments**: reductions in transfers (later removed).
2003	(E-I-Int-HealthE) Difference from 2002: None	Expenditure cannot exceed 104.5 percent of its 2000 level, adjusted for planned inflation.	Sanctions: monetary (proportional to the size of the slippage) if Italy is fined at EU level. **Regions**: In case of noncompliance, no additional resources for the health relative to the August 2001 agreed level. **Other local governments**: Limits on spending for goods and services, constraints on new borrowing, and ban on new hiring.
2004	(E-I-Int-HealthE) Difference from 2003: None	Expenditure cannot exceed 104.5 percent of its 2000 level.	As in 2003.

Source: Based on Table 2 in Franco, Messina and Zotteri (2004); and staff elaborations.
Note: R = revenue; T = transfers; E = expenditure; I = investment spending; Int = interest payments; ExR = exceptional revenue; FinR = financial revenue; HealthR= health-related revenue; ExE=exceptional spending; HealthE = health-related spending.
1/ Information on local (non-regional) governments is available in Franco, Messina, and Zotteri (2004).

- *Varying (and somewhat limited) institutional coverage*. In 1999, the original DSP formulation applied the same targets to regions, provinces and municipalities; in 2000, a distinction was introduced between regions and the other entities; and since 2001, smaller municipalities (with less than 5,000 population) have been excluded from the targets. Local health units continue to be excluded.

- *Lack of coordination with debt reduction targets*. The DSP included an explicit debt reduction target, as a share of GDP, only in its original 1999 formulation (covering the period 1999-2001). Although in subsequent years the DSP formulation has focused directly on reducing regions' and local governments' budget deficits, there was still an implicit presumption that this would allow debt reduction. However, by excluding some spending programs, compliance with the DSP targets does not necessarily cap the increase in overall debt of the general government. In other words, the DSP does not provide a robust anchor to the attainment of the (implicit) debt reduction target (Balassone and Franco, 2001).

- *Sensitivity to cyclical conditions*. The DSP does not deal with the possible impact of cyclical conditions on local budgets. Increasing reliance on own taxes—as they progressively replace central transfers—may increase the exposure of local finances to varying macroeconomic conditions.

202. **The Budget Law for 2005 extends the expenditure-based definition of the DSP (previously applied to regions only) to all levels of government**. For regions, the limit will be based on a 4.8 percent increase relative to the level of spending in 2003. Health spending will however continue to be excluded; as in the past, health spending will remain subject to limits negotiated and agreed among the center and the regions. For provinces and municipalities, new limits are now set on the growth of spending (Box 3), defined to exclude wages, financial operations, and transfers to other public administrations.

203. **Investment will be included in spending limits**. This is not a new element for the regions, as Article 28 of the 2004 Budget Law already foresaw the "inclusion" of their investment spending as of 2005; it is a new element for provinces and municipalities. Investment spending will be allowed to exceed the specified limits if financed by asset sales.

204. **Spending limits for all levels of government may be conducive to more fiscal discipline and contribute to protecting budget priorities in a multi-year framework**. However, implementation of spending limits at the local level is subject to a number of risks, in particular as spending limits are not based on cost parameter changes.

Box 3. The new definition of Domestic Stability Pact in the 2005 Budget Law

The 2005 Budget Law introduces limits on the nominal increase in spending for all government levels. For provinces and municipalities, this is a major shift from the past focus was on fiscal balances. While most spending at the central government and regional level is subject to 2 percent increase relative to the 2004 outturn and a 4.8 percent increase relative to the 2003 outturn, respectively, for provinces and municipalities spending limits will be computed, for current and capital expenditure, relative to an average for 2001-03. These entities will be divided in 14 demographic "classes" depending on their population size. For those local governments that over the period 2001-2003 had an average per capita spending level lower that the average of their population class, the allowed increase in spending in 2005 is set at 11.5 percent; for the others, the increase is 10 percent.

The 2005 Budget Law also modifies limits on debt contracting. Rather than 25 percent of own revenue, the cap on borrowing is set at 12 percent of own revenue, with a medium-term adjustment path foreseen for those entities that already exceed this limit.

