

## Introduction: Italy in Crisis

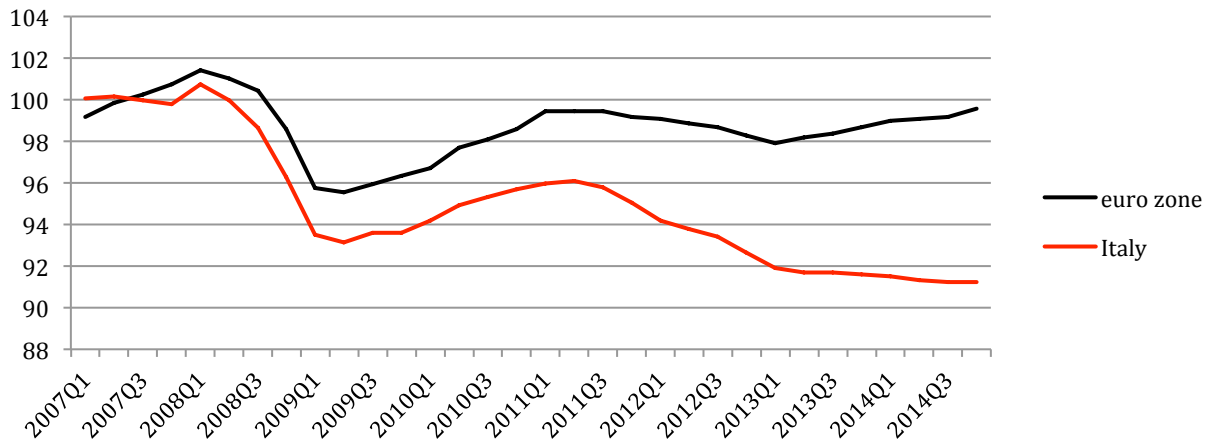
Italy was one of the worst hit during the 2007–2009 global financial crisis (GFC) among the major advanced economies. By year-end 2009, Italy's economy had contracted by 6.6 percent; significantly larger than the recessions in the euro zone and the United States, for example, which saw their GDPs shrink by 4.4 and 3.1 percent, respectively (Table 1). In the ensuing euro-zone crisis, its economy has contracted the second most over the past seven years, next to Greece, and unlike most other countries its GDP is still expected to remain smaller than its pre-crisis levels in five years. Despite its falter, Italy has one of the most resilient economies in the euro zone: although it has been shocked and shaken over the past eight years, did not suffer a banking crisis or the collapse of its real estate market.

**Table 1: Size of Major Economies Relative to Pre-crisis Level (2007=100)**

	2009	2014 <sup>P</sup>	2019 <sup>P</sup>
France	97.2	102.2	110.9
Germany	95.7	105.7	113.9
Greece	96.7	76.8	90.8
euro zone	95.9	99.1	107.3
Ireland	91.2	96.7	110.3
Italy	93.4	91.3	96.4
Portugal	97.1	94.2	102.8
Spain	97.0	95.4	104.5
Japan	93.5	101.2	105.9
United Kingdom	94.1	101.9	115.1
United States	96.9	107.9	124.3

Source: IMF October 2014 WEO. p indicates a projection.

While the euro zone as a whole has been recovering since 2013, Italy has yet to see positive growth since the since the third quarter of 2011 (Figure 1). The recession has been met with rising unemployment remaining in the double digits since the first quarter of 2012, currently resting around 12.5 percent. This is much higher than Italy's pre-crisis average of just over 8 percent, while it remains significantly lower than several other euro-zone countries including Greece and Spain that have unemployment rates of 25.8 and 23.4 percent, respectively.

**Figure 1: Recession in Italy and the Euro Zone (2007=100)**


Source: Eurostat

Perhaps the most troubling issue in a few euro-zone economies is that high levels of debt are still raising questions over medium-term debt sustainability. Italy has the second-largest debt-to-GDP ratio in the euro zone, after Greece, at over 135 percent; the ratio has increased by over 30 percent of GDP during the past seven years. A combination of weak fundamentals, political instability and sovereign yield volatility raised concerns over how large Italy's debt would grow and the government's ability to service its debt at various points throughout the crisis. The main question that will be explored in this paper is what caused Italy's economy to fall so far and its debt to grow so large during the crisis?

We will consider whether the general arguments that have been put forward for the euro zone's sovereign debt crisis apply equally to the case of Italy. One potential explanation for the cause of the euro-zone crisis is that governments practised overly generous fiscal policies that became unsustainable when global demand and financial markets were shocked. The argument that fiscal profligacy was at the heart of the economic ills of the euro-zone periphery was advanced by several Northern European analysts, particularly in Germany, who insisted that the periphery had been living beyond their means in the lead up to the GFC. Carlo Bastasin (2015) describes the German's viewpoint as, "Debt levels were the consequence of irresponsible management by both public and private consumers, described by Germans as *Defizitsuender*, or "fiscal sinners" whose countries had become insolvent through their own mistake" (Bastasin 2015, 242). If fiscal profligacy is the problem, then fiscal austerity that cuts unproductive government expenditures will help secure sustainable debt dynamics and restore market confidence. Most economists, however, recognize that reckless fiscal expenditures might explain part of the vulnerability of some euro-zone economies, typically pointing to Greece and Portugal, but that there were several other explanations for the euro zone's troubles.

Philip Lane notes that, "Looking back, the failure of national governments to tighten fiscal policy substantially during 2003-2007 was a missed opportunity" (Lane 2012, 54); however, he argues that the initial design of the monetary union facilitated the build-up of regional imbalances and subsequently amplified the shock. The fundamental flaw in the design of the euro zone is its vulnerability to balance of payments crises, which can derail the entire union if the private financing of external imbalances suddenly stops. Lane advances that "the combined impact of domestic recessions, banking-sector

distress, and the decline in risk appetite among international investors...fuel[ed] the conditions for a sovereign debt crisis" (Lane 2012, 54). Furthermore, the economic instability caused by the correction of intra-euro-zone macroeconomic imbalances may have been exacerbated by the interconnectedness of the monetary union through financial spillovers and contagion.

If capital flows are the problem, then wage and price adjustments coupled with structural reforms can help boost the competitiveness of the domestic goods of countries with net deficits. Although fiscal policy can help facilitate nominal adjustments, it would be very difficult within a monetary union without fiscal policy coordination (see, for example, Blanchard 2007). Several academics have advocated for the creation of a fiscal union, either at the supranational level or through stronger coordination of national policies, to help facilitate these adjustments (see, for example, Allard et al. 2013; and the collection of papers in Allen, Carletti and Gray 2013). To address stronger financial spillovers and contagion, the European Banking Union has been established with a unified set of legislation and a common supervisor already in place, and a supranational resolution mechanism set to be fully operational by 2016.<sup>1</sup>

This paper will explore whether these leading explanations of the euro-zone crisis can explain the troubles in the Italian economy over the last seven years. We are therefore only concerned with the dynamics of the Italian economy during the crisis, rather than exploring the cause of the euro-zone crisis as a whole. We anticipate that the causes of Italy's economic stagnation and escalating levels of debt are several and highly intertwined; however, we are most interested in the key underlining factors that fuelled Italy's crisis. The paper argues that the underlining cause of the ills of the Italian economy during the crisis was neither fiscal profligacy nor capital flow volatility, but rather longer-term structural issues. We maintain that the euro-zone crisis did not cause the Italian economy to be weak and vulnerable, but instead the global demand shock and an increase in financial risk aversion during the crisis were amplified in Italy due to weaknesses in its economic fundamentals. These weaknesses include: decreasing global competitiveness, low technological capacity and advances in the knowledge economy, an unfriendly business environment, geographic polarization, and high levels of corruption and vulnerable to political gridlock.

## Final Cause: Fiscal Profligacy?

Fiscal profligacy refers to excessive and unproductive fiscal expenditures that are inappropriate given the economic circumstances. This can cause a severe recession and prolonged stagnation because either taxes must be raised or contractionary fiscal policies must be used in order to service higher levels of debt. Furthermore, concerns over debt sustainability raise risk premiums on sovereign yields, exacerbating the cost of servicing debt, and potentially escalating into a sovereign debt crisis. Several academics have indicated that the monetary union — characterized by a single currency and highly integrated capital markets — encourages fiscal profligacy through access to cheap and easy money (see, e.g., Feldstein 2010 and Koo 2012). Several analysts have advanced that this moral hazard problem facilitated fiscal profligacy and is the main cause of the euro-zone sovereign debt crisis, particularly in the case of Greece. Whether this is true or not is outside the purview of this paper, but we will explore whether this explains Italy's debt troubles.

