The Italian Debt Saga

In recent weeks the eurozone crisis flared up again, this time on the occasion of a debate between the European Commission and the Italian government over the latter's new budget proposal. The Commission rejected Italy's budget on the grounds that the proposed 2.4% fiscal deficit is in violation of the Fiscal Compact whereby countries need to aim towards a structural (i.e. cyclically-adjusted and excluding one-off measures) budget deficit given by their so called medium-term objective (MTO) - which is zero percent for Italy, a country with a very high 132% debt-to-GDP ratio. According to the Commission, the current budget proposal entails a deterioration in Italy's structural balance of 0.8 percentage points, while they were advocating an *improvement* of 0.6 pps (adding up to a deviation of 1.4 pps), and threatens sanctions if Italy does not comply.

Financial markets are jumpy, Italian government bond yields are rising, and *"lo spread"* is again a closely watched indicator. Several commentators (especially in Germany) are accusing the newly elected nationalist-populist-eurosceptic Italian government of not respecting the commonly agreed rules and of irresponsible foolish behaviour which will not only bankrupt their country but could threaten the stability of the euro as well. Italian public debt is already huge, so more spending is certainly not what the country should be doing, they say. But is this degree of hysteria around the slightly higher Italian fiscal deficit really warranted from a purely economic perspective? Not necessarily.

In this three-part essay I look at

1. whether fiscal stimulus is warranted in Italy (and why hysteria about the fiscal deficit is overblown)
2. the role of Germany and austerity bias in the eurozone
3. how solving the crisis depends on the ECB

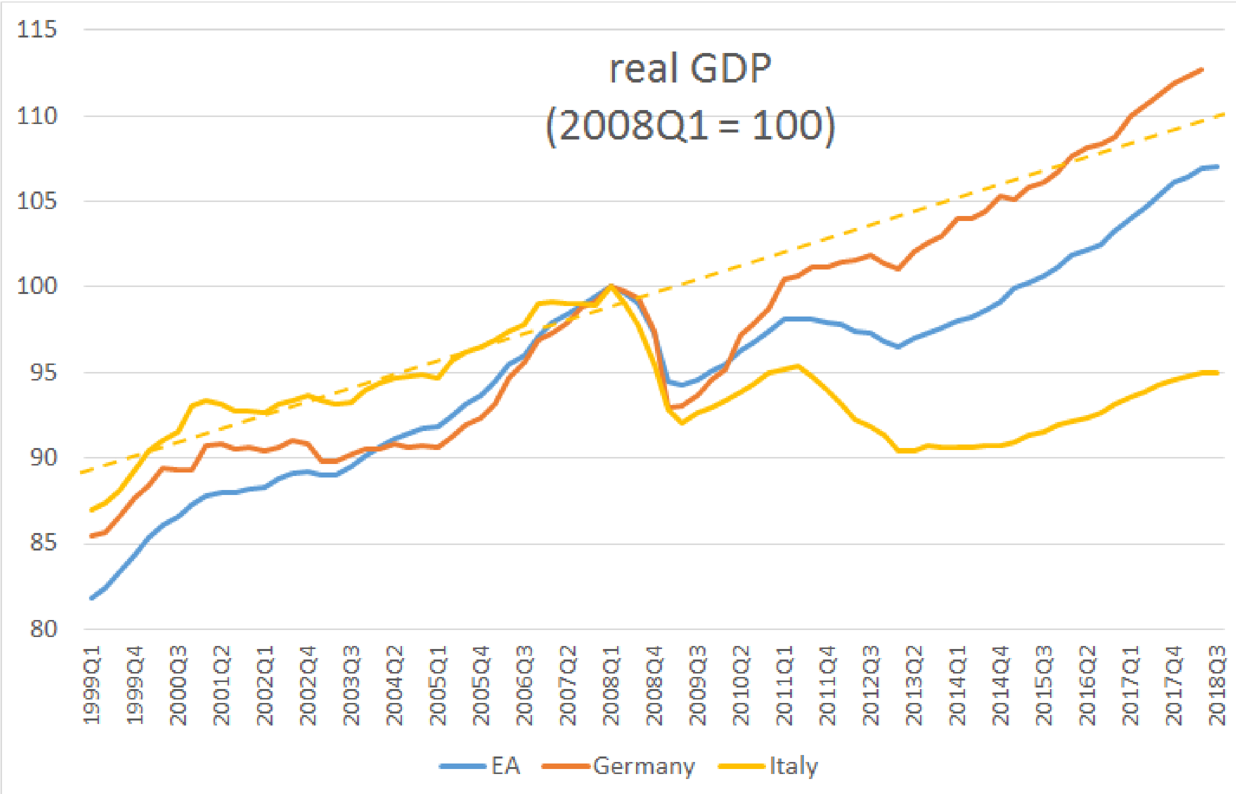
Let's take each in turn.

1. Is fiscal stimulus warranted in Italy?

Fiscal policy normally has a role in **cyclical aggregate demand management** through automatic stabilizers (like unemployment benefits or progressive taxes), but this role increases even more in liquidity traps (with monetary policy constrained at the zero-lower-bound) when some discretionary fiscal stimulus is also warranted. In other words, whenever aggregate demand (actual GDP) is weaker than the economy's supply potential, we have a negative output gap which should be closed by macroeconomic policy stimulus. The idea behind the "structural budget deficit" is that it filters out these effects of business cycle fluctuations on the budget, so a higher headline deficit due to e.g. more unemployment benefits will not be reflected in the structural number. The fact that the Fiscal Compact's MTO is defined in terms of the structural balance is supposed to provide flexibility for governments to pursue this kind of Keynesian countercyclical fiscal policy.

If the supply potential is estimated to be higher, the currently observed weak aggregate demand (as measured by the GDP) indicates more slack in the economy, justifying more fiscal stimulus (also, the structural budget balance is expressed as a percentage of potential GDP, meaning that higher potential output would lower the structural deficit number). So it all comes down to **how negative the Italian output gap really is**. According to the European Commission's estimates, Italy has now a slightly *positive* (!) output gap (corresponding to a low and damaged potential GDP), which is the source of their large structural deficit estimate. In other words, the Commission thinks that Italy's growth problems have to do more with structural problems in the supply side rather than weak aggregate demand. Given this, macroeconomic demand stimulus is unlikely to boost growth, but it would just lead to higher inflation, and Italy should rather focus on structural reforms to repair its supply side instead of more fiscal spending.