Monitoring

205. **A system for monitoring local government finances is in place, but in some cases is not timely**. Monitoring mechanisms are established within the DSP—basically unchanged over the last two years. Regions are required to submit quarterly reports to the General Accounting Office (*Ragioneria Generale dello Stato*), containing information on cash and commitment basis. Transmission is based on a specific reporting format and must be made within 30 days from the end of the relevant quarter. Monitoring of compliance with the DSP is undertaken by the audit court (*Corte dei Conti*) on data transmitted from *Ragioneria*. However, for some regions there have been significant and repeated delays in submitting requested information (Grilli, 2004). Finally, monitoring of health spending, which continues to be subject to separate negotiations between the central government and regions, is undertaken in the context of a computerized system (*tavolo di monitoraggio*), accessible by all participating entities and maintained by the Ministry of Economy and Finance (MEF).

206. **While harmonized measurement of fiscal outcomes is key to effective monitoring, budgeting and accounting practices continue to vary**. In 2000, decree No. 76 introduced principles of budgeting and accounting for regions, in line with those of the central government. However, as a result of the autonomy recognized by various norms, accounting differences persist, among regions and relative to the central government.[139]

[139] Beginning in 1995, municipalities, provinces, and health units were allowed to adopt accrual accounting practices similar to those followed by the private sector. Health units have done so, but practices across municipalities and provinces continue to differ.

207. **Local governments' borrowing and debt are comprehensively recorded by the Bank of Italy**. The 2004 Budget Law allowed the MEF to access information from the Bank of Italy on all local governments' operations with financial institutions; a dedicated information system has been devised to ensure the acquisition of the relevant data. As of July 2004, the MEF database covered about 80 percent of the data collected by the Bank of Italy.[140] In the same vein, the 2004 Budget Law also defined what operations are included in the definition of debt; and what kind of spending programs are to be classified as investment, consistent with the SEC95. This provision will go a long way in ensuring consistency of accounting and reporting systems (Grilli, 2004).

208. **Harmonization of budgeting and accounting practices varies across countries, generally as a function of their degree of fiscal decentralization** (Table 2). At one end of the spectrum, countries with a strong federalist tradition (Canada, New Zealand, and United States) allow full independence of budgeting and accounting practices and no common financial reporting; this also reflects a history of no interference of the federal government with the affairs of the states and subnational governments and a lack of strong financial support from the former to the latter. At the other end of the spectrum, countries which are now undertaking their first steps toward fiscal decentralization and where traditionally subnational governments have relied heavily on the center's financial support, such as Italy and Spain, tend to determine centrally both budgeting and accounting rules and reporting standards. A large group of countries (Austria, Denmark, Netherlands, and Norway) lies in between, with no common budget and accounting standards among central and local governments—although the latter have to follow rules set by the former—while reporting is standardized according to rules set by the central government.

Table 2. Harmonization of budgeting, accounting, and reporting across selected OECD countries

	Common budget classification and accounting rules, set by the central government	No common budget classification and accounting rules; rules set by the central government	No common budget classification and accounting rules; rules set by each government level
Common financial reporting, set by the central government	Ireland Italy Spain	Austria Denmark Netherlands Norway	
Common financial reporting, set by lower levels of government	Belgium		United States Sweden
No common financial reporting among lower levels of government	Germany	France	Canada New Zealand

Source: OECD and World Bank (2002).

[140] According to information provided by the Budget Commission, Chamber of Deputies.

209. **Transparent accounting rules and efficient channels of reporting are essential to timely and reliable mechanisms to monitor finances of local governments**. Cross-checking information "above the line" (reported by the local governments) with "below-the-line" information (provided by the banking system) enhances the integrity of the data.

210. **In this regard, the establishment of a centralized and standardized reporting system for cash operations is promising**. This new system (*Sistema Informativo delle Operazioni degli Enti Pubblici*, SIOPE) will be piloted in 2005 in a limited number of entities, with plans to extend it gradually to the rest of the country. This would allow more timely, accurate, and harmonized reporting and recording of local governments' treasury operations. The database, realized with cooperation of the interbank network, will be kept at the Bank of Italy and be MEF property. In addition, treasury officers would not be able to execute operations whenever the relevant coding is missing—thus adding an additional layer of control at the spending execution stage.

Credibility of enforcement, accountability and hard budget constraints

211. **In its original formulation, the DSP included incentives** (Table 1). This is because it was meant to serve as tool to reach shared goals and enhance cooperation across government levels, rather than act as a binding constraint imposed by the central government.

