

## **Italy: Selected Issues**

This Selected Issues on Italy was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on June 22, 2012. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of Italy or the Executive Board of the IMF.

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**International Monetary Fund**  
**Washington, D.C.**

# INTERNATIONAL MONETARY FUND

## ITALY

### Selected Issues

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Approved by European Department (in consultation with other departments)

June 22, 2012

### Executive Summary

#### **Chapter I. Structural Reforms in Italy: Overview and Macroeconomic Impact**

*Wide-ranging structural reforms are underway in Italy, aimed at addressing key bottlenecks in the product and labor markets. This paper reviews and assesses the authorities' reform plans in each area. Our model-based analysis suggests that the potential gains to the economy from deeper reforms are sizeable. The priorities should be to strengthen competition in the non-tradable sector and increase flexibility and participation in the labor market, supported by growth-friendly fiscal reforms.*

#### **Chapter II. Fiscal Devaluation In Italy: Towards A More Export, Employment, And Growth Friendly Tax System**

*A "fiscal devaluation" is a revenue-neutral shift from employer's social contributions toward value-added tax, meant to promote net exports, employment, and growth. If sizeable, the shift could contribute to addressing Italy's competitiveness gap. Fiscal devaluation, however, does present potential risks in terms of tax compliance and pension financing. To enhance its effectiveness, fiscal devaluation should aim to reduce VAT tax expenditures, while focusing social security contribution cuts on groups that are poorly integrated into the labor market.*

#### **Chapter III. Recent Movements in Italian Government Bond Spreads: Driving Factors and Implications on Lending Conditions**

*Italian sovereign spreads have been driven by both euro area related and Italian specific factors, underscoring the importance of reducing country-specific vulnerabilities as well as addressing fragilities in the euro zone at large to contain common risks and spillovers. In turn, Italian sovereign spread shocks are rapidly transmitted to firm lending rates. Firm credit has contracted until March, driven both by demand and supply factors, although the latter seem to have prevailed at the end of last year.*

#### **Chapter IV. Recent Developments and Implications from Changes in the Investor Base for Italian Government Bonds**

*Changes to the investor base for Italian government bonds will continue to affect the terms under which the sovereign accesses market financing. After a long period of stability, foreign holdings of Italian government bonds declined rapidly, starting in the second half of 2011. Italian banks have stepped in partly, using funds from the European Central Bank (ECB)'s refinancing operation to invest in government bonds, but this has also tightened the link between the sovereign and the banks. Against this background, public debt management strategy should seek to maintain the current average maturity of the debt, while exploring ways to support stability in market financing and execution.*

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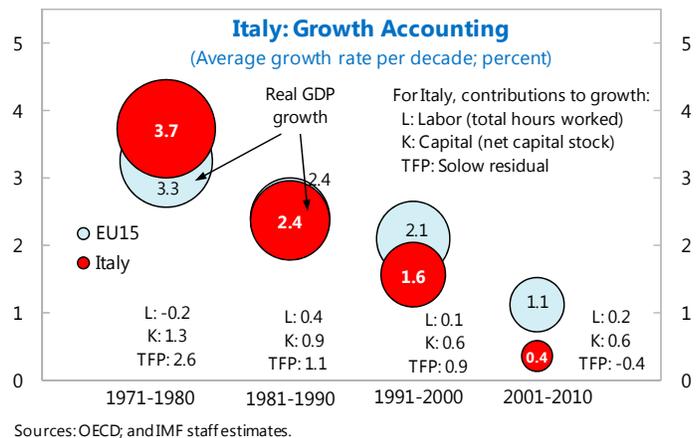
## I. Structural Reforms in Italy: Overview and Macroeconomic Impact<sup>1</sup>

*Wide-ranging structural reforms are underway in Italy, aimed at addressing key bottlenecks in the product and labor markets. This paper reviews and assesses the authorities' reform plans in each area. In most cases, the reforms go in the right direction, and their impact would depend on consistent and prompt implementation. In some areas, especially in the labor market, reforms would benefit from further strengthening. Our model-based analysis suggests that the potential gains to the economy from deeper reforms can be sizeable. The priorities should be to strengthen competition in the non-tradable sector and increase flexibility and participation in the labor market, supported by growth-friendly fiscal reforms.*

### A. Introduction

1. **Italy's economy has a number of important strengths.** Italian households have sound balance sheets, and private savings have traditionally been high. Private debt, at about 125 percent of GDP, is among the lowest in the euro area. The public sector, despite having one of the largest debt in the world, has also large assets.<sup>2</sup> With net foreign liabilities at around 20 percent of GDP, Italy's net international investment position is more favorable than in other euro area periphery countries, and its current account deficit is relatively low. Italy's exports, though lagging in terms of high value-added contents, are among the most diversified in the world.

2. **Despite these strengths, Italy's economic performance has lagged behind its peers.** Growth averaged less than ½ percent in the last decade (against over 1 percent in EU15 and 1¼ percent in G7 countries), while total factor productivity growth was negative. Potential growth is estimated to have stalled in recent years or even turned negative. In the absence of major changes to trends in productivity, employment, and investment, potential growth is likely to remain close to zero over the medium term.



<sup>1</sup> Prepared by Lusine Lusinyan (EUR) and Dirk Muir (RES). The authors are grateful to Gianluca Esposito, Benjamin Hunt, Yan Liu, Isabelle Mouysset, Justin Tyson, the staff of the Ministry of Economy and Finance and of the Bank of Italy, and other interlocutors during the 2012 Article IV Consultation mission for helpful discussions and comments.

<sup>2</sup> Some estimates, for example, put the value of assets almost at the same level as the debt (Reviglio, 2011).

**3. Italy's weak growth performance has been attributed to a number of structural factors.**

- *Limited competition.* Regulatory rigidities and entry barriers have limited competition and kept rents high, especially in non-tradable sectors (Figure 1). This has adversely effected the business environment (Figure 2), increasing costs for the sectors that need to compete globally and eroding the competitiveness of the economy. With firms unable to grow and benefit fully from economies of scale, the efficiency of the productive system has remained low, innovation has been limited, and specialization has not moved sufficiently up toward more high-skill sectors (Figure 3), leading to a loss in export market shares.
- *Labor market rigidities.* Mirroring these problems, the labor market is marred by low labor participation, dualism, and low educational attainment (Figure 3).
- *Weak public services.* Deficiencies in the product and labor markets have been accentuated by the high tax burden coupled with inefficient public spending (Figure 4), a lengthy legal system, limited FDI penetration, large regional disparities, and a sizeable unofficial economy.

**4. Against this backdrop, the government has recently taken important steps in a wide range of structural areas.** Product market liberalization and competition measures, introduced with the several packages in 2011 and 2012, cover many key areas. Administrative simplification reforms to lower the cost of doing business have also been approved. The government's labor market reform, yet to be approved by the parliament, aims at making the labor market more flexible and inclusive.

**5. To assess the potential impact of these reforms, this paper uses a model-based approach.** We begin by reviewing product and labor market reforms in Italy (Sections B and C), highlight the main structural problems, and contrast these with the actions proposed. Section D estimates the impact of structural reforms in Italy using a simulation framework. We conclude with a brief discussion of reform priorities and implementation issues.

**6. Our main findings can be summarized as follows:**

- Reforms go in the right direction. They cover the key structural bottlenecks in the product and labor markets and address most key priority areas.
- In product market reform, prompt and consistent implementation is key, especially in the energy sector, where the gains could be sizeable. Labor market reform should aim to lower labor adjustments costs, introduce more flexibility at the core, increase participation, especially among women, and improve activation policies.

- Three important areas for the public sector reform include: (i) liberalization in the areas where the central government is a major stake-holder; (ii) liberalization and increasing competition in local public services; and (iii) regional differentiation and more flexibility in the public sector employment and wages.
- The impact of structural reforms on GDP can be sizeable. We confirm the findings from the literature using IMF's Global Integrated Monetary and Fiscal model (GIMF) showing that policies that would close roughly half the gap in product and labor markets with the rest of the euro area and best practice cases in OECD, respectively, could raise real GDP by 5¾ percent after 5 years and by 10½ percent in the long run. A broader set of reforms including also fiscal measures to lower direct taxation and increase investment spending (both in a deficit neutral way) could amplify the gains and contribute further to closing Italy's competitiveness gap.

## **B. Product Markets: Enhancing Competition and Deregulating**

7. **Liberalizing economic activity and enhancing competition are the main objectives of the ongoing product market reforms.**<sup>3</sup> Unlike past approach to structural reforms, the latest interventions by the government of Prime Minister Monti are more comprehensive and incisive. In general, the measures aim to address excessive monopolistic rents, reduce entry barriers and information asymmetries as well as remove unnecessary regulation of economic activities. They also address some of the key regulatory shortcomings from the 2001 constitutional reform that re-allocated significant legislative and regulatory powers to sub-national authorities in commercial distribution, energy, and transport, where strong connections to local vested interests exist.

8. The key problems in the product markets and measures addressed in the January 2012 liberalization package are concentrated in the services and public sector (Table 1).<sup>4</sup> They cover largely non-tradable sectors, including network industries (energy and transport, also at the local government level), professional services (e.g., legal/notaries, accounting, medical/pharmacists, engineering), and provision of local public services/utilities. Together these sectors amount to about one-third of the total value added in the economy and contribute about 40 percent of total inputs used (intermediate consumption) by other

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<sup>3</sup> The recently updated OECD Product Market Regulation (PMR) indicators show that the overall PMR indicator has improved from 1.3 in 2008 to 1.2 in 2012, becoming less restrictive than the 2008 EU and OECD averages (Figure 1), with the indicator on the regulation restrictiveness in professions improving significantly to reach the 2008 average of the EU and OECD (NRP, 2012).

<sup>4</sup> The package (DL n. 1/2012) was approved by the parliament on March 24, 2012 (Law n. 27/2012).

Table 1. Italy: Product Market Reforms—A Summary of Main Problems and Actions Taken

Area	Sub-sector	Main Problems	Actions Taken
<b>Energy</b>	Gas industry	High wholesale prices as a result of insufficient facilities for gas importation; insufficient investment in transport/storage capacity by incumbent ENI; multi-level veto powers and co-ordination failure; long-term import contracts	Ownership separation of ENI from the gas distribution company; lower tariffs for vulnerable customers; promoting strategic investments
	Electricity	High tariffs as a result of costly gas-based generation; insufficient investment in transmission infrastructure; information asymmetries between integrated distributors and final sellers	Promoting investment in the transmission network; increasing information transparency
	Petroleum products	Outdated and oversized distribution network; regulatory barriers; contractual constraints	Eliminating restrictions on contractual arrangements and activities; replacing outdated systems; improving information transparency
<b>Transport</b>	Regulatory framework	Fragmented regulation, involving conflict of interest between regulator and service provider	Establishing independent Transport Authority
	Railways	Lack of vertical separation and competition; low quality of passenger (regional) and freight services; incumbent protected by government subsidies and entry barriers	Measures to be defined by the Transport Authority; competitive tender process for local railway services introduced
	Highways	Inadequate tariff system (not translating into investments to extend the network); very long duration of concessions	Measures to be defined by the Transport Authority; tariffs systems for new concessions to be reviewed
	Taxi services	Supply restrictions	Guidelines to limit the restrictions are provided but yet to be operationalized; however, Transport Authority's role in decisions on licenses will be limited
<b>Professional services</b>	General	Excessive regulation; limited competition protecting incumbent rents; conflict of interest in the governance of professional orders	Abolishing tariffs for regulated professions; reforming professional orders to ease entry and activity restrictions; separating administrative, education, and disciplinary functions within orders
	Pharmacies	Quantitative restrictions; constraints on ownership; partial liberalization of the sale of drugs	Increasing the number of pharmacies; abolishing some restrictions; prescription should indicate generic alternative
	Notaries	Quantitative restrictions; inadequate supply; shortcomings in entry exams	Increasing the number of notaries; more regular assessment of needs
<b>Local public services</b>	General	Non-competitive contract awards in favor of incumbents; "in-house" contracting; conflict of interest between regulator and service provider; low service quality	Requiring competitive tendering and territorial consolidation in service provision to increase efficiency/reduce costs; strengthening enforcement and sanctions for non-compliance; monitoring by the Presidency of the Council of Ministers

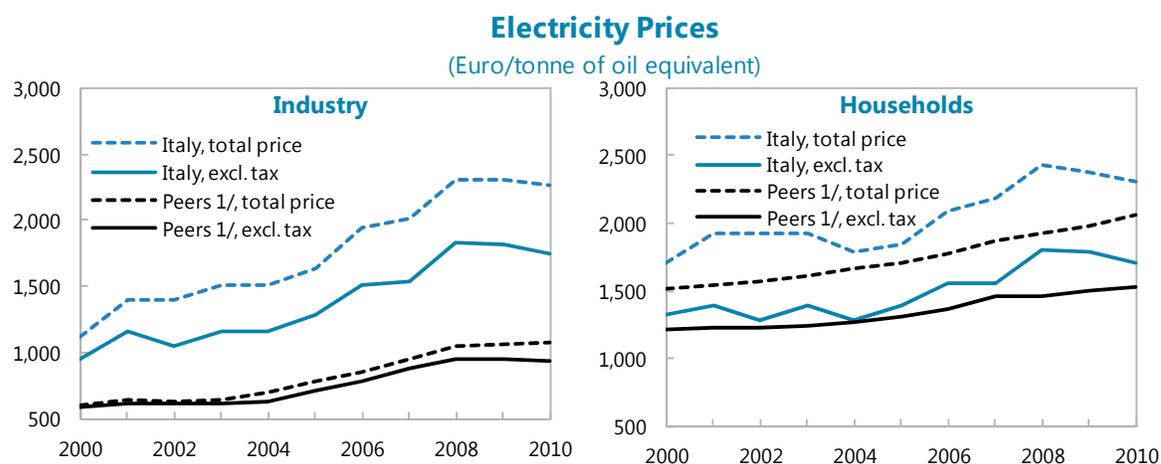
Source: IMF staff.

industries and close to 30 percent of the households' final consumption expenditure.<sup>5</sup>

## Energy Sector

### 9. Italy's energy prices are among the highest in Europe, reflecting limited competition and the lack of energy policy coordination across levels of government.

High gas prices and large reliance on gas in electricity production have contributed to electricity prices in Italy being 50 percent higher than the European average (Antitrust Authority, 2012), especially for industrial users.<sup>6</sup> The limited import infrastructure, the existence of a strong incumbent (ENI) in all segments of gas importation/ transport/storage, and long-term import contracts hamper competition and discourage investments. Achieving coordination on the projects of national interest (e.g., liquefied natural gas (LNG) facilities) is complicated by a veto power of regional/local governments. While also in other countries, sub-national governments exercise such veto power, the project authorization process in Italy is exceptionally long. Information asymmetries discourage competition in the final sale of electricity. Prices of petroleum products (with and without taxes) are also higher in Italy as a result of outdated and oversized distribution network, barriers to entry, and contractual restrictions.



Source: OECD.

1/ Peers = Average of Austria, Belgium, France, Germany, Netherlands, Portugal, and Spain.

<sup>5</sup> Not included here are financial/insurance activities, telecommunication, public administration, wholesale/retail trade, and accommodation/food services. For some of these areas, more general measures to abolish/reduce regulatory and administrative restrictions are introduced in the January 2012 liberalization and simplification packages.

<sup>6</sup> Energy products constitute about 4 percent of total inputs used (intermediate consumption) by other industries, mainly manufacturing (Eurostat, Input-output tables, 2008). Italy is among the five most energy dependent countries in Europe (83 percent of its energy needs are met by net imports versus 54 percent for EU-27 average).

10. **The authorities plan to encourage competition and infrastructure investments by separating the ownership of the gas transport/storage companies from ENI.** The modalities of the ownership unbundling have been outlined in the May 2012 decree, which envisages a sale of ENI's shares in SNAM to *Cassa Depositi e Prestiti* (CDP). The share transfer is set to be completed by May 2013. Some measures are also in place to address the delays in authorization process for strategic infrastructure projects, promote investments in gas and electricity sectors, and reduce the cost of gas for companies (through additional access to storages) and vulnerable customers. Some restrictions on exclusive contracts between fuel distributors and suppliers have been lifted, and measures to enhance information transparency have been introduced.

### Transport Sector

11. **The bottlenecks in the transport sector include a fragmented regulatory framework, lack of liberalization in the railways services, and limited competition in the highways industry.** Regulatory functions have been scattered among various agencies and levels of government, while not always respecting the distinction between regulator and service provider necessary to avoid a conflict of interest (OECD, 2009a). Progress in improving passenger (especially regional) and freight services has been held back by also the lack of vertical separation in the sector: the state-owned incumbent monopolist (FS) owns both most of railways infrastructure and main transport operators and benefits from government subsidies and entry barriers. The current tariff system and the very long duration of concessions hinder investments in the highways network and limit competition while generating high profits for operators (Antitrust Authority, 2012; Asquer, 2011). Supply restrictions on the taxi services remain despite past liberalization efforts.

12. **An independent Transport Authority will be established in the coming months to strengthen the regulatory framework.** This represents a major institutional change, with specific measures on the transport sector delegated to the Transport Authority, including on the vertical separation in the railways industry. In some areas, reform guidelines have already been provided, such as extending competitive tendering to the regional passenger railways services and establishing new tariff systems for new highways concessions. However, in taxi services, the role of the Transport Authority will be limited, and the decision on licenses will remain with the sub-national governments.

### Professional Services

13. **Italy has one of most restrictive regulations in professions among the OECD countries (Figure 1).** This has limited competition, protected incumbents' rent, and increased costs for businesses and households. Unlike most of the OECD, Italy featured (until recently) price regulations, particularly in the form of minimum fees, while entry to and conduct in the market are subject to stringent controls. Pharmacists are particularly heavily regulated (ownership restrictions, limits on number/location/products), while the

structure of lawyers' fees creates incentives to prolong litigation. Regulations also create uncertainty about the ultimate costs of resorting to the justice system. The supply of notarial services is low, reflecting shortcomings in the process of entry exams and the organization of notaries throughout the country. In general, the governance of professional orders creates a possible conflict of interest as some members could be both competitors and responsible for the oversight of the order's activities and disciplinary matters.

14. **Tariffs for regulated professions are being abolished, and a reform of professional orders is underway.** The reform, to be completed by September 2012, should ensure liberal access to professions and increase competition by strengthening the governance (including in the areas of training and oversight) and removing restrictions on advertising. A decree to establish parameters for setting professional tariffs is to be issued by the Ministry of Justice by end-July 2012. The number of pharmacies and notaries will be increased, and some restrictions on pharmacies' activities are abolished. However, reforms have fallen short of a more complete opening up of these sectors.<sup>7</sup>

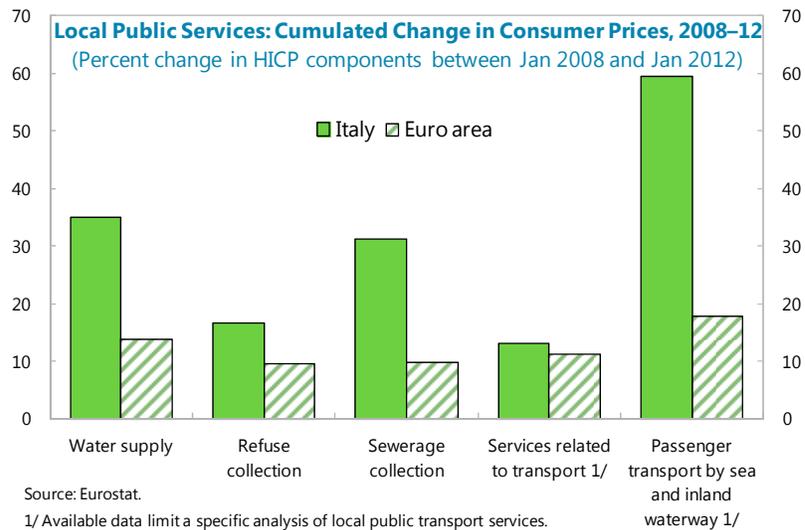
### Local Public Services

15. **Non-competitive contract awards, ineffective regulation, and constraints to economic activities have affected the costs, quality, and efficiency of local public services.** These are cross-

cutting issues, spanning from gas/electricity distribution and water supply to local public transport, waste industry, and other areas under the competencies of local governments (e.g., commercial distribution).<sup>8</sup>

The use of "in-house" contracting has created a conflict of interest between regulator (local authority) and service provider (closely

linked to the local authority). The devolution process has also contributed to the proliferation of regulations and regulators, but the enforcement of competition rules has been weak,



<sup>7</sup> Efforts have been uneven and at times suffered setbacks, including most recently relating to the transparency requirements for professional fees (providing preliminary estimates of the cost of the service is not legally binding) and liberalization of pharmaceutical products.

<sup>8</sup> There are, however, regional differences in the extent of these problems, which manifest in large productive disparities across regions (e.g., see IMF, 2011).

especially given the constitutional autonomy that the sub-national governments enjoy and strong connections to local vested interests. A substantial privatization of local public services has not yet taken place. Overall, in recent years, utility tariffs have increased more in Italy than in other euro area countries, especially in the sectors not subject to independent regulation (OECD, 2009a).

16. **Stronger enforcement of competition rules for providing local public services is a key focus of reforms.** Sub-national governments are required to clearly define public service obligations, provide services through competitive tendering, and deviate only in exceptional cases. The latter will be subject to a mandatory evaluation by the Antitrust Authority. The Antitrust Authority has also been given the power to challenge in court the decisions made at all levels of government that infringe competition. To increase efficiency and reduce costs, service provision will be organized over “optimal territorial areas”. A monitoring mechanism by the Presidency of the Council of Ministers has been set up; sanctions, including fiscal, for non-compliance have been introduced; and instances where the State can intervene within its constitutional “substituting powers” have been broadened. Other changes include providing more flexibility to potential service providers to adjust organizational needs after winning a tender. However, effective implementation of the new framework remains the key issue in light of fiscal pressures at the local level, capacity constraints, and uncertainties arising from frequently changing regulatory framework. While reforms include some measures to encourage asset sales by local governments, more focus on privatization is still needed.

### C. Labor Market: Improving Participation and Productivity

17. **Making the labor market more dynamic and inclusive are the main objectives of the authorities’ reform proposal.** The government’s proposal, as presented in the April draft law, is wide-ranging and addresses most of the key aspects of the labor market (Table 2). In general, the reform aims at tackling job insecurity and dualism, making employment protection and unemployment insurance more even, encouraging more stable employment relationships while also lowering the firing costs, and ultimately increasing employment and participation, especially of youth. The reform also envisages strengthening active labor market policies, but does not address internal flexibility and wage bargaining decentralization. Also, the implications of the reforms for the public sector are left for a future (legislative) action. The draft proposal is still waiting approval from the parliament.

18. **High inactivity, dualism, and inertia are the main elements of labor market outcomes in Italy (Table 3).**

- For a 15–24 year-old, the chance of being in education is about 60 percent and being employed is slightly over 20 percent compared to over 35 percent in the euro area.

Table 2. Italy: Labor Market Reform—A Summary of Main Problems and Actions Proposed

Area	Sub-area	Main Problems	Actions proposed
<b>Contracts and labor market entry</b>	General	Dualism; large number of atypical contracts; precariousness and difficulties to enter the market, especially for youth	Encouraging stable employment relationships
	Apprenticeship	Insufficient training contents; ineffective in translating into an open-ended contract	Promoting apprenticeship via tax incentives (*); increasing training; conditioning new contracts on past conversion into open-ended positions; increasing minimum duration and share of apprentices
	Temporary contracts	Disincentives for investing in skills and human capital; subject to abuse	Tax disincentives for fixed-term contracts (*); controlling abuse of atypical contracts
<b>Employment protection legislation</b>	Open-ended contracts	Prohibitively high costs for dismissal; mandatory reinstatement and compensation for unfair dismissal	Reducing costs of individual dismissal by limiting the compulsory reinstatement in case of dismissal for economic reasons
	Collective dismissal	Highest costs among OECD countries	Harmonizing with the modifications proposed for individual dismissal
	Legal process	Long and costly; only country in OECD where legal representation is mandatory; limited use of out-of-court settlements	Establishing special accelerated process for dismissal litigations; incentives for out-of-court settlement
<b>Social safety net</b>	General	Fragmented, complex, and uneven system; inefficient worker reallocation, regionally and in terms of skill mismatches	Reorganizing social safety net to make the coverage more uniform (within the overall fiscal constraints) by 2017; instruments for employer-financed early retirement schemes
	Wage guarantee funds	May hinder efficient worker reallocation and create adverse incentives for non-viable firms	Extend wage guarantee funds, as in part already in place during the crisis years (*)
<b>Labor participation</b>	Female participation	Very low participation	Protecting against illegal 'blank resignations'; vouchers for baby-sitting services; tax incentives to hire (*)
	Youth employment	Very low participation	Tax incentives to hire (*); establishing a special type of company (with simplified requirements) for young entrepreneurs (*); apprenticeship contracts (see above)
	Active labor market policies	Regional fragmentation and differences in efficiency; low spending on activation policies	Some liberalization of employment placement services (*); strengthening the system by introducing minimum levels of employment services
<b>Internal flexibility</b>	Firm-level contracts	Disconnect between wage and productivity developments; insufficient use of firm-level contracts	Agreement between social partners and legislation to promote wage bargaining decentralization (*); tax incentives for productivity-based contracts (*)
<b>Public sector employment</b>	General	Large regional differences in the relative size; high public-private wage ratio; differences in regional cost of living not reflected in wages; insufficient mobility	Not covered in the reform proposal yet but remains under discussion; earlier public administration modernization reform stalled because of fiscal constraints

Source: IMF staff.

Note: Reforms marked with (\*) have already been introduced (in part or fully) in earlier legislation.

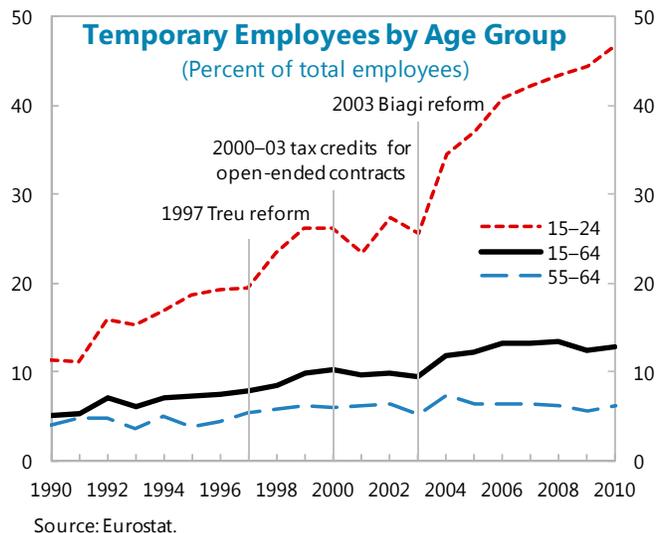
- For a 40–64 year-old, the chance of being employed is only 60 percent (mainly driven by low female employment) and being inactive about 35 percent (almost 50 percent if a woman).
- If employed, a 15–24 year-old would have a 50 percent chance that the contract would be open-ended, while for a 40–64 year-old this chance would be over 90 percent.
- Alarming, the transition probability from unemployed to inactive is higher than in other countries, especially for women and in the South (Istat, 2011) while inactivity tends to be almost permanent.

