FOR AGENDA

SM/10/127

May 12, 2010

To: Members of the Executive Board

From: The Secretary

Subject: **Italy—Staff Report for the 2010 Article IV Consultation**

Attached for consideration by the Executive Directors is the staff report for the 2010 Article IV consultation with Italy, which is tentatively scheduled for discussion on **Wednesday, May 26, 2010**. At the time of circulation of this paper to the Board, the authorities of Italy have indicated that they need more time to consider whether they will consent to the Fund's publication of this paper. Publication will only proceed upon the receipt by the Fund of the member's explicit consent. Any requests for modifications for publication are expected to be received two days before the Board concludes its consideration.

Questions may be referred to Mr. Spilimbergo (ext. 36346) and Mr. Bennett (ext. 35345) in EUR.

Unless the Documents Section (ext. 36760) is otherwise notified, the document will be transmitted, in accordance with the procedures approved by the Executive Board and with the appropriate deletions, to the European Central Bank forthwith; to the WTO Secretariat on Thursday, May 20, 2010; and to the Caribbean Development Bank, the European Commission, and the Organisation for Economic Cooperation and Development, following its consideration by the Executive Board.

This document, together with a supplement providing an informational annex, will shortly be posted on the extranet, a secure website for Executive Directors and member country authorities. The supplement, which is not being distributed in hard copy, will also be available in the Institutional Repository; a link can be found in the daily list (http://www-int.imf.org/depts/sec/services/eb/dailydocumentsfull.htm) for the issuance date shown above.

Att: (1)

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Department Heads

INTERNATIONAL MONETARY FUND

ITALY

Staff Report for the 2010 Article IV Consultation

Prepared by the Staff Representatives for the 2010 Article IV Consultation with Italy
(In consultation with other departments)

Approved by Marek Belka and Tamim Bayoumi

May 11, 2010

EXECUTIVE SUMMARY

Context: The global financial crisis has taken its toll on Italy's economy, exacerbating its long-standing structural weaknesses and causing the worst recession since WWII. Higher public debt and lower potential output will be the long-term legacy of the recession. A modest and fragile recovery based on external demand, restocking of inventories, and modest government support is under way, but the high level of public debt could make Italy susceptible to reversals in market sentiment.

Challenges: After more than a decade of anemic growth and a persistent inflation differential with other Euro area countries, competitiveness needs to increase and structural bottlenecks should be removed. While the recent fiscal deterioration has been relatively contained compared to the euro area average, fiscal consolidation needs remain substantial, and market risks have risen. Much needed structural reforms are still lagging.

Authorities' views: The authorities were committed to containing the fiscal deficit to below 3 percent by 2012; they also considered the next three years a golden opportunity to implement structural reforms. In particular, they believed that fiscal federalism would facilitate sustained budgetary consolidation while improving the efficiency of public services.

Mission team: A. Bennett (Head), J. Daniel, L. Lusinyan, H. Morsy, A. Spilimbergo, E. Zoli (all EUR), A. Buffa di Perrero (MCM), and S. Sgherri (SPR)

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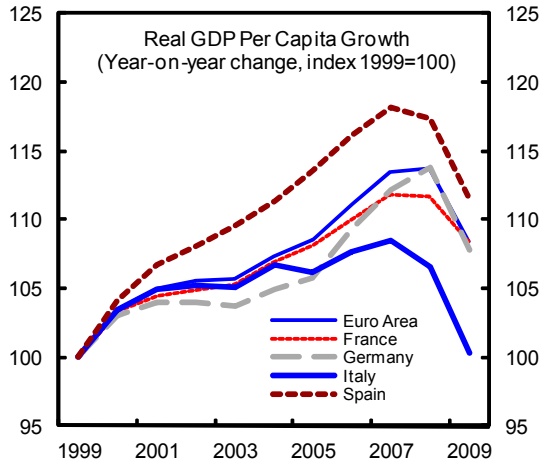
I. CONTEXT: THE GLOBAL CRISIS EXACERBATED PRE-EXISTING PROBLEMS

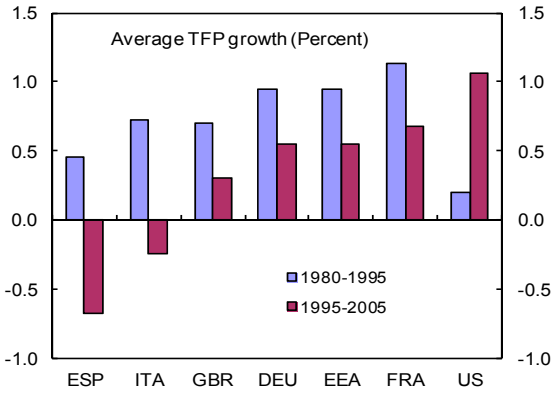
A. Before the Crisis (1999–2007)

1. **The global economic crisis hit an already structurally weak Italian economy.** Despite growing employment, income growth had been anemic due to stagnant productivity and declining competitiveness over more than a decade.



Source: WEO.

2. **Italy has been steadily losing its market share of world trade.** Economic rigidities, along with Italy's specialization in products with relatively low value added, contributed to a steady erosion of competitiveness. Earnings growth outpaced labor productivity, and Italy's unit labor costs grew by nearly 25 percent during 1999–2007. Italy's market share in world trade has declined significantly (and by more than its euro area peers) since the mid 1990s.



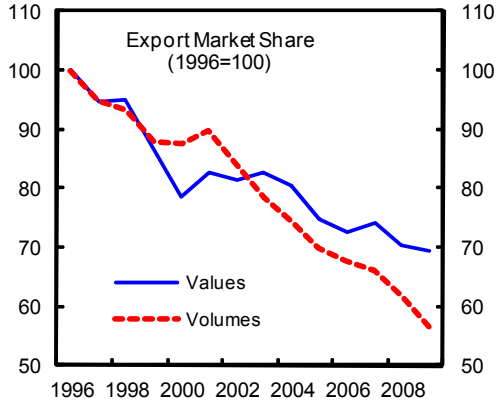
Sources: EU KLEMS database.

3. **Italy's public finances were fragile going into the crisis.** While government debt declined gradually from 113¾ percent of GDP in 1999 to 103½ percent in 2007, interest savings and (partly cyclical) revenue strength were offset by poor spending control. As a result, the structural primary balance deteriorated by some 2¾ percent of potential GDP during this period, and the overall deficit hovered around 3 percent of GDP.

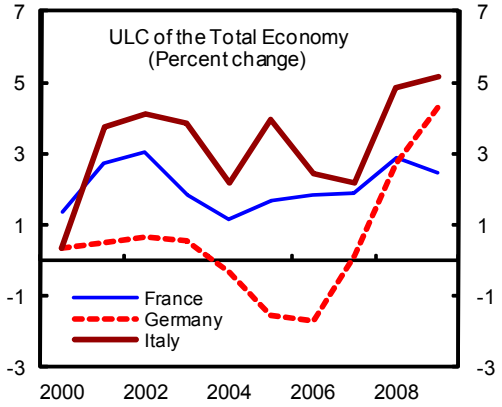
4. **In contrast, the Italian financial system entered the global crisis from a position of comparative strength.** In large part, this derived from the traditional bank-based nature of the system, but also reflected previous consolidation, improved governance, and a sound supervisory framework.

Figure 1. Standard Competitiveness Indicators Indicate a Gap

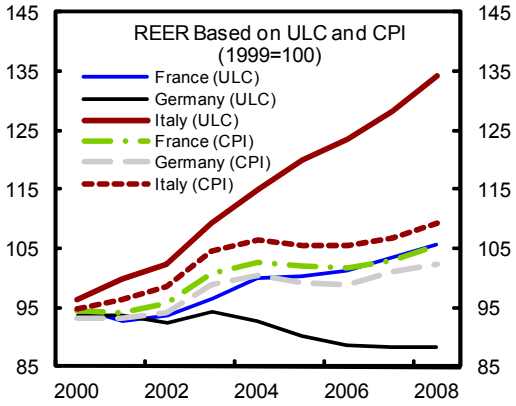
Global market shares have been declining...



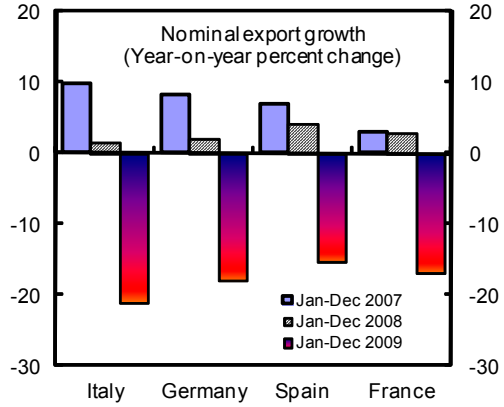
...as labor costs have been relatively high...



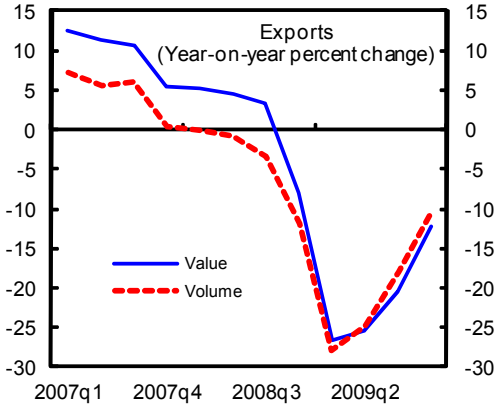
... and the real exchange rate appreciated.



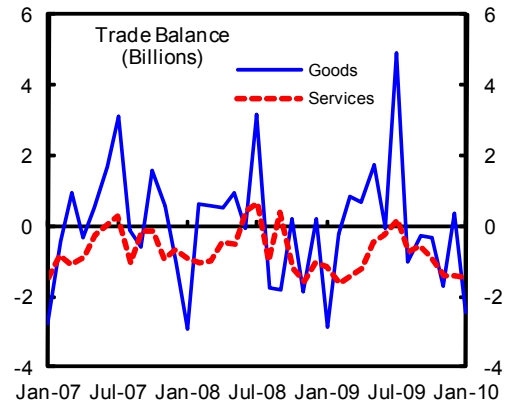
Nominal exports fell sharper than for peers...



...but the exports started to recover following a sharp decline ...



...with trade balances moving sideways.



Sources: Istat; OECD; Eurostat; Bank of Italy; and IMF staff estimates.

B. The Global Crisis (2008–2009)

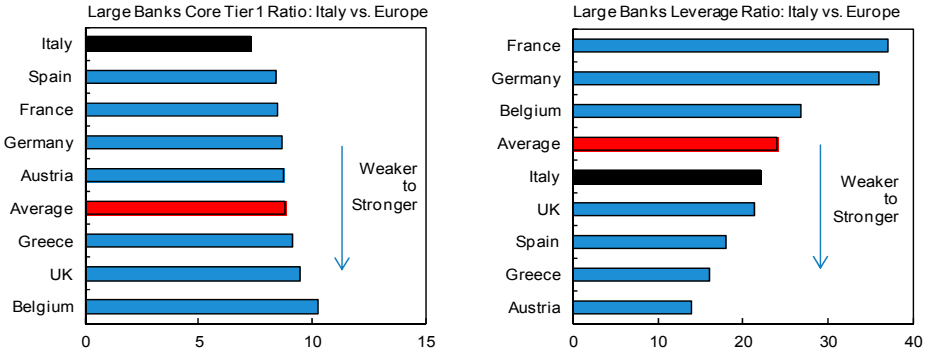
Despite the comparatively resilient financial system and the lack of a domestic credit/housing boom/bust, output fell sharply as trade and investment slumped.

Financial sector: resilient

5. **Banks proved resilient to the initial phase of the global financial crisis.** The banks benefited from a business model based on classical on-balance sheet lending-deposit activity, and strong customer relationships. With adequate liquidity and the absence of asset bubbles and toxic assets, this conservative business model sheltered Italian banks from the liquidity crunch at the onset of the crisis. Unlike elsewhere, Italian banks did not need emergency government intervention and recourse to ECB liquidity support schemes remained limited.

6. **The subsequent deterioration of the economy nevertheless weakened banks' asset quality and profitability.** Credit risk increased during the second half of 2008 and deteriorated rapidly in 2009. Following the economic contraction, lending growth to the private sector slowed sharply, profitability declined, and asset quality deteriorated. In 2009, the stock of nonperforming loans increased by 40 percent with respect to the previous year. Loan loss provisions for the 5 largest banks (as a percentage of pre-provision earnings) increased from about 30 percent in 2008 to about 56 percent in 2009, which was in line with the European average.

7. **Banks increased capitalization in 2008–09, but their capital ratios still range from weak to average compared with other countries in Europe.** Capitalization had weakened to just-adequate levels before the crisis. Since the crisis, banks were able to recapitalize by raising capital from core shareholders, selling nonstrategic assets, and cutting dividends (often to zero). Some banks also issued government-sponsored recapitalization bonds (the so-called "*Tremonti Bonds*"). Despite recent strengthening in capitalization, Italian banks still display weaker Core Tier1 ratios than their European peers. The comparison is more favorable if the leverage ratio (defined as the ratio between assets and equity) is taken into consideration.

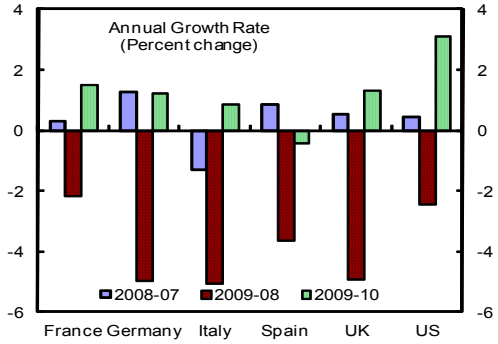


Source: IMF staff calculations on Company Reports. 2009 data.

8. **Other financial institutions have also weathered the global financial crisis relatively well.** The Italian insurance industry was little exposed to the crisis, with issuer defaults amounting to ½ percent of technical reserves. In 2009, premium revenues increased, and in the first semester, the insurance sector recorded a profit. Most pension funds had positive (albeit low) returns in 2009, often offsetting the losses recorded in 2008. The profitability of asset management companies, investment firms, and financial companies fell, but remained positive, in 2008.

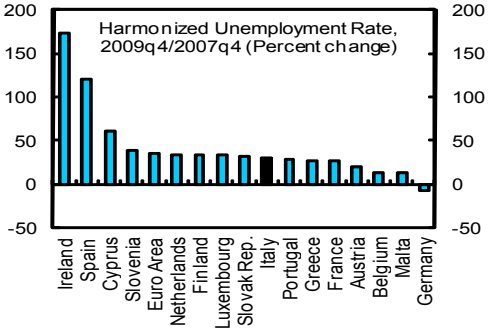
Real Sector: adversely affected by the global crisis

9. **The global financial crisis affected the real economy mainly through trade, credit, and confidence channels.** The recession in Italy's main trading partners led to a sharp fall in exports. Financing conditions tightened and credit growth fell, both to households and corporates, reflecting a combination of lower perceived borrower creditworthiness and a fall in loan demand. Corporate leverage increased, bankruptcies rose, and the profit share fell. Market indicators of expected corporate default spiked in 2009 and still remain above pre-crisis levels. Despite strong household balance sheets, private consumption declined significantly, reflecting rising unemployment and tighter consumer credit, only marginally offset by the weak rise in government consumption. Gross fixed investment and inventories also fell sharply, reflecting weak demand prospects and difficult financing conditions.



Sources: OECD; and WEO.

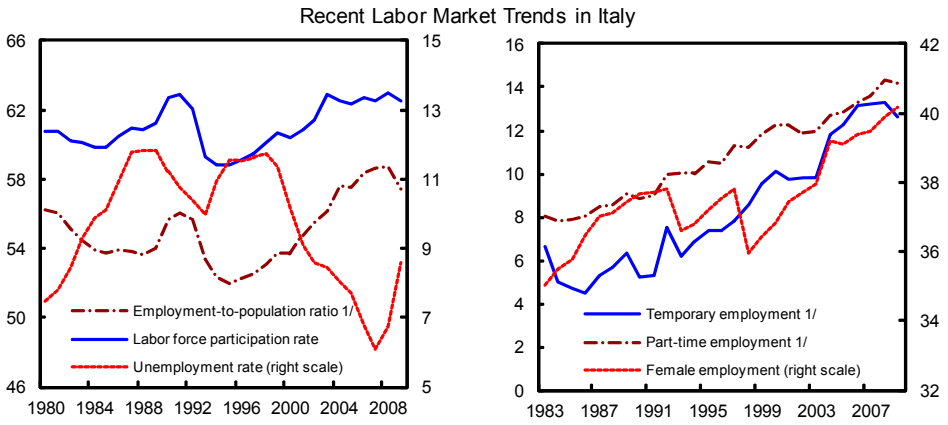
10. **The global crisis triggered Italy's worst recession since World War II.** The downturn in Italy started earlier and lasted longer than in most of its euro area peers. Italy's reliance on exports and the predominance of SMEs increased its vulnerability to a global downturn. Additionally, the weak initial conditions and the decision not to engage in a large fiscal stimulus (which was appropriate in view of the high level of public debt) translated into one of the deepest output falls among large industrialized countries. Despite the sharp output fall, inflation and wage growth remained above the euro area average. Combined with falling productivity growth, this further worsened unit labor costs and squeezed profit margins.



Source: Eurostat.

11. **Unemployment increased, though relatively mildly.** Unemployment rose to 8.3 percent in the fourth quarter of 2009, 1.9 percentage points increase from end 2007, much lower than in most of its euro area peers. While this partly reflects falling participation, Italy, like Germany and France, relied on temporary lay-off and work

reducing measures. In particular, the government provided additional wage supplementation funds (*Cassa Integrazione Guadagni*, or CIG) to sustain labor demand.



Sources: Istituto Nazionale di Statistica; and Eurostat.
1/ Latest observation is as of 2009q3.

Response to the crisis: supportive but modest

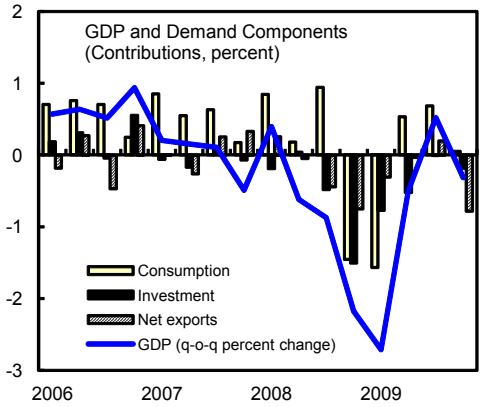
Financial sector

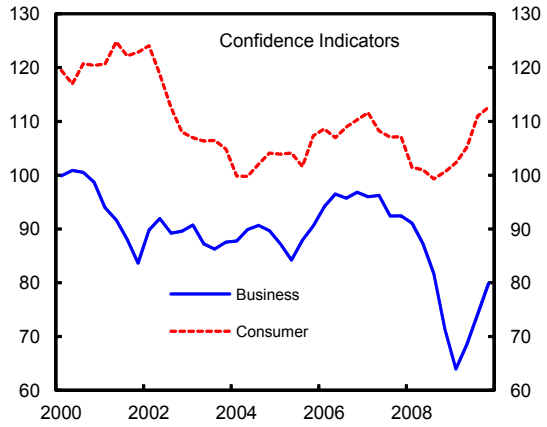
12. **The authorities helped the financial sector weather the crisis through a range of measures.** The government guaranteed the deposit insurance fund; several instruments were established to improve bank liquidity, including a state guarantee for new bank liabilities, a facility for swapping bank assets or bonds issued by banks for government securities and a system for anonymous but collateralized interbank lending. The government also offered a recapitalization scheme ("*Tremonti Bonds*"), although this was used by only four banks (for a total of €4.05 billion recapitalization bonds, or less than half the €10 billion that was made available). The modest uptake of the scheme mainly reflected the conditionality as well as the recovery in global financing conditions which was already underway when the scheme was launched.

13. **Government policies also focused on supporting credit to the private sector, especially to small- and medium-sized enterprises (SMEs).** Besides exerting moral suasion on financial institutions, a state-controlled financial institution (*Cassa Depositi e Prestiti*, CDP) made funds available to banks that extend credit to SMEs, the existing guarantee fund for SMEs has been strengthened, and the Ministry of the Finance is overseeing a bank loan moratorium agreement between the banking association and the employers' federation, which has allowed the suspension of loan repayments for €9 billion (0.6 percent of GDP). The government is also setting up a recapitalization fund for SMEs, financed by the government, the CDP, the employers' federation, and private banks.

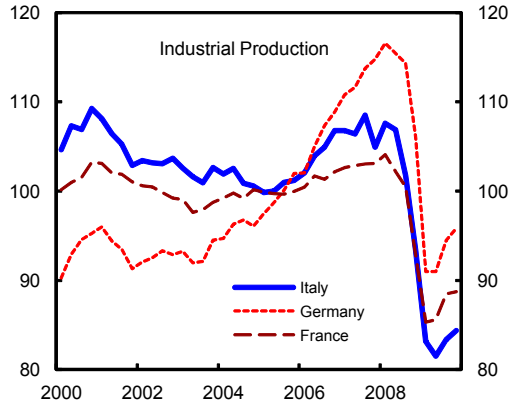
Figure 2. Economic Recovery is Underway

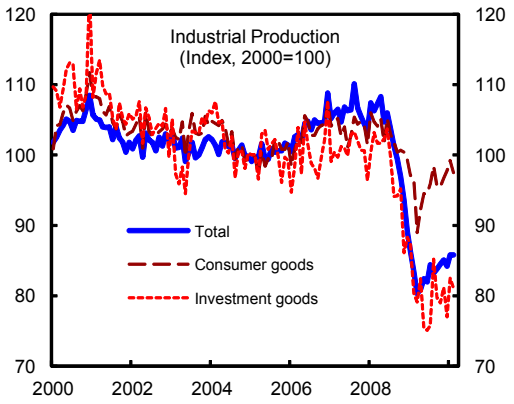
Indicators point to a modest recovery in consumption ...



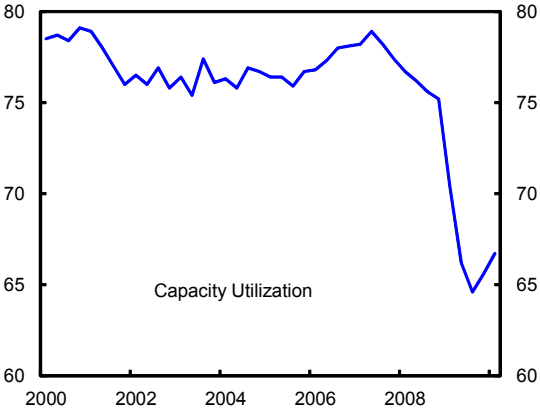


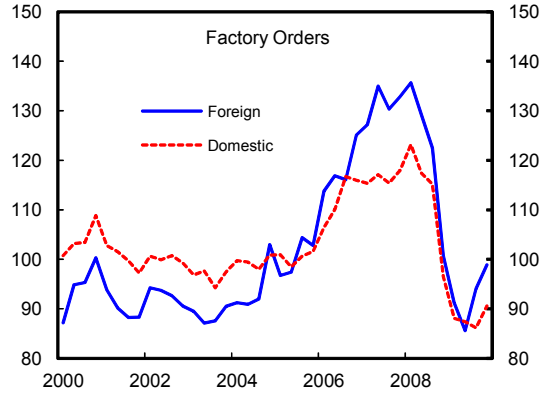
…industrial output...





…and investment.



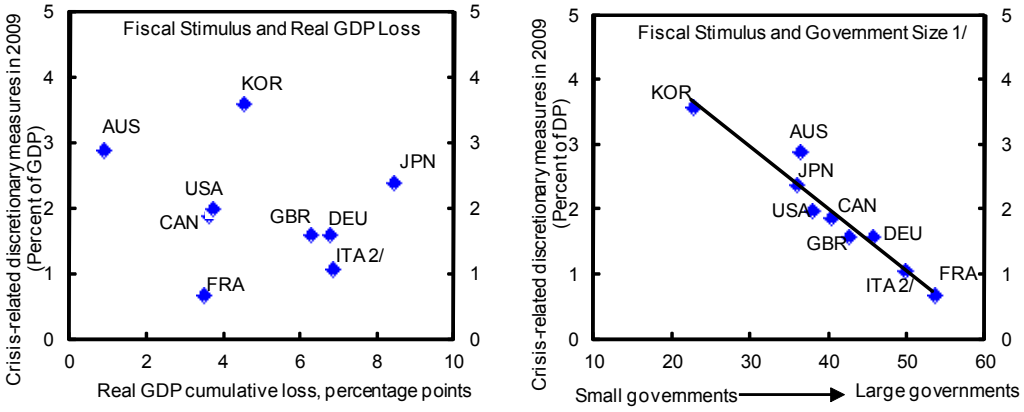


Sources: Istituto Nazionale di Statistica; and ISAE.

Fiscal policy

14. **The high level of public debt constrained the government's ability to implement discretionary countercyclical fiscal policy.** Italy's stimulus package included facilitating access to credit for small and medium-sized enterprises (SMEs), a car scrapping program, a one-off family bonus, and wage supplementation schemes. Overall, this was one of the smallest stimulus packages among advanced G–20 countries, reflecting the limited fiscal space available, the existence of large automatic stabilizers, and concerns that the market might have reacted adversely to an expansionary fiscal stance.

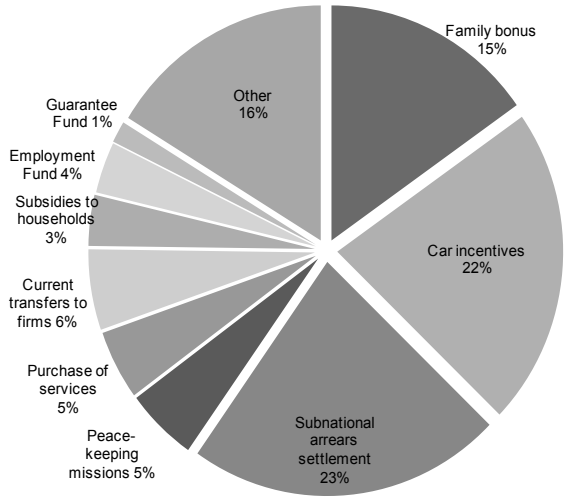
Italy's real GDP loss has been one of the highest in the advanced G-20 countries, but the already large size of the government appeared to be a dominant factor for the size of the fiscal stimulus.



Sources: WEO database; and IMF staff estimates.
1/ General government expenditure, percent of GDP (average over 2005-09).
2/ For Italy, estimated gross fiscal impact of revenue reducing and expenditure increasing measures is used, adjusted for the end-2009 postponement of the part of income tax payment and actual utilization of the one-off family bonus and the car scrapping scheme in 2009.

15. **Although the fiscal stimulus was small, the fiscal position deteriorated sharply in 2009.** Public debt increased by about 10 percentage points of GDP in 2009, reaching 115.8 percent of GDP. The overall deficit is estimated to have reached 5.3 percent of GDP, an increase of over 2½ percentage points from 2008. This fiscal deterioration was largely in line with that in the euro area (Figure 3). Total revenue remained robust, unlike in other countries, largely because of one-off capital tax receipts (about ¾ percent of GDP, including those resulting from a tax amnesty), which offset a slump especially in indirect and corporate income taxes. However, primary expenditure rose sharply because of increased social transfers and outlays on goods and services (including defense spending).

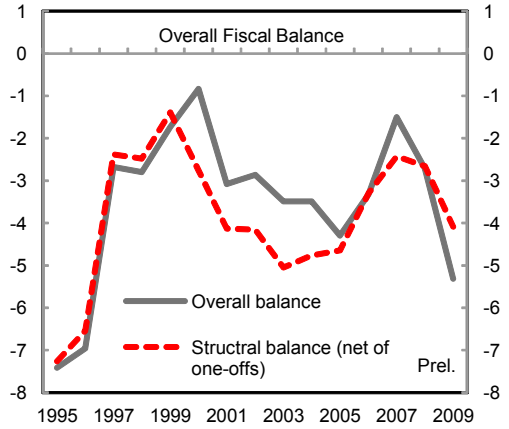
Composition of expenditure inceasing measures in 2009
(Total increase = 0.66 percent of GDP)

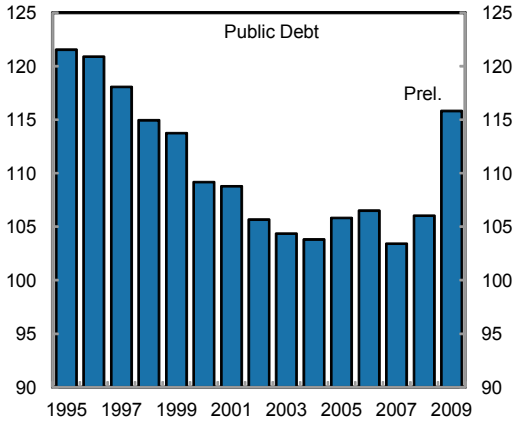


Source: Ministry of Economy and Finance.

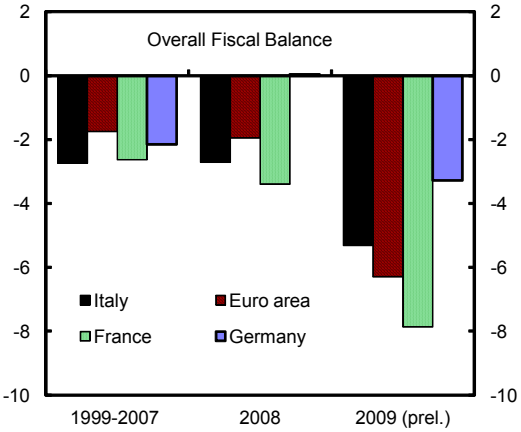
Figure 3. Italy: Fiscal Overview, 1995–2009
(Percent of GDP, unless otherwise indicated)

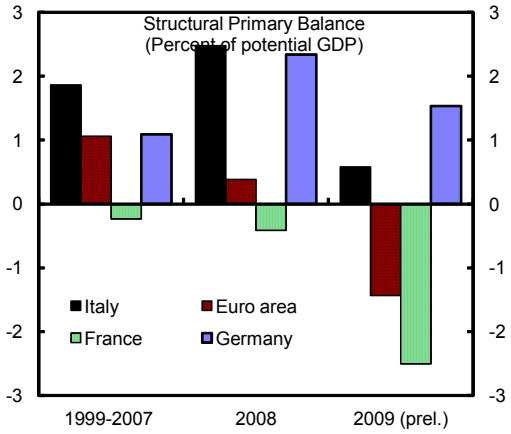
Fiscal position deteriorated sharply in 2009, contributing to a significant increase in public debt.



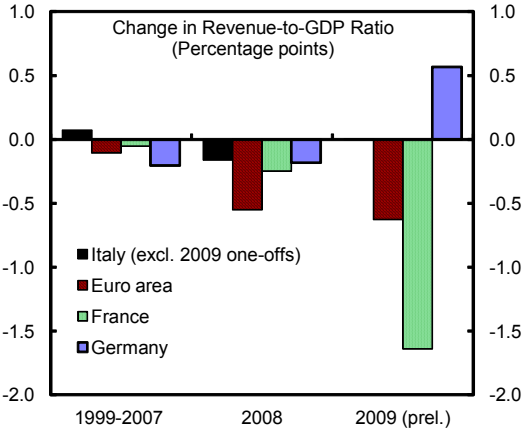


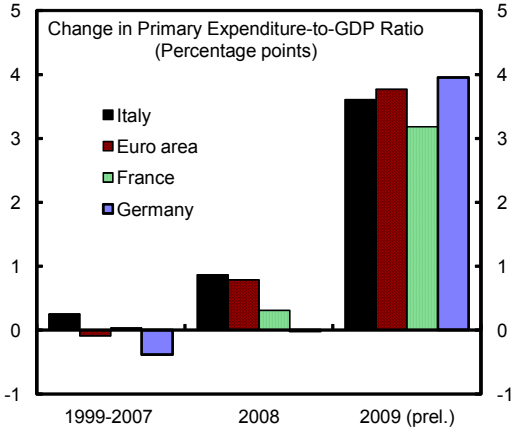
Compared to other euro area countries, the fiscal outcome was relatively better...





...particularly on the revenue side, but spending pressures persisted.





Sources: ISTAT; WEO; and IMF staff estimates.

Political context

16. **The center-right government that came to power in May 2008 is likely to see out its full term ending in 2013.** The government retains a handsome majority, and its popularity was confirmed by the outcomes of recent local elections**.**

II. OUTLOOK: A MODEST AND FRAGILE RECOVERY

Baseline

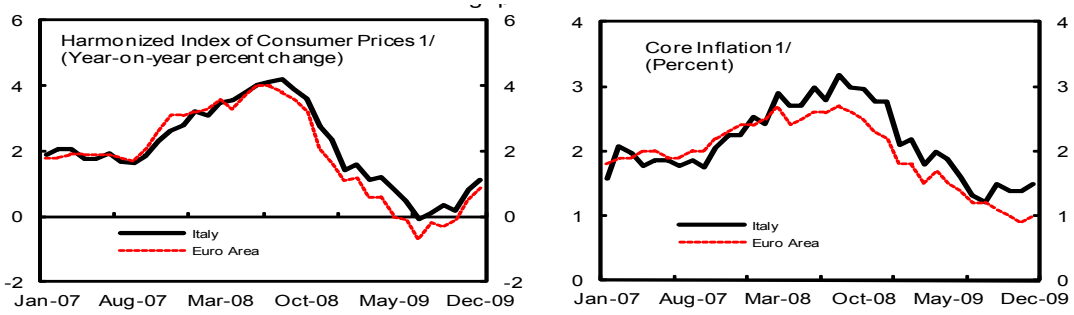
17. **The recovery is expected to be modest**. Staff projects Italy's output to grow by 0.8 percent in 2010 and 1.2 percent in 2011, in line with most other forecasters. The rebound would be driven by the global rebound, resumption of investment, and the restocking cycle, more than offsetting the gradual withdrawal of government support. However, the recovery is likely to be moderate because: (1) the slow rebound of Italy's major trading partners and persistent competitiveness gap will limit the scope for export growth; (2) the sustained rise in non-performing loans, enhanced lending discrimination due to the continued decline in the perceived creditworthiness of borrowers, and the need to rebuild capital in response to forthcoming new regulation are likely to constrain credit supply; (3) rising and persistent unemployment will undermine private consumption; and (4) firms will likely remain cautious on investment due to financing constraints, low capacity utilization, and falling profitability. More generally, the recovery will likely be hampered by many structural factors, including pervasive rigidities in product and labor markets, stagnant productivity, as well as the burden of the public sector.

Italy: Comparative Growth Forecasts

	Forecast Date	2010	2011	2012
IMF/WEO	Jan-10	0.8	1.2	1.5
Ministry of Finance	Jan-10	1.1	2.0	2.0
OECD	Nov-09	1.1	1.5	
European Commission	Oct-09	0.7	1.4	
Consensus	Mar-10	0.8	1.2	

Sources: MEF, OECD, EC, Consensus, and IMF staff estimates

18. **Inflation is expected to gradually increase in line with the recovery and rising energy prices.** Inflation rose sharply from 0.1 percent year-on-year in August 2009 to



Sources: Istituto Nazionale di Statistica; and Eurostat.
1/ Latest observation is December 2009.

1.1 percent in December. Core inflation reached 1.5 percent year-on-year in December 2009, and the differential with the euro area widened further, largely due to service prices, likely reflecting weak domestic competition. Inflation is projected to rise to 1.4 percent in 2010 and 1.7 percent in 2011 owing to strengthening demand, and rising energy prices.

19. **The competitiveness gap remains significant**. Staff estimates of the equilibrium real exchange rate based on the CGER methodology indicate that there could be a competitiveness gap (real exchange rate overvaluation) of the order of 7–8 percent by 2015. Italy's competiveness has been eroding not just because of low productivity growth, but also because of higher than average inflation compared to the euro area (affecting trade within the euro area) and the strength of the euro (affecting trade with the rest of the world). The former (in particular) will be difficult to reverse, and may weigh on activity for some time, reinforcing the importance of advancing structural measures.

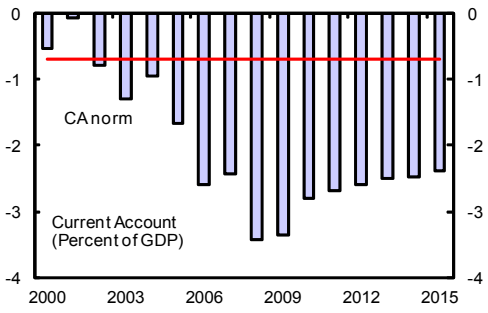
Estimates Applying the CGER Methodology to Italy 1/

	Exchange rate (percent)			Current account (percent of GDP)	
	MB 2/	ERER 3/	ES 4/	2009	2015
Italy	8.1	7.3	6.9	-3.4	-2.4

1/ Positive numbers indicate that REER is above equilibrium.
2/ Macroeconomic balance.
3/ Reduced-form equilibrium real exchange rate.
4/ External stability.

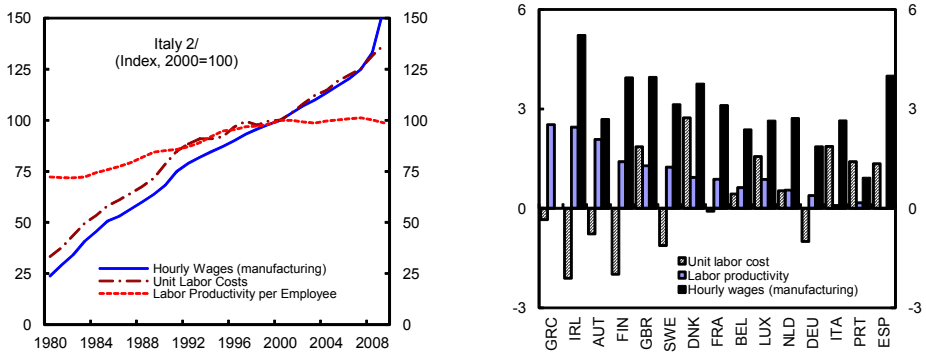
20. **The current account deficit is projected to gradually improve**. The current account has been deteriorating since 2005. It did not improve in 2009, despite a sharp decline of imports, because Italy's export market share continued to shrink. Export growth is expected to pick up in line with the global economy and import growth will likely remain constrained by weak domestic demand. Despite the improvement, overvaluation issues are likely to remain and the current account deficit is expected to remain above the CGER current account norms in the medium-term.

The current account deficit has increased relative to the norm, but is expected to gradually decline over the medium run.



Source: WEO.

Earnings, Productivity and Competitiveness 1/



Sources: Istituto Nazionale di Statistica; European Central Bank;
1/ Cross-country data are average annual growth rates during 1998-2008 for Austria, Greece, Ireland, and Luxemburg. All remaining data are average growth rates during 1998-2009.
2/ Latest observation is as of 2009q4.

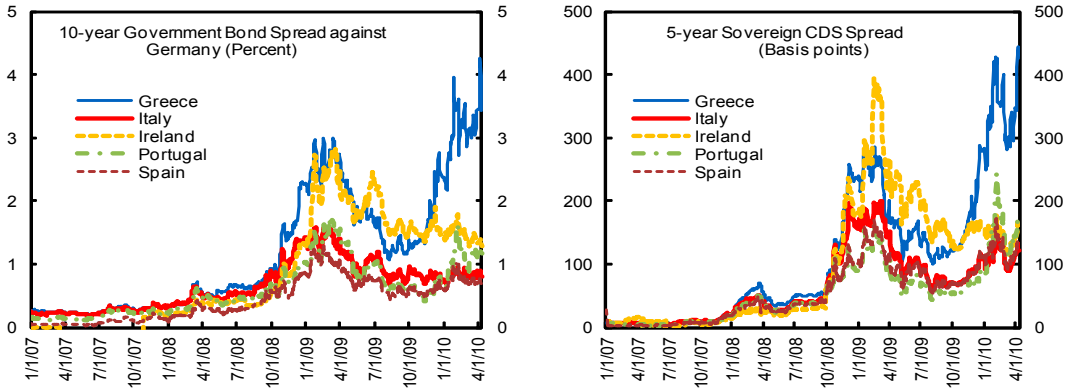
21. **A significant and permanent output loss will probably be the legacy of the global financial crisis**. After an initial rebound, growth is expected to slow over the medium term, converging to potential. The level of output in 2015 is projected to be around 10 percent lower than the pre-crisis historical trend (for 1990–2004), mainly reflecting (1) the sharp fall in capital accumulation experienced during this recession, (2) higher structural unemployment, (3) the deterioration in total factor productivity associated with the credit slowdown and lack of incentives for industrial restructuring, and (4) weaker growth in partner countries.

22. **The authorities believed that staff projections for potential output were too pessimistic.** They argued that Italy's recession reflected only a severe external demand shock. However, unlike some other countries, Italy did not suffer from asset bubbles, a domestic financial crisis, or the prospect of lost or shrinking sectors. This could lead to a quick rebound once external conditions improve. Staff stressed that, even though the crisis may have had an external origin, it has likely lowered the potential growth of some of Italy's trading partners and could therefore have a permanent effect on foreign demand for Italian goods and services. Staff also noted that prolonged demand shocks (of whatever source) could have permanent adverse effects on idle labor and capital through hysteresis effects. The authorities and staff concurred that considerable uncertainty surrounded post-crisis medium term dynamics.

Risks and spillovers

23. **Risks are, on balance, tilted toward the downside in the near term and become more negative in the long term.** In the near term, there is an upside scenario where the global recovery and the inventory cycle could gain more momentum. On the downside, continued tight credit and falling profitability might further limit private investment, while rising unemployment may restrain consumption. There is also the danger of destabilizing spillovers from regional financial market turbulence. In the longer term, there is a risk of prolonged economic stagnation, resulting from the failure to address structural issues, leading to rising structural unemployment and a deteriorating fiscal situation.

24. **Spillovers from market turbulence in Greece, Spain or Portugal are not unlikely but have been limited so far.** Italian sovereign bond spreads over bunds have declined from their peak in early 2009 and have so far been only marginally affected by recent regional turbulence. Italy's high debt-to-GDP ratio, the large gross financing (mostly debt rollover) requirement (about 25 percent of GDP annually), and dismal growth performance could make Italy susceptible to reversals in market sentiment. On the other hand, markets should take comfort from Italy's strong corporate and household balance sheets, the absence of a housing bubble, the strength of its banking sector, its small competitiveness gap, its relatively favorable net foreign asset position and its traditionally high private savings. However, market sentiment could turn sharply negative if the government does not specify sufficiently promptly detailed plans to reduce the fiscal deficit according to its medium-term plan.