However, the problem is that the economy's potential output, and hence the output gap, is not directly observable: it can only be estimated and is subject to substantial uncertainty, especially in real time. According to some analysts, the Commission's estimates are suspicious at best (e.g. see INET's Orsola Constantini, FT's Martin Sandbu or Matthew C. Klein). The EC's estimates of potential output seem to track actual GDP too closely, as if a large part of economic fluctuations is supply side related, which is quite unlikely given the huge negative demand shock of the financial crisis. Italy's GDP is still 5 percent below the pre-crisis peak (while the euro zone as a whole is 7% *above)*, meaning that the average Italian is barely better off than 20 years ago. The unemployment rate is also more than 10%, still above the 2008 rate across the country, with youth unemployment around a staggering 30%. With such poor numbers **it is hard to argue that Italy has fully recovered to its potential** (even taking into consideration weaker pre-crisis trend-growth) - but at the very least, the case for more demand stimulus should not be dismissed right away.



Of course, the proper reference point is not necessarily the "pre-crisis peak" where the economy was probably already overheated with a positive output gap - but the amount of shortfall from the pre-crisis *trend* is just still too large. In addition, it might very well be that the prolonged period of weak demand has damaged the potential of the Italian economy, closing the output gap "from above" (and bending the dashed trendline downwards). This is the so called hysteresis effect, whereby idle capital stock gets depleted, long-term unemployed workers lose skills and drop out of the labor force, and technology-enhancing innovation is postponed. It is very likely that Italy suffers from the hysteresis-induced damage to its supply potential. But then the argument should cut both ways: if weak demand can damage potential output, then strong demand (or even overheating the economy) can also help repair it, so **hysteresis is hardly a case against stimulus!** Indeed, in contrast to assumptions in the Commission's framework, the supply side of the economy is unlikely to be completely independent of aggregate demand: more investment into capital, infrastructure, technology and skills, while boosting demand, also contributes to higher potential GDP.

One can argue that even though Italy might need some fiscal boost, it has simply no fiscal space anymore to do so, given its already huge public debt burden: even more spending would put **debt-sustainability** in question, so it is time for a more restrained budget. The problem with this argument is that containing the debt-to-GDP ratio depends a lot on how GDP grows and the latter is not invariant to the fiscal stance. **Harsher austerity can be self-defeating** if GDP growth is harmed more than debt growth is slowed. (Just think of Keynes's paradox of thrift argument: the economy is a whole is not like a single household. Trying to spend less and save more can actually lead to less saving as incomes fall. Somebody's spending is another person's income and the two must be equal on the macro level - if we abstract from exports). If a fiscal stimulus manages to bring the economy back to its growth-trend, or even better, improve the long-run growth potential of the country, then it actually improves debt-sustainability. That is why low Italian growth rates are not an argument for austerity on the grounds that a low-growth country can only support smaller debt - they are rather an argument for stimulus on the grounds that debt cannot be supported with low growth. Case in point is Greece, which after years of imposed harsh austerity has lost a quarter of its GDP, and its debt-to-GDP is now higher than before, even after a substantial debt write-off.

Interest rates also matter for debt-sustainability. **Issuing debt in a near zero interest rate** environment should finance itself even if it contributes to positive nominal GDP growth only slightly. Of course, Italy pays on its bonds a substantial premium over the ECB interest rate, but a large part of that spread could be eliminated with a better design of the euro (more about this later, in the third part of this essay).

Several commentators also raise the issue of **intergenerational fairness**, saying that spending more today by indebting future generations is immoral. Even if the public debt is never to be repaid in full (as it is just rolled over), the interest-cost of servicing such a large debt-pile can be a substantial burden in the future. While this may be true, this cost must be traded-off against the huge costs of continued austerity today. It should also be noted, that a large fraction of Italian debt is held domestically, so interest payments are not that big of a burden for the economy as a whole (even if they lead to redistribution). In addition, as pointed out above, fiscal stimulus today can actually *improve* debt-sustainability for future generations by putting a quicker end to a weak-growth period. Moreover, it is rather continued austerity which is intergenerationally unfair: by maintaining the 30% youth unemployment rate, and contributing to the hysteresis effect, a generation of young Italians will have a hard time transitioning from school to working-life, missing out on acquiring skills, and having lasting damage on their career and earning-prospects. The harmful effects of austerity can resonate for decades to come.

According to some, the expected growth effects of the Italian government's larger budget deficits are overly optimistic and claim that they will not achieve the desired boost to GDP. As recent research by Summers & DeLong, and Christiano, Eichenbaum & Evans, or Eggertsson or Woodford has shown, **fiscal multipliers are much larger in a liquidity trap** (i.e. when the zero lower bound on interest rates binds) than normally, meaning that an extra euro of budget deficit can generate a more than a euro GDP and income in the economy. This is because the usual crowding out effect of fiscal expansion on investment and consumption through raising interest rates is absent at the ZLB. (Fiscal multipliers can also be larger than previously assumed, due to the presence of liquidity-constrained households who are not sensitive to the interest rate, or the presence of countercyclical risk whereby higher incomes due to a demand stimulus mitigate consumers' precautionary saving motives, further boosting demand. See Bilbiie or Auclert et al or Ravn & Sterk). Based on these academic results, the Italian government can expect quite a big bang for its buck, especially now that the ECB still keeps interest rates at zero. What this means is that achieving a given increase in GDP-growth requires a relatively small increase in the fiscal deficit. Despite this, the estimated fiscal multiplier effects of 0.3 in the government's budget draft proposal seem quite conservative and are definitely not "overly optimistic".