### Enhancing Internal Flexibility

#### 19. **The need for more flexibility and inclusiveness in the labor market and rigidities at the core have led to increased flexibility at the margin, affecting primarily the youth.**

The two main reforms—the Treu reform in 1997 and the Biagi reform in 2003—aimed to promote and deregulate temporary and atypical contracts, provide incentives for part-time work to increase employment, and introduce new types of atypical work arrangements (see, for example, Schindler, 2009). As a result, youth (15–24) and female (15–64) employment increased, respectively, from about 25 percent in 1997 to a high of 27.6 percent in 2004, and from 36.5 percent in 1999 to a high 47.2 percent in 2008. However, most of the increase was at the margin: the share of temporary workers among youth increased from less than 20 percent in 1997 to almost 50 percent by 2010.

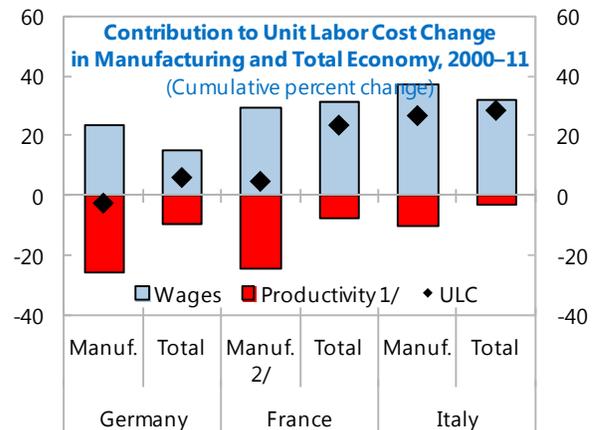
This phenomenon is not unique to Italy, and in fact, the share of temporary employment in total employment in Italy was lower than in Spain and Germany in recent years (Table 4). However, limited absorption of temporary workers<sup>9</sup>, high youth unemployment (record high at about 35 percent in 2012), a rigid core with little internal flexibility, and abuse of atypical contracts can cause lasting damage to human capital and skill accumulation.



<sup>9</sup> In 2008, estimated 65–70 percent of workers on atypical contracts found themselves in the state of precariousness after two years (UniCredit, 2012).

20. **An emphasis on open-ended contracts and apprenticeship, in particular, is a key focus of the reform but more should be done to bridge the gap between permanent and temporary workers.** Building upon the existing apprenticeship regime, the reform proposes a few novelties which could result in more stable employment relationships for youth.<sup>10</sup> However, apprenticeship contracts have fiscal costs (100 percent exemption from social security contributions) and age limits. A variety of atypical contracts will still remain under the reform, though fixed-term contracts will cost somewhat more (1.4 percent higher social contribution rate). At the same time, some more flexibility in hiring is introduced, and the total duration of fixed-term contracts at 36 months will remain at a higher end compared to, for example, 24 months in Spain and Germany (Table 4).<sup>11</sup> To bridge the gap between different types of workers and simplify the system, a more flexible open-ended contract for new workers that gradually increases employment protection with tenure could be considered. This would help encourage hiring by lowering the cost of new regular hires, remove discontinuity in firing costs that employers face, and reduce incentives for excess turnover in favor of longer tenures and skill accumulation.

21. **The mismatch between wages and productivity needs to be addressed to raise competitiveness.** Italy's aggregate wage distribution is too compressed, in stark contrast to large regional differences in productivity (Schindler, 2009; Boeri and Perotti, 2004). Indeed, the significant mismatch between wage and productivity growth has increased unit labor cost in Italy's manufacturing sector since 2000, well above that in Germany and France, and eroded its competitiveness. In this context, the June 2011 agreement among social partners and the August fiscal package (Article 8 of Decree Law 138/2011) which allowed firm-level contracts to derogate from legislation



Sources: AMECO and IMF staff calculations.  
1/ Negative = Increase in labor productivity; 2/ 2000-10.

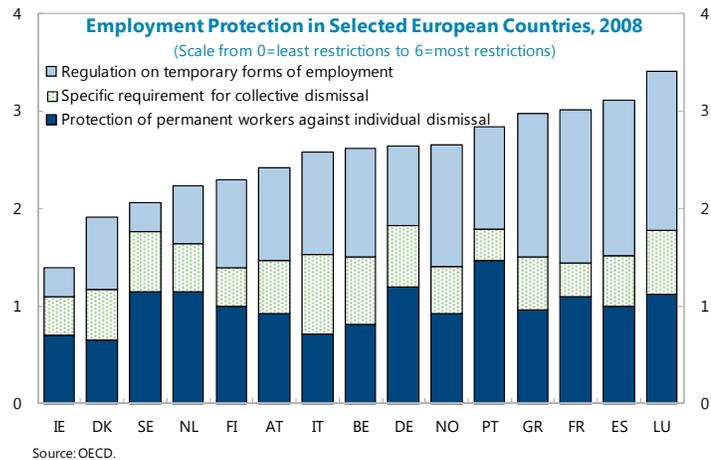
<sup>10</sup> Three new types of open-ended apprenticeship contracts were introduced in 2011. In exchange for training services, these contracts allow employers to pay a wage below the level stipulated by collective agreements. Some guarantees are also provided to prevent employers from dismissing apprentices during the training period (OECD/ILO, 2011). The reform proposes to condition new contracts on past conversion into open-ended positions and increase minimum duration and share of apprentices.

<sup>11</sup> Some suggest, however, that in the absence of a minimum wage, higher fiscal costs would simply be shifted to temporary workers, by lowering their wages (Boeri and Garibaldi, 2012a).

and industry-wide collective agreements by generally binding decentralized agreements were welcome steps but their adoption is slow.<sup>12</sup> With exception of some limited fiscal incentives that were re-introduced to encourage firm-level wage bargaining, these initiatives have not received any further push as part of the current reform proposal.

## Reducing Firing Costs

22. **Employment protection legislation (EPL) in Italy does not appear particularly restrictive at first sight but some elements make firing costs prohibitively high.** Both for open-ended and temporary workers, the EPL restrictions place Italy at about the OECD average. However, Italy scores the highest in collective dismissal, because of special costs to employers and cumbersome procedures. The breakdown within the EPL indices points to the length of trial process and possibility of reinstatement following unfair individual dismissal for companies with 15 employees and more (Article 18 of the Workers' Statute) as the areas where Italy's performance is particularly weak. Uncertainty and costs associated with dismissals are likely to prompt employers to rely more on temporary contracts to cope with workforce adjustment needs or to deter hiring in general.<sup>13</sup> Use of out-of-court settlements is limited while courts are burdened by a huge backlog of labor dispute cases.<sup>14</sup>



<sup>12</sup> Already with the *Mirafiori* agreement of December 2010, *Fiat* chose to regulate labor relations through first-level plant agreements, abandoning the traditional reference point of the metalworking industry-wide agreement and the practice of second-level supplementary collective agreements at company and plant levels. In December 2011, the Federation of Metalworkers (*Fiom-CGIL*) left negotiations with *Fiat* on a new group-level agreement when *Fiat* declared the basis for talks would be the *Pomigliano* agreement of December 2010, which *Fiom* had refused to sign. The new first-level agreement was signed on December 13, 2011, covering some 86,000 workers and including common group-wide minimum wage rates. *Fiom*, which did not sign the new agreement, will not be allowed to have company-level representatives. Reflecting concerns over the effective implementation of the June 2011 agreement and the August package, *Fiat* withdrew, as of January 2012, from all existing collective agreements and left the *Confindustria* representation system, which governs Italian industrial relations. <http://www.eurofound.europa.eu/eiro/2011/11/articles/it1111029i.htm>.

<sup>13</sup> Schivardi and Torrini (2008) find also that the firms' growth slows down around the threshold of 15 employees above which the obligatory reinstatement is applied. However, they also note that the effect of stringent employment regulations on the firm size is quantitatively modest.

<sup>14</sup> The Ministry of Justice's statistics for 2009 indicates that over 300,000 labor dispute cases were pending in the 1st instance and in appeal, for both private and public sector employment disputes. Separately, ISTAT noted, (continued...)

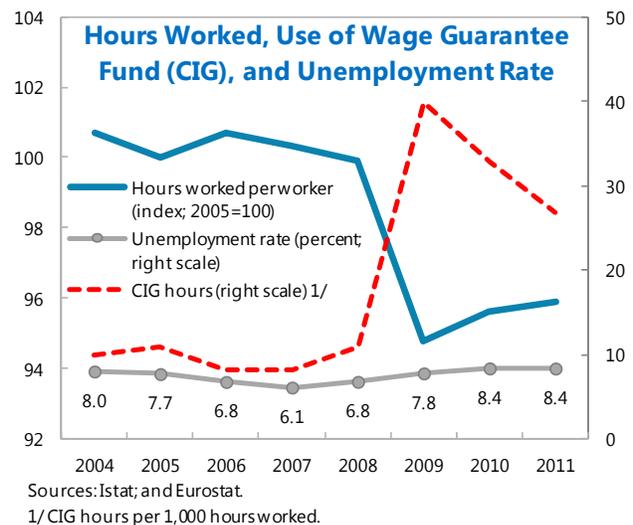
23. **Proposed modifications to dismissal regulations should allow firms to more flexibly adjust to economic conditions (Table 5).** In particular, in case of an unfair dismissal for economic reasons, the reform introduces a possibility of limiting legal remedy to compensation only (equivalent to 12–24 months of salary). Still, the possibility of reinstatement, unlike the original reform proposal, is retained. Compared to other countries, this may still make Italy’s dismissal rules more restrictive (see Table 4). Further, on the positive side, a mandatory conciliation is introduced, the time to lodge a complaint before a judge is reduced (from 270 to 180 days), and the procedures for labor disputes are streamlined. Overall, the modifications may increase the role of judges,<sup>15</sup> highlighting the need to improve the efficiency of the judicial system. However, the issue of the backlog of pending cases is not covered, which, if not urgently addressed, may impede the implementation of the proposed labor reform.

### Social Safety Net

24. **A fragmented and uneven social safety net has added yet another layer to the dualism and inefficiencies in the labor market.** Italy’s system of income support for the unemployed relies on a large short-time work scheme (*Cassa Integrazione Guadagni (CIG)*; or Wage Guarantee Fund) and several unemployment insurance benefit schemes. The latter

are limited in time and access, while CIG can be substantially more generous but it has traditionally been limited to large firms in manufacturing. In recent years, some schemes have been extended to the workers who were previously ineligible (fixed-term and atypical contracts). This played an important role in containing the impact of the crisis on employment, but the use of CIG hours is still well above the pre-2008 levels, while unemployment has been on a rise. Unlike the German short-time scheme, CIG is not designed explicitly for temporary

shocks, but allows also for short-time work in case of structural adjustment, hence potentially delaying needed firm restructuring/liquidation. Also, its expansion was financed through the budget and not employer contributions, providing little incentives to firms to reduce its use



in 2001, that the average length of a labor-related dispute in the 1st instance was 917 days and 884 days in appeal, for a total average length of labor-related disputes of almost 5 years.

<sup>15</sup> Boeri and Garibaldi (2012a,b) argued that the reform, even in its original version, would give vast powers to judges, emphasizing also asymmetries in legal remedies depending on the reasons for dismissal and the fact that collective dismissals may cost less than individual ones.

(Boeri and Bruecker, 2011). Overall, the lack of a broad and well-developed social safety net inhibits efficient worker mobility and reallocation, both regionally and in terms of skill mismatches.

25. **The reform proposal aims to make the unemployment benefit system more universal by 2017, along with extending the wage guarantee funds.** A new scheme (ASpI) will be introduced starting in January 2013, which will consolidate the existing non-CIG income support schemes and have a wider coverage, including apprentices and workers with short work experience, but not public sector employees on open-ended contracts. There would be little change in the unemployment benefit and duration from the current regimes. The reform will also have fiscal costs (estimated at €1.7 billion per year), which is expected to be covered in part by higher social security contributions for fixed-term contracts. To improve the current CIG system, the extraordinary CIG—the scheme used in case of firm restructuring and prolonged crisis/bankruptcy—will not apply if business activity ends. The ordinary CIG, however, which covers temporarily suspended workers in manufacturing and construction sectors for up to 12 months, will remain unchanged, while a new wage supplementation scheme will be introduced for other sectors.

### **Activation and Participation**

26. **Regional fragmentation, inefficiencies, and limited fiscal resources impede the effective use of active labor market policies (ALMP).** Following the 1997 liberalization of job placement services, competencies in ALMP have been devolved to regions, resulting in large heterogeneities in the efficiency of the services provided. Mediation between labor supply and demand both by public and private employment offices is limited. Italy's spending on ALMP (in percent of GDP) is relatively small compared to other EU and OECD countries, and less than on passive policies. Lack of a single system of skill certification and recognition of vocational/training standards that is acknowledged across the country impedes labor mobility (European Council, 2011). Female labor participation, especially in the South, is particularly low.

27. **The reform intend to strengthen active labor market policies and reduce regional differences in employment services.** Minimum levels of employment services will be established to help ensure more uniform provision of such services across the country. The implementation risk of these policies, however, is large given the dependence on the regional governments to enact and implement these policies. The specific measures in the area of promoting labor participation, especially among women, are very modest, and only partially address the key issue of Italy's relatively high taxation of labor, especially for second earners. Some ad hoc tax incentives for hiring women and youth have recently been introduced, but it would be too early to assess their effectiveness.

#### **D. Assessing the Impact of Structural Reforms: Using the IMF's GIMF**

28. **An extensive literature finds a positive relationship between structural reforms and economic performance, especially in the long run.**<sup>16</sup> Four key findings emerge from the recent empirical studies:

- In the long run, product and labor market reforms can have positive effects on growth, employment, and productivity (e.g., Bouis and Duval, 2011; Barnes and others; 2011; OECD, 2012b; Hobza and Mourre, 2010)<sup>17</sup>;
- In the short run, however, the impact of the reforms can be small or even negative because of adjustment costs, especially in case of job protection and unemployment benefits reforms (Cacciatore, and others, 2012), particularly when these are undertaken in severely depressed economies (Bouis and others, 2012);
- While the issue of long-run substitutability versus complementarity between product and labor market reforms remains empirically debated (Cacciatore and others, 2012), studies agree that a broad reform package would be more beneficial than individual reforms as the former could help lower transitional costs; and
- Cross-country coordination of reforms could produce larger and more evenly distributed positive effects (e.g., Gomes and others, 2011; Forni and others, 2010).

Complementing the recent literature, Box 1 discusses an alternative cross-country analysis which looks at the determinants of the change in growth trend. The results, in line with the above findings, suggest that reforms aimed at deregulating product markets, especially network industries, and reducing the share of direct taxes increase the probability of exiting a low-growth phase.

29. **Italy-specific empirical results also point to potentially sizeable positive effects of structural reforms on GDP and productivity.** In particular:

- OECD (2009a) simulations suggest that Italy's labor productivity could increase by about 14 percent over 10 years if its product market (especially professional services) regulation is aligned to international best practice.

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<sup>16</sup> For a detailed literature survey, see, for example, IMF (2011), and Schiantarelli (2010) for a comprehensive survey of the literature on the impact of product market regulation on macroeconomic performance.

<sup>17</sup> For an average OECD country, the overall GDP gains from undertaking an ambitious and comprehensive package of product and labor market reforms (EPL) as well as reforms of unemployment benefit, labor tax, and pension system, could reach 10 percent over the next decade.

### **Box 1. Turning Points in Growth and Structural Reforms 1/**

**This box asks whether structural reforms can help economies exit a protracted period of low growth.** This is particularly relevant for Italy where growth has slowed down markedly in the last decade (Section I). But slow-growth episodes are not uncommon in general: indeed, growth tends to be highly unstable, and the more typical pattern is that countries experience phases of growth, stagnation, or decline of varying length (Easterly and others, 1993; Pritchett, 2000; Hausmann and others, 2005). While commonly used determinants of growth tend to be more stable, smoothing the growth series for a long-term analysis comes at a cost of removing important variation in growth rates. As an alternative, turning points in growth experience and events around them can be analyzed explicitly. In our analysis, these would be the turning points when countries exited a protracted period of low growth.

**Our analysis is related to the recent literature on growth accelerations, which provides partial evidence for the importance of economic reforms for sustained growth takeoffs.**

The literature has focused on growth acceleration episodes and mainly on the impact of economic openness and political factors, using a mixed sample of developed and developing countries. In particular, Hausmann and others (2005) find that growth accelerations tend to be highly unpredictable and in most cases are not preceded or accompanied by major changes in economic policies, institutional arrangements, political circumstances, or external conditions. Still, they show that economic reform—proxied as the start of trade liberalization—has a significant impact on the likelihood of sustained accelerations, as also confirmed by Aizenman and Spiegel (2010), Xu (2011), and Jong-A-Pin and De Haan (2011).

**We use a two-stage approach to estimate the impact of structural reforms on the probability of exiting a low-growth spell.** We first identify low-growth episodes within a sample of OECD countries spanning over 1960–2010, and then use a probit model to look at the determinants of the turning point following such episodes.<sup>2/</sup> In contrast to the existing studies, we have limited the country sample to the advanced economies, but have significantly expanded the set of explanatory structural reform variables.

**Our empirical results suggest that reforms aimed at deregulating product markets increase the probability of exiting a low-growth spell.** In particular, deregulation of network industries has a statistically significant impact: the predicted probability of exiting a low-growth spell varies in the range of 0.09–0.18 if a reform effort is taken to deregulate network industries. When combined with reform efforts in liberalizing the domestic financial sector and reducing public sector ownership in the economy, the predicted probability increases to almost 0.40 (column 3).

### Box 1. Turning Points in Growth and Structural Reforms 1/ (concluded)

**Other predictors show expected signs but employment protection reforms do not yield robust results.** A reduction in the share of direct taxes in the total tax revenue (column 4) and being open economy (column 5) increase the predicted probability of exiting a low-growth phase. Real effective exchange rate depreciation, in contrast, has not been found statistically significant (column 6). Also, employment protection reforms yield unstable results (not reported here), likely as a result of data limitations.

**Predicting Exit from Low-Growth Episodes: Probit Regression Results**  
(Dependent variable: Dummy variable for the timing of exit from low-growth phase)

	(1)	(2)	(3)	(4)	(5)	(6)
Reform effort_network industries	0.47** (2.08)	0.50** (2.25)	0.65*** (2.75)	0.64*** (2.85)	0.66*** (2.88)	0.65*** (2.93)
Reform effort_financial sector		0.27** (2.06)	0.35** (2.42)	0.27* (1.93)	0.28** (2.11)	0.28** (2.10)
Reform effort_public ownership			0.39** (1.96)	0.39* (1.74)	0.40* (1.71)	0.41* (1.73)
Share of direct taxes (change)				-0.11* (-1.94)	-0.12** (-1.99)	-0.12** (-1.99)
Openness					0.01** (2.04)	0.00** (2.01)
REER depreciation						-0.01 (-0.73)
Constant	-2.34*** (-11.87)	-2.13*** (-9.61)	-1.80*** (-14.25)	-1.75*** (-12.91)	-2.11*** (-8.64)	-2.10*** (-8.62)
Predicted probability at:						
Reform effort_network industries = 1	0.09***	0.13***	0.18***	0.17***	0.18***	0.17***
+ Reform effort_financial sector = 1		0.18***				
+ Reform effort_public ownership = 1			0.39***			
+ Share of direct taxes (changes) = mean				0.35***		
+ Openness = mean					0.36***	0.36***
Pseudo R <sup>2</sup> (robust probit regression)	0.18	0.12	0.08	0.08	0.10	0.10
Number of observations	1,012	657	592	589	589	589
Number of countries	24	22	22	22	22	22

Source: IMF staff estimates.

Notes: Annual data over 1960–2007 (sample period varies); robust population-averaged estimation; z-statistics in parentheses; \*\*\*(\*\*), \* = significant at the 1 (5, 10) percent level; time fixed effects are included but not reported.

For definition/sources of the variable: See Ostry and others (2009) for Reform effort\_network industries and Reform effort\_financial sector; Conway and Nicoletti (2006) for Reform effort\_public ownership; Share of direct taxes is the sum of income, payroll, and social security contribution taxes in total taxes (OECD); Openness is the share of exports and imports in GDP (OECD); and REER depreciation is the change in CPI-based real effective exchange rate (OECD).

1/ Based on Lusinyan (2012).

2/ A period is defined a low-growth episode if the annual (logarithmic) growth rate of real per capita GDP is below  $\bar{g}$ -percent over at least 7 consecutive years, where  $\bar{g}$  is the estimated growth rate from a pooled (OLS) regression of the growth rate on the initial real GDP per capita level. Alternative definitions have also been used.

- Bouis and Duval (2011) and OECD (2012b) illustrate that, under an ambitious and broad reform agenda to close the gap with the best practice or most liberal cases (labor market reforms), Italy's GDP per capita could increase by about 7 percent after 5 years and close to 15 percent after a decade.
- Forni and others (2011) find that increasing competition in services sector in Italy could raise its real GDP by up to 11 percent in the long run, half of which comes in the first three years.
- In the National Reform Programme 2012 (NRP, 2012), the authorities estimate that the impact of recent liberalization and simplifications measures could increase the level of real GDP by 2.4 percent over 2012–20 while closing the gap (in terms of the degree of competition, entry barriers, and administrative costs) with the best performers in Europe could raise real GDP by 5 percent by 2020.<sup>18</sup>
- The OECD estimates that product market reforms adopted in Italy over 2008–12 could potentially increase TFP by 2–3 percent in 2020 (NRP, 2012).

### **The Model and Simulation Design**

30. **The impact of structural reforms is simulated using the IMF's Global Integrated Monetary and Fiscal model (GIMF) (see Annex).**<sup>19</sup> Because of the presence of monopolistic competition in firms and in labor markets, GIMF can be used to generally assess the effectiveness of structural reforms in those markets, through markups on the price of non-traded and traded goods, and on wages. This is useful, since structural reforms are usually framed in terms of making those markets more competitive, for example, through reducing entry barriers. The labor market in GIMF, while containing a wage markup, is relatively simple, as only total hours are modeled, with no true distinction between unemployment, participation, and working-age population. However, through a proper mapping to the labor supply shock, GIMF can capture most labor reform measures.

31. **The standard calibration of GIMF is augmented with additional information for Italy and the euro area.** Liquidity constrained households make up 25 percent of all

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<sup>18</sup> Also, a recent analysis by the Antitrust Authority, conducted in collaboration with the Bank of Italy, suggests that full and immediate implementation of the liberalization measures advocated by the Antitrust Authority would raise (as mapped through the OECD PMR indicators) the value added in the manufacturing sector by 2.2 percent in six years.

<sup>19</sup> For a more detailed description of GIMF, see Kumhof and others (2010). GIMF differs from the Global Economy Model (GEM), used in Everaert and Schule (2008), as it has a fully endogenous determination of the net foreign asset position, because of its overlapping generations framework. It also has a richer fiscal framework, and a more realistic baseline fiscal rule.

households, in both Italy and the rest of the euro area. The share of non-tradable sector accounts for roughly 50 percent of the economy.<sup>20</sup> The markups are calibrated to be consistent with data from Forni and others (2010) for wage and price markups, such that the non-tradable sector price markup is 61 percent versus 35 percent for the rest of the euro area, and 17 percent for tradable sector price markups. As for the wage markup, we follow the assumption in Forni and others (2010) and use the same values as for the non-tradable sector price markup.

32. **As with any macroeconomic model, our analysis has limitations.** GIMF can only approximate the extent of the reforms, as the model is restricted to two sectors, tradable and non-tradable goods. This makes the direct analysis of specific reforms, such as a reduction of professional services costs, or a cut in the energy costs as a result of more competitive energy market, only approximate, through the broader aggregates. Also, since the analysis is conducted around an initial steady state, it does not account for differences in cyclical position that can affect the impact of policies, especially in case of labor market reforms (OECD, 2012b; Bouis and others, 2012). Finally, different from Cacciatore and others (2012), this model does not capture well the hiring-firing dynamics which can be important for assessing short-term effects of structural reforms.

33. **The analysis is conducted along two approaches used in the literature:**

**A positive approach**, which shows a range of possible outcomes for two major areas of structural reform—policies that promote competition in the non-tradable sector and increase flexibility in the labor market. These are achieved by lowering the markup on prices in the non-tradable sector and on wages. For Italy, price markups in the non-tradable sector are high relative to the rest of the euro area, and there are indications that this is also true for the wage markup.<sup>21</sup>

- We consider an array of reductions in the markups for non-tradable goods and wages (5, 10, 15 and 20 percentage points), where the policy reform is phased in over five years.
- Policy is either immediately credible or stepwise credible. The former assumes households and firms believe government policies to be permanent, and markups adjust permanently. In the latter, households and firms believe that the policies will lead to no

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<sup>20</sup> According to the Eurostat's input-output tables, the share of the energy, other utilities, construction, trade, transport, professional services and services sectors in total value added in Italy amounted to about 47½ percent in 2008.

<sup>21</sup> In general, price markups, which measure the degree of competition in a sector, are found to be higher in non-tradable (services) sectors than in tradable (manufacturing) sectors across countries (e.g., Christopoulou and Vermeulen, 2008; Forni and others, 2010; Gomes and others, 2011). However, the average markups, especially in services are much higher in Italy than in other advanced economies. For example, Christopoulou and Vermeulen (2008) estimate that, over 1981–2004, the markups for the manufacturing/construction sectors were on average 1.18 and 1.23 in the euro area and Italy, respectively, while the markups for the services sector were 1.56 and 1.87 in the euro area and Italy, respectively.

further reductions in markups in the following years, so that the future announced path of policy changes has no effect on current decisions by households and firms. However, since the government continues to implement its new policies over time, households and firms eventually perceive the entire change to be permanent, after 5 years. The difference in the outcomes between the immediately and stepwise credible policies is only over the short/medium term.

**A normative approach**, which uses the distance-from-frontier approach, whereby the gap between Italy's indicators and the best practice in OECD and euro area is assumed to be closed in part.

- For labor market reforms, we use the OECD estimates and a methodology developed in 2011 for the IMF's contribution to the G-20 Mutual Assessment Process.<sup>22</sup> For product market reforms, we base our reforms on the data and assumptions in Forni and others (2010). The specific reform measures and proxies used in the simulations are reported in Table 6. The bulk of the reforms are implemented over the 2013–18 period and assume that the reform measures will close roughly half the gap between the current situation in Italy and a best practice measure (the OECD for labor markets, rest of the euro area for product markets).<sup>23</sup> For product market reforms, in particular, closing half the gap over a five-year period may still be ambitious considering deeply-rooted structural problems.
- We supplement these simulations with an analysis of the impact of (deficit neutral) fiscal policies based on tax and expenditure switching, which could potentially enhance growth.

