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Open Review of Management, Banking and Finance

«They say things are happening at the border, but nobody knows which border» (Mark Strand)

The new eurozone risk morphology

by **Marcello Minenna**

Abstract: *Ten years into the global financial crisis, the euro area is struggling to get back on a path of stability and growth. Apart from international factors, there are endogenous reasons that develop along two main risk backbones: large and persistent competitive gaps, which contrast center and periphery, and risk segregation, which hinders effective progress towards a fiscal union. The present paper explores these two risk backbones and measures them through economic and financial indicators that are closely related to each other. The critical values of these indicators highlight a matter of unsustainability of the EMU membership, as hinted by the rising Euro-skeptic debate. This has resulted in a confrontational attitude of most distressed countries with the European institutions, which in turn has translated into higher sovereign risk premia as in the recent Italian experience. The recipe for these problems cannot be limited to a tighter regulation for the public sector and for banks: it must open to risk sharing in order to definitively defuse centrifugal forces, remove financial and commercial imbalances, and pave the way for a fiscal union with a federal budget, a unified debt market and a single finance minister.*

1. Ten years into the global financial crisis, the Eurozone is struggling to get back on a path of stability and growth. The recovery seen in recent years is crunching in the wake of the slowdown in the international economic cycle [IMF, 2018] especially in relation to the escalating trade tensions, Brexit-related uncertainty, renewed nuclear tensions and the increased volatility of raw materials' prices.

However, the problems of the Euro bloc are also the result of a progressive stratification in which the original flaws and the architectural incompleteness of the monetary union have added to inadequate anti-crisis policy measures. So far none of the open issues of the Euro area has been properly addressed, starting from the mandate and constraints of the monetary authority. The monetary orthodoxy of a central bank mandate only in terms of price stability and inflation target – and the (related) prohibition of monetary financing of governments' spending – is made particularly critical by the lack of serious forms of fiscal integration. In this framework the ECB inflation target («below, but close to 2%») is condemned to remain referred to the Eurozone as a whole and, therefore, to be pursued on average across member countries. This is equivalent to saying that the architecture of the Euro area admits inflation differentials between its components despite they share the same currency [OTERO-IGLESIAS, TOKARSKI, 2018].

As long as credit risk has remained essentially unknown to financial markets, inflation heterogeneity has been regarded as the main divisive edge between Eurozone members. But the onset of the crisis has unveiled another stress factor: the possibility of outright sovereign defaults arising from the lack of a lender of last resort and the consequent dissolution of the single interest rate curve that had characterized the early years of the monetary union.

The above arguments allow to identify two main ‘risk backbones’ that have concurrently contributed to build up the current Eurozone risk morphology([1]).

The first – which in this paper is called competitiveness gap risk – concerns the large and undue competitiveness gaps that over time have been accumulated across member countries because of inflation differentials and sovereign yield spreads. The winners/losers’ divide produced by persisting gaps endangers the membership feeling of losers pushing them to look for alternatives. In order to gauge the size of these gaps the paper considers two indicators regarding the financial sector and the manufacturing sector, respectively: real (or inflation-adjusted) sovereign yield spreads and the Financial Real Effective Exchange Rate (F-REER) defined as the effective exchange rate after adjusting both for inflation and for differences in sovereign yields. The relevance of the first indicator is quite intuitive: core activity of banks and other financial players is strongly affected by their funding costs that are closely related to domestic inflation and to the credit worthiness of their national governments. In turn, by affecting lenders’ margin profits, these factors also influence the funding costs of industries resident in the different countries shifting the break-even point of their business especially in a bank-centered environment as the one of the Euro bloc. From this standpoint, the F-REER is an indicator that summarizes the different strength with respect to the terms of trade along with the competitive advantages associated with the opportunity to rely on lower interest rates. Information conveyed by these two indicators reveals huge distances between countries that cannot rely on exchange rate adjustments to rebalance highly asymmetric situations.