Still, there are many who say that the proposed Italian budget will not manage to achieve the supposed stimulative effect, or improvement in the supply potential. Bruegel's Alessio Terzi writes that due to structural issues, like corruption or messy bureaucracy, the efficiency of Italian public investment in raising growth potential is very low, so reforms must come before stimulus. Even if this is so, the beneficial effect on demand and unemployment of even purely wasteful government spending should not be ignored through the reverse-hysteresis channel or by closing the negative output gap (which Terzi accepts to be positive, in line with the Commission's questionable methodology). Of course, it should be acknowledged that Italy *does* suffer from serious supply side problems, as reflected in its terrible productivity growth record, which is why **structural reforms are undoubtedly necessary.** On the long run, demand boosting policies are surely not the solution to anaemic growth, a very rigid labor market, a poor education system and unfriendly business environment (as summarized by the FT). Implementing the necessary reforms are much easier though, when supported by demand stimulus, especially when there is still some slack in the economy, even compared to its admittedly weak potential output.

The **problem with the Italian budget proposal seems to be its *composition*** rather than its *size.* As pointed out by Martin Sandbu, or the FT's Editorial Board, the Lega-M5S government's budget includes flat tax for companies, increase in welfare spending through a minimum income, and a cut in the retirement age (which shrinks the labor force), while barely spending anything on infrastructure -- it is hardly a "Keynesian revolution", while not tackling the structural problems, either.

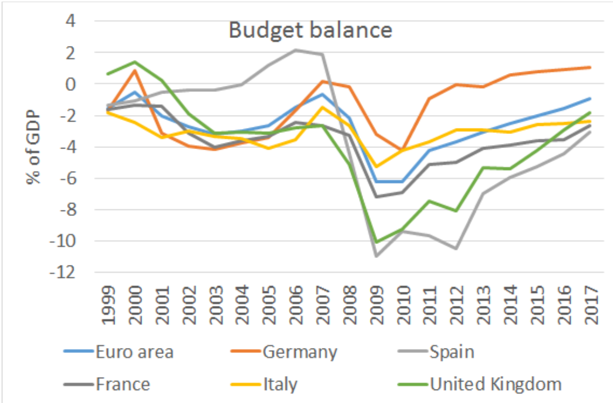
That said, the current hysteria around the "profligate" Italian budget seems to be not about its composition but about its headline deficit number - which at 2.4%, well within the 3% Maastricht limit and just slightly higher than previously planned, is **hardly the embodiment of fiscal irresponsibility** it is painted to be, especially for a country with a most probably negative output gap and years of weak growth behind it. Arguing against it on these grounds is therefore not warranted, and just fuels the austerity bias of the eurozone which contributed to its lacklustre post-crisis recovery.

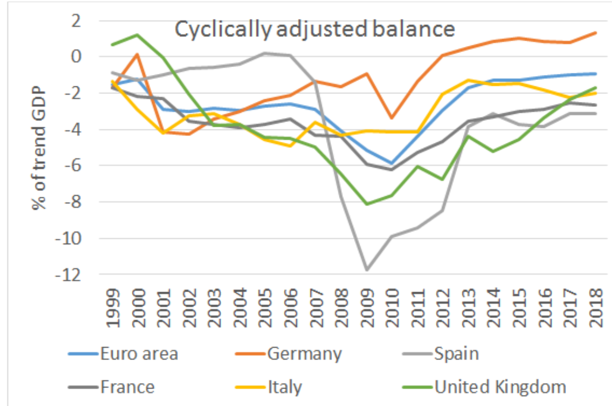
Why this situation could still lead to serious problems and why the crowding out effects through higher government bond yields could still materialize even at the ZLB, is less the fault of Italy's fiscal policy than of the flawed monetary design of the euro - to which we turn in the third part of this essay. But first, an account of what lead to here: austerity bias in the eurozone.

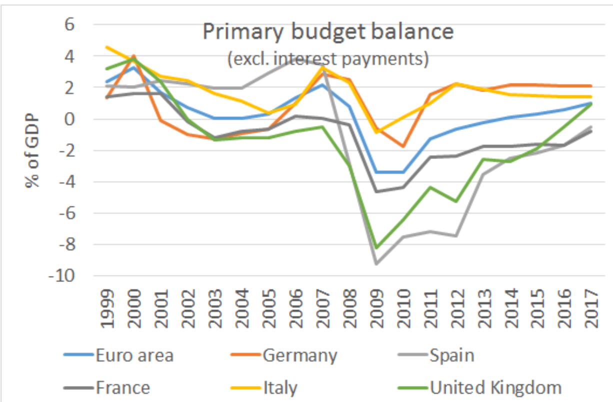
2. Austerity bias of the eurozone

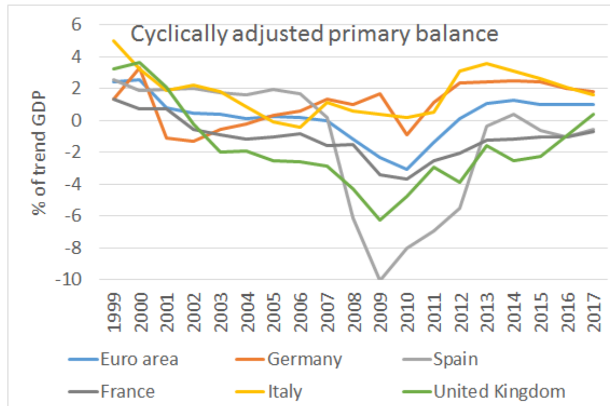
There is a common moralising narrative according to which [“profligate” euro periphery] countries were living beyond their means, were overspending in the form of consecutive fiscal deficits, and were irresponsibly running up debt, so now that the day of reckoning has come, they must necessarily tighten their belts to atone for their past excesses. Apart from the more general point, that this argument is subject to the fallacy of composition to the extent that it treats the macroeconomy as if it was a single household (see e.g. Keynes’s paradox of thrift argument, and my argument in the previous part about self-defeating austerity), and that it ignores fiscal policy’s role in countercyclical demand stabilization, the more particular problem with it is that, in Italy’s case at least, it does not seem to be true - at all.