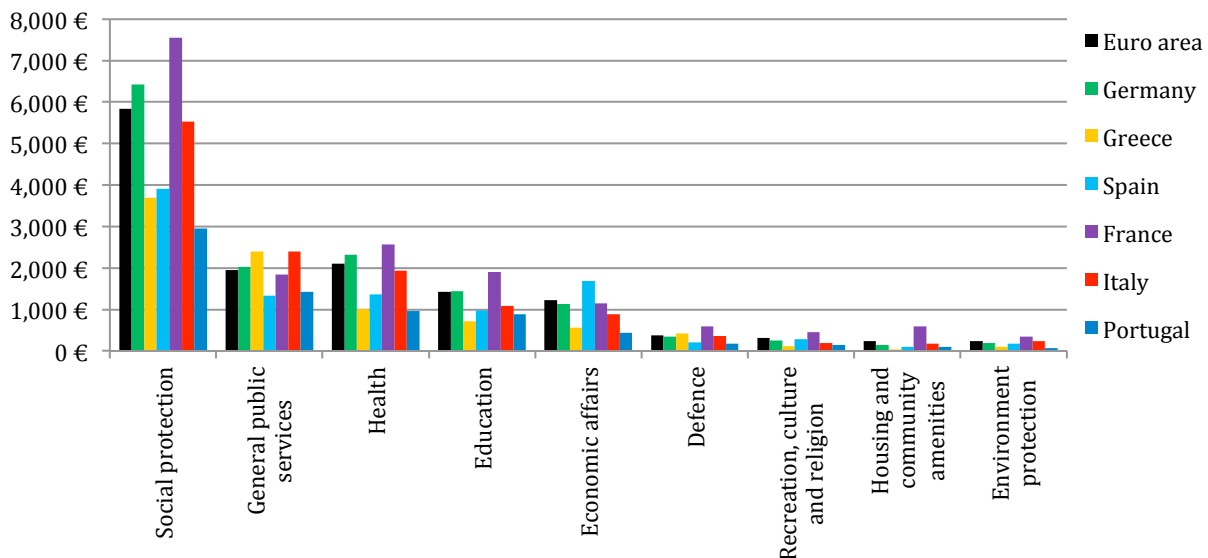
---

<sup>1</sup> Another option that remains under consideration is 'eurobonds' to help stabilize intra-euro-zone financial markets (see, for example, Claessens, Mody and Vallee 2012; and Gilbert, Hessel and Verkaart 2013).

Italy's debt burden is no laughing matter: at over 135 percent of GDP, even with ultra-low interest rates, the cost of servicing its debt is not a drop in the bucket. However, Italy has been inured to high debt service costs because its debt-to-GDP ratio has been above 100 percent since 1991. In fact, the country successfully lowered its debt ratio every year from its peak of 120.9 percent in 1995 to the trough of 103.3 percent in 2007. This was no easy task given the fact that Italy could not inflate away the debt because of low inflation requirements for joining the monetary union, nor could it simply grow out of its debt because, as we will discuss later, Italy has persistently low growth rates. Instead, it successfully consolidated its debt by running primary surpluses every year from 1992 until the GFC (Figure 3).

Since 2007, the country continued to maintain relatively strong primary surpluses in every year except for 2009 and 2010 — when it was trying to recover from a severe recession. Despite being one of the worst hit by the GFC, Italy remained prudent and had one of the smallest fiscal stimulus packages among the G20 (IMF 2010). Based on Italy's budgetary surpluses and fiscal policy during the crisis, it therefore appears that Italy's fiscal expenditures were not reckless given the economic circumstances.

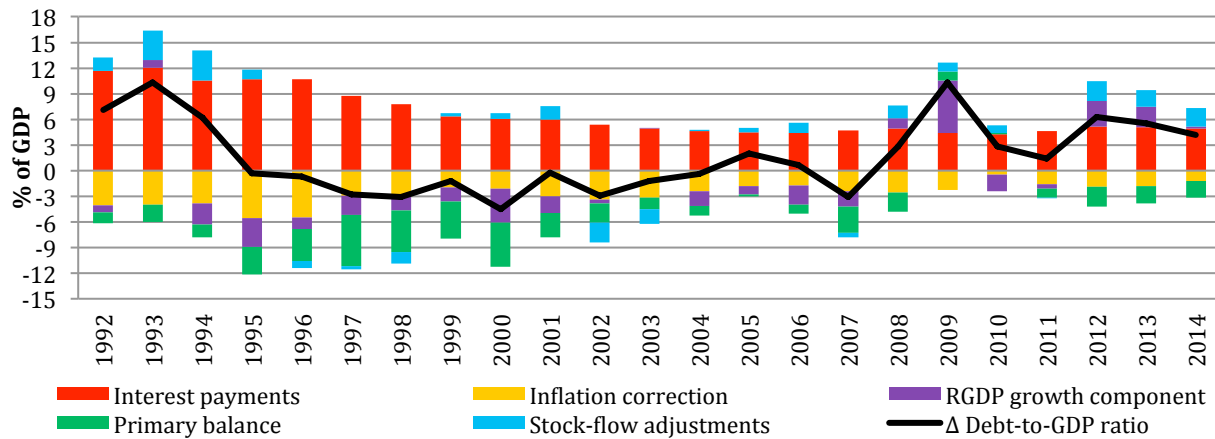
**Figure 2: General Government Expenditures by Function (€, per capita)**



Source: Eurostat

Budget balances of course do not explain expenditures: Italy's high spending might simply be matched by a higher tax burden, and not necessarily add value to the economy. But Italy's per capita public expenditures are actually lower than the euro-zone average in almost every category — the exception being general public services, which includes government debt servicing costs. Overall, total expenditures are €900 lower per capita than the euro-zone average, €1,500 lower per capita than Germany and €4,200 lower per capita than France. This demonstrates that government expenditures in Italy are not recklessly high; however, this does not mean that expenditures are necessarily productive. An analysis of the efficiency of government expenditures is outside the purview of this paper.

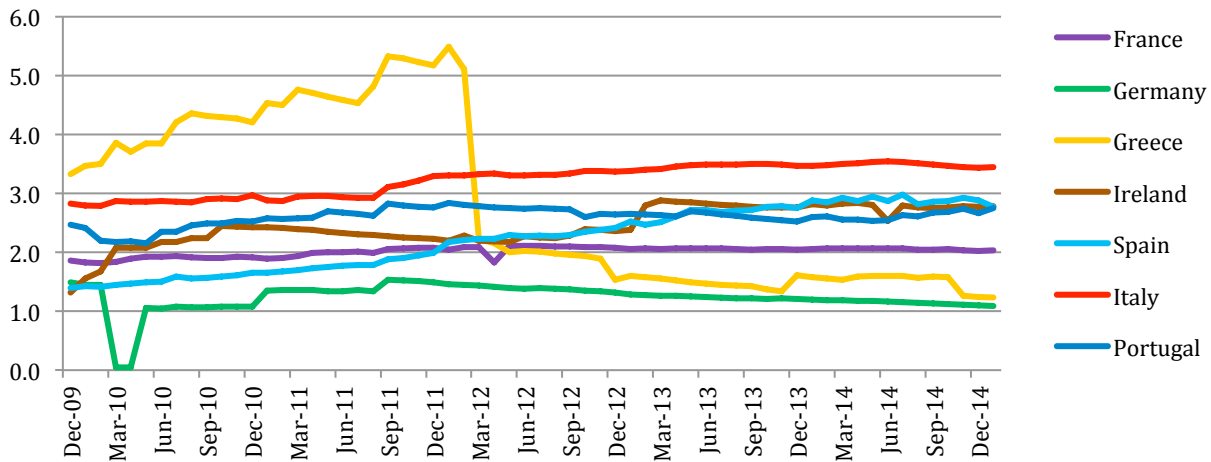
**Figure 3: Decomposition of Italy's Debt-to-GDP Ratio**



Source: Authors' elaboration on IMF October 2014 and January 2015 WEOs

Financial markets alone have the power to destabilize a country if they perceive escalating sovereign risks. If Italy's fiscal spending was perceived as reckless or significantly unproductive by financial market participants, then debt service costs could have increased substantially over debt sustainability concerns. However, the debt decomposition in Figure 4 demonstrates that Italy's interest payments as a percentage of GDP have remained almost constant throughout the crisis. Furthermore, Figure 3 demonstrates that interest payments as a percentage of total government liabilities have been relatively stable in Italy over the past five years. Although the rate increased by around 25 basis points in the fourth quarter of 2011, it has since gradually decreased to its pre-euro-zone crisis levels. In addition, Italy's interest payments as a percentage of total liabilities have been the least volatile among the countries in the sample. It is therefore clear that debt service costs or volatility of interest payments did not cause the sharp rise in Italy's debt ratio during the crisis.

**Figure 4: Interest Due Up to One Year (% total liabilities)**



Source: ECB

If it wasn't fiscal profligacy or financial market perception of fiscal profligacy, why has Italy's debt increased by over 30 percent of GDP since the GFC? Figure 3 shows the decomposition of its debt-to-GDP dynamics since the ratification of the Maastricht Treaty. While primary surpluses and relatively stable inflation have contributed to mitigating the rise in the ratio, the biggest change in Italy's debt dynamics since 2007 has been the effects of the real growth component. Specifically, Italy's very long recession has decreased the denominator of the debt-to-GDP ratio, causing the ratio itself to rise by 10 percentage points.

As the denominator continued to shrink, Italy's fiscal prudence was insufficient to keep its debt ratio stable. In order to restore growth and debt sustainability, International Monetary Fund (IMF) staff recommended more austerity and more growth-friendly structural reforms. Italy was certainly in need of structural reforms, as we will get to later, however the contractionary effect of austerity measures might actually send the debt ratio rising (especially because external demand was also in a slump). After the initial shock of the GFC, IMF (2010) suggested that Italy's fiscal consolidation plan was not enough and noted that, "[a]lthough the fiscal stance was appropriate during the crisis given the very high level of public debt to GDP ratio, efforts must now swiftly be made to reduce the fiscal deficit in a sustainable way. Public debt needs to be put back on a declining path" (IMF 2010, 29). A year later, IMF (2011) noted that even though Italy had achieved one of the highest primary surpluses in the euro zone, more needed to be done to bring down the level of debt against an environment characterized by low growth and high interest rates. As IMF (2011, 30) put it, "Given the high level of public debt and the current market turbulence, fiscal discipline is a prerequisite for growth."