Sources: Thomson Financial/DataStream; and Bloomberg.

III. The Policy Agenda: Renewing the Reform Momentum to Foster Sustained Growth

25. **The downside risks could be mitigated if Italy were to embark on a program of comprehensive reforms in order to raise its longer-term growth potential.** Although significant reforms have been undertaken in recent years, much more is needed—especially after the recent global crisis—to significantly improve longer-term economic performance. This calls for tackling with greater vigor the long-standing problems of poor productivity and fiscal weakness. Such a strategy would also help financial markets differentiate between Italy and other highly indebted advanced countries. International experience shows that the implementation of such reforms require determined political leadership over many years and can take considerable time to bear fruit.

26. **Other countries have overcome similar challenges from very difficult starting positions with comprehensive policy packages.** Canada, Australia, United Kingdom, New Zealand, Ireland, and the Netherlands all undertook path-breaking fiscal and structural reforms in the 1980s and 1990s in the wake of severe recessions. Indeed, Italy itself significantly cut its debt, liberalized its labor market and reformed its pension system during this same period. Empirical evidence suggests that recoveries from economic crises can often serve as an opportunity for reform. Broad-based support can be harnessed through such institutions as the independent commissions to set the agenda (France's Attali Commission and Australia's Productivity Commission) or monitor public finances (Sweden's Fiscal Policy Council), and pacts with social partners (the Netherlands' Wassenaar agreements).

A. Fiscal Sector: Deep Expenditure-Based Consolidation Required

Short- and medium-term outlook

27. **The 2010 budget targets a deficit of 5.0 percent of GDP, representing a small reduction with respect to the outturn for 2009.** This targeted improvement in the deficit reflects the phasing out of some 2009 one-off outlays, and implementation of the expenditure rationalization measures. The budget also includes a few stimulus measures equivalent to 0.4 percent of GDP, to be covered mainly by some revenue collection postponed from 2009.

Italy: Finance Law 2010—Summary of Main Budget Interventions
(Percent of GDP)

	2010	2011	2012
Revenue increasing measures, o/w:	0.29	0.03	0.02
Postponed 2009 income tax installment	0.24		
Revenue reducing measures, o/w:	0.10	0.03	0.03
Aid to auto carriers	0.02		
Extension of tax relief for productivity performance-related pay	0.05	0.02	
Extension of income tax/VAT allowances for building restructuring			0.02
Net revenue measures	0.20	0.00	-0.01
Expenditure increasing measures	0.29	0.07	0.16
Current expenditure, o/w:	0.26	0.06	0.07
Fund for non-self sufficiency and Fund for social policies	0.04		
Increase in National Health Service financing	0.04	0.03	
Extension of *5 per mille* (charitable donation from income tax)	0.03		
Active labor market policies	0.02		
Fund for financing new spending laws	0.05	0.00	0.04
Capital expenditure, o/w:	0.03	0.02	0.09
Tax credit for research	0.01	0.01	
Fund for financing new spending laws			0.03
Infrastructure initiatives (incl. construction in health sector)	0.00	0.00	0.02
Expenditure reducing measures	0.10	0.07	0.17
Current expenditure, o/w:	0.07	0.05	0.17
Trento and Bolzano	0.03	0.03	0.03
Fund for structural economic policy initiatives	0.01		0.12
Capital expenditure, o/w:	0.04	0.02	0.00
Disposal of real estate	0.02	0.02	
FAS (Local development fund)	0.01	0.00	0.00
Net expenditure measures	0.19	0.00	-0.01
Net fiscal impact (manovra netta)	0.00	0.00	0.00
Gross impact (revenue reducing + expenditure increasing)	0.39	0.10	0.18

Sources: Stability Programme Update, January 2010; and Ministry of Economy and Finance.

28. **The government plans to reduce the deficit to below 3 percent of GDP by 2012.** The plan, which is outlined in the January 2010 Stability Program Update, envisions a reduction of the deficit below 3 percent of GDP one year earlier than for most of other Excessive Deficit Procedure (EDP)-subject countries (due to its high debt and relatively modest deficit). This will require a fiscal consolidation of over 1 percent of GDP in 2011–12 compared to that based on existing legislation. The authorities have not yet specified the measures through which fiscal consolidation will be achieved.

Italy: Comparison of Medium-Term Fiscal Projections, 2008–2012 1/
(Percent of GDP)

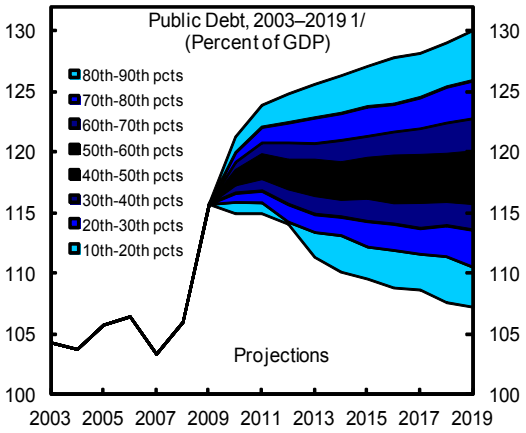
	2008	2009 Prel.	2010 Proj.	2011 Proj.	2012 Proj.
Overall fiscal balance					
Staff	-2.7	-5.3	-5.2	-4.9	-4.9
Authorities					
Unchanged legislation	-2.7	-5.3	-5.0	-4.3	-3.9
Policy scenario	-2.7	-5.3	-5.0	-3.9	-2.7
Primary balance					
Staff	2.5	-0.6	-0.6	0.0	0.4
Authorities					
Unchanged legislation	2.4	-0.5	-0.1	0.9	1.5
Policy scenario	2.4	-0.5	-0.1	1.3	2.7
Overall structural fiscal balance (excluding one-offs) 2/					
Staff	-2.7	-4.1	-3.6	-3.5	-3.9
Authorities					
Unchanged legislation	-3.3	-3.6	-3.1	...	...
Policy scenario	-3.3	-3.6	-3.1	-2.5	-2.0
Public debt					
Staff	106.0	115.8	118.6	120.5	121.6
Authorities					
Unchanged legislation	105.8	115.1	116.9	...	...
Policy scenario	105.8	115.1	116.9	116.5	114.6

Sources: Ministry of Economy and Finance; and IMF staff estimates.
1/ Based on Jan 2010 Stabilility Programme Update, including the impact of the 2010 Finance Law.
2/ One-off measures in 2009, estimated at 0.6 percent of GDP, include mainly receipts of tax amnesty and substitute taxes net of some spending on anti-crisis measures, support to the earthquake zone, and securitization operation. One-offs amount to 0.2 and 0.1percent of GDP in 2008 and 2010, respectively.

29. **The government's fiscal adjustment strategy raises some concerns:**

- **Realism of consolidation plans.** Reducing the deficit to about 2¾ percent of GDP by 2012 would require cuts in primary current spending of 2 percent every year over the period in real terms, even assuming GDP growth of 2 percent in 2011–12. This compares with increases in such spending averaging 2 percent a year over the last decade. Moreover, the plan relies on very optimistic assumptions on spending efficiency, combating tax evasion, unspecified saving in local governments deriving from fiscal federalism, and one-off measures.

- **The planned consolidation is not ambitious enough.** Meeting the minimum requirement under the Stability and Growth Pact (an annual structural adjustment, net of one-offs, of ½ percent of GDP) in 2010–12, would still not deliver the medium-term objective (MTO) of structural balance by the end of the period. Moreover, debt service costs rise continuously, and the debt ratio would likely remain well above 100 percent of GDP a decade from now, with potentially further negative implications on growth.



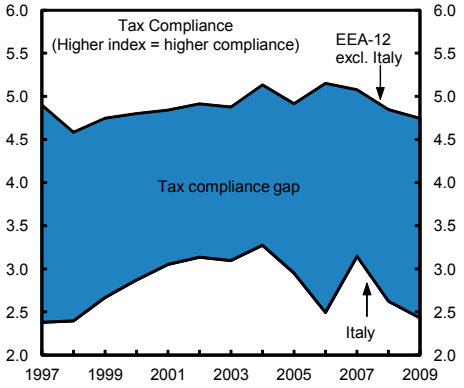
Source: IMF staff calculations.
1/ Assumes primary balance path in 2010–12 in line with the authorities' policy scenario (Stability Programme Update, Jan 2010; and Nota di Aggiornamento 2010–12); primary balance is assumed to stay constant after 2013.

- **Withdrawal of stimulus.** The plan assumes that the existing anti-crisis measures will largely expire by 2012. However, as unemployment rate is still rising and will persist a while, there may continue to be a need for income and employment support.

- **Weaknesses in the budget process.** Plans to have a more streamlined and targeted budget have proven difficult to implement, with amendments and new extensions of existing provisions having quickly followed the just-approved budget.

- **Tax amnesty.** The recent tax amnesty, despite its announced success in terms of volumes of repatriated capital, could decrease already low tax compliance while the impact of accompanying measures to deter future tax evasion is yet to be seen. Unlike recent initiatives in other countries that focused on disclosure, Italy's amnesty provides full anonymity to the taxpayer, immunity against further administrative or criminal investigations, and allows the regularization of funds held abroad in connection with tax evasion in return for paying a relatively low final tax.

The tax compliance gap with euro area average has been widening in recent years.



Source: World Competitiveness Online.

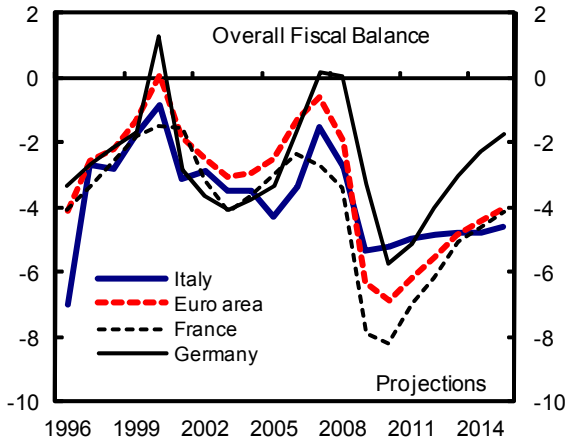
30. **The staff's medium-term scenario is less optimistic than the authorities' (Figure 4).** The overall deficit in 2010 is projected to remain at about the same level as in 2009, and only slowly declines in following years. Less sanguine assumptions about expenditure savings (especially on current spending), together with different macroeconomic assumptions after 2010, explain most of the difference. While the structural primary balance would stabilize at about 1¼ percent of GDP over the medium term, rising interest and pension cost will make structural consolidation difficult, and the debt ratio could increase to about 125 percent of GDP by the end of the projection period.

31. **Local governments have some exposure to derivative products.** The use of derivates by local authorities has been banned on a temporary basis since 2008 while new and more stringent legislation is being prepared, and recently a special parliamentary commission found the problem to be limited in scale. Even though a comprehensive assessment of all fiscal risks arising from exposure to derivatives at the local level is not available, Bank of Italy's data suggest that potential losses from such instruments contracted with Italian banks could be of the order of €1–2 billion (0.1 percent of GDP) in total, and thereby manageable from a macroeconomic perspective.

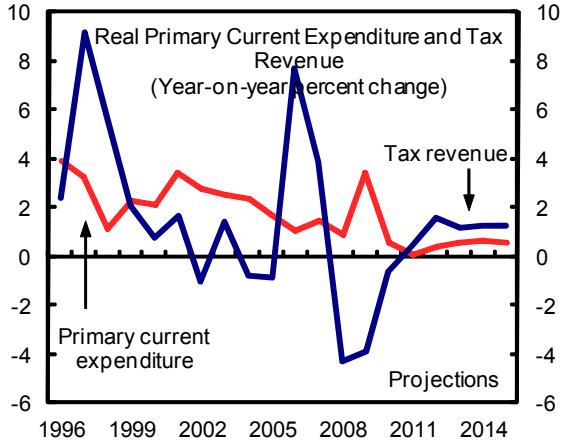
32. **The authorities reiterated the commitment to reducing the deficit to below 3 percent of GDP by 2012 and to further consolidation in the longer term.** They agreed that assumptions on growth may be optimistic but pointed out that corrective measures could be taken if necessary.

Figure 4. Italy: Fiscal Projections, 1996–2015
(Percent of GDP, unless otherwise indicated)

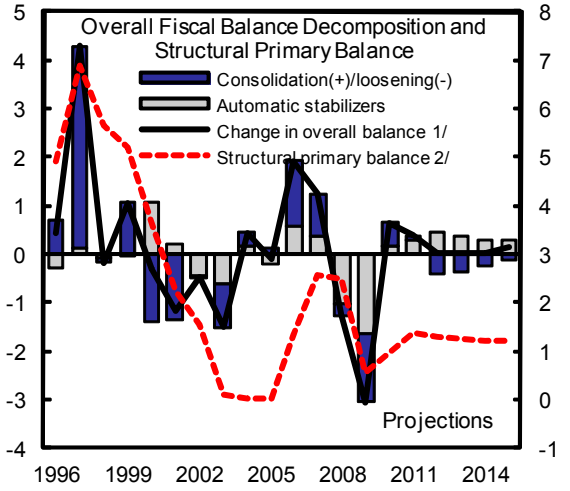
Over the medium-term, deficit is projected to improve only marginally in Italy.



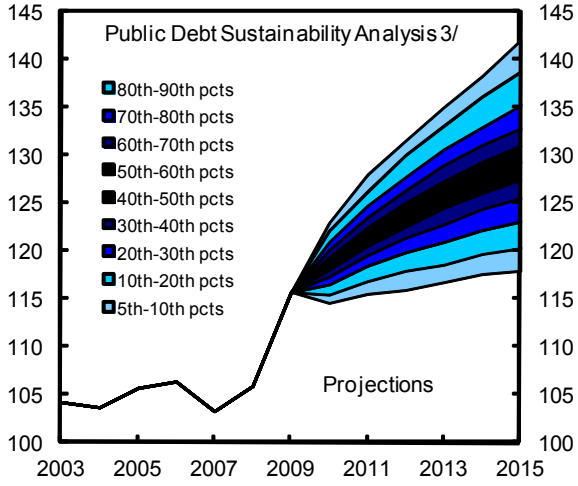
Even with optimistic assumptions about expenditure growth, combined with modest revenue expectations...



...sustained fiscal consolidation appears beyond reach,



...raising debt sustainability concerns.



Sources: ISTAT; MEF; and IMF staff estimates.
1/ Excluding one-off measures.
2/ Excluding one-off measures (percent of potential GDP, right scale).
3/ Based on staff projections for the primary fiscal balance. For discussion of methodology, see IMF SPN/09/18.

Longer-term outlook

33. **Official longer-term fiscal projections seem relatively favorable compared to those of euro area peers.** Although Italy had the highest pre-crisis debt ratio in the euro area, it is projected to have the lowest debt ratio in the euro area in 2060 (206 percent of GDP versus an average of 422 percent of GDP), according to the 2009 Sustainability Report of the European Commission. Similarly, various long-term fiscal sustainability analyses place Italy among the countries with the lowest sustainability gap. This positive outlook is largely due to the projected stabilization of pension spending despite the rapidly aging population, as a result of a series of past pension reforms with future implications. Pension spending, however, will still remain among the highest in the world.

Ageing Related Government Expenditure, 2007–2060
(Percentage points of GDP)

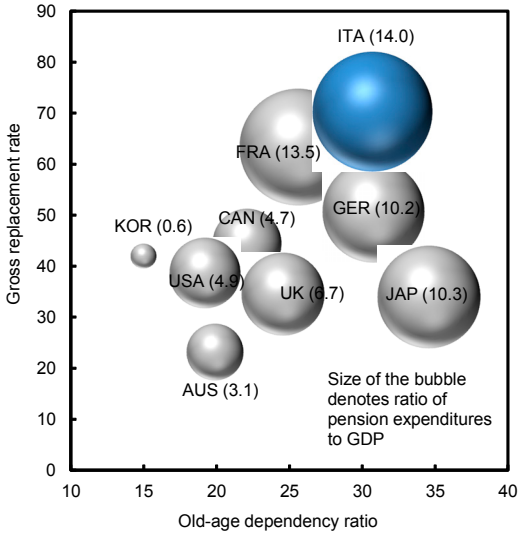
	Pensions		Health care		Long-term care		Unemployment benefits		Education		Total	
	Level	Change 2007	Level	Change 2007	Level	Change 2007	Level	Change 2007	Level	Change 2007	Level	Change 2007
	2007	2060	2007	2060	2007	2060	2007	2060	2007	2060	2007	2060
Germany	10.4	2.3	7.4	1.8	0.9	1.4	0.9	-0.3	3.9	-0.4	23.6	4.8
Spain	8.4	6.7	5.5	1.6	0.5	0.9	1.3	-0.4	3.5	0.1	19.3	9.0
France	13.0	1.0	8.1	1.2	1.4	0.8	1.2	-0.3	4.7	0.0	28.4	2.7
Italy	**14.0**	**-0.4**	**5.9**	**1.1**	**1.7**	**1.3**	**0.4**	**0.0**	**4.1**	**-0.3**	**26.0**	**1.6**
Portugal	11.4	2.1	7.2	1.9	0.1	0.1	1.2	-0.4	4.6	-0.3	24.5	3.4
EU27	10.2	2.4	6.7	1.5	1.2	1.1	0.8	-0.2	4.3	-0.2	23.1	4.7
EA12	11.1	2.8	6.7	1.4	1.3	1.4	1.0	-0.2	4.2	-0.2	24.4	5.2

Source: European Commission.

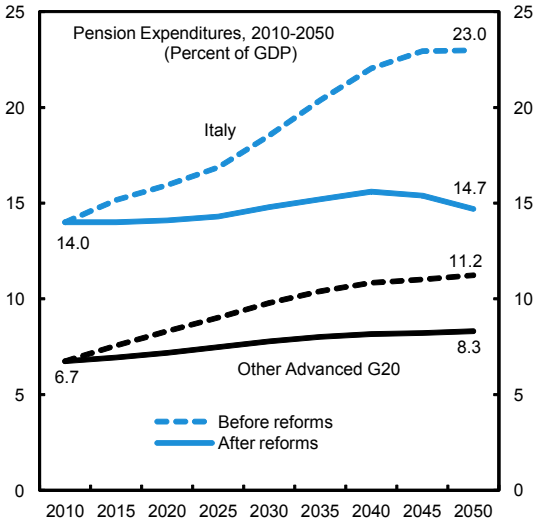
34. **These results, however, hinge on a number of optimistic assumptions.** The projections assume a long-term average labor productivity growth of over 1.6 percent, well above the stagnant growth rate experienced in the past decade. They are also based on the key assumption that the pension reform would be fully implemented, including periodic revisions of the conversion coefficients and the maintenance of the contributory principle. Moreover, the remaining reform is heavily back-loaded, with about two thirds of the adjustments in benefits expected to take place after 2020 compared to only about half of the adjustment after 2020 for reforms in other advanced economies. The sharp fall in the replacement ratio, from 67 percent in 2007 to 49 percent in 2060, could be politically challenging. Further risks would likely arise from the growing use of flexible labor market arrangements which reduce the pension revenues and result in lower pension benefits.

Figure 5. Italy: Pension System, Reforms, and Risks

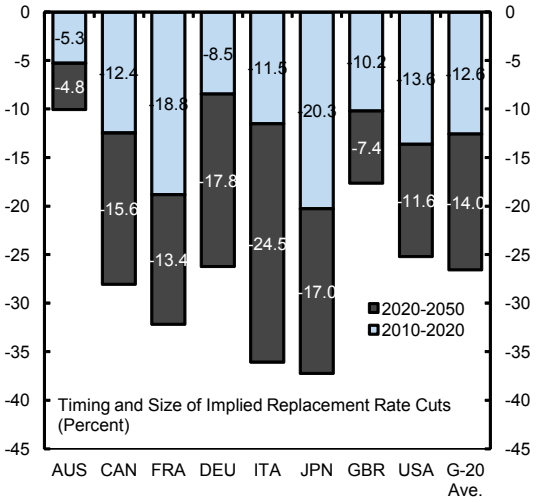
Italy's high pension outlays reflect unfavorable demographics and the relatively generous system.



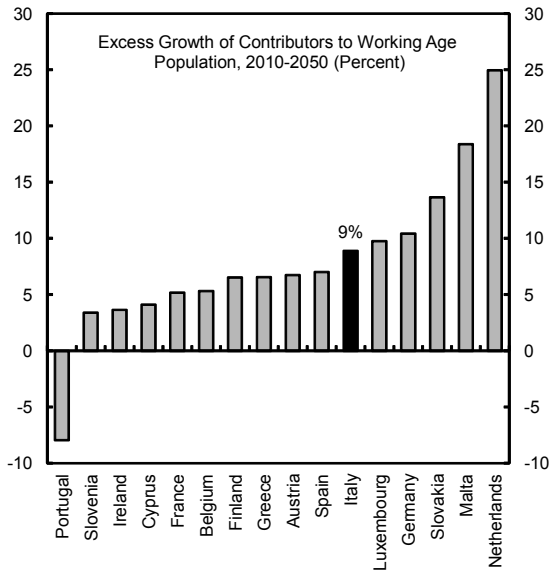
In the absence of reform, spending pressure in Italy would be much higher than in other advanced G-20 countries.



However, risks stem from passing most of benefit cuts to future generations...



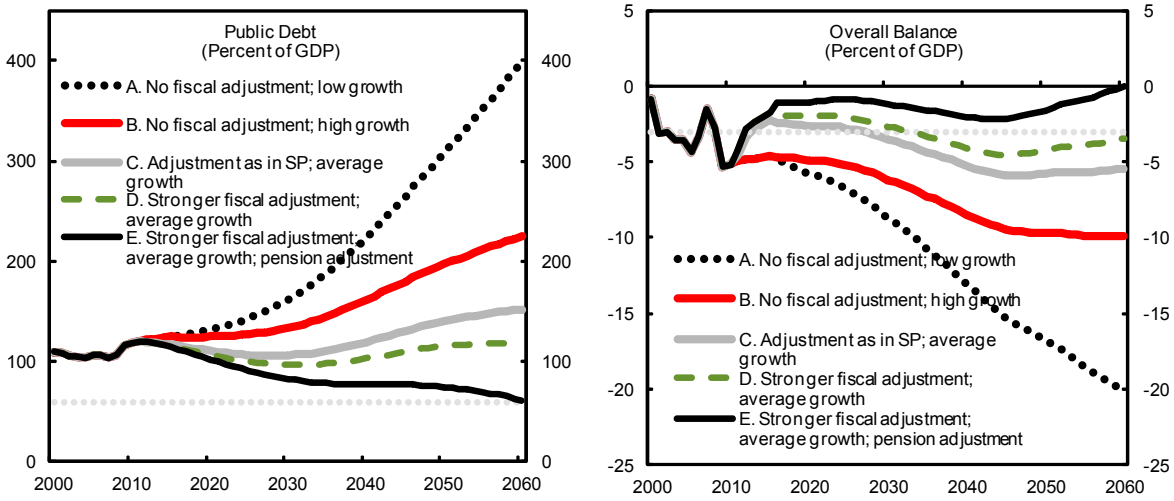
...while some key assumptions, like the number of contributors, might not materialize.



Sources: Country authorities; European Commission; OECD; and IMF staff estimates.

35. **Stronger medium-term fiscal consolidation and increased growth will be necessary to ensure fiscal sustainability.** Without a fiscal effort additional to what is envisaged, the debt ratio would become unsustainable in a low growth scenario (with real GDP growth of about 0.8 percent over the long term). In a scenario with somewhat higher growth (1.1 percent), an adjustment effort generating a structural improvement equivalent to about 2¼ percent of GDP over 2010–12 (against the authorities' envisaged 1¾ percent of GDP, of which about 1¼ percent of GDP is yet to be identified) would be necessary to broadly stabilize the debt ratio over the long run. Additional savings from age-related expenditure (equivalent to cutting nominal pensions by 5 percent over the long term) would still be needed to bring debt ratio to 60 percent.

Italy: Long-Term Fiscal Sustainability, 2000–2060—Illustrative Scenarios



Sources: Ministry of Economy and Finance; Stability Programme Update, January 2010 (SP); and IMF staff estimates.

Assumptions underlying the illustrative scenarios (growth rates are average rates for 2015–2060):
A. Lower growth; no fiscal adjustment: Labor productivity growth 1.00%; employment growth -0.18%; fiscal projections as in staff baseline for 2010–2015.
B. High growth; no fiscal adjustment: Labor productivity growth 1.62% and employment growth -0.13% (macroeconomic assumptions used in the Ministry of Economy and Finance projections); fiscal projections as in staff baseline for 2010–2015.
C. Adjustment as in SP; average growth: Fiscal adjustment as in the Stability Programme Update (1¾ percent of GDP in 2010–2012); labor productivity growth 1.20%; and employment growth -0.13%.
D. Stronger fiscal adjustment; average growth: Fiscal adjustment of 2¼ percent of GDP in 2010–2012); labor productivity growth 1.20%; and employment growth -0.13%.
E. Stronger fiscal adjustment; average growth: Scenario D and nominal pension reduction of 5 percent.

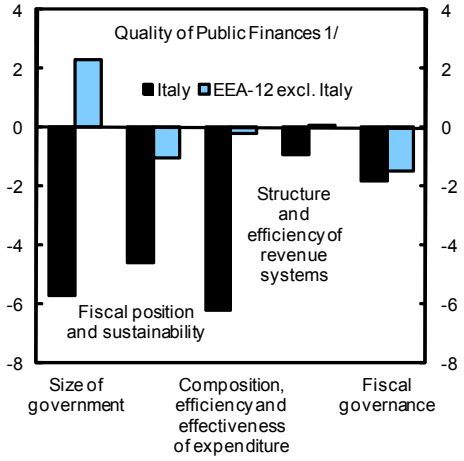
36. **The pension system should be adjusted to build buffers and to distribute the fiscal burden of reform more equally across generations.** Pension reform should proceed as planned, but additional reforms should be considered to ensure long-term sustainability, including revisiting the current high replacement rates and increasing the age of retirement age. In this context, the enactment of the recently legislated indexation of the retirement age to changes in life expectancy, though starting from 2015, could be brought forward, possibly saving as much as 0.3–0.7 percent of GDP a year over the medium term. A more front-loaded adjustment effort would also help balance the intergenerational distribution of the fiscal burden arising from past pension reforms.

37. **The authorities considered the pension system sustainable but were open to the idea of bringing forward the already scheduled increase in the retirement age.**

38. **Fiscal consolidation should be based on rationalizing current spending.** The authorities' plans concerning the reduction in personnel costs (mainly via slowing the turnover in public employment), and containing the growth of intermediate consumption of ministries and of healthcare spending (particularly, on pharmaceuticals) should be fully implemented. Consolidation should also include strict adherence to budget targets, including minimizing new spending initiatives outside the budget process, a commitment to save any revenue overperformance, and implementing the recommendations of the recently completed expenditure reviews. On the revenue side, the already high labor income tax-wedge would limit feasibility for tax rate increases, but there remains scope for broadening the tax base. One-off revenue measures should generally be avoided.

39. **Fiscal framework reforms underway should benefit fiscal consolidation (Box 1).** The current debate in key areas of fiscal decentralization and reform of the budget framework provides an important opportunity to help make public expenditure more efficient and strengthen fiscal discipline. Improving the quality and sustainability of public finances should entail: setting binding multiyear aggregate expenditure ceilings and sanctioning a strict top-down budgeting procedure; more formal scrutiny of macroeconomic forecasts by an independent institution; maintaining commitment appropriations at least for capital expenditure; a decisive switch to a baseline design based on current policies (instead of current legislation); and making a statement of fiscal risks and long-term fiscal projections part of budget.

Quality of public finances remains poor.



Source: ECFIN.
1/ Scores range from -30 to +30 with an EU-15 average of 0: (-30 ,-10) = very poor; (-10,-4) = poor; (-4,+4) = average, (+4,+10) = good ; (+10 ,+30) = very good.

40. **The authorities saw fiscal federalism as the key priority to achieve fiscal consolidation, improve the quality of public spending, and revive the South.** Imposing tougher budget constraints and moving away from the culture of soft, centrally-financed budgets is seen as *sine qua non* for the establishment of fiscal discipline at local level while fostering development in southern regions. The authorities were aware that fiscal federalism in other countries had often been associated with an increase in fiscal expenditures overall, but expressed their determination to ensure a fiscally-prudent fiscal federalism in Italy.

Box 1. Recent Fiscal Framework Reforms

Budget reform. The 2009 Accounting and Public Finance law (*Legge di contabilità e finanza pubblica*) marks a first step in bringing Italy's public financial management in line with best international practices. Its focus on harmonizing accounting systems, strengthening expenditure control and monitoring, and enhancing performance orientation of the budget is welcome. But the reform falls short on resolving some key issues such the establishment of a strict top-down budgeting process, the adoption of binding medium-term expenditure ceilings, the use of a credible current-policy baseline, the introduction of long-term scenarios, the (further) enhancement of transparency, and the strengthening of independent scrutiny of forecasts and policies. The law also envisages a move, over three years, toward a cash concept in budgeting (though informed by accrual-based accounting) but its pilot-based implementation implies uncertainties as to the outcome of this proposal.

Fiscal federalism. In May 2009, the Parliament adopted a Delegation Law outlining the main principles of fiscal federalism. The law stipulates that fiscal federalism must be consistent with Italy's commitments under the Stability and Growth Pact and gives the government the authority to issue main implementation decrees by May 2011. In addition, it states the general principle that standard costs, fiscal discipline, and accounting uniformity will be important features. The key principles of harmonization of public sector budgets are expected to be defined by mid-May 2010 but the work of the technical commission is still lagging, and only a decree on transferring public property to local authorities (*federalismo demaniale*) has been introduced. The bulk of reform implementation measures, including determination of standard costs, subnational revenue assignments, and the size and sharing of the equalization fund will be adopted by May 2011.

B. Financial Sector: Mitigating Vulnerabilities

41. **Going forward, Italian banks will benefit from improved macroeconomic conditions, but vulnerabilities will remain.** In line with the projected output recovery, revenues are expected to increase moderately, due to a low rate of lending growth, a limited rise in interest rates, and some positive contribution from commission income. A more favorable environment for corporates and households is expected to slow the pace of deterioration in credit quality. However, given the still fragile economy, and the lag between economic recovery and improvement in asset quality, banks will continue to face a high level of credit risk for the next two years. For the two largest banks, further deterioration of credit risk in central and Eastern Europe could add to earnings pressure.

Box 2. Scenario Analysis of the Banking Sector

According to a scenario analysis run by staff, the five largest banks would not be able to generate sufficient profits to significantly strengthen capital ratios. The Base Scenario takes into consideration a macroeconomic outlook in line with IMF estimates of a 2010 GDP growth of 0.8 percent, and 1.2 percent in 2011. As a result, loans are expected to grow by 1–3 percent in 2010–11, revenues by 1–3 percent, loan loss provisions to further increase by 6-9 percent in 2010, before falling by 3–0 percent in 2011. Under such assumptions, cumulated loan loss provisions in the 2010–2011 periods would be one third higher than in the 2008–2009 periods. Earnings would slightly improve in 2010 and in 2011, but would continue to remain significantly lower than before the crisis. Assuming a dividend distribution of the order of 10-30 percent of earnings, aggregated Core Tier1 ratio would rise in the 2010–11 period by less than 0.5 percentage points by 2011. The capital shortfall with respect to an 8 percentage Core Tier1 level would on average progressively close by 2011, although with significant bank by bank convergence differences.

In a more severe scenario with a more sluggish economic recovery and a weaker corporate landscape, earnings would shrink further and capital ratios would deteriorate. The Severe Scenario takes into consideration a harsh macroeconomic outlook, with GDP declining by -1.7 percent in 2010 and by -1.3 percent in 2011 (or a cumulative 2.5 percentage points lower than in the Base Scenario). Under this scenario, loans would remain flat, revenue growth would be negative, and loan loss provisions could increase by some 18-22 percent, in both 2010 and 2011. The cumulated loan losses would be 65 percent higher than in 2008-09. Such scenario would generate a significant erosion of profitability. On an aggregated level, the Core Tier1 ratio would deteriorate to below the 7 percent mark, for several banks.

42. **Efforts to strengthen banks' recapitalization should thus continue.** Banks, which will already have a hard time raising capital under existing guidelines (see Box 2), will also need to comply with a new regulatory framework that will call for more and higher quality capital. The impact of the new capital rules on Italian banks should be manageable, given the stringent requirements already applied by the Bank of Italy with regard to capital deductions and to hybrid capital limits. However, given the still moderate outlook for profitability, it will be difficult to significantly reinforce capital through earnings retention, even assuming low dividend distributions. Banks should thus be encouraged, on a case by case basis, to continue to dispose of non strategic assets and raise capital from the market, as market conditions improve. In particular, banks that took advantage of "*Tremonti bonds*" will need to prepare an alternative recapitalization strategy as the interest rate on these securities rises sharply in three years.

43. **The authorities should guide the domestic banking system towards the prompt adoption of the latest recommendations of the Basel Committee on Banking Supervision.** Although implementation of the proposals will take time, Italian banks should begin to adapt their capital strategies around the new regulatory framework, and the authorities should quickly adopt the new international rules, as soon as possible after they are defined.

44. **Consideration should be given to loosening the current tax rules on the deductibility of loan write-downs.** These rules are stricter than those in force in other major European countries, and while the existing fiscal treatment of loan losses has the advantage of creating substantial deferred tax assets that currently can be included in banks' regulatory capital, this will not be allowed under forthcoming new regulations. Such action would also help support earnings, recapitalization, and lending in the face of increasing non performing loans.

45. **Government sponsored loan guarantees to support SMEs were appropriate in the circumstances, but an exit strategy should be planned.** Measures to support credit to the SMEs are justified in view of the sharp recession and credit drought, especially given the very large size of the SMEs sector in Italy. However, recourse to government guarantees should be temporary and appropriately priced. Nor should government support to firms prevent needed restructuring. Some improvements to the existing bankruptcy regime could be useful to help rehabilitate distressed, but creditworthy, firms and the speedy liquidation of non viable enterprises. For example, consideration could be given to the enhancement of the mechanism to support prompt provision of new financing to enterprises during the restructuring period in line with international best practices. The current eligibility criteria for bankruptcy trustees could also to be reexamined to better promote the appointment of trustees with firm management and restructuring skills.

46. **The authorities concurred with the staff on the need for further capital strengthening of banks.** They saw this as necessary, in view of the forthcoming changes in international regulation and increasing loan loss provisions. The authorities also expressed concerns that banks could be too conservative in their lending practice, which could hinder the credit rebound and the recovery.

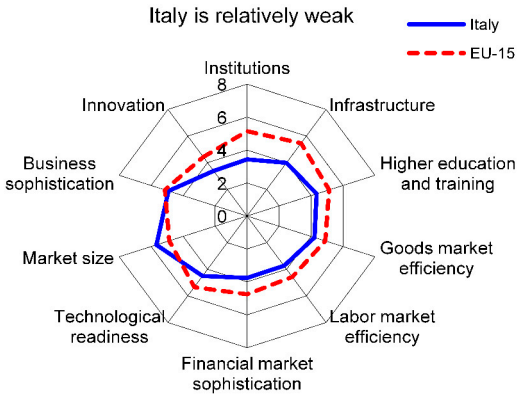
C. Renewing the Structural Reform Momentum

47. **Persistent low productivity growth in Italy has deep structural causes.** The main structural factors are: (1) policy and regulatory rigidities limiting competition and hindering the business environment; (2) low efficiency, linked to the preponderance of small and medium-sized enterprises typically unable to exploit fully economies of scale; (3) limited process and product innovation**,** hindered by labor market rigidities; (4) outdated specialization patterns, given a production structure (especially in manufacturing) based on traditional low skill products; and (5) relatively poor human capital.

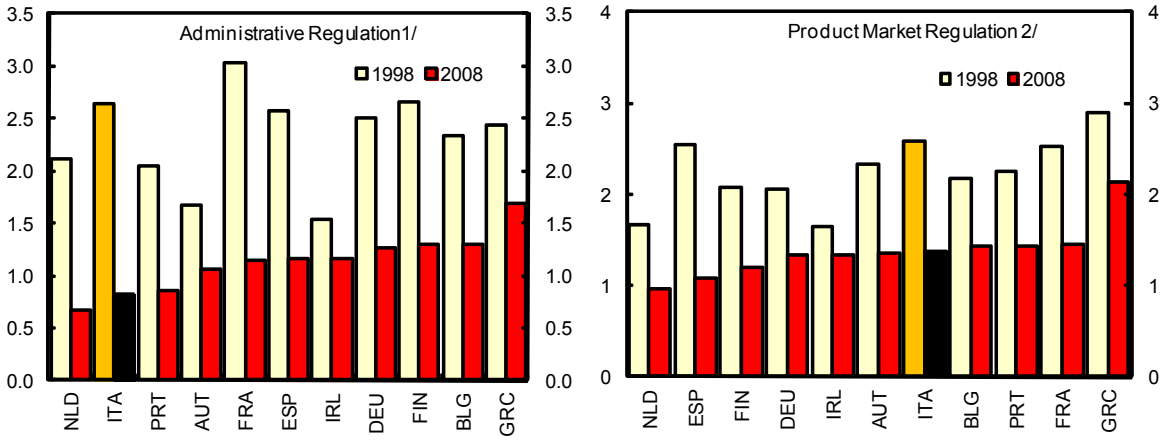
48. **Although some structural reforms have been undertaken in recent years, further progress is needed.** The government has, inter alia: (1) passed the local public services bill; (2) began abolishing obsolete legislation; (3) strengthened the transparency and accountability of public administration management; (4) implemented a law instituting competition assessments and regulatory impact analysis; and (5) incorporated the Antitrust Authority's recommendations in a competition bill to be discussed by Parliament annually. Given the electoral cycle and the urgent need to reinvigorate growth, the next three years represent a unique opportunity to push forward the reform agenda.

49. **Further reforms are necessary to remove impediments to competition and reduce the high cost of doing business in Italy.** The second package of the 2007 structural reform reduced regulatory barriers in retail trade, retail banking, insurance and professional services. Further measures are needed to reduce state ownership in business activities in key network sectors, including electricity, gas, postal services, and transport, limit local government involvement in enterprises providing local services, eliminate entry barriers to professional services, continue deregulation the energy market, strengthen the enforcement of the rule of law, and enhance the role of competition bodies in formulating policy.

50. **The EU Services Directive should be implemented without further delay.** In adherence with the EU Service Directive, the government is currently in the process of reviewing all existing regulations on service activities at the central, regional, and local level to ensure consistency of existing regulation on service activities at all government levels with the EU legislation. While the review at the central government level has been completed and is in the final stage of the preparation of amendments, regions are lagging.



Source: World Economic Forum.



Sources: OECD Product Market Regulation Database; European Commission; and European Central Bank.
1/ Administrative regulation covers the low-level indicators within the sub-domains "Regulatory and administrative opacity" as well as "Administrative burdens on startups" in the domain "Barriers to entrepreneurship".
2/ Index 0–6 from least to most restrictive.

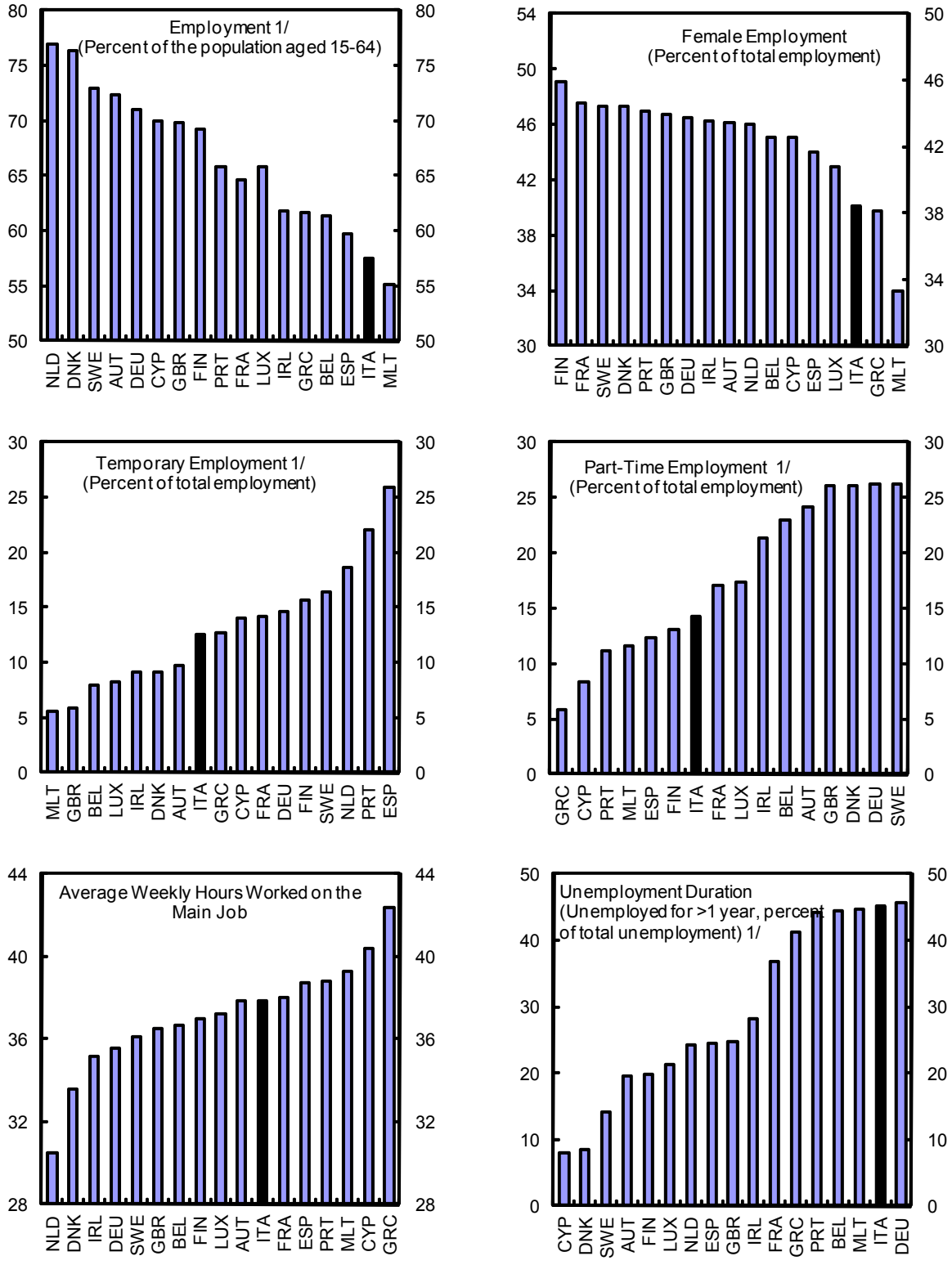
51. **Despite substantial improvements over the past decade, labor market performance still lags behind that in other European economies.** Significant labor market reforms over the past decade have improved employment, labor force participation, and unemployment rates, but Italy's (measured) employment-to-population ratio continues to remain among the lowest in the euro area. In addition, unemployed workers still take a long time to find work—nearly 50 percent of the unemployed have been out of work for more

than one year, substantially above the euro area average. While the deregulation of fixed-and part-term contracts in recent years has improved labor market flexibility, it has also resulted in more "atypical" employment, contributed to stagnant labor productivity, and exposed workers to increased employment risk without commensurate improvements in the social safety net.