**34. Product market reforms introduced by the Italian authorities are expected to increase competition, especially in the non-tradable sector.** As discussed above, we map these reforms through a reduction in price markups over a range of values given uncertainties in the impact and implementation of these measures. In mapping product market reforms into the model (QUEST III) parameters, NRP(2012) distinguishes between specific measures which are expected to: (i) increase competition in both tradable and non-tradable sectors (price markup reduction); (ii) reduce entry barriers (price markup reduction); and (iii) reduce

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<sup>22</sup> The data is provided by the OECD for use in the G-20 Mutual Assessment Process. The methodology employed, and the results of the 2011 exercise can be found in IMF (2011a) "G-20 Mutual Assessment Process: From Pittsburgh to Cannes - IMF Umbrella Report".

<sup>23</sup> Some measures have fiscal outlays, so there is a 1-year delay in implementation, so that the government does not have to change its fiscal projections for the upcoming fiscal year. Also, we assume that policies are stepwise credible (until fifth year) such that the future path of shocks is not fully taken into account in households' and firms' decisions in the first years. This assumption affects only the short-term dynamics.

administrative costs (reduction in overhead labor, i.e. a shock to labor demand).<sup>24</sup> However, we do not distinguish between these cases mainly because of model limitations.

35. **Our labor market reforms reflect the authorities' reform agenda to introduce more flexibility in the labor market and increase its inclusiveness.** To achieve this, we consider first a reduction of wage markups over a range of values, and, in the case of the normative approach, more flexibility in employment protection, stronger activation policies, and higher female participation (through childcare support measures).

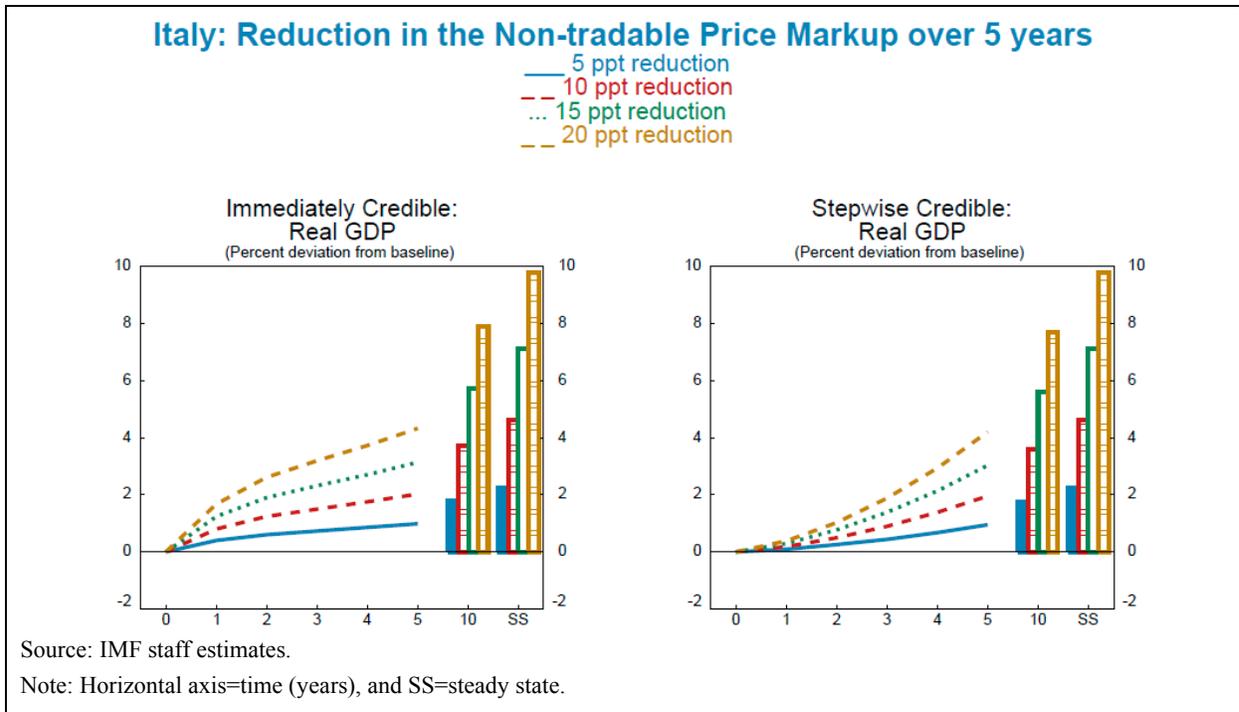
#### **Simulation Results: Positive Approach**

36. **A sustained reduction in the non-tradable price markup could increase output by over 4 percent in 5 years and almost 10 percent in the long run (Figure 5).**

Consumption, investment, and exports are over 8 percent higher in the long run. While real wages increase by almost 10 percent, labor productivity increases by more as a result of capital accumulation, resulting in a slight reduction in unit labor costs. Hours worked is slightly lower in the long run as a result of a stronger income than substitution effect. These policies produce a real exchange rate depreciation of up to 5 percent (for details of the transition dynamics, see Annex). In the medium term (5 years), when the markup reduction process is still ongoing and the model dynamics have not settled yet, the outcomes differ from the long-term results. Investment is much stronger than consumption, hours worked are still increasing as the substitution effect from higher real wages outweighs the income effect, and productivity has not yet caught up with higher wages to lower the unit labor cost. Imports increase by more than exports although the real exchange rate already shows a small depreciation.

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<sup>24</sup> To complete the mapping, NRP (2012) assumes that recent liberalization and simplification measures will have a similar impact on price markups and business costs as estimated in the case of earlier major structural reforms.

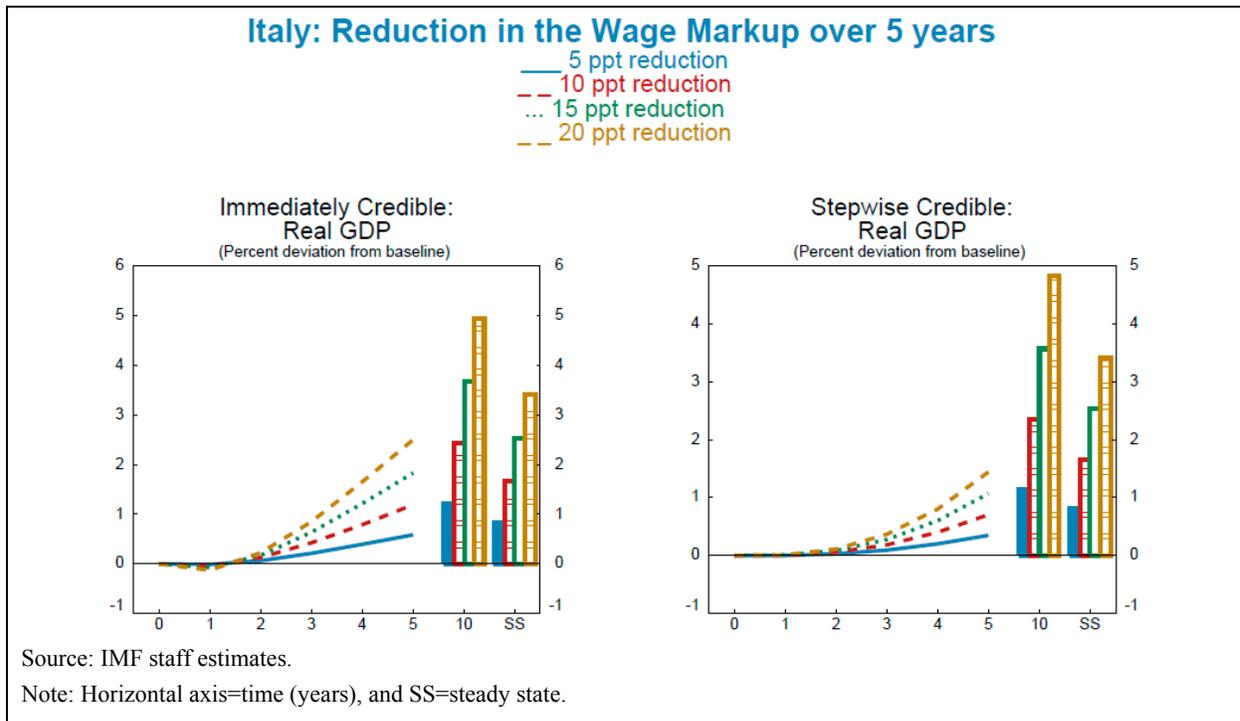


37. **When households and firms find the reform measures to be not immediately but stepwise credible, the rise in real GDP will be slower.** Much of the gains from increased competitiveness come from the perception of a future increase in wealth from the promised continuation of the reform process, by the households that can save, allowing higher consumption in the present. When the reforms are stepwise credible, this source of increased consumption is no longer present.

38. **The labor market also behaves very differently under immediately credible and stepwise credible policies.** In an immediately credible scenario, firms and households foresee the potential for future production, and more labor is used in the short run, until such time that firms can invest enough to generate a higher capital stock to permanently increase their productive capacity. In the case of stepwise credible policies, the labor response is much weaker, as no long-run needs are perceived. After year five, labor will pick up as the full future benefits are understood, and firms still do not have enough capital in place. So, in the immediately credible case, labor peaks early (in year 3) and declines, while in the stepwise credible case, labor builds gradually, peaks at a lower level (in year 5), but sustains the peak for longer. Once credibility is established, the results are the same as under the full credibility case, after about 10 years, as the economy has almost adjusted to its long run path.

39. **Labor market reforms that could help reduce wage markups would raise output but at a more modest rate than product market reforms (Figure 6).** After 5 years, real GDP gains, relative to the baseline, vary from 0.5 percent (under a 5 percentage point

reduction in the wage markup) to about 3 percent (under a 20 percentage point reduction in the wage price markup). The long-run impact on GDP would be similar. As the labor market becomes more flexible and competitive, labor supply will increase in both the medium and long run. As a result, real wages will decline beyond just the fall in the wage markup. Labor productivity will decline slightly (between 0.25 percent and 1 percent in the long run), but unit labor cost will decline, too (for details of the transition dynamics, see Annex). Compared to product market reforms, the impact of a commensurate wage markup reduction on consumption and investment is more muted, but, in the medium term, exports grow faster and imports decline although the size of the real exchange rate depreciation is similar.

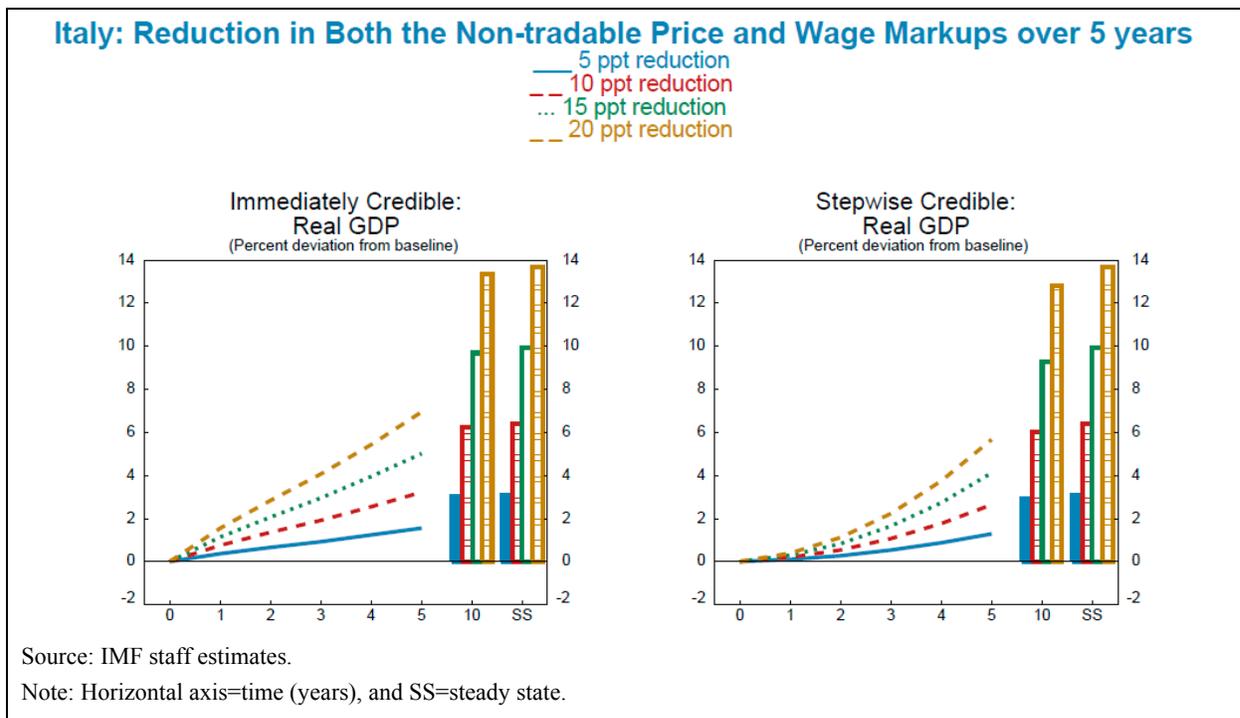


40. **As a special case, a reduction in the markup in professional services can be considered.** Our calculations imply a small impact on the overall wage markup: a 20 percentage point cut in the wage markup in the professional services sector is approximately equal to a 1.7 percentage point cut in the economy-wide wage markup.<sup>25</sup> The

<sup>25</sup> Professional services contribute 6 percent of total value added in Italy and 10 percent of total intermediate consumption used by the industry (about 7 percent of total inputs to manufacturing and almost 12 percent of total inputs to non-tradable sectors). If we assume labor is roughly 60 percent of factor costs at the intermediates level, then professional services make up roughly 16 percent of labor costs. The wage markup in the Italian labor market is assumed to equal to the price markup in the non-tradable sector of 53 percent (consistent with Forni and others, 2010, of 61 percentage points, minus 8 percentage points markup at the final goods level, which is in GIMF, but not in Forni and others, 2010). 16 percent of 53 percent is roughly 8.5 percentage points, so a 10 percent reduction in the wage markup exclusive from professional services will translate to a 0.85 percentage point reduction in the wage markup for the entire Italian labor market.

growth impact of this would be relatively small, about 0.3 percent in the long run, most of which will be achieved in the medium term. However, this is likely to underestimate the impact of increasing competition in the professional services since non-cost aspects, such as length of procedures that effect the business environment, are not fully taken into account. These factors, as Figure 2 shows, are as important in Italy as direct costs. Indeed, in OECD (2009) simulations, a reform of professional services is showed to give the most significant effects on labor productivity when compared to the effects from other sectoral reforms (energy and retail).

41. **Combining product and labor market reforms would reinforce the effect of the reforms on output and hours worked (Table 7).** On average (with a 10 percentage point reduction in both price and wage markups), output gains would reach over 3 percent after 5 years and almost 6.5 percent in the long run. Product market reforms would strongly boost consumption even as labor market reforms act as a drag, especially in the short run. Hours worked would increase in both the medium and long term, and real wages would still be higher despite downward pressure from the labor market reforms. Unit labor cost would decline, and a strong labor productivity increase, driven by product market reforms, would dominate. In the medium term, the asymmetries in real exports and imports would also disappear as the rise in import from product market reform would match the rise in exports from reducing labor costs. Since effects on the rest of the euro area would be driven by the trade balance, the overall spillovers would be small as exports and imports would be roughly in balance.



**42. When product and labor market reforms in Italy are implemented in the context of wider euro area product market reforms, the gains for Italy would increase**

(Table 7). Assuming that the euro area, as a whole, implements reforms on the same scale as that carried out by Italy, Italy's gains will be reinforced. As in the case of Italy, there is an increased demand for imports, as households become wealthier in the long run. Since Italy has strong trade linkages with the rest of the euro area, exports by Italy will increase, to meet increased euro area demand.

**43. Overall, our results on the GDP impact of structural reforms are similar to those found in the literature as well as the authorities' recent estimates.**

Forni and others (2010) find that a reduction of the Italian service price markup to the level prevailing in the euro area (around 25 percentage point reduction) could increase real GDP by close to 11 percent in the long run. This is close to the 10 percent real GDP increase when simulating a 20 percentage point reduction in GIMF, where also close to half of the GDP increase would materialize in the first five years.<sup>26</sup> For the case of Germany, Gomes and others (2011) find that a 15 percentage point reduction in services markups could raise real GDP by about 4.5 percent in the long run (and a similar impact from reducing wage markups). Spillovers to the rest of the euro area would be positive but small, and simultaneous reforms in Germany and rest of euro area would have large positive effects on the euro area. Hobza and Mourre (2010) look at a similar set of reforms that increase competitiveness in labor and product markets and find a similar impact on GDP as in our simulations. the response of real GDP Finally, in assessing the impact of the recent liberalization and simplification measures, NRP (2012) estimates that these measures would result in about 2 percentage points reduction in both tradable and non-tradable price markups by 2020, with an estimated increase in real GDP by 1.2 percent. Simulating such markup reductions in GIMF would result in very similar estimates.<sup>27</sup>

### **Simulation Results: Normative Approach**

**44. Comprehensive product and labor market reforms are needed to bring Italy's economy closer to other euro area countries and the OECD best-practice frontier.**

For product markets, we look at the impact of reforms that could increase competition and productivity especially in non-tradable sector toward those in the rest of the euro area by

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<sup>26</sup> However, the investment response is not as strong in GIMF, but the increase in real wages and exports as well as the terms of trade deterioration are similar. The differences in the response of labor and the size of the real effective exchange rate depreciation are likely driven by the differences between models. Forni and others (2010) also find that the impact of labor market reforms is smaller than in the case of product market reforms, but we find an even more muted impact from the wage markup reduction.

<sup>27</sup> This is not surprising given similarities between GIMF and the QUEST III model used in NPR (2012). See Table 1 in Coenen and others (2012) for a comparison of the two models.

lowering costs for doing business. For labor market reforms, our focus is on the policies that would increase efficiency in the labor market (lower adjustment costs and better job matching) and boost labor participation, and we use the OECD best practices frontier to quantify the reforms. Furthermore, cross-cutting fiscal reforms which would—in a deficit-neutral way—lower the labor tax wedge and increase infrastructure spending are considered.

45. **In particular, the impact of the following reforms are analyzed** (for further details, see Table 6):

- **Increasing competition in product markets (tradable and non-tradable):** Reducing barriers to entry and exit, lowering the cost of professional services, reducing other business costs, such as energy costs for the tradable sector, and providing local public services on a more competitive basis.
- **Easing employment protection:** Reducing costs of labor adjustment for the firms, and lowering bargaining power of insiders.
- **Strengthening active labor market policies:** Encouraging the unemployed or those no longer participating in the work force to retrain to fields with greater employment, leading to an overall increase in labor supply; increasing government spending for ALMP programs.
- **Increasing female participation:** For example, increasing the availability of childcare available to women (through increased government spending).
- **Shifting taxation from direct to indirect taxes:** Lowering both labor and corporate taxes, offset by broadening the VAT base.
- **Shifting expenditure from transfers to investment:** Shifting expenditure composition from general lump-sum transfers to infrastructure investment.

46. **All product and labor market reforms have a positive impact in the medium term, and together, could raise real GDP in Italy by 5¾ percent after 5 years and by 10½ percent in the long run (Table 8).** The reforms with the greatest impact are those that affect the competitiveness of the non-tradable sectors given the assumed large reduction in markups to close half of the gap with the rest of the euro area. The labor market reforms focused on labor supply are smaller since in the areas of employment protection legislation, active labor market policies, and childcare services, Italy, according to the OECD estimates, is not as far off from best practices. Moreover, the effects of these reforms on productivity and GDP are empirically found to be relatively small (e.g., Barnes and others, 2011; Bouis and Duval, 2011), even more so when government spending associated with these measures (in case of ALMP and childcare) are offset as assumed in our simulations. Finally, in the short run, their impact is muted also because of the assumed stepwise credibility of the reforms (per design of the exercise) such that the future shocks are not fully taken into

account in households' and firms' decisions in the first years. Yet, given these factors, the effects of labor market reforms are not inconsequential.

**Italy: Product and Labor Market Reforms—Decomposition of Real GDP**  
(Percent deviation from baseline)

	Year 1	Year 2	Year 5	Long run
Product and labor market reforms	0.8	1.6	5.7	10.5
Product market reforms	0.4	1.0	4.4	8.3
Tradables sector	0.1	0.3	0.9	0.8
Non-tradables sector	0.3	0.7	3.3	6.9
Professional services	0.0	0.0	0.2	0.6
Labor market reforms	0.5	0.6	1.1	1.8
Employment protection	0.0	0.0	0.1	0.3
Active labor market policy	0.3	0.3	0.4	0.5
Female participation rate	0.2	0.3	0.7	1.0

Source: IMF staff estimates.

47. **There appears to be a payoff from doing all product and labor market reforms simultaneously, as also shown earlier.** The impact of the total simultaneous reform package is greater than the sum of the components. This result is somewhat counter to the recent findings by OECD (Cacciatore and others, 2012) arguing that in the long run there might be substitutability, rather than complementarity, between product and labor market reforms. The degree of complementarity in our simulations reinforces the point that a broad reform package would be highly beneficial.

48. **A tax reform to shift taxation from direct to indirect taxes could promote growth, hours worked, and exports (Figure 7).** In particular, a tax reform package, which lowers both labor and corporate taxes (by 2 percent of GDP combined), offset by broadening the VAT base, could raise GDP relative to the baseline 0.5 percent on impact and by up to 2 percent in the long run. Hours worked, after a positive short-term reaction, will be marginally higher in the long run (although the real wage will increase by 1.3 percent). Exports will rise by about 1.5 percent in the long run, while the real exchange rate will depreciate by less than 1 percent. While an increase in consumption taxes will lower the amount consumed by households, the distortions removed by lowering corporate and labor income taxes are much greater. Moreover, the labor income tax cut will offset the negative effects from consumption taxes on households' spending power and will provide an incentive for more labor supply. The corporate income tax cut will reduce the cost of capital faced by firms, encouraging greater demand for capital, investment goods, and labor.

49. **An expenditure reform to shift government expenditure from transfers towards investment (by 1 percent of GDP) would produce larger gains.** Spending on infrastructure has the greatest return: instead of the fiscal outlay just entering real GDP on impact for that year, it improves the stock of infrastructure (for example, in key network industries) in Italy,

making all sectors more productive as a whole. Therefore the temporary increase in government investment in infrastructure leads to a long-lived and persistent gain in economy-wide productivity. To make this increase in spending neutral, general lump-sum transfers, which have a smaller negative multiplier, are cut. On net, real GDP will be 1 percent higher on impact, and more than 5 percent in the long run, relative to the baseline.

50. **The gains in growth might be delayed if the fiscal reforms are not perceived as fully credible in the short run.**<sup>28</sup> In the case of tax switching, households and firms would not perceive the long-run benefits from lower labor and corporate income taxes, but the short-run costs of higher consumption taxes would be relatively high. In contrast, if households and firms perceive the expenditure switching as temporary, there would still be positive gains, just fewer than in case of a immediately credible reform. Additional infrastructure spending, even temporarily, would provide a large short-run fiscal multiplier, as there would be a temporary but long-lived public capital stock improvement that would increase economy-wide productivity.

**Italy: Combined Reforms Scenario—Decomposition of Real GDP**  
(Percent deviation from baseline)

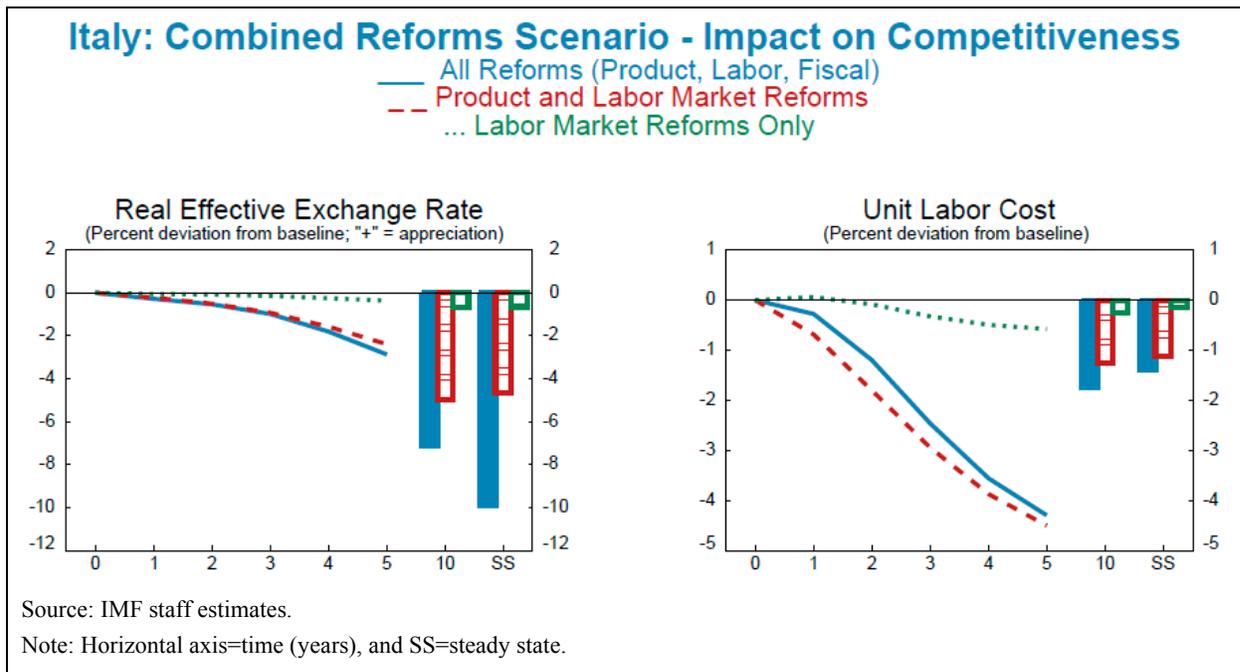
	Year 1	Year 2	Year 5	Long run
Total	1.7	3.2	8.6	21.9
Product and labor market reforms	0.8	1.6	5.7	10.5
Product market reforms	0.4	1.0	4.4	8.3
Labor market reforms	0.5	0.6	1.1	1.8
Fiscal reforms	0.9	1.7	3.0	9.8
Tax switching	0.6	0.9	1.3	1.8
Expenditure switching	0.2	0.7	1.6	7.7

Source: IMF staff estimates.

51. **By combining fiscal reforms with product and labor market reforms, real GDP in Italy could increase by about 8½ percent after 5 years and almost 22 percent in the long run (Table 8).** In this case, we assume the switch in tax composition is one-off, and therefore fully credible from the beginning. The expenditure switching, however, occurs over 5 years, and is not fully credible until year 5. Nonetheless, by including fiscal reform, the effects of the package are roughly twice as large. Plus there are some synergies. Increased real GDP from the higher productivity also increases the tax revenues collected, and can amplify the fiscal multipliers of the tax switching. This is also true of the expenditure switching measures. And the productivity of the economy, already improved by product market reform, has its effects amplified by the productivity-enhancing effects of the higher government infrastructure spending.

<sup>28</sup> This is a common property across many macroeconomic models, and is also found in the literature. See Coenen and others (2012).