We must consider two factors in order to determine whether austerity was the key to improving the sustainability of Italy's debt: the size of the fiscal multiplier and the effects of growth relative to the primary balance on the debt-to-GDP ratio during the crisis. On the latter, using our debt decomposition we find that for every one percent increase in growth in any given year during the crisis, Italy's debt-to-GDP ratio would have decreased by around 1.35 percentage points. Alternatively, for every one percent increase in the primary balance as a percent of GDP, the ratio would have only decreased by less than 1.2 percentage points. All else being equal, if growth was one percent higher in every year since 2008, the debt to GDP ratio would have been 9.3 percentage points lower; and if the primary balance was one percent higher in every year, the ratio would have been 7.8 percentage points lower. This means that even if the fiscal multiplier was equal to one, fiscal stimulus would have had a more favourable effect on the debt ratio.<sup>2</sup> The fiscal multiplier, however, has been estimated to be significantly greater than one during recessions (see, e.g., Auerbach and Gorodnichenko 2011; Blanchard and Leigh 2013; and Riera-Crichton, Vegh and Vuletin 2014). This means that stronger counter-cyclical fiscal policy during the crisis would have had a stronger negative effect on the debt ratio during the crisis through its effects on growth than did the fiscal austerity measures.

The presented evidence suggests that Italy has been anything but profligate in its fiscal expenditures over the last two decades. Before the crisis, Italy made strides in decreasing its debt through prudent cuts to fiscal expenditures; its successes are evident by the fact that it has, on average, lower per capita fiscal expenditures than its euro-zone counterparts but is still regarded as having strong social infrastructure, including one of the best health care systems in the world.<sup>3</sup> While Italy certainly benefitted from lower yields (and therefore lower debt service costs) after joining the euro zone, it did

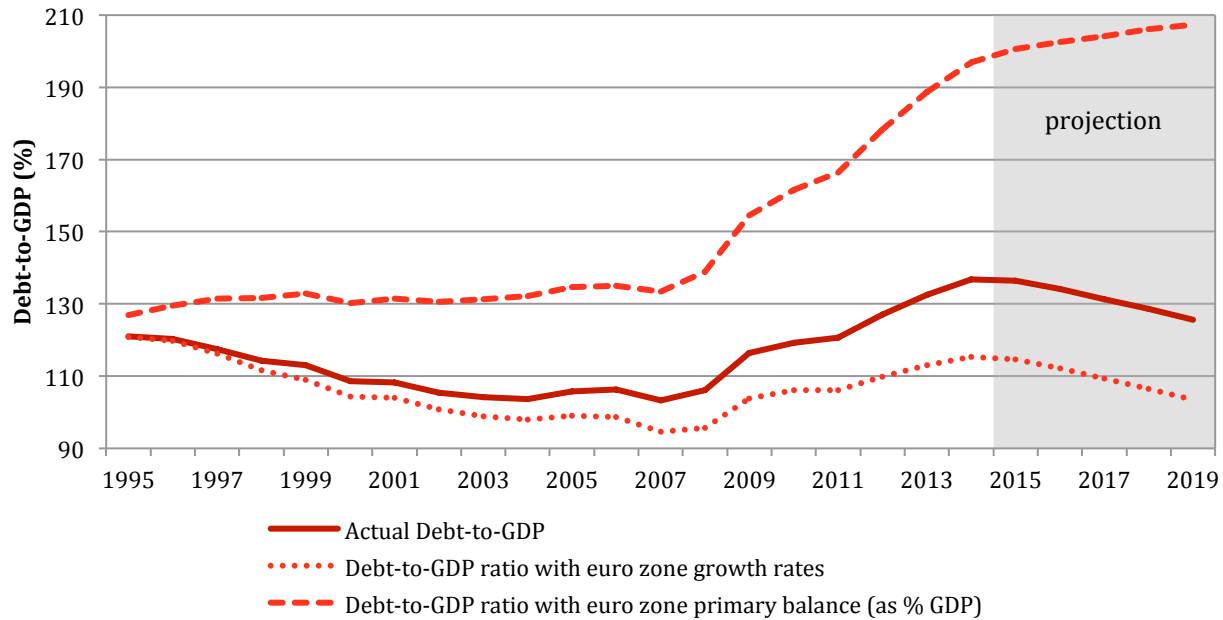
---

<sup>2</sup> This is of course not to forget about the more favourable impact of GDP growth over fiscal austerity on social outcomes.

<sup>3</sup> Italy is ranked second on the World Health Organization's rankings of the World's Health Systems.

not take this as an opportunity to spend frivolously. Italy's high levels of debt before the crisis and rising debt-to-GDP ratio throughout were not caused by fiscal profligacy. A simple simulation presented in Figure 5 demonstrates that low growth took its toll on the Italian debt ratio, while at the same time prudent fiscal policy prevented it from escalating to unmanageable levels. Specifically, if growth in Italy were equivalent to growth in the euro zone since 1995, Italy's debt-to-GDP ratio would currently rest at around 115 percent — more than 20 percent below its current level. On the other hand, if Italy had run primary balances at the same level as the euro zone, its debt ratio would be approaching 200 percent.

**Figure 5: Debt Ratio Dynamics Simulations**



Source: Authors' elaboration on IMF October 2014 WEO

These simulations demonstrate the importance of the individual components of the debt ratio in managing debt sustainability. It further reveals that Italy has been a champion in prudent fiscal policy, relative to the euro zone as a whole, while its low growth rates have significantly contributed to rise of its debt ratio. Indeed, high levels of debt did not cause low growth; instead low growth was a main culprit in its debt troubles. We will later demonstrate that Italy's longer-term structural issues have created secular stagnation that caused its debt woes during the crisis by creating a deeper and more prolonged recession.

## Final Cause: Capital Flows?

After the formation of the euro zone and in the lead up to the GFC, large current account deficits and excessive levels of intra-euro-zone and global financial flows fuelled asset bubbles and excessive borrowing in some member countries. This made banking systems and government debt positions more vulnerable to a sudden reversal in net capital flows. Furthermore, the interconnectedness of the euro zone makes it susceptible financial contagion and spillovers. In this section we will explore whether Italy's ailing economy and debt dynamics were the result of capital volatility through current account

imbalances and excessive borrowing after the formation of the monetary union, or financial contagion and spillovers during the euro-zone crisis.

### Current Account Imbalances

The euro-zone crisis is often viewed as a balance of payments crisis. The creation of the single currency removed foreign exchange risks, and money from countries with high levels of savings swiftly channelled in to countries with higher returns. Prior to the crisis, external imbalances within the euro zone were often accepted as the periphery countries “catching up” with higher income countries; meaning it was all part of convergence within the monetary union. In practice, the euro zone became divided between the net exporters — mostly composed of countries in the euro-zone core — and net importers — mostly including countries in the periphery. This fuelled domestic imbalances in the size of traded and non-traded sectors and therefore made the economy vulnerable to external demand shocks. This explanation emphasizes re-organization of industries within the euro zone as a source of vulnerability rather than reckless expenditures. In this story, much of the blame is targeted toward Germany for emphasizing an export-led growth model that fuelled imbalances throughout the monetary union. As Martin Wolf (2011) put it, “The German faith is that fiscal malfeasance is the origin of the crisis. It has good reason to believe this. If it accepted the truth, it would have to admit that it played a large part in the unhappy outcome.”

If Italy followed the trend of the euro-zone periphery and fell trap to growing external imbalances, then its current account deficit would have increased in the lead up to the GFC at the same time as the relative size of the “non-traded” sector expanded. If this is the case, then a sudden reversal in capital flows would have exacerbated Italy's recession. Italy's current account deficits, however, have actually been relatively small, typically less than 1 percent of GDP before the crisis, and its current account balance has been the least volatility among euro-zone member countries between 1999 and 2014 (Table 2). In contrast, the other countries under stress, including Greece, Ireland, Portugal and Spain, saw their current account deficits increase in the lead up to the GFC, and subsequently collapse, while countries like Germany, and to a lesser extent Austria and the Netherlands, saw rising current account surpluses.