Looking at the budget deficit of Italy since it joined the euro, we can see that it is not far out of line relative to the other main European economies. Once we take out the cost of servicing debt, we get the actual difference between what the government spent in the economy and what it raised as tax revenue (**the primary budget** deficit), i.e. what Italian people were getting in net from the state. This measure is and has been in ***surplus*** for almost 20 decades now, and at par with prudence champion Germany. If we further adjust for the effect of the business cycle, allowing for fluctuations in the deficit due to aggregate demand stabilization, we get the most appropriate measure of “fiscal stance”, i.e. how stimulative/austere is fiscal policy relative to the cyclical position of the economy. This indicator signals that Italy’s fiscal policy has been among, if not *the,* strictest (!) in Europe over this period, with continued surpluses, even higher than disciplined Germany. In addition, although large in absolute terms, the Italian public debt-to-GDP ratio was actually decreasing until the crisis; and even with the increase since then, Italian debt growth since the euro began is still among the lowest in Europe (see charts).



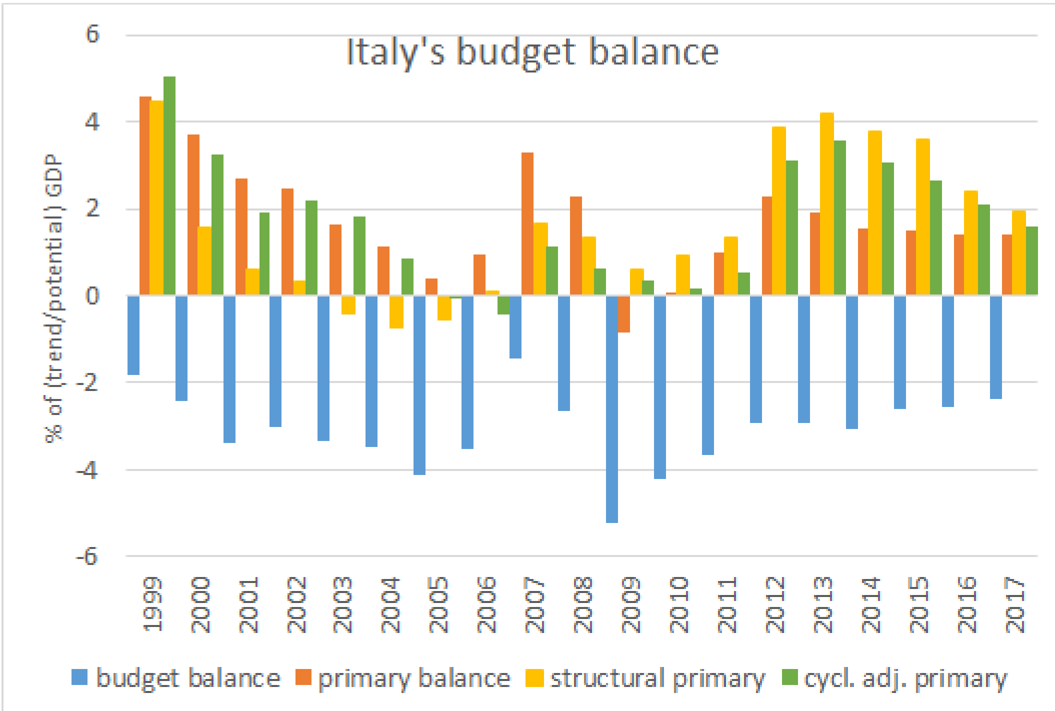


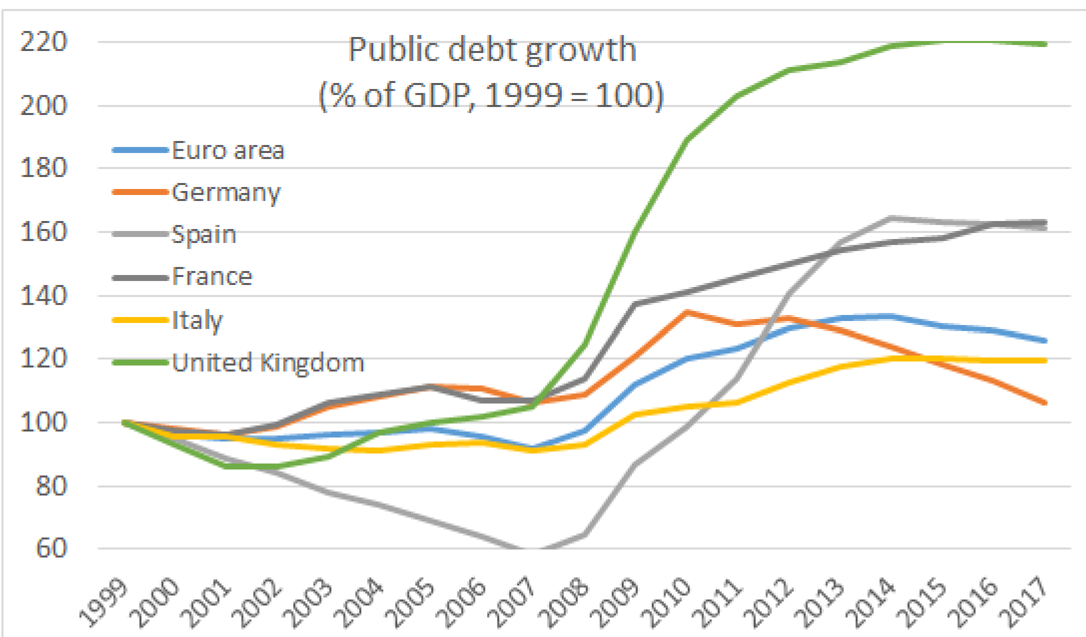




All this is hard to square with the image of a spendthrift country incapable of fiscal restraint, which Italy is painted to be. It rather paints a picture where **Italian people on average have been living under more austere conditions than their European neighbours.** Hefty primary budget surpluses are all the more striking for an economy with weak private demand and a most likely negative output gap. Given all this, it does not seem to be a big ask from Italian voters to let fiscal policy ease a little (not even by much!), especially after the biggest crisis in 80 years from which the economy has still not recovered fully.