The second ‘risk backbone’ is the risk segregation paradigm adopted by private investors resident in core countries and by the Eurozone ruling class since the notorious Deauville meeting in October 2010. Banks and other financial institutions located in the center of the Euro area have imposed a sort of ‘quarantine’ on the public and private sectors of peripheral economies: since 2008, Franco-German lenders have scaled down their peripheral exposures by over two thirds. This was a clear statement of mistrust for market participants who began to speculate against the survival of the Euro further deflating the market value of peripheral debts. Even selective risk sharing interventions agreed from time to time by the Euro-bureaucracy to the benefit of individual countries in the periphery have not been effective exceptions to the risk segregating attitude: rather, they have been twin bailouts that – by avoiding extreme outcomes in the beneficiary country – have allowed French and German banks to suffer losses on their exposures to that country and to gain the time needed to disinvest [MINENNA, 2018a].

Extraordinary ECB measures – such as 1 trillion euros Long-Term Refinancing Operations (LTROs) and the Quantitative Easing (QE) – have contributed to gain time, but for timing, size and constraints have contributed to pathological phenomena: nationalization of the government debt of peripheral States, negative yields, large and unprecedented Target2 imbalances.

Precisely Target2 is the last act of the risk segregation paradigm: as long as the Eurozone survives without losing ‘pieces’, Target2 imbalances matter little; but, in case of exit by a debtor nation, its National Central Bank may be tempted not to settle the debit balances with the rest of the Euro-system, imposing a consequent loss on the NCBs of the other countries. Not surprisingly, the rise of Euro-skeptical forces in recent years in many member countries has preoccupied creditor countries, pushing them to elaborate various proposals to revise the Target2 system in order to get immunized from adverse events.

Also real sovereign spread dynamics help to measure this segregation process since they represent the risk premium required to peripheral countries with respect to the German safe haven. And, it is not a coincidence that, since the eruption of the crisis, this quantity is strictly linked to the evolution of net Target2 balances.

The landscape outlined by the above described ‘risk backbones’ raises serious concerns about the compactness and resilience of the Eurozone. A confirmation comes from the recurrent surge of the redenomination risk in reaction to domestic developments that question the membership of a State, as recently happened in Italy and, before, in France (although to a lesser extent), and Greece. These internal developments are the result of a growing unsustainability of the current Eurozone set-up for several member countries, which manifests itself in various ways (social discontent, impossibility to implement expansive fiscal policies, exacerbation of the Euro-skeptical debate, rise of political forces characterized by a confrontational attitude with European institutions), precisely because of the imbalances and anomalies produced by the competitiveness gaps and systematic risk segregation analyzed in this paper.

The two issues qualify the risk morphology of the euro area and their analysis offers a useful map to orientate the EMU reform process and find adequate solutions.

A first area of intervention should address the ECB mandate and constraints. Less than one year after the end of its massive bond-buying program, the monetary authority has resumed buying securities – at a rate of 20 billion euros a month and without setting time limits for the duration of this new program – in order to spur Eurozone inflation and support the economy in front of rising downside risks. Yet, even this second QE edition could have little success [MODY, 2019], as the functioning rules have not changed with respect to the previous edition and, consequently, also the new program could result barely effective in addressing the sources of riskiness and fragmentation of the euro area.

An important move in the right direction would have been to get rid of the capital key criterion in favor of a criterion that is more aligned with the actual needs of each State [MINENNA, 2019a]. A similar change could have been implemented by directing the liquidity injected through assets' purchases only to highly indebted countries. The ECB has already enacted a similar measure with the Securities Markets Programme (SMP), even if with a limited success because of the modest size and some technical details of the program. The success of a new large-scale round of peripheral bonds' purchases would depend on how much risk sharing it embeds. To this aim, a similar program should be carefully calibrated with regard to the policy on coupon rebates, the residual life of purchased securities and the identity of the bond buyer (either the NCBs or the ECB). For example, a set-up where earned coupons are remitted to the sovereign issuer and where NCBs purchase only ultra-long peripheral bonds as part of a coordinated intervention with national Treasuries would deliver a certain drop in sovereign yield spreads across member countries. Nevertheless, such a measure would hardly achieve a marked improvement of the Target2 imbalances due to the persisting risk segregation associated with direct NCBs' purchases.