52. **Implementing a comprehensive package of structural reforms could contribute to closing Italy's competitiveness gap accumulated over the past decade.** In particular, IMF's estimates suggest that the competitiveness gap (real exchange rate overvaluation) could be of the order of 5–10 percent.<sup>29</sup> Our simulations suggest that the above discussed structural reforms, especially in product markets and fiscal reforms, could result in real exchange rate depreciation of close to 3 percent after 5 years and over 7 percent in a decade. Unit labor cost would decline, by just about 4½ percent after 5 years, as increased labor productivity more than offsets the increase in wages. In the short run, however, the current account would deteriorate reflecting higher investment relative to private savings. In the medium term, real exports rise faster than real imports, although real imports would accelerate in the short run from stronger investment that is taking advantage of tax reform and productivity gains. In addition, the price shift from the depreciation (terms of trade deterioration) would adversely affect the nominal trade balance. In the long run, however, current account would converge to zero and turn slightly into surplus.



53. **In sum, a combination of structural reforms in the product market, labor market and fiscal sector will produce long-run gains for the Italian economy.** As the results from the positive approach suggest (Table 7), these effects could be reinforced if the rest of the euro area engages in similar reforms simultaneously. Also, there will be positive feedback effects across the different types of reforms, as demonstrated particularly with the labor and product market reforms. Moreover, the fiscal reforms could provide positive feedback effects for labor market reforms, as they use many of the same channels,

<sup>29</sup> See, IMF 2010 and 2011 Article IV Consultation Staff Reports.

particularly productivity, and could provide a stimulus for greater consumption and labor supply.

### **E. Reform Priorities and Implementation**

#### **54. Italy needs comprehensive reforms to raise growth and restore competitiveness.**

To increase competition and productivity in product markets, there is a need to further open services sector, especially, professional services, key network industries, and local public services; reduce entry barriers; and promote investment in productive infrastructure, thus lowering the costs of doing business. In the labor market, reforms should focus on allowing firms and workers to more easily adjust to changing economic conditions by: (i) reducing uncertainty and costs associated with employment protection; (ii) promoting more internal flexibility and closer link between wages and productivity; and (iii) improving employability and efficiency of job matching process of the work force at the same time as also augmenting labor participation. Reforms coordinated at a wider European level could be beneficial for all.

#### **55. The reforms introduced by the authorities go in the right direction but more needs to be done.**

- **In the product market reform**, the agenda is comprehensive, and its consistent, sustained, and early implementation is key. Depending on the implementation and hence on the achieved reductions in price markups, the economic gains could be sizeable: the real output could increase by 4½ percent in the medium term if the reforms could close half the gap in the degree of competition with the rest of the euro area. Well-targeted and timely executed infrastructure projects in the areas of main network bottlenecks could further increase productivity in the economy with significant implications for potential output, as our simulations suggest.
- **In the labor market**, the impact of the reforms that bring Italy close to the OECD best practices in employment protection legislation, active labor market policies, and female participation support through childcare services could be relatively modest. However, there is an important scope to strengthen the proposed reform further. More needs to be done to increase flexibility of the core via more firm-level arrangements that favor employment rather than wages and to bridge the gap between permanent and temporary workers. A tax reform to lower the labor tax wedge and remove disincentives for labor supply, especially for second earners should be considered.
- **Growth-friendly fiscal reform**, by shifting taxation from labor and corporate tax to indirect taxes and by prioritizing public expenditure away from general transfers toward more targeted infrastructure spending could lead to significant growth and competitiveness gains.

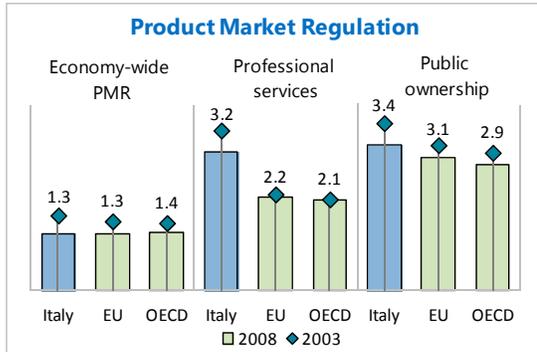
56. **The signaling role of the public sector is important both for the reform impetus and credibility.** There are three key areas where public sector reforms would be particularly important: (i) liberalization in the areas where the central government is a major stake holder (e.g., gas sector); (ii) liberalization and competition where local governments play the major role (local public services); and (iii) regional differentiation and more flexibility in the public sector employment and wages.

57. **Rigorous monitoring of the reforms should be a priority, and the authorities should stand ready to intervene if policies appear ineffective in addressing reform priorities.** Implementation of structural reforms can face a number of challenges because of unfavorable macroeconomic environment, reliance on sub-national governments, and pressures from ongoing fiscal adjustment. Stepwise credible policies could delay the potential gains from reforms, as our simulations suggest, emphasizing also the need for a more predictable regulatory and legal environment. To increase credibility and effectiveness of the reforms: (i) consideration could be given to establishing an independent review and advisory body for reforms (“growth commission”) which could foster consensus and focus policies on priority areas, while ensuring the continuity of the reform agenda; (ii) the competition enforcement framework should be effectively applied (especially in the areas of local public services, transport, and local business regulations); (iii) a strong buy-in from sub-national governments should be garnered; and (iv) efforts to monitor, assess, and communicate on the reform progress should be reinforced.

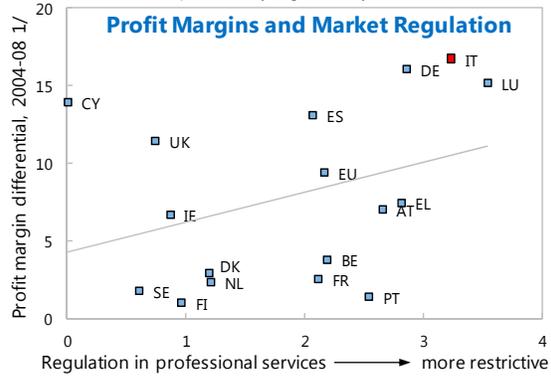
58. **Other reforms that are essential for the success of labor and product market reforms would need to be implemented in parallel.** In particular, without improving the efficiency of the judicial system, labor market reform implementation will be hindered, with the result that dismissal costs may remain high and uncertain. The envisaged streamlined procedure for labor disputes as well as special business courts to deal with industrial disputes can be important in accelerating judicial procedures, provided the implementation is not impeded by the huge backlog of outstanding cases. Strengthening contract enforcement, streamlining legal procedures, and reducing costs should be a key priority in any reform aimed at improving Italy’s business environment.

Figure 1. Regulatory Barriers and High Profit Margins in Nontradable Sectors

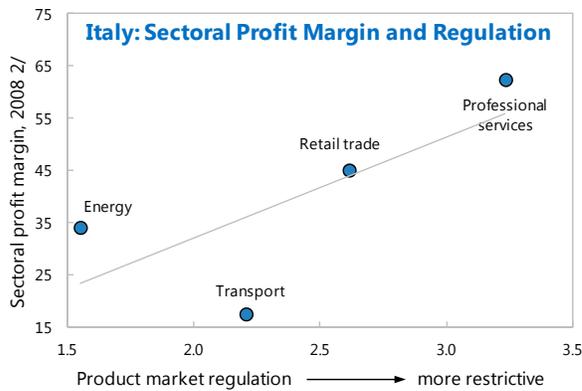
Overall product market regulation restrictiveness in Italy is in line with the EU and OECD averages, but Italy underperforms in services sector while public ownership remains high.



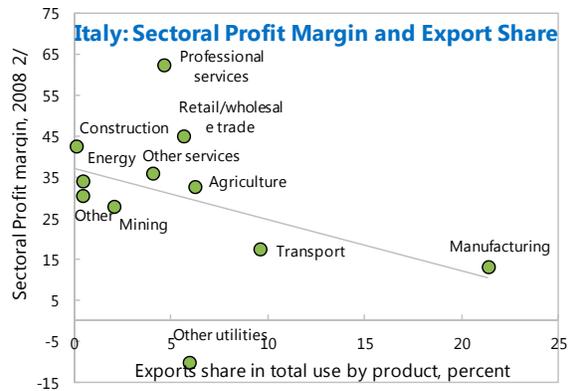
Profit margins are generally higher in services than manufacturing sector but the differential is particularly high in Italy.



More restrictive regulations are associated with higher profit margins, both across countries and across sectors in Italy. In services (over 70 percent of total value added), only 5 percent is exported ...



...while profit margins reach over 60 percent in professional services. In contrast, in manufacturing (less than 20 percent of total value added), over one-fifth is exported, and profit margin is 13 percent.



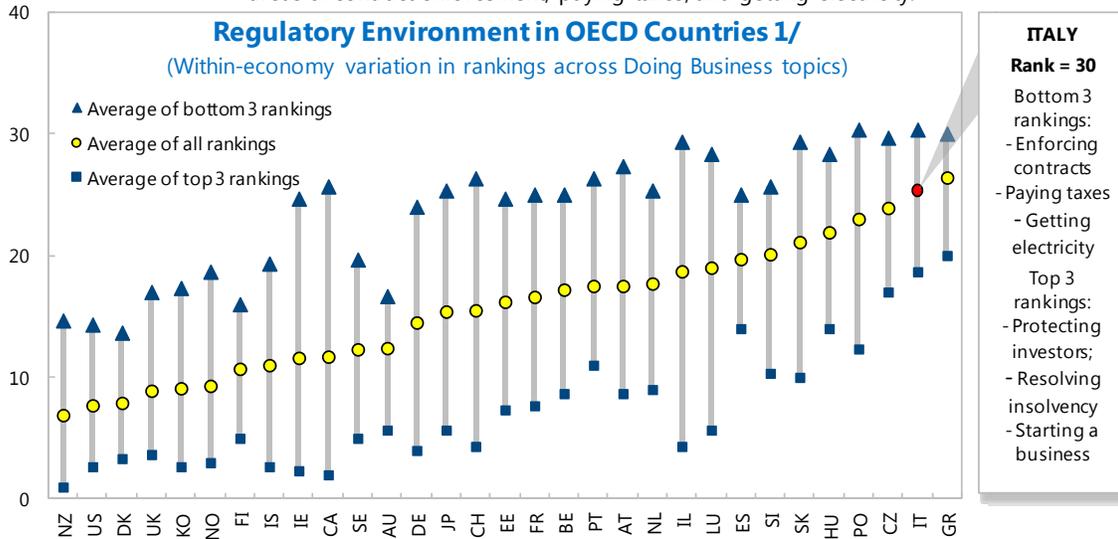
Sources: OECD; Eurostat; and IMF staff calculations.

1/ Difference between gross operating surplus in percent of production value in services and manufacturing sectors.

2/ Net operating surplus in percent of sectoral value added, 2008 (latest available year).

Figure 2. Difficult Environment for Doing Business

Among high-income countries, Italy ranks the last before Greece for doing business, particularly in the areas of contract enforcement, paying taxes, and getting electricity.



**Ease of Doing Business in Italy vs. OECD Average 1/2/**

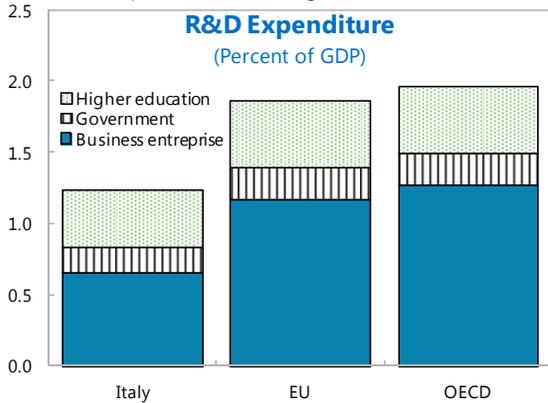
<p><b>Enforcing contracts #31</b></p> <ul style="list-style-type: none"> <li>• Takes twice longer and more procedures</li> <li>• And costs more</li> </ul>	<p><b>Getting electricity #29</b></p> <ul style="list-style-type: none"> <li>• Takes more time</li> <li>• And costs 4 times more</li> </ul>	<p><b>Construction permits #27</b></p> <ul style="list-style-type: none"> <li>• Takes more time</li> <li>• And costs 3 times more</li> </ul>	<p><b>Registering property #25</b></p> <ul style="list-style-type: none"> <li>• More procedures</li> <li>• But takes less time at about the same cost</li> </ul>	<p><b>Resolving insolvency #19</b></p> <ul style="list-style-type: none"> <li>• Takes longer to close a business</li> <li>• Costs twice but with lower recovery rate</li> </ul>
<p><b>Paying taxes #31</b></p> <ul style="list-style-type: none"> <li>• Takes more time and more payments</li> <li>• Tax rates are much higher</li> </ul>	<p><b>Getting credit #28</b></p> <ul style="list-style-type: none"> <li>• Weaker legal rights</li> <li>• Wider coverage in credit registries</li> </ul>	<p><b>Trading across the board #26</b></p> <ul style="list-style-type: none"> <li>• Takes twice longer to export/import</li> <li>• Costs about 20% more to export/import</li> </ul>	<p><b>Starting a business #21</b></p> <ul style="list-style-type: none"> <li>• Takes less time</li> <li>• But costs 4 times more</li> </ul>	<p><b>Protecting investors #16</b></p> <ul style="list-style-type: none"> <li>• Transparency is better</li> <li>• But investor protection is weaker</li> </ul>

Source: World Bank Doing Business 2012.

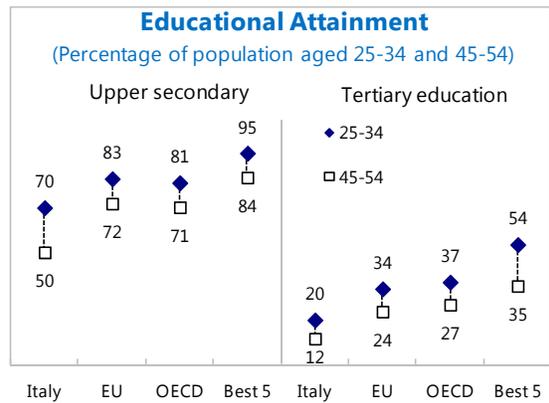
1/ OECD high-income economies; 2/ For each topic, the ranking among 31 OECD countries is reported.

Figure 3. Low R&D, Poor Educational Attainment, and Insufficient Complexity of Exports

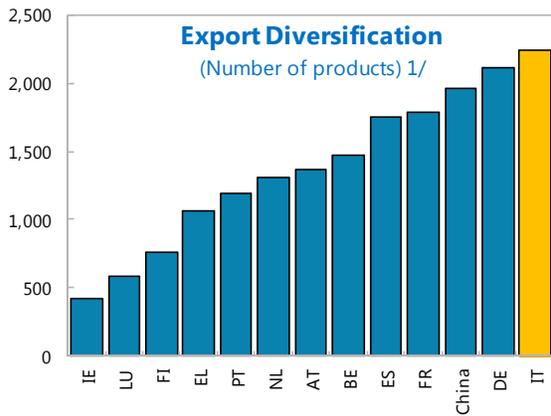
Italy has one of the lowest investments in R&D and ICT specialization among OECD countries.



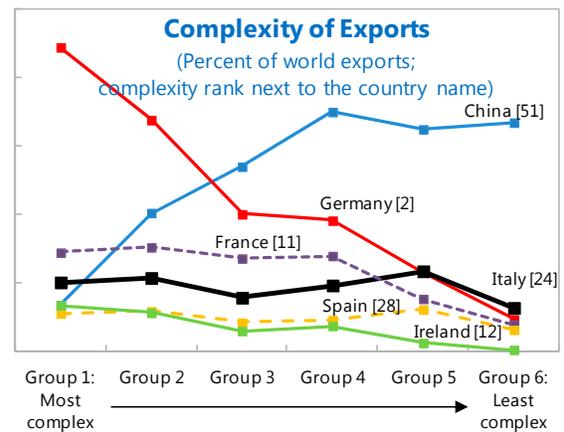
It also scores among the worst in educational attainment, including on average PISA scores (among worst 8) in OECD.



While Italy's exports are the most diversified among 125 countries, followed by Germany,...



it ranks only 24th in exports complexity, with similar shares in world exports both for most complex (competing with Germany and France) and least complex (competing with China) products.



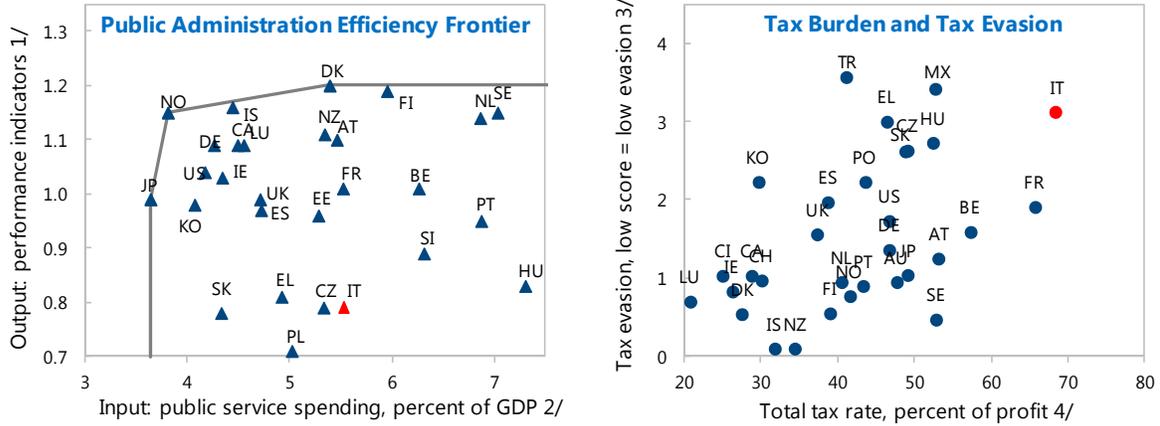
Sources: OECD; and Felipe and Kumar (2011).

1/ Products with revealed comparative advantage (RTA) > =1, where RTA is the ratio of the export share of a given product in the country's exports to the same share at the worldwide level (or the country's share of world exports of a given product in its share of total world exports).

Figure 4. Inefficient Public Administration and High Tax Burden

While Italy's public expenditure ranks among the worst in terms of quality and efficiency, especially for public administration...

...its tax burden is the highest in OECD, particularly for businesses, with alarming incidence of tax evasion.



Sources: OECD (2012); World Bank Doing Business 2012; and Sustainable Governance Indicators 2011.

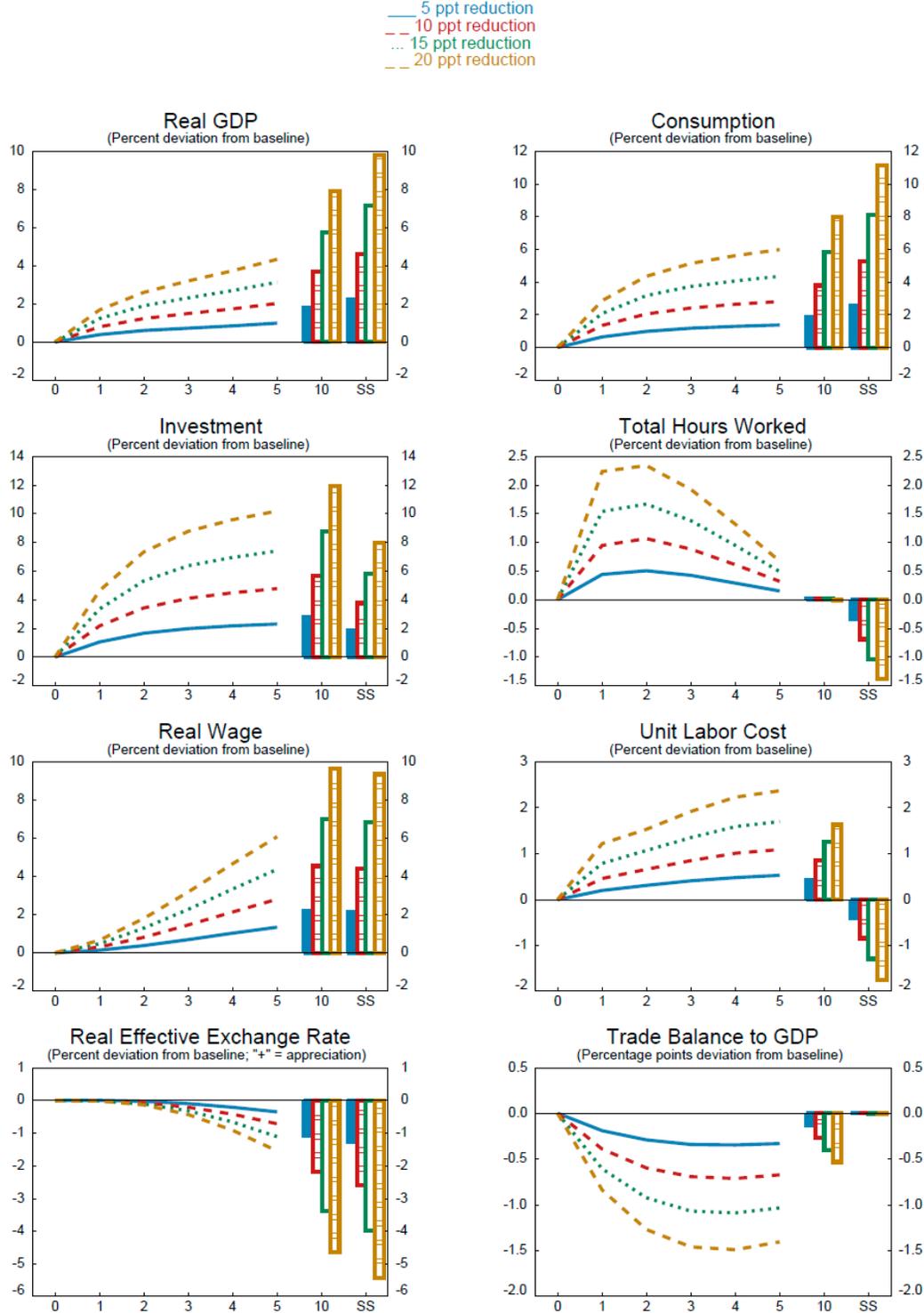
1/ A composite indicator for public administration outcome based on international surveys on the quality of justice and the level of corruption, both taken from the Global Competitiveness Report, and the levels of bureaucracy in the economy measured by OECD's Product Market Regulation indicator.

2/ Spending on general public services (excluding interest payments) and public order and safety, 2007.

3/ Business tax evasion and avoidance: 6 = more than 50% of business is unofficial or unrecorded, 0 = all businesses are registered.

4/ The total tax rate measures the amount of taxes and mandatory contributions payable by the business in the second year of operation, expressed as a share of commercial profits.

**Figure 5. Italy: Immediately Credible Reduction in the Non-tradable Price Markup over 5 years**

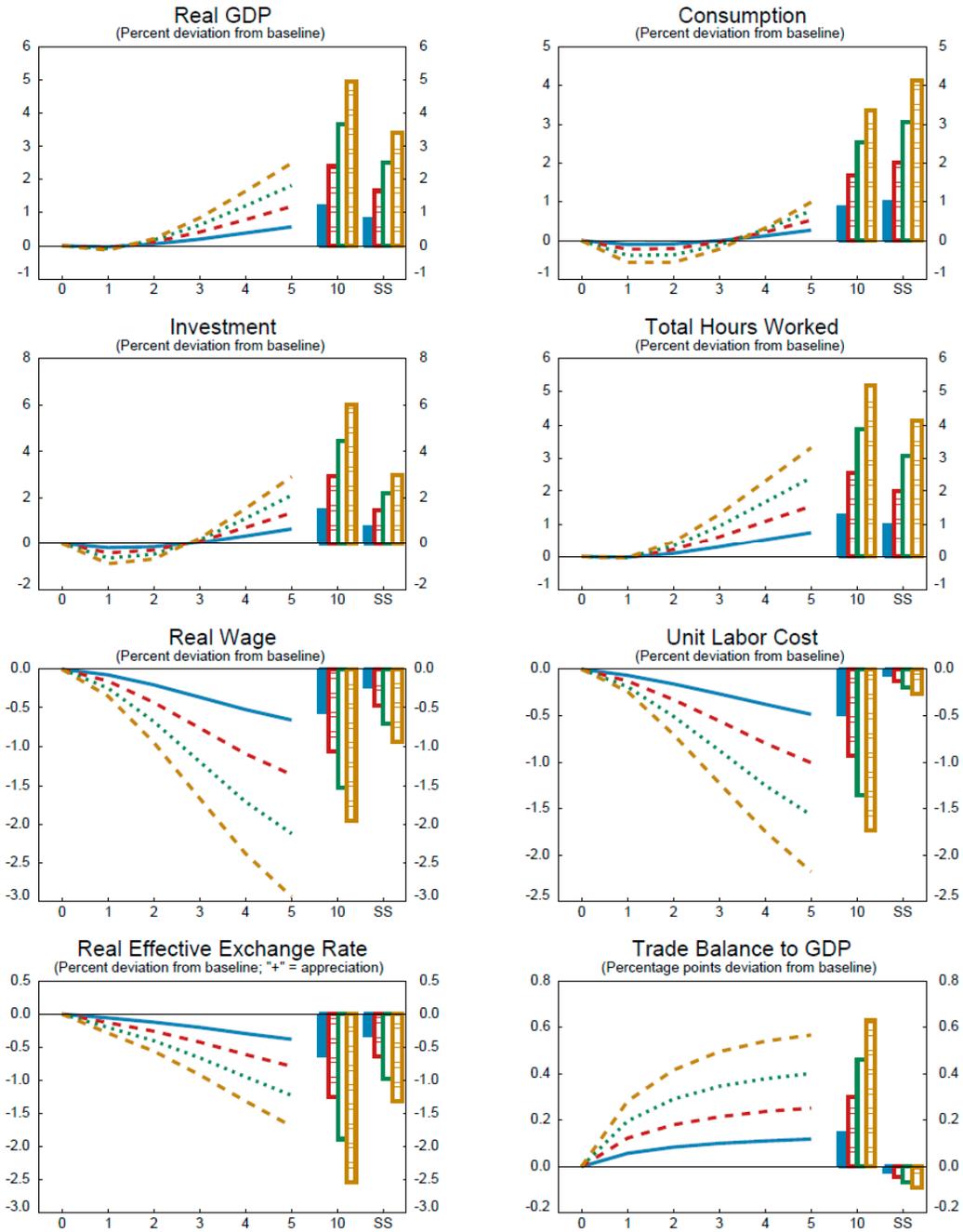


Source: IMF staff estimates.

Note: Horizontal axis=time (years), and SS=steady state.