Of course, whatever the effect on citizens and the underlying true fiscal stance is, it does not change the fact that interest on debt must be paid, which is why the headline budget balance is in deficit. Therefore even if one accepts that Italians are not to be blamed as irresponsible overspenders, they can still say that a country which **inherited such a huge pile of public debt from their grandparents**, simply, and sadly, has no other choice: financial markets and outsiders will not care about who is to blame when deciding whether to finance more Italian debt - they will only care about debt-sustainability which limits the fiscal room for an already grossly indebted Italy (more about how to address this in the third part of this essay). However, notwithstanding the previously discussed potential for a demand stimulus to actually *improve* debt-sustainability, what also does not seem to be sustainable is to sentence Italians to perpetual primary budget surpluses, fiscal austerity and low living standards, depriving them of even minimal countercyclical fiscal flexibility in the name of paying down their ancestors' debt. This will inevitably lead (or rather, has already lead) to democratic backlash, potentially destabilizing and threatening the whole European integration project. Already tiny Greece posed a serious challenge, but a country the size of Italy will not be as easily bullied.





But it is not just strict EMU fiscal rules and tight Italian fiscal policy which constrained Italy's post-crisis recovery. A major contributor were tight fiscal stance and **weak demand elsewhere in the euro area** on the one hand, and the **asymmetric current account rebalancing** within the eurozone on the other, which forced the burden of adjustment mainly on peripheric deficit countries. I have explained this in detail in my earlier post where I lay out the case that irresponsibility lies rather with CA-surplus countries like Germany who are not willing to spend, thereby depriving the rest of the eurozone from aggregate demand. I recommend going through that post, but here are the main points in summary. First, building up large CA-surpluses (meaning excess saving over investment) during a liquidity trap in a currency union, where neither interest rates nor exchange rates can adjust easily any more, imposes further deflationary and recessionary effects on trading partners, as it captures already weak aggregate demand (for an illustrative model see Blanchard). Second (as Keynes has already pointed out at Bretton Woods), when rebalancing needs to occur, putting the adjustment burden asymmetrically on CA-deficit countries - i.e. requiring them to save more and/or go through painful internal devaluation causing Fisher-type debt deflation and increasing real debt burdens, while surplus countries neither need to spend more nor tolerate higher inflation - further weakens their domestic demand and raises unemployment.

Given these considerations, in the eurozone then it is not hard to see why persistent and record **high German current account surpluses (currently above 8% of GDP, eclipsing that of China!) pose a problem.** Just to indicate the consensus among non-German macroeconomists on this matter, I would guide the interested reader to *The Economist* (1, 2, 3, 4, 5), former fed-chair Ben Bernanke, Barry Eichengreen of Berkely, FT's Martin Wolf (1, 2, 3, 4), Gavyn Davies (1, 2) or Simon Wren-Lewis of Oxford (1, 2, 3, 4, 5, 6). Germany could afford to restrain its *domestic* demand and build up savings without suffering higher unemployment because its export sector could rely on *external* demand and the willingness of its trading partners to spend. It is hard to follow the same route for euro periphery countries if their main trading partner, Germany, is not willing to spend: again, one's income (from which they can save) is the other's spending. This became even harder after the crisis as the asymmetric burden of CA-rebalancing meant that deficit countries could only increase their savings by constraining their domestic demand, since they could still not rely on more external demand through more German spending. As the eurozone fell into the liquidity trap, where interest rate cuts could not offset this rise in periphery saving desire any more, it meant that incomes had to adjust, leading to higher unemployment and negative output gaps across Southern Europe - continued German CA-surpluses essentially imposed a deeper recession on the eurozone.

The pain of this adjustment and rebalancing could have been substantially eased **if only Germany started spending more,** which it could easily afford. Barring a short period of fiscal stimulus after the crisis, the German government is sticking to the *"schwarze null"* policy of balanced budgets, even though the country badly needs more infrastructure spending. The saving rate of the private sector was also pushed up by reforms which depressed the real wages of (high-spending) German workers, and redistributed income towards (less-spending) wealthy firm owners. The median German household is therefore not even a beneficiary of this policy: they have low real wages and are relatively asset-poor in European comparison despite large German savings on the macro level: *"Most Germans' living standards have stagnated, wealth is highly skewed and national saving has been spectacularly badly invested."* (This also shows that despite the appearances and the political narrative, it is not countries but rather economic sectors facing off each other in the euro crisis).

> What's more, (although it does not affect Italy that much), the excess savings Germany accumulated in the run-up to the crisis were an active contributor to **fuelling financial instability** in the euro periphery as they were irresponsibly invested into risky assets like Spanish and Irish real estate (or US subprime mortgages) and Greek government bonds. The destabilizing capital outflows accompanying the excess saving-induced German CA-surplus fuelled financial bubbles in countries on the receiving end of these flows. Before protesting that nobody can force southerners to borrow, note that the fall in interest rates indicates that it was more like a "push" from larger and eager German loan supply rather than a "pull" from larger Southern borrowing demand trying to convince reluctant German lenders. In other words, it was not (just) irresponsible southerners letting their competitiveness deteriorate and going to Germany for loans to finance their ensuing current account deficits, but that an independent increase in German savings were also responsible for fuelling easy borrowing conditions and credit bubbles in the South (see Erik Jones). As Michael Pettis and Matthew C. Klein argue, *"if enough money is sloshing around willing to invest in any stupid idea, you shouldn't be too surprised that a lot of stupid ideas get funded [...] it's logically impossible for excess borrowing to occur unless there is someone sufficiently reckless (or stupid) to provide the financing."* Who is the irresponsible here?
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> (Sidenote: this is not to say that Germany literally "dumped their savings on the euro periphery" as one would think in a loanable funds framework. Lending can take place even without collecting pre-existing savings, so capital flows from Germany to the periphery did not actually require German savings. They only required more willingness from German banks to lend. Savings were a consequence rather than a prerequisite of lending, and they materialized once the periphery spent those loans on German imports, restoring the accounting necessity whereby capital outflows must equal current account surpluses. It still remains the case though that Germany did not spend enough, maintaining these CA-surpluses and contributing to weak euro area aggregate demand.)
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> (Sidenote2: After the bubbles went bust, German lenders woke up, and stopped providing capital inflows. But instead of realizing losses on their risky investments, German lenders were essentially bailed out by their own government: this bailout however, was not direct but rather channelled through Spanish and Irish governments who in turn needed to bail out their own banks who intermediated German lending. Therefore, these bailouts did not really flow to periphery taxpayers, but rather compensated the losses of mainly German banks - nonetheless they were used to justify harsh austerity imposed on the periphery so that German taxpayers can recover from Southerners the cost of bailing out their own banks after their foolish investments.)