52. **A second generation of labor market reforms is needed.** Italy's social safety net is generous for some worker groups, but virtually nonexistent for (most) others; the extent of employment protection varies substantially across worker groups; and the aggregate wage distribution is highly compressed. The existing wage bargaining system exacerbates these disparities: nationally bargained wages are less binding in the North, but too high for South, and the lack of a broad social safety net, particularly for those in the South**,** prevents sufficient spatial mobility. The public sector should take the lead in decentralizing wage bargaining arrangements, taking into account regional differences in productivity and cost of living. In this respect, a program to enhance transparency and productivity-related rewards in the public administration has been introduced, although significant effects on wage negotiations to be seen.

53. **The authorities pointed out that many reforms especially in the labor market had already taken place, though with unequal effects across the country.** At the same time, the authorities saw the next three year—during which no elections are scheduled—as a golden opportunity to proceed with growth-enhancing reforms. The authorities indicated that government would announce decisive reforms in the next few months, especially in the area of fiscal federalism and tax policy.

Figure 6. Italy's Labor Market Outcomes in Cross-Country Comparison, 2009



Source: Eurostat.
1/ All data are as of 2009q3.

IV. Staff Appraisal

54. **Although the worst effects of the global financial crisis on Italy's economy have mostly passed, key vulnerabilities remain.** The high private savings rate, low private indebtedness, and the resilience of the financial sector are important elements of strength. However, the elevated level of public debt and the disappointing growth performance could make Italy vulnerable to future external shocks. The ongoing regional market turbulence could also be destabilizing. Public debt management has been conducted prudently, by lengthening the debt maturity and building buffers. These efforts should help strengthen the government's financial position. But they cannot be a substitute for a sustained fiscal consolidation.

55. **The overarching goals should be to maintain fiscal discipline, reduce the burden of public debt, and raise the economy's long-term growth rate.** Although the fiscal stance was appropriate during the crisis given the very high level of public debt to GDP ratio, efforts must now swiftly be made to reduce the fiscal deficit in a sustainable way. Public debt needs to be put back on a declining path. Policies to reinvigorate growth should focus on removing structural bottlenecks, improving the quality of public services, and strengthening the financial sector.

56. **Staff endorses the authorities' fiscal targets of reducing the deficit to below 3 percent by 2012.** However, it cautions that the planned fiscal adjustment is based on the optimistic assumption of a strong and sustained recovery, full implementation of the earlier envisaged consolidation plans, and additional measures that have yet to be announced. Close monitoring of sub-national public finances should be maintained. Consideration should be given to advancing the pace of fiscal consolidation if market turbulence continues.

57. **Staff concurs with the authorities' objective of an expenditure-based fiscal consolidation**. Containment of the public sector wage bill should be a key element of the consolidation strategy. The progressive reduction of public employment should continue, and a firm control of public wages is needed, especially at the local government level. The 2009 Accounting and Public Finance law marks a step in bringing Italy's public financial management in line with best international practices, and could help in the consolidation effort, but effective implementation is crucial.

58. **The tax burden is high and weighs disproportionally on salaried and retired workers.** When the expenditure-based consolidation is firmly underway, the authorities should consider a tax reform with the view to reducing the tax wedge while increasing tax compliance. This reform should decrease the cost of labor and increase the employment rate, which continues to be one of the lowest in Europe. Ad-hoc revenue measures which could be detrimental to tax compliance in the long term should be avoided.

59. **Fiscal consolidation must be a key guiding principle in the implementation of the federalism.** The authorities see fiscal federalism as an opportunity to strengthen fiscal responsibility at all levels of government. However, international experience shows that

implementation of fiscal federalism is often associated with fiscal expansion. The government should consider offsetting measures if the reform is to result in higher costs. In addition, the authorities will need to strike the right balance between regional autonomy and transfers across regions in the context of large local income disparities.

60. **Italy has implemented bold pension reforms, which have significantly improved the sustainability of the pension system.** However, the remaining adjustment in benefits is back-loaded and long-term sustainability projections are based on optimistic assumptions about economic growth. These factors raise questions about intergenerational equity. Therefore, the authorities should consider bringing forward the already scheduled increase in the retirement age. Efforts to develop private pension schemes should also be intensified.

61. **Italian banks should increase their capitalization, as recommended by the Bank of Italy.** Banks will face a number of challenges over the medium term. Owing to the weak economy, they will continue to encounter a high level of credit risk, low lending growth, and significantly lower profitability than before the crisis. Furthermore, the international regulatory rules will be tightened in several respects, including capital requirements. Banks should be encouraged to dispose of non-strategic assets, retain earnings, and raise capital from the market. Consideration could also be given to relaxing the current tax rules on the deductibility of loan write-downs, which are stricter than in other major European countries, also in light of the possible new capital regulation on deferred tax credits.

62. **The next few years offer an important opportunity to pursue an ambitious program of structural reforms.** The global crisis has further exposed the structural weaknesses of the economy, underscoring the urgency of structural reform. Progress in the structural reform agenda will be the key to unleash Italy's growth potential. This will require multi-faceted reforms to enhance competition, raise productivity, and reduce the high cost of doing business in Italy. Such reforms could include enhancing the efficiency of public services, improving the quality of public investment and infrastructure, streamlining bureaucratic requirements, reforming civil justice and accelerating legal processes, and strengthening enforcement of the rule of law. The EU Services Directive should be implemented without further delay to ensure the consistency of existing regulations on service activities at all government levels with the Directive.

63. **Labor market performance still lags behind that in other European economies.** Previous reforms have helped to reduce unemployment. Nevertheless, Italy's employment rate still remains among the lowest in Europe, productivity is lagging, and the labor market is split between highly protected workers with permanent contracts and ill-protected temporary workers. This gap needs to be bridged by making permanent contracts more flexible and temporary workers more protected while simplifying the labor market legislation. A second generation of labor market reforms is also needed to strengthen the link between wages and productivity, allow wages to better respond to regional differences, and foster adequate spatial mobility.

64. **It is proposed that the next Article IV Consultation be held on the regular 12-month cycle.**

Table 1. Summary of Economic Indicators
(Annual percentage change, unless noted otherwise)

	2007	2008	2009 1/	2010 1/	2011 1/	2012 1/	2013 1/	2014 1/	2015 1/
Real GDP	1.5	-1.3	-5.0	0.8	1.2	1.5	1.4	1.3	1.3
Public consumption	0.9	0.8	0.6	0.2	0.0	0.8	0.6	0.6	0.6
Private consumption	1.1	-0.8	-1.8	0.9	1.2	1.7	1.6	1.3	1.1
Gross fixed capital formation	1.7	-4.0	-12.1	1.7	2.4	2.8	2.3	2.0	2.0
Final domestic demand	1.2	-1.2	-3.5	0.9	1.2	1.7	1.5	1.3	1.2
Stock building 2/	0.1	-0.3	-0.3	0.5	0.0	0.0	0.0	0.0	0.0
Net exports 2/	0.2	0.1	-1.3	-0.1	-0.1	-0.2	-0.1	0.0	0.0
Exports of G&S	4.6	-3.9	-19.1	2.8	3.5	3.8	4.1	4.1	4.1
Imports of G&S	3.8	-4.3	-14.5	3.0	3.6	4.2	4.0	3.8	3.6
Money and credit (end of period, percent change)									
Private sector credit 3/	9.8	4.9	1.7	…	…	…	…	…	…
National contribution to euro area M3 4/	7.6	6.9	5.8	…	…	…	…	…	…
Interest rates (in percent, end of period)									
6-month interbank rate	4.9	3.7	1.0	…	…	…	…	…	…
Government bond rate, 10-year	4.7	4.5	4.1	…	…	…	…	…	…
Resource utilization									
Potential GDP	0.8	0.7	-1.9	0.5	0.6	0.6	0.7	0.7	0.7
Output Gap (% of potential)	1.5	-0.5	-3.7	-3.3	-2.8	-1.9	-1.1	-0.6	0.0
Natural rate of unemployment	6.3	6.7	7.5	8.4	8.4	8.2	7.8	7.6	7.4
Employment	1.0	0.8	-1.5	-0.7	0.4	0.7	0.9	0.9	0.8
Unemployment rate (%)	6.2	6.8	7.8	8.7	8.6	8.3	7.9	7.6	7.4
Prices									
GDP deflator	2.6	2.8	2.1	1.4	1.7	1.8	1.8	1.9	2.0
Consumer prices	2.0	3.5	0.8	1.4	1.7	1.8	1.8	1.9	2.0
Hourly compensation	2.9	4.1	2.3	2.0	2.1	2.4	2.5	2.8	2.9
Productivity	0.4	-1.0	-2.4	0.2	0.4	0.5	0.6	0.7	0.8
Unit labor costs	2.5	5.1	4.7	1.8	1.7	1.9	1.9	2.1	2.1
Fiscal indicators									
General government net lending/borrowing 5/	-1.5	-2.7	-5.3	-5.2	-4.9	-4.9	-4.8	-4.7	-4.6
Structural balance net of one-offs (in % of potential GDP)	-2.5	-2.6	-3.9	-3.5	-3.4	-3.8	-4.2	-4.5	-4.6
Public debt 5/	103.4	106.0	115.8	118.6	120.5	121.6	122.8	123.9	124.7
Exchange rate regime				Member of EMU					
Exchange rate (NC/US$)	1.4	1.5	1.4	…	…	…	…	…	…
Nominal effective rate: CPI based (2000=100)	102.0	104.4	104.5	…	…	…	…	…	…
Real effective exchange rate based on									
CPI (2000=100)	113.2	115.0	115.8	…	…	…	…	…	…
normalized ULC (2000=100)	135.7	145.2	156.0	…	…	…	…	…	…
External sector 6/									
Current account balance	-2.4	-3.4	-3.4	-2.8	-2.7	-2.6	-2.5	-2.5	-2.4
Trade balance	0.2	0.0	0.0	0.3	0.4	0.3	0.2	0.2	0.2
Saving investment balance 5/									
Gross national saving	19.4	17.7	15.5	16.1	16.2	16.5	16.8	16.9	17.2
Public	2.3	0.8	-2.1	-1.8	-1.9	-1.8	-2.0	-1.9	-1.8
Private	17.2	16.9	17.6	17.9	18.1	18.3	18.7	18.8	19.0
Gross domestic investment	21.9	21.1	18.9	18.9	18.9	19.1	19.3	19.4	19.6
Gross fixed domestic investment	21.2	20.7	18.9	19.2	19.5	19.9	20.2	20.4	20.6
Public	2.3	2.2	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Private	18.9	18.5	16.5	16.7	17.1	17.5	17.8	18.0	18.2
Net lending	-2.4	-3.4	-3.4	-2.8	-2.7	-2.6	-2.5	-2.5	-2.4

Sources: National Authorities; and IMF staff calculations.

1/ Staff estimates and projections, unless otherwise noted.

2/ Contribution to growth.

3/ Twelve-month credit growth, adjusted for securitizations.

4/ Excludes currency in circulation held by nonbank private sector.

5/ Percent of GDP.

Table 2. Italy: General Government Accounts, 2007–2015
(Percent of GDP, unless otherwise indicated)

	2007	2008	2009	2010		2011			2012			2013	2014	2015
			Prel.	Proj.	SP-T/P	Proj.	SP-T	SP-P	Proj.	SP-T	SP-P	Proj.	Proj.	Proj.
Total Revenues	46.9	46.7	47.2	46.6	46.5	46.3	46.1	...	46.3	46.1	...	46.1	46.1	46.1
Current revenues	46.6	46.5	46.2	46.2	46.1	45.9	45.7	...	45.9	45.7	...	45.7	45.7	45.7
Tax revenues	29.8	29.1	29.1	28.6	28.7	28.4	28.3	...	28.4	28.4	...	28.4	28.4	28.4
Direct taxes	15.1	15.3	14.6	14.9	15.3	14.9	15.1	...	15.1	15.4	...	15.1	15.1	15.1
Indirect taxes	14.7	13.8	13.6	13.6	13.4	13.5	13.2	...	13.3	13.0	...	13.2	13.2	13.2
Social security contributions	13.3	13.8	14.1	14.0	13.8	14.0	13.8	...	13.9	13.7	...	13.8	13.8	13.8
Other current revenues	3.5	3.6	3.8	3.7	3.7	3.6	3.6	...	3.6	3.6	...	3.5	3.5	3.5
Capital revenues	0.3	0.2	1.1	0.4	0.4	0.4	0.4	...	0.4	0.4	...	0.4	0.4	0.4
Total expenditures	48.4	49.4	52.5	51.8	51.4	51.3	50.4	...	51.2	50.0	...	50.9	50.8	50.7
Current expenditures	44.3	45.7	48.2	48.0	47.5	47.8	46.9	...	47.7	46.5	...	47.6	47.6	47.4
Wages and salaries	10.6	10.8	11.3	11.3	11.2	11.0	10.9	...	10.7	10.6	...	10.7	10.6	10.6
Goods and services	7.9	8.2	9.0	8.9	8.5	8.8	8.3	...	8.7	8.2	...	8.4	8.3	8.1
Social transfers	17.1	17.7	19.2	19.2	18.9	19.1	18.8	...	19.1	18.6	...	19.2	19.2	19.2
Other	3.7	3.8	4.1	4.0	4.0	4.0	3.7	...	3.9	3.6	...	3.8	3.7	3.6
Interest payments	5.0	5.2	4.7	4.6	4.9	4.9	5.2	5.2	5.3	5.5	5.4	5.5	5.8	5.9
Capital expenditures	4.0	3.7	4.3	3.8	3.9	3.5	3.5	...	3.5	3.6	...	3.3	3.3	3.3
o/w: Asset sales	-0.1	-0.1	-0.1	-0.1	...	-0.1	...	...	-0.1	...	...	-0.1	-0.1	-0.1
Overall balance	-1.5	-2.7	-5.3	-5.2	-5.0	-4.9	-4.3	-3.9	-4.9	-3.9	-2.7	-4.8	-4.7	-4.6
Memorandum items:														
Primary balance	3.5	2.5	-0.6	-0.6	-0.1	0.0	0.9	1.3	0.4	1.5	2.7	0.7	1.0	1.3
One-off measures (negative=balance-improving)	-0.2	-0.2	-0.6	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1
Cyclically-adjusted overall balance	-2.3	-2.5	-3.4	-3.5	-3.0	-3.5	...	-2.6	-3.9	...	-2.0	-4.2	-4.5	-4.6
Structural overall balance excl. asset sales	-2.4	-2.5	-3.5	-3.6	...	-3.6	...	...	-4.0	...	...	-4.3	-4.5	-4.6
Struct. overall balance excl. asset sales 1/	-2.4	-2.5	-3.4	-3.5	...	-3.5	...	...	-3.9	...	...	-4.2	-4.5	-4.6
Struct. primary balance excl. asset sales 1/	2.7	2.6	1.1	1.0	...	1.2	...	...	1.3	...	...	1.2	1.2	1.2
Structural overall balance excl. one-offs	-2.4	-2.7	-4.1	-3.6	-3.1	-3.5	...	-2.5	-3.9	...	-2.0	-4.3	-4.5	-4.6
Struct. overall balance excl. one-offs 1/	-2.5	-2.6	-3.9	-3.5	...	-3.4	...	...	-3.8	...	...	-4.2	-4.5	-4.6
Struct. primary balance excl. one-offs 1/	2.6	2.5	0.6	1.0	...	1.4	...	...	1.3	...	...	1.2	1.2	1.2
Primary current expenditure real growth rate 2/	1.4	0.9	3.4	0.5	0.3	0.1	-0.6	...	0.4	0.2	...	0.6	0.6	0.6
Nominal GDP growth rate 2/	4.1	1.4	-3.0	2.2	2.6	2.9	3.8	...	3.4	3.9	...	3.3	3.2	3.3
Real GDP growth rate 2/	1.5	-1.3	-5.0	0.8	2.2	1.2	2.9	2.0	1.5	3.4	2.0	1.4	1.3	1.3
Output gap 1/	1.5	-0.5	-3.7	-3.3	-4.0	-2.8	...	-2.7	-1.9	...	-1.5	-1.1	-0.6	0.0
Public debt	103.4	106.0	115.8	118.6	116.9	120.5	116.5	116.5	121.6	114.6	114.6	122.8	123.9	124.7

Sources: ISTAT; Ministry of Economy and Finance; and IMF staff estimates.
1/ Percent of potential GDP.
2/ Percent.
SP-T = Stability Programme Update (unchanged legislation scenario), January 2010
SP-P = Stability Programme Update (policy scenario), January 2010

Table 3. Italy: Financial Soundness Indicators
(Percent, unless otherwise noted)

	2002	2003	2004	2005	2006	2007	2008	2009	Latest available
Core set									
Deposit-taking institutions									
Capital adequacy									
Regulatory capital to risk-weighted assets	11.2	11.4	11.6	10.6	10.7	10.4	10.8	11.3	June
Regulatory tier I capital to risk-weighted assets	8.2	8.5	8.8	8.1	7.8	7.7	7.6	8.2	June
Asset quality									
Nonperforming loans									
Share of total gross loans	6.5	6.7	6.6	5.3	4.9	4.6	4.9	6.6	Sept.
Percentage change	2.4	7.6	4.7	-12.4	1.6	2.3	11.3	35.4	Sept.
Net of provisions, percent of capital	22.4	21.8	20.9	14.2	25.3	23.1	23.8		
Sectoral distribution of loans to total loans									
General government	5.3	4.7	4.5	4.5	4.5	3.9	3.7	3.9	Sept.
Financial corporations	14.6	13.8	12.1	11.7	11.5	11.2	11.2	10.4	Sept.
Nonfinancial corporations and sole proprietorships	59.0	59.6	59.5	58.8	58.5	59.9	60.9	60.5	Sept.
Building and construction	6.2	6.5	6.7	6.9	6.9	7.4	7.6	7.8	Sept.
Consumer households	21.0	21.9	23.9	25.0	25.5	25.0	24.2	25.3	Sept.
Earnings and profitability									
Return on assets	0.5	0.5	0.6	0.7	0.8	0.8	0.3		
Return on equity	7.1	7.4	9.3	9.7	14.3	12.9	4.8		
Interest margin to gross income	56.6	55.4	55.9	54.5	51.9	56.6	66.4		
Non-interest expenses to gross income	59.8	61.0	60.6	59.8	59.4	59.8	66.5		
Liquidity									
Liquid assets to total assets (liquid asset ratio)	7.8	8.6	8.3	7.5	6.5	4.1	4.0	5.1	Sept.
Leverage 1/	20.2	20.8	20.7	19.2	19.7	21.1	23.9	24.4	June
Encouraged set									
Deposit-taking institutions									
Capital to assets	6.7	6.4	6.4	6.9	4.9	6.4	6.6	8.0	Sept.
Average risk weight (ratio of risk-weighted assets to assets)	0.60	0.57	0.55	0.65	0.66	0.66	0.64	0.50	June
Geographical distribution of loans									
North	62.2	62.3	62.2	62.0	61.8	61.9	59.9	61.7	Sept.
Center	24.1	24.0	23.5	23.5	23.4	23.3	23.3	23.2	Sept.
South	13.6	13.7	14.3	14.6	14.7	14.8	14.3	15.1	Sept.

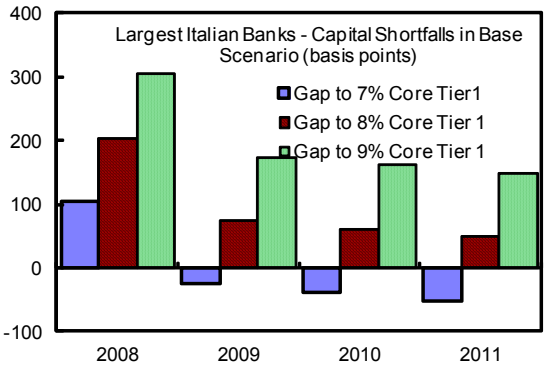
Sources: Bank of Italy; Eurostat; and IMF staff calculations.
1/ Tier 1 capital on asset

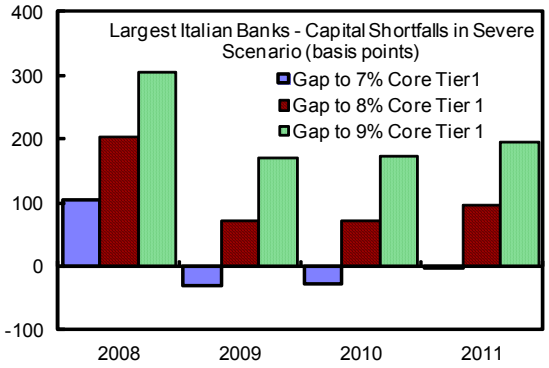
Appendix 1. Italy: Scenario Analysis of the Banking Sector

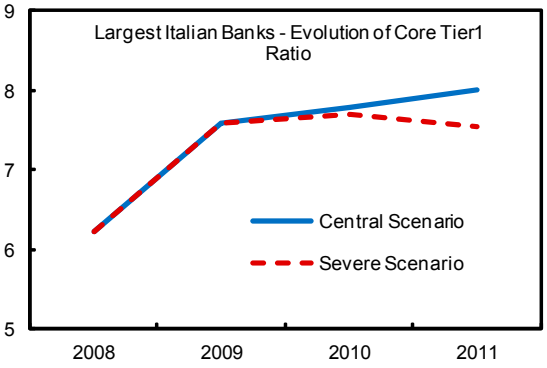
Scenario Analysis: Main Assumptions

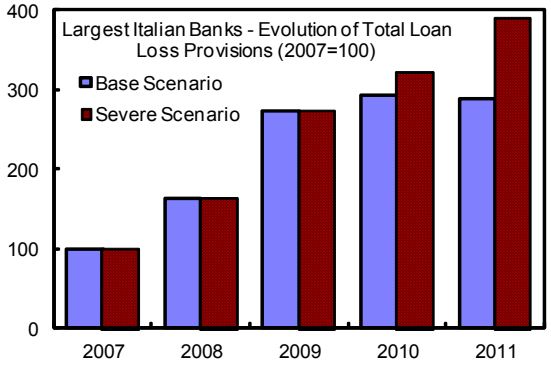
	Base Scenario		Severe Scenario	
	2010	2011	2010	2011
GDP Growth	0.8%	1.2%	-1.7%	-1.3%
Revenue Growth	+1% to +3%	+2% to +5%	-1% to -3%	-1% to +1%
Loan Loss Provision Growth	+6% to +9%	-3% to +0%	+18% to +22%	+15% to +20%
Loans Growth	+1% to +3%	+2% to +4%	-1% to +2%	-1% to +2%

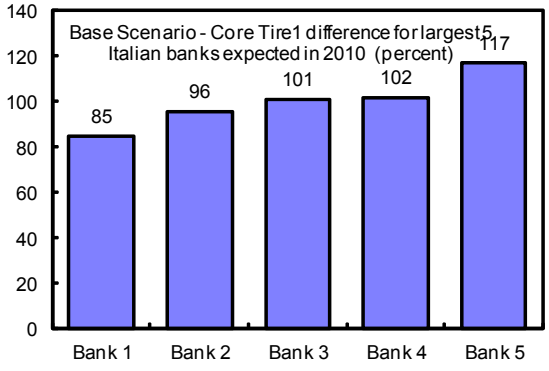
Source: IMF staff calculations.

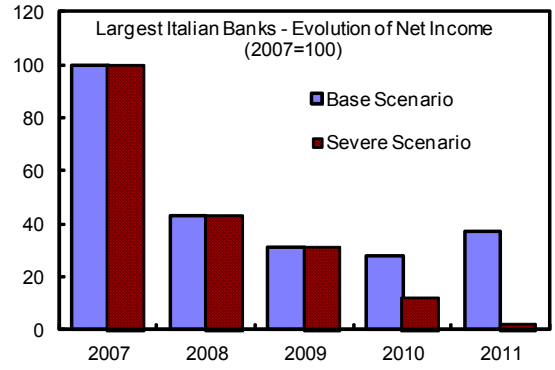








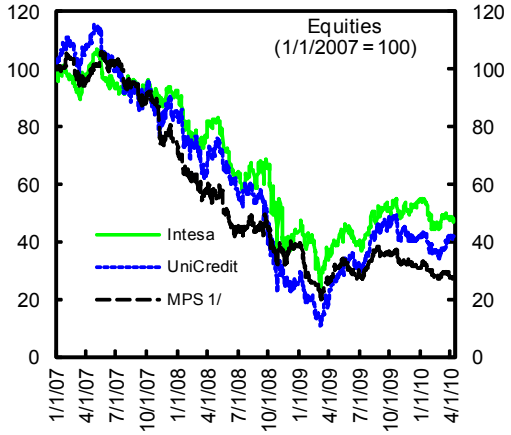




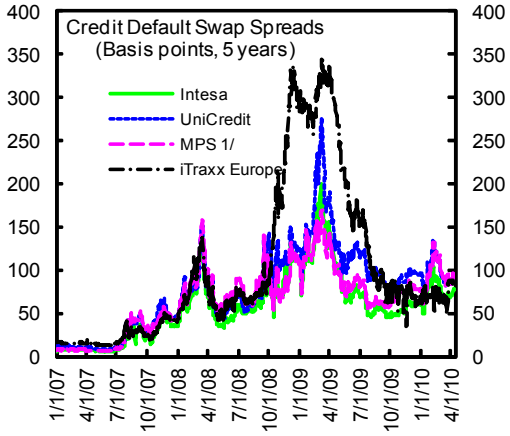
Source: IMF staff calculations.

Appendix 2. Italy: Financial Indicators, 2007–2010

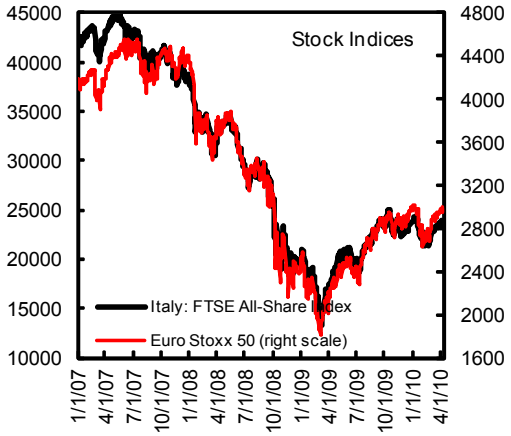
Bank equity prices have somewhat recovered since March 2009...



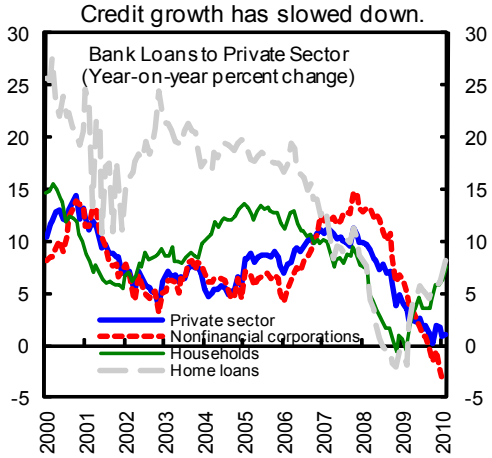
...and bank Credit Default Swap spreads have come down.



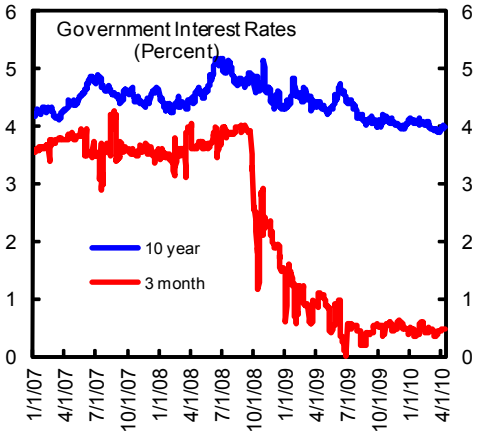
Stock prices have rebounded.



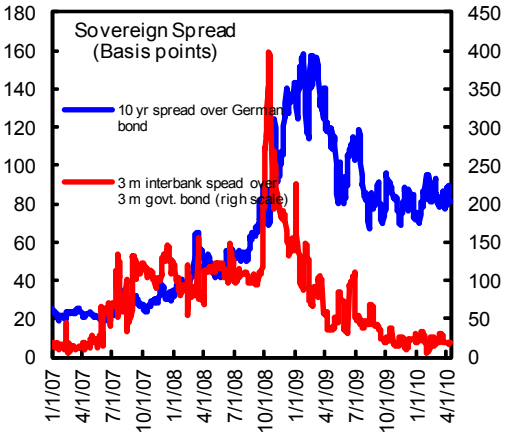
Credit growth has slowed down.



Government borrowing costs are low on the short end, but...



...sovereign spreads on longer maturities are not back to pre-crisis levels, yet.



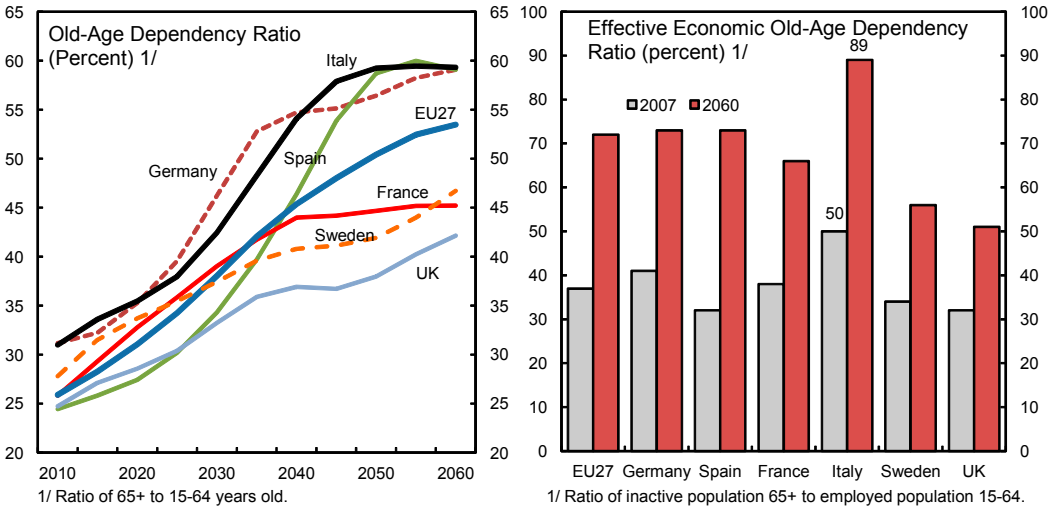
Sources: Thomson Financial/DataStream; and Bloomberg.
1/ MPS stands for Banco Monte dei Paschi di Siena.

ANALYTICAL ANNEX I: ITALY'S FISCAL SUSTAINABILITY REVISITED[1]

Despite unfavorable demographic trends, high public debt, and generous pensions, Italy's longer-term fiscal outlook appears to be benign compared to euro area peers. This outlook, however, is not without challenges and risks. Ensuring fiscal sustainability would require economic growth much stronger than in the past decade, bold fiscal adjustment over the medium term, and full implementation of the planned pension reform as well as further reforms to improve intergenerational equity.

I. INTRODUCTION

Fiscal sustainability will be largely driven by demographic trends. The old-age dependency ratio is projected to double in EU countries in 2010–2060: for every person over 65 there will be only two working-age persons instead of the current four (the balance between inactive elderly and the employed population is even less favorable). Ageing is projected to affect both economic growth and public expenditure. Its impact, combined with post-crisis weak budgetary position, makes the long-term fiscal situation in Europe unsustainable in the absence of reforms (EC, 2009a). With unchanged policies, average EU public debt would be more than 400 percent of GDP in 2060, with about half of the required adjustment to ensure sustainability just offsetting the impact of ageing costs.

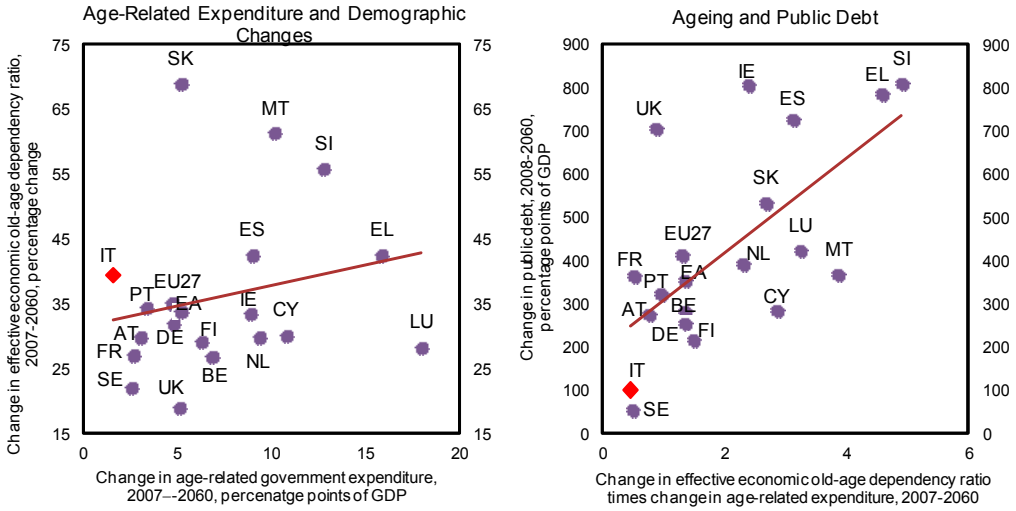


Sources: Eurostat; and 2009 Ageing Report.

In Italy, the increase in age-related expenditures appears to be relatively contained, primarily owing to the expected impact of pension reforms already enacted. Between 2007 and 2060, total age-related government expenditure is projected to increase by about 5 percentage points of GDP for the EU, but only by 1.6 percentage points of GDP for Italy—

[1] Prepared by L. Lusinyan (EUR) and M. Soto (FAD). The authors are grateful to the Ministry of Economy and Finance staff for comments and helpful collaboration. Comments and suggestions received during the 2010 Article IV consultation mission to Italy are also gratefully acknowledged.

the lowest among the advanced EU countries (Appendix Table 1A).[2] At about 170 percent of GDP, the net present value of the projected increase in age-related spending in Italy is the second lowest after Japan, against an average of nearly 270 percent of GDP for advanced G-20 countries.[3]



Sources: 2009 Ageing Report; and 2009 Sustainability Report, European Commission.

Consequently, Italy fares relatively well in terms of the standard indicators of fiscal sustainability. The authorities' January 2010 Stability Programme Update projects a steady decline in the public debt ratio to below 40 percent of GDP by 2060 and an absence of sustainability gaps based on the standard indicators (for details on the latter, see EC, 2006). The 2009 Sustainability Report by the European Commission suggests that sustainability gaps exist in Italy, but these are the smallest in the euro area (EC, 2009a). Even with some upward adjustments to age-related costs, Balassone and others (2010) find that Italy would achieve the lowest debt and deficit ratios in 2060 and with smallest sustainability gaps.

This Annex examines the factors behind the relatively favorable long-term fiscal prospects for Italy. It identifies the factors driving the positive long-term outlook, particularly pension reform. It assesses the challenges and risks surrounding these outcomes, including the risk of reversal of the reforms and the weight of the adjustment put in future generations of workers. Finally, it discusses alternative illustrative scenarios and provides suggestions to ensure fiscal sustainability.

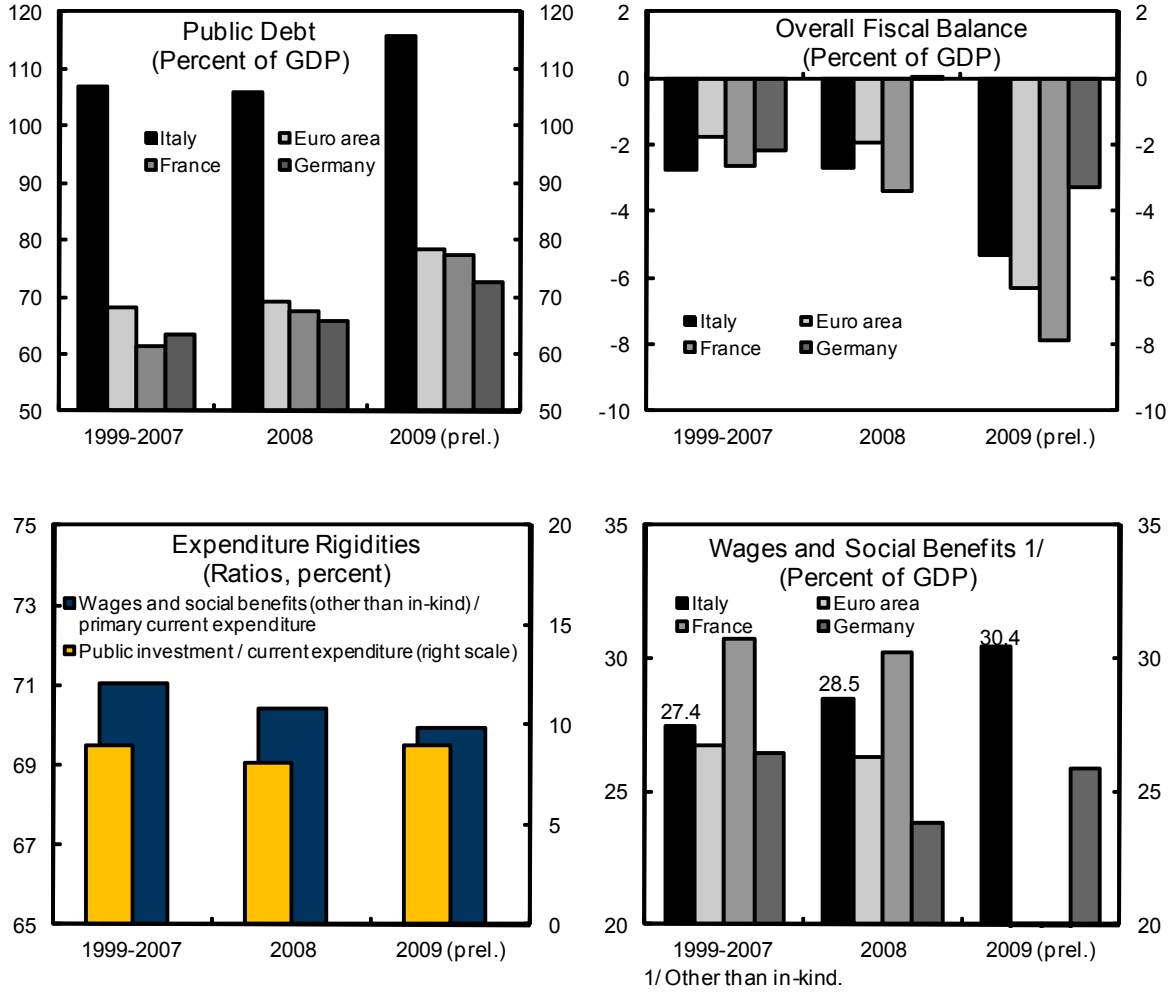
[2] These estimates use the baseline scenario from EC (2009b); but even in the less optimistic scenario, in which health cost increases are more in line with historical trends, Italy would still have one of the lowest age-related expenditure among the advanced EU countries.

[3] For more details, see IMF (2009).

II. CURRENT FISCAL ENVIRONMENT AND PENSION REFORMS

A. The State of Public Finances in Italy

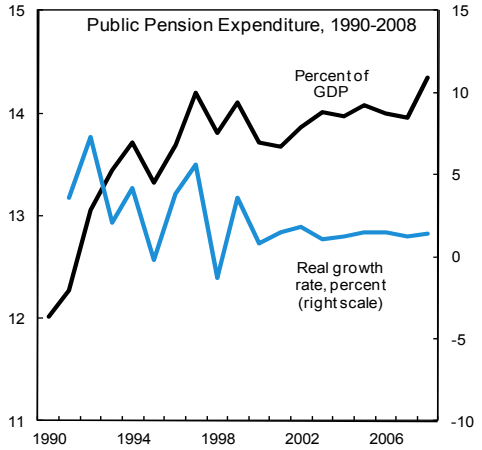
The financial crisis worsened Italy's already fragile fiscal position and exacerbated the structural weaknesses of the budget. Public debt reached 115.8 percent of GDP in 2009—second only to Japan among advanced G-20 countries. The deficit doubled, despite modest stimulus measures and large one-off revenue receipts. Recent efforts to introduce more flexibility in the budget have helped ease slightly expenditure rigidities but the share of non-discretionary primary spending in GDP increased substantially, reaching 30½ percent of GDP in 2009.[4] The high tax burden, including relatively high taxes on wages, and persistent problems with improving significantly the revenue-raising potential further constrain the fiscal policy space.



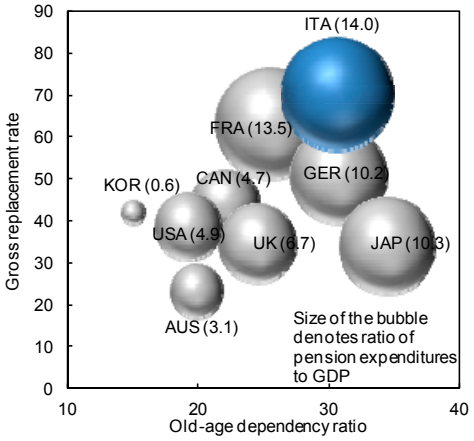
Sources: WEO; and Eurostat .