**Figure 6. Italy: Immediately Credible Reduction in the Wage Markup over 5 years**

— 5 ppt reduction  
 - - 10 ppt reduction  
 ··· 15 ppt reduction  
 - - - 20 ppt reduction

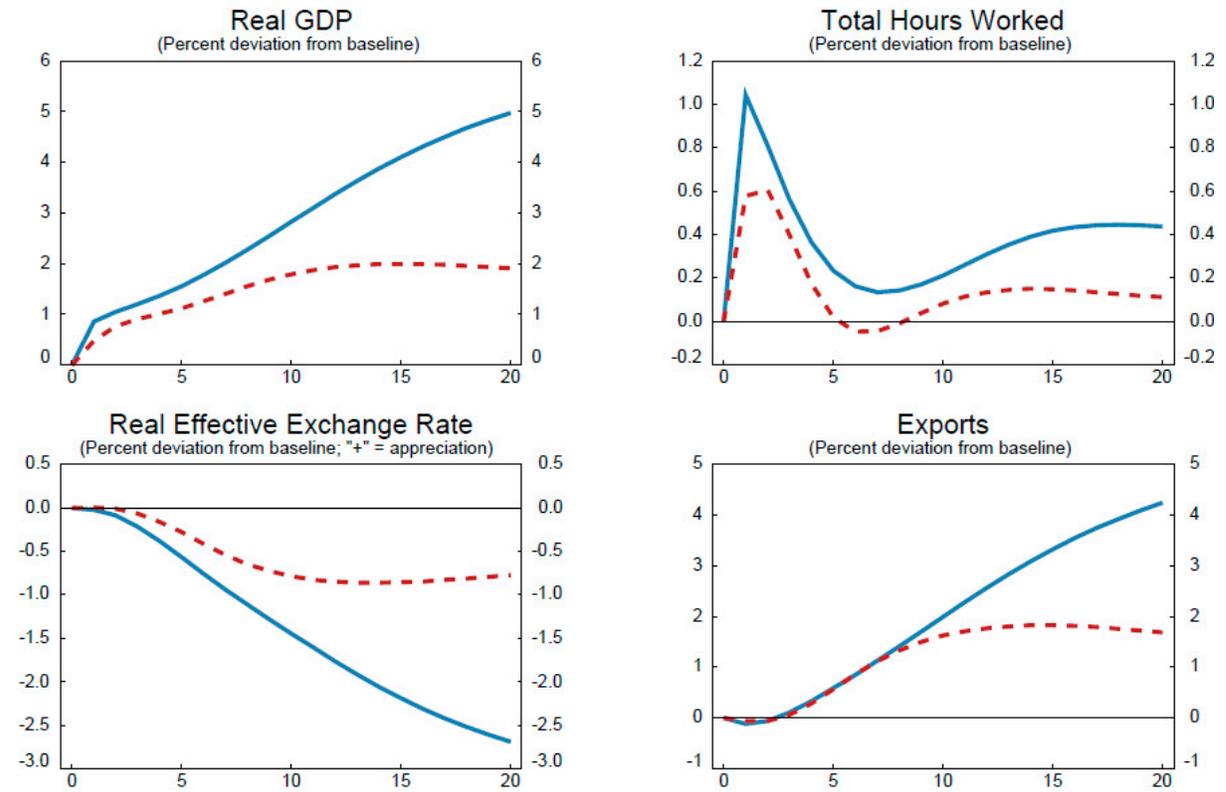


Source: IMF staff estimates.

Note: Horizontal axis=time (years), and SS=steady state.

### Figure 7. Italy: Fiscal Reform

— Expenditure Switching  
 - - Tax Switching



Source: IMF staff estimates.

Note: Horizontal axis=time (years).

Table 3. Italy's Labor Market: What are the Chances

(Percent, unless otherwise indicated)

	If 15-24 years old	If 25-39 years old	If 40-64 years old
Belong to a group of (millions):	6	12	21
% of total population	10	20	35
Chance of: 1/			
Being in education/training	63	10	4
Being employed	22	70	60
Being an employee	19	55	44
Being self-employed	3	15	16
Being unemployed	7	7	3
Doing none of the above	8	13	34
of which: women	9	23	47
Reasons for inactivity (% of total inactive, excluding in education/training) 2/			
Retired	...	0	31
Family responsibility	21	42	19
Think no work is available	29	19	10
Other (unspecified)	36	26	30
If unemployed, chance of: 3/			
Finding a job in a year time	34 (higher for male and in the North)		
Staying unemployed over one year	31 (higher for male and in the South)		
Becoming inactive	35 (higher for female and in the South)		
If inactive, chance of:			
Remaining inactive	>90 (for 15-64 age group)		
If have a job, chance of:			
Having a permanent contract 4/	56	86	93
Becoming unemployed in a year time	<2 (4 x higher if have temporary part-time contract)		
Becoming inactive in a year time	<6 (2.5 x higher if have temporary part-time contract)		
If working on temporary contract:			
Chance of working less than 1 year 5/	50	73	82

Sources: Eurostat; Istat (2011); and IMF staff calculations.

1/ Percent of respective population group.

2/ Results for 25-49 age group are reported for 25-39 age group because of data unavailability.

3/ Transitional probabilities for 2007Q1-2008Q1; probability of finding a job (becoming inactive) is estimated to have decreased (increased) in 2008-10, as a result of the global crisis (Bank of Spain, 2012; Bank of Italy, 2011; Lucarellia and Mussida, 2010).

4/ Non-temporary employees in percent of total employees.

5/ Temporary employees with duration of the work contract &lt;12 months in percent of total temporary employees.

Table 4. Labor Market Institutions and Reforms at a Glance

	Italy 1/	Spain 1/	Germany
<b>Non-discriminatory unfair dismissal</b>			
Pre-court resolution required	Yes	Yes	Some
Pre-trial conciliation mandatory	Yes	Yes	Yes
Pre-trial conciliation outcome enforceable	n.a.	Yes	Yes
Conditions defined	No	Yes	Broadly, "socially justified"
Reinstatement mandatory	Yes, if "manifestly unfounded"	No, employer decides	Yes, but rarely applied; either party can dissolve
Compensation (if not reinstated)	12-24m wage	max 24m wage 2/	12-18m wage
Mandatory legal representation	Yes	No	No
Length of procedure	23-26m	n.a.	14.3m
<b>Fair dismissals</b>			
Severance pay	3/	max 12m	0.5m for each year of service
Application to public sector	No	Yes	No
<b>Fixed-term contracts (FTCs)</b>			
Objective and material reasons for FTC	Yes, excluding first FTC	Yes	Yes, with exceptions
Incentives in favor of open-ended contracts	Yes	Yes	No
Max number of successive FTCs	2	2	4
Max cumulative duration of successive FTCs	36m	24m	24m
<b>Internal flexibility (vs. national contracts)</b>			
Opt-out clauses	Allowed, but little used	Eased for firms in distress 4/	Largely used
Short-time schemes	Yes	Yes	Yes
<b>Other</b>			
Focus on activation policies	Little	Some	Strong
Unemployment insurance	Gradual move to universal	Not addressed in the reform	Linked to activation
<b>Memo: Labor market outcomes</b>			
Unemployment (% , April 2012)	10.2	24.3	5.4
Temporary employment (% total employment, 2005–10)	9.7	24.7	12.9
Inactivity rate (% of 15-64 year old; 2010)	37.8	26.6	23.4
Public expenditure on ALMP (% GDP, 2005–09)	0.5	0.8	0.9

Sources: OECD; Eurostat; ILO; and IMF staff.

Notes: 1/ Reflects the latest reform proposals, where applicable; 2/ For contracts signed after Feb 10, 2012; otherwise max of 42 m wage; 3/ No severance pay as such; there is an end-of-employment contract indemnity (TFR), a wage share set aside by employer and paid upon employment termination; 4/ Priority given to the use of firm-level agreements over industry or region-wide collective agreements.

Table 5. Article 18 of the Workers' Statute—Before and After Proposed Modifications (as of April 5, 2012, draft law)

Reason for individual dismissal	Before 1/		After		
	If judged valid:	If judged invalid:	If judged valid:	If judged invalid:	
1. Just cause ( <i>Giusta causa</i> )	No right to reinstatement or compensation	Judge can decide reinstatement; employee can waive in favor of 15-months wage; in both cases, compensation maybe awarded	same as before	For "disciplinary dismissals": Judge can decide reinstatement; employee can waive in favor of 12-months wage; in both cases, compensation maybe awarded (max 12-months wage)	Other cases: Judge awards compensation (12-24 months wage) 2/
2a. Justified reason ( <i>Giustificato motivo</i> )—Subjective	No right to reinstatement or compensation	Judge can decide reinstatement; employee can waive in favor of 15-months wage; in both cases, compensation maybe awarded	same as before	For "disciplinary dismissals": Judge can decide reinstatement; employee can waive in favor of 12-months wage; in both cases, compensation maybe awarded (max 12-months wage)	Other cases: Judge awards compensation
2b. Justified reason ( <i>Giustificato motivo</i> )—Objective/Economic	No right to reinstatement or compensation	Judge can decide reinstatement; employee can waive in favor of 15-months wage; in both cases, compensation maybe awarded	same as before	Judge has two options: (i) compensation only (12-24 months wage); or (ii) reinstatement in case dismissal is found "manifestly unfounded".	

Sources: Official reports.

1/ The provisions below apply to employers who have >15 employees within each seat, branch, office or >60 overall, or in case of discriminatory dismissal.

2/ 6-12 months wage if the employee sues the employer exclusively on the grounds of formal and/or procedural violations.

Table 6. Main Reform Measures and Proxies Used in Simulations

Reform	Proxy	Phasing	Other assumptions
<b>Reforms in product markets</b>			
Increasing competition in the tradable sector	Decrease in tradable markup.	Phases in over 5 years. Not fully credible until the fifth year.	Share of tradable sector in production = 50%. Markup declines 2.5 ppt (= roughly 50% of gap with the rest of the world, outside the euro area).
Increasing competition in the non-tradable sector	Decrease in non-tradable markup.	Phases in over 5 years. Not fully credible until the fifth year.	Share of non-tradable sector in production = 50%. Markup declines 15 ppt (=roughly 50% of gap with the rest of the euro area).
Increasing competition in professional services	Decrease in wage markup, economy wide.	Phases in over 5 years. Not fully credible until the fifth year.	Markup declines 3.4 ppt (=40% decline in the cost of professional services).
<b>Reforms in labor markets</b>			
Easing employment protection	Increase in productivity in both the tradable and non-tradable sectors.	Delayed for 1 year because of reform enactment issues; then immediate. Not fully credible until the fifth year.	Employment protection legislation converges towards average of 3 lowest stances observed across the OECD. Overall productivity increases 0.34% (= 50% of OECD best practices gap).
Strengthening active labor market policies (ALMP)	Increase in labor supply and government spending (offset with a reduction in lump-sum transfers to non-liquidity constrained households only).	Delayed 1 year because of lack of fiscal space; then immediate. Not fully credible until the fifth year.	Increase in the ratio of per capita ALMP spending per unemployed over GDP towards average level in Denmark, Austria, Netherlands, Norway, Sweden, and Switzerland. Participation rate increases 0.24%; fiscal costs = 0.45% of GDP (= 50% of OECD best practices gap)
Increasing female participation through childcare	Increase in labor supply and government spending (offset with a reduction in lump-sum transfers to non-liquidity constrained households only).	Delayed for 1 year because of lack of fiscal space; then immediate. Not fully credible until the fifth year.	Increase in public childcare spending towards average level in Denmark, Norway, Sweden and the United Kingdom. Participation rate increases 0.60%; fiscal costs = 0.3% of GDP (= entire OECD best practices gap).
<b>Fiscal reform through tax and expenditure switching</b>			
Switching to consumption taxes from labor and corporate income taxes	All components exist in GIMF.	Immediate and permanent change. Immediately credible.	Increase 2% of GDP on consumption taxes; decrease 1% of GDP on each of labor and corporate income taxes.
Switching to infrastructure from general lump-sum transfers.	Infrastructure is government investment; general lump-sum transfers are in GIMF.	Phases in over 5 years. Not fully credible until the fifth year.	1% of GDP switch.

Table 7. Reforms in Italy and the Rest of the Euro Area

Scenario: 10 percentage point reduction in non-tradable (NT) price and wage markups  
(Percent deviation from baseline)

	NT price	Wage	Both	EA NT price	Italy + EA
Italy in Year 5					
GDP	2.0	1.2	3.2	0.8	3.9
Consumption	2.8	0.5	3.3	0.1	3.4
Investment	4.8	1.4	6.2	1.0	7.1
Labor	0.3	1.6	1.9	0.9	2.7
Real wages	2.8	-1.4	1.5	0.2	1.7
Unit labor cost	1.1	-1.0	0.1	0.4	0.5
Labor productivity	1.6	-0.7	0.9	-0.3	0.6
Exports	0.4	1.5	2.0	1.4	3.3
Imports	2.1	-0.2	1.9	0.0	1.8
Real Italy/EA exchange rate	-0.7	-0.8	-1.4	0.6	-0.8
Real effective exchange rate	-0.7	-0.8	-1.5	-0.1	-1.6
Terms of trade	-0.3	-1.0	-1.3	-0.3	-1.6
Italy in the Long Run					
GDP	4.6	1.7	6.4	0.2	6.6
Consumption	5.3	2.0	7.5	0.8	8.3
Investment	3.8	1.5	5.4	0.5	5.9
Labor	-0.7	2.0	1.3	-0.1	1.3
Real wages	4.4	-0.5	4.0	0.7	4.7
Unit labor cost	-0.9	-0.1	-1.0	0.4	-0.6
Labor productivity	4.9	-0.5	4.4	0.7	5.1
Exports	3.6	1.2	4.9	0.6	5.5
Imports	1.2	0.6	1.8	1.8	3.5
Real Italy/EA exchange rate	-2.5	-0.6	-3.1	3.4	0.1
Real effective exchange rate	-2.5	-0.6	-3.2	1.1	-2.1
Terms of trade	-2.3	-0.8	-3.1	1.2	-2.0

Source: IMF staff estimates.

Table 8. Italy and Euro Area: Combined Reforms Scenario  
(Percent deviation from baseline)

	Year 1	Year 2	Year 5	S.S.
Italy				
Total	1.7	3.2	8.6	21.9
Product and labor market reforms	0.8	1.6	5.7	10.5
Product market reforms	0.4	1.0	4.4	8.3
Tradables sector	0.1	0.3	0.9	0.8
Non-tradables sector	0.3	0.7	3.3	6.9
Professional services	0.0	0.0	0.2	0.6
Labor market reforms	0.5	0.6	1.1	1.8
Employment protection	0.0	0.0	0.1	0.3
Active labor market policy	0.3	0.3	0.4	0.5
Female participation rate	0.2	0.3	0.7	1.0
Fiscal reforms	0.9	1.7	3.0	9.8
Tax switching	0.6	0.9	1.3	1.8
Expenditure switching	0.2	0.7	1.6	7.7
Rest of the Euro Area				
Total	0.3	0.5	0.4	0.1
Product and labor market reforms	0.2	0.3	0.3	0.1
Product market reforms	0.1	0.2	0.3	0.1
Tradables sector	0.0	0.0	0.0	0.0
Non-tradables sector	0.1	0.2	0.3	0.1
Professional services	0.0	0.0	0.0	0.0
Labor market reforms	0.1	0.1	0.0	0.0
Employment protection	0.0	0.0	0.0	0.0
Active labor market policy	0.1	0.1	0.0	0.0
Female participation rate	0.0	0.1	0.0	0.0
Fiscal reforms	0.1	0.2	0.1	0.1
Tax switching	0.1	0.1	0.0	0.0
Expenditure switching	0.0	0.1	0.0	0.0

Source: IMF staff estimates.

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## ANNEX: IMF'S GIMF AND TRANSITION DYNAMICS

**GIMF is a multi-region micro-founded dynamic stochastic general equilibrium (DSGE) model.** The version used in this analysis has six regions: Italy, the euro area (excluding Italy), emerging Asia, Japan, the United States, and a remaining countries bloc. GIMF has optimizing behavior by households and firms (divided between tradable and non-tradable goods sectors), and full intertemporal stock-flow accounting. Frictions in the form of sticky prices and wages, real adjustment costs, liquidity constrained households that cannot save, and households with finite planning horizons that can save give the model certain key properties—notably, an important role for both fiscal and monetary policy.

**For fiscal policy, GIMF has certain advantages.** It is based on the Blanchard-Weil-Yaari overlapping generations model, which leads to a significant break in Ricardian equivalence. Therefore households can save and choose to hold government debt, which is important for permanent fiscal reforms. This saving-investment decision means that large-scale reforms in large countries lead to long-run movements in the global real interest rate. This non-Ricardian feature is complemented by the presence of liquidity-constrained households that cannot save.

**The fiscal rule maintains a deficit-to-GDP target** (equivalent to a long-run debt-to-GDP target), with an endogenous countercyclical response of general lump-sum transfers based on an output gap measure, parameterized as found in Girouard and André (2005). Fiscal policy is conducted using seven instruments—government spending, government investment (infrastructure spending), general lump-sum transfers, lump-sum transfers targeted to liquidity-constrained households, the consumption tax (VAT), the corporate income tax, and the labor income tax.

**In each region, monetary policy is an inflation-targeting regime in tandem with a flexible exchange rate regime.** The monetary policy rule is a standard CPI-inflation-forecast-based interest rate reaction function. For Italy and the rest of the euro area, they are governed by one interest rate reaction function, based a euro-area-wide measure of CPI inflation, where Italy has a weight of roughly 1/6th.

### **Impact of a Permanent Increase in the Non-tradable Price Markup**

**Policies to promote competition in non-tradable sector lead to a reduction in price markups.** This leads to a reduction in costs in the non-tradable sector, similar to an increase in productivity in the non-tradable sector. Demand for the factors of production increase. Consequently, the real wage increases, leading to higher households' wealth, resulting in higher consumption. The higher demand for capital also stimulates investment, both in order to accumulate a higher capital stock, and to maintain its permanently higher level.

**The real exchange rate depreciates, as the relative price shifts between tradable and non-tradable goods in Italy.** The adjustment however is restricted by the nominal exchange rate peg required maintain the monetary union (but interest rates still have some reaction to the economic developments in Italy, unlike a conventional nominal exchange rate peg). The real depreciation, strongest against the rest of euro area, leads to higher real GDP in the rest of the euro area from cheaper imports.

**On the price side, there is downward pressure on prices from production, but slightly higher from stronger domestic demand.** In the short run, inflation increases slightly, but falls after about 2 years. However, the policy rate is governed by the monetary union, and Italy is only a small portion (roughly 1/6th). Since the rest of the euro area is subject to a sustained increase in aggregate demand and inflationary pressures, there is a sustained increase in the euro area-wide policy rate.

**In the long run, output is higher across the euro area, particularly in Italy, and there are higher real wages.** The higher real wage and stronger consumption lead to consumers decreasing their supply of labor in the long run. However, on the demand side, there is a shift in the use of labor from the non-tradable to the tradable sector, as tradable firms hire more workers in order to take advantage of their higher export opportunities from the permanent depreciation. After 20 years, real GDP gains, relative to the baseline, vary from 2 percent (under a 5 percentage point reduction in the non-tradable price markup) to over 10 percent (under a 20 percentage point reduction in the non-tradable price markup).

### **Impact of a Permanent Increase in the Tradable Price Markup**

**Policies to promote competition in tradable sector lead to a reduction in price markups.** This leads to a reduction in costs in the tradable sector, similar to an increase in productivity in the tradable sector. Demand for the factors of production increase. Consequently, the real wage increases, leading to higher households' wealth, resulting in higher consumption. The higher demand for capital also stimulates investment, both in order to accumulate a higher capital stock, and to maintain its permanently higher level.

**The real exchange rate appreciates, as the relative price shifts between tradable and non-tradable goods in Italy.** The adjustment however is restricted by the nominal exchange rate peg required maintain the monetary union (but interest rates still have some reaction to the economic developments in Italy, unlike a conventional nominal exchange rate peg). However, the euro area still imports cheaper goods from Italy, which depresses their GDP, and dampens inflation, leading to euro-area-wide interest rate cuts.

**On the price side, there is downward pressure on prices from production, but cycles higher from weaker monetary policy.** In the short run, inflation falls slightly, but rises for

about after about 2 over the first 10 years, before decelerating. The inflation dynamics are driven by the decline in euro-area-wide interest rates.

**In the long run, output is in Italy, and there are higher real wages, but roughly unchanged in the euro area.** The higher real wage and stronger consumption lead to consumers decreasing their supply of labor in the long run. However, on the demand side, there is a shift in the use of labor from the tradable to the non-tradable sector, as tradable firms face the negative effects of the permanent appreciation.

### **Impact of a Permanent Decrease in the Real Wage Markup**

**Reforms to make the labor market more flexible and competitive lead to a lower wage markup by households.** Costs in both the non-tradable and tradable sectors will decline, and the demand for labor will increase by firms, as wages fall in the short run. In the medium to long run, households benefit from higher wealth, as both the amount of workers increase, while the fall in the real wage from the drop in the markup is mostly offset by higher labor demand boosting the real wage. In the more competitive environment, households also supply more labor, which contributes to the lower real wage. Overall labor income rises, and there is higher consumption. The higher demand for labor also stimulates demand for capital, so investment rises in order to accumulate a higher capital stock, and to maintain its permanently higher level.

**Since the cut in the wage markup is tantamount to an increase in productivity across the economy, the real exchange rate depreciates.** The adjustment however is restricted by the nominal exchange rate peg required to maintain the monetary union (but interest rates still have some reaction to the economic developments in Italy, unlike a conventional nominal exchange rate peg). The real depreciation, strongest against the rest of euro area, leads to stronger growth in the rest of the euro area from cheaper imports, although this effect is quite small.

**On the price side, there are downward pressure on prices from production, but slightly higher from stronger domestic demand.** In the short run, inflation increases slightly, but falls after about 2 years. However, the policy rate is governed by the monetary union, and Italy is only a small portion (roughly 1/6th). Since the rest of the euro area faces little impact from the reforms in Italy, there are no inflationary pressures in the euro area, so the euro area-wide policy rate remains effectively unchanged.

**In the long run, output is higher in Italy, and there are lower wage costs, leading to higher labor demand.** However, there is upward pressure on the real wage (that is, much of the cut of the markup is offset), as stronger consumption and wealth leads consumers to face downward pressure on their supply of labor, given their utility function. So in the long run,

consumption and investment is higher, as is output, labor is stronger, and wages are only slightly weaker.

**There is little effect in the rest of the euro area.** As with the price markups on non-tradable goods, households and firms find the policy reform measures to be stepwise credible, the rise in real GDP will be much slower. Once credibility is established, the results are the same as under the full credibility case, after some additional time has passed, and the economy has adjusted to its long run path.

### **Other Shocks**

**An increase in labor supply:** Higher labor supply lowers the real wage, lowering the costs of goods for both home and foreign markets. There will be downward pressure on inflation, although there will not be a strong response on the part of the ECB, since Italy is only 1/6th the euro area, and will have limited impact on the euro-area-wide measure of inflation. In GIMF, the substitution effect generally outweighs the income effect slightly, so labor income will be higher, allowing for higher consumption. Investment will be higher from the increased demand for capital to complement the increase in labor available for production. In general, with more labor available, the effects of other shocks considered in the simulations will be amplified.

**An increase in government spending:** As government spending increases, real GDP increases immediately. The increase in aggregate demand will lead to higher inflationary pressures, but with only a minimal impact on the setting of the monetary policy rate, as Italy is only around 1/6th of the euro area. So there will not be much crowding out of real activity from monetary policy. However, increased spending also increases the government debt burden (albeit only slightly with the proposed reforms), which leads to increased crowding out of investment in debt-financing markets, and reduced fiscal room for other spending. The debt burden can be offset by either increasing taxes (distortionary or lump-sum), or decreasing other spending (such as lump-sum transfers, or government infrastructure investment).

## II. Fiscal Devaluation In Italy: Towards A More Export, Employment, And Growth Friendly Tax System<sup>1</sup>

*A “fiscal devaluation” is a revenue-neutral shift from employer’s social contributions toward value-added tax, meant to promote net exports, employment, and growth. If sizeable, the shift could contribute to addressing Italy’s competitiveness gap. Fiscal devaluation, however, does present potential risks in terms of tax compliance and pension financing. To enhance its effectiveness, fiscal devaluation should aim to reduce VAT tax expenditures, while focusing social security contribution cuts on groups that are poorly integrated into the labor market.*

### A. General Considerations

1. **A fiscal devaluation is a shift in the tax structure meant to promote net exports, employment, and growth.** More specifically, the term “fiscal devaluation” (FD) describes a budget-neutral shift from employer’s social security contributions (SSC) to the VAT.<sup>2</sup> This tax rebalancing is expected to produce three main effects in the short-run. First, the trade balance should improve: the SSC cut lowers labor costs and thus producer prices, including those of exports (if the exchange rate and wages are fixed). At the same time, the higher VAT bears on domestic consumption, including imports, but not on exports. Second, employment should increase with the reduction in labor cost. Third, the boost in net exports and employment should raise GDP, the immediate effect being stronger if the FD is announced in advance and prompts households to bring forward consumption.
2. **A FD could permanently raise employment and GDP.** The effect of a FD on the trade balance is likely to be temporary, as nominal wages eventually adjust and the competitiveness gains fade away.<sup>3</sup> However, the FD impact on employment and output may be more persistent for two reasons. First, a FD shifts the tax burden toward non-labor income; while SSCs only weigh on labor, the VAT affects all types of household income, including transfer and capital income. The reform may therefore lead to a permanent increase

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<sup>1</sup> Prepared by Luc Eyraud (FAD). This paper has benefited from the comments of Ruud de Mooij, Aasim Husain, Kenneth Kang, Michael Keen, Daniel Leigh, John Norregaard, Maximilien Queyranne, Jack Riggs, Mauricio Soto, Antonio Spilimbergo, Justin Tyson, Dirk Vaughn Muir, and Edda Zoli.

<sup>2</sup> In the long-term, the incidence should be the same regardless of whether the tax cut applies to personal income tax (PIT), employer or employee contributions. However, in the short run, the impact on labor cost is more direct and immediate if the cut bears on employer contributions, because “gross wages” (including PIT and employee SSCs, but excluding employer SSCs) are temporarily fixed by employment contracts.

<sup>3</sup> As workers find their real wages reduced by the increased VAT rate, they will aim to increase their nominal wages, moving labor costs back to the pre-reform equilibrium.

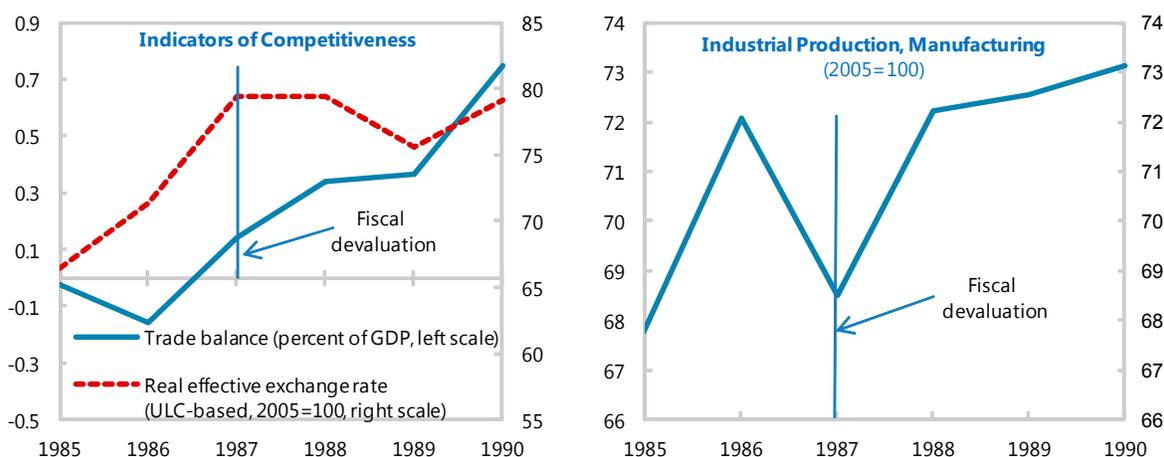
in employment<sup>4</sup>—an effect that could be amplified if social benefits are not fully adjusted to the increased VAT (thereby raising labor supply). Second, a FD creates a less distortionary tax system, with positive effects on output. In particular the reform should reduce the tax bias against saving. Empirical evidence shows that moving toward consumption-based taxation increases GDP growth in the long-term (Arnold 2008; and Martinez-Vasquez et al. 2010).