**Table 2: Current Account Balance and Volatility (Euro Zone-12)**

	CA balance in 1999	CA balance in 2007	CA balance in 2014	Standard deviation (1999-2014)
<b>Austria</b>	-1.6	3.5	3.0	1.7
<b>Belgium</b>	7.9	1.9	-1.3	2.7
<b>Finland</b>	5.9	5.2	-0.6	3.4
<b>France</b>	3.1	-1.0	-1.4	1.5
<b>Germany</b>	-1.5	7.1	6.2	3.1
<b>Greece</b>	-5.4	-14.6	0.7	4.5
<b>Ireland</b>	0.2	-5.4	3.3	2.7
<b>Italy</b>	<b>1.0</b>	<b>-1.3</b>	<b>1.2</b>	<b>1.4</b>
<b>Luxembourg</b>	10.7	10.1	5.1	2.5
<b>Netherlands</b>	3.7	6.3	9.9	2.6
<b>Portugal</b>	-8.7	-10.1	0.6	4.0
Spain	-2.9	-10.0	0.1	3.1

Source: IMF October 2014 WEO

The same countries where the current account deficit was enlarging also saw growth of the non-traded sector outpace that of the traded sector. For example, Philip Lane (2013) calculated that the non-traded sector in Ireland was growing by as much as 0.35 percent faster per year than the traded sector. This differential was as much as 0.16 percent in Greece and Spain, and 0.09 percent in Portugal. At the same time, countries with current account surpluses saw their non-traded sector shrink relative to the trading sector by as much as 0.11 percent per year, for example, in Germany. Italy, however, did not observe any change in the relative size of the non-traded and traded sectors from 2003 to 2007 (Lane 2013). This implies that Italy's industrial dynamics were more stable than the rest of the euro-zone countries under stress, making it less vulnerable to domestic demand shocks.

In sum, there is certainly evidence of growing imbalances driven by high savings in the North and rising consumption in the euro-zone periphery; however, Italy's economy did not fall into the same trap as the rest of the periphery. As we will explore later, this trend may have been more of fluke caused by relatively low competitiveness of Italian firms. In other words, Italy's stable current account balance and industrial dynamics may have been a positive outcome from failures in other areas of the economy. Still, Italy's economic ills were not fuelled by intra-euro-zone capital imbalances.

### Financial Flows and Excessive Borrowing

After the introduction of the single currency, capital flows accelerated as investors took advantage of channelling money across borders absent of currency risk. Furthermore, as the monetary union was increasingly being viewed as a successful experiment that created stable inflation and strong growth, premiums on euro-zone assets decreased such that yields no longer adequately reflected risks determined by economic fundamentals (see, for example, De Grauwe and Ji 2012). Countries became vulnerable to the sudden re-pricing of risk and capital flight.

Net financial inflows were largest in Greece, Ireland, Portugal and Spain (Table 3).<sup>4</sup> In Greece and Portugal, net inflows were concentrated in non-financial corporations and government borrowing. In Spain, net flows channelled into non-financial corporations and, to a lesser extent, households. Ireland actually saw net accumulation of foreign assets in all sectors with the exception of households that had particularly large net inflows. Net financial inflows are clearly tilted toward the countries under stress during the euro-zone crisis and represented a source of instability. High levels of government borrowing in Greece and Portugal have since sparked concern over debt sustainability. The buildup of capital into non-financial corporations and households in Spain and Ireland were later reversed when the housing markets collapsed, in addition to the construction sector in Spain. In Italy, however, net financial inflows were muted relative to the other periphery countries and overall it had one of the most stable net financial balances in the euro zone.

**Table 3: Sectoral Net Financial Flows (Euro Zone-12)**

	Total	Non-financial corporations	Financial Corporations	Government	Households
<b>Belgium</b>	18.0	-0.7	4.7	-2.9	17.1
<b>Germany</b>	45.9	24.8	4.7	-11.5	27.8
<b>Ireland</b>	-9.9	0.7	15.9	5.2	-31.8
<b>Greece</b>	-37.5	-25.7	-0.1	-26.7	15.0
<b>Spain</b>	-29.1	-33.7	4.6	4.9	-5.0
<b>France</b>	-2.4	-7.1	2.8	-14.3	16.3
<b>Italy</b>	-6.5	-12.8	5.1	-14.3	15.4
<b>Luxembourg</b>	10.7	-5.5	9.2	4.9	2.1
<b>Netherlands</b>	35.5	32.7	7.1	-3.8	-0.5
<b>Austria</b>	8.8	-9.3	6.1	-9.6	21.6
<b>Portugal</b>	-36.6	-27.4	1.4	-20.3	9.6
<b>Finland</b>	16.7	6.8	0.4	14.8	-5.2

Source: Lane (2013)

In the lead up to the GFC, net inflows and debt accumulation led to the buildup of risk in most of the euro-zone periphery. When capital began to flow out of these countries amidst higher risks, it caused significant strain on their financial sectors and, in some countries, including Ireland and Spain, one-off adjustments from bank bailouts or bailouts of other sectors caused government debt to soar. Italy did not experience a similar housing bubble or excessive lending patterns in the lead up to the crisis. In fact, Italy's household loans-to-gross disposable income remains among the lowest in the euro zone and it did not observe nearly as much growth as countries like Greece, Ireland and Spain before the crisis (Table 4).

<sup>4</sup> A positive value for total net financial flows corresponds to net accumulation of foreign assets, and a negative value denotes net financial inflows.

**Table 4: Ratio of Loans to Gross Disposable Incomes for Households**

	2002	2007	2013
Germany	104.5	94.2	83.3
Ireland	113.8	202.0	191.8
Greece	28.9	63.4	91.0
Spain	79.3	129.9	116.7
France	54.8	72.4	84.6
Italy	37.7	57.0	64.5
Portugal	96.2	126.4	117.5

Source: ECB

This is all to show that in Italy, unlike some of the other euro-zone countries under stress including Ireland, Portugal and Spain, excessive lending and sectoral financial flows did not create a systemic buildup of risk that shocked the financial systems when the financial flows suddenly stopped.

### Contagion and Spillovers

Despite the fact that Italy's financial markets did not see the buildup of systemic risk through current account imbalances or excessive borrowing prior to the crisis, Italy may have fallen susceptible to contagion and spillovers from the ills of other countries during the crisis. Increased financial interdependence was an inevitability of the monetary union; meaning that if one country was under stress then others would feel the pressure due to cross-border economic and financial activity. During a crisis, however, financial markets may be susceptible to spillover effects and contagion. Spillover effects refer to the amplification of the interdependence between cross-border financial markets that are not explained by economic fundamentals. Contagion can be thought of as more of a domino effect, where financial or economic shocks in one country cause market panic and herd behaviour that shock markets in other countries.

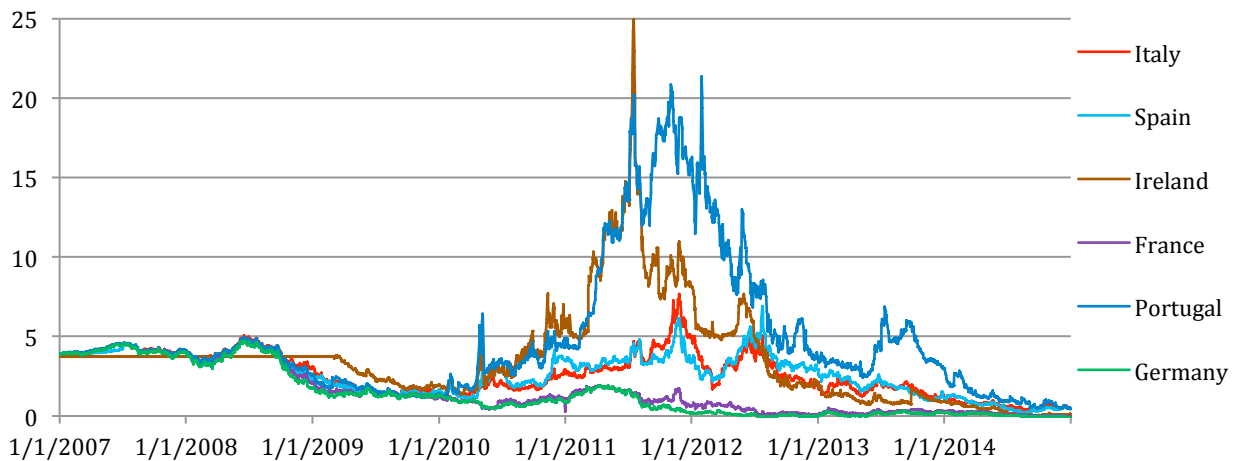
In the literature, contagion is typically characterized as a change in the instantaneous financial interdependencies between countries that is not explained by economic fundamentals. Using a dynamic correlation coefficient model, Sebastian Missio and Sebastian Watka (2011) find that there was higher co-movement of long-term sovereign bond yields between Greece and Italy during the second and third quarters of 2010 before the Greek bailout was introduced. However, the authors do not control for economic fundamentals and they do not find that Greek sovereign ratings downgrades affected Italian yields. Norbert Metiu (2012) expanded on Hashem Pesaran and Andreas Pick's (2007) canonical model of contagion that captures financial interdependence to include country-specific indicators of bond market distress — to identify the source of contagion — and a Value-at-Risk method to identify sovereign credit events as a function of market volatility — to capture the fact that financial market volatility changes over time. Metiu (2012) finds that there was evidence of contagion from Spain to Italy, but not from other originating countries, including Greece, Ireland and Portugal. Alexander Ludwig (2014) further expanded on this canonical model to allow time-varying risk pricing, in recognition that contagion effects can differ in significance and intensity over time. Specifically, Ludwig attempts to separate what he coins “wake-up call” contagion, which captures general changes in risk aversion (changes in common risk factors), and “pure contagion” which is a direct transmission of a negative shock from one country to another that is not reflected in the fundamental determinants of sovereign

risk of the recipient country. Ludwig identified some pure contagion effects that originated in Ireland, Portugal and Greece to Spain, Italy, France and Belgium, but found that contagion ceased after these countries established bailout programs. Since the very early part of the euro-zone crisis, Ludwig finds that most of the contagion falls under the category of “wake-up call” contagion; and contagion effects that occurred after 2010 often originated in Italy.