[4] Including in-kind social benefits increases non-discretionary spending to 33½ percent of GDP.

Pension expenditure is relatively large but its growth rate has stabilized since 2000.[5] With one-third of budgetary resources spent on pensions, Italy has the largest share of pension expenditure in GDP among advanced economies. In addition to demographic factors—one inactive person over 65 for every two employed 15–64—the high level of pension spending reflects the relative generosity of the system. After several reforms, however, the growth rate of real pension spending has stabilized at below 1½ percent per year.



Source: ISTAT.

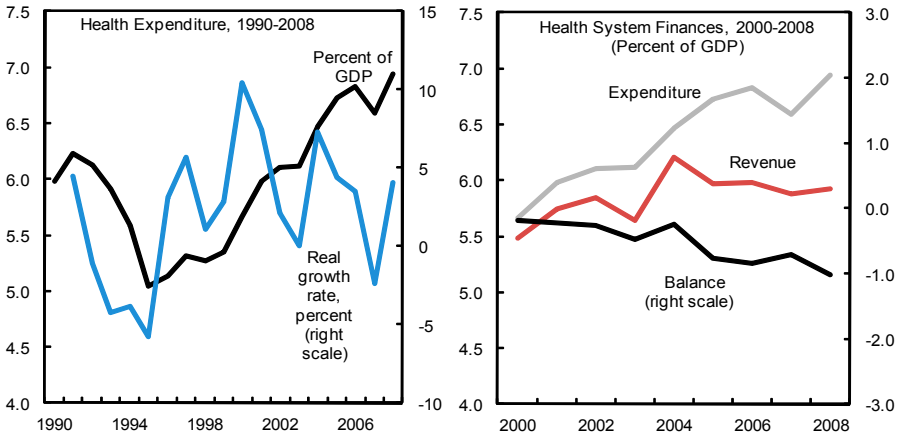


Sources: Country authorities; European Commission; OECD (2009); and IMF staff estimates.

Other age-related expenditures, especially health spending, have been on the rise and also show greater volatility. At about 7 percent of GDP, the level of public health spending is near the euro area average. The decentralized nature of health services involves risks, especially in the presence of "soft" budget constraints and negotiations of the health budget (*Patto per la salute*) between the central and subnational governments (the latter provide about 1/3 of total contributions to the health system). The fiscal position of the overall system, as defined by national and ESA95 statistical standards, has deteriorated in recent years, with the deficit reaching 1 percent of GDP in 2008, while the size of non-market producers of in-kind, especially hospital care has been increasing.[6] Ongoing fiscal federalism reform compounds the uncertainty in this area.

[5] RGS (2009, 2010) lists several different definitions of pension expenditure depending on the specific social benefit programs included in the calculation. In this annex, the MEF/RGS definition is used, as in the general government fiscal accounts. MEF/RGS definition includes old-age, disability, and survivors (IVS) pensions and old-age means tested transfers (social pensions and social allowances starting from 1995). This definition excludes severance payments (TFR) by private and public employers (estimated at over 1¼ percent of GDP).

[6] This presentation of the economic account of the health sector is however different from the financial relations between the state and the regions derived from accounts of the National Health Service (*Servizio Sanitario Nazionale, SSN*), mainly reflecting differences in the coverage and accounting treatment. The financial position of the SSN, in particular, has improved somewhat in recent years, with the deficit of €3.2 billion (0.2 percent of GDP) in 2008 expected to have been covered by the regions.



Source: ISTAT.

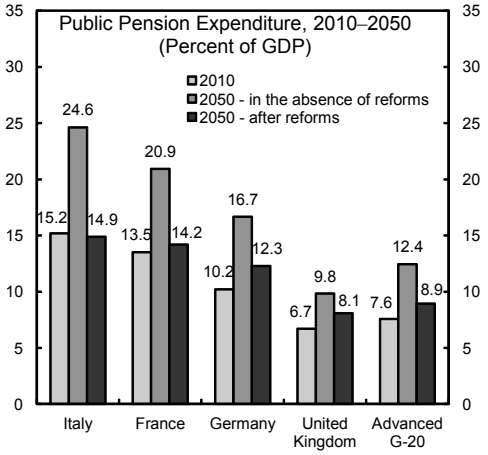
B. Pension reforms in Italy

In many ways, the structure of the Italian pension system is broadly in line with pension systems in other advanced G-20 countries. These systems generally offer a means-tested pension benefit as the basic layer of retirement income accompanied by an earnings-related mandatory component and voluntary occupational schemes (Appendix Table A2). Nearly all of these systems index pensions to prices. Although Italy uses Notional Defined Contribution Accounts—which directly link contributions to benefits— instead of the traditional Defined Benefit structure of public pensions in all other advanced G-20, all these systems generally use current workers' contributions to pay for current pensions.

In Italy, however, public pensions play a larger role than in other advanced G-20 countries. The Italian system offers the highest average gross replacement rate (nearly 70 percent of average earnings) and has a relatively high payroll tax rate among the advanced G-20. Even accounting for the already legislated reforms, Italy will still have the highest replacement rate among these countries for many decades—only after 2055 France would have a slightly higher replacement rate.

	Social Security Contributions 2010 1/	Total tax wedge 1/	Replacement rates 2/		
			2010	2030	2060
Australia	5.7	26.9	23	23	23
Canada	16.8	31.3	45	…	…
France	39.4	49.3	63	53	48
Germany	33.4	52.0	50	46	43
Italy	31.5	46.5	71	64	47
Japan	22.4	29.5	41	34	…
Korea, South	15.8	20.3	58	46	…
United Kingdom	18.0	32.8	35	35	37
United States	14.3	30.1	39	35	35

Sources: OECD (2009); and IMF staff estimates.
1/ In percent of labor cost.
2/ In percent of average wages.



Sources: 2009 Ageing Report; and IMF staff estimates.

In the absence of the envisaged adjustments, demographic pressures would increase outlays substantially. In Italy, pension spending would increase from 15¼ percent of GDP in 2010 to 24½ percent in 2050. Other advanced G-20 countries face much less pressing fiscal demands due to demographics, in large part because of their smaller current pension expenditures.

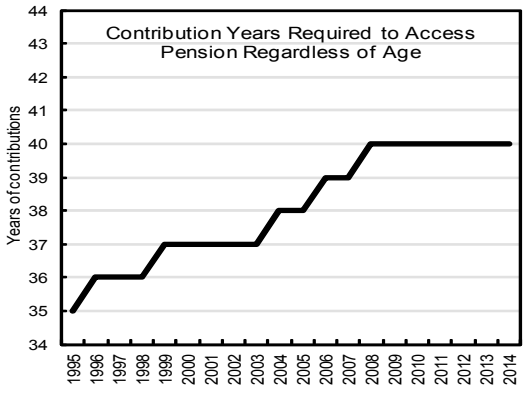
The Italian pension reform was a crucial response to these enormous demographic challenges. The waves of reforms in 1990s and 2000s included a combination of measures to increase revenues and reduce the generosity of benefits, including via increasing the age prerequisites to access pension (see Box 1). As a result, the authorities' latest estimates suggest that pension spending would decline from the 2008 level of 14¼ percent of GDP to about 13½ percent of GDP in 2060. Other advanced G-20 countries have also adopted reforms to offset the changes in demographics.

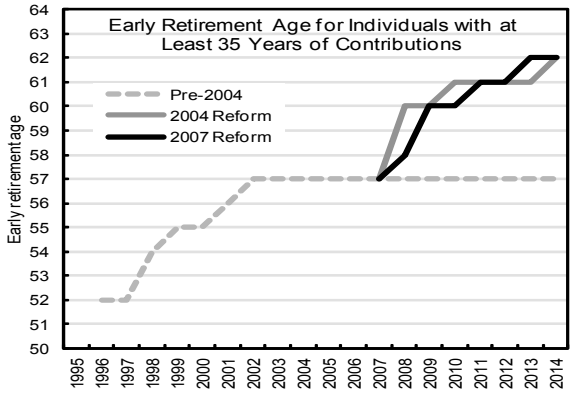
The reform path has not been without setbacks. Over the years, discretionary adjustments to the system have been introduced, some of which delayed or reversed the reform impact. These included a five year delay (from 2005 to 2010) in reviewing the transformation coefficients—an important component of the system that reduces benefits to reflect increases in longevity. Also, increases in the early retirement age were partially delayed (and even slightly lowered for those with 36 years of contributions). As a result of incremental changes, the system continues to be very complex.

Despite these setbacks, the impetus for reform continues. The 2004 reform widened the "exit windows" for claiming early retirement, effectively increasing the early retirement age by up to 9–12 months. The 2007 reform responded to the delay in transformation coefficients by increasing the frequency (from every 10 to every 3 years) of the adjustments and making them more administrative (the hearing of parliamentary committees, employers' federation and trade unions is no longer required). It also set a more rapid increase of the early retirement age to 62 in 2013 instead of 2014, while a 2009 law linked the early retirement age to increases in life expectancy starting in 2015.

Box 1. Highlights of the Italian Pension Reform

The 1992 reform cut net pension liabilities by about 25 percent. The main changes included: increasing the retirement age from 60 (55) to 65 (60) for men (women); increasing reference earnings from 5 to 10 years (lifetime earnings for younger workers); changing valorization to prices plus 1 percent; increasing contributing years from 15 to 20; and, most importantly, modifying indexation from wages to prices. **The 1995 reform adopted a Notional Defined Contribution system** in which pension benefits depend on lifetime contributions and GDP growth. The retirement age was set at 57 (with 5 years of contributions), with benefits adjusted depending on the age at which pensions are first claimed. After first receipt, pensions grow with inflation. **The 2004 reform raised the minimum retirement age** from 57 to 60 in 2008 to 62 in 2014 for those with a minimum of 35 years of contributions, along with widening the "exit windows". **The 2007 reform smoothed the initial increase in the retirement age (from 57 to 58 in 2008) but brought forward the increase to age 62 to 2013.** Additionally, the minimum age requirement was reduced by a year for those with 36 years of contributions. The above age requirements apply uniformly to all three pension regimes (retributive, contributive, and mixed). **A 2008 law** allowed old age and seniority pensions to be fully cumulated with labor income. **In 2009,** statutory retirement age of women in the public sector (60 in 2009) was set to increase starting from 2010, to equalize it with age of men (currently 65) by 2018, in response to the European Court of Justice sentence. Furthermore, the 2009 law introduced a five-year indexation mechanism linking the age retirement prerequisites to changes in life expectancy starting in 2015 but implementation mechanisms are yet to be enacted by end-2014.





Plans to develop private pension schemes, however, have not been very successful. Starting January 1, 2007, severance-pay benefits are to be accumulated in funds outside employers. The *Trattamento di fine rapporto (TFR*) is a mandatory benefit that employers traditionally financed by book reserves on behalf of workers to be withdrawn as a lump-sum upon retirement or separation. The default destination for future contributions is private pension funds. Workers have the option to opt-out of private funds, in which case the TFR contributions are held by special fund of the INPS (the National Social Security Institute) on behalf of the Treasury. Progress in the development of TFR private funds, however, suffered a setback following the financial crisis—open and closed funds had substantial financial losses in 2008. This fueled an aversion to the risks of private funds. The funds recovered in 2009 but the early enthusiasm seems to have been lost. By December of 2009, about

5 million workers (only about 1/5 of the labor force) had subscribed to these funds. For the remainder, the severance-pay contributions were transferred to the INPS or remained within the firms.

III. Re-assessing Italy's long-term fiscal sustainability

A. Why Italy looks good and what are the challenges ahead

At first sight, long-term fiscal prospects for Italy do not appear to raise serious concerns. The authorities' latest projections, based on the envisaged policy scenario (under the excessive deficit procedure requirement of the Stability and Growth Pact) of structural tightening of about 1.8 percentage points of GDP in 2010–12 suggest that public finances are on a long-term sustainable path. Debt would steadily decline to below 40 percent of GDP in 2060, deficit would remain well within the 3 percent of GDP threshold, and age-related spending would stabilize, remaining below the euro area average.

Authorities' Projections
(Percent of GDP, unless otherwise indicated)

	2010	2015	Ave. 2020-60	2060
Total revenue	46.5	46.8	46.7	46.7
Total expenditure	51.4	48.3	47.3	46.0
Age-related	28.3	27.6	28.8	28.6
Pensions	15.2	14.8	15.0	13.8
Health	7.4	7.4	8.4	8.9
Long-term care	1.0	1.0	1.3	1.7
Education	4.2	3.9	3.7	3.8
Interest expenditure	4.9	5.2	2.9	1.8
Overall fiscal balance	-4.9	-1.5	-0.6	0.7
Debt	116.9			below 40
Assumptions (percent)				
Labor productivity growth	1.1	1.3	1.7	1.7
Total participation rate	66.9	69.6	71.0	71.7
Real GDP growth	1.1	2.5	1.4	1.3

Source: Stability Programme Update, Jan 2010.

However, this favorable outlook is subject to a number of challenges. First, under these projections, labor productivity and real GDP growth would have to be well above the growth rates evidenced in past decade. Second, near- to medium-term fiscal adjustment, including in non age-related spending and pensions, has to take place as planned, at a minimum, and more so if growth disappoints or there are slippages in medium-term fiscal consolidation. Third, pressures from health and other age-relating spending should be contained.

Assumptions about future growth and its components are key. In the absence of further broad structural reforms, the expected large increase in long-term productivity cannot be readily assumed. Indeed, the authorities' most recent revisions, which are used in the subsequent analysis, have adjusted the labor productivity growth downwards. However, the assumption that the relatively strong employment dynamics experienced in the past will continue would seem to be at odds with the projected increase in the ratio of inactive elderly to the economically active population.

Macroeconomic Assumpions Used in the Authorities' Projections
(Average grow th rates, percent)

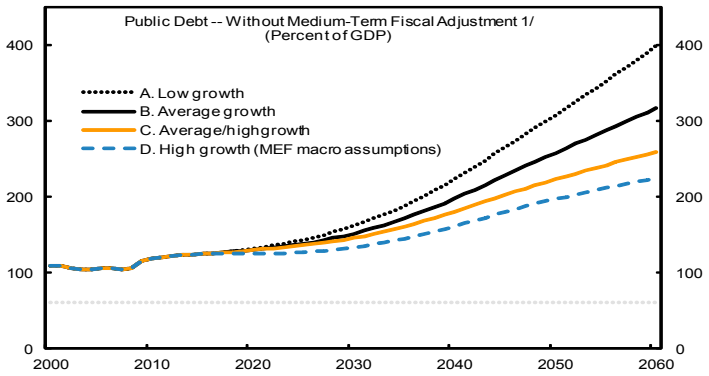
	Italy	Italy*	Euro area	Germany	France
Real GDP					
1999–2007	1.5		2.2	1.5	2.2
2015–2035 1/	1.7	1.7	1.8	1.6	1.9
2040–2060	1.2	1.4	1.4	1.0	1.9
Labor productivity					
1999–2007	0.0		0.9	1.0	1.1
2015–2035 2/	1.6	1.5	1.8	1.7	1.7
2040–2060	1.7	1.6	1.7	1.7	1.7
Employment					
1999–2007	1.4		1.3	0.5	1.1
2015–2035	0.1	0.1	0.0	-0.4	0.1
2040–2060	-0.5	-0.3	-0.3	-0.6	0.1

Sources: For Italy and Germany, projections from Jan 2010 Stability Programme Updates; for Italy*, projections are from Feb 2010 MEF update of long-term social spending analysis (RGS, 2010); for EA and France, projections from 2009 Ageing Report; for Italy, employment grow th projections are derived; 1999–2007 from WEO.
1/ Averages over 2020–2035 for EA and France and 2015–2030 for Germany.
2/ Average over 2015–2030 for Germany.

Scenarios discussed below differ from the authorities' macro-fiscal policy scenario in several aspects. For the medium term, real GDP growth is assumed to be slower and hump-shaped, reaching 1½ percent of GDP in 2012 (in contrast to the authorities' 2¼ percent) and declining to 1¼ percent by 2015. For the longer term, labor productivity growth and employment growth are both assumed to be weaker than in the authorities' scenario (itself following the common scenarios adopted in the context of the European Commission and the Economic Policy Committee of age-related expenditure (AWG) work). The authorities' fiscal plans to scale back one-off crisis-related interventions in 2010 are taken into account, along with most of the consolidation measures under the unchanged legislation scenario. The scenarios without medium-term fiscal adjustment reflect the lack of specific measures to support the authorities' proposed policy scenario. The starting point (for debt and structural primary balance) in the authorities' above-mentioned long-term sustainability projections presented in the latest Stability Programme Update is 2012, whereas that in the following exercise is 2015. Lastly, expenditure on pensions, health ('reference scenario') and long-term care is calibrated for respective macroeconomic scenarios.[7]

Lower long-term growth and a lack of medium-term fiscal adjustment would render fiscal situation unsustainable. The debt would reach 400 percent of GDP by 2060 in such illustrative scenario. Assuming the authorities' optimistic assumptions about long-term growth developments, the debt ratio would reach over 200 percent of GDP (close to the projection in the 2009 Sustainability Report).

[7]Education spending is based on EC (2009b). The age-related expenditure projections incorporate the impact of immigration, with the net flow of immigrants assumed at about 200,000 annually in the baseline scenario. Increases in immigration would ease pension pressures in the near-term, but would not change the overall picture substantially: according to the authorities, a 40,000 higher net flow of immigration from 2020 would result in a reduction of about ½ percentage points of GDP in age-related spending by 2060, two-thirds of which in pensions achieved mainly after 2040.

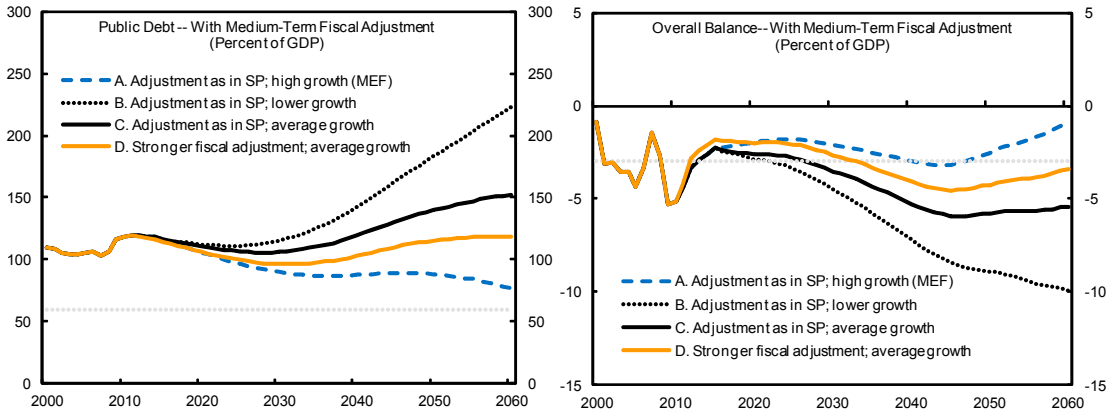


Sources: Ministry of Economy and Finance; and IMF staff estimates.

1/ Fiscal projections as in staff baseline for 2010–2015.

Assumptions underlying the illustrative scenarios (growth rates are average rates for 2015–2060):
A. Lower growth: labor productivity growth 1.00% and employment growth -0.18%.
B. Average growth: labor productivity growth 1.20% and employment growth -0.13%.
C. Average/high growth: labor productivity growth 1.45% and employment growth -0.16%.
D. High growth: labor productivity growth 1.62% and employment growth -0.13% (macroeconomic assumptions used in the Ministry of Economy and Finance projections).

Both strong medium-term fiscal consolidation and increased growth are necessary for fiscal sustainability but may still not be sufficient. The fiscal consolidation (1¾ percentage points of GDP in 2010–2012) envisaged in the Stability Programme Update (SP) combined with the authorities' optimistic growth assumptions would put the debt on a declining path, and deficit would remain broadly within the 3 percent of GDP threshold. However, even by 2060, the debt-to-GDP ratio would not reach the 60 percent level. Only together with stronger fiscal consolidation—say, ½ percentage points of GDP over the SP effort in 2011–12 is assumed, via non-age related spending cuts, similar to the authorities' approach in SP—debt will eventually fall under 60 percent threshold (not reported on the chart). Instead, under more realistic—average growth assumptions—even with the stronger fiscal adjustment effort the debt dynamics would reverse, and sustainability concerns may re-emerge. These illustrative findings are summarized in the table with the standard sustainability indicators, pointing also to the importance of addressing age-related spending pressures.



Sources: Ministry of Economy and Finance; Stability Programme Update, January 2010 (SP); and IMF staff estimates.

Assumptions underlying the illustrative scenarios (growth rates are average rates for 2015–2060):

A. Adjustment as in SP; high growth: Fiscal adjustment as in Stability Programme Update (1¾ percent of GDP in 2010–2012); labor productivity growth 1.62%; and employment growth -0.13%.
B. Adjustment as in SP; low growth: Fiscal adjustment as in Stability Programme Update (1¾ percent of GDP in 2010–2012); labor productivity growth 1.00%; and employment growth -0.18%.
C. Adjustment as in SP; average growth: Fiscal adjustment as in Stability Programme Update (1¾ percent of GDP in 2010–2012); labor productivity growth 1.20%; and employment growth -0.13%.
D. Stronger fiscal adjustment; average growth: Fiscal adjustment of 2¼ percent of GDP in 2010–2012); labor productivity growth 1.20%; and employment growth -0.13%.

Sustainability Indicators: Illustrative Scenarios
(Percent of GDP)

	SP	Scenario 1	Scenario 2	Scenario 3	Scenario 4
S2	-0.9	3.8	-0.9	0.4	0.0
Initial budgetary position	-1.6	1.3	-1.7	-1.2	-1.6
Long-term changes in primary balance	0.7	2.5	0.8	1.6	1.6
S1	-0.3	4.6	0.3	1.4	0.9
Initial budgetary position	-1.8	1.3	-1.7	-1.2	-1.6
Debt requirement in 2060	0.8	0.9	0.9	0.8	0.8
Long-term changes in primary balance	0.7	2.4	1.1	1.7	1.7
RPB (Required primary balance)	2.8	5.1	2.5	3.8	3.7

Sources: Ministry of Economy and Finance; Stability Programme Update, January 2010 (SP); IMF staff estimates.

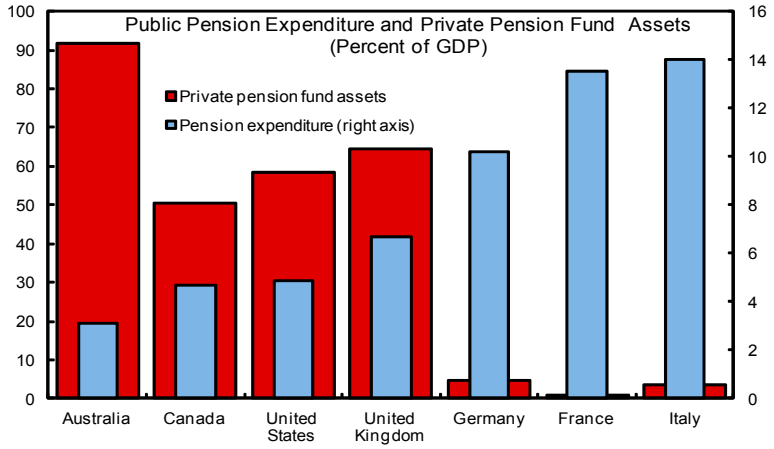
1. No fiscal adjustment; low grow th (productivity grow th 1.00%; employment grow th -0.18%).
2. Fiscal effort as in SP; high grow th (productivity grow th 1.62%; employment grow th -0.13%).
3. Fiscal effort as in SP; average grow th (productivity grow th 1.20%; employment grow th -0.13%).
4. Stronger fiscal effort in 2011–12; average grow th (productivity grow th 1.20%; employment grow th -0.13%).

S2=Permanent budgetary adjustment need to fulfil the intertemporal budget constraint.
S1=Permanent budgetary adjustment need for debt to reach 60% of GDP in 2060.
RPB=Primary balance resulting from budgetary consolidation that ensures sustainability.

Some challenges, however, arise from the assumed evolution of age-related spending, especially pensions. The baseline projections for pension expenditures offer a healthy outlook for the sustainability of the pension system. However, two main challenges lay ahead: first, uncertainty exists due to implementation risks and the sensitivity of some of the assumptions; and second, issues of intergenerational equity remain due to the back-loading of the remaining reform.

Although the authorities have responded to reversal attempts, implementation risks remain. Recent attempts for reversal of the reforms—such as the delay in the update of the transformation coefficient or the more gradual increase in the early retirement age—suggest that the risks of implementation are important. The effects of these delays are not negligible: initial pension benefits were reduced by between 6 and 8 percent for new beneficiaries depending on age after the new coefficients were introduced in 2010. There is a risk that the expected cuts in replacement rates could precipitate further attempts to delay the reform, which could be perceived as the weak link of the reform efforts.

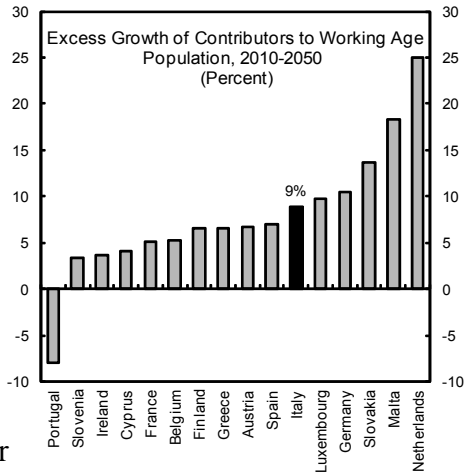
The projected decline in replacement rates points to a larger role for voluntary pensions. The Italian pension system currently includes some sharp cuts in replacement rates, especially for the very young. To ensure individuals have adequate resources in old age and to reduce the risk of reversal, the projected decline in public pensions should be at least partially offset with accumulations in voluntary pensions. Relative to other advanced countries, however, Italy currently has rather small accumulations in private



Sources: IMF (2010); and OECD (2010).

pension funds. Encouragingly, despite the crisis, the number of subscribers to private pension funds increased in 2009 (by about five percent); however the persistently small share of young-age contributors is worrisome.

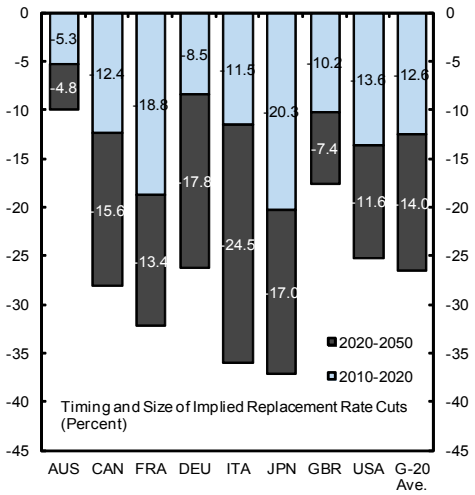
Other key assumptions might not materialize. A key assumption is that the number of contributors to the system will increase faster than the growth of the working age population (15–64), reflecting the rising labor force participation of women and the increase in effective retirement age. The prospect of lower replacement rates, especially for very young cohorts, however, might increase the incentive to stay in the informal sector. This would reduce the future number of contributors and threaten the financing of the system. Additionally, the extended use of temporary labor arrangements could also reduce contributions over time.



Sources: 2009 Ageing Report; and IMF staff calculations.

While pension reforms have improved the balance across generations, an important burden still remains on future generations. Mainly by introducing price indexation of benefits, the 1992 reform greatly reduced the burden on future generations of workers—net pension liabilities were reduced by about 25 percent. However, intergenerational inequities remain due to the slow transition implied by the reforms which grandfathered individuals with at least 15 years of contributions in 1992 (18 years in 1995)—cohorts covered by the old, more generous system are projected to get benefits until at least 2040. For instance, the net present value of pensions for a current new born are about 75 percent of benefits of a 40-year old and 50 percent of benefits of a 60-year old.[8] The current divide in the labor market between different types of labor arrangements could also exacerbate the intragenerational inequities. Simple simulations show that the pension of a worker with a temporary contract in the initial working years would be, other things equal, 30 percent lower than that of a worker with an open-ended contract.[9]

Future adjustments in pensions are back-loaded. In particular, future adjustments to pensions will kick in more gradually in Italy than in other advanced G-20 countries. Over the next 40 years, the overall changes in pension outlays due to reform are larger in Italy (a decline of 36.4 percent) than in other G-20 countries (a decline of 28.2 percent). However, the remaining effects of the reform are heavily back-



Source: 2009 Ageing Report.

[8] See Rizza and Tommasino (2008).

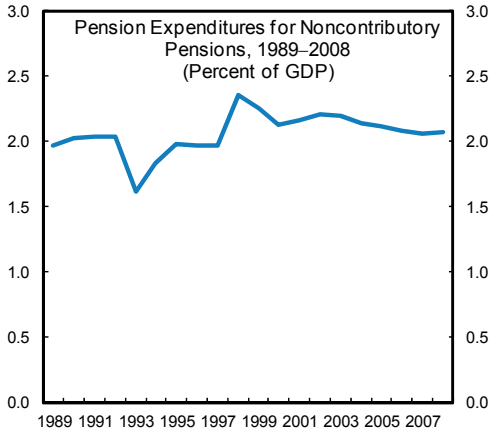
[9] See Boeri (2010).

loaded—about 2/3 of the adjustments are expected to happen after 2020 compared to only about 1/2 of the adjustment after 2020 for the advanced G-20 countries.

Despite the reforms, replacement rates will continue to be among the highest in the region for the next couple of decades. These sustained levels of replacement rates—combined with the lack of incentives to delay retirement—will further defer the desired macroeconomic effects of the pension reform and will also limit the role of the private sector for retirement savings.

Although the reforms improved the long-term outlook, significant budgetary demands will arise over the medium term. Official projections show that pension expenditures are set to increase by nearly 1 percent of GDP between 2015 and 2040 (RGS, 2010)—the net present value of this projected increase over 2015–2040 is about 8 percent of 2010 GDP. To offset this projected increase, benefits would have to be cut by about 5 percent between 2015 and 2040 on top of the already legislated benefit adjustments or the retirement age could be increased by one year (accompanied by a shift of the transformation coefficients for those in the new system, to reflect lower benefits at each age of claiming).

The non-contributory component of pension expenditures remains large. Despite the contributory nature of the pension system, a substantial share of expenditure continues to be financed through general taxation (*Gestione per gli interventi assistenziali, GIAS*). In 2008, these expenditures, which arise from non-contributory welfare pensions, accounted for about 15 percent of the expenditures (2 percent of GDP). More importantly, this level of spending has remained virtually unchanged as a percent of GDP over the last 20 years.

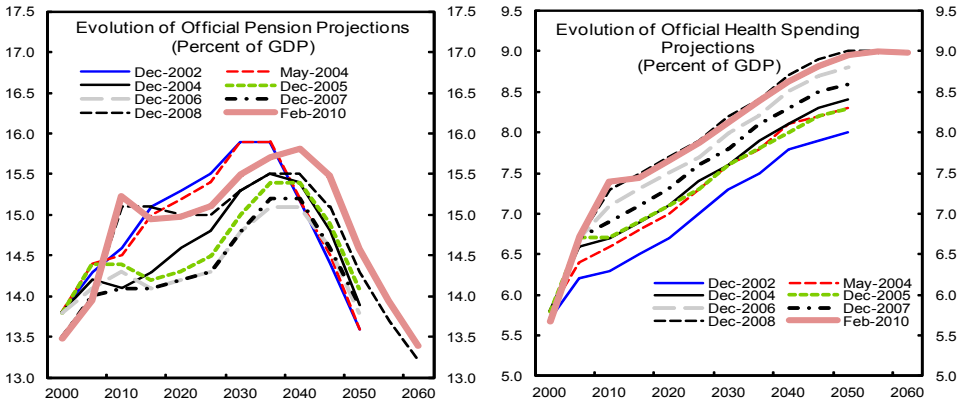


Source: Nucleo di Valutazione della Spesa Previdenziale.

Overall, the pension reforms adopted over the years would—if implemented faithfully—significantly reduce the costs associated with aging. The projected size of pensions in relation to GDP has increased in recent years; the system still provides incentive for early retirement and if, anything, the back-loading of the remaining adjustments may strengthen incentives to exit the labor market before these adjustments take place; intergenerational balance is still a key issue; and the strengthening of the second pillar remains sluggish.

Importantly also, there are large uncertainties in the area of health spending. In this area, the projected increase of the costs over time is much higher than for pensions—in the baseline projections of the 2009 Ageing Report, health care spending in Italy is projected to increase by 1.1 percent of GDP between 2007 and 2006 compared to a decline of 0.4 percent for pensions. Furthermore, there is large uncertainty on these projections. Recent staff

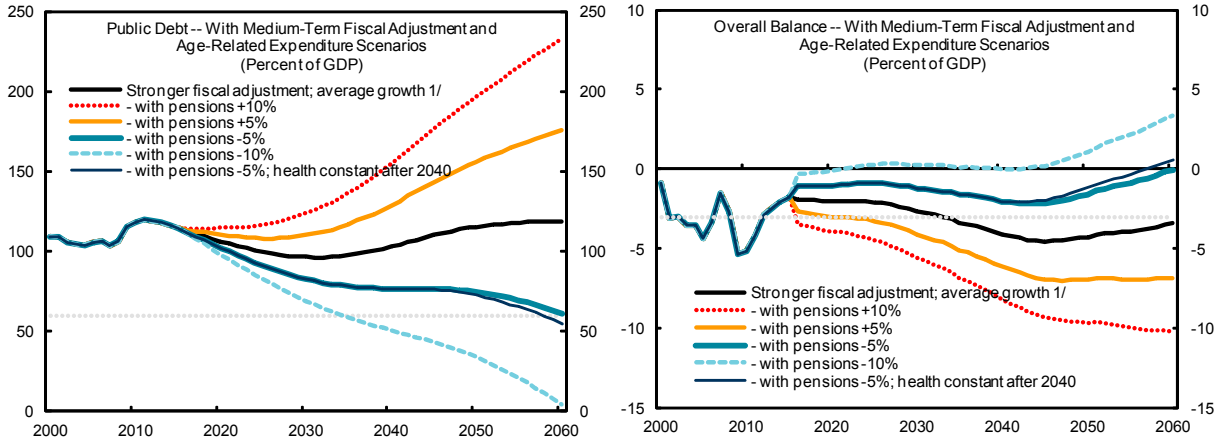
estimates, using a scenario in which the changes in health spending are more in line with historical trends, point to an increase in health spending of over 2½ percent of GDP between 2007 and 2060. The uncertainty of these projections is also notable in the authorities' estimates which have been shifting upwards over time.



Source: Ministry of Economy and Finance.

B. How Italy Can Ensure Long-term Fiscal Sustainability

The strategy to ensure long-term fiscal sustainability should be three-pronged: stronger fiscal consolidation in the medium term combined with improved growth prospects should be complemented with adjustments to the pension system and possibly to health expenditure. For illustration, as a central scenario, a somewhat stronger fiscal adjustment (½ percentage points of GDP in 2011–12 on top of the one envisaged by the authorities) and average growth (based on an average long-run labor productivity growth of 1.2 percent) is used. In this scenario, an adjustment in pension expenditure of a minimum 5 percent in nominal terms would be needed to put public debt on a declining path and bring it to just about 60 percent of GDP in the long run. Containing the growth in health spending toward the end of the projection horizon may still be needed to tip the debt ratio down more decisively.



Sources: Ministry of Economy and Finance; and IMF staff estimates.

1/ Fiscal adjustment of 2¼ in 2010–12; average long-run productivity growth of 1.20% and employment growth of -0.13%.

The high sensitivity of public debt to pension expenditures indicates that pension reforms should go ahead as planned. The Italian pension reforms introduced notional contribution accounts, with pension contributions revalued in line with the growth of the economy. The system is also intended to offset changes in life expectancy by periodically adjusting the factor that converts the notional accumulation into the initial benefit. All of these have been steps in the right direction which help isolate pension expenditures from adverse macroeconomic and demographic developments. Nonetheless, the reforms have faced some headwinds from implementation delays. Given the large effects from deviations in the projections of pension expenditures—a 5 percent permanent increase in pension would put public debt on an unsustainable path—it is imperative that the reform continues as planned.

Future pension reforms should focus on automatic adjustments to improve intergenerational equity. One of the peculiar characteristic of the Italian system is that the anchors to macro or demographic variables (such as the valorization of contributions or the periodic revision of the transformation coefficient) affect future generations of retirees while leaving the benefits of current retirees virtually unchanged.[10] Future reforms would greatly improve the balance of the burden of the reform by shifting at least part of the adjustment to current pensioners. For example, bringing forward the already planned increase in the early retirement age could yield savings of 0.3–0.7 percent of GDP per year (depending on the assumption about the share of retirees who claim early retirement) in the medium term.[11]

Adjustment to pension benefits, however, should also ensure compliance with the system. The long-term sustainability of the system depends largely on the need to ensure that future generations of workers comply with the system. The use of notional defined contribution provides incentives to participate in the system by directly linking contributions to pensions. The prospect of lower replacement rates, especially for the very young, however, could deter some workers from participating in the system. Additionally, the use of temporary labor arrangements could also reduce the mass of contributions over time.

Efforts to develop private pension schemes should continue. Private pensions, which are an important element of the retirement income systems of most advanced economies, are notably unimportant in Italy. With the decrease role of public pensions in the future, it is fundamental that private pensions continue to be developed. The expansion of these systems should be supported by a sound regulatory framework and a careful assessment of the capacity of the private sector to efficiently manage these schemes.

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[10] Once benefits are claimed, they are adjusted proportionally with inflation, with the proportion decreasing with the size of the pension.

[11] Other adjustments could include limiting price indexation of pensions to account for increases in life expectancy or the change in the mass of contributors (as in Japan) or to freeze pensions to respond to long-term actuarial imbalances (as in Canada).

IV. CONCLUSIONS

There are key challenges to Italy's long-term fiscal prospects. The authorities' projections suggest a sustainable fiscal outlook, but they hinge on a number of optimistic assumptions, including: a quick and robust rebound of growth in the medium term; high labor productivity growth in the long run; fiscal consolidation in the tune of 1¾ percent of GDP in 2010–12 with underlying policy measures yet to be identified; and sanguine expectations about the budgetary impact of ageing. The projections also assume the back-loading of the remaining pension reform and face significant uncertainties about other age-related expenditure.

Pension reforms should go as planned, at a minimum, with further adjustments needed to secure fiscal sustainability. It should be a priority to ensure that the reform does not suffer further delays in its implementation—following the scheduled increases in the retirement age, updating the coefficients in a timely and transparent way, and limiting the discretionary adjustments in future revisions of the system. Furthermore, efforts should be made to improve the balance of the adjustment efforts across generations, which is currently tilted against future generations.

The impact of ongoing and future structural fiscal reforms should be assessed in the context of their potential long-run implications for fiscal sustainability. This concerns especially health spending and fiscal federalism reform, in general, as well as budget reforms. While the outcomes of expected budgetary implications of these reforms are not clear yet, the already ambitious fiscal strategy outlined above underscores the need to implement such reforms in a cost-conscious manner.

In sum, to succeed, fiscal sustainability will require bold medium-term fiscal consolidation and strong economic growth in the long run, supported by measures to further ease the budgetary pressures from ageing.

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ANNEX 1: VI. APPENDIX

Table 1A. Age-Related Government Expenditure, 2007–2060
(Percentage points of GDP)

	Pensions			Health care			Long-term care			Unemployment benefits			Education			Total		
	Level	Change 2007	Change 2007	Level	Change 2007	Change 2007	Level	Change 2007	Change 2007	Level	Change 2007	Change 2007	Level	Change 2007	Change 2007	Level	Change 2007	Change 2007
	2007	2035	2060	2007	2035	2060	2007	2035	2060	2007	2035	2060	2007	2035	2060	2007	2035	2060
BE	10.0	4.4	4.8	7.6	1.0	1.2	1.5	0.7	1.4	1.9	-0.4	-0.4	5.5	-0.1	0.0	26.5	5.6	6.9
DE	10.4	1.4	2.3	7.4	1.4	1.8	0.9	0.7	1.4	0.9	-0.3	-0.3	3.9	-0.5	-0.4	23.6	2.6	4.8
IE	5.2	2.8	6.1	5.8	0.9	1.8	0.8	0.4	1.3	0.8	0.1	0.1	4.5	-0.4	-0.3	17.2	3.7	8.9
EL	11.7	7.7	12.4	5.0	0.9	1.4	1.4	0.8	2.2	0.3	-0.1	-0.1	3.7	-0.3	0.0	22.1	9.1	15.9
ES	8.4	3.4	6.7	5.5	1.0	1.6	0.5	0.5	0.9	1.3	-0.4	-0.4	3.5	-0.3	0.1	19.3	4.3	9.0
FR	13.0	1.4	1.0	8.1	1.0	1.2	1.4	0.5	0.8	1.2	-0.3	-0.3	4.7	0.0	0.0	28.4	2.7	2.7
IT	**14.0**	**1.2**	**-0.4**	**5.9**	**0.9**	**1.1**	**1.7**	**0.5**	**1.3**	**0.4**	**0.0**	**0.0**	**4.1**	**-0.6**	**-0.3**	**26.0**	**2.0**	**1.6**
LU	8.7	8.0	15.2	5.8	0.9	1.2	1.4	0.7	2.0	0.4	0.0	0.0	3.8	-0.5	-0.5	20.0	9.1	18.0
NL	6.6	3.4	4.0	4.8	0.9	1.0	3.4	2.8	4.7	1.1	-0.1	-0.1	4.6	-0.2	-0.2	20.5	6.9	9.4
AT	12.8	1.2	0.9	6.5	1.2	1.5	1.3	0.6	1.2	0.7	0.0	0.0	4.8	-0.6	-0.5	26.0	2.3	3.1
PT	11.4	0.9	2.1	7.2	1.0	1.9	0.1	0.0	0.1	1.2	-0.4	-0.4	4.6	-0.6	-0.3	24.5	1.1	3.4
FI	10.0	3.9	3.3	5.5	0.9	1.0	1.8	1.7	2.6	1.2	-0.2	-0.2	5.7	-0.2	-0.3	24.2	6.1	6.3
EU27	10.2	1.7	2.4	6.7	1.0	1.5	1.2	0.6	1.1	0.8	-0.2	-0.2	4.3	-0.3	-0.2	23.1	2.7	4.7
EA12	11.1	2.1	2.8	6.7	1.0	1.4	1.3	0.7	1.4	1.0	-0.2	-0.2	4.2	-0.3	-0.2	24.4	3.3	5.2

Source: European Commission (2009).