3. **A few countries have carried out FDs in the past with some success.** The best-known examples are Denmark in 1987 and Germany in 2007 (Besson, 2007). Italy also carried out three FDs in the 1970s, substituting VAT for social security contributions in 1974, 1977, and 1978. More recently, several countries have been considering FD reforms, including Finland, France, and Portugal.

- In 1987, Denmark introduced a wide-ranging tax reform to contain overheating pressures, reduce labor cost, and improve cost-competitiveness while preserving exchange rate stability within the European Exchange Rate Mechanism. A tax on consumption replaced the employer payroll tax for unemployment and disability. A few years later the tax was merged into the VAT which was increased by 3 percentage points (from 22 to 25 percent). OECD (1988) estimates that this increased price competitiveness by 5 percent, as measured by relative export prices.
- In 2007, Germany raised the VAT rate from 16 to 19 percent and used about one-third of the additional revenues to cut employer contributions to the unemployment insurance scheme. The remaining revenue was used to consolidate the budget. The primary objective of the reform was not to restore competitiveness, but to reduce the tax wedge and improve the fiscal position. Its effect on competitiveness is difficult to evaluate, as the improvement in employment also reflected several years of wage restraint following the labor market reforms of 2003–05 (EC 2008; and Burda and Hunt, 2011).

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<sup>4</sup> In a simple labor market model, this asymmetry implies that the labor supply reduction due to the higher VAT is less pronounced than the labor demand increase due to the lower SSC, resulting in higher employment in equilibrium.

**Figure 1. Denmark: Fiscal Devaluation, 1985–1990**

Sources: OECD.

Note: An increase in the real effective exchange rate denotes a deterioration in competitiveness.

4. **Italy's recent fiscal packages include some shift from direct to indirect taxation.** In December 2011, the authorities reduced labor and capital income taxes by introducing a corporate equity allowance, raising deductions from the regional value-added tax (IRAP) for young people and women, and making the IRAP on labor fully deductible from corporate income tax. At the same time, the standard VAT rate was raised in September 2011 from 20 to 21 percent, and is scheduled to rise by an additional 2 percentage points in October 2012. The property tax on primary residences was reintroduced and its base revalued, while the government adopted new taxes on luxury goods and assets held abroad. Overall the shift from direct to indirect taxes is estimated at below 1 percent of GDP.

### B. The Case for Further Fiscal Devaluation in Italy

5. **A FD may be particularly beneficial in Italy.** The country has four features that would make a FD more effective: a fixed nominal exchange rate, a (moderate) competitiveness gap, strong wage rigidities, and a high tax wedge (Box). Under these conditions, a FD would more easily facilitate the wage and real exchange rate adjustments needed to restore competitiveness.

### Box. Conditions for an Effective Fiscal Devaluation in Italy

- *Fixed exchange rate.* The share of trade denominated in a fixed exchange rate is high in Italy. About half of exports and imports are with eurozone trading partners.<sup>5</sup>

#### Italy: Intra-and Extra-Euro Area Trade

(In percent of total)

	2000	2005	2010
Exports to non-Euro Area	52	53	56
Exports to Euro Area	48	47	44
Imports from non-Euro Area	50	51	54
Imports from Euro Area	50	49	46

Source: IMF, Direction of Trade Statistics.

- *Eurozone external trade.* In addition, Italy represents about 20 percent of eurozone external trade. A change in Italy's trade balance vis-à-vis countries outside the eurozone would only result in a limited exchange rate correction.

#### Italy's Share in Euro Area Trade 1/

	2000	2005	2010
Exports	11.5	20.0	21.2
Imports	10.7	20.0	21.8

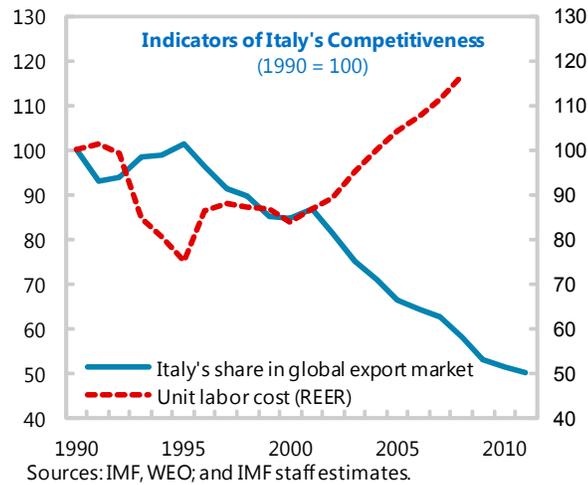
Sources: IMF, Direction of Trade; and Eurostat.

1/ Italy exports/imports to/from countries outside euro area as a share of consolidated exports/imports of euro area.

- *Competitiveness gap.* Italy presents a moderate competitiveness gap, with an estimated real exchange rate overvaluation of 5–10 percent, and a steady decline in market shares. Under the Macroeconomic Balance, External Sustainability, and Equilibrium Real Exchange Rate approaches of the Consultative Group on Exchange Rate Issues (CGER), the most recent overvaluation estimates are 10, 6 and 7 percent, respectively (see Competitiveness Annex in the 2012 IMF Article IV Report).

<sup>5</sup> The large share of intra-euro trade may also reinforce the FD impact on competitiveness, as intra-euro trade is particularly sensitive to prices (Bayoumi et al. 2011).

### Box: Conditions for an Effective Fiscal Devaluation in Italy (continued)



- *Tax wedge.* According to the OECD (2012), Italy has the sixth highest tax wedge on labor income among OECD countries. The implicit tax rate on labor was the largest in the EU in 2010 (EC 2012).

#### Tax Wedge in OECD Countries 1/

(PIT+SSC in percent of labor costs)

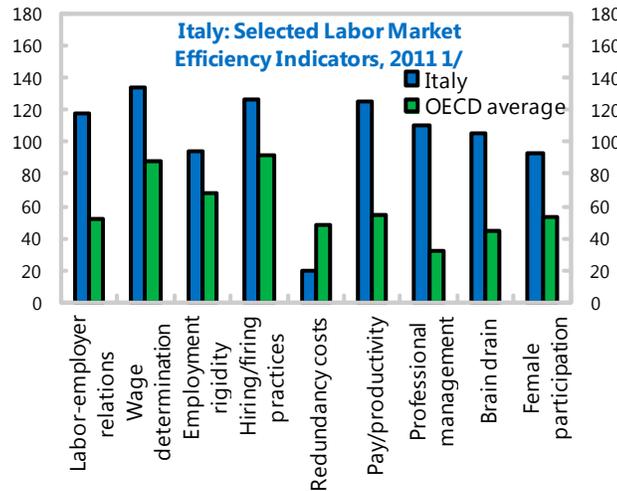
Country	Tax Wedge 2011
Belgium	55.5
Germany	49.8
France	49.4
Hungary	49.4
Austria	48.4
Italy	47.6
OECD avg.	35.3

Source: OECD.

1/ Single worker at average wage without children.

### Box: Conditions for an Effective Fiscal Devaluation in Italy (concluded)

- *Labor rigidities.* Italy ranks low in the areas of wage and employment flexibility (respectively, 134 and 94 out of 142 countries) according to The Global Competitiveness Report (2011).



Sources: World Economic Forum, *The Global Competitiveness Report 2011-2012*; and IMF staff calculations.  
1/ Higher index denotes weaker performance.

## 6. A FD could supplement structural reforms to address Italy's competitiveness gap. Euro-zone countries cannot rely on exchange rate devaluation to restore their competitiveness, but other policies may produce similar effects:

- An “internal devaluation”—whereby the wage adjustment is solely driven by market forces—would be very costly in Italy owing to the wage stickiness. Nominal wages are unlikely to quickly respond to labor and product market imbalances for a number of reasons, including the centralized and rigid wage bargaining system, the size of trade unions,<sup>6</sup> and the duality of the labor market reflecting the strong employment protection for permanent workers (Schindler 2009; and IMF 2011). Hysteresis and debt deflation effects would also raise the cost of an internal devaluation.<sup>7</sup>

<sup>6</sup> In Italy, the share of employees who are members of a trade union (“trade union density”) is twice as large as the OECD average (35 percent compared to 18 percent in 2010).

<sup>7</sup> An internal devaluation would negatively affect tax revenues and GDP in the short-run, making it more difficult to service public debt and achieve fiscal targets. This could prompt the authorities to engage in repeated  
(continued...)

- Labor market and productivity-enhancing reforms are key to addressing the structural problems underlying the competitiveness gap, but their full benefits may take time to materialize and their short-term effects on the trade balance are likely to be small or even negative (EC 2010).
- By comparison, a FD could improve the trade balance in the short-term without having to rely on deflationary dynamics. But the FD is not a panacea, and its effect is likely to fade, as nominal wages eventually adjust. In addition a FD, like an exchange-rate devaluation, does not address underlying structural problems. The purpose of the tax shift is to smooth and temporarily mitigate the painful effects of the wage adjustment toward its new equilibrium. This means that the FD should be seen as a complement to, rather than a substitute for, structural reforms and market forces.

### C. Expected Effects of the Reform

7. **Both simulation results and empirical evidence suggest that to have marked effects, the tax shift needs to be sizeable.** Table 1 reports estimates of FD effects found in the literature. To generate a significant effect, we assume a shift on the order of 2 percent of GDP from SSC towards VAT in Italy. This would approximately represent a 6 percentage point cut in the Italian SSC rate (from 42 percent). Based on plausible results from the literature, a FD would likely produce the following effects:

- **GDP.** Based on a range of elasticities of 0.2–0.7, GDP would rise by 0.5–1.5 percent above the baseline after 10 years, with the effects being smaller in the short-run.
- **Employment.** The impact on employment would be of the same order of magnitude as that on GDP.
- **Competitiveness.** Based on macroeconomic model estimates, a 2 percent of GDP revenue shift would increase net exports by about 0.4 percent of GDP in the short-run, with no significant effect in the long-term. Econometric studies point to stronger short-term gains (Franco 2011; and de Mooj and Keen 2012).

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rounds of tightening in an effort to reduce the debt ratio, undermine confidence, and set off a vicious circle of low growth, deflation, and further tightening.

**Table 1. Short and Long-Term Impacts of a Revenue Shift of 1 percent of GDP From SSC to VAT 1/**

Country	Source	Method 2/	GDP 3/		Employment 3/		Trade balance 4/	
			ST 5/	LT 5/	ST 5/	LT 5/	ST 5/	LT 5/
EU15	EC 2006	M	-0.1 to 0.5	0.4 to 0.7	0.1 to 0.7	0.5 to 0.9	-0.2 to 0	-0.1 to -0.2
Germany	EC 2008	M	0.1 to 0.2	0.2	0.1 to 0.3	0.2		
OECD	Arnold 2008	E		0.7				
EU27	EC 2010	M		0.2				0
Portugal	EC 2011	M	0 to 0.2	0.3 to 0.7	0.2 to 0.3	0.4 to 0.7	0 to 0.2	0
Portugal	ECB 2011	M	0.1 to 0.5	0.2 to 0.3	0.2 to 0.9	0.2 to 0.4	0 to 0.2	0
Portugal	Franco 2011	E					4	
OECD	De Mooj and Keen 2012	E					0.9 to 4	0
Italy	IMF 2012	M	0 to 0.2	0.5			0.1 to 0.2	0.2

1/ Across-the-board SSC cut.

2/ M = Model-based simulations; E = Econometric results.

3/ Effect on the level of GDP and employment relative to baseline (in percent).

4/ Effect on the trade balance as a share of GDP relative to baseline (in percentage point).

5/ ST = 1-3 years; LT = 10 years.

#### D. Caveats

8. **A FD can place strains on the pension system.** To avoid any resource shortfall in the social security fund, the loss in SSCs needs to be compensated by transfers financed from general taxes. This shift towards tax-financed social benefits may have important implications. The intergenerational inequity of the Italian pension system is well known (IMF 2010), and the FD could help restore equity and make the elderly contribute more to the rebalancing of the system.<sup>8</sup> On the other hand, the FD would loosen the link between contributions and benefits. This may also weaken the intergenerational contract underpinning the PAYGO system and negatively affect labor supply.<sup>9</sup>

9. **Another potential downside of a FD is the risk of revenue loss.** Raising VAT revenues by broadening the VAT base may encounter some opposition, as sensitive items benefit from reduced rates or exemptions. In addition, a FD switch may reduce tax compliance: SSCs are collected through withholding mechanisms that are seen as effective, while VAT is collected via self-assessment through a commercial chain that depends on the

<sup>8</sup> While SSCs are only paid by workers, VAT is also paid by pensioners, provided that pensioners are not fully compensated for the loss in their after-tax income.

<sup>9</sup> Unlike personal income taxes, SSCs carry some benefit entitlement, and are a form of deferred consumption. Empirical evidence shows that the perception of the link between contributions and benefits matters for labor supply responses (Disney 2004). To preserve this link, the tax cut should primarily bear on the non-pension component of SSCs. In Italy about 6 percentage points of SSCs were not financing pensions in 2010 (SSA 2010).

level of formality.<sup>10</sup> If the risk of revenue loss is too high, a shift to other “destination-based” taxes could be contemplated.

**10. Alternative tax shifts may be considered, although none of them seem clearly superior to a FD.** To have a marked impact on competitiveness, alternative tax shifts should also produce a rebalancing from origin-based to destination-based taxation.<sup>11</sup> This would ensure that exports are released from the tax, while imports are brought into it.

- SSC cuts are not the only way to lower labor taxation, but reducing the PIT or the IRAP presents some shortcomings. It is unlikely that a lower PIT would be fully passed on to labor costs, as wages are usually set and negotiated in gross terms (including PIT). In addition, a one euro cut in PIT or IRAP would have a smaller effect on labor costs than a one euro cut in SSC, because the PIT and IRAP also bear on capital income. A lower IRAP would increase the reliance of subnational governments on transfers with potentially negative effects on fiscal discipline. Finally, IRAP revenues are not sufficiently large to serve as the basis for a sizeable revenue shift.
- Different instruments other than the VAT could be used to finance SSC cuts. For example, a natural candidate is the residential property tax, which is relatively growth friendly (Arnold 2008), difficult to avoid, and has elements of progressivity. However, there does not seem to be much room for further property tax increase in Italy given the reintroduction of the primary residence tax in December. In addition, the reallocation of domestic consumption from foreign to domestic products—which reduces imports and improves the trade balance—is likely to be less pronounced with the property tax compared to the VAT. Another possibility could be to finance the SSC cut by a reduction in the wage bill, but this could have negative effects on GDP in the short-run (EC 2011; ECB 2011; and IMF 2012). Finally raising excises may aggravate cross-border shopping and smuggling.

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<sup>10</sup> The economic literature on the compliance implications of tax shifts is limited and inconclusive: a shift from SSC to VAT has no effect on tax compliance according to Kesselman (1993), a positive impact in Gordon and Nielsen (1997), and Schneider (2008), and a negative effect in Hill and Kabir (1996) and Brou and Collins (2001). Additional empirical work would be needed to determine the net impact on tax evasion, which depends on the tax rate elasticity of compliance. Overall compliance will only deteriorate if the decrease in VAT compliance (due to higher rates and/or fewer exemptions) exceeds the improvement in SSC compliance (related to lower SSC rates).

<sup>11</sup> Goods and services can be taxed either where they are produced (origin-based taxation) or where they are consumed (destination-based taxation).

## E. Implementation Issues

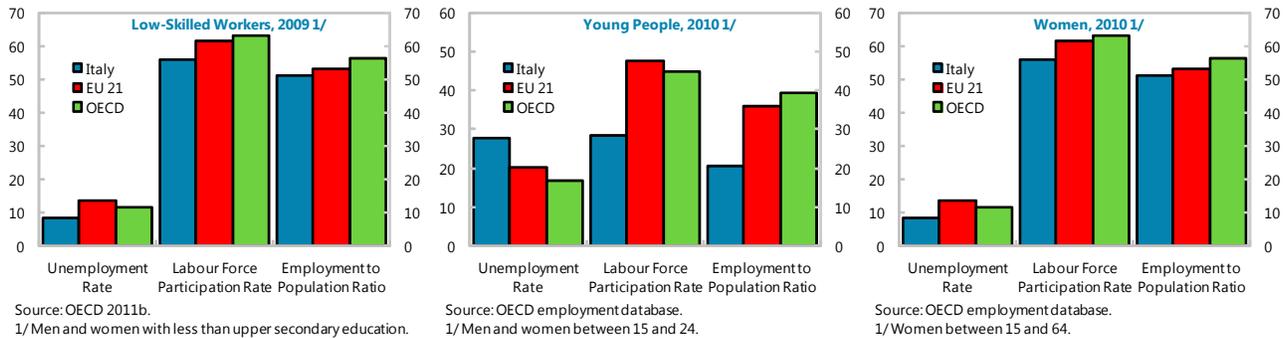
11. **Increasing VAT revenues should be achieved by reducing tax expenditures rather than raising the standard rate.** The Italian VAT standard rate is already high by international standards, and further increases may exacerbate tax evasion and avoidance, and reduce labor supply incentives. Raising the VAT by 2 percent of GDP by broadening the base, however, seems feasible.<sup>12</sup> This would result in raising Italy's VAT efficiency to the OECD average. The primary objective should be to levy the standard rate on goods and services that currently enjoy preferential VAT treatment, with the exception of standard exemptions such as on financial services, health, and education. In addition to direct revenue gains, this simplification of the VAT system would reduce administration and compliance costs, and opportunities for avoidance. Where preferential treatment is deemed necessary, the super-reduced rate could be abolished and replaced with a single-reduced rate.

12. **SSC cuts should focus on groups that are poorly integrated into the labor market.** Targeting the SSC cut reduces the cost of the measure, while concentrating the impact on individuals whose employment and participation are low and sensitive to tax considerations. In Italy, the SSC cut should primarily benefit low earners, women and young workers. Although the unemployment rate of the low-skilled workers is not high in Italy, their participation rate and employment to population ratio are well below the OECD and EU averages (Figure 2). In addition, the tax wedge on low-skilled workers is high by international standards, with the marginal wedge for a worker earning two thirds of the average wage at 54 percent, compared to an OECD average of 41 percent, and a EU21 average of 48 percent (OECD 2012). Women and young workers would also benefit from SSC cuts. High average and marginal tax wedges of second earners suggest that women may face strong tax-related disincentives to work (OECD 2011a).

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<sup>12</sup> Tax expenditures related to reduced VAT rates and exemptions may be on the order of 6 percent of GDP (as estimated by IMF 2010). The final report of the working group on tax erosion (Italian Ministry of Economy and Finance 2011) assesses the cost of VAT reduced rates at about 2.5 percent of GDP but does not provide cost estimates for most VAT deductions, exemptions, credits, and deferrals.

Figure 2. Employment Indicators



13. **Some compensation for the poor should be considered.** Eliminating the preferential VAT treatment of goods that comprise a large share of total spending by low income households (e.g., electricity and household fuels) will raise distributional concerns. However, high income households generally capture a large share of total benefits from preferential VAT treatment, as they spend larger amounts on these goods in absolute terms. This suggests that low income households could be fully compensated for the increase in prices through well targeted transfer programs, while raising net revenues to pay for the cut in SSC rates.

## F. Conclusion

14. **Shifting the tax burden from direct to indirect taxation would improve Italy's trade balance, employment, and growth prospects.** Italy's recent fiscal packages already include some rebalancing, and more can be done to generate stronger effects. A FD would supplement structural reforms to address Italy's competitiveness gap. To enhance its effectiveness, FD should aim to reduce VAT tax expenditures, and focus SSC cuts on groups that are poorly integrated into the labor market, such as low-earners, women, and young workers.

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### III. Recent Movements in Italian Government Bond Spreads: Driving Factors and Implications on Lending Conditions<sup>1</sup>

*Italian sovereign spreads have been driven by both euro area related and Italian specific factors, underscoring the importance of reducing country-specific vulnerabilities as well as addressing fragilities in the euro zone at large to contain common risks and spillovers. In turn, Italian sovereign spread shocks are rapidly transmitted to firm lending rates. Firm credit has contracted until March, driven both by demand and supply factors, although the latter seem to have prevailed at the end of last year. To ensure adequate supply of credit going forward, banks need to maintain strong capital and liquidity buffers.*

#### A. Introduction

1. **Since the summer of 2011, the Italian sovereign bond market has been affected by a number of shocks.** An important question is to what extent recent movements in Italian spreads reflect either country-specific vulnerabilities or more general euro area concerns. The first part of the paper analyses this issue by focusing on the impact of euro area and Italy specific news as well as macroeconomic variables on sovereign risk premiums, using daily time series as well as monthly panel regressions.

2. **As the sovereign turmoil has spilled over to affect the banks, lending conditions, especially for firms, have tightened significantly.** The second part of the paper illustrates the impact of sovereign tensions on firm lending rates and credit.<sup>2</sup> A VAR approach shows that sovereign spreads shocks are rapidly transmitted to lending rates. Then, the paper tries to assess whether recent developments in firm lending have been driven by the slowing demand due to the contracting economy or by supply constraints.

#### B. Factors Driving Italian Sovereign Spreads

3. **In the period preceding the global financial crisis, Italian government bonds spreads moved in line with those of other euro area government bonds.** Indeed, during 1999–2007 sovereign risk premia were compressed as financial markets were not pricing in higher default risk for governments running higher deficits.<sup>3</sup> There is indeed consensus in the literature that at least up to 2008, euro area sovereign spreads have been mostly driven by a common factor, reflecting international risk appetite (Codogno and others, 2003; Geyer and others 2004; Sgherri and Zoli, 2009; Caceres and other, 2010; Favero and others, 2010). However, since the Lehman bankruptcy, financial markets have

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<sup>1</sup> Prepared by Edda Zoli (EUR).

<sup>2</sup> The focus is mostly on firms rather than households since the former receive about 60 percent of private sector credit and have the largest impact on investment and economic activity.

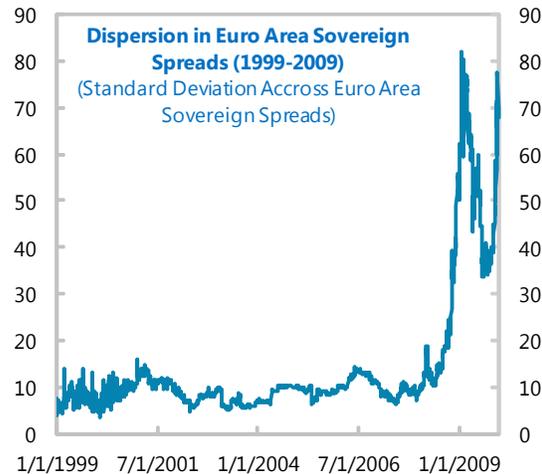
<sup>3</sup> See Garzarelli and Vagnin (2005), Debrun and others (2008), and Attinasi and others (2009).

been increasingly discriminating among government issuers (Sgherri and Zoli, 2009; Caceres and other, 2010).

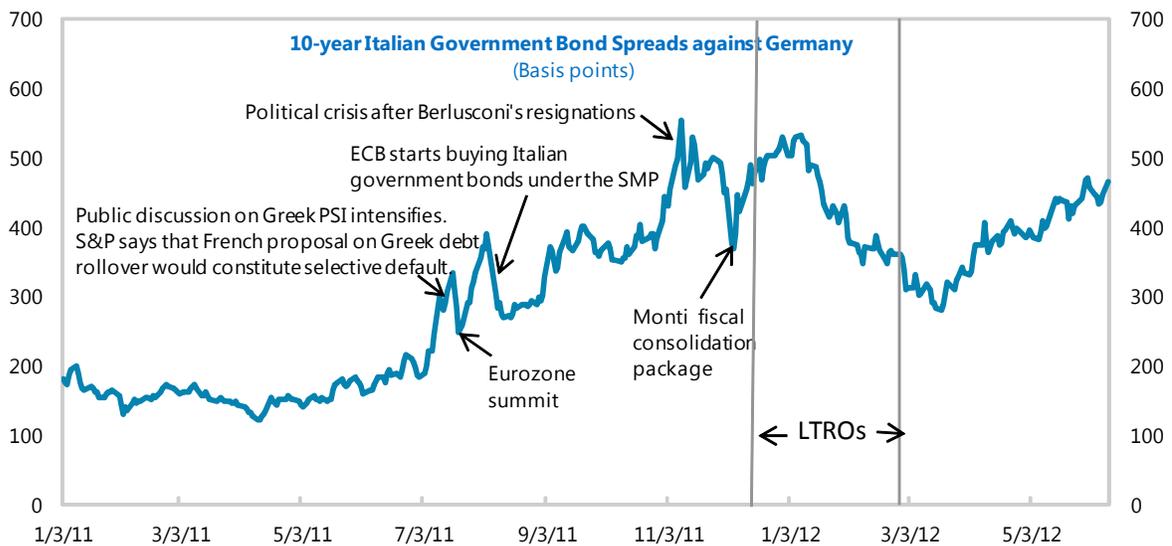
**4. Starting in July 2011, pressure on Italian government bonds intensified considerably.**

After remaining below 200 basis points (bps) until June 2011, 10-year bond spreads widened by almost 300 basis points in the second half of last year. They tightened only for a brief period in early 2012 after the 3-year Long term Refinancing Operations (LTRO) and remain about 280 bps above the end June 2011 levels.

The volatility of spreads has also increased substantially, with the monthly standard deviation peaking in December 2011–January 2012. The largest daily changes in spreads have taken place at the time of international and Italian related announcements and events.



Sources: Bloomberg; and IMF staff calculations.

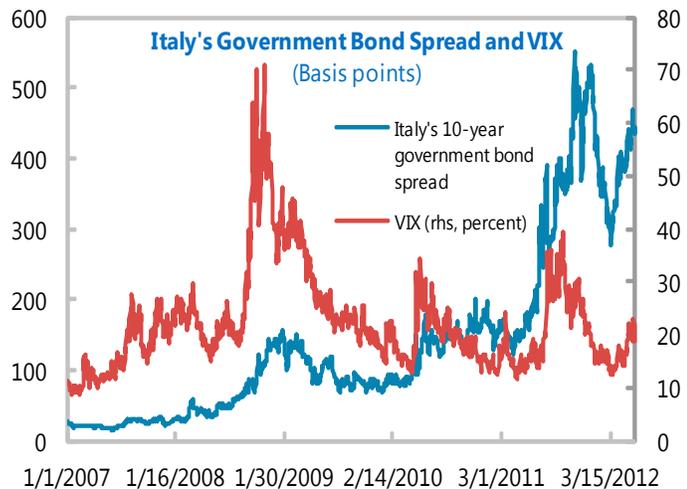


Source: Bloomberg.