A more ambitious program would necessarily require a centralization of the purchasing policy at the ECB (implying a full risk sharing on bonds held by the Euro-system) and a larger size of the intervention. Such a move would certainly have a greater impact in terms of normalization of Target2 balances as well as of the shape and slope of the sovereign yield curves, favoring the return on a convergent path.

It remains understood that a complete zeroing of sovereign spreads could hardly ignore a review of the institutional objectives of the ECB with a direct targeting in terms of interest rates as the Bank of Japan has decided in 2016 (so-called yield-curve-control)([2]). In the multi-national environment of the euro area, such a target would operatively require country-specific interventions also to take into account the different inflation dynamics of the involved economies.

A similar revision of the ECB target would have a breaking effect on investors' expectations and interest rate dynamics, as happened in 2012 in reaction to the announcement of the anti-spread shield (the OMTs).

It goes without saying that the ECB cannot be charged alone with the whole responsibility of making the Eurozone sustainable again. As it was in the intentions of the founding fathers, the monetary union must be completed by a fiscal union, an ambitious goal but attainable provided that the right choices are made and they are implemented gradually.

In this regard, a practical and effective solution would be a step-by-step reform of the European Stability Mechanism (ESM) with the aim of realizing – in a reasonable timeframe – a complete mutualisation of Eurozone sovereign risks compliant with market rules and with conduct rules designed to minimize moral hazard.

As explained in a recent work [DOSI, MINENNA, ROVENTINI, VIOLI, 2018], this risk mutualisation would take the form of a supranational ESM guarantee with the ECB financial backing and would include, inter alia, the introduction of a non-redenomination clause on government bonds that benefit from the guarantee. At the end of a transitional period in which sovereign yields of the member countries would be boosted to converge on a common trajectory, the Eurozone would finally be ready to become a fiscal union with a genuine federal budget and a federal debt managed by a single finance minister.

Hopefully the above sketched solutions would gradually deflate the overall risks, bring to physiological levels the above identified indicators of the Eurozone risk morphology (i.e. real yield spreads, F-REER and Target2 imbalances) and ensure long-term stability to the euro area.

2. According to euro advocates, one of the strengths of the single currency would have been the elimination of the exchange rate risk between member countries and (with it) of unfair competition from economies whose growth model was based on competitive devaluations [TILFORD, 2014] to pump exports to the detriment of their neighbors.

Facts have shown, however, that the Eurozone architecture – especially in the interpretation given by the European ruling class – is an equally fertile ground for the development of undue divergences in competitiveness between member countries than the former regime of flexible exchange rates.

The main cause is the inappropriate choice of a partial integration, evidenced by the adoption of the same currency without fiscal and labor market integration and with a common monetary policy that – having to mediate between so different realities – is subject to unavoidable operational limits, especially when considering inflation rates at the level of individual member States.

Compared to the pre-Euro phase, there has been a deterioration in the competitiveness of the Southern European countries (Italy, Spain, Ireland, Portugal and Greece) and a simultaneous increase in the competitiveness of the Central-Northern European countries (Germany, the Netherlands, Finland, Austria, Luxembourg, France and Belgium) [ENGLER et. al., 2014]. In particular, the entry into the single currency has led to a huge commercial advantage for Germany, which has benefited from a substantial devaluation of its currency compared to the era of the Deutsche mark. The combination of this factor with a policy of wage restraint and low inflation has allowed the German manufacturing industry to subtract important market shares from its European competitors and to consolidate a leadership position in the arena of global trade.

A good representation of this phenomenon is offered – limited to the pre-crisis period – by BIS data on Real Effective Exchange Rates (REER).

Figure 1 illustrates the REER dynamics for selected Eurozone countries over the period 2000-2008. Apart from a somehow correlated pattern (especially up to 2004), most countries have experienced a deterioration in competitiveness, whereas Germany and its allied countries (Austria, Finland and the Netherlands) have enjoyed a devaluation of their REER along a path already undertaken in the immediately preceding years.