In the context of Italy, this shows us the important role Germany played in the current situation. **It is hard to grow out of your debt and/or save more when your main trading partner is not spending so you don't have enough income.** It is even harder when the asymmetric CA-adjustment burden on euro deficit countries requires to constrain domestic demand and undergo internal devaluation, which then leads to recession and unemployment in a liquidity trap, amplifying the fiscal problems as the tax base is eroded. **If those who can afford stimulus, do not undertake it, then more indebted countries like Italy will face more urge**

to run high fiscal deficits. Looking at Southern indebtedness in isolation of German excess savings and capital flows therefore does not make much sense. What makes equally little sense is judging “irresponsible” Italians who can only thank themselves for being in a bad situation of their own making, while morally superior “prudent” Germany washes its hands. If anything, the reverse has more truth to it.

The disappointing recovery of the euro area compared to the United States is in large part due to the **insufficiently accommodative macroeconomic policy stance,** including not just monetary policy (which is constrained by the ZLB) but also fiscal policy in the currency union as a whole. This is not only because of Germany’s unwillingness to spend per se, but also because of the corresponding asymmetric CA-rebalancing pressure on Southern deficit countries to restrain their domestic demand. Add to this the very strict fiscal rules of the EMU and the harsh austerity imposed on bail-out program countries, and no wonder that **the eurozone suffers from deficient aggregate demand**. The **euro has an austerity bias**, under which all adjustments are harder, unemployment and real debt burdens increase, creating instability and threatening the future of the single currency.

Germany has a responsibility in boosting eurozone demand. This would not only help Italy, but would also benefit German people. If those who can afford stimulus, undertake it, then more indebted countries like Italy will face less urge to run high fiscal deficits. While this assumes a minimum degree of solidarity and a feeling of shared destiny, if the euro is to work, Germany cannot shun this responsibility. Without more German spending and more robust eurozone demand it is no wonder that Italy tries to stimulate its weak economy and goes against the strict budgetary rules imposed by the Fiscal Compact. And recall, **the irresponsible in a liquidity trap are not those who borrow, but those who do not spend** (“virtue becomes vice, and prudence is folly”). So where the European Commission should rather be strict instead, is enforcing the Macro Imbalance Procedure which tries to make CA-rebalancing more symmetric in the spirit of Keynes by forbidding a member state to run a current account surplus in excess of 6% of GDP - the strongest eurozone member seems to be getting away with it.

However, even if EMU fiscal rules were relaxed, there would still be a further obstacle in front of fiscal stimulus for countries like Italy. Financial markets can potentially drive a euro country into default and banking collapse, which is not the case for other countries with their own central bank. The source of this issue is the flawed monetary design of the euro, to which we turn in the third and final part of this essay.

3. The role of the ECB as a monetary backstop

In the previous two parts of this essay we have seen that fiscal expansion in Italy could be justified. However, even without disagreement from the European Commission, the willingness of financial markets to finance the ensuing budget deficits seems to be putting a hard constraint to this. *"Lo spread"* between German and Italian government bond yields has risen sharply on the news of the draft budget, signalling that market investors now fear Italian default considerably more. Despite the ECB still keeping euro interest rates near zero, this makes servicing Italian sovereign debt much more expensive, reducing the stimulative effects through crowding out, and worsening the fiscal situation as well, potentially making default more likely in a self-fulfilling way. Even before the current Italian situation, on the surface the euro crisis seemed to be about public debt, severely limiting the ability of periphery countries to fight the recession with fiscal stimulus.

All this may *not* sound so surprising or unusual, but in fact, it is very much so. The eurozone should not be having a debt crisis, and fear of default should not guide its policy decisions, simply because **an economy with its own fiat currency should never default.** I have written about this in another post, which I really urge you to read because it is an often overlooked and ignored aspect of monetary-fiscal interactions. A country who issues debt in a currency which it can control need not have default risk because the central bank can be a buyer of last resort in the government bond market in times of stress by its unlimited ability to create money, ensuring that creditors *always* get back the face value of their bonds in legal tender. While this may add some inflation premium, default risk should therefore not feature in the nominal bond yield. As it is pointed out by Paul de Grauwe from the LSE, Corsetti, Dedola and coathors from the ECB, or Athanasios Orphanides, a former ECB central banker, a central bank which acts as a lender of last resort for governments is essential to rule out unsubstantiated, self-validating default concerns ("sunspots") and multiple equilibria.

It is not just unfounded, sentiment-driven confidence crises which can be avoided though: even a significant fundamental easing in fiscal policy should be free of increasing default risk. As Corsetti and co. also explain (formalized model by Jarocinski & Mackowiak), another source of multiple equilibria is the liquidity trap, where monetary policy loses its ability to affect demand and determine inflation due to the zero-lower-bound constraint. Therefore we might need a switch to **"active fiscal policy" which is not primarily focused on debt stabilisation** but can take over from the central bank to provide demand stimulus in the form of *permanently* decreasing the present value of future primary budget surpluses. This can only be done though without violating the intertemporal government budget constraint (i.e. without defaulting), if monetary policy passively accommodates rising inflation (i.e. without raising interest rates, or even buying government bonds with freshly printed money), effectively monetizing debt by eroding its real value. At this point, I think it is useful to cite a disclaimer from my earlier post:

> "Before you start screaming, this is **not a hostile take-over of independent central banks by politicians**, pressuring it to monetize debt. It is just a realization that no sane

> independent monetary authority would stand idle while its government is going bankrupt and the collapse of bond markets is bringing down the banking system. Of course, systematically irresponsible fiscal policies and money printing sooner or later would lead to runaway inflation, but this is not the case we are talking about here. It is just to [rule out multiple equilibria and stabilize demand at the liquidity trap], which also points to the fact that the prohibition of monetary financing should not be viewed as a binary choice."