**5. While sovereign risk premia continue to reflect common euro area factors, country-specific risks have become more important with the intensification of the euro area debt crisis.** In the period January 2008–March 2010—preceding the first IMF Greek program—the first principal component explains about 87 percent of the variance in euro

area spreads.<sup>4</sup> By contrast, since July 2011 the variance share explained by the first principal component falls to only 55 percent.

6. **Econometric analysis suggests that Italy's high public debt is amplifying the impact of common shocks.** Equations for daily changes in Italian 10-year government bond spreads are estimated over January 1, 2008–March 30, 2012 to assess the impact on country risk premia from common risk factors, international and Italian specific news, and projected country specific macroeconomic variables.<sup>5</sup> Consistent with the literature, the implied volatility of the S&P stock price index options (VIX index) is used as a proxy for general risk appetite—a source of common risk. Indeed, Italian government bond spreads have moved in line with the VIX, and changes in the VIX are found to have a statistically significant impact on sovereign spreads.<sup>6</sup> Also, changes in the VIX index interacted with the projected debt to GDP ratio push up spreads, suggesting that the high level of debt has amplified the impact of investor risk appetite shocks.<sup>7</sup>



Sources: Bloomberg; and IMF staff calculations.

7. **Both international and Italian-specific news have a sizable impact on daily movements in Italian 10-year spreads.** Dummies capturing bad and good news related to

<sup>4</sup> The principal component analysis uses an orthogonal transformation to convert a set of observations of possibly correlated variables into a set of values of linearly uncorrelated variables called principal components. The first principal component is the one that accounts for most of the data variability.

<sup>5</sup> Monthly macroeconomic variable projections are used instead of actual variables since the former are in the investor information set when portfolio allocation decisions are made. During the sample period monthly projections have changed quite dramatically over time, and at times, were very different from the actual outcome. For example, in January 2009, the growth Consensus Forecast for Italy for that year was -1.6 percent, while actual growth turned out to be -5.2 percent.

<sup>6</sup> Since Italy is a systemically important country, movements in the VIX may not be completely exogenous to changes in Italy's spreads. However, Granger causality tests indicate that changes in the VIX affect Italian sovereign spreads movements, but not the other way around. To address possible endogeneity, equations are estimated using instrumental variables.

<sup>7</sup> For example, at the debt to GDP ratio projected for this year, a one standard deviation shock in the VIX index sustained for 5 days (a 10 percentage point increase) would increase spreads by about 20 bps.

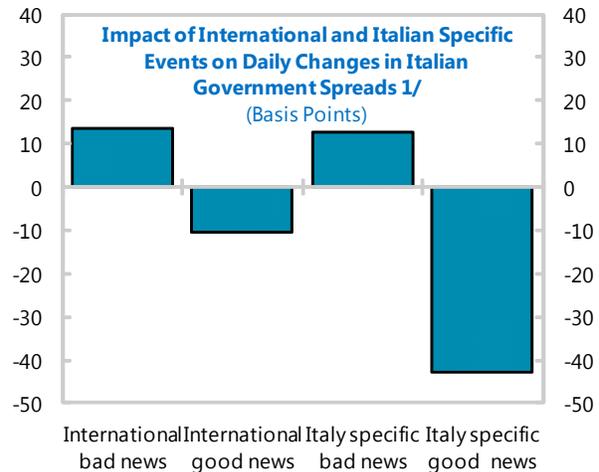
important international events on the global and European sovereign crisis (e.g., the start of the Irish or Greek programs), as well as positive and negative news related to Italy specific events (e.g., approval of consolidation or reform measures) are found to have a statistically significant and large impacts on daily changes in spreads.<sup>8</sup>

**8. Panel regressions find that changes in projected public debt to GDP ratios also affect euro area sovereign spreads, but the estimated impact is small.** To assess the determinants of spreads movements in a broader context and

exploit cross-country macroeconomic variables, a panel of 10 euro area sovereign spreads is estimated over the period January 2008–March 2012 at monthly frequency.<sup>10</sup> Common factors, such as changes in the VIX and international news, have a statistically significant impact on country risk premiums. International good news reduced spreads by about 7 bps, while bad news raised them by 10 bps. The projected debt to GDP ratio has a significant, but small impact on spreads. Indeed, a 1 percentage point increase in the debt to GDP ratio leads to less than 5 bps rise in spreads. This is consistent with most of the literature that finds a limited impact of fiscal variables on government yields or spreads (Table 1). Lagged changes in the VIX index interacted with the projected debt to GDP ratio trigger an increase in spreads, again indicating that high debt amplifies the impact of investor risk appetite shocks. On the other hand, projected growth is found not to have a significant impact on spreads (Table 2).

### C. Impact of Movements in Sovereign Spreads on Lending Conditions

**9. Following the enhanced volatility in the sovereign debt market, credit conditions have tightened sharply, especially for firms.** Higher sovereign risks has limited banks' access to the international wholesale markets and pushed up funding costs.<sup>11</sup> These were



Sources: Bloomberg and IMF Staff calculations.

1/ Impact is based on a regressions for daily changes in 10-year government bond spreads estimated over the period January 1, 2008-March 30, 2012. The control variables are changes in the lagged dependent variable and the VIX.

<sup>8</sup> The Appendix provides the list of events captured by the dummies.

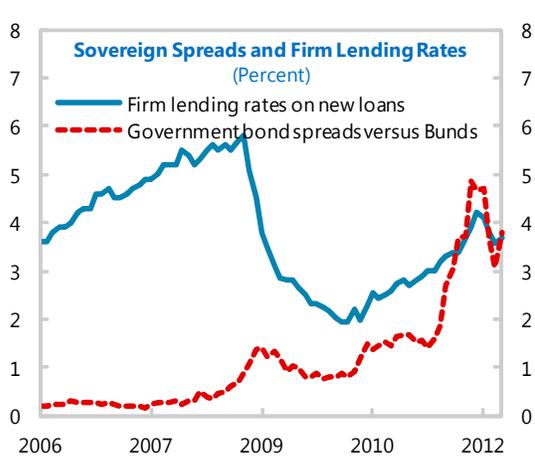
<sup>9</sup> Using government bond yields changes instead of spreads as the dependent variable does not alter the overall results. International and Italian specific good news reduce yields by 6 and 34 bps, respectively, while international and Italian specific bad news raise yields by 11 and 12 bps, respectively.

<sup>10</sup> For program countries, only the pre-program period is included in the sample.

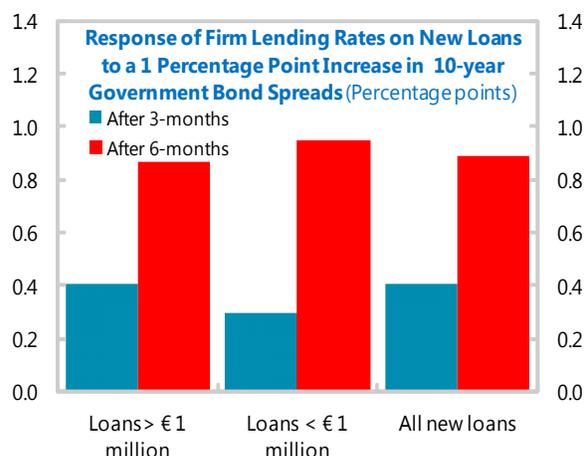
<sup>11</sup> An analysis of the link between sovereign risks and bank funding costs in Italy is presented in Zoli (2011).

passed on to borrowers, as rates on new firm loans increased by 100 bps in the second part of 2011, and on new mortgages by 80 bps. In January, however, rates on firm loans started to decline, as sovereign spreads tightened (Figure 1).

10. **Indeed, Italian sovereign spreads and lending rates have moved together since the onset of the euro area crisis in early 2010.**<sup>12</sup> Consistent with this, VAR analysis suggests that changes in sovereign spreads quickly affect corporate borrowing costs.<sup>13</sup> About 30–40 percent of the increase in sovereign spreads is transmitted to firm lending rates within three months, and the transmission is nearly complete within six months, for both large and small loans. This suggests that a decline and stabilization in sovereign spreads would be essential for a sustained decrease in lending rates.



Source: Bank of Italy.



Sources: Bank of Italy; Bloomberg; and IMF staff

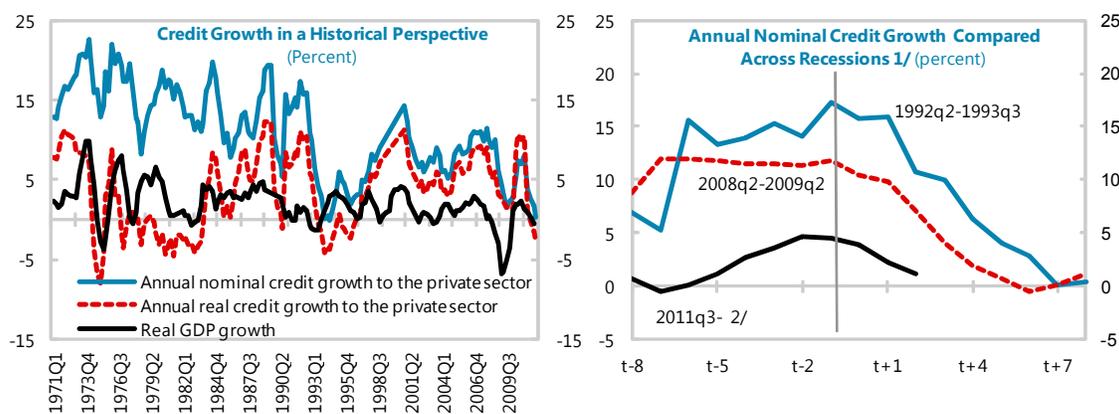
11. **Credit growth has also slowed down sharply, especially for small firms.** 12-month credit growth to the non-financial private sector dropped from 3.5 percent in November to 1.6 percent in April 2012. This reflected the decrease in loans to non-financial corporations, concentrated especially in December, and a slowdown in household lending. The credit contraction was more severe for small firms, and more pronounced than in 2009 (Figure 1). Indeed, the 12-month growth in loans to small firms—net of bad debt and repos—declined from 0.4 percent (y/y) in November to -1.9 percent in March. Bank and business surveys conducted toward the end of 2011 point to tight lending standards similar to those observed

<sup>12</sup> The correlation between changes in 10-year government bond spreads over the Bund, and changes in lending rates on firm new loans was 0.1 in the period January 1999–April 2010, and 0.4 afterwards.

<sup>13</sup> The VAR, estimated at monthly frequency over January 2006–February 2012, includes changes in sovereign bonds spreads and changes in bank CDS spreads, as well as changes in the 3-months euribor as an exogenous variable. The model focuses on the impact of sovereign spreads, instead of yields, as the former measure the country risk premium affecting banks' CDS spreads and their cost of funding, whereas the euribor is a proxy for the underlying interest rate.

in the immediate period after the Lehman bankruptcy, owing to banks' high cost of capital and funding difficulties, while more recent surveys indicate some improvement in loan supply conditions and a significant decline in credit demand (Figure 1).

12. **As in previous recession episodes, the ongoing slowdown in credit growth is partly driven by the decline in loan demand.** Historically, the sharpest slowdowns in credit growth in Italy have been associated with the severe recessions of the 1970s, early 1990s, and 2008–09, with the lowest nominal annual credit growth (-0.1 percent) taking place during the 1992–93 recession. Interestingly, the most recent episode of lending slowdown has been somewhat milder than in the 1992–93 recession, despite the severe 2008–09 output contraction, probably thanks to lower interest rates supporting demand and the policies put in place to sustain credit to small and medium sized enterprises.<sup>14</sup> The 2009–10 credit slowdown was mainly driven by weak demand, even though supply constraints appear to have prevailed for a period in early 2009 (Albertazzi and Marchetti, 2010; Panetta and Signoretti, 2010; Del Giovane et al., 2010; Zoli, 2010).<sup>15</sup> So far the pace of the slowdown in private sector credit seems to be consistent with that experienced in previous recession episodes. Indeed, almost three quarters since the start of the recession, nominal annual credit growth to the private sector has declined by 3.3 percentage points, compared to declines of 6.5 and 4.7 percentage points respectively during corresponding periods in the early 1990s and 2008–09.<sup>16</sup>



Sources: ISTAT, IMF, and IMF staff calculations.

1/ The legend shows the dates of recession episodes. t is the recession starting period.

2/ Data adjusted for the impact of securitization.

<sup>14</sup> 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.

<sup>15</sup> Albertazzi and Marchetti find that supply restrictions account for 1 percentage point of the 7 percentage points slowdown in credit growth in September 2008–March 2009. Panetta and Signoretti (2010) estimate that in 2009 the output contraction due to lending supply tightening was 1.2 percentage points.

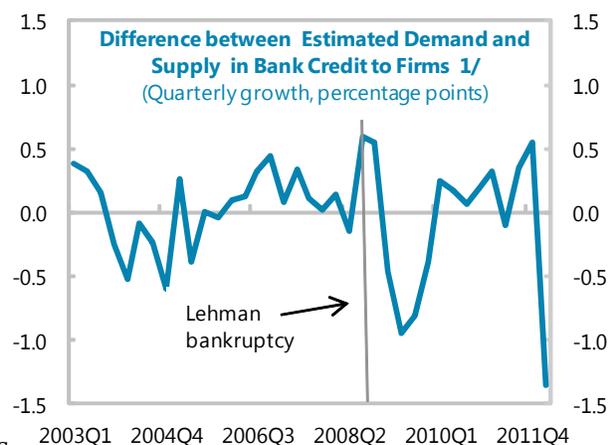
<sup>16</sup> Annual credit growth data expressed in real terms show a similar pattern.

13. **However, the picture changed at end 2011 with supply constraints prevailing over weak demand.** To assess the relative importance of demand and supply in affecting corporate lending, a loan supply and demand functions are estimated, using the bank survey on lending standards and credit demand from firms (BLS). Disentangling demand and supply effects in credit markets is not straightforward, as suitable exogenous instruments for

identification are difficult to find. The approach adopted here assumes that the responses from loan officers in the BLS are good proxies for unobserved demand and supply. Hence, loan supply and demand are modeled as linear functions of the indicators of supply and demand conditions obtained from the BLS, respectively.<sup>17</sup>

Evidence of a potential supply-driven credit crunch is then assessed by evaluating whether the difference between fitted demand and supply (excess demand) is positive and large. The estimates of excess demand suggest that growth in loan demand exceeded that of credit supply by 0.5 percentage points

in 2011Q4, similar to that observed in the aftermath of the Lehman bankruptcy. A supporting piece of evidence at the end of last year can be found in net corporate bond issuance, which issuance returned positive in the fourth quarter of 2011, after having been negative for several months—a sign that firms were possibly substituting bank borrowing with bond issuance.



Sources: Bank of Italy; and IMF staff calculations.

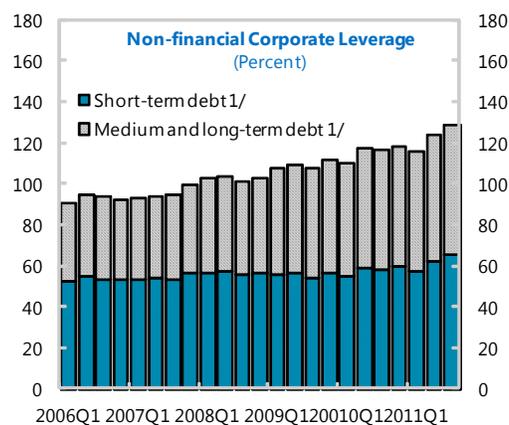
1/ Loan supply and demand are estimated as linear functions of the indicators of supply and demand conditions obtained from the bank lending survey, using equation [1] in Table 3.

14. **In 2012, the situation appears to have reversed with weak demand now driving changes in credit.** After the LTROs and other actions taken by policy makers to support banks, estimated demand for credit fell well short of supply, as it happened in 2009, as the severe recession curbed loan demand. The decline in corporate borrowing rates observed in early 2012 is consistent with this conclusion.

15. **While demand for credit is expected to remain subdued with the weak economy, a number of factors will probably continue to impinge on credit supply going forward.**

<sup>17</sup> Specifically, the dependent variable is the quarterly growth in seasonally adjusted credit to non-financial firms. Regression results are reported in Table 3. A similar approach is used in Jakab and Benes (2012). Results similar to those presented here are obtained if the indicators of demand and supply from the BLS are “purged” as in the Jakab and Benes’s study.

- Despite the large LTRO intake by Italian banks, the supply of loanable funds remains constrained by the need to repay debt coming to maturity and provide funding to the public sector. This is compounded by the decline in non-resident deposits and the difficulties in wholesale funding market.
- Banks need to build up higher capital ratios to meet EBA and Basel III requirements and therefore may be inclined to shrink their loan portfolios.
- The stock of bank non-performing loans is sizable, discouraging banks from increasing exposure to risky borrowers.
- Firms' ability to borrow may be constrained by (i) weak balance sheets, as financial leverage is at historical highs; and (ii) low capacity to repay and service debt due to higher interest bills.<sup>18</sup>



Source: Bank of Italy.  
1/ Ratio to equity.

#### D. Conclusions and Policy Implications

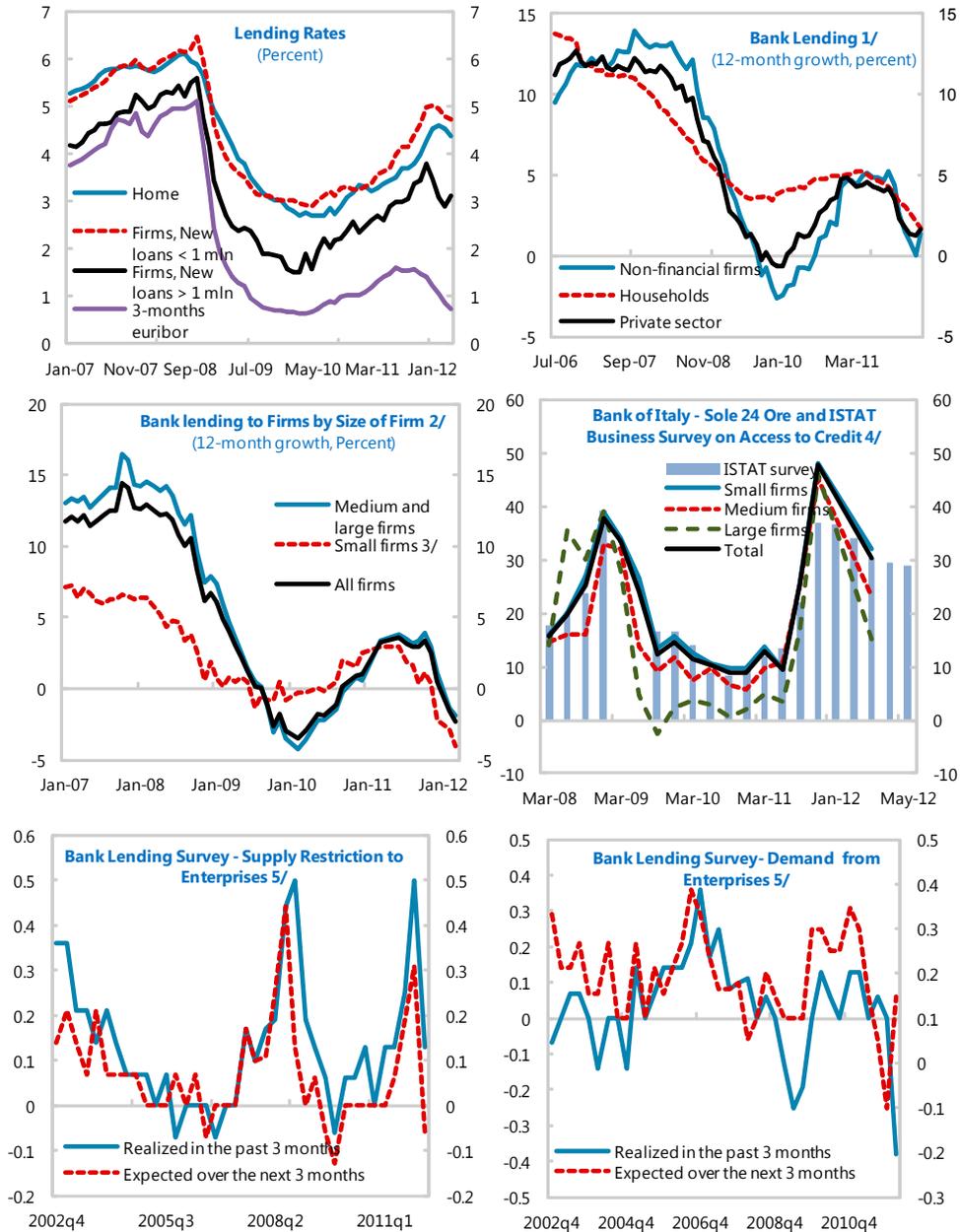
16. **With Italian sovereign spreads at elevated levels, the government bond market continues to be vulnerable to several risks.** The analysis presented above indicates that news related to the euro area debt crisis as well as Italy specific news have been important drivers of Italian sovereign spreads. The analysis also indicates that Italy's high debt levels amplify the impact of investor risk appetite shocks on spreads. These findings underscore the importance of reducing country-specific vulnerabilities as well as the need to address fragilities in Euro area at large to contain common risks and spillovers.

17. **Lending conditions have been considerably affected by tensions in the sovereign markets.** The analysis shows that increases in sovereign spreads raise bank funding costs, which in turn drive up firm lending rates. Therefore a decline and stabilization in sovereign spreads would be essential for a sustained decrease in banks' funding and lending rates.

18. **Credit growth to firms has declined significantly, reflecting both weak demand and supply constraints.** The latter appear to have prevailed at the end of last year, and continue to impinge on lending. Going forward banks need to maintain adequate capital and liquidity buffers to ensure adequate loan supply.

<sup>18</sup>According to Bank of Italy, the share of firms with a ratio of interest expense to gross operating profit of more than 50 percent could raise from 32 percent in 2010 to almost 40 percent in 2012 (and even more under a stressed scenario) on account of lower profits and rising interest rates.

Figure 1. Italy: Lending Conditions



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

1/ Data adjusted for the accounting effect of securitizations.

2/ Data adjusted for the accounting effect of securitizations. Loans exclude repos, bad debts and some minor items.

3/ Limited partnerships, general partnerships, informal partnerships, de facto companies and sole proprietorships with up to 19 workers.

4/ 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.

5/ Net percentage.

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**Appendix - List of Events Corresponding to Good and Bad News****International/EU related news****Bad**

Bear Stearns bailout	March 14, 2008
Lehman bankruptcy	September 15, 2008
G-7 meeting fails to address Greek debt problem	February 7, 2010
EU-IMF program on Greece announced	April 11 2010
S&P downgrades Greece and Portugal	April 27, 2010
Moody's publishes report warning on contagion risks from Greece and ECB disappoints expectations that it will support sovereign	May 6, 2010
French and German governments agree to take steps that would make it possible to impose haircuts on government bonds	October 28, 2010
Ireland requests EU-IMF program	November 21 2010
EU-IMF Irish program is announced	November 28 2010
EU Commission issues a consultation paper on a draft directive that would give regulators sweeping powers to restructure debt of failing banks	January 6, 2011
Portugal's Minister of Finance says that the country will need international financial assistance	April 6, 2011
Moody's downgrades Portugal. S&P says that French proposal on Greek debt rollover would constitute selective default	July 11, 2011
Reports that Greek officials had failed to reach an agreement with representatives from the International Monetary Fund and the European Union on austerity measures to meet fiscal targets as part of the second bail-out package for Athens	September 5, 2011
Euro zone finance ministers rejected an offer of Greek private sector involvement.	January 23, 2012
<b>Good</b>	
At the G-20 Finance Ministers meeting IMF funding is boosted	March 15, 2009
750 billion rescue package is announced	May 10, 2010
Stress test results are published	23 July 2010
Finance ministers make clear that burden sharing would apply only to bonds issued after 2013	November 12, 2010
ECB announces that it would continue to provide exceptional liquidity support	December 2, 2010
The European Commission says the size of the 440 billion European Financial Stability Facility must be reinforced and its application expanded	January 12, 2011
European finance ministers decide to provide 500 billion euros for a new crisis fund that will come into force in 2013	February 14, 2011
At the eurozone summit Germany and France are expected to reach an agreement on an aid strategy for Greece. Stress test results are published	July 21, 2011
IMF agrees to release disbursement for Greece	September 7, 2011
First LTRO	December 21, 2011
ECB debt swap removes obstacle to launch of PSI	February 17, 2012
Second LTRO	February 29, 2012
High participation in Greece's PSI deal is disclosed	March 9, 2012
IMF approves new Greece's program	March 15, 2012

**Appendix - List of Events Corresponding to Good and Bad News (Cont.)****Italy related news****Bad**

Prime Minister's position weakens as he loses support from party members	September 11, 2011
S&P's sovereign rating downgrade	September 19, 2011
Moody's sovereign rating downgrade	October 4, 2011
Fitch's sovereign rating downgrade	October 7, 2011
Berlusconi letter is presented to the EU	October 27, 2011
After Prime Minister's resignation, uncertainty during the consultations to form a new government	November 12, 2011
S&P's sovereign rating downgrade	January 14, 2012
Moody's sovereign rating downgrade	February 13, 2012

**Good**

The ECB start buying Italian government bonds under the SMP program	August 8, 2011
Italian government approves consolidation package (manovra d'Agosto)	August 12, 2011
Monti consolidation package is announced	December 5, 2011
Cabinet approves liberalization decree	January 20, 2012
Cabinet approves labor market reform	March 23, 2012

Table 1: Estimated Impact of Fiscal Variables on Government Spreads and Yields in the Literature.