212. **Progressively, though, the focus shifted on sanctions to foster compliance**. While initially sanctions were monetary, based on cuts of transfers to noncompliant entities, it was soon realized that this would further exacerbate the latter's financial difficulties at a time of distress. It is generally recognized that financial sanctions present a time-consistency problem, as fining a local government already experiencing difficulties could be politically difficult or even unconstitutional (Joumard and Kongsrud, 2003).

213. **Sanctions have moved away from monetary to administrative measures—in line with the practice followed in a number of countries** (Table 3).[141] While administrative sanctions may be more effective than financial ones as they imply a loss of reputation and administrative autonomy, they are nonetheless difficult to design due to information asymmetries. Differences in local government sizes and historical and cultural aspects also complicate the design of sanctions that may fit all subnational governments (Joumard and Kongsrud, 2003). In some cases, penalties and sanctions may apply to public officials deemed responsible for non-compliance; in Brazil, sanctions include dismissals, fines, and even jail terms, as established under the Fiscal Crimes Law.

[141] Countries with strong federalist systems, such as Australia, Canada, New Zealand, and the United States, mostly rely on market discipline to foster compliance from lower levels of government.

214. **The 2005 Budget law reiterates and strengthens the system of penalties in force over the last two years**. For provinces and municipalities, the law foresees limits on the purchase of goods and services (not exceeding the level of the last year when the DSP was verified to be respected; in case of continuous noncompliance, the limit would be applied to the level of spending of two years before, reduced by 10 percent); prohibition to hire new staff under any contractual terms; and ban on contracting debt to finance investment. Other penalties apply to regions for missed compliance with health spending ceilings and translate into a reduction of health financing. As an additional control mechanism, loan applications by regions, provinces, and municipalities need to be supported by proof of compliance with the DSP in the preceding year. Absent this certification, to be released by the internal audit office of the entity in question, banks and financial institutions are not allowed to grant financing.

Table 3. Types of sanctions and enforcement mechanisms in selected countries

Country	Type of sanctions	Enforcement mechanism
Austria	Financial: Noncompliant local governments have to pay a fine proportional to the shortfall, up to a ceiling. If compliance is obtained within one year, the fine is returned; otherwise, the funds are allocated across compliant governments.	Cooperative: Application of sanctions depends on the unanimous decision of a commission involving the federal and local governments.
Belgium	Administrative: Limits on subnational borrowing	Cooperative: The federal government is allowed to limit regional borrowing, following a recommendation of the Supervisory Council and in consultation with regional governments.
Canada	Administrative: In four provinces, ministries and members of the executive council are subject to significant cuts in wages for failure to achieve fiscal targets.	No formal coordination. A non-binding budget coordination exists via a dialogue among ministers
Germany	No formal sanctions.	Cooperative: The Financial Planning Council (formed by the federal government, the states and representatives of the communities) is charged with monitoring fiscal developments at all government levels and making recommendations in cases of noncompliance.
Ireland	Administrative: Defaulting authorities can be removed from office and replaced by a commissioner appointed by the central government.	Centralized: Subnational governments are monitored and controlled by the Department of the Environment and Local Government.
Italy	Administrative: Limits on the purchase of goods and services; prohibition to hire new staff and to contract debt to finance investment	Cooperative: The State-Local Government Conferences are involved in the monitoring process.
Spain	Administrative: Noncompliant authorities have to submit a plan for correcting any fiscal deficit.	Centralized.

Source: Joumard and Kongsrud (2003).

215. **Compliance with the DSP appears to have been strong, but this partly reflects the DSP limited coverage of regional fiscal operations.** In 2003, 14 ordinary regions (out of 15) have complied with the DSP. However, until 2004, the share of spending monitored under the DSP was very limited, representing only 13 percent of total regional expenditure. In addition, targets are set relative to projected trends—to the extent these are set in a relatively loose way, their respect is easier to achieve.[142]

216. **There is also a credibility problem**. Bordignon and Turati (2004) stress that credibility issues are likely to emerge in sensitive areas such as health care, as it is not politically conceivable that local governments would be allowed to fail in providing essential health care services. This perception is more acute when the central government can be blamed for this failure—as may happen in countries where political and financial responsibilities across different government levels are not well defined. More generally, if the central government is involved in local governments' affairs (for example when it is in charge of guaranteeing minimum level of services, as mandated by the Italian Constitution), then a policy of no bail-out may not be credible.