Table 2A. Parameters of Pension Systems in the Advanced G-20 Countries

	Australia	Canada	France	Germany	Italy	Japan	Korea	UK	US
First Tier 1/									
Social Assistance				24	22				
Targeted	23	16	31					26	20
Basic		14				19	30	20	
Minimum			29					13	
Overal entitlement 2/	23	30	31	24	22	19	30	33	20
Second tier									
Earnings related									
Type	none	DB	DB/points	points	NDC	DB	DB	DB	DB
Accrual rate 3/		0.63	1.75	1	1.75	0.71	0.75	0.89	0.91
Earnings measure		b34	b25/L	L	L	L	L	L	b35
Valorization		w	p/p	w	GDP	w	p	w	w
Indexation		p	p/p	Nl+sus	p	p	p	p	p
Defined contribution									
Contribution rate 3/	9								
Ceilings 1/									
Public		100	128	164	357	175	189	156	262
Private/occupational	234		385						
Pension age									
Normal	65	65	60	65	65	65	60	65	66
Early 4/	55	60		63	59(60)	60	55		62

Source: Whitehouse (2008).

DB=defined benefit, NDC=notional defined contribution, b=number of best years, L=lifetime earnings, w =w ages, p=prices, Nl+sus=nominal income grow th and sustainability factor.

1/ Percent of average earnings.

2/ Full career w orker.

3/ Percent of individual earnings.

4/ For Italy, the pension access age w ith 36(35) years of contribution in 2010. The access age is set to increase to 61(62) by 2013.

Box 1A. Italy's Long-Term Fiscal Outlook: Some Highlights in Numbers

- For *every* inactive person over 65, there were *two* employed persons 15–64 age in 2007; in 2060, the relation will be *nine-to-ten*, the highest in Europe.
- Public debt reached *115.8* percent of GDP in 2009, the second highest to Japan among advanced G-20 countries.
- Public pensions consume *1/3* of budgetary resources or over *15* percent of GDP in 2009, the highest among advanced economies.
- In the absence of the envisaged pension reform, pension expenditure will increase to *24½* percent in 2050, much more than in other advanced G-20 countries.
- The waves of pension reform have helped improve the balance of fiscal adjustment across generations, but the effects of the remaining reform are heavily back-loaded—about *2/3* of the adjustments are expected to happen after 2020 (about 1/2 for the advanced G-20 countries).
- The pension reform is not generationally fair—the net present value of pensions for a current new born are about *75* percent of benefits of a 40-year old and *50* percent of benefits of a 60-year old.
- With no fiscal consolidation in the medium term and lower than envisaged growth in the long run, the public debt will reach over *400* percent of GDP in 2060.
- A *0.2* percentage point increase/decrease in average long-run labor productivity growth translates, other things equal, into about *60* percentage points of GDP decrease/increase in debt-to-GDP ratio in the no-fiscal adjustment scenario.
- *½ percentage points of GDP* increase in the envisaged fiscal structural consolidation in 2011–2012 will cumulate in the long run to *about 35* percentage points of GDP lower debt ratio in 2060.
- Average long-run growth of about *1.1 percent* and fiscal adjustment of *2¼ percent of GDP* in the medium term would be needed to close the sustainability gap but at the debt level close to that of 2010.
- Still, at least a *5* percent nominal cut in overall pension costs (or *0.8* percent of GDP) on average will be needed to bring debt close to 60 percent of GDP by 2060.

ANALYTICAL ANNEX II: AFTER THE CRISIS: ASSESSING THE DAMAGE[1]

Italy's deep-rooted structural problems resulted in an unsatisfactory productivity performance and a dismal growth over the last 15 years. The global financial crisis has exacerbated these long-standing weaknesses, taking a heavy toll on Italy's economy. With output back to its end-2001 level, Italy's output losses associated with the crisis have been, thus far, about 132 billion of 2000 euro (around 10 percent of precrisis 1998–2004 real GDP). About three quarters of these losses are estimated to be due to a shortfall in potential output. Potential output is not expected to rebound to its precrisis trend over the medium term, even though growth is projected to do so within the next two years. In the short-run, the decline in output is mainly accounted for by a collapse in productivity; in the medium term, employment and capital are also likely to be affected, with implications for the longer-term growth and fiscal outlook.

I. INTRODUCTION

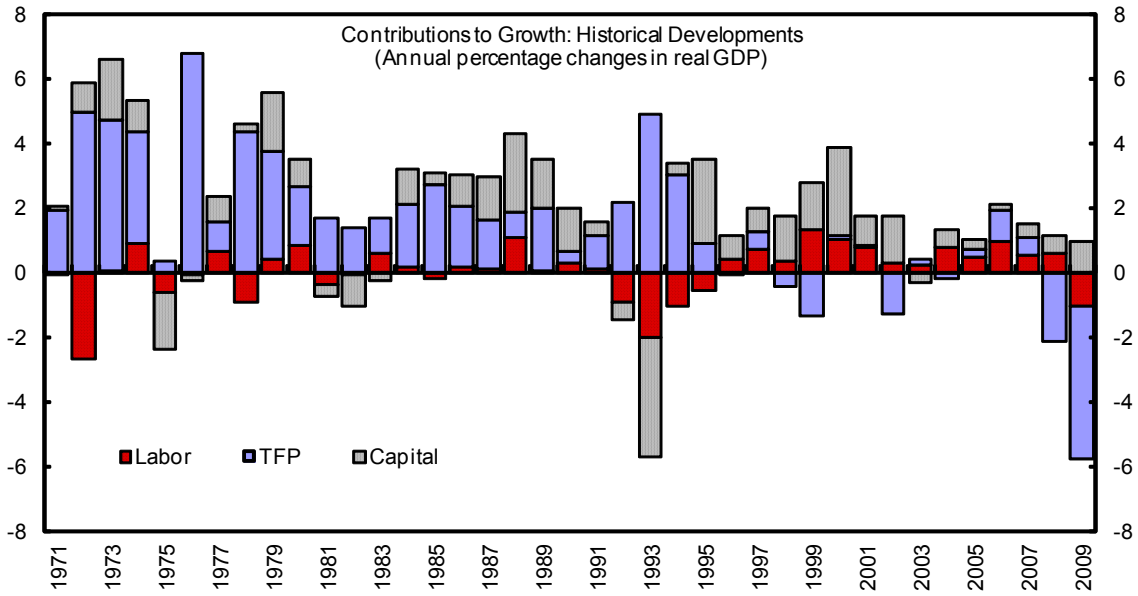
The financial crisis will likely have a long-lasting impact on Italy's economic potential. Indeed, innovation and investment opportunities may weaken because demand prospects are likely to be poor and the real cost of borrowing remains high. In addition, some of the increase in unemployment may be structural given that displaced workers will find it hard to return to the labor market as industrial restructuring takes hold.

Against this backdrop, this annex assesses Italy's medium-term output losses following the crisis and their implications for the longer-term growth outlook and the fiscal situation. It argues that Italy's deep-rooted structural problems—giving rise to unsatisfactory productivity growth—had weakened the Italian economy long before the financial crisis. Using a variety of techniques, results suggest that output is not expected to rebound to its precrisis trend over the medium term. Unless policy actions are taken, structural weaknesses will continue to weigh on the Italian economy even when the recovery takes place.

II. PRODUCTIVITY: ITALY'S ACHILLES' HEEL

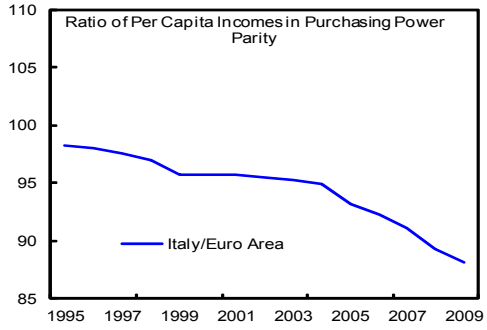
Italy has suffered from chronically low economic growth, even before the global financial crisis. Real GDP growth averaged 1.6 percent during the period 1995–2007, down from over 2 percent in the earlier decade (Figure 1).

[1] Prepared by Hanan Morsy (EUR) and Silvia Sgherri (SPR).



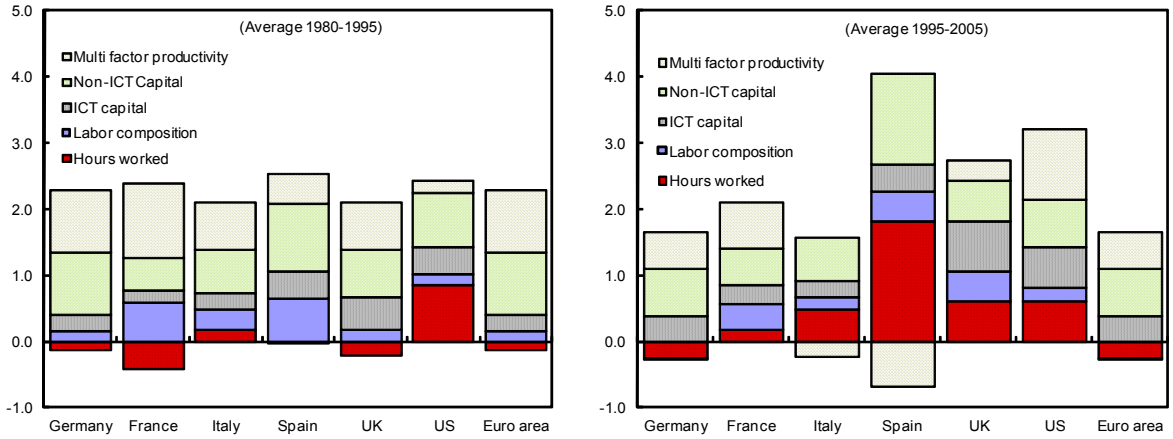
Sources: OECD; and IMF staff calculations.

Before the crisis, the Italian economy underperformed most of its euro area peers. Over the last decade, Italy's GDP moved gradually away from the EU15 benchmark, with average annual growth almost one percentage point lower than the average Correspondingly, Italy's per capita income (measured in purchasing power parity) has declined, diverging away from the euro area over the same period.



Source: WEO.

Figure 1: Contribution to GDP growth
(Percent change)



Sources: EU Commission; and IMF staff calculations.

Italy's dismal growth performance is largely due to poor productivity. Breaking down GDP growth into labor, capital, and total factor productivity (TFP) contributions shows that the Italian economy's anemic growth is mostly explained by the declining TFP. In fact, TFP contributions decreased substantially over the period 1995–2005—a slowdown which was pervasive across all sectors but especially pronounced in manufacturing and non-tradable sectors. Besides, the reallocation of employment from sectors with higher productivity (typically manufacturing) to sectors with lower productivity (typically services) would not be large enough to justify a sizeable impact on the whole economy.[2]

Table 1. Italy: Gross Value Added Growth and Contributions 1/
(Percent, annual average volume growth rates)

		Contribution of						
	VA (1)= (2)+(5)+(8	L (2)= (3)+(4)	H (3)	LC (4)	K (5)= (6)+(7)	KIT (6)	KNIT (7)	MFP (8)
1980-1995								
Total industries	2.11	0.49	0.19	0.30	0.89	0.25	0.64	0.73
Manufacturing	2.22	-0.94	-0.99	0.05	0.94	0.19	0.75	2.22
Electricity, gas and water supply	1.65	0.37	0.32	0.06	2.60	0.27	2.33	-1.32
Construction	0.08	-0.33	-0.35	0.01	0.51	0.09	0.41	-0.10
Wholesale and retail trade	0.08	-0.33	-0.35	0.01	0.51	0.09	0.41	-0.10
Hotels and restaurants	0.96	2.63	2.52	0.11	0.27	0.04	0.22	-1.94
Transport, storage and communication	3.71	1.13	1.05	0.07	1.15	0.69	0.46	1.43
Finacial intermediation	1.31	1.50	1.28	0.22	1.70	1.18	0.52	-1.89
Business activities	3.48	2.37	2.25	0.12	1.39	0.21	1.18	-0.27
Personal and social services	1.63	1.60	1.99	-0.39	0.51	0.18	0.34	-0.49
1995-2005								
Total industries	1.33	0.66	0.49	0.17	0.91	0.25	0.66	-0.24
Manufacturing	-0.15	-0.22	-0.41	0.18	0.80	0.21	0.59	-0.73
Electricity, gas and water supply	0.87	-0.91	-0.91	0.00	1.20	0.16	1.03	0.58
Construction	1.78	1.48	1.33	0.15	1.30	0.14	1.17	-1.00
Wholesale and retail trade	1.78	1.48	1.33	0.15	1.30	0.14	1.17	-1.00
Hotels and restaurants	1.50	2.04	1.86	0.18	0.97	0.12	0.85	-1.52
Transport, storage and communication	3.68	0.80	0.66	0.14	1.41	0.32	1.09	1.47
Finacial intermediation	0.74	-0.08	-0.18	0.10	0.16	0.77	-0.61	0.66
Business activities	2.21	1.82	1.71	0.11	0.83	0.23	0.60	-0.44
Personal and social services	1.19	0.78	0.95	-0.17	0.68	0.24	0.44	-0.27

Source: EU KLEMS database.

1/ Where, VA=Gross value added growth; L=Labor input growth; H=Total hours worked; LC=Labor composition; K=Capital input growth; KIT=ICT capital; KNIT=Non-ICT capital; MFP=Multi factor productivity growth.

By contrast, the contribution of labor growth has been positive over recent years. While contribution of capital remained broadly stable, contribution of hours worked increased significantly—also relatively to the EU15—thanks to extensive labor market reforms. Within the labor factor, labor participation accounted for almost half of the annual GDP growth in 2001–2007. The contribution of employment was also substantial, while that of average

[2] On this point, see also Daveri and Jona Lasinio, 2005.

hours worked was marginally negative. In addition, there was a strong contribution from immigration.

The contrasting movements of labor and total factor productivity may be partly an (unwanted) effect of sweeping labor market reforms. A significant trade-off between employment and productivity can be observed since 1997. As firms responded to labor market reforms by shifting to less capital-intensive production methods, a somewhat reduced rate of capital deepening had to be expected. Moreover, regularization of the illegal immigrant work force may have contributed to bringing to light irregular employment, which had not previously been included in estimates, thereby depressing measured productivity growth.

Some of the policy reforms implemented in Italy may have boosted employment per capita but depressed productivity in the short run. Indeed, if labor demand does not shift when labor market reforms occur, then labor supply shifts to the right along a given labor demand curve, causing productivity to slow down as a result.[3] This could have been the case in Italy, following the changes in labor market legislation in favor of more flexibility. Nevertheless, it is striking that the drop in the TFP growth since the mid-1990s has largely offset the increase in labor supply following the reforms.

Protracted sluggishness in productivity growth may also conceal economic features, including:

- Relatively high tax ratios, deemed to have undercut Italy's growth performance by discouraging labor supply and investment;
- A heavy regulatory burden in labor and product markets and bureaucratic red tape, likely to have hampered competition and stifled incentives to invest;
- A large share of small and medium-size enterprises, which might have hobbled productivity growth by limiting the scope for economies of scale and technology transfers.

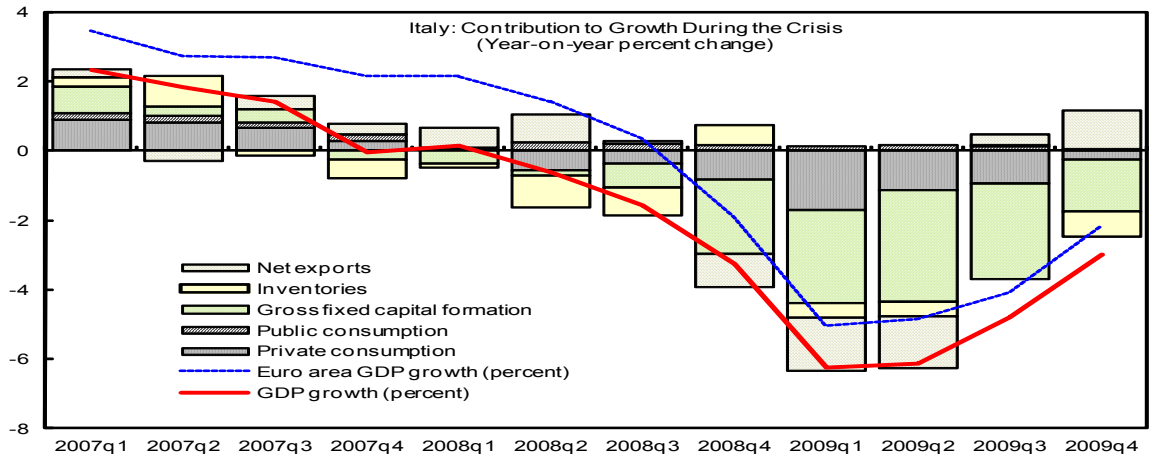
Indeed, the presence of such rigidities—along with an industrial specialization in products with relatively low value added—may also have contributed to Italy's steady erosion of competitiveness, as highlighted by the significant decline in Italy's world market share in world trade since the mid-1990s (even compared to its peers).

III. THE CRISIS: A NEW TOLL ON PRODUCTIVITY

The global financial crisis took a toll on Italy's economy. The downturn in Italy started earlier and has been deeper and longer-lasting than in most of its euro area peers. Output contracted by 1.3 percent in 2008 and 5.0 percent in 2009. The recession in Italy's main

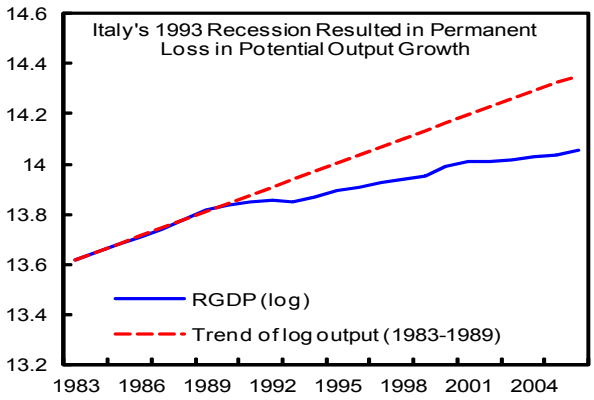
[3] On this point, see evidence in Gordon and Dew-Becker (2008).

trading partners led to a sharp fall in exports. Investment dropped more sharply than in earlier recessions reflecting weak demand prospects, while inventories were cut. Despite strong household balance sheets, private consumption also declined significantly, possibly reflecting uncertainty, rising unemployment, and tighter consumer credit, and was only marginally offset by the modest rise in government consumption.



Source: Eurostat.

The economy suffered the worst recession since World War II. The collapse in economic activity was far more severe than the one experienced during the 1974–75 oil-price crisis and the 1992–93 EMS crisis (Figure 2). In the first quarter of 2009, growth witnessed a decline in growth of 6 percent (year-on-year), four times as large as the one experienced during the EMS crisis.[4] Additionally, growth was starting from weaker initial conditions. More importantly, following the EMS crisis, output did not recover to its precrisis trend (1983–89), resulting in permanent loss in potential output growth in the long run.[5] The most distinguishing feature of this recession was the sharp deterioration of exports (Italy's traditional engine of growth. The globally synchronized nature of this recession led to the largest historical contraction of Italian exports since the 1930s. As a result, investment dropped sharper than experienced in earlier recessions. On the other hand, the profile of decline in private consumption was similar, though more persistent.



Sources: Eurostat; and IMF staff calculations.

[4] See Bassanetti, et al. (2009) for a comparison of historical recessions in Italy.

[5] Data is not available to examine the recovery to pre-crisis trend for other historical recessions.

Since the onset of the crisis, productivity has plummeted even further, exacerbating Italy's long-standing structural weaknesses (Table 1). As a result, unit labor costs have soared and profitability has been further squeezed, worsening Italy's already weak competitive position. On the other hand, capital deepening has—thus far—been showing strong resilience, while unemployment has been rising only modestly, largely due to part-time work schemes and declining hours worked. Regrettably, the drop in TFP growth over 2008–09 has been so large it has offset most of the resilience in capital and—to a lesser extent—employment.

Table 2. Contributions to Growth in Times of Crisis

Looking at contributions to growth...

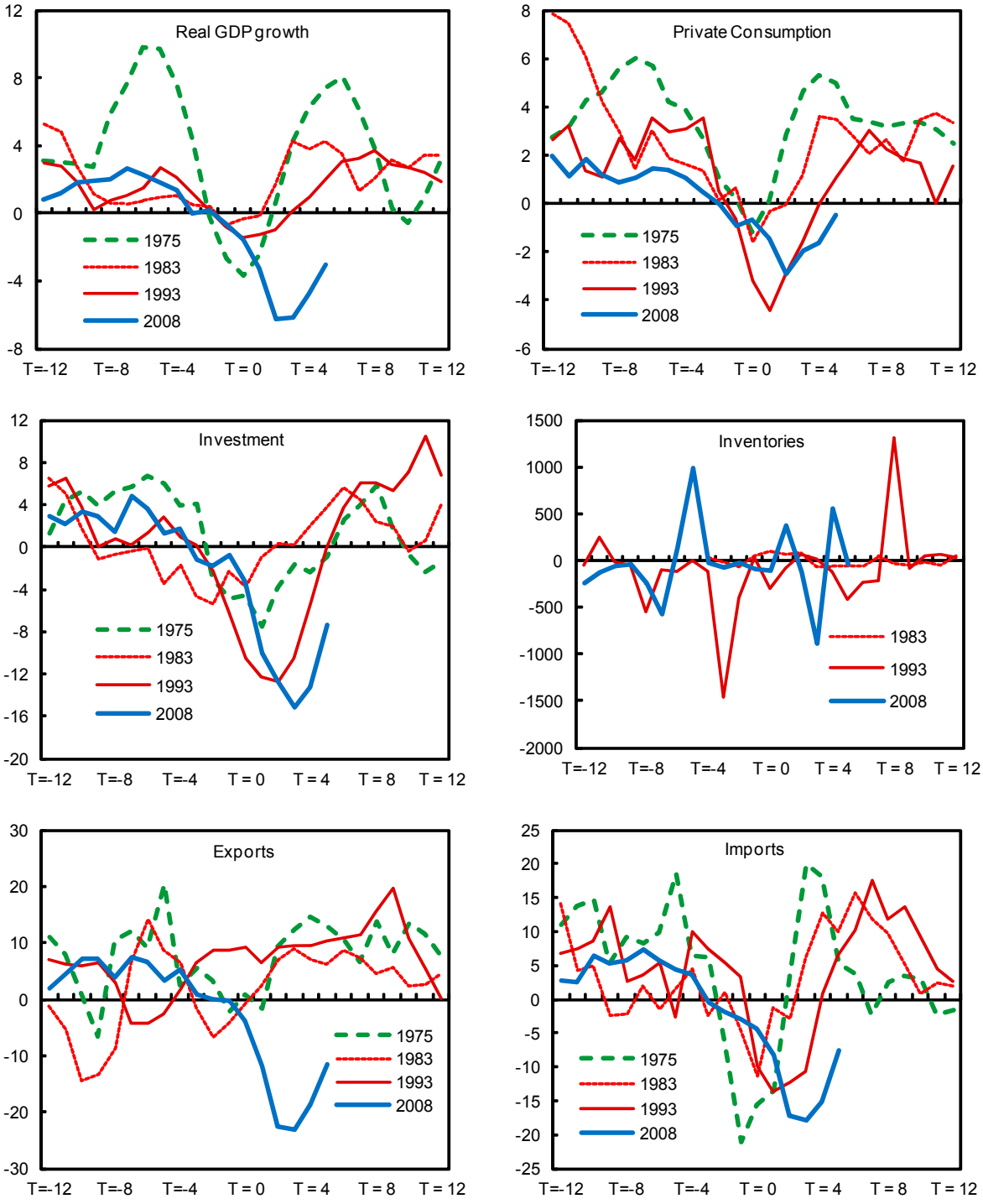
	Labor					Capital			TFP	GDP
	Total Hours Worked	Average Hours Worked	Employment	Labor force	Working-age Population	Total	IT	NIT		
Oil crisis	-0.6	-1.0	-0.3	0.3	0.4	-1.7	0.0	-1.7	0.3	-2.0
76-92	0.1	-0.1	-0.2	0.0	0.4	0.6	-0.2	0.8	2.1	2.8
Currency crisis	-2.0	0.1	-0.8	-1.5	0.2	-3.7	-4.2	0.5	4.8	-0.9
94-07	0.4	-0.1	0.2	0.4	0.0	1.0	0.1	0.9	0.2	1.6
Financial crisis	-0.2	-0.2	-0.5	0.2	0.3	0.7	-0.4	1.1	-3.5	-2.9

Looking at capital deepening...

	Capital Deepening	TFP	Labor Productivity
Oil Crisis	-1.4	0.3	-1.1
76-92	0.6	2.1	2.7
Currency Crisis	-2.8	4.8	2.1
94-07	0.7	0.2	0.9
Financial Crisis	0.9	-3.5	-2.6

Sources: ISTAT; EU Commission; OECD; and IMF staff calculations.

Figure 2. Comparing Recessions
(Year-on-year change, Index, Trough=100)



Sources: Eurostat; and Istituto Nazionale di Statistica.

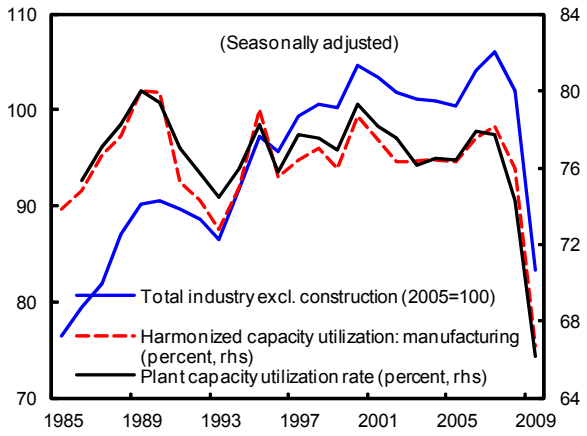
IV. ALTERNATIVE WAYS TO DISENTANGLE TEMPORARY FROM PERMANENT LOSSES

It is very difficult to assess how much of the observed decline in output is associated with a persistent (but temporary) demand shock versus supply factors. A sudden collapse in activity could be the result of a severe and long-lasting demand shock or the outcome of a structural change in the economy, such as an increase in natural rate of unemployment or a sectoral reallocation of production factors. While the latter would translate into a permanent loss in potential output, the former would translate into a temporary increase in the size of the output gap.

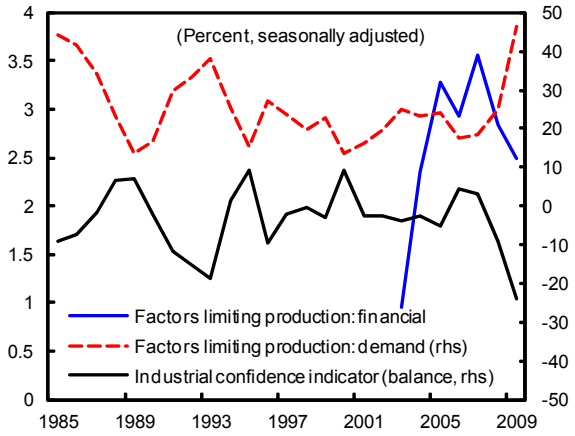
The crisis has induced an unprecedented fall in output, which is likely to have broken down previous economic relationships. While in normal times business cycle fluctuations account for most of the output volatility; in times of crisis, structural changes may occur, contributing substantially (and more than usual) to output movements.

Survey measures of capacity utilization and expected capacity constraints indicate that the adverse demand shocks started in late 2008. There is evidence that financial conditions had tightened before the collapse in capacity utilization at the onset of the crisis. However, during 2009, demand collapsed and this limited production (Figure 3).

Figure 3. Demand or Supply? Capacity Utilization and Expected Capacity Constraints



Sources: IST; EUCOM; and ISAE Haver.



Sources: European Commission; and Haver Analytics.

Several approaches have been used in this annex to assess the impact of the crisis on potential output performance. None of them is deemed to be perfect or superior, but each offers some insight into this difficult issue:

1. *Statistical approaches*. They offer the advantage of using information from the past, while being internally consistent, but the results may not be robust in periods of large structural changes. Among these we consider:[6]

a) the univariate Hodrick-Prescott (HP) filter,
b) and two multivariate unobserved component models:
   i. a multivariate filter (MV), and
   ii. a production function approach (PFA).

2. *Historical approach*. Evidence from previous international crises is also considered. Unlike some statistical methodologies, this approach does not impose any priori restrictions on the analysis and can therefore offer an alternative more judgmental perspective.

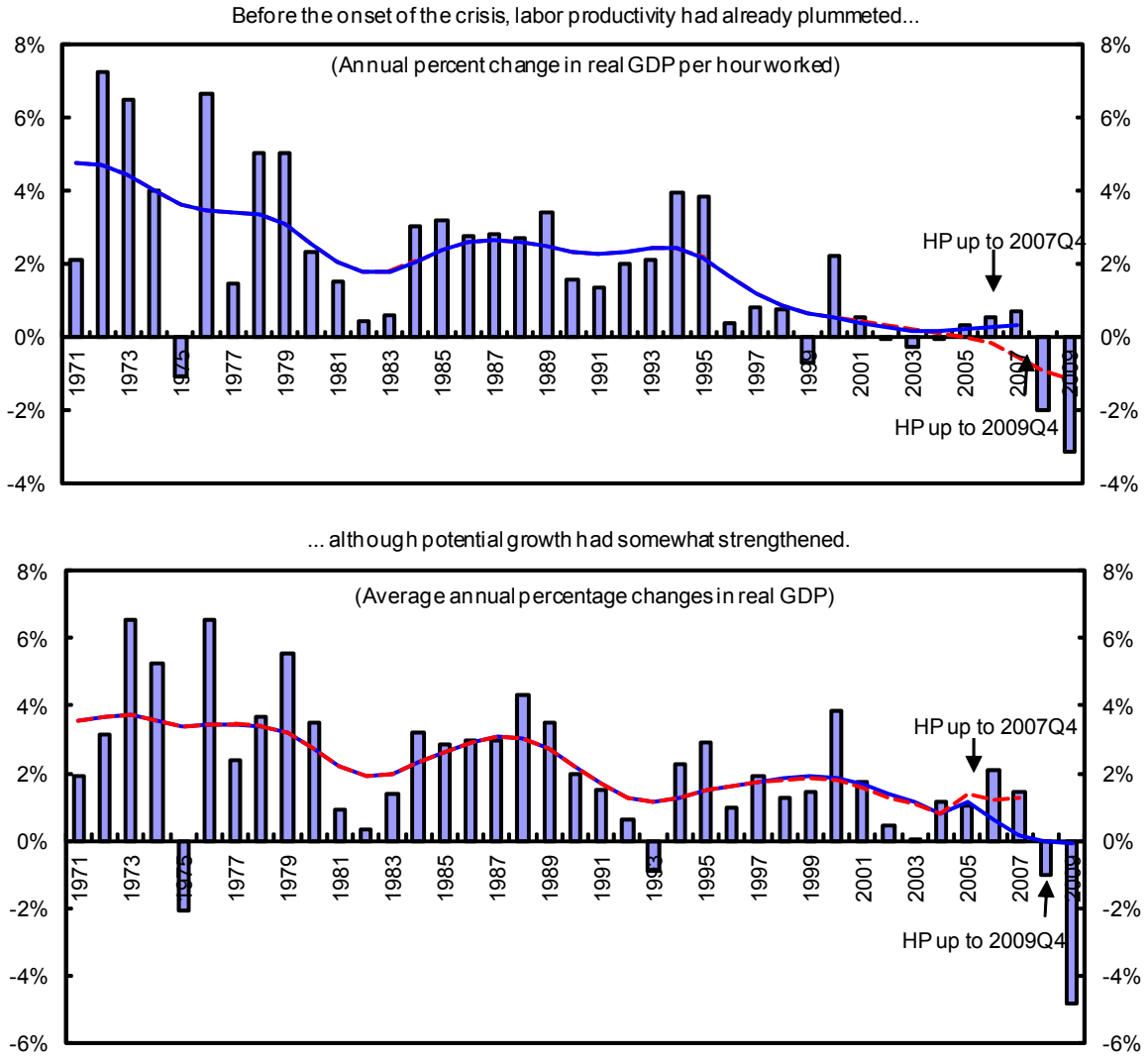
Univariate two-sided filter

Despite its simplicity, the HP filter has a number of shortcomings. The HP filter only uses the data for the series itself, hence ignoring other relevant economic information. It extracts the trend component, balancing a good fit of actual series with the smoothness of the trend. In addition, the results are not model-based and are prone to "end-point bias," which becomes a significant problem considering the substantial revisions of recent estimates (Appendix I). Generally, the approach is useful for historical analysis but not well-suited for forward looking analysis.

Estimates of potential output and potential labor productivity based on a two-sided moving average smoothing procedure (the HP filter) point to a pre-existing weakness in labor productivity trend growth (Figure 4)**.** However, because of the "end-point" problem intrinsic to the two-sided moving average smoothing procedure, trend measures based on HP-filtering procedure generally prove unreliable, especially if a prolonged recession or a structural break occurs at the end of the sample, as it was indeed the case with the outbreak of the crisis.

[6] While the HP filter imposes restrictions on the shape of the cyclical and trend component of real output, which may not hold after the crisis, the two multivariate unobserved component models have the merit of extracting long-term trends by exploiting additional information about short-run relationships, like the unemployment-inflation trade-off (in the case of the MV filter), or the productivity-capacity utilization relation (in the case of the PFA). The analytical underpinnings of a multivariate filter and a production function approach with unobserved stochastic components are reported in Appendix II and Appendix III, respectively.

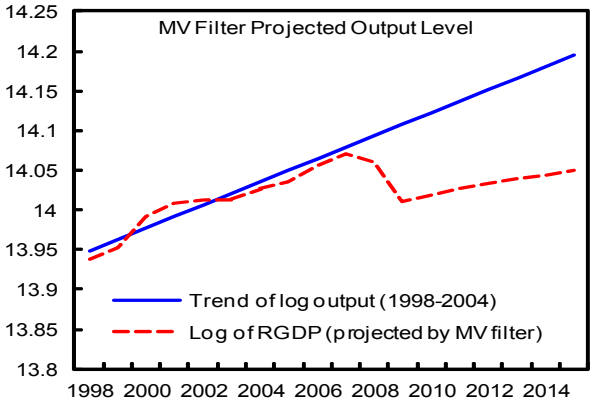
Figure 4. Looking at Potential and Labor Productivity Growth Using HP Trends



Sources: ISTAT; EU Commission; OECD; and IMF staff calculations.

A multivariate (MV) filter

A key advantage of the Multivariate (MV) filter is that it incorporates both recent data and long-term trends (Appendix II). The approach uses a small macroeconomic model to estimate the empirical relationships between actual and potential GDP, unemployment, core inflation, and capacity utilization in manufacturing. Note that this approach assumes that the relationships between the major economic variables were stable



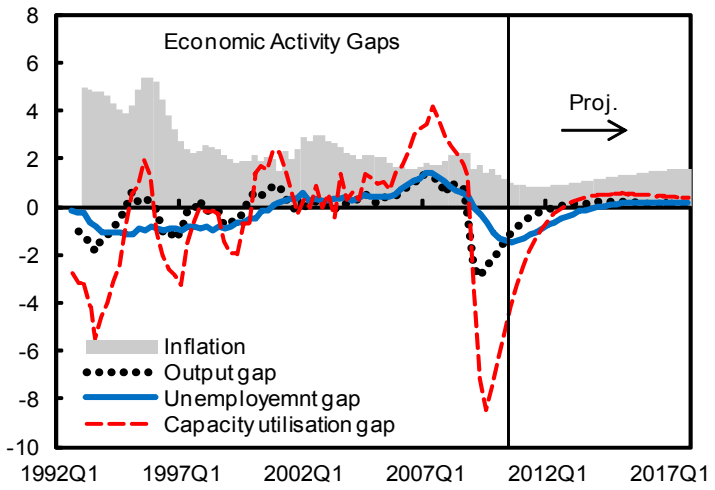
Sources: Eurostat; and IMF staff calculations.

despite the large shocks associated with the crisis. In this sense, the approach provides the counterfactual of what would be the dynamics if this were a "normal" recession (i.e. a recession for which only the size of the shock was large but without any structural break).

The MV filter estimates positive output gaps for 2005–08. The results of this filter contrast with the IMF's historical estimates, suggesting that the potential output levels were overestimated. Similarly, the model estimates negative output gap for 2009-2011, which are smaller than current projections. While staff forecasts the output gap to close in 2015, the model projects its closure by 2012. The projected real GDP level suggests an output loss of about 14 percent relative to precrisis trend (1998–2004) by 2015.

The output gap is estimated to have declined sharply in 2009, with gradual improvements thereafter. Italy's output gap is estimated to have troughed at about minus 2 percent in 1993 during the European Monetary System (EMS) crisis. Output subsequently expanded; and in the years 2000–07 the estimated output gap is mostly positive. With the 2008–09 recession, the estimated gap shows a sharper drop, to a trough of about minus 2.5 percent. The model forecasts a negative output gap of minus 1.3 percent for 2010, which gradually declines to minus 0.4 percent in 2011 before closing in 2012. The economy is expected to converge to its steady state growth by 2012. The 2-standard-deviation confidence band is about +/- 1 percent of the estimated potential growth for Italy. The behavior of inflation is consistent with the model's output gap dynamics. Italy's core inflation declined during periods with negative output gap, and rose during the years with positive gap.

The NAIRU is expected to rise moderately. The estimated NAIRU peaked in 1998, and then gradually declined before climbing up toward the end of 2009. The decline during 2008 and beginning of 2009 is likely due to the discouraged worker effect and the falling participation rates. The model, however, forecasts the NAIRU for Italy to increase by only 0.2 during 2008–10, well below the estimated 1–2 percentage rise points in most countries projected by Benes et al (2010), reflecting the measures introduced in Italy for temporary lay-off and work reducing measures. The unemployment gap closes by 2014, reflecting persistence in labor market. The NAIRU's return to the steady state rate is slow.

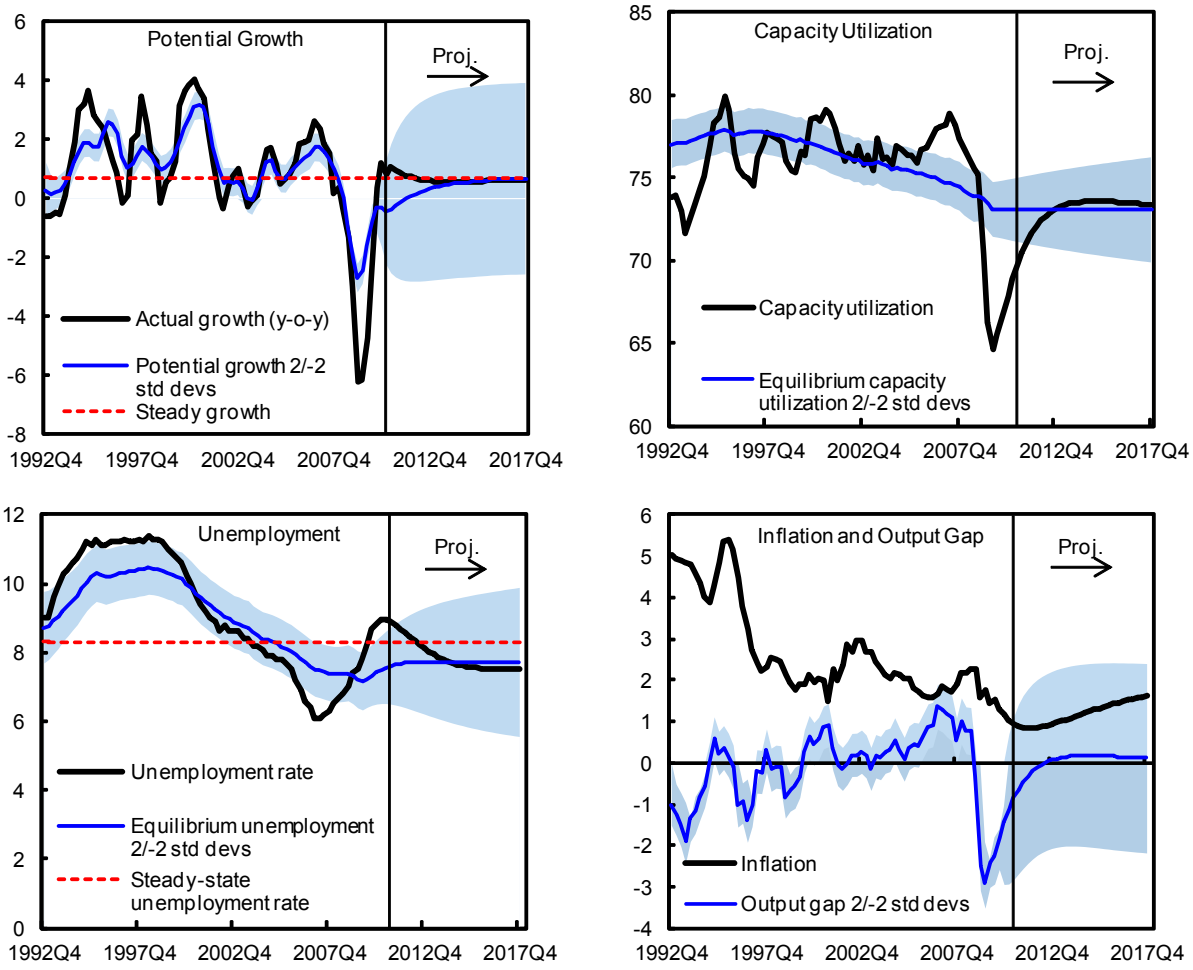


Source: IMF staff calculations.