Reference	Countries	Fiscal variables <sup>1</sup>	Estimated effects on long-term interest rates in basis points (bps)
<b>Studies that focus on flow fiscal variables</b>			
Thomas and Wu (2009)	United States	A 1% point increase in projected fiscal deficit in 5 years	30-60 bps
Bernoth et al (2006)	14 EU countries	A debt-service ratio 5% above Germany's	32 bps (Spread vis-à-vis Germany, post-EMU period, some non-linear effects)
Dai and Philippon (2005)	United States	A 1% point increase in fiscal deficit lasting 3 years	20-60bps
Ardagna et al (2007)	16 OECD countries	A 1% point deterioration in primary balance	10 bps
Laubach (2003)	United States	A 1% point increase in projected fiscal deficit	25 bps
Literature review by Gale and Orzag (2003)	United States	A 1% point increase in projected fiscal deficit	40-50 bps
Literature review by Gale and Orzag (2002)	United States	A 1% point increase in projected fiscal deficit	50-100 bps (macro models) 50 bps (others)
Canzeroni, Cumby and Diba (2002)	United States	A 1% deterioration in projected fiscal balance, 5 to 10 year ahead	41-60 bps (Spread of 10-year yield over 3-month)
Linde (2001)	Sweden	A 1% deterioration in fiscal balance	25 bps after 2 years (Domestic-foreign long-term interest differential)
Reinhart and Sack (2000)	19 OECD countries	A 1% deterioration in fiscal balance in current and next years	9 bps (yield)
	G7		12bps (yield)
Orr, Edey and Kennedy (1995)	17 OECD countries	A 1% point deterioration in fiscal balances	15 bps
<b>Studies that focus on stock fiscal variables</b>			
Chinn and Frankel (2005)	Germany, France, Italy, UK and Spain	A 1% increase in current net debt	5-8 bps
	USA	A 1% increase in net public debt ratio projected 2 years ahead	10-16 bps
	USA	A 1% increase in current or projected net debt	5 bps over period 1998-2002, but obscured when extended to 2004
Ardagna et al (2007)	16 OECD countries	Public debt	non-linear
Engen and Hubbard (2004)	United States	A 1% point increase in debt ratio	3 bps (with ranges)
Laubach (2003)	United States	A 1% point increase in projected debt ratio	4 bps
Chinn and Frankel (2003)	Germany, France, Italy, Japan, Spain UK and USA	A 1% increase in net public debt ratio projected 2 years ahead	3-32 bps (individual country) 7-12 bps (European interest rates)
Codogno et al (2003)	9 EMU countries	Debt-to-GDP ratio	Small and significant effects on spreads for Austria, Italy and Spain
Conway and Orr (2002)	7 OECD countries	A 1% point increase in net public debt	Less than 1 bps (Real 10-year bond yields, starting from zero net debt) 1.5 bps (Real 10-year bond yields, starting from 100% net debt)
O'Donovan, Orr and Rae (1998)	7 OECD countries	A 1% point increase in net public debt	Less than 1 bps (Real 10-year bond yields, starting from zero net debt) 2 bps (Real 10-year bond yields, starting from 100% net debt)
Ford and Laxton (1995)	9 countries	A 1% point increase in world net public debt	14 - 49 bps (Real 1-year bond yields )
	World		15 -27 bps (Real 1-year bond yields )

1. All changes are expressed in relation to GDP unless otherwise specified.  
Source: OECD.

Table 2. Panel Regression Results 1/

Dependent variable: Change in the 10-year government bond spreads over the Bund.

	[1]	[2]	[3]	[4]
D(Lagged dep. variable)	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>
<i>P-value</i>	0.02	0.02	0.02	0.03
International good news 2/	<b>-5.4</b>	<b>-5.8</b>	<b>-5.6</b>	<b>-5.7</b>
<i>P-value</i>	0.02	0.01	0.01	0.01
International bad news 2/	<b>11.9</b>	<b>11.0</b>	<b>11.7</b>	<b>11.1</b>
<i>P-value</i>	0.00	0.00	0.00	0.00
D(VIX(-1))	<b>0.7</b>	<b>0.6</b>	<b>0.7</b>	<b>0.6</b>
<i>P-value</i>	0.00	0.01	0.00	0.00
D(Projected debt)	<b>1.1</b>	<b>1.1</b>	<b>1.1</b>	<b>1.1</b>
<i>P-value</i>	0.00	0.00	0.00	0.00
Projected debt* D(VIX(-1))		<b>0.01</b>		<b>0.01</b>
<i>P-value</i>		0.02		0.01
Projected growth			0.7	0.7
<i>P-value</i>			0.41	0.40
Number of observations	438	438	438	438
Adjusted R-squared	0.14	0.13	0.14	0.15

Sources: Bloomberg; EIU; NewsPlus/Factiva; and IMF staff estimates.

1/ Equations were estimated at monthly frequency over the period January 2008-March 2012.

A constant was included among the regressors. Bolded coefficients are those statistically significant at 5 or 1 percent.

2/ Euro area good and bad news are dummies capturing good and bad news on international events related to the global crisis and European debt crisis.

Details are reported in the Appendix.

Table 3. Estimated Credit Demand and Supply 1/

Dependent variable: Quarterly percent changes in seasonally adjusted credit to firms

	[1]		[2]		[3]	
	Supply	Demand	Supply	Demand	Supply	Demand
Lagged dep. Variable	<b>0.90</b>	<b>0.8</b>	<b>0.56</b>	<b>0.8</b>	<b>0.6</b>	<b>0.9</b>
<i>P-value</i>	0.00	0.00	0.03	0.00	0.03	0.00
Lending standards 2/	<b>-0.01</b>		<b>-0.01</b>		<b>-0.01</b>	
<i>P-value</i>	0.03		0.03		0.03	
Demand indicator 3/		<b>0.02</b>		<b>0.02</b>		<b>0.01</b>
<i>P-value</i>		0.00		0.00		0.02
Lending rate			0.5	-0.1	0.5	
<i>P-value</i>			0.12	0.61	0.12	
D(Confidence indicator) 4/						0.0
<i>P-value</i>						0.63
Number of observations	35		35		35	
Adjusted R-squared	0.85	0.87	0.86	0.87	0.87	0.87

Sources: Bloomberg; EIU; NewsPlus/Factiva; and IMF staff estimates.

1/ Equations were estimated over the period 2003Q1-2012Q1, using instrumental variables.

A constant was included among the regressors. Bolded coefficients are those statistically significant at 5 or 1 percent.

2/ Bank lending standards from bank lending survey responses.

3/ Demand for loans from bank lending survey responses.

4/ ISAE consumer confidence indicator, as a proxy for expected economic activity.

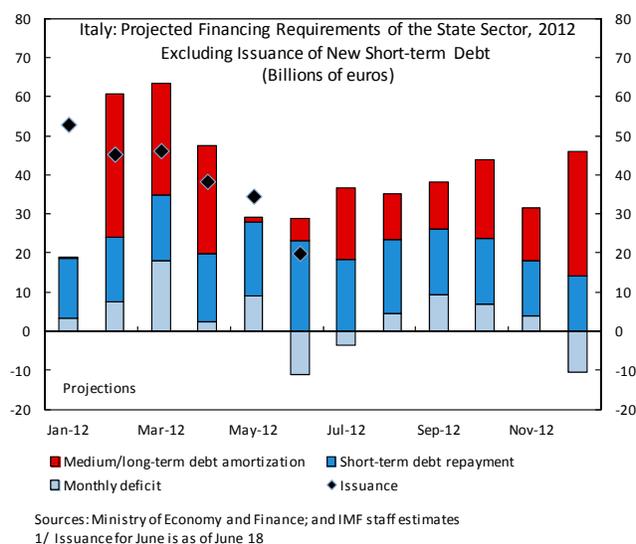
#### IV. ITALY: RECENT DEVELOPMENTS AND IMPLICATIONS FROM CHANGES IN THE INVESTOR BASE FOR ITALIAN GOVERNMENT BONDS<sup>1</sup>

*Changes to the investor base for Italian government bonds will continue to affect the terms under which the sovereign accesses market financing. After a long period of stability, foreign holdings of Italian government bonds declined rapidly, starting in the second half of 2011, led by both banks and non-bank investors. Italian banks have stepped in partly, using funds from the European Central Bank (ECB) 's three-year long-term refinancing operation (LTRO) to invest in government bonds, but this has also tightened the link between the sovereign and the banks. Against this background, public debt management strategy should seek to maintain the current average maturity of the debt, while exploring ways to support stability in market financing and execution.*

##### A. Introduction

1. **Despite a high average maturity of public debt, the Italian sovereign faces sizeable financing needs in the coming months.** The average life of Italy's government debt is close to seven years, but its refinancing profile highlights significant near-term rollover needs. Against €414 billion of principal repayments<sup>2</sup> in 2012, and a projected deficit of €39 billion during the same period, the government has already met more than half of its financing needs for the year. After a temporary decline in Q2, the refinancing profile will rise again during the second half of the year.

2. **The objective of this paper is to assess the recent developments in the investor base for Italian government bonds and its implications for the financing of the sovereign.** After a long period of stability, foreign holdings declined rapidly, starting in the second half of 2011, led by both banks and non-bank investors. Official funding made available through the SMP and, more recently, Italian banks have filled in the void left behind by the exit of non-



<sup>1</sup> Prepared by Vincenzo Guzzo (MCM).

<sup>2</sup> Principal repayments comprise of €206 billion of medium- and long-term debt redemptions and €208 billion of short-term redemptions. The latter is based on the outstanding stock of short-term bills as of June 18, 2012, and excludes issuance of new short-term debt, which may also fall due over the course of 2012.

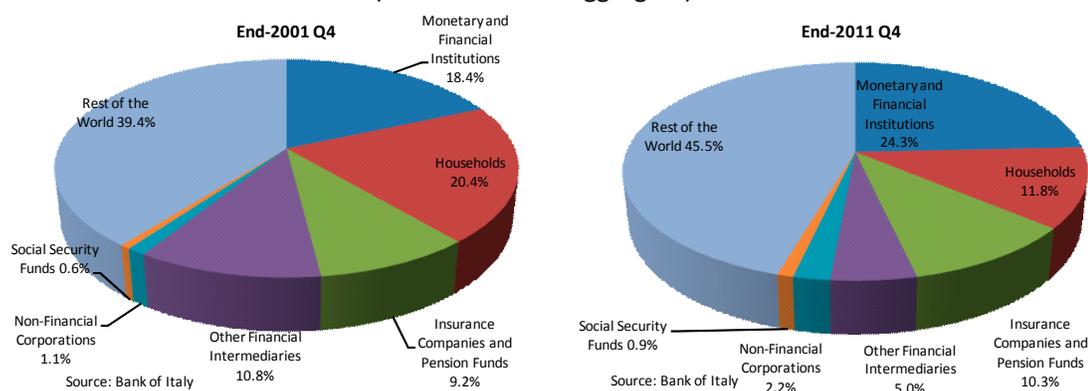
residents. Looking ahead, given the sizeable sovereign financing needs, supporting market stability will remain an important policy objective.

## B. Recent Developments in the Investor Base

### 3. At end-2011, around half of the public sector debt was held by foreigners.

According to the Financial Accounts of the Bank of Italy,<sup>3</sup> as of December 2011, holdings of general government securities were broadly split between domestic and foreign investors. Domestic investors held about 54.5 percent of the total (or €937 billion), whereas foreign investors owned the remaining 45.5 percent, up from about 39.4 percent ten years earlier.<sup>4</sup> Domestic investors held a larger share of floating rate notes and short-term securities, whereas foreign investors owned more medium- and long-term bonds.

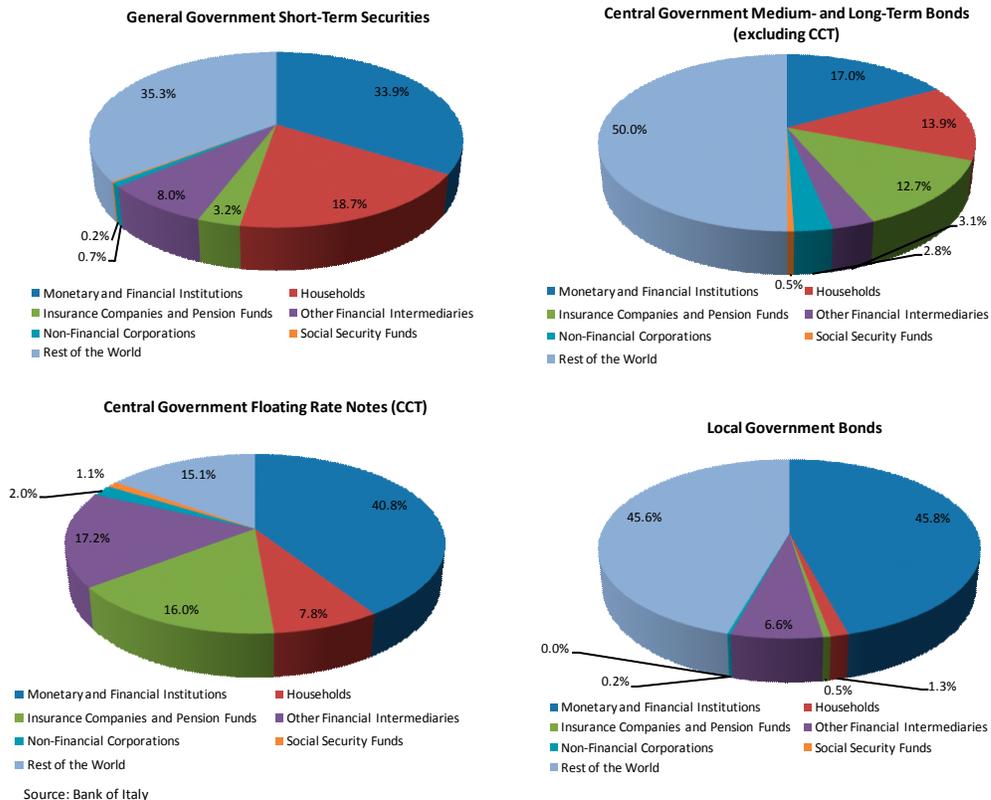
Italy: Composition of Government Securities by Holders  
(Percent of total aggregate)



<sup>3</sup> See Bank of Italy (2012b). Shares are calculated on data at market prices and net of the securities held by the general government sector. Republic of Italy loans are included. Bank of Italy (2011) estimates that as of June 2011, around five percent of the total stock of government securities was owned by foreign portfolios and investment funds attributable to Italian savers. See the box “The Holders of the Italian Public Debt and Government Securities,” and Bank of Italy (2012a) for an update.

<sup>4</sup> Cross-country comparisons from the Joint External Debt Hub (JEDH) show higher foreign ownerships for most euro area countries (with the exception of Spain), although other international large issuers such as the United States, Japan, and the United Kingdom exhibit even lower shares.

Italy: Composition of Government Securities by Holders  
(Percent of total aggregate, end-2011 Q4)



4. **After a long period of stable conditions, foreign holdings declined rapidly during the second half of 2011.** According to Bank of Italy's public finance data,<sup>5</sup> the share of government securities held by foreigners rose steadily from 30 percent at the onset of the European Monetary Union to over 50 percent in 2006, where it remained steady until mid-2011. Between June 2011 and February 2012, the share held by foreigners fell by eight percentage points, from 51.6 to 43.2 percent. These data, however, include the securities purchased by the ECB through the Securities Market Program (SMP). If the holdings of the Eurosystem are excluded, then the drop is estimated to be even more severe, lowering the share owned by private foreign investors to around 37 percent.<sup>6</sup>

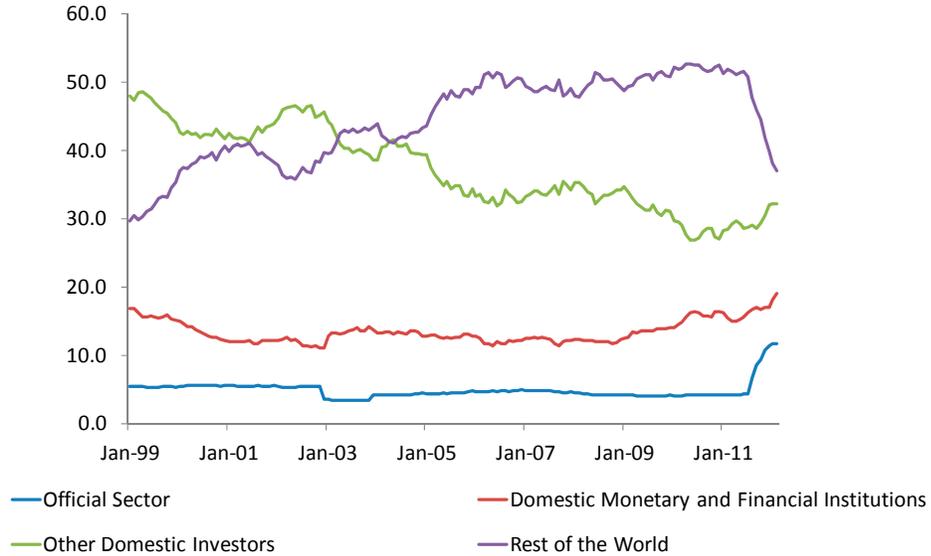
5. **Both foreign banks and non-bank investors have contributed to the decline.** Data from the Bank of International Settlements (BIS) on foreign banks' exposure to Italy's public

<sup>5</sup> See Bank of Italy (2012c).

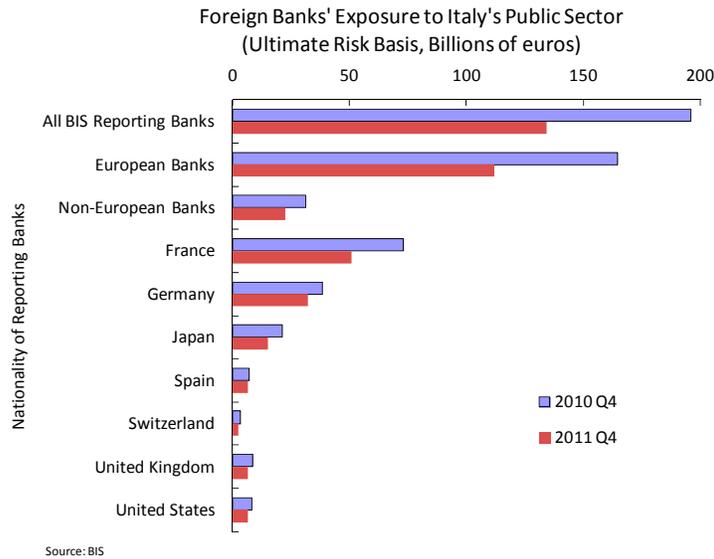
<sup>6</sup> While the ECB does not disclose the country breakdown of the securities purchased through the SMP, a gross approximation may be obtained by dividing the change in the holdings of the Bank of Ital—which had been fairly stable before the extension of the SMP to Italy—by its share in the ECB's capital (about 18 percent).

sector indicate that their share of Italian government bonds fell from 12.4 percent in June 2011 to 8.4 percent by year-end.<sup>7</sup> Other non-bank investors, primarily real money investors, would account for the remaining drop, from 38.7 percent to just about 30 percent of total government securities.

**Italy: Composition of General Government Securities by Holders  
(Percent of total aggregate)**



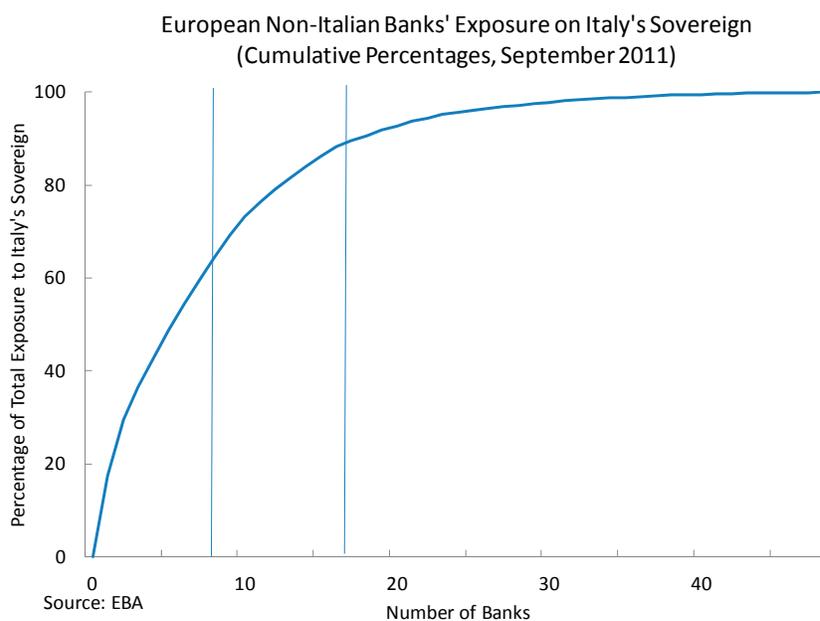
Source: Bank of Italy and IMF estimates  
Note: Official Sector includes Bol and SMP holdings



<sup>7</sup> See BIS (2012).

**6. European Banking Authority (EBA) stress test data provide additional granularity on the exposure of European and domestic banks to Italy's public sector.<sup>8</sup>**

The dataset offers information on the maturity profile of the debt holdings, which is relevant in assessing rollover risk. It also discloses the accounting classification of the securities involved, an important factor in determining the likelihood of liquidation (higher for those positions available for sale in the banking book or included in the trading book). As of September 2011, the gross direct long exposures to the Italian sovereign of all foreign banks included in the sample was €129 billion, with around €17 billion of debt coming due within a year. The net direct positions available for sale (AFS) in the banking book were €50 billion, whereas those on the trading book were €5 billion. The concentration of risk was significant with eight institutions<sup>9</sup> accounting for 65 percent of foreign holdings and as much as 17 banks amounting for 90 percent.

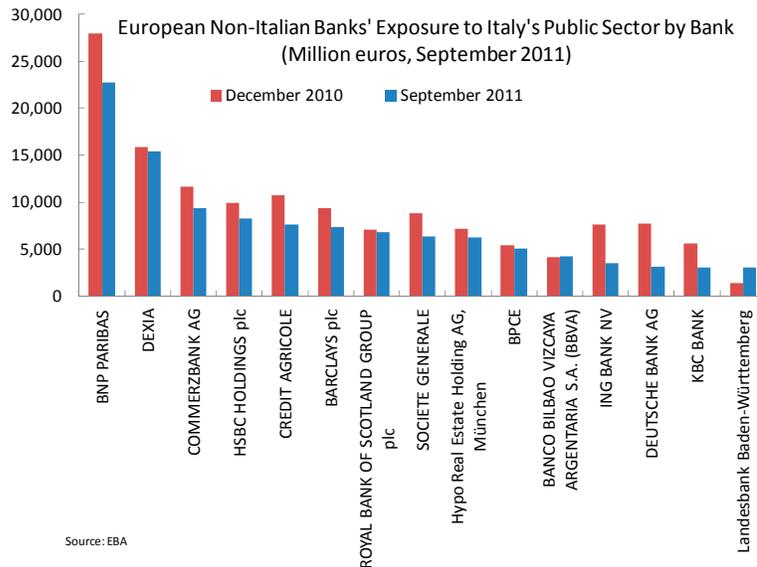
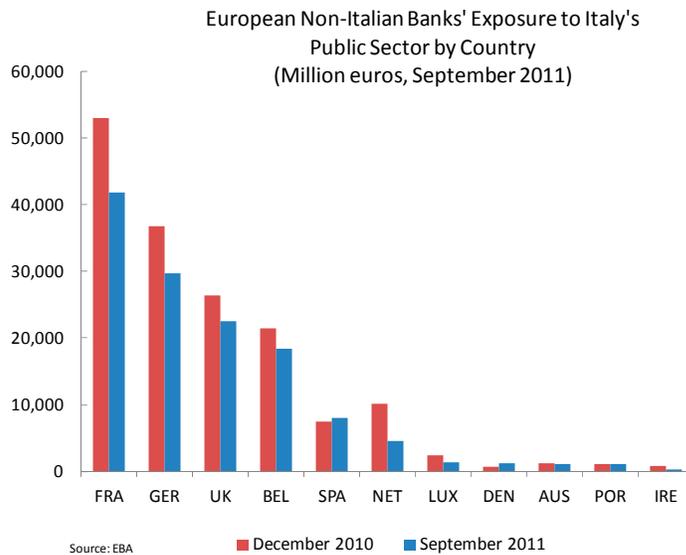


**7. EBA stress test data also capture how these positions have changed between December 2010 and September 2011.** A comparison of the latest EBA stress test performed in September 2011, offers further insights into the changes after 2010. These numbers reveal a €33 billion drop in the holdings of foreign banks from €162 billion in Q4/2010 to €129 billion in Q3/2011 stemming mainly from AFS positions in the banking books and from

<sup>8</sup> See EBA (2011) for a broad overview of the exercise.

<sup>9</sup> These are BNP Paribas, Dexia, Commerzbank AG, HSBC Holdings plc, Credit Agricole, Barclays plc, Royal Bank of Scotland, and Société Générale.

the trading books. French, German, and Dutch banks account for most of the decline, but the data also highlight a €8 billion contraction in the share owned by domestic banks. These dynamics are broadly consistent with those exhibited by the BIS data <sup>10</sup> and with anecdotal evidence pointing to sell-off by non-European banks and institutional investors.



**8. Italian banks and official funding made available through the SMP have filled in the void left by non-residents.** The estimated share of Italian sovereign bonds held by the

<sup>10</sup> The EBA database covers exposures to central and local governments on immediate borrower basis, whereas BIS consolidated bank statistics broken down by nationality of reporting banks and sector of exposure are only available on an ultimate borrower basis. Nonetheless, exposures to Italy's public sector appear to be broadly consistent across the two datasets.

Eurosystem rose significantly, from 4.3 percent in June 2011 to an estimated (by staff) 10–12 percent in February. Preliminary data through April 2012 on the balance sheets of MFIs resident in Italy<sup>11</sup> suggest that domestic banks also became more active, purchasing over €80 billion between November 2011 and April 2012, as LTRO-driven flows were invested in government bonds. The emergence of a stronger “home bias” in sovereign debt markets has helped stabilize the investor base in the short run, but could exacerbate the links between domestic banks and the sovereign in the longer run.

### **C. Policies to Promote Stability in the Government Bond market**

**9. In order to adjust to these changes in the investor base, the authorities have adopted three broad approaches.**

- In an effort to accommodate the large financing needs earlier this year and stabilize supply and demand conditions, the Treasury has adjusted the issuance mix to include more short-term debt.
- The authorities have also expanded their use of non-core markets and borrowing instruments to broaden the investor base. For example, in March 2012, they introduced a new four-year inflation-linked bond, the first government security indexed to Italian inflation. Issued on the stock exchange as opposed to the traditional auction mechanism, it successfully met significant demand from retail investors.<sup>12</sup>
- They have continued re-opening off-the-run bonds with the aim of improving secondary market conditions for specific segments of the yield curve in the context of an optimal cost-risk trade-off, as anticipated in the 2012 Guidelines for Public Debt Management.<sup>13</sup>

**10. There may be some scope to take advantage of the strong demand for short-term securities, but over time the debt management strategy should seek to maintain the current average maturity of the debt.** The plans announced by some core issuers in the euro area are consistent with a slight reduction in the issuance of short-term securities relative to 2011. The relative scarcity of supply from these countries, coupled with the LTRO-driven increased demand for short-term securities in the near term, has helped support issuance at the short-end of the curve.

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<sup>11</sup> See Bank of Italy (2012d).

<sup>12</sup> See Ministry of Economy and Finance (2012).

<sup>13</sup> See Ministry of Economy and Finance (2011).

11. **The authorities should continue to explore additional ways to promote market stability.**<sup>14</sup> The heavy selling of Italian sovereign debt by foreigners last year that was partly offset by purchases by domestic banks underscores the need to diversify the investor base, including through broader channels such as syndication and private placement, and a wider range of products. A greater reliance on these techniques would ease pressures on primary dealers' and complement other efforts to build a stronger and more direct link with investors. Similarly, exploring the scope to reduce the size of each individual issuance, while increasing the frequency, may help promote market stability.

12. **Proactive and timely communication of financing needs of the government and the public debt management strategy should continue to be promoted.** Clear communication helps minimize uncertainty and contain financing costs by providing investors with the necessary information required to form expectations and manage investment decisions. It also facilitates the smooth undertaking of debt management operations, including primary market issuance.

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<sup>14</sup> For a broader overview of the importance of debt management strategies, see IMF (2010), IMF (2011) and Blommestein et al. (2010).

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