One might argue that once politicians get access to money printing, they will abuse it even when it is not warranted. But all this is in line with the Fiscal Theory of the Price Level: **if policymakers are to maintain price stability, fiscal policy must contain its deficits voluntarily.** If politicians keep overspending from freshly printed money, it will either lead to hyperinflation, or the central bank taking back the printing press and forcing the government to default (which it will most certainly not do). Therefore, no matter how independent our central banks are, at the end of the day price stability depends on fiscal policy being conducted by sensible politicians. In other words, there is no added value in banning monetary financing when it is actually needed. Then this allows a responsible policymaker to undertake some extra money-financed fiscal stimulus in times of a liquidity trap when it is be beneficial: in a low demand environment a bit of inflationary pressure is just what the doctor ordered. By **ensuring that public debt is non-defaultable** (i.e. guaranteeing that maturing bonds can be converted into currency at face value), and keeping interest rates low while the fiscal expansion lasts, the central bank can prevent rising fiscal deficits from being associated with increasing default premia, and the necessary stimulus will not be halted by financial markets (or its effect offset by crowding out).

Once you wrap your head around this argument, it becomes surprising why the euro area with unlimited capacity to print euros should be paralyzed by default-fearing debt markets, when it should be rather wielding a formidable fiscal stimulus to fight the biggest crisis since the Great Depression. The United States has a public debt-to-GDP ratio above a 105%, much larger than the eurozone's combined 86%, and yet they could overtake a much bigger fiscal stimulus without even a slight increase in bond yields, and with **no sign of the dreaded "bond vigilantes"**. But even if we look at the United Kingdom (which does not have the "exorbitant privilege" of issuing a reserve currency like the US dollar), we see that much larger budget deficits and a similar debt ratio of 88% did not cause British bond yields to rise. As a consequence, the overall fiscal-monetary policy stance in these countries was much more accommodative than it was in the euro area, resulting in a much more robust recovery from the crisis.

Quantitative Easing by their respective central banks certainly helped in this, but the more crucial difference is that these countries have their own central banks, implicitly guaranteeing that their government bonds are non-defaultable. The problem with the eurozone is that the same implicit guarantee is perceived to be missing from the part of the ECB, which is one of the **most serious design flaws of the single currency.** In fact, the EU Treaty explicitly forbids the ECB from undertaking anything of the sort (prohibition of monetary financing and no-bailout clauses), in the spirit of German-inspired aversion to inflation and moral hazard. What this means is that euro member countries, like Italy, are like not having their own central bank, or **like being indebted in a foreign currency** over which they have no control (see dollar-indebted Argentina) - as if the euro was not a fiat currency with potentially unlimited supply but something akin to a modern gold standard. All of these cases mean that default risk becomes real and it can seriously constrain fiscal policy, which is exactly what we see now as Italy faces off debt markets and *"lo spread"*.

It is not the first time this is happening. In 2011-2012 spreads on Italian sovereign debt were around 4-5 percentage points. Apart from (potentially unfounded) default concerns this also reflected something unique to a multi-country monetary union: ***redenomination risk*.** Given that the domestic banking system holds large portions of the national government's debt, a sovereign default would likely go hand in hand with a banking crisis, which would increase pressure to exit the euro and recapitalise banks with a newly printed national currency. It was not until ECB chief Mario Draghi's famous 2012 **"whatever it takes"** speech and the introduction of the ECB's Outright Monetary Transactions (OMT) program that the spread was normalized. Although it is most certainly a violation of the ill-advised EU Treaty (and as such, was attacked by Germany in court), it was needed to preserve the unity of the single currency, and thankfully the central bank managed to sell it under the label of "being necessary for the proper functioning of monetary transmission". The subsequent introduction of QE in 2015 also helped to contain sovereign debt markets. But still, QE is winding down and OMT is conditional on submitting to a harsh bail-out program, and beyond Draghi's term there are no institutional guarantees from the ECB. The effect of this uncertainty is clearly present in current Italian bond yields.

If this situation continues and the ECB does not intervene, it can have dire consequences. **Italy might be forced into default by the markets.** This could lead to mass bankruptcies in its banking system which holds a large portion of government debt. Normal access to ECB liquidity operations would be severed as the most common collateral used by banks, sovereign bond, would lose its value. The ECB's lender-of-last-resort facility, Emergency Liquidity Assistance (ELA), which does not require collateral, might be approved on a case-by-case basis, but it is for liquidity purposes and is not supposed to be granted to actually insolvent banks. Moreover, the fiscal burden of the credit risk in ELA is not born by the Eurosystem as a whole, but by the Banca d'Italia and the Italian state - which would not reassure the ECB Governing Council in the case of a country in default. The banking crisis and the corresponding recession could then force the government to leave the euro and reintroduce the lira. In anticipation of redenomination into lira, capital would start rushing out of the country, basically causing a bank run and further draining liquidity from the banking system. To prevent that, capital controls might need to be imposed which would severely disrupt trade and daily life, as we have seen in Greece and Cyprus. It is another question what would happen with the already existing TARGET2 liabilities of Banca d'Italia within the Eurosystem, the value of which would be further amplified by the capital flight as euro deposits are transferred abroad (it is like running down FX reserves for a normal country). Seeing that a defaulted country is unlikely to honor them, Italy might be shut out of the TARGET2 payment system, effectively ejecting the country from the euro. It would be, as Barry Eichengreen put it, the **mother of all financial crises.**

Moreover, as Orphanides points out, due to an (inapprehensible) discretionary decision taken by the ECB in 2005, **collateral eligibility of sovereign bonds** is not even determined by the central bank's Governing Council, but by the credit ratings of private agencies like Standard & Poor's. Even if the Italian government does not default, a downgrade to junk category already deprives Italian banks from accessing normal ECB liquidity operations using Italian government bonds as collateral. This can also have serious disruptive effects, potentially creating a self-fulfilling mechanism.