The recoveries in output and utilization gaps are expected to move in tandem, while the unemployment gap lags behind. The above figure portrays the dynamics of the estimated gaps for output, unemployment rate, and capacity utilization. The unemployment gap is influenced by the current and lagged output gap but has smaller cyclical fluctuations. The smooth profile of the unemployment gap is associated with labor hoarding and the "discouraged worker" effect during recessions. The utilization gap exhibits more volatility with sharp declines during recessions. In particular, the utilization gap declined to in 1993 and to over 8 percent in 2009. Following the 2009 trough, the capacity utilization and the output gaps rebound, closing by 2012. In contrast, the recovery of the unemployment gap lags behind, closing by 2014.

There is a high degree of uncertainty around the forecast. While the multivariate filter projects the output gap to close by 2012, there is a high degree of uncertainty around this forecast with confidence bands widening to about 4 percentage points (-2 to +2 percent). Figure 5 illustrates the estimated year-on-year potential output growth, and the historical and projected real GDP growth. While the estimated growth of potential is correlated with actual growth, the path of potential growth is rather smooth. As expected, fluctuations in output are found to be mainly driven by demand shocks in the short-term and by movements in potential output in the long-term.

Figure 5. Short- and Medium-term Forecasts Based on a MV Approach



Source: IMF staff calculations.

A Production Function Approach

A production function approach (PFA) with unobserved stochastic components offers another perspective on potential output (Appendix III). The rationale for this approach is to estimate potential output from the trend levels of its structural determinants, such as productivity and factor inputs.[7]

[7] Using a production function, such trend levels are extracted by taking into account the relationships between the cyclical components of output and unemployment, the link between cyclical productivity and cyclical hours worked, as well as the impact of the business cycle on labor supply dynamics. Estimates are carried out using real-time data and a Bayesian framework. In order to use sufficiently long quarterly frequency time series, a PFA must usually rely on low-quality data on capital stocks and hours worked, raising issues on whether the TFP component will be spuriously contaminated by measurement problems.

Estimates from PFA show that the major source of potential growth variation is associated with changes in labor participation. The bulk of the *permanent* variation in output is found to be driven by shifts in labor trends, namely labor participation and employment. Conversely, *cyclical* variations in real GDP are mainly driven by (total factor) productivity fluctuations..

While TFP is found to be highly pro-cyclical, the dynamics of its structural component markedly diverge from those of potential output. Since the mid-1990s, TFP growth has declined from one percent to zero. On the contrary, potential growth has risen from an annual rate of 0.7 percent at the end of 1992–93 recession to over 2 percent just before the current slowdown—a growth rate analogous to that of the early 1990s. Finally, there seems to be a constant wedge between the trend growth in labor and factor productivity, confirming the idea that the rate of capital deepening has remained stable over time, at around 1 percent.

TFP and hours worked are strongly pro-cyclical. Both have dramatically plunged below trend since 2002 and have become more pro-cyclical since 1999. The unemployment rate is found to be significantly countercyclical and—consistently with previous model estimates—to fall by about 0.04 percent as output rises 1 percent above potential. Interestingly, labor participation is 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 volatility than corresponding estimates from the MV approach.[8]

The projected real GDP level suggests an output loss of about 11 percent relative to precrisis trend (1998–2004) by 2015. Potential output levels derived from the PFA are found to be lower than currently implied by the staff's projections, with the output gap estimated to have troughed in 2009 at 2.6 percent. Potential output growth is likely to have dropped by 2.7 percent in 2009, but is expected to increase to 0.4 percent in 2010 before reaching its steady-state rate of 0.8 percent. The NAIRU is estimated to rise gradually, from 7.2 in 2009 to 7.9 percent by 2014, when the unemployment gap is also expected to be reabsorbed (Table 2).

[8] Because of the high volatility of the Solow residual, conditioning real-time output decomposition upon indicators of demand pressures in product and labor market provides smoother estimates of potential growth than unobserved component models relying on a production function approach.

Table 3. Summary of Economic Indicators Implied by the PFA

(Annual percentage change, unless noted otherwise)

	2009	2010	2011	2012	2013	2014
Real GDP	-5.2	0.9	1.6	1.4	1.2	1.1
Resource utilization						
Potential GDP	-2.7	0.4	0.8	0.8	0.8	0.8
Output gap (percent of	-2.6	-2	-1.2	-0.6	-0.3	-0.1
Natural rate of unemployment	7.2	7.7	7.8	7.8	7.8	7.9
Employment	-0.8	-0.4	0.1	0	0	0
Unemployment rate (percent)	7.6	7.9	7.9	7.9	7.9	7.9
Prices						
Labor productivity	-3.2	-1.8	0	0.2	0.3	0.4
Fiscal indicators						
Structural balance net of one-offs (percent of potential GDP)	-4.5	-4.3	-4.5	-4.8	-4.9	-5.1

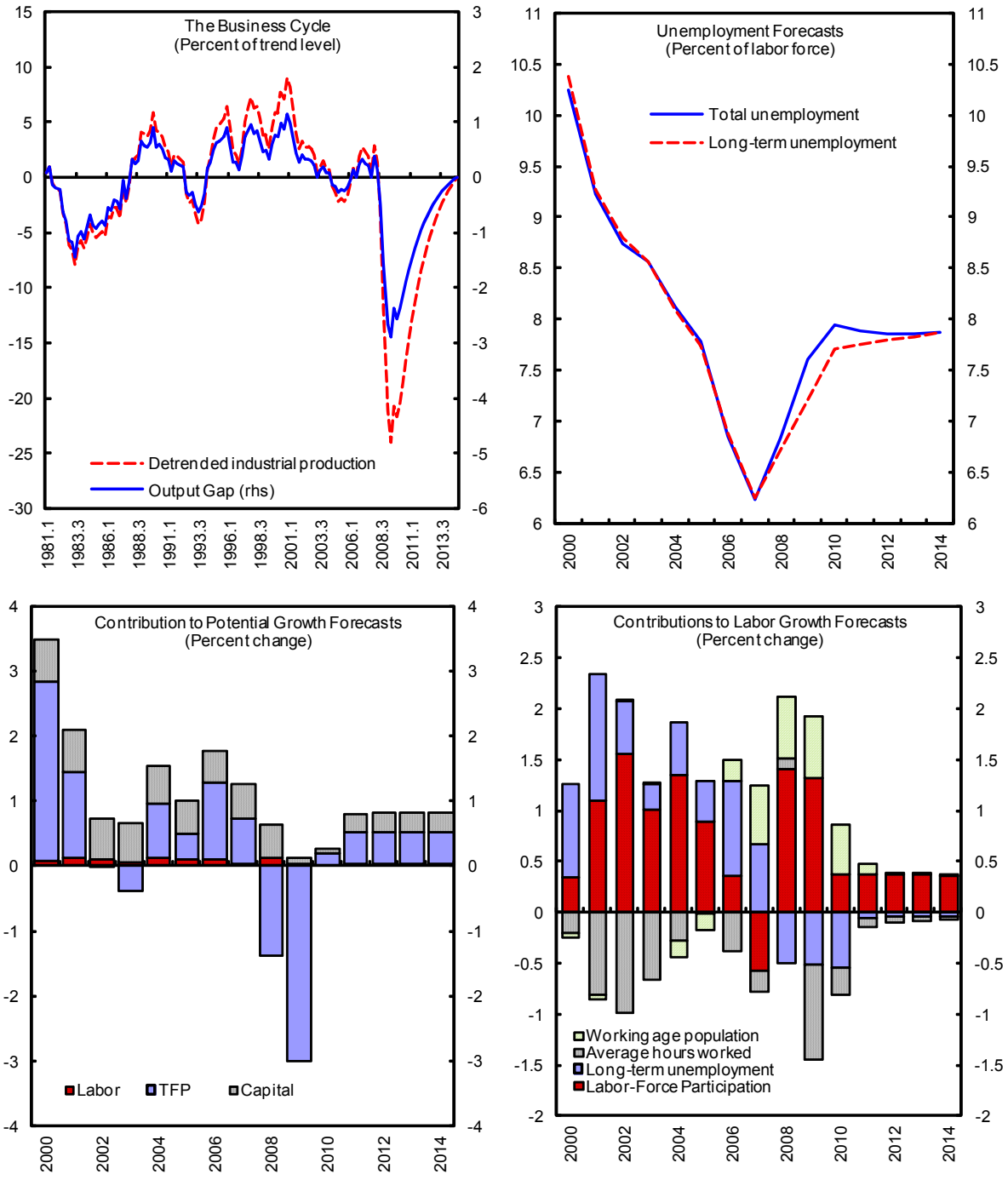
Sources: National Authorities; and IMF staff calculations.

Evidence from previous international episodes

Output performance in the aftermath of past financial crises can offer useful insights into the medium-term recovery prospects. IMF (2009) studied the medium-term output dynamics after financial crises over the past four decades across a wide range of countries. This examined the impact of initial conditions on post-crisis medium-term output losses. The initial conditions considered include those for output, investment, macroeconomic imbalances, level of income and financial development, openness, external conditions, and whether the financial crisis is accompanied by a currency crisis. Estimated OLS coefficients in IMF (2009) are here applied to calculate the impact of the global financial crisis on Italy's medium term output level (Table 3).

Based on this approach, the medium-term output is estimated to decline by about 15 percent relative to the precrisis trend but some caveats should be noted. The medium-term output is estimated to decline by about 15 percent relative to the precrisis trend, well above the 10 percent average found for historical international financial crisis episodes in IMF (2009). The result was driven by a high precrisis investment share of GDP, which was found to be highly correlated with negative capital dynamics following historical international financial crises. Indeed, evidence shows that countries with high precrisis investment to GDP ratios during the three years preceding the crisis experienced large output losses. Another key contributing factor is Italy's large initial output loss during the crisis—the variable most associated with medium-term output performance—confirming the view that the permanent toll of the crisis on economic activity has been exacerbated by Italy's deep-rooted structural weaknesses. This finding suggests that postcrisis macroeconomic policies could play a role in shaping medium-term dynamics—an issue worth examining here.

Figure 6: Short- and Medium-term Forecasts Based on a Production Function Approach



Sources: ISTAT; EU Commission; OECD; and IMF staff calculations.

Table 4. Output Losses versus Initial Conditions

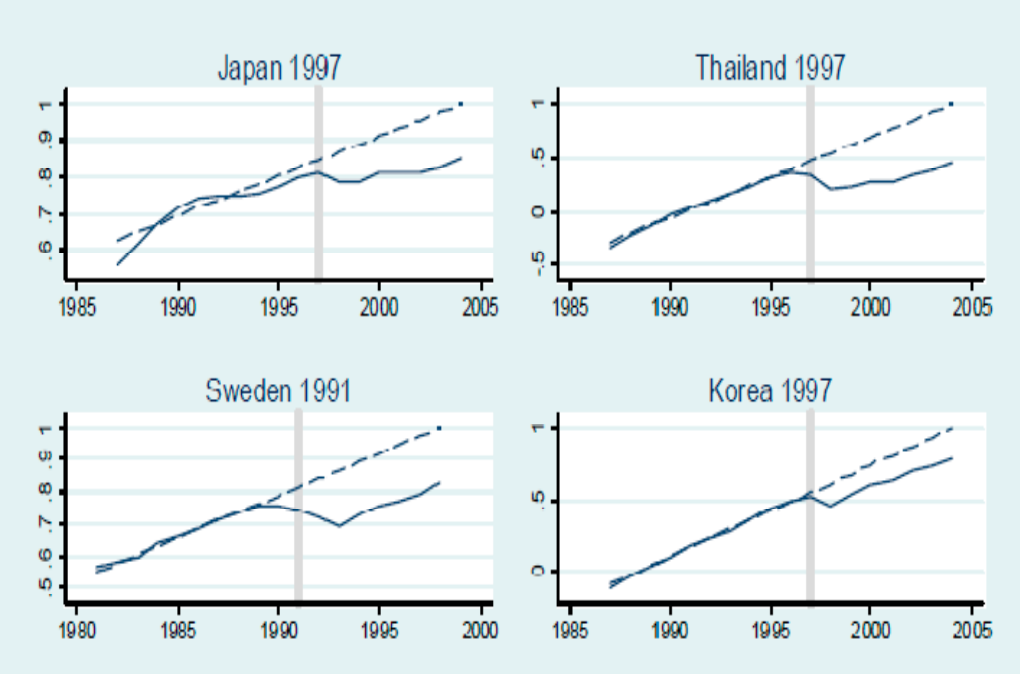
(Dependent variable: output at t=7 in percent of precrisis trend)

	Contribution	Variable definition
Investment/GDP	-0.255	Average gross fixed capital formation to GDP ratio during the three pre-crisis years.
Investment/GDP gap	-0.009	Deviation from historical average (based on the seven-year period ending three years before the crisis) of the investment to GDP ratio during the three pre-
Current account/GDP	-0.001	Average current account to GDP ratio during the three years before the crisis.
Current account/GDP gap	-0.011	Deviation from historical average (based on the seven-year period ending three years before the crisis) of current account to GDP during the three pre-crisis
Inflation	0.0001	Average inflation during the three years before the crisis.
Inflation gap	0.0001	Deviation from historical average (based on the seven-year period ending three years before the crisis) of inflation during the three pre-crisis years.
Fiscal balance	0.016	Average gerneral government overal fiscal balance to GDP ratio during the three years before the crisis.
Fiscal balance gap	-0.002	Deviation from historical average (based on the seven-year period ending three years before the crisis) of overall fiscal balance during the three pre-crisis
Log (PPP GDP per capita)	0.039	Average of the logarithm of output per capita of GDP per capita at purchasing power parity during the three years before the crisis.
Credit/GDP	-0.028	Average credit to GDP ratio during the three years before the crisis.
Credit/GDP gap	0.070	Deviation from historical average (based on the seven-year period ending three years before the crisis) of credit to GDP ratio during the three pre-crisis years.
Currency crisis	0	Dummy=1 if the financial crisis coincides with a curreny crisis, and zero otherwise.
U.S. Treasury bill rate	0.042	Three-month U.S. Treasury bill rate obtained from Thomson Datastream.
External demand shock	0	A dummy variable that equals one if partner-countries' growth is in the worst 10 percent over the last 40 years, and zero otherwise.
Financial openness/GDP	0.016	The sum of foreign assets and foreign liabilities divided by GDP, using the External Wealth of Nations Mark II Database (see Lane and Milesi-Ferretti,
Trade openness/GDP	-0.017	The sum of exports and imports divided by GDP.
Precrisis output	-0.010	Deviation from historical average (based on the seven-year period ending three years before the crisis) of output during the three pre-crisis years.
First-year output change	-0.127	Deviation from historical average (based on the seven-year period ending three years before the crisis) of output during the crisis year.
Constant term	0.125	

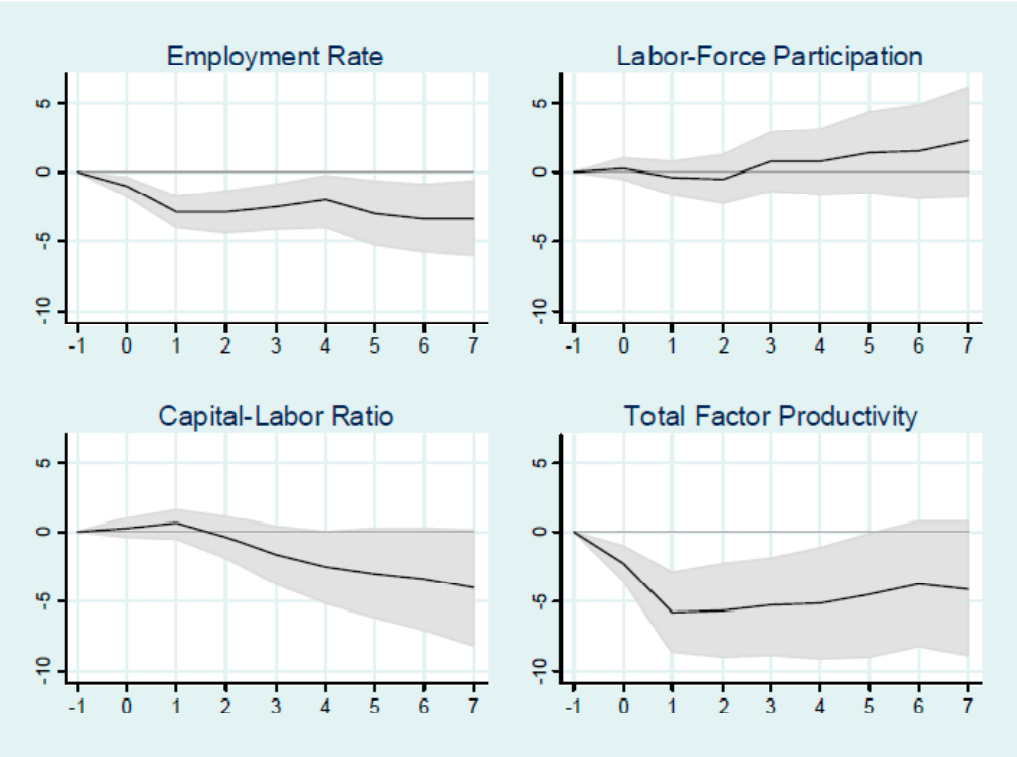
Note: The table reports contributions of respective variables for Italy based on estimated coefficient of ordinary least squares reported in IMF(2009). All the variables, except for the currency crisis and first-year output change, are calculated as average for the three years before the crisis

Figure 7: Evidence From Previous Episodes

(a) Output losses (logs)



(b) Output decomposition (percent of precrisis trend)



Sources: World Economic Outlook (2009); and Abiad and others (2009).

Summary of results

Summary of Estimated Output Losses Relative to Precrisis Trend

	2015
Multivariate Filter	-14
Production function framework	-11
Evidence from previous epidsodes	-15

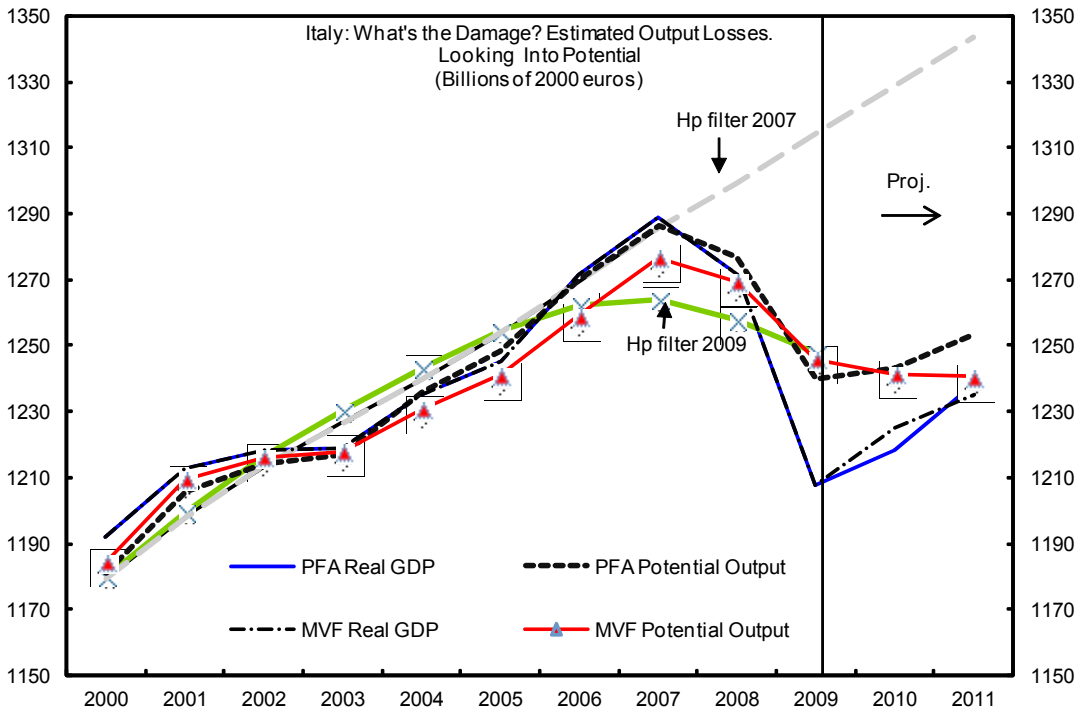
A significant permanent output loss will likely be the legacy of the global financial crisis With output back to its end-2001 level, Italy's output losses associated with the crisis at the end of 2009 are estimated to be about 125 billion of 2000 euro (about 10 percent of precrisis 1998–2004 real GDP). Three quarters of these losses are estimated to be related to shortfalls in potential output. The path of output level is not expected to rebound to its precrisis trend over the medium term, even though growth is projected to do so within the next two years. In the short-run, the decline in output growth is mainly accounted for by a collapse in productivity growth. Over the medium term, productivity is likely to recover and contribute to potential output growth by approximately 0.5 percent, while employment is deemed to suffer more enduring losses. Similarly, capital accumulation is expected to remain weak over 2010 and, in the medium term, to contribute to growth slightly less than used to. The estimated output loss by 2015 relative to precrisis trend (1998–2004) ranges between 11 to 15 percent using different methodologies.

Stronger fiscal adjustment will be required. The profile of potential output and the output gap projected by the MV filter and the PFA implies that the fiscal structural deficits are underestimated. Looking forward, there will be a need for a stronger adjustment effort than the current projections entail, and for reforms to stimulate faster growth. With the forecasted real GDP growth, the consolidation envisaged in the authorities' latest Stability Program would still not be sufficient to ensure a sustained reduction in public debt. With lower real GDP growth over the medium-term, than currently projected, a stronger, expenditure-based, adjustment effort would be needed to put debt on a declining path. A more front-loaded fiscal adjustment would also help balance, to some extent, the highly unequal intergenerational distribution of the long-term fiscal adjustment arising particularly from the current design of the pension reform.

Structural Overall Balance Excluding One-offs

(Percent of potential GDP)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
						Proj.	Proj.	Proj.	Proj.	Proj.	Proj.
Using MV filter	-4.7	-3.1	-1.9	-2.7	-4	-3.9	-4.2	-4.7	-5.1	-5.2	-5.5
Using PFA	-4.7	-2.9	-1.8	-2.7	-4.5	-4.2	-4	-4.3	-4.6	-4.8	-4.9
Current estimates	-4.3	3.8	-2.5	-2.6	-3.9	-3.5	-3.4	-3.8	-4.2	-4.5	-4.6



Sources: ISTAT; and IMF staff calculations.

V. POLICY: LIMITING THE DAMAGE

Downside risks for a permanent loss in potential output growth in the long run remain, especially if the global recovery stalls and financial conditions worsen, adversely impacting investments and total factor productivity growth. As highlighted by evidence from previous crisis episodes, downside risks to the output growth recovery reflect a sharper than expected fall in TFP and capital accumulation during the recession as well as a declining labor participation rate, mainly due to lack of incentives for industrial restructuring.

Policy can also limit the damage. Macroeconomic policies can shape medium-term dynamics by reducing the permanent costs associated to the crisis. In Italy, for example, the wage supplementation fund (*Cassa Integrazione Guadagni)* does involve on-the-job training which could cushion the impact of the crisis on structural unemployment.

But which policy priorities? Applying the Lisbon Assessment Framework (LAF) may help identify policy priorities and areas that could help strengthen medium-term TFP growth, (Table 4). TFP growth is shown to be affected by a number of policies, notably in the areas of R&D and innovation, education, product and capital market regulation, as well as a number of labor market policies aiming at increasing working time and making work pay.

The overall LAF picture shows an improvement in reforms in the corresponding area over 2001–2007 with respect to the EU 15.[9]

The European Economic Recovery Programme (EERP) also called for priority to be given to structural policies. The EERP has called for these measures to be consistent with long-term policy objectives such as those found in the Lisbon Strategy, the smooth functioning of the Single Market, and facilitating a move towards a low-carbon economy. The assessment published by the European Commission services (European Commission 2009), shows that Member States are largely undertaking policy responses in line with these principles.

Despite the above-mentioned progresses, however, the impact on Italy's productivity and economic growth has been limited. This may suggest divergent conclusions: either the effects of the implemented reforms are yet to be felt in Italy, or a lot more is needed for reforms to produce visible results or—and this is also a possibility—reforms are not as growth-inducing as the literature seems to suggest.

If growth cannot be resumed through structural reforms, sizeable fiscal adjustment will be required. With lower real GDP growth over the medium-term than currently projected, a stronger, expenditure-based, adjustment effort would be needed to put debt on a declining path. This calls for a more ambitious fiscal consolidation starting now.

[9] For a recent analysis of Italy reform progresses see also Codogno and Felici (2008).

Table 5: Policy Areas Likely Responsible for GDP Performance

Policy area	Level		Growth	
	(*)	GDP components involved	(*)	GDP components involved
Labour market				
Active labour market policies	S	Youth Participation 25-54 Female Participation 25-54 Male Participation 55-64 Participation		Youth Participation
Making work-pay: interplay of tax and benefit system	S	Youth Participation 25-54 Female Participation 25-54 Male Participation 55-64 Participation	B	Youth Participation Total Factor Productivity
Labour taxation to stimulate labour demand	S			
Job protection and labour market segmentation/dualisation	B	Youth Participation 25-54 Female Participation 25-54 Male Participation 55-64 Participation Total Factor Productivity	S	Youth Participation Total Factor Productivity
Policies increasing working time		Total Factor Productivity		Total Factor Productivity
Specific labour supply measures for women	S	Youth Participation 25-54 Female Participation 55-64 Participation	S	Youth Participation
Specific labour supply measures for older workers	B	55-64 Participation		
Wage bargaining and wage-setting policies	S			
Immigration and integration policies	S	Net migration	B	
Labour market mismatch and labour mobility	B	Youth Participation 25-54 Female Participation 25-54 Male Participation		Youth Participation
Product and capital market regulations				
Competition policy framework	S	Total Factor Productivity Capital Deepening	S	Total Factor Productivity Capital Deepening
Sector specific regulation (telecoms, energy)	S	Total Factor Productivity Capital Deepening		Total Factor Productivity Capital Deepening
Market integration - Openness to trade and investment	S	Total Factor Productivity Capital Deepening Labour Quality		Total Factor Productivity Capital Deepening
Business environment - Regulatory barriers to entrepreneurship	B	Total Factor Productivity Capital Deepening		Total Factor Productivity Capital Deepening
Business Dynamics - Start-up conditions	B	Total Factor Productivity Capital Deepening	B	Total Factor Productivity Capital Deepening
Financial markets and access to finance	S	Total Factor Productivity Capital Deepening		Total Factor Productivity Capital Deepening
Innovation and Knowledge				
R&D and Innovation	B	Labour Quality		Total Factor Productivity Capital Deepening
ICT	S	Total Factor Productivity Capital Deepening		Total Factor Productivity Capital Deepening
Education and life-long learning	B	Youth Participation 25-54 Female Participation 25-54 Male Participation 55-64 Participation Labour Quality (Education) Total Factor Productivity	S	Youth Participation Total Factor Productivity
Macroeconomy				
Orientation and sustainability of public finances	S	Capital Deepening	S	Capital Deepening

(*) Existence of policy issue(s): B= "Broad policy issue" means that the aggregate index shows underperformance (aggregate score is below -4 in Table 2), while S= "Specific policy issue" indicates that only a set of sub-indicators shows underperformance.

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Appendix I. 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 frequency of the series), the decomposition of cycle and trend estimated by an HP filter turns out to be inaccurate under two circumstances:

- **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.
- **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 2½ 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 the on-going prolonged slowdown using HP trends could prove to be misleading.

Annex II: Appendix II. A Multivariate Filter

The table below presents the equations of the multivariate filter.[10]

MV Model Equations	
$y_t = 100 * LOG(Y_t/\bar{Y}_t)$	(1)
$u_t = \bar{U}_t - U_t$	(2)
$c_t = C_t - \bar{C}_t$	(3)
$\pi 4_t = \pi 4_{t-1} + \beta y_t + \Omega(y_t - y_{t-1}) + \varepsilon_t^{\pi 4}$	(4)
$u_t = \phi_1 u_{t-1} + \phi_2 y_t + \varepsilon_t^{u}$	(5)
$c_t = k_1 c_{t-1} + k_2 y_t + \varepsilon_t^{c}$	(6)
$\bar{U}_t = \bar{U}_{t-1} + G_t^{\bar{U}} - \omega y_t - \frac{\lambda}{100}(\bar{U}_{t-1} - U^{ss}) + \varepsilon_t^{\bar{U}}$	(7)
$G_t^{\bar{U}} = (1-\alpha) G_{t-1}^{\bar{U}} + \varepsilon_t^{G^{\bar{U}}}$	(8)
$\bar{Y}_t = \bar{Y}_{t-1} - \theta(\bar{U}_t - \bar{U}_{t-1}) - (1-\theta)(\bar{U}_t - \bar{U}_{t-20})/19 + G_t^{\bar{Y}}$	(9)
$G_t^{\bar{Y}} = \tau G_{ss}^{\bar{Y}} + (1-\tau) G_{t-1}^{\bar{Y}} + \varepsilon_t^{G^{\bar{Y}}}$	(10)
$\bar{C}_t = \bar{C}_{t-1} + G_t^{\bar{C}} + \varepsilon_t^{\bar{C}}$	(11)
$G_t^{\bar{C}} = (1-\delta) G_{t-1}^{\bar{C}} + \varepsilon_t^{G^{\bar{C}}}$	(12)
$\pi 4_t^{LTE} = \pi 4_{t-1}^{LTE} + \varepsilon_t^{\pi 4^{LTE}}$	(13)
$y_t = \rho_1 y_{t-1} - \rho_2(\pi 4_{t-1} - \pi 4_{t-1}^{LTE}) + \epsilon_t^{y}$	(14)

The model includes output, unemployment, and capacity utilization gaps. Equation (1) defines the output gap y_t as the log difference between actual GDP (Y_t) and potential GDP ($\bar{Y}_t$). The output gap is approximately measured as percent of potential output. The concept of potential output used is the maximum amount of output that can be produced without generating upward or downward pressures for inflation. Equation (2) defines the unemployment gap u_t as the difference between the equilibrium unemployment rate, or NAIRU, ($\bar{U}_t$) and the actual unemployment rate (U_t). A positive unemployment gap indicates excess demand for labor. In equation (3), the capacity utilization gap (c_t) is the difference between the actual manufacturing capacity utilization index (Ct) and its equilibrium level ($\bar{C}_t$).

The model focuses on core inflation to best capture the relationship between excess demand and inflation, avoiding the components of the CPI that change for exogenous reasons. Equation (4) describes the inflation dynamics. The current core inflation is affected by the level (y_t) and the change ($y_t - y_{t-1}$) in the output gap. The output gap displays the influence of excess demand on inflation. If the economy is producing above its potential, i.e., has a positive output gap, inflation will rise. The change in output gap embodies rigidities in

[10] The equations that are presented here are those used for the estimation of the potential output in "The Global Financial Crisis and Its Implications for Potential Output", Forthcoming IMF Working Paper.

the adjustment process of the economy, such as increased structural unemployment following a recession. The previous period inflation, with coefficient set to one, would (i) proxy for inflation expectations, and (ii) entails no long-run tradeoff between inflation and output.

The unemployment dynamics reflect labor market characteristics. Equation (5) identifies the unemployment gap dynamics by the output gap and the lagged unemployment gap. Okun's law suggests a relationship between unemployment and output movements. The lagged unemployment gap is included to reflect the lag between developments in output and unemployment in line with theory and data. Similarly, equation (6) implies a relationship between capacity utilization gap, its lag, and output gap. The evolution of equilibrium unemployment rate, NAIRU, is determined in equation (7). The equilibrium unemployment ($\bar{U}_t$) is influenced by its lag, transitory shocks ($\varepsilon_t^{\bar{U}}$), persistent shocks ($G_t^{\bar{U}}$), the output gap, and difference between current equilibrium unemployment and its steady state level in the long-run(U^{ss}). The specification would take into consideration the persistence in unemployment. The persistent shocks follow an autoregressive process illustrated in equation (8).

Data Sources

Y	Gross Domestic Product (SAAR, Bil.Chn.2000.Euros)
C	Capacity utilization in manufacturing sector (Haver)
$\pi 4_t$	Annual rate of core inflation (Haver)
$\pi 4_t^{LTE}$	Long term inflation expectations (Consensus Economics)
U	Unemployment rate (SA, percent)

The potential output depends on changes in NAIRU and the underlying potential growth trend. In equation (9), the coefficient for first difference of the NAIRU is set to equal the labor share in a Cobb-Douglas production function (θ). The coefficient of the long-run difference (19 quarters) of NAIRU is constrained to (1-θ) so that in the log-run the impact of a permanent changes in NAIRU are fully reflected in the potential output level. The underlying potential growth trend ($G_t^{\bar{Y}}$)follows serially correlated deviations from the steady-state growth rate. The equilibrium capacity utilization ($\bar{C}_t$) also follows a stochastic process with transitory ($\varepsilon_t^{\bar{C}}$) and persistent ($G_t^{\bar{C}}$) shocks. Equation (13) formulates the perceived long-term inflation objective, taking into consideration revisions to previous period expectations captured by ($\varepsilon_t^{\pi 4^{LTE}}$). The historical data for the long-term inflation expectations is obtained from Consensus Economics. In equation (14), the output gap is influenced by monetary policy, while other factors encompassed by the stochastic term(ϵ_t^y).

The model is estimated using Bayesian technique. The sample period is 1992Q4 to 2009Q3. We assume a steady-state value of 0.61 for the labor share, 0.7 percent for output growth, and 8.3 percent for the unemployment rate. Table 1 displays prior distributions and estimated posterior distributions. The results are relatively robust as evidenced by the limited sensitivity of the current quarter estimates to new data revisions (Table 2).

Table 1. Maximum Regularised Likelihood

Parameter	Prior		Posterior	
	Mode	Dispersion	Mode	Dispersion
alpha	0.500	0.016	0.496	0.024
beta	0.400	0.032	0.218	0.040
omega	0.500	0.032	0.392	0.045
rho1	0.800	0.016	0.806	0.024
kappa1	0.100	0.063	0.427	0.059
phi1	0.800	0.016	0.813	0.025
phi2	0.300	0.016	0.252	0.024
tau	0.100	0.016	0.113	0.022
delta	0.500	0.016	0.498	0.024
kappa2	1.500	0.158	1.735	0.141
parhist	5.000	0.316	4.925	0.472
rho2	5.000	0.316	5.034	0.468
lambda	1.000	0.316	1.061	0.441
std_RES_Y	1.000	0.032	0.906	0.049
std_RES_G	1.000	0.032	1.038	0.049
std_RES_UNR_GAP	0.500	0.032	0.330	0.044
std_RES_UNR_BAR	0.100	0.016	0.099	0.024
std_RES_UNR_G	0.100	0.016	0.117	0.021
std_RES_CAPU_GAP	0.400	0.032	0.569	0.040
std_RES_CAPU_BAR	0.250	0.016	0.274	0.025
std_RES_CU_G	0.075	0.003	0.076	0.005
std_RES_PIE	0.500	0.032	0.478	0.039
std_RES_PIELTE	0.300	0.032	0.159	0.019

Table 2. Forecasting Accuracy and Revision Robustness

Root Mean Squared Errors

Parameter	1Q Ahead	4Q Ahead	8Q Ahead	12Q Ahead
LGDP	0.598	1.929	2.882	3.259
PIE4	0.273	0.656	0.826	0.907
UNR	0.228	0.691	1.164	1.421
CAPU	1.043	2.717	3.221	3.067
PIELTE	0.142	0.326	0.453	0.621

Mean absolute revisions (according to most recent estimates)

quarter	t-12	t-8	t-4	t (nowcast)
Y	0.144	0.176	0.227	0.295
Y (HP)	0.120	0.177	0.327	0.498
UNR_GAP	0.131	0.125	0.110	0.096
UNR_GAP (HP)	0.076	0.070	0.177	0.332

Annex II: Appendix III. A Production Function with Unobserved Stochastic Components[11]

Output decomposition is further carried out within a production function framework. The rationale is to derive potential output estimates from the trend levels of its structural determinants, such as productivity and factor inputs. In considering a specification of the technology which allows for variable capital utilization, we assume a quite flexible production function:

$$Y_t = A_t (C_t L_t)^{\beta} (C_t K_t)^{1-\beta} \qquad (15)$$

Here, technology has the usual Cobb-Douglas representation with constant returns to scale and perfect market competition.[12] Hence, β is the labor share—measured by the cost of labor services as a share of total costs—*A* represents total factor productivity, *L* denotes total hours worked in the economy, *K* is the capital stock, and *C* is the unobserved degree of capacity utilization—ranging over the interval (0,1]—both labor and capital are adjusted for.[13] Taking logs of both sides of equation (15)—here denoted by small caps—yields:

$$y_t = (a + c) + \beta l_t + (1 - \beta) k_t \qquad (16)$$

All factor inputs in equation (16) can be additively decomposed into their (unobserved) permanent (denoted by superscript star) and cyclical (denoted by superscript *c*) components, with the exception of the capital stock, which is assumed to be fully permanent and, hence, to contribute only to potential. While the permanent component of the Solow residual (a^*) is solely driven by technology, the transitory component of the Solow residual (a^c) is likely to absorb all nontechnological effects to productivity as well as fluctuations in the intensity of capital use. As such, the stationary component of the Solow residual is likely to display more business cycle variability than strictly defined TFP. Algebrically:

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[11] This appendix draws on Sgherri (2004).

[12] In the model we have in mind, all the non-technological effects (e.g., non-constant returns to scale, imperfect competitions, and input reallocations) considered by Basu, Fernald, and Kimball (2004) and briefly discussed in Section II, do not operate in the long run, so that over long horizons, productivity is solely driven by technology. In particular, whenever a shock increases demand, the increase in production would mandate higher output per firm and would lead to increases in profits. This would spur entry and drive per firm output and profits down to zero. By the same token, in order for increasing returns to contribute to long-run productivity growth, firms should expand their scale of operation, thereby reducing unit costs forever. This is impossible, as scale economies would be reduced as new firms enter the market and per-firm output falls. Non-technological effects would, however, operate over the short run and would therefore be part of the cyclical component of the Solow residual.

[13] Basu and Kimball (1997) show that if the sole cost of changing the workweek of capital is that workers need to be compensated for working at night, then one can use a single proxy for changes in *both* effort and capital utilization.

$$\begin{aligned} \tilde{a} &\equiv (a+c) = a^* + a^c, \\ l &= l^* + l^c, \\ k &= k^*. \end{aligned} \qquad (17)$$

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).[14] 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:

$$\begin{aligned} l^* &= wpop + pr^* - u^* + h^*, \\ l^c &= pr^c - u^c + h^c. \end{aligned} \qquad (18)$$

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

Combining identities (16)-(17)-(18) yields a multivariate UC model for output decomposition. Specifically, the model consists of a measurement equation for real output:

$$y_t = \beta wpop_t + (1-\beta)k_t + \begin{bmatrix} 1 & \beta & -\beta & \beta \end{bmatrix} \boldsymbol{\mu}_t + \begin{bmatrix} 1 & \beta & -\beta & \beta \end{bmatrix} \boldsymbol{\psi}_t, \qquad (19)$$

where the unobserved permanent and transitory components are denoted by $\boldsymbol{\mu}_t = \begin{bmatrix} a^* & pr^* & u^* & h^* \end{bmatrix}'$ and $\boldsymbol{\psi}_t = \begin{bmatrix} a^c & pr^c & u^c & h^c \end{bmatrix}'$, respectively. The transition system describing the dynamics of such stochastic unobserved components is given by:

$$\begin{cases} \boldsymbol{\mu}_t = \boldsymbol{\mu}_{t-1} + \boldsymbol{\kappa}_{t-1} + \mathbf{v}_t^{\mu}, & \mathbf{v}_t^{\boldsymbol{\mu}} \sim \mathbf{N}(\mathbf{0}, \boldsymbol{\Sigma}_{v^{\mu}}), \\ \boldsymbol{\kappa}_t = (\mathbf{I}-\mathbf{P})\boldsymbol{\kappa}^* + \mathbf{P}\boldsymbol{\kappa}_{t-1} + \boldsymbol{\omega}_t^{\kappa}, & \boldsymbol{\omega}_t^{\boldsymbol{\kappa}} \sim \mathbf{N}(\mathbf{0}, \boldsymbol{\Sigma}_{\omega^{\kappa}}), \\ \boldsymbol{\psi}_t = \boldsymbol{\tau}\varphi(L) ip_t + \boldsymbol{\varepsilon}_t^{\boldsymbol{\psi}}, & \boldsymbol{\varepsilon}_t^{\boldsymbol{\psi}} \sim \mathbf{N}(\mathbf{0}, \boldsymbol{\Sigma}_{\varepsilon^{\psi}}). \end{cases} \qquad (20)$$

where the reference cycle—an autoregressive process of second order $\varphi(L)$ that is here constrained to be common across factor inputs—is assumed to be driven by fluctuations in the industrial production index, *ip*. The four transitory components in vector $\boldsymbol{\psi}_t$—e.g., the Solow residual, a^c, the participation ratio, pr^c, the unemployment rate, u^c, and the average hours, h^c—can in turn be expressed as linear combinations of current and lagged values of the reference cycle, given the matrix of loading parameters, $\boldsymbol{\tau}$. Corresponding factor inputs

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

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 matrix *P*. For instance, if the first element in *P* is estimated to be insignificantly different from 1, then TFP would be an integrated series of second order. Else, if $0<P_{1,1}<1$, the time-varying TFP growth rate would converge back to a steady-state rate, κ_1^*. $\boldsymbol{\varepsilon}_t^{\psi}, \mathbf{v}_t^{\mu}$, and $\boldsymbol{\omega}_t^{\kappa}$ denote the vectors of shocks to the cyclical components, the factor trends, and the trend growth rates, respectively. The shocks are assumed to follow independent identically distributed processes, with error covariance matrices $\boldsymbol{\Sigma}_{\varepsilon}, \boldsymbol{\Sigma}_{\mathbf{v}}$, and $\boldsymbol{\Sigma}_{\boldsymbol{\omega}}$, respectively. The dynamics of permanent and transitory components depend on the nature of the shocks, that is, on the relative importance of supply and demand shocks.[15] This relative importance, which determines the smoothness of the trend component, is the ratio of the variance of the cycle to the variance of the trend fluctuations. A small ratio implies that shocks are mainly supply shocks, where trend inputs moves nearly with observed data, and hence a small business cycle component is to be 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.

Once the model (19)-(20) 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 set of initial parameters and 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.[16]

[15] By construction, demand and supply shocks are assumed to be orthogonal.