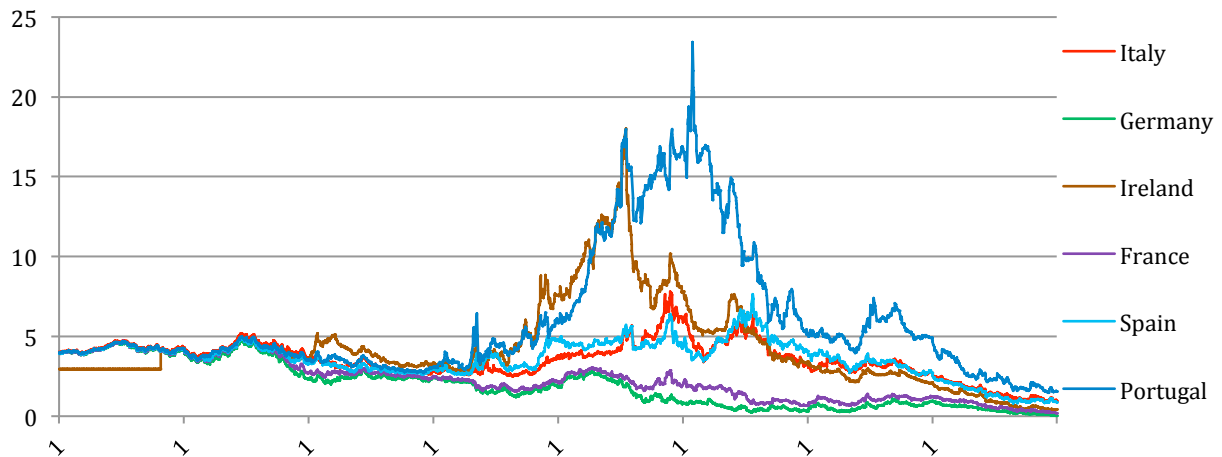
Massimiliano Caporin et al. (2012) use a different approach that is better suited to deal with nonlinear and unstable transmission mechanisms — namely, Bayesian quantile regressions. The authors find that the propagation of shocks remained constant during the early part of the crisis (2008 to 2011), suggesting that contagion was subdued in both CDS and bond markets. This result suggests that the interdependencies among euro-zone member countries were stable and not affected by the size of the shock. Anssi Kohonen (2014) also uses a novel approach to distinguish between the effects of contagion (instantaneous interdependencies), spillovers (change in intercept) and idiosyncratic country risks (change in dynamic interdependencies). The novelty of Kohonen’s approach is that it measures spillovers, contagion, and country fundamentals simultaneously. The author finds that there is contagion across all countries, but it was only particularly strong in Greece and Portugal. In addition, only Greece and Portugal show signs of spillovers. The fluctuation in Italian and Spanish bond spreads, however, is mostly attributable to idiosyncratic country risk — their economic fundamentals.

In general, it appears that contagion and spillovers explained some of the volatility in CDS and sovereign bond markets in the earlier part of the crisis, however, studies that controlled for economic fundamentals found that this was not significant in Italy. Furthermore, in the period that contagion was identified, particularly in 2010, Italian sovereign bond markets were relatively stable (Figure 6 and 7). Specifically, two- and five-year sovereign yields were not as volatile in Italy during the start of the crisis as they were in Ireland, Portugal and Spain. It wasn’t until after the Greek and Irish bailout programs were established that Italian sovereign yields became more volatile, suggesting a stronger role for weak fundamentals and general rising risk aversion in the euro zone.

**Figure 6: Two-year Yield on Select Euro-zone Government Bonds**



Source: Thomson Reuters

**Figure 7: Five-year Yield on Select Euro-zone Government Bonds**


Source: Thomson Reuters

In sum, there is no evidence of excessive borrowing or financial inflows in Italy before the crisis, and its current account balance was relatively stable; therefore, during the crisis Italy was not as vulnerable to a sudden stop of capital flows as the rest of the euro-zone periphery. Furthermore, contagion and spillovers during the crisis did not appear to have had a strong impact on the volatility of sovereign yields and risk premiums, instead Italy's yields increased sharply due a combination of a change in the perception of the weakness of the Italian economy and an increase in risk aversion of financial market participants. That is to say, capital flows did not cause Italy's recession or unstable debt dynamics, instead, as we will see in the next section, fundamental weakness in the Italian economy provoked a deep and prolonged recession that drove the debt ratio higher.

## Final Cause: Long-term Structural Obstacles

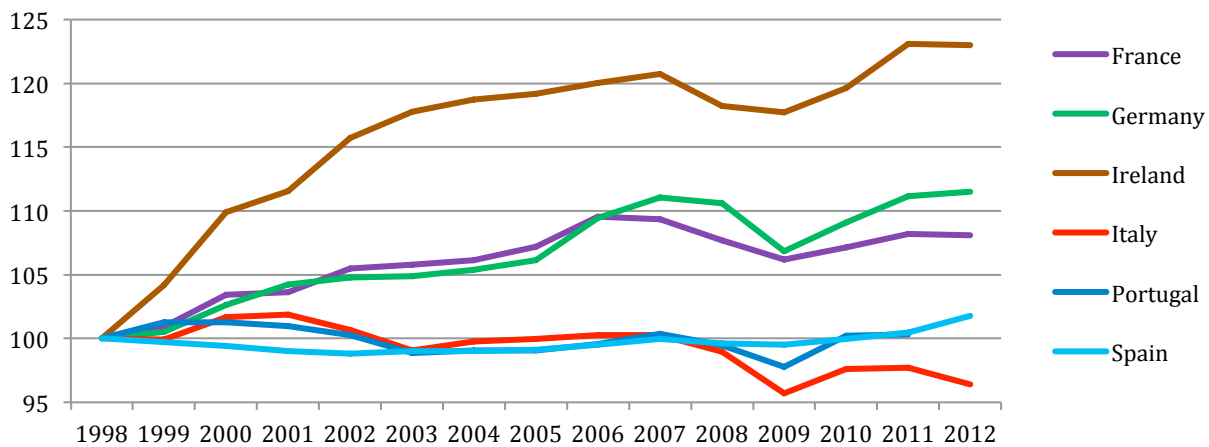
We have demonstrated that, on the whole, Italy has been fiscally prudent over the past two decades and that it did not fall trap to easy money during the euro-zone's glory days by increasing reliance on external demand or engaging in excessive borrowing. This doesn't mean that Italy "got things right": to the contrary, amid a relatively stable pre-crisis economic climate Italy failed to be proactive in keeping up with the competitive global economic environment. Italy's growth and labour market activity was weak long before the crisis and its debt was already large prior to joining the monetary union. And while the pre-crisis boom and low yields after joining the euro zone have kept Italy in a good position with steady inflation and growth, and stable debt service costs, this became unsustainable when both domestic and global demand was shocked and financial markets were shaken. Italy's problems are thus in its inaction rather than its actions.

The final cause of Italy's stagnation and debt troubles is in its longer-term structural issues: low productivity and high wage growth, low levels of education, lagging behind the technological frontier, heavy red tape, and an inefficient labour market. Each of these issues contributes to undermining the most essential characteristics of the modern economy: its internal dynamism and global competitiveness. These issues are further exacerbated by high levels of corruption and political

instability, which impede significant progress. We will discuss each of these issues in turn and how they have contributed to Italy's vulnerability during the crisis and ongoing economic stagnation.

A major issue for the Italian economy is its global competitiveness: Italy has actually seen its productivity levels decrease since joining the euro zone (Figure 8), while at the same time it has maintained high growth rates of labour compensation. As a result, Italy's real unit labour cost (ULC) — a measure of firm competitiveness in production — has been rising very steadily since it joined the euro zone (Figure 9). After the GFC, the other countries under stress managed to decrease their ULC either through raising productivity (in Portugal and Spain), or decreasing real labour compensation (in Greece). Italy, however, did neither; therefore, its relative competitiveness is continuing to decline.