If all this were to happen in Italy, it would arguably mean the end of the euro. **Italy is just simply "too big to fail"**, which is why I would hope that one way or another, this scenario will be avoided and the ECB cannot afford to stay idle. They either intervene in the bond markets similarly to 2012, or approve a blanket ELA to Italian banks the fiscal risk of which is born by the whole Eurosystem, or Italy gets an explicit and formal intergovernmental bailout like Greece or Ireland did. In the case of Italy the required size of such a bailout would likely to be prohibitively large though. Which is why it seems that the only thing standing between us and disaster is most probably the ECB.

That is, *unless* the Italian government backtracks first in this game of chicken. But as I argued throughout this three-part essay, **it is really not fiscal stimulus which should be on the losing side in a weak-demand eurozone and stagnating Italy, but rather the unnecessary and self-inflicted austerity bias stemming from the ill-advised design flaws of the single currency.**

> Sidenote: The exact institutional setup in an alternative eurozone might not entail the ECB actually buying bonds: it can also be done by a fund, or even just by *unconditionally* accepting them as collateral in financing operations with banks. Corsetti and co. propose a **"euro area fund"** which buys the (dafaultable) bonds of national governments as long as they satisfy a flexible fiscal criteria (which allows for stimulus in liquidity traps) while financing itself from issuing non-defaultable "eurobonds" which are convertible into currency at par, as guaranteed by the ECB. In an economic sense, this is no different from ECB bond purchases: the fund just acts as intermediary between national governments and the ECB. Deciding on when to buy national bonds of member states needs more direct democratic accountability than what the ECB has. Admittedly, this is a form of debt-mutualisation and fiscal risk sharing. After extreme fundamental shocks, or fundamentally irresponsible national fiscal policies sovereigns might fail to meet the fiscal criteria and they can still be forced to default in which case the euro fund will suffer capital losses, which have to be shared among other member states. Another proposal for a "Financial Stability Fund" is designed in the ADEMU project by Ábrahám, Marimon & coauthors, which is similar to the one above, but also involves limited enforcement and moral hazard constraints trying to optimally balance between risk *reduction* ("discipline") and risk *sharing* ("solidarity").

Of course, there are valid reasons behind the German point of view. **Moral hazard concerns** in a multi-country monetary union are certainly justified and not to be taken lightly. In the basic single country framework of the Fiscal Theory of the Price Level we could reasonably rely on the sensibility of fiscal policymakers not to overspend and abuse the printing press as this would have lead to suboptimally high inflation, possibly crippling hyperinflation, the cost of which is internalized by a sensible politician (if they are not sensible, then recall, there is nothing to talk about: price stability is jeopardized anyhow). In a currency union with many independent fiscal authorities, however, this cost might not be internalized, as their size to the whole union is smaller. So it could be optimal for a single government to free-ride on some easy money-financed fiscal spending, the benefits of which are enjoyed by the country alone while the costs are spread out over the whole union in the form of higher inflation and/or fiscal loss-sharing on the monetized debt through the balance sheet of the ECB. It is true that this free-riding and externality problem should be handled and avoided, and these moral hazard considerations are certainly the reason behind the EU Treaty's no bailout clause and the strict budgetary rules of the Fiscal Compact (although, as discussed in the previous parts of this essay, the fiscal rules could allow for a bit more flexibility in a liquidity trap, without jeopardizing debt-sustainability or price stability).

However, they should not be the reason behind a ban on monetary financing. **Disciplining free-rider countries and fighting moral hazard is not the job of monetary policy.** Using the ECB as leverage against these countries puts in danger the proper conduct of monetary policy, the adequate functioning of a monetary union without redenomination risk, and financial stability. European politicians must find way to enforce commonly-agreed (and possibly more sensible) fiscal rules without using the central bank as a political weapon (see proposals listed above in the box). Delegating the task from the ECB to a "euro area fund", which in turn issues non-defaultable eurobonds would not make the core of the moral hazard issue go away though. This is why they do not need to grant a free pass to member states, but instead can make access to the fund subject to conditionality. The point is that this **conditionality is decided by politicians/central bankers, and not the markets.** E.g. they might decide that fiscal stimulus in a liquidity trap complies with the rules, so access to the fund/central bank is granted and forced default by the markets is averted. In other cases, fiscal expansion might not comply with the rules, so the threat of default would be a real disciplining force, constraining moral hazard. A key feature is that the rules should be transparent and institutionalized, in contrast to the current ad hoc system of intergovernmental bailouts and discretionary ECB decisions.

Of course, this leads to some fiscal risk sharing through the balance sheet of the Eurosystem which is backed by national governments of the member states. But this **minimum degree of risk sharing is unavoidable in a well-functioning monetary union,** even if fully fledged fiscal union is not a political reality with the current lack of solidarity.

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In this three-part essay I have argued that hysteria about the recent Italian budget proposal is largely overblown and that some fiscal demand stimulus would not hurt Italy which is likely to have not yet recovered fully from the crisis. Myths about Italy being a fiscally irresponsible profligate country seem equally misleading. What is often overlooked though, is the responsibility of Germany which significantly contributed to the austerity bias of the eurozone by its excess savings, running current account surpluses in a liquidity trap and forcing asymmetric rebalancing burden on deficit countries. In effect, Europe imposed self-inflicted austerity and misery on itself, significantly underperforming the US, in order to avoid more risk sharing and solidarity. There are also serious flaws in the monetary design of the euro, whereby debt markets can force member states into default. The ECB should guarantee sovereign bonds as non-defaultable by standing ready as buyer of last resort. Moral hazard concerns should not be addressed through the central bank, and the unavoidable risk sharing must be accepted by Europe as the price of a well-functioning monetary union.