[16] 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.

ANALYTICAL ANNEX III: THE RECENT SLOWDOWN IN BANK CREDIT GROWTH: WHAT ARE THE FACTS?[1]

In Italy bank credit growth has declined sharply in the past two years. *This slowdown coincided with the global crisis and the associated bank financing difficulties, a substantial fall in private consumption and investment, and a significant deterioration in firms' creditworthiness. This paper assesses whether the recent slowdown in bank lending was driven by a drop in demand for credit, or by supply tightening due to lack of loanable funds or to discrimination against riskier borrowers.[2] First a comparison is made between the current episode of lending slowdown and credit developments during the 1992–93 recession, as well as previous episodes of lending tightening. The results from recent bank and enterprises surveys on credit demand and supply conditions are also discussed. Then a bank loan supply and demand functions are estimated to detect any evidence of excess demand in the credit market. Survey results and the econometric analysis suggest that in late 2008-early 2009 banks progressively tightened lending standards. Excess demand in the credit market was particularly acute for a brief period, in early 2009, but there is little evidence of a prolonged supply-driven "credit crunch" thereafter. Overall, the analysis suggests that policy actions to sustain credit growth in Italy should rely on measures in support of borrowers rather than lenders.*

I. INTRODUCTION

Since early 2008 bank lending tightened significantly in Italy, especially for the corporate sector. Credit growth to the private sector slowed down sharply, starting in 2008, from around 10 percent on an annual basis, to 0.1 percent in October 2009, and picked up slightly again since November 2009. The slowdown in credit has been longer and harsher for firms than for households. Annual loan growth to non financial corporations has been negative since September 2009, while credit growth to households always remained positive and bottomed out at the beginning of 2009.[3] Within household credit, mortgage lending growth initially fell more than consumer lending. Other large euro area countries have experienced a similar sharp contraction in credit growth to firms, while in those economies the slowdown in household lending has been more protracted than in Italy.

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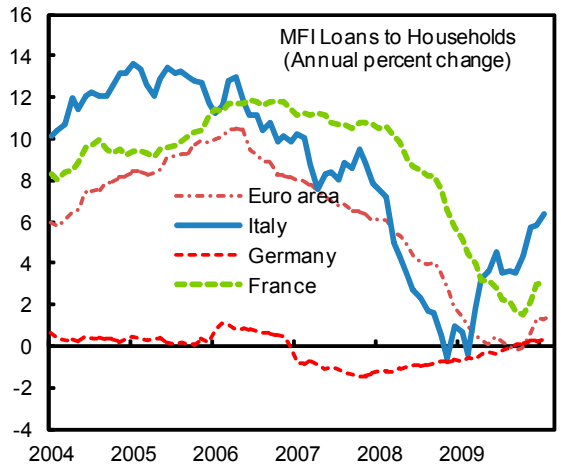
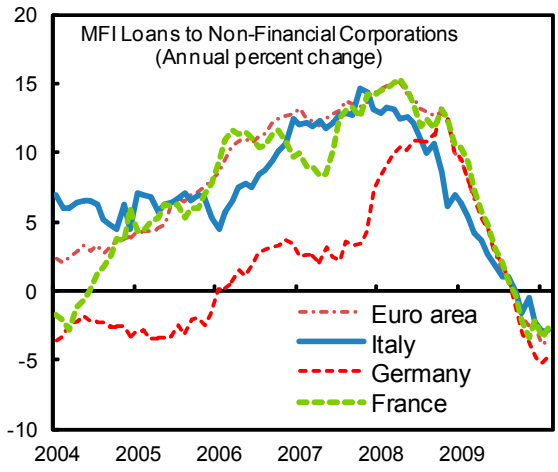
[1] Prepared by Edda Zoli. The author thanks Lorenzo Codogno, Alexandra Folie, Eugenio Gaiotti, Alessandro Giustiniani, Alessandro Gullo, and Antonio Spilimbergo for useful inputs and comments.

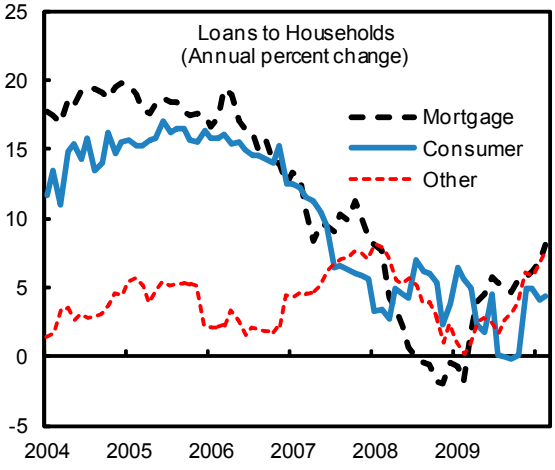
[2] Other works on this topic include Di Giulio (2009), Albertazzi and Marchetti (2010), Del Giovane, Eramo, and Nobili (2010), and Panetta and Signoretti (2010).

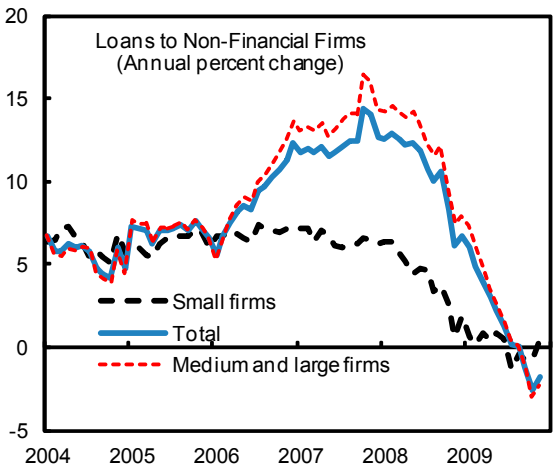
[3] Data on households loans adjusted for the effects of securitization, however, indicate that credit growth remained stagnant during 2009 and started to pick up again only at the end of last year.





Source: European Central Bank.





Source: Bank of Italy.

The fall in bank credit growth has been more pronounced for large and medium sized enterprises than for small firms. Loan growth to large and medium sized enterprises fell by 17 percentage points, from a record high of plus 14 percent average annual rate in 2007, to minus 3.0 percent in October 2009. Credit growth to small firms fell by 8.3 percentage points, from plus 6.5 percent average annual rate in 2007 to minus 1.8 percent in July 2009.

Despite the severe output contraction over the 2008–09 period, so far the slowdown in credit to the private sector has been somewhat milder than in the 1992–93 recession.[4] Six quarters after the start of the recession, nominal annual lending growth to the private sector has fallen by 8.0 percentage points, while in the corresponding period in the early 1990s, nominal annual credit growth had dropped by 14.5 percentage points. Also in real

[4] A comparison with the 1974–75 recession is rather difficult, due to the impact of high inflation rates on nominal and real credit growth at that time. Comparisons with more recent recession episodes could be misleading, as in those cases the output contraction was much milder than in the current recession.

terms so far the slowdown in lending growth has been smaller than in the 1992–93 recession. While the size of the current credit growth slowdown is historically large it is not unprecedented (Table 1).

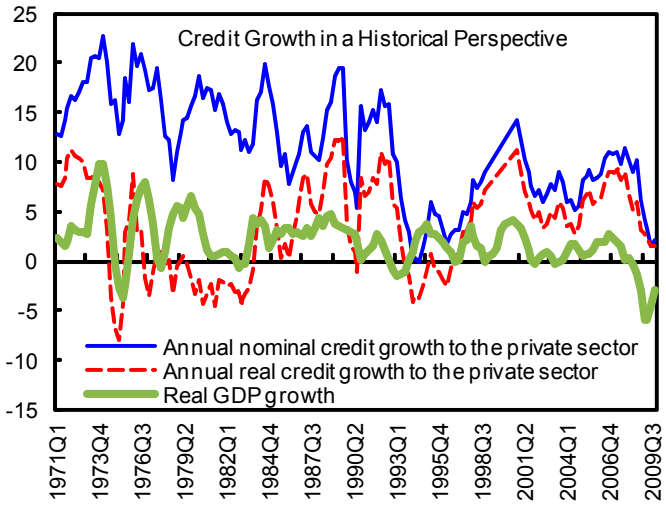
Table 1. Historical Episodes of Sharp Slowdown in Domestic Credit

Periods	Change in growth in nominal credit to the private sector over the period (Percentage points)	Change in growth in real credit to the private sector over the period (Percentage points)
1973Q4-1975Q4	-4.3	-3.8
1976Q1-1978Q3 1/	-13.7	-12.0
1979q2-1983q1 2/	-3.0	-4.6
1980Q4-1982Q4	-4.4	0.2
1983Q4-1986Q4	-1.1	2.4
1988Q4-1991Q4	-2.0	-2.7
1991Q4-1994Q4 1/	-12.7	-10.2
2007Q4-2009Q4	-9.3	-7.4

Sources: Bank of Italy; and IMF staff calculations.

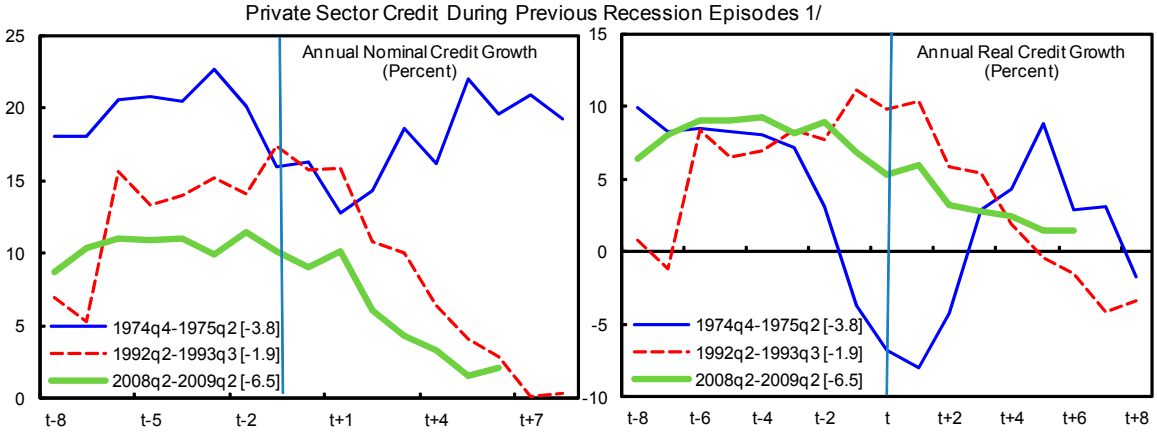
1/ Episodes of sharp slow dow n in domestic credit identified in Bassanetti et al. (2009).

2/ Episode of sharp slow dow n in domestic credit identified in Claessens, Kose and Terrones (2008).



Sources: ISTAT; and IMF.

Private Sector Credit During Previous Recession Episodes 1/



Source: IMF staff calculations.
1/ The legend shows the dates of previous recession episodes. The percent cumulative output loss over the recession period is shown in brackets. t is the recession starting period.

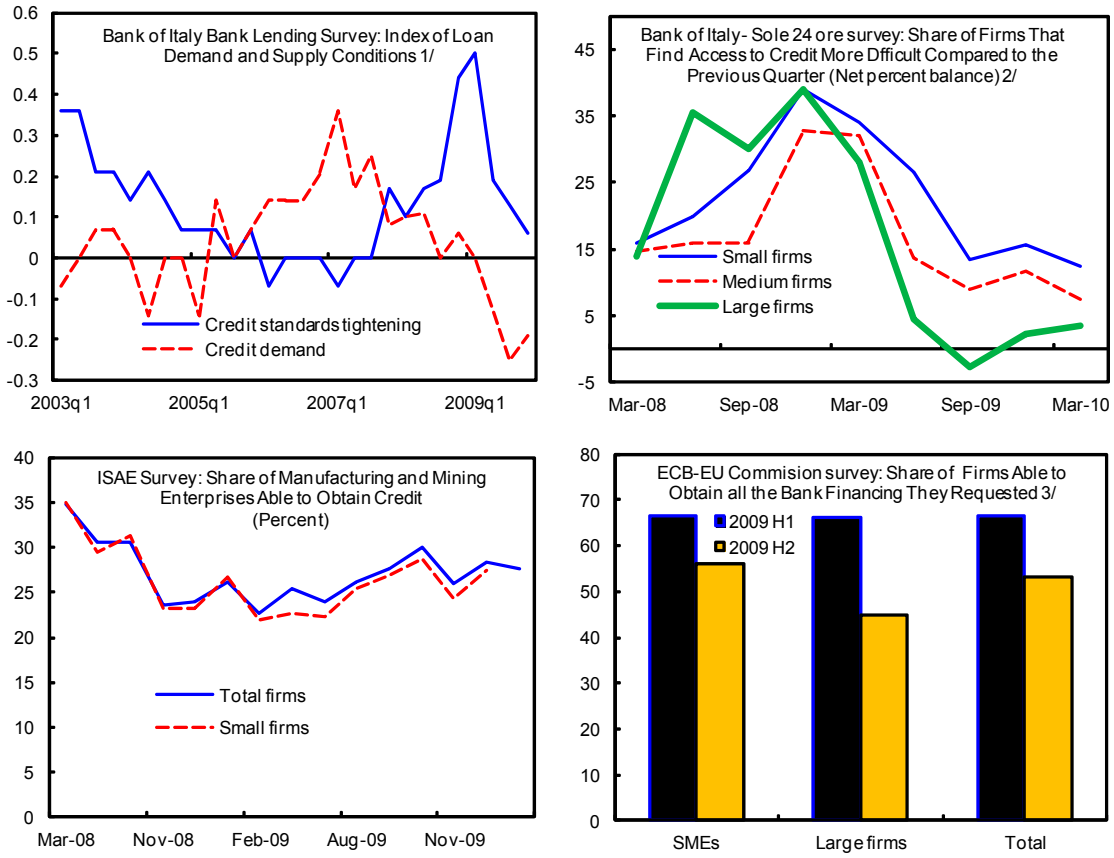
II. WHY HAS BANK LENDING SLOWED DOWN?

Slow credit growth could be driven by weak lending supply, weak credit demand, or both. The fact that the fall in credit growth has been more pronounced for firms than for households is an indication that low demand and discrimination across borrowers with a different risk profile might have played an important role in the lending slowdown. Indeed, if banks had been unable to extend credit due to a limited availability of loanable funds, they would have cut lending to all types of borrowers. This section tries to better understand the factors behind the current loan growth slowdown. Given that credit tightening is more severe for firms than for households, the focus is on the former, which accounts for about 50 percent of total private sector credit.

Surveys of banks and enterprises suggest that tightening of lending standards and lower loan demand have both contributed to the recent slowdown in credit growth, with the slowdown in demand preceding the peak in credit standards tightening. The Bank of Italy's bank lending survey indicates that bank credit standards became increasingly tighter in the second part of 2008 until early 2009, both for large firms and small and medium sized enterprises (SMEs).[5] The main factors bearing on credit standards appear to have been expectations regarding economic activity, and specific firm and industry outlooks, while capital costs and banks' access to market financing seem to have mattered less (Figure 1). The ISAE survey of manufacturing enterprises and the Bank of Italy-Sole 24 Ore survey of firms in the industry and service sectors also suggest that access to bank credit (for all firms, large or small) became more and more difficult from early 2008 to early 2009, and then improved until September 2009 (with some deterioration afterwards). On the other hand, according to the firm survey conducted by the ECB-EU Commission, the share of firms (of any size) able to obtain all the financing requested decreased in second half of 2009. However, while the supply of bank credit may have deteriorated, the demand for bank loans

[5] The Bank of Italy's quarterly bank lending survey is part of the euro area bank lending survey published by the European Central Bank. Approximately 6 Italian banks participate in the survey.

seems also to have declined. The Bank of Italy's bank lending surveys suggest that credit demand from all firms progressively slowed down in 2007–2008 and has been falling since early 2009, albeit at a slower rate in Q4.[6] The drop in loan demand seems to have been driven mainly by the fall in financing needs for business investment, whereas the financing needs for debt restructuring have gone up sharply (Figure 2).



Sources: ISAE; ECB; and Bank of Italy.
1/ Survey figures are reported as net percentage balances. The range of variation is between -1 and 1. A positive net percentage balance indicates that a larger proportion of banks have tightened credit standards. A negative number would refer to a net easing of credit standards. A positive figure related to the credit demand questions would indicate an increase in loan demand and viceversa.
2/ Difference between the share of firms that declared to find access to credit more difficult compared to the previous quarter, and the share of firms that declared to find access to credit less difficult compared to the previous quarter.
3/ It excludes firms that only obtained part of the financing requested or that were offered unacceptable costs or terms and conditions.

In order to detect evidence of excess demand in the credit market, bank loan supply and demand functions are estimated.[7] Credit demand is modeled as a function of business and consumer confidence indicators (as proxies for expected economic activity), lending rates, and corporate bond yields (or the difference between the latter two), and corporate

[6] Another Bank of Italy survey on a sample of 400 banks finds that the demand for credit increased in the second part of 2009, after falling in the first six months. Consistently with these findings, according to the ECB-EU Commission firm survey, 35.5 percent of the sampled firms applied for bank loans in the first part of 2009, while a slightly higher share (38 percent) applied in the second part of 2009.

[7] A similar approach has been adopted in other contexts by Pazarbasioglu (1997), Ghosh and Ghosh (1999), Barajas and Steiner (2002), and Athanasopoulou and Lundback (2009).

bankruptcies. Credit supply is assumed to be driven by lending rates, the capital to asset ratio (or the difference between the actual and desired capital to asset ratio)[8], liquidity ratio, growth in demand deposits, the nonperforming loan ratio, and corporate bankruptcies—as a measure of credit risk. Including variables such as bank liquidity, deposit, and capitalization allows to test whether shortage of loanable funds and capital had an impact on credit supply. According to the estimate results, loan demand is driven mainly by confidence indicators, and bankruptcies growth. Loan supply mainly responds to changes in lending rates and bankruptcies growth. The availability of capital and loanable funds do not appear to have been a significant factor. This suggests that supply constraints might have played a limited role in causing the lending slowdown. Interacting measures of loanable funds and capital availability with a dummy for the pre crisis and crisis period does not change the results, indicating that no major change in the loan supply function took place during the crisis (Table 2). This might be due to the fact that, unlike other European banks, Italian banks did not suffer from major losses.

[8] The desired capital-asset ratio is assumed to be 8 percent.

Table 2. Regression Results 1/

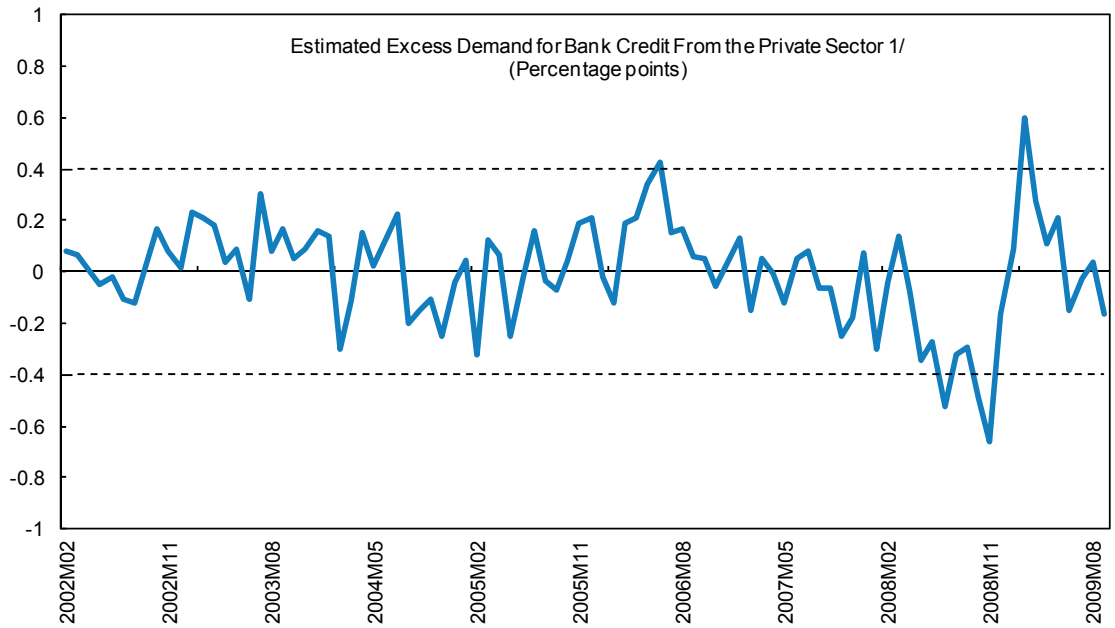
	Dependent Variable: Annual Nominal Growth in Credit to the Private Sector					
	[1]		[2]		[3]	
	Supply	Demand	Supply	Demand	Supply	Demand
Constant	**0.8**	0.1	**0.8**	0.4	**0.7**	0.4
	[0.04]	[0.3]	[0.3]	[0.3]	[0.04]	[0.2]
Lagged dep. variable	**0.9**	**0.9**	**0.9**	**0.9**	**0.9**	**0.9**
	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]
D(Lending rate)	**1.9**	-0.1	**1.8**	-0.1	**1.8**	-
	[0.08]	[1.0]	[0.08]	[1.0]	[0.08]	
D(Capital to asset ratio(-1))	0.1	-	-	-	-	-
	[0.8]					
D(Bank liquidity(-1))	0.03	-	-	-	-	-
	[1.0]					
Deposit growth(-1)	-	-	-0.02	-	-	-
			[0.2]			
Bankruptcies growth (-1)	**-0.007**	**-0.006**	**-0.006**	**-0.007**	**-0.006**	**-0.007**
	[0.02]	[0.01]	[0.05]	[0.01]	[0.02]	[0.01]
Growth in confidence indicators	-	**0.01**		**0.01**		**0.01**
		[0.1]		[0.1]		[0.05]
Adjusted R squared	0.9	0.9	0.9	0.9	0.9	0.9
Estimation period	2002m2-2009m10		2002m2-2009m10		2002m2-2009m10	
Number of observations	93		93		93	

Source: IMF staff estimates.

1/ P-values in parenthesis. Coefficients in bold are significant at 5 or 10 percent significance level. Equations are estimated with two-stage-least squares. The lagged change in Euribor is used as instrument for the change in the lending rate. Lagged values of confidence indicators and the industrial production index growth are used as instruments for current confidence indicators. Confidence indicators include the PMI, and the ISAE consumer confidence indicator. Liquidity is the ratio between liquid assets and total assets.

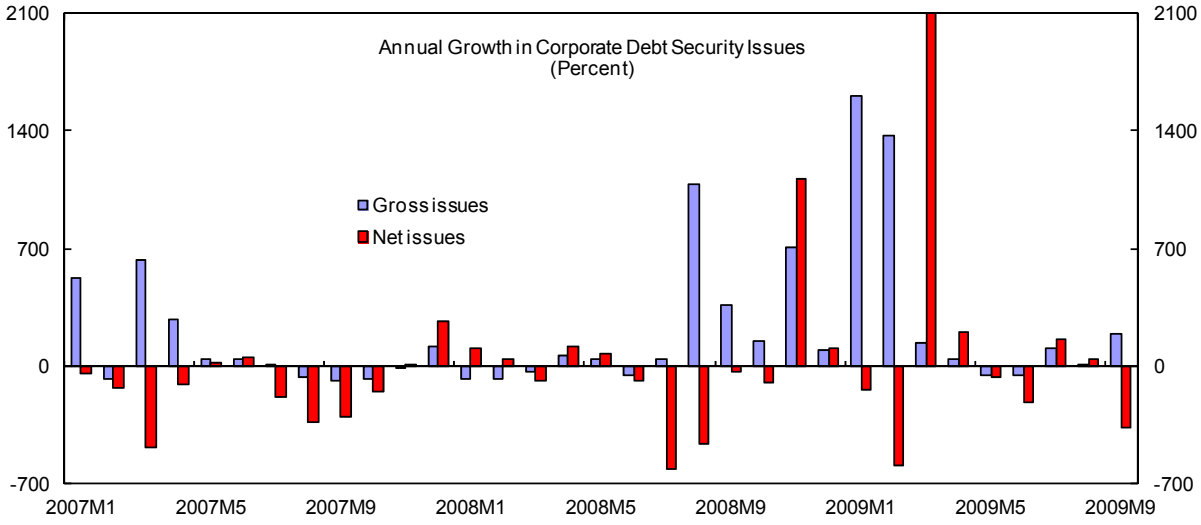
The econometric results suggest that excess demand in the credit market was particularly acute for a brief period, in early 2009, but there is little evidence of a prolonged supply-driven "*credit crunch*". The presence of a potential "credit crunch" is assessed by evaluating whether the estimated excess demand (i.e., the difference between estimated demand and estimated supply) is positive and large. Inspection of the estimated excess demand suggests that loan demand was much lower than supply in late 2008, and that lending supply constraints prevailed for a brief period in early 2009, which is consistent with bank and firm survey results.[9]

[9] Also Panetta and Signoretti (2010) find that supply restrictions have contributed to the decline in credit growth for a limited amount, and only during the most acute phase of the crisis.



Source: IMF staff estimates.
1/ Estimated excess demand is the difference between estimated demand and estimated supply. Estimated demand and supply are derived from equation [3] in Table 2.

Another indication that excess demand for bank credit was significant at the beginning of 2009 is given by data on corporate bonds issuance. Debt securities issues by non-financial firms peaked in early 2009 (a sign that firms were possibly substituting bank borrowing with bond issuance), but declined afterwards, despite the fact that corporate bond markets conditions improved in the second half of 2009.



Source: ECB.

III. POLICY ISSUES

The analysis suggests that policy actions to sustain credit growth in Italy should rely on measures to support borrowers rather than lenders. Indeed, so far supply constraints related to bank capitalization and liquidity conditions appear to have played only a limited role in causing the lending slowdown. Loan supply growth has nevertheless been declining in response to increasing credit risks—as proxied by corporate bankruptcies growth. Therefore, actions to foster firms' demand and creditworthiness would be the most appropriate.

The Italian authorities have implemented a number of measures to support borrowers, especially SMEs. Different forms of loan guarantees have been introduced. The existing guarantee fund for SMEs has been strengthened, including by increasing the maximum guaranteed amount, and expanding the list of eligible beneficiaries. In 2009 guarantees provided by the fund amounted to €8 billion (0.5 percent of GDP). The *Cassa Depositi e Prestiti* (CDP, a state-controlled financial institution) has made available €8 billion (0.5 percent of GDP) to banks that extend credit to SMEs, and SACE, the government-owned institution providing guarantees for export credits has been allowed to guarantee up to 50 percent of the loans extended to SMEs with CDP's funds. SACE has also been permitted to prove an up to 50 percent guarantee on bank loan extended to firms using receivables from the public administration as collateral. The government has requested banks that took advantage of the "Tremonti bonds" recapitalization scheme to increase lending to SMEs. Furthermore, the Ministry of Finance is overseeing a bank loan moratorium agreement between the banking association and the employers' federation, which has allowed the suspension of loan repayments for €7 billion (0.5 percent of GDP). The government is also setting up an equity fund for SMEs recapitalization, financed by the CDP and private banks.

Actions taken so far by the authorities to support credit to the SMEs seem in line with those implemented in other advanced economies. Most OECD countries have tried to alleviate the financing difficulties of SMEs by extending public guarantees on bank loans.[10] In order to pressure banks to continue lending to enterprises, some countries, such as Belgium and France, have also appointed a credit mediator, who, at regional and central level, may intervene to ease difficulties and help solve divergences between enterprises and banks.[11] The UK has established the SMEs Lending Monitoring Panel. In the US, the government is monitoring on a monthly basis the credit activities of banks that have been rescued by public funding. Ireland has instituted a legally binding code of conduct for banks' SMEs lending (OECD, 2009).

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[10] Government guarantee schemes for SME credit are expected to be an incentive for bank lending also because according to Basel II the level of capital requirement for a publicly guaranteed credit line is very low or even nil.

[11] In a similar vein in Italy enterprises that find difficult access to credit have been given the possibility to appeal to the local government representatives (the *Prefetti*), and ask for help in the negotiation with the bank.

Any form of directed lending should however be avoided, and actions to support enterprises should be accompanied by corporate restructuring when needed. While it is important to continue sustain credit access, especially for SMEs that have limited alternative financing opportunities, government directed lending should be avoided as banks are better equipped to assess loan riskiness, and to prevent potential quasi-fiscal costs. Also, recourse to government guarantees should be temporary and appropriately priced. Policies in support of enterprises should also include corporate restructuring, to boost borrowers' creditworthiness, foster a more efficient and profitable sector as well as enhance banking sector soundness. In this context, the forthcoming private equity fund for SMEs could be a useful instrument to strengthen their capital base.

While recent reforms have, to a certain extent, modernized Italy's commercial insolvency and restructuring legal framework, further improvements could help facilitate the rescue and reorganization of viable enterprises as well as the speedy and efficient liquidation of non viable firms. For example, consideration could be given to the enhancement of the mechanisms to support prompt provision of new financing to enterprises during the restructuring period, in line with international best practices. In addition, the reorganization and debt restructuring frameworks could be improved, for instance by clarifying the scope of the judicial review of the restructuring plans, and providing a more detailed and predictable regime on out-of-court restructurings. The eligibility criteria for bankruptcy trustees could be reexamined to promote the appointment of trustees with firm management and restructuring skills. The liquidation procedures could be streamlined to support a speedy exit of nonviable enterprises from the economy. Furthermore, a reform of the judicial system to ensure the consistent, predictable and transparent implementation of the legal framework could help make the insolvency regime more effective and efficient.

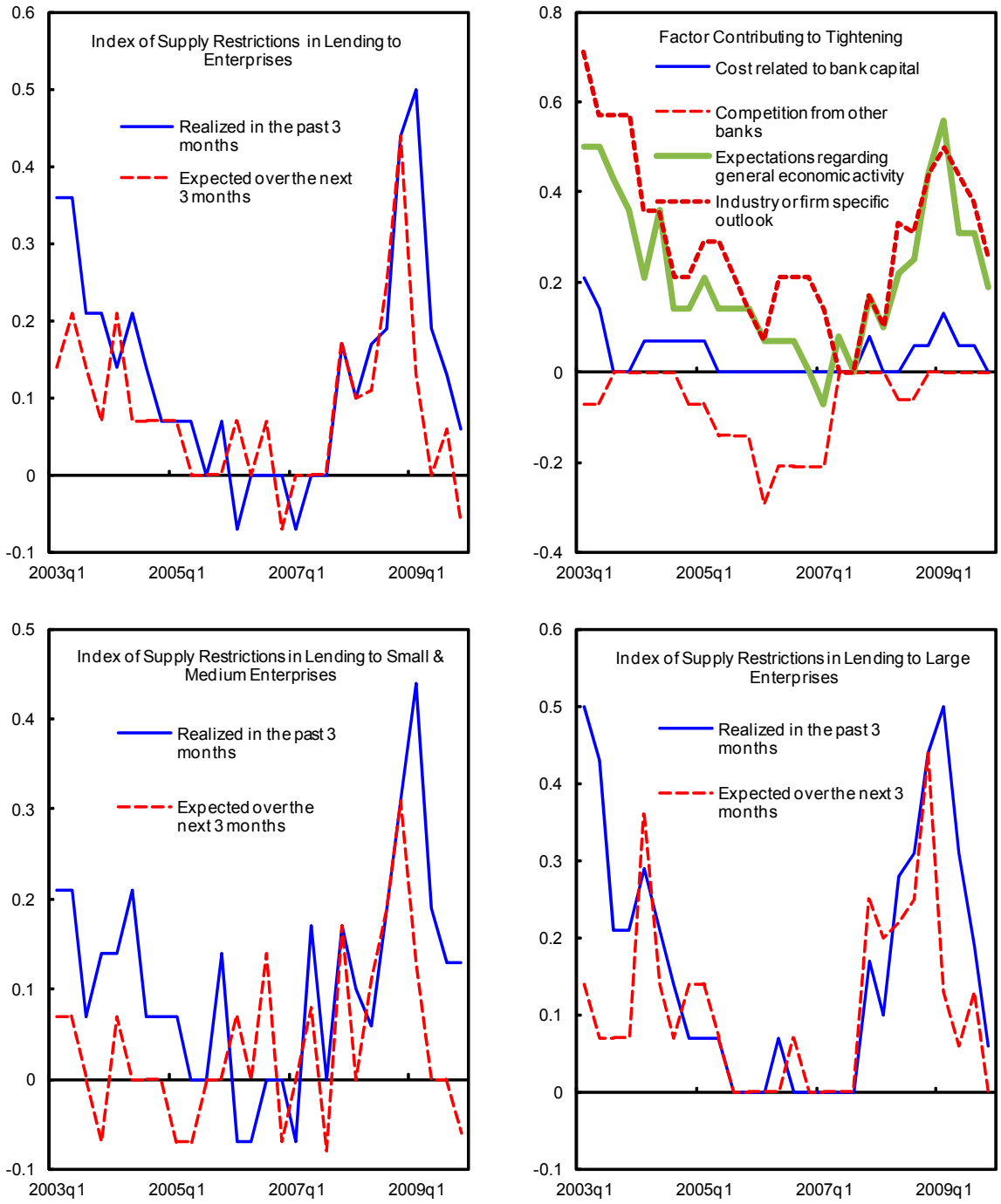
IV. CONCLUSION

While lending tightened significantly since 2008, especially for the corporate sector, so far the slowdown in credit growth has been somewhat milder than in the 1992–93 recession and is not unprecedented. Survey results and the econometric analysis suggest that the lending slowdown was initially mainly driven by weak loan demand, and then (in late 2008-early 2009) by the progressive tightening of lending standards applied by banks. Excess demand in the credit market was particularly acute for a brief period, in early 2009, but there is little evidence of a prolonged supply-driven "credit crunch".

Although a modest recovery in bank lending is expected as growth resumes, risks remain of additional tightening. In the coming months the availability of firms' balance sheet data for 2009 will likely result in worse assessments of borrowers' creditworthiness, and possibly enhanced lending discrimination. Also, credit quality may continue to deteriorate even after the recovery has started, as in previous recession episodes, with adverse implications for credit risk. Furthermore, the need to rebuild capital due to forthcoming new regulation could have an unfavorable impact on the credit rebound in the near future. Policies introduced so far to support lending growth appear to be broadly

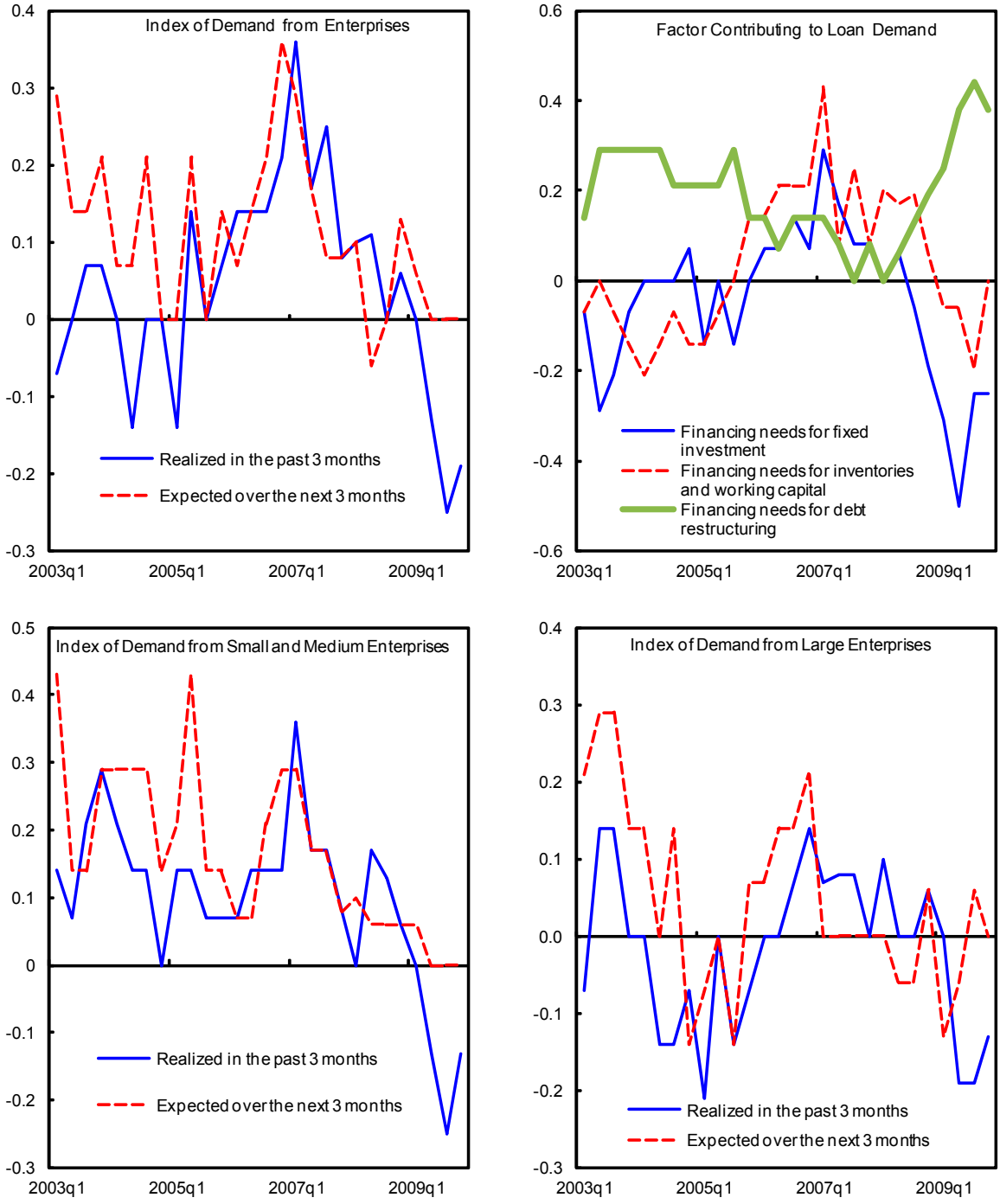
appropriate and in line with those implemented in other advanced economies. Nonetheless, direct public intervention in the credit market should be avoided, and the recourse to government guarantees should be temporary and appropriately priced. Further actions to support enterprises should be accompanied by corporate restructuring when needed.

Figure 1 . Italy: Bank of Italy Bank Lending Survey: Supply Conditions



Source: Bank of Italy.
Survey figures are reported as net percentage balances. For the index of supply restrictions a positive net percentage balance indicates that a larger proportion of banks have tightened credit standards. A negative number would refer to a net easing of credit standards.

Figure 2. Italy: Bank of Italy Bank Lending Survey: Demand Conditions



Source: Bank of Italy.
Survey figures are reported as net percentage balances. A positive figure related to the credit demand questions would indicate an increase in loan demand and vice versa.

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ANALYTICAL ANNEX IV: RESISTING THE STORM, NAVIGATING THE RECOVERY: THE CASE OF ITALIAN BANKS [1]

Thanks to their conservative business profile, Italian banks weathered the global financial meltdown relatively well and did not need emergency government interventions, unlike elsewhere in Europe. However, banks suffered from weak asset quality, low lending growth, and significantly lower profitability. They have been forced to strengthen capital to more adequate levels. Going forward, Italian banks' risk profile will benefit from improved macroeconomic conditions, but high credit risk will limit their ability to significantly improve earnings and capital. As the future global regulatory framework calls for higher capitalization, Italian banks will need to continue to strengthen their capital base and to improve their risk profiles.

I. IMPACT OF THE GLOBAL CRISIS ON THE ITALIAN BANKING SECTOR

A. Tackling the Global Crisis from a Position of Relative Strength

Italian banks entered the global crisis with sound risk profiles. Before 2008, they improved risk management techniques, lowered credit risk, and ultimately strengthened their profitability. Thanks also to the introduction of the Basel II framework, risk management benefited from the adoption of objective credit scoring and analytical tools for risk modeling. The largest banks introduced the role of Chief Risk Officer, who has the mandate to monitor all risk components. Helped by a favorable business cycle, that reduced both corporate and household insolvencies, credit risk lowered to historical minima. Thanks to domestic consolidation, banks became more efficient through the rationalization of headquarters and branch networks. Acquisitions of weaker players by stronger ones favored the spread of best practices. Revenues benefited from a positive cycle, with increasing lending volumes, positive inflows of assets under management, and contained cost growth.

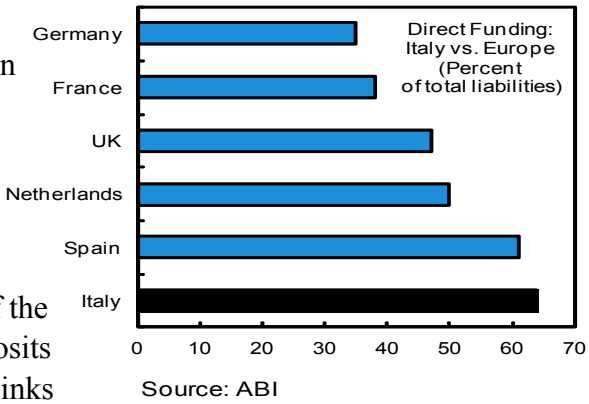
Banks weathered the global financial meltdown relatively well. Thanks to low exposures to complex financial products or toxic assets, domestic banks did not suffer from abrupt securities mark-downs, as happened to several banks in other countries. A traditional business model based on classical on-balance sheet lending-deposit activity, deep customer relationships, and a central role of banks in the intermediation of most financial activities sheltered Italian banks from pressures on investment banking and market funding. Credit quality indicators, such as the stock of nonperforming loans, or the need for credit provisioning, started to deteriorate only in the second half of 2008.

Unlike in some other European countries, there was no major real estate bubble. In the ten years prior to the crisis, housing prices grew less than the European average. Household indebtedness, while rising, remained lower than in several other advanced economies, and a

[1] Prepared by Alberto Buffa di Perrero (MCM/FA).