217. **A cooperative approach to formulation and implementation of fiscal policies may enhance credibility and compliance**. This may strengthen political commitments, and hence fiscal discipline, through a consensus-building process (Joumard and Kongsrud, 2003). All countries, especially those with a longer tradition of fiscal federalism, rely on cooperative mechanisms; this is generally achieved either by parliamentary chambers representing lower levels of government (such as in Germany and Austria) or advisory councils with representatives from all tiers (Table 3). This mechanism could be supplemented by a peer review system—whose feasibility and effectiveness would clearly be sensitive to the levels of government involved—and by the introduction of credible sanctions (Balassone, Franco, and Zotteri, 2002).

218. **Eliminating the perception of soft budget constraints is difficult but not infeasible.** Past experience in Italy offers an example of how this may be achieved. Substantial retrenchments in health spending were achieved in the mid-1990s—by about 1.2 percent of GDP between 1991 and 1995, when health spending reached a minimum of 5.3 percent of GDP. By that year, the regional health deficits had been eliminated. This is because the central government had managed to convince regions that it would not intervene with ex-post financing of health deficits (Bordignon and Turati, 2004). A number of developments made this course of action credible, including the need to address forcefully the causes of the 1992 financial crisis and external constraints stemming from the quest to join the final stage of EMU. However, since Italy entered into the EMU, the need to stick to non bail-out policy loosened, and with it perceptions of central government's severity in pursuing offenders.

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[142] As reflected in mimeo material provided by Budget Commission, Chamber of Deputies.

219. **Credible enforcement is, however, impossible if the policies to be enforced are not tenable**. Thus, the reduction in health spending experienced in the mid-1990s soon proved to be unsustainable—health care spending swelled back to 6.2 percent of GDP by 2001, and has hovered around that level since. This indicates that, without properly designed reforms aimed at increasing the efficiency of spending and strengthening the quality of administration and financial management at the regional level, sustainable savings are not feasible. In other words, tighter budgetary allocations may not be viable—and their enforcement would not be credible—unless regional governments are put in a position to pursue such savings in a sustainable way. Although outside the scope of this paper, this confirms that the design of expenditure mandates—and their underlying key policy parameters—will be key to ensuring fiscal discipline when fiscal decentralization is implemented.

D. Concluding Remarks and Policy Implications

220. **The authorities' cautious implementation of fiscal federalism is understandable, given the attendant risks**. However, uncertainties and contradictory steps along the way to the reform of intergovernmental fiscal relations may come at a cost—not least for the credibility of government policies and their consistency with the legal framework establishing the guiding principles of these reforms.

221. **The design of the intergovernmental fiscal relations system ultimately remains a political choice. But a few elements need to be in place to ensure its successful implementation:**

- Mechanisms for coordinating budgetary policies and management across levels of government should be strengthened; and the existing institutions and cooperative mechanisms, such as the Conferenza Stato Regioni and the joint state-region monitoring of health spending, could be enhanced by allowing them greater voice in defining the government's policy intents. This would ensure an appropriate contribution of each level of government to macroeconomic objectives and fiscal sustainability consistent with the SGP objectives.

- As a first step, it is essential to ensure appropriate recording and reporting of all subnational government operations. The current piloting of a new standardized recording system, SIOPE, is promising. Its sound functioning and prompt extension to all government entities should be encouraged. This is all the more important in cases where a "no bailout" policy may not be credible—the evidence reported in this paper would suggest that Italy is such a case. A sound and timely monitoring system is therefore essential to intervene at earlier stages of financial difficulties—rather than waiting until problems that require central government intervention materialize.

- Transparency and stability of rules and regulations are also needed. The many changes to the DSP since its inception witness the difficulty of adapting it to changing circumstances. As the 2005 Budget Law applies the same typology of targets to both

central and subnational governments, this should be supported by a multi-year budgetary framework to formulate and protect budget priorities.

- Rules and regulations should be backed by clear and effective sanctions for non-compliance; these should be non-discretionary and based on automatic mechanisms to limit political interference. Administrative measures on managers and politicians could also be applied to strengthen their accountability and respect of the "rules of the game."

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