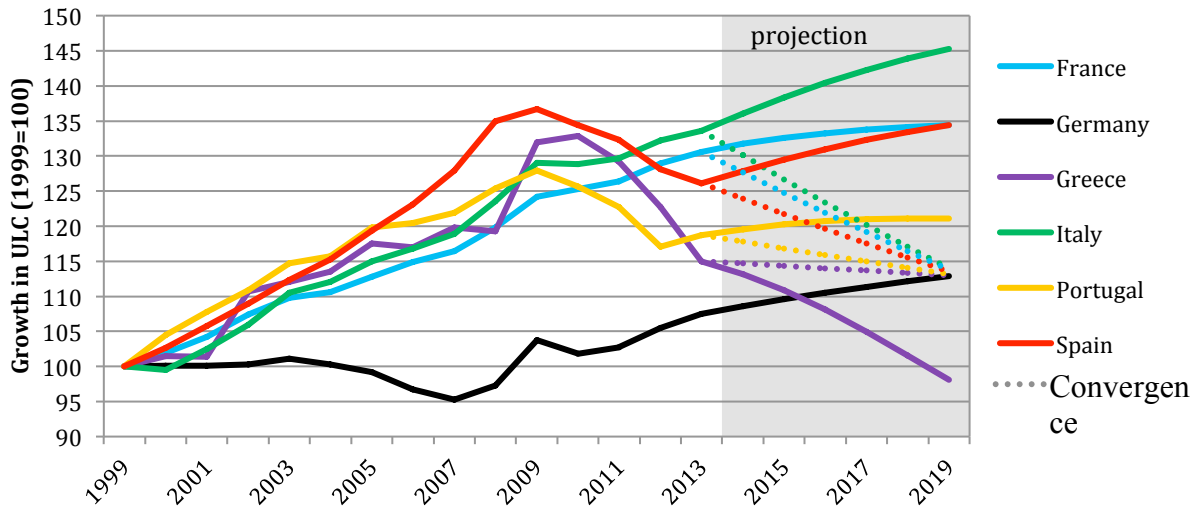
**Figure 8: Multifactor Productivity**



Source: OECD

The further it slips away, the longer it will take and more difficult it will be to catch up. Raising productivity requires a long-term effort and cutting real wages is both politically unfavourable and often completely unfeasible when workers have stronger bargaining power. Based on the OECD's projected growth in labour productivity over the next five years, in order to catch up with German levels of ULC Italy would need to decrease its real labour compensation by an average of 2.2 percent per year. These cuts are much stronger than other countries with high ULCs, including Spain, which would need to decrease compensation by 0.8 percent per year and France by 0.6 percent. Wages in Italy would require larger cutbacks precisely because of its low levels of productivity growth.

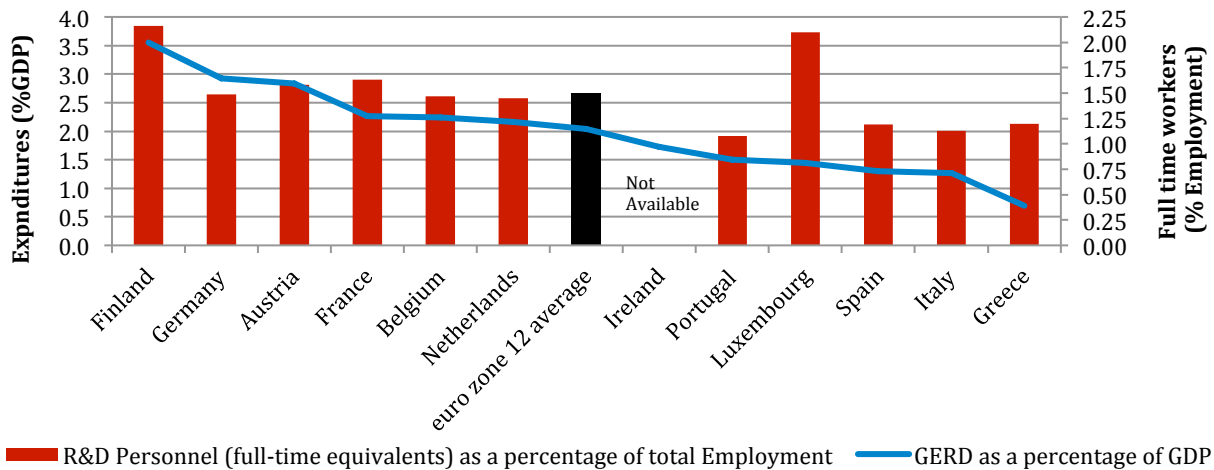
**Figure 9: Real ULC Trend Projections and Convergence Scenario**



Source: Authors' elaboration on OECD

Two reasons that Italy has lagged behind its counterparts in productivity growth are low levels of R&D and lower rates of educational attainment. R&D expenditures as a percentage of GDP by the Italian government, business enterprises, higher education and private non-profit sectors is the second lowest among euro-zone member countries. It also has one of the lowest numbers of workers in R&D as a percentage of employment (Figure 10). With fewer funds channelling into R&D and fewer workers engaging in research activity or support, Italy has relatively low resources available to support innovation.

**Figure 10: Gross Domestic Expenditures on R&D (GERD)**

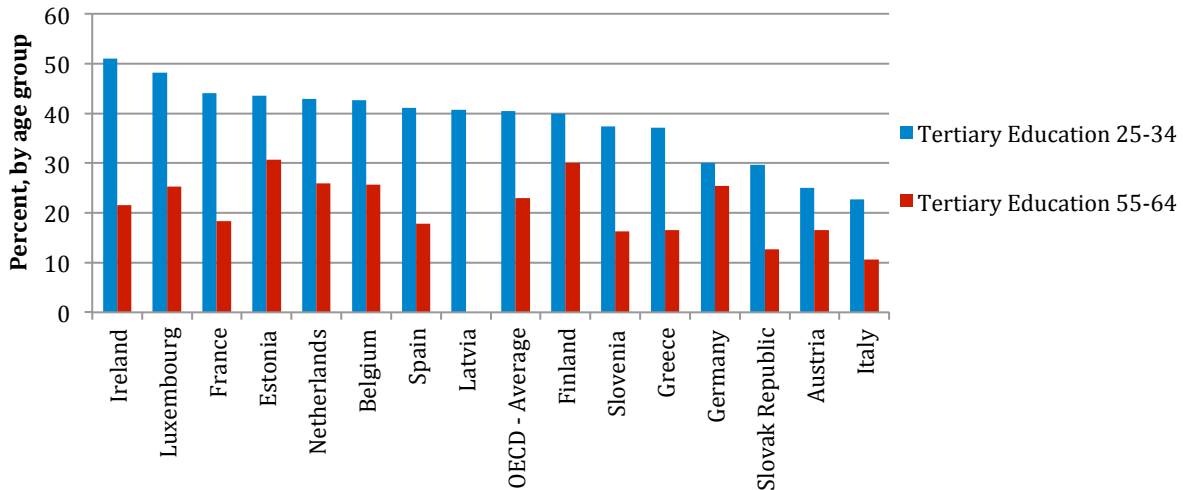


Source: OECD (R& D Spending) and Eurostat (R&D Personnel)

In addition to resource allocation, we must also consider a country's capacity to support innovation. High rates of educational attainment imply that a country has an educated work force that has the capacity to engage in more innovative activity and advance into higher knowledge sectors. But Italy has the lowest rates of tertiary level education among all euro-zone member countries (Figure 11). It also

has one of the lowest enrolment rates in the science as a percentage of tertiary level education at 7.4 percent; significantly lower than Germany at 16.3 percent.

**Figure 11: Population with Tertiary Education by Age Group**

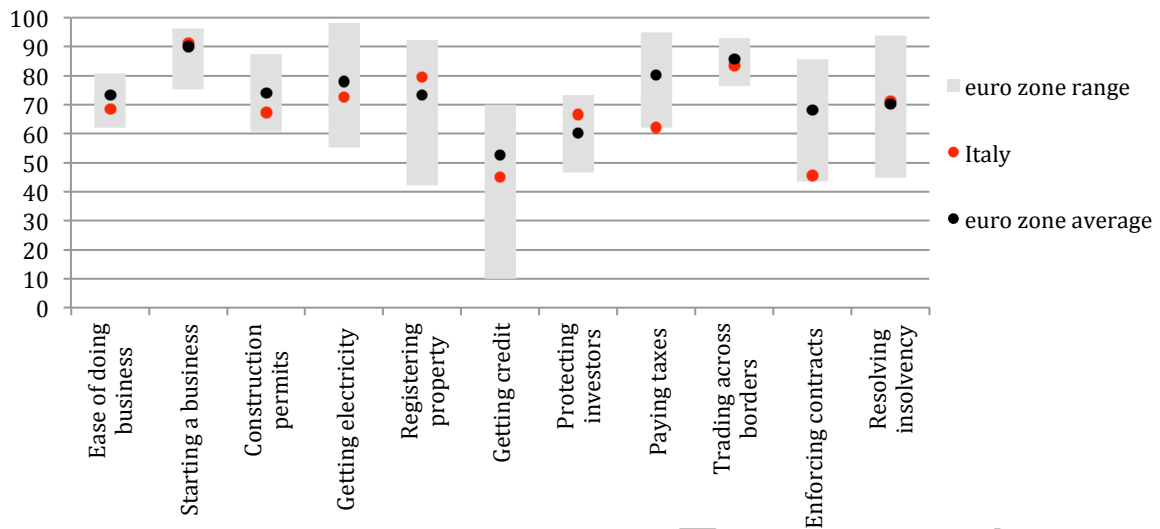


Source: OECD

Another important factor for encouraging an innovative and dynamic economy is to provide a friendly business environment where new firms are encouraged to flourish. This is particularly important in countries where there is a large informal economy, such as Italy, because it helps facilitate stronger participation in the formal economy: encouraging stronger firm-level growth and increasing the tax base. According the World Bank metric — the Ease of Doing Business — Italy has one of the least friendly business environments in the euro zone. Its economy falls behind the euro- zone average in almost all of the categories in the index, including construction permits, getting electricity, getting credit, paying taxes, trading across borders and enforcing contracts (Figure 12). Although it has made progress in cutting red tape since the start of the crisis, including on the ease of starting a business, registering property, resolving insolvency, enforcing contracts and through labour market regulation, it still falls well behind most of the other euro-zone member countries.



**Figure 12: World Bank's Ease of Doing Business (Distance to the Frontier)**



Source: World Bank Ease of Doing Business 2015

Despite all of these shortcomings, the Italian economy presents some potential opportunities to boost its competitiveness. Based on a sub-national analysis of the Ease of Doing Business, for example, the World Bank (2013) suggests that each Italian city exhibits good practices in some areas and inefficient practices in others. Therefore, one opportunity for improving Italy's business environment is to engage in peer-to-peer learning on good regulatory practices. Indeed, if the best practices among Italy's biggest cities were adopted, the World Bank indicates that its *Ease of Doing Business* ranking would be higher than both Austria and the Netherlands.

Italy suffers from strong geographic polarization and sharing regulatory practices might not be the only benefit that could be obtained from improving inter-regional policy cooperation. Geographical division is most often distinguished by Northern and Southern Italy. Indeed, the equivalent income in the South is less than 80 percent and wealth is only 67 percent of that of the North (Banca d'Italia 2013). The governance divide is not, however, this simple. Italy has a highly decentralized system of government. In fact, since the turn of the century, federalism in Italy has been strengthened and better defined through the constitutional reform of 2001, the 2009 fiscal federalism law, and the law on funding local authorities in 2011. These laws have increased the tax and spending authority and accountability of regional and sub-regional governments, and clarified the spending roles of regional governments (OECD 2012). Italy has a multi-tiered system consisting of regions, provinces, and municipalities. Regional governments have significant autonomy over issues concerning foreign trade, education, professions, scientific and technological research and support to innovation, large-scale transport and navigation networks, and health care.<sup>5</sup> Provinces are responsible, among other areas, for public transportation and highways, agriculture, fishing, labour markets and local economic development; and municipalities have significant oversight for local development and planning, as well as local transportation and other social services.

<sup>5</sup> The Federal level sets fundamental principles for these responsibilities, and the regional level acts within these.

This multi-tiered, decentralized system of governance leads to a plurality of policies and approaches to economic development.<sup>6</sup> Italy has mechanisms for promoting deliberation on policies that span across multiple jurisdictions, including the Conference for State-Cities and Local Autonomies and the Conference for Relations between State, Regions, and Autonomous Provinces of Trent and Bolzano. These establishments are important for building stronger inter-governmental relationships and improving cooperation between different levels of government.<sup>7</sup> The governance arrangement, however, lacks more formal mechanisms to share regional and local experiences in different approaches to economic development. Stronger regional and local government cooperation therefore represents a significant opportunity to unleash Italy's economic potential. Indeed, creating a more formal network for regional ministers and local councillors to discuss different policy approaches could help improve the efficiency and effectiveness of government spending, taxation and regulation. For example, Canada — another federation — established the Canadian Intergovernmental Conference Secretariat (CICS) in 1973 to provide administrative support for senior-level intergovernmental conferences. CICS is directed, financed and staffed by both multiple levels of government in order to ensure impartiality. Ministerial meetings from different sectors (e.g. agriculture, education, finance, health, etc.) at the provincial and national level meet regularly and on an ad-hoc basis to exchange information and ideas, negotiate policies that have multi-jurisdiction implications, and to find common purposes in charting general policy directions. A similar mechanism in Italy could help improve the efficiency of regional and local government, which could help facilitate decrease regional fragmentation and inequalities.

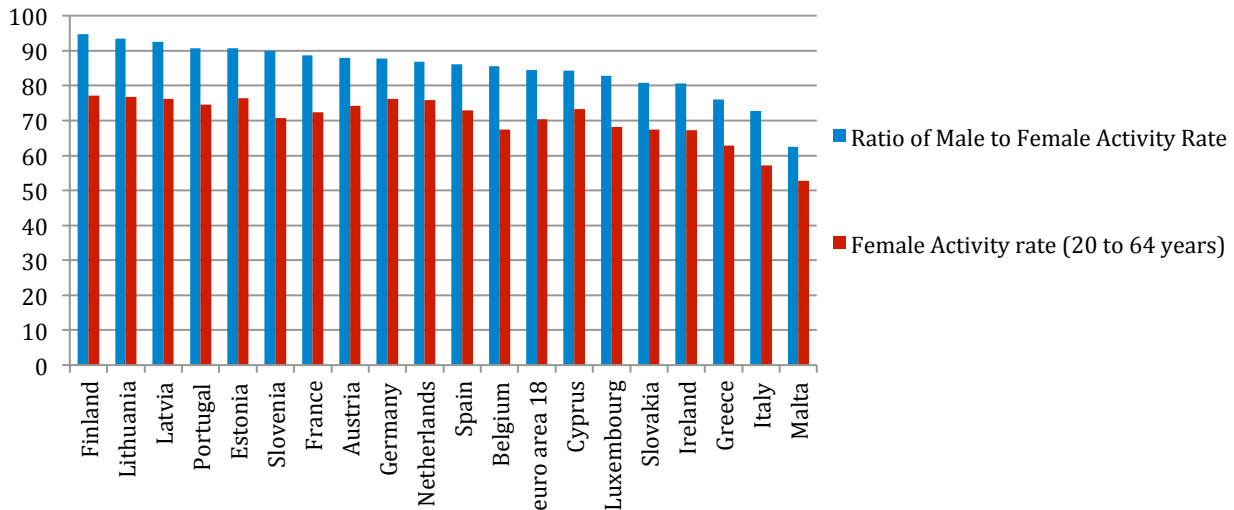
A final opportunity for boosting potential growth is by increasing the representation of women in the labour force. The female labour force participation rate in Italy is 57.2 percent, significantly below the euro-zone average of 70.3 percent, and is only equivalent to 73 percent of the male participation rate (Figure 13). Furthermore, the average income for women is 76 percent that of men. Stronger representation of women in the labour force by employing active labour market policies could increase domestic activity as a whole.

---

<sup>6</sup> Information on the distribution of powers was obtained from the EU Committee of the Regions, available at <http://extranet.cor.europa.eu/divisionpowers/countries/MembersLP/Italy/Pages/default.aspx>, accessed on 18 March 2015.

<sup>7</sup> Information on these Conferences are available at the Ministero Dell'Interno website: [http://www1.interno.gov.it/mininterno/export/sites/default/en/themes/state-local\\_authority\\_relations/Bodies\\_acting\\_as\\_intermediaries\\_between\\_State\\_local\\_authorities\\_and\\_regions.html](http://www1.interno.gov.it/mininterno/export/sites/default/en/themes/state-local_authority_relations/Bodies_acting_as_intermediaries_between_State_local_authorities_and_regions.html)

Figure 13: Female Labour Force Participation



Source: Eurostat

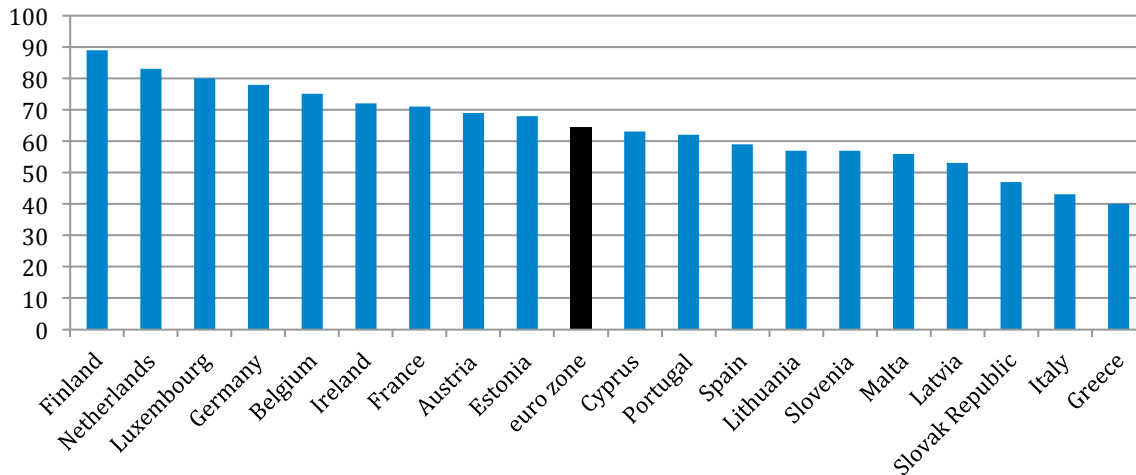
We have demonstrated that Italy has neither the resources nor the capacity nor the environment to effectively engage in innovative activity. And if it continues to sustain its current levels of productivity growth, educational attainment, and investment in R&D, without reforming product and labour markets and encouraging more equal national development, Italy will continue to lag behind the technological frontier. All of these shortcomings damage its economy's potential growth; however, the fact that Italy is so far behind the curve demonstrates that its economy has enormous potential to be a strong engine of growth. The solution is to implement structural reforms that target these major inefficiencies in the economy.

The country has already implemented several reforms during the crisis, particularly in the product markets – including in energy, transportation and professional services – and labour markets – including with contracts, employment protection and labour force participation (Lusinyan and Muir 2013). More recently, the Italian parliament passed the Jobs Act which is designed to increase the flexibility of the labour market. The Act includes several measures that aim to improve firms' incentives to hire permanent employees, including; new remedies for wrongful dismissal for new hires, redefining types and structures of contracts, and gradual job protection for permanent employees. The reform also widens access to unemployment insurance. The increased flexibility and stronger social safety net are meant to improve the inclusiveness of the Italian labour market by enabling participation in the labour force and the creation of jobs for youth, women and other marginalised groups. Still, more targeted measures could be introduced to address deep rooted structural dynamics of the Italian society, including the informal economy, geographic polarization and participation of females in the labour market. In addition, as Lusine Lusinyan and Dirk Muir (2013) suggest, Italy needs to focus on removing barriers to entry and promoting investment in infrastructure. Indeed, if the fiscal multiplier in Italy is still greater than one, then public expenditures on infrastructure can help decrease the debt-to-GDP ratio.

The major hurdle of introducing structural reforms in any country is getting the reforms through the legislature and effectively implementing them; but Italy's political system was deliberately designed to be weak. Its inefficiencies are mostly attributable to the independent bicameral system, the massive size of parliament (with almost 1,000 members of parliament), relatively weak power afforded to the prime

minister, a proportional representation system (adopted in 2006 with staunch opposition to secure the re-election of Prime Minister Silvio Berlusconi's win) and high diversity of political parties (Calingaert 2008). Ironically, two of the most prominent features of Italy's political system are very strong checks and balances and high levels of corruption (Figure 14).

**Figure 14: Corruption Perception Index (100 = lowest level of perceived corruption)**



Source: Transparency International, Corruption Perceptions Index 2013

The prevalence of corruption and vulnerability to political gridlock are the biggest barrier to unleashing the Italian growth engine because it stands at the very beginning of the reform process. Political instability has been found to have a negative effect on growth and even have self-reinforcing properties as low growth increases the likelihood of government turnover (Alesina, Roubini and Swagel 1996). Marcel Fratzscher and Livio Stracca (2009) specifically analyzed how the adoption of the euro changed the effects of political instability on financial market volatility in Italy. The authors confirm that political instability has been a source of volatility in the past, but note that “Italy’s adoption of the euro in 1999 appears to have insulated financial markets entirely from the adverse consequences of political shocks” (Fratzcher and Stracca 2009, 9). Membership in the European Union and monetary union may also help facilitate structural reforms in Italy and the adoption of growth-enhancing policies because of requirement set by supranational authorities and stronger peer pressure. Still, significant political reforms are needed to be able to effectively unleash Italy’s dormant economic potential.

Over one year ago, Prime Minister Matteo Renzi stormed into parliament with a plan to reform the Senate by decreasing its powers in order to make it easier to pass legislation and prevent political gridlock. Political system reform, of course, does not happen overnight; but after a year of negotiation, it appears that the reforms will be moving forward in 2015. This would mark a major step in Italy’s economic potential, but would need to be paired with better cooperation among governments and politicians from different regions in order to be effective at passing and implementing structural reforms.

## Conclusions

Neither fiscal profligacy nor capital flight has been the cause of Italy's economic troubles over the past seven years. Instead, Italy's stagnation caused its rising debt levels while longer-term structural issues have caused its stagnation. Italy's major problems can be attributable to low global competitiveness and weak internal dynamism, which are being held constant by political inefficiency. Italy's prospects, however, may be looking up. Political and institutional reforms may contribute to unleashing the Italian economy's potential by improving parliament's ability to legislate reforms. Furthermore, the implementation of existing reforms in the product and labour markets will be crucial to improving Italy's global competitiveness, reducing the size of the informal economy, and increasing the tax base. More research is needed to identify the size of Italy's fiscal multiplier, because if the multiplier is greater than one, as it was identified to be during the crisis, Italy's economic growth potential and debt dynamics could greatly benefit from productive infrastructure investment. For example, Italy has very low telecommunication infrastructure relative to other OECD member countries (OECD 2006). Infrastructure investment would not only create a short-term stimulus effect through job creation and a boost to economic activity, decreasing the debt-to-GDP ratio in the short term, but it would also help sustain a longer-term downward trajectory of its debt.

## References

- Alesina, Alberto, Nouriel Roubini, and Phillip Swagel (1996) "Political Instability and Economic Growth" *Journal of Economic Growth* 1, 189-211.
- Allard, Céline, Petya Koeva Brooks, John C. Bluedorn, Fabian Bornhorst, Katharine Christopherson, Franziska Ohnsorge, Tigran Poghosyan, and an IMF Staff Team (2013) "Toward a Fiscal Union for the Euro Area" IMF Staff Discussion Note 13/09, Washington: IMF.
- Allen, Franklin, Elena Carletti and Joanna Gray (eds.) (2013) *Political, Fiscal and Banking Union* Philadelphia: FIC Press.
- Auerbach, Alan J. and Yuriy Gorodnichenko (2011) "Fiscal Multipliers in recession and Expansion" NBER Working Paper No. 17447.
- Banca d'Italia (2013) Supplements to the Statistical Bulletin, Sample Surveys: Household Income and Wealth in 2012, Rome: Banca d'Italia.
- Bastasin, Carlo (2015) *Saving Europe: Anatomy of a Dream*, Washington, DC: Brookings Institution Press.
- Blanchard, Olivier (2007) "Current Account Deficits in Rich Countries", NBER Working Paper No. 12925.
- Blanchard, Olivier, and Daniel Leigh (2013) "Growth Forecast Errors and Fiscal Multipliers", IMF Working Paper 13/1, Washington DC: IMF.
- Calingaert, Michael (2008) "Italy's Choice: Reform or Stagnation" Brookings Article, March, Washington DC: Brookings Institution.

Caporin, Massimiliano, Lorian Pelizzon, Francesco Ravazzolo and Roberto Rigobon "Measuring Sovereign Contagion in Europe" CAMP Working Paper Series No 4/2012.

Claessens, Stijn, Ashoka Mody and Shahin Vallee (2012) "Paths to Eurobonds" Bruegel Working Paper No. 2012/10, Brussels: Bruegel.

De Grauwe, Paul and Yuemi Ji (2012) "Mispricing of Sovereign Risk and Macroeconomic Stability in the Eurozone" *Journal of Common Market Studies* 50(6), 866-80.

Feldstein, Martin (2010) "Let Greece take a eurozone 'holiday'", *Financial Times*, 16 February. Available at <http://www.ft.com/intl/cms/s/0/72214942-1b30-11df-953f-00144feab49a.html#axzz3TFMGfE8w>, accessed on March 3, 2015.

Frankel, Jeffrey (2013) "One Recession or Many? Double Dip Downturns in Europe", Project Syndicate, 19 July; available at <http://www.project-syndicate.org/blog/one-recession-or-many--double-dip-downturns-in-europe>, accessed on March 2, 2015.

Fratzscher, Marcel, and Livio Stracca (2009) "Does It Pay To Have The Euro? Italy's Politics and Financial Markets Under the Lira and the Euro" ECB Working Paper No. 1064, Frankfurt: European Central Bank.

Gilbert, Niels, Jeroen Hessel and Silvie Verkaart (2013) "Towards a Stable Monetary Union: What Role for Eurobonds?" DNB Working Paper No. 379, Amsterdam: De Nederlandsche Bank.

IMF (2010) *Italy: 2010 Article IV Consultation*, IMF Country Report 10/157, Washington DC: IMF.

IMF (2011) *Italy: 2011 Article IV Consultation*, IMF Country Report 11/173, Washington DC: IMF.

Kohonen, Anssi (2014) "Transmission of government default risk in the eurozone" *Journal of International Money and Finance* 47, 71-85.

Koo, Richard C. (2012) "Revitalizing the Eurozone without Fiscal Union", *INET*, 16 March. Available at <http://ineteconomics.org/sites/inet.civicaactions.net/files/koo-richard-berlin-paper.pdf> , accessed on March 3, 2015.

Lane, Philip R. (2012) "The European Sovereign Debt Crisis", *Journal of Economic Perspectives* 26(3), 49-68.

Lane, Philip R. (2013) "Capital Flows in the Euro Area", *European Commission Economic Papers* 497, April.

Ludwig, Alexander (2014) "A unified approach to investigate pure and wake-up-call contagion: Evidence from the Eurozone's first financial crisis" *Journal of International Money and Finance* 48, 125-46.

Lusinyan, Lusine and Dirk Muir (2013) "Assessing the Macroeconomic Impact of Structural Reforms: The Case of Italy" IMF Working Paper 13/22, Washington DC: IMF.

Metiu, Norbert (2012) "Sovereign risk contagion in the Eurozone" *Economic Letters* 117, 35-38.

Sebastian Missio and Sebastian Watka (2011) "Financial contagion and the European debt crisis" CESifo working paper: Monetary Policy and International Finance No. 3554.

OECD (2006) *Infrastructure to 2030: Telecom, Land Transport, Water and Electricity*, Paris: OECD.

Pesaran, M.H. and A. Pick (2007) "Econometric issues in the analysis of contagion" *Journal of Economic Dynamics and Control* 31, 1245-77.

Riera-Crichton, Daniel, Carlos A. Vegh, and Guillermo Vuletin (2014) "Fiscal Multipliers in Recessions and Expansions: Does It Matter Whether Government Spending Is Increasing or Decreasing?" World Bank Group Policy Research Working Paper No. 6993, Washington DC: World Bank Group.

Wolf, Martin (2011) "Merkozy failed to save the eurozone", *Financial Times*, 6 December; available at <http://www.ft.com/intl/cms/s/0/396ff020-1ffd-11e1-8662-00144feabdc0.html?siteedition=intl#axzz1fwLi3F1I>, accessed on March 2, 2015.

World Bank (2013) *Doing Business in Italy 2013*, Washington DC: World Bank.

DRAFT