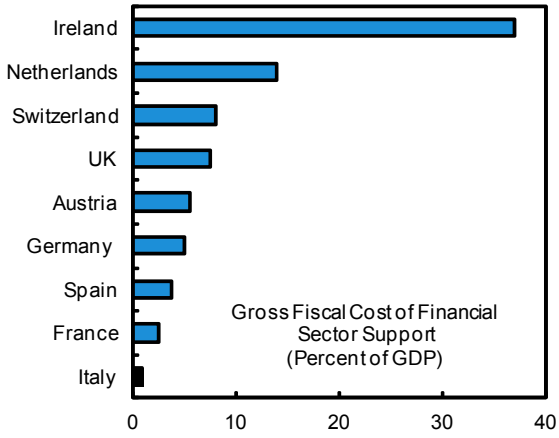
strong culture of saving is still predominant. Banks' exposure to the real estate sector continued to be contained, accounting for about 25 percent of banks' loan book. The household sector high creditworthiness offset the large number of insolvencies among small and medium Enterprises (SMEs), to which banks have historically been greatly exposed. Banks avoided risky lending practices, such as buy-to-let or high loan-to-values. Also, loan growth, albeit sustained, was more limited than in other European countries, with the yearly growth rate for customer loans rarely exceeding 15 percent in the last decade.

Liquidity remained adequate. When liquidity suddenly dried up at the peak of the crisis, Italian banks could rely on large and stable deposit bases, business models based on commercial banking, strong local franchises, high customer confidence, and low dependence on securities. Customer deposits represent on average 60 percent of total bank funding, one of the highest levels in Euro area. Banks attracted deposits even at the peak of the crisis, relying on strong links with their customers. The stock of deposits continued to grow by 5 percent annually both in 2008 and 2009. Banks were also able to place significant amounts of bonds through their retail network. Liquidity in large banks was somewhat weaker than in the rest of the banking system, given their relatively higher dependence on wholesale funding.



Source: ABI

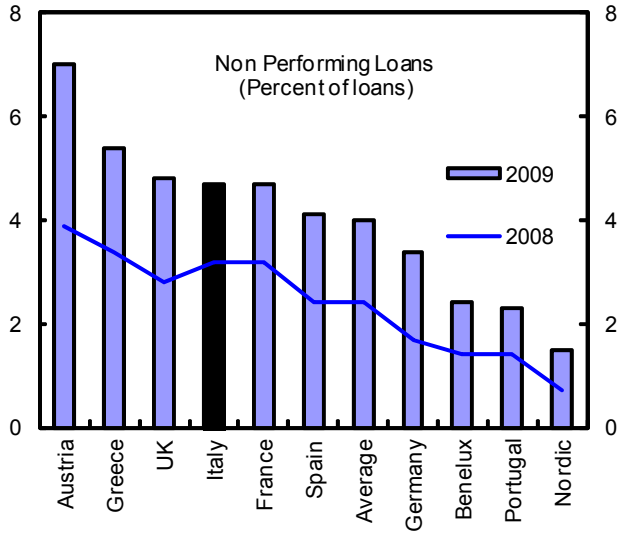
Unlike elsewhere, Italian banks used limited government support. The authorities responded to the crisis by launching several supporting initiatives. Action were taken to improve bank liquidity, including a state guarantee for new bank liabilities, a facility for swapping bank assets or bonds issued by banks for government securities, and a system for anonymous but collateralized interbank lending. The government also offered the so-called Tremonti Bonds recapitalization scheme, although this was used by only four banks, for a total €4.05 billion.



Source: Fitch

B. Economic Deterioration Hits Asset Quality

The dramatic worsening of the economic conditions has weakened bank asset quality. Credit risk increased during the second half of 2008, and continued to deteriorate in 2009, in tandem with the worsening of the economy and the rise in corporate defaults. For the entire banking system the gross nonperforming loans ratio deteriorated from 2.7 percent in 2008 to 3.6 percent in 2009 for the household sector and from 3.0 percent to 4.5 percent for the corporate sector, with the nonperforming loans ratio to SMEs alone growing from 6.2 percent to 7.4 percent.



Source: Company reports of largest banks for each country.

The speed of credit deterioration was remarkable, but broadly in line with developments elsewhere in Europe. For the five largest banks the stock of nonperforming loans (NPLs) increased by 40 percent from 2008 to 2009 (see Box 1). Three-quarters of the new flow of NPLs came from the corporate sector, and one-quarter from households, which were increasingly hit by unemployment. Thanks to banks' efforts to provision adequately for the new inflows of NPLs, the coverage ratio (i.e., the amount of nonperforming loans covered by loan loss provisions) remained broadly stable in 2009 compared to the previous year, at about 55 percent.

BOX 1. Measuring the Impact of the Crisis: Asset Quality Deterioration in Italy and in Europe

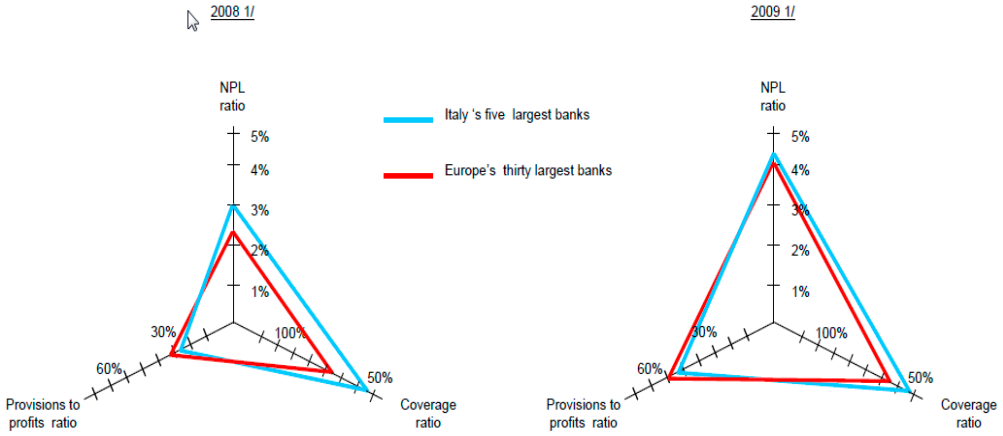
A comparative analysis of 30 large European banks with the largest 5 Italians in the period from December 2008 to December 2009 shows that:

The gross stock of nonperforming loans, as a percentage of total loans (NPL ratio) deteriorated significantly in the period of observation, both in Italy and abroad. The pace of deterioration was very similar in Italy and abroad, with Italian banks reaching the same level of NPL ratio as the average large European banks. For the largest five domestic banks, it increased on average from 3.2 percent in December 2008 to 4.7 percent one year later; in Europe, it deteriorated from an average of 2.4 percent to 4.0 percent in the same period.

The coverage ratio (i.e., the amount of nonperforming loans covered by loan loss provisions) **fell more significantly in the rest of Europe than in Italy.** The average ratio for Europe declined significantly from 75 percent to about 66 percent from December 2008 to December 2009. This reflected the very severe credit quality deterioration that occurred in some European countries, and their inability to provision adequately for the new flow on nonperforming loans. In Italy, banks kept loss reserves levels at about 55 percent of nonperforming loans, provisioning enough to keep their coverage ratio broadly stable. Although the gap between Italy and Europe has fallen significantly, credit reserves in the rest of Europe remain larger (in relation to NPLs) than in Italy.

The provisions for loan losses as a percentage of pre-provision income (the so-called provisions to profits ratio) increased significantly both in Italy and in Europe. For the five largest Italian banks the provisions to profits ratio rose from 30 percent in 2008 to 56 percent in 2009. In Europe, the same ratio reached 60 percent, from 34 percent in 2008. Both in Italy and Europe, this increase reflected the growing need to provision for deteriorating loans, while large banks' ability to generate pre-provision income remained solid, thanks to good revenue generation.

Figure 4. Barometer of Asset Quality Deterioration: Italy Vs Europe



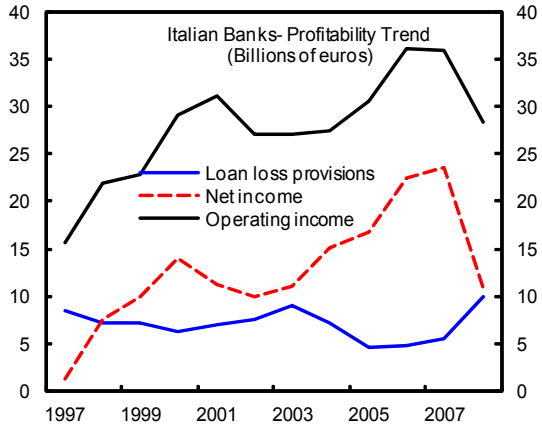
Sources: IMF staff calculations from companies' reports.

1/ Closer to the center means "better", farther means "worse"

In a few cases, the deterioration of credit risk reflected in part developments in foreign loan portfolios. Total banking activity abroad was €150bn at year-end 2008, or just 5 percent of the banking system loans. It was directed mainly to Eastern Europe (especially Croatia, Hungary, Poland, and the Slovak Republic), Turkey, Kazakhstan, and Ukraine, and operated by UniCredit and Intesa, whose lending outside of Italy account for about 11 percent and 7 percent of total loans, respectively. The contribution to risk from overseas exposure was not, however, large, in view of the relatively low share of foreign lending in total banks' activity.

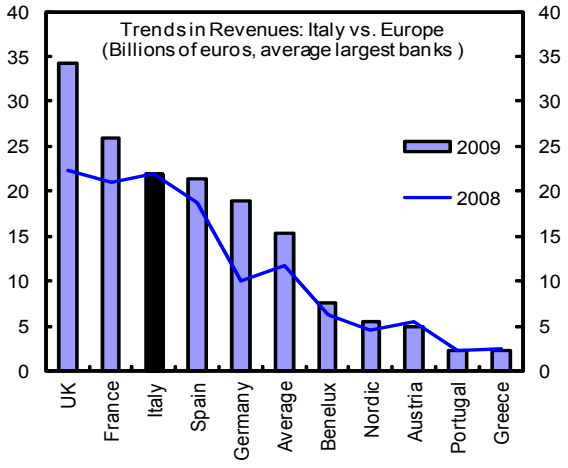
C. Profitability Weakens

Net income worsened significantly, due to a spike in loan loss provisions linked to deteriorating asset quality. For the largest five Italian banks, net income in 2008 was about 50 percent lower than in 2007, despite a favorable change in tax treatment regarding the revaluation of goodwill. Their net income in 2009 was about 30 percent lower than in 2008, In 2009, therefore, these Italian banks' profits were one third of what was generated in 2007. The banks' provisions for loan losses increased strongly after the second half of 2008, in line with the worsening of the economy and the rise in corporate defaults. The amount of profits that was consumed by provisions rose from 30 percent in 2008 to 56 percent in 2009.



Source: Bank of Italy.

Revenues rebounded in 2009 less for large Italian banks than for their European peers. On average, the largest five domestic banks were able (as of end-2009) to maintain (or to contain to only a modest decrease) the level of revenues compared to what was generated one year before. Although this is a good result given the difficult macroeconomic environment, it compares unfavorably with what happened in other large banks elsewhere in Europe that recorded (on average) an improvement in revenues, especially in countries such as Spain, France, and Germany.



Source: Company reports of largest banks for each country.

This is mainly explained by decreasing interest margins. Italian banks' interest margins tend to decline when interest rates go down, as occurred over the last two years. This is due to a combination of assets with short duration, a high proportion of assets bearing variable interest rates, and a high proportion of cheap customer deposits. As a result, interest margins fell by 8 percent in 2009, compared to one year before. In contrast, interest margin in other countries on average increased, reflecting different structures of assets, and also a higher ability to apply higher pricing to customers. In Spain, for example, major banks recorded increases of interest margins in the range of 7–15 percent.

Italian banks were not able to take advantage of the large gains in equity, fixed income, and commodities markets, given their low trading and investment banking activities. Several large European banks operating in the investment banking arena (mainly Swiss, UK, and German), boosted revenues thanks to very strong trading gains in 2009. This reflected, among other things the rally in equity, fixed-income and commodity markets, lower competition due to the exit or consolidation of some of the largest investment banks, and cheap funding thanks to low interest rates.

D. Capital is Raised to More Adequate Levels

In the years before the crisis, Italian banks spent significant amount of capital in acquisitions. Acquisitions were usually executed at hefty prices, incorporating significant amounts of "goodwill." The large domestic banks often doubled their size in the period 2004–2007. As an example, UniCredit purchased the German group HVB (with significant presence in central and eastern Europe) and the Italian Capitalia; and Intesa created the current Intesa SanPaolo group, via the merger with SanPaolo IMI.

Banks also distributed generous dividends to shareholders. The dividend payout ratio in the years prior to the crisis (for the top five Italian banks) exceeded 50 percent, and in a few cases topped as much as 70 percent. In some instances, banks resorted also to extraordinary distributions (for example, Intesa SanPaolo and Banco Popolare).

Since the inception of the crisis, the capital strategy has radically changed. Under moral suasion of the Bank of Italy, banks have launched capital strengthening initiatives, in the form of capital increases, sales of nonstrategic assets, and issuance of Tremonti bonds. UniCredit directly tapped the equity markets with a €4 billion issuance of shares; Intesa and MPS began the sale of a number of assets, including branches. The dividend payout policy was also sharply curtailed, with most banks not distributing any dividends on the 2008 earnings. Management of risk-weighted assets has also been an important lever to improve capital ratios.

Table 1. Capital Management at Top Five Italian Banks: Pre-crisis vs Post-crisis.

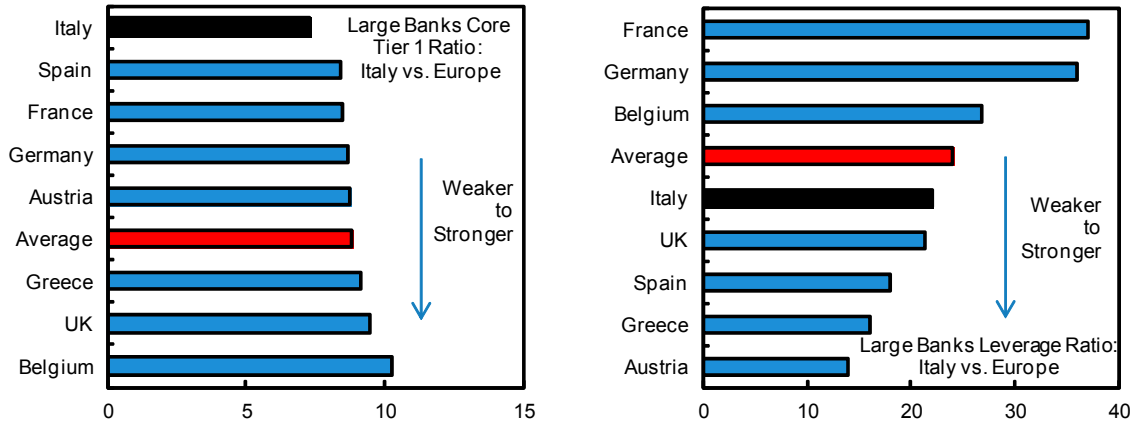
	Pre-Crisis, 2004-2007:				Since inception of the crisis, 2008 onwards:	
	Main acquisitions/mergers executed.	Total Goodwill generated, as of y-e, 2008 (Eur bn).	Extraordinary distributions of dividends.	Historical dividend payout.	Extraordinary capital strengthening measures.	2008 dividend payout.
UniCredit	HVB Group, Capitalia	20.8	No	50%-60%	Capital increase and scrip dividend, for a total Eur7 bn	None
Intesa SanPaolo	SanPaolo, CariFirenze	19.6	Eur3 bn	50%-70%	Sale of nonstrategic assets, undergoing.	None
Monte Paschi	Antonveneta	6.7	No	50%-60%	Issuance of "Treminti bonds", for a total Eur1.9 bn	None
UBI Banca	Banca Lombarda	4.3	No	50%-60%	None	40%
Banco Popolare	BP Lodi	4.4	Eur1.3 bn	50%-60%	Issuance of "Treminti bonds", for a total Eur1.45 bn	None

Sources: IMF staff calculations; and company reports.

As a consequence of these actions, capital ratios have now strengthened to more adequate levels. For the largest five banks, the average Tier1 ratio had dropped to 6.5 percent at end-2007, from 7.5 percent at end-2004. Following the capital strengthening initiatives, the average Tier1 ratio then improved to above 8 percent at end-2009. Beyond the largest five banks, the system displayed historically higher capitalization ratios, with Tier1 ratio at 7.7 percent at end-2007. After the capital strengthening initiatives of the large banks, this gap between the large banks and the banking system has largely disappeared with the Tier 1 ratio of the entire banking system having reached 8.2 percent in June 2009.

The trend towards strengthening capitalization has been in line with what observed in the rest of Europe. Thanks to capital increases, government interventions, and efforts to refocus attention on core businesses, all large banks in Europe have considerably strengthened their capital ratios during 2009, responding to strong regulatory pressures to hold more capital against risks. As of end-2009, Tier1 ratios rose above 10 percent for the average of the largest 30 banks, from 8.6 percent one year before.

Comparison of capital levels with the rest of Europe gives a mixed ranking. Despite the recent capital strengthening, Italian banks still display weaker Core Tier1 ratios than their European peers, with the weighted average being 7.2 percent as of end-2009, versus 8.8 percent in Europe. However, the comparison is more favorable if the leverage ratio (or the ratio between assets and equity) is taken into consideration. The difference derives from the business mix in Italian banks being more based on lending activity than for other European banks, which also have significant trading and investment arms. This produces a difference in risk-weighted assets that tend to be higher for banks with more traditional business profiles like the Italian.



Sources: IMF staff calculations on Company Reports. 2009 data.

The quality of capital compares well with the rest of Europe. With strict regulatory rules that limit to 20 percent the inclusion of hybrid instruments into banks' capital base, Italian banks display good quality of capital. The same regulatory limit is higher in several European countries, with the average limit being about 35 percent. Core Tier1 represented, at end- 2009, an average 88 percent for the largest five banks, one of the highest levels in Europe. Also, the regulatory prudential filters applied to computation of Tier1 capital are quite conservative.

II. Going Forward: Scenario Analysis and Policy Implications

A. Challenging Times Ahead

Italian banks should benefit from improved macroeconomic conditions, but vulnerabilities will likely remain. In line with the projected output recovery, revenues are expected to increase moderately, reflecting low lending growth, a limited rise in interest rates, and some positive contribution from commission income. A more favorable environment for corporates and households is expected to slow the pace of deterioration in credit quality. However, given the still fragile economy, and the lag between economic recovery and improvement in asset quality, banks will continue to face a high level of credit risk for the next two years.

A scenario analysis run by staff on the five largest banks shows that, due to still high loan write-downs, these banks would not generate sufficient profits to meaningfully reinforce capital ratios. The Base Scenario takes into consideration a macroeconomic outlook in line with IMF projections of GDP growth of 0.8 percent in 2010, and 1.2 percent in 2011. As a result, loans are expected to grow by 1–3 percent in 2010–11, revenues by 1–3 percent, loan loss provisions to further increase by 6–9 percent in 2010, and then fall by 3–0 percent in 2011. Under such assumptions, cumulated loan loss provisions in the 2010–2011 periods would be one-third higher than in the 2008–2009. Earnings would slightly improve in 2010 and in 2011, but would continue to remain significantly lower than in the pre-crisis period. Assuming a dividend distribution in the order of 10–30 percent of

earnings, aggregated Core Tier1 ratio would rise in the 2010–11 period by less than 0.5 percentage points by 2011. The capital shortfall with respect to an 8 percentage Core Tier1 level would progressively close by 2011, although with significant discrepancies bank by bank.

BOX 2. Methodology for Scenario Analysis

Staff performed a scenario analysis to measure the ability of large Italian banks to feed the economy with adequate lending growth and in the meantime continue strengthen their capital ratios through earnings retention. Banks included in the panel are UniCredit, Intesa SanPaolo, Banca Monte Paschi, Unione di Banche Italiane, and Banco Popolare. Aggregated, they represent two-thirds of the banking system's assets, and almost 90 percent of profit generation. The scenario encompasses 2010 and 2011.

Starting point is, for each bank, the 2009 profit and loss and balance sheet data. Taking into consideration IMF projections on GDP growth, staff derived two different scenarios: a Base Scenario, where GDP growth is kept in line with IMF forecasts; and a more conservative one, called Severe Scenario, where GDP growth is stressed to lower levels.

The main variables projected under both scenarios, for the two years of the simulation, are revenues growth; loan loss provision growth, operating cost growth, and loan growth.

Italy: List of Top Five Banking Groups
(Millions of euros, 2008)

	Total Loans	Net Income
Total Italian Banking System	1761199	8122
UNICREDIT SPA	623538	4012
INTESA SANPAOLO	400911	2553
BANCA MONTE DEI PASCHI	151408	923
UBI BANCA	98103	69
BANCO POPOLARE	79776	-333
Top 5, as percent of total:	77	89

Sources: Bank of Italy; Bloomberg; and IMF staff calculations.

The scenario provides, for each bank, an estimate of net income that, assuming certain earnings retention levels, feeds into each bank's existing capital base. On the assets side, staff estimates a correlation between loans growth rate and risk-weighted assets growth rate, which allows to project risk-weighted assets.

Capital ratios (in terms of Core Tier1) are then calculated for 2010 and 2011, using the following formula:

$$CR_t = \frac{K_{(t-1)} + E_t - D_{(t-1)}}{RWA_{(t-1)} * G_t}$$

where: *CR*= capital ratio; *K*= capital base; *E*=earnings; *D*=dividends distributed; *RWA*= risk-weighted assets; *G*=growth coefficient.

A capital shortfall is then calculated, as the difference between the projected capital ratio, and certain target levels for Core Tier1 (7, 8, and 9 percent). The Scenario Analysis is performed under the current regulatory capital rules, and does not take into consideration forthcoming regulatory changes currently under discussion.

Earnings retention alone would not be enough to improve capitalization to the required levels. During 2008 and 2009, large banks raised their Core Tier1 ratios by injecting a cumulated €15 billion of new capital trough capital increases, sales of nonstrategic assets, or the subscription of Tremonti Bonds. The average Core Tier1 for the largest five banks improved more than 100 basis points. The future projected improvements under the Base Scenario, driven just by future earnings retention, would be much more modest, of the order of a few tens of basis points per year in 2010 and 2011.

In a severe scenario with a more sluggish economic recovery and a weaker corporate landscape, earnings would shrink further and capital ratios would deteriorate. The Severe Scenario assumes a harsh macroeconomic outlook, with GDP shrinking by 1.7 percent in 2010 and by 1.3 percent in 2011 (or 2.5 percentage points lower than in the

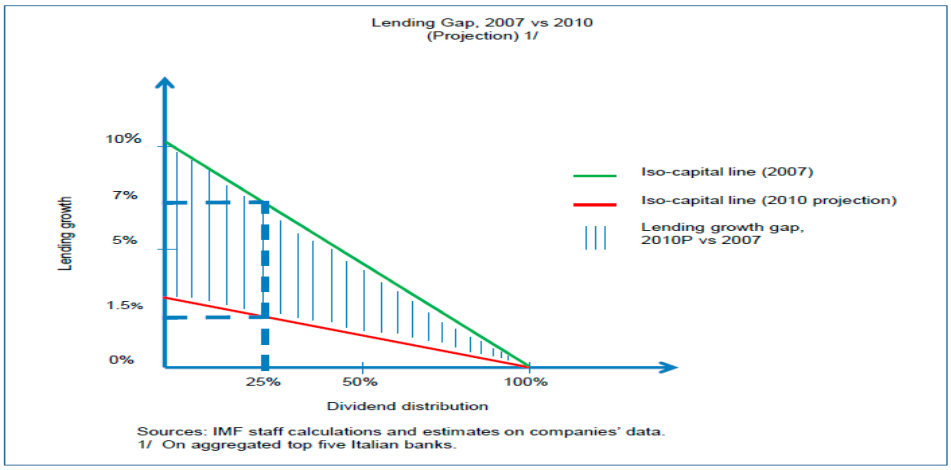
Base Scenario). Under this scenario, loans would remain flat, revenues growth would be negative, and loan loss provisions would increase by around 18-22 percent, in both 2010 and 2011. The cumulated loan losses would be 65 percent higher than in 2008-09. Such a scenario would result in a significant erosion of profitability. On an aggregated level, the Core Tier1 ratio would deteriorate to below the 7 percent mark for several banks.

Under both scenarios, the capitalization situation of individual banks would vary considerably, however. The strongest bank would be about 25 percent better capitalized than the weaker, with the strongest reaching a Core Tier1 ratio above 8 percent, while for the weaker it would be lower than 7 percent in the Base scenario. The difference between the weaker and the stronger capitalized banks would not materially change in the severe scenario, but more banks would have a Core Tier1 ratio below 7 percent.

B. Ability to Feed Economic Recovery Will Remain Constrained

Reflecting the economic contraction, lending growth to the private sector has slowed down significantly from about 10 percent in 2007 to close to 2 percent at end-2009. Banks have become more selective in granting new credit, reflecting the perception of higher counterparty risk. Banks may also be containing loan growth to reinforce capital ratios and to deleverage. The demand for credit has also fallen, due to the sharp economic contraction.

Banks' ability to increase lending and reinforce capital ratios will be significantly weaker than in the pre-crisis period. Banks will continue to be constrained in their lending strategy by lower earnings prospects on one side, and the necessity to further strengthen capital on the other. Prior to the crisis, earning generation was strong enough to assure hefty dividend payouts on one side, and enough earnings retention on the other. Staff expects that in the coming years banks will need to keep dividends very low in order to assure lending growth and, in the meantime, some growth of their capital ratios.



C. A New Tougher Regulatory Framework

Banks will also have to withstand the impact of a tougher regulatory framework. Regulatory rules are currently being revised across the board on several aspects from the definition of core capital to new, more stringent liquidity requirements. Future definition of capital will be narrower than today's, therefore lowering capital ratios other things being equal (see Box 3).

BOX 3. The Future Regulatory Framework on Capital and its Impact in Italy and in Europe

In December 2009, the Basel Committee on Banking Supervision (BCBS) announced a series of measures that will directly impact the future level of banks capital as well as its measurement. The BCBS objective is to raise the quality, consistency, and transparency of the regulatory capital base, by overcoming the limitations of the current regulatory framework on capital. Ultimately, the Committee aims at promoting more resilient banks as the foundation for sustainable economic growth. This announcement comes on top of other critical reforms to the Basel II framework launched in July 2009, which will raise capital requirements for the trading book and complex securitization exposures, a major source of losses for many internationally active banks.

The new rules would lower current banks' capital ratios, other things being equal. The BCBS states the principle that the dominant form of Tier1 capital must be common shares and retained earnings. The proposed new Basel framework would apply more conservative prudential filters, by deducting from the computation of common equity items such as defined benefit pension assets; capital in insurance subsidiaries; deferred tax assets; intangibles; negative available-for-sale reserves; and minority interests, and minority participations. More deductions will mean lower capital ratios. Future issuances of government-subscribed bonds will also be excluded from core capital.

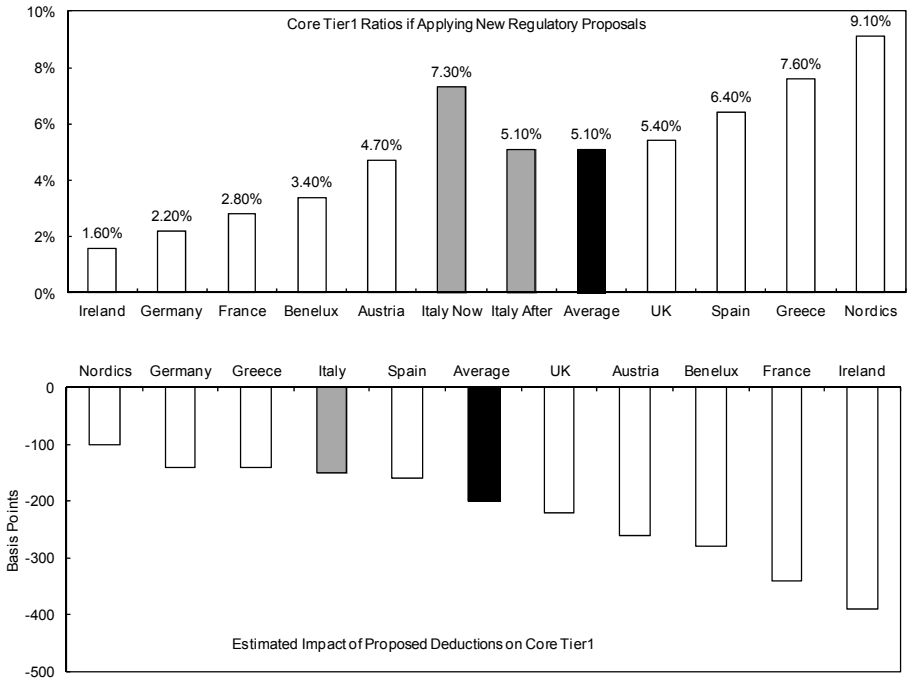
Preliminary simulations for large banks indicate that impact of the new regulatory framework could be significant. The BCBS proposal lays down general principles. The details will be discussed with local regulators and the market at a later stage. It is very difficult at this stage to perform accurate simulations on the future impact of the new regulation. A first (broad) simulation suggests that the impact for Italian banks could overall be manageable and somewhat lower than in other countries, reflecting the fact that their capital is of good quality and the regulatory prudential filters are already rather stringent. However, on aggregate, Core Tier1 ratio would still decline by about 150 basis points, for the largest domestic banks.

The BCBS will allow for a smooth transition to the new rules. The impact assessment will be carried out in the first half of 2010. The fully calibrated set of standards will be developed by the end of 2010, with the aim of implementation by end-2012. The Committee anticipated that it will put in place appropriate phase-in measures and grandfathering arrangements for a sufficiently long period to ensure a smooth transition to the new standards.

Potential Impact of BCBS Proposal on Capital: Italy vs Europe.

	Current regulatory treatment in Italy	How Italian regulation compares with that of other European countries?	Likely impact of deduction	European Countries potentiall more affected
Minority Interests	Not deducted	In line	Medium impact for the big banks.	Austria; France
Negative Available for Sale Reserves	Deducted from Tier1	More conservative than in some other countries, where they are not deducted.	Low impact, as Italian banks have generally small securities portfolios.	Investment banks; Benelux; Germany
Intangible Assets	Deducted from Tier1	In line	Low impact.	No significant impact expected across Europe.
Deferred Tax Assets	Not deducted	In line	High impact, especially due to limited fiscal deductibility of loan losses.	Several banking systems, given the amount of losses generated during the crisis.
Minority Participations	Deducted 50% from Tier2, and 50% from Tier1.	In line	Medium impact. However, some banks hold significant amounts of minority participations.	France; Ireland; Investment banks
Capital in Insurance Subsidiaries	Deducted 50% from Tier2, and 50% from Tier1.	In line	Generally low impact, with the exception of a few cases of banks owning singificant majority stakes of insurance companies.	France; UK
Defined Pension Assets	Not applicable	Not applicable	No impact, because pension system is not based on defined contribution.	Portugal; Ireland

Sources: IMF staff; and market views.



Source: Morgan Stanley. Simulation on 3Q09 data.

D. Further Capital Strengthening, Fast Adherence to Future Standards Need to be the Priority

Banks are being called to respond to potentially conflicting forces. They have to deleverage, raise the level and quality of capital, and extend credit to the private sector to support economic recovery in a still uncertain world.

Against this background, and in line with what was recommended by the Bank of Italy, efforts to strengthen capitalization should continue. On a case-by-case basis, capital will need to be further reinforced to face a still challenging credit and earnings outlook, and to support future economic growth. Given the still moderate outlook for profitability, it will be difficult to significantly reinforce capital only through earnings retention, even assuming low distribution of dividend levels. Therefore, banks should be encouraged to:

- Limit the distribution of dividends.
- Refocus on core businesses/geographies, disposing of nonstrategic assets if needed.
- Issue new capital

Although there is still high uncertainty on the details of future capital regulation, the authorities should guide the domestic banking system towards the prompt adoption of the future framework. When the Basel II framework was introduced, Italian banks were given a long time to comply with certain elements of the new regulation (e.g., the rule under which credits become classified as past-due). Going forward, instead, Italian banks should be encouraged to start adapt their capital strategies around the forthcoming new regulatory framework, and to quickly adopt the new international rules on capital, as soon as they are defined.

Along these lines, banks should be encouraged to adopt long-term strategies in terms of core capital. In particular, banks that made use of government recapitalization bonds will need to prepare an alternative recapitalizations strategy as the interest rate on these securities rises sharply in 2013.

In the context of high credit risk, prompt recognition of nonperforming loans will be essential in order to avoid legacy problems in the future. Reserve coverage should also be maintained at an adequate level.

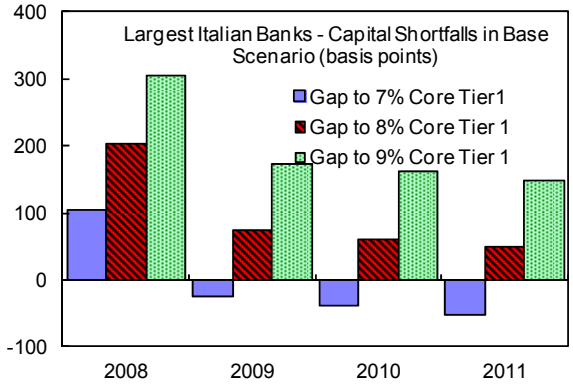
The Bank of Italy should consider publishing a by-annual stability review in line with current practice in other countries in order to enhance the supervisory framework and to raise awareness of the domestic banking system's strengths and weaknesses.

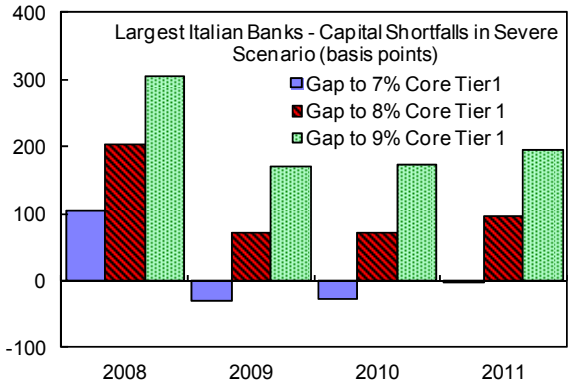
Annex IV: Appendix I. Scenario Analysis

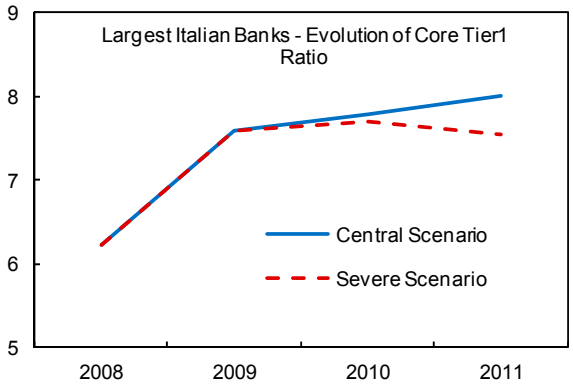
Scenario Analysis: Main Assumptions

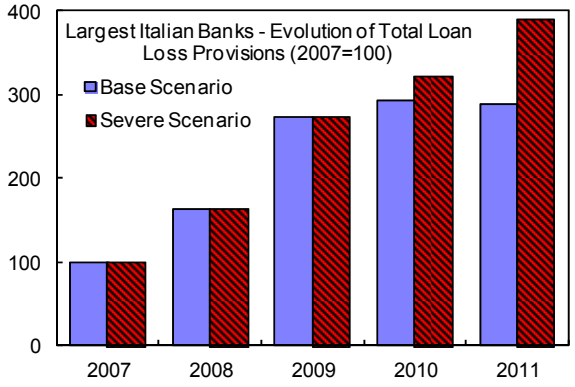
	Base Scenario		Severe Scenario	
	2010	2011	2010	2011
GDP Growth	0.8%	1.2%	-1.7%	-1.3%
Revenue Growth	+1% to +3%	+2% to +5%	-1% to -3%	-1% to +1%
Loan Loss Provision Growth	+6% to +9%	-3% to +0%	+18% to +22%	+15% to +20%
Loans Growth	+1% to +3%	+2% to +4%	-1% to +2%	-1% to +2%

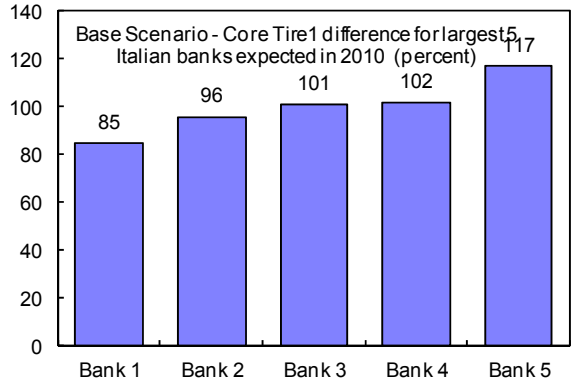
Source: IMF staff calculations.

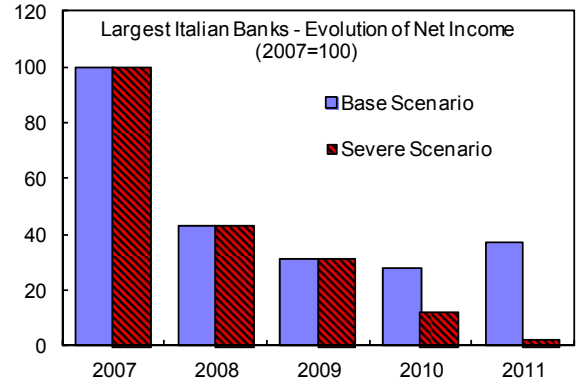












Source: IMF staff calculations.

INTERNATIONAL MONETARY FUND
Public Information Notice
EXTERNAL RELATIONS DEPARTMENT

Appendix 3. Draft Public Information Notice

Public Information Notice (PIN) No. 10/--
FOR IMMEDIATE RELEASE
May --, 2010

International Monetary Fund
700 19th Street, NW
Washington, D. C. 20431 USA

IMF Executive Board Concludes 2010 Article IV Consultation with Italy

On May 24, 2010, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with Italy.[1]

Background

The global crisis affected Italy's economy mainly through the trade, credit, and confidence channels. The recession in the country's main trading partners led to a sharp fall in exports. Financing conditions tightened, and credit growth fell. Despite strong household balance sheets, private consumption declined significantly, reflecting uncertainty, and tighter consumer credit. Fixed investment and inventories also fell sharply, reflecting weak demand prospects and difficult financing conditions. The drop in aggregate demand, which was not offset by the comparatively limited fiscal response, resulted in one of the largest output falls among large industrialized countries. However, unemployment rose only modestly, in large part due to wage supplementation schemes and falling participation. A modest and fragile recovery based on external demand, restocking of inventories, and some government support is underway. Output contracted 5 percent in 2009 and is projected to increase 0.8 in 2010.

The large public debt and the fear of adverse market reactions limited the ability of the government to implement countercyclical fiscal policy. Italy's stimulus package was the smallest among advanced G-20 countries. Nevertheless, the fiscal position deteriorated sharply in 2009. The overall deficit has reached 5.3 percent of GDP in 2009, and public debt increased to about 115.8 percent of GDP by end-2009. The fiscal deficit is projected at 5.2 percent of GDP in 2010 in the absence of further corrective measures.

[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board. At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities.

The banking system weathered the global financial crisis relatively well, reflecting pre-existing strengths, such as limited exposure to toxic assets, the absence of a property bubble, retail-based business models, and a sound supervisory/regulatory framework. Unlike elsewhere, Italian banks did not need emergency government intervention, and recourse to ECB liquidity support schemes remained limited. However, the deterioration of the economy weakened banks' asset quality and profitability. Credit risk increased during the second half of 2008 and in 2009. Following the economic contraction, lending growth to the private sector slowed sharply, profitability declined, and asset quality deteriorated. Banks increased capitalization in 2008–09, but their capital ratios still range from weak to average compared with other countries in Europe. Banks will need to raise more capital, also in view of forthcoming new regulations and probable increase in non-performing loans.

Executive Board Assessment

Italy: Selected Economic Indicators, 2004–10

	2004	2005	2006	2007	2008	2009 1/	2010 1/
Real economy (change in percent)							
Real GDP	1.5	0.7	2.0	1.5	-1.3	-5.0	0.8
Domestic demand	1.4	1.2	1.4	1.2	-1.2	-3.5	0.9
CPI (year average, harmonized index)	2.3	2.2	2.2	2.0	3.5	0.8	1.4
Unemployment rate (percent)	8.0	7.7	6.8	6.2	6.8	7.8	8.7
Gross national saving (percent of GDP)	19.9	19.0	19.0	19.4	17.7	15.5	16.1
Gross domestic investment (percent of GDP)	20.8	20.7	21.6	21.9	21.1	18.9	18.9
Public Finance (percent of GDP)							
General government balance	-3.6	-4.4	-3.3	-1.5	-2.7	-5.3	-5.2
Structural balance net of one-offs (in % of potential GDP)	-4.8	-4.6	-3.3	-2.5	-2.6	-3.9	-3.5
Primary balance	1.1	0.1	1.1	3.3	2.2	-0.8	-0.8
Public debt	103.8	105.8	106.5	103.4	106.0	115.8	118.6
Money and credit (end-of-period, percent change)							
Credit to the nonfinancial private sector 2/	5.8	7.7	11.0	9.8	4.9	1.7	...
National contribution to euro area M3 3/	5.1	6.3	7.7	7.6	6.9	5.8	...
Interest rates (end-period)							
6-month interbank rate	2.2	2.6	3.8	4.9	3.7	1.0	...
10-year government bond yield	3.8	3.5	4.2	4.7	4.5	4.1	…
Balance of payment (percent of GDP)							
Trade balance	0.6	0.0	-0.7	0.2	0.0	0.0	0.3
Current account (including capital transfers)	-0.9	-1.7	-2.6	-2.4	-3.4	-3.4	-2.8
Exchange rate							
Exchange rate regime -- euro-area member							
Exchange rate (NC/US$)	1.2	1.2	1.3	1.4	1.5	1.4	…
Nominal effective rate (2000=100)	100.8	100.0	100.1	102.0	104.4	104.5	…
Real effective rate (2000=100)	113.8	112.2	111.9	113.2	115.0	115.8	…

Sources: National Authorities; and IMF staff calculations.

1/ Staff estimates and projections, unless otherwise noted.
2/ Twelve-month credit growth, adjusted for securitizations.
3/ Excludes currency in circulation held by nonbank private sector.
4/ Excludes currency in circulation held by nonbank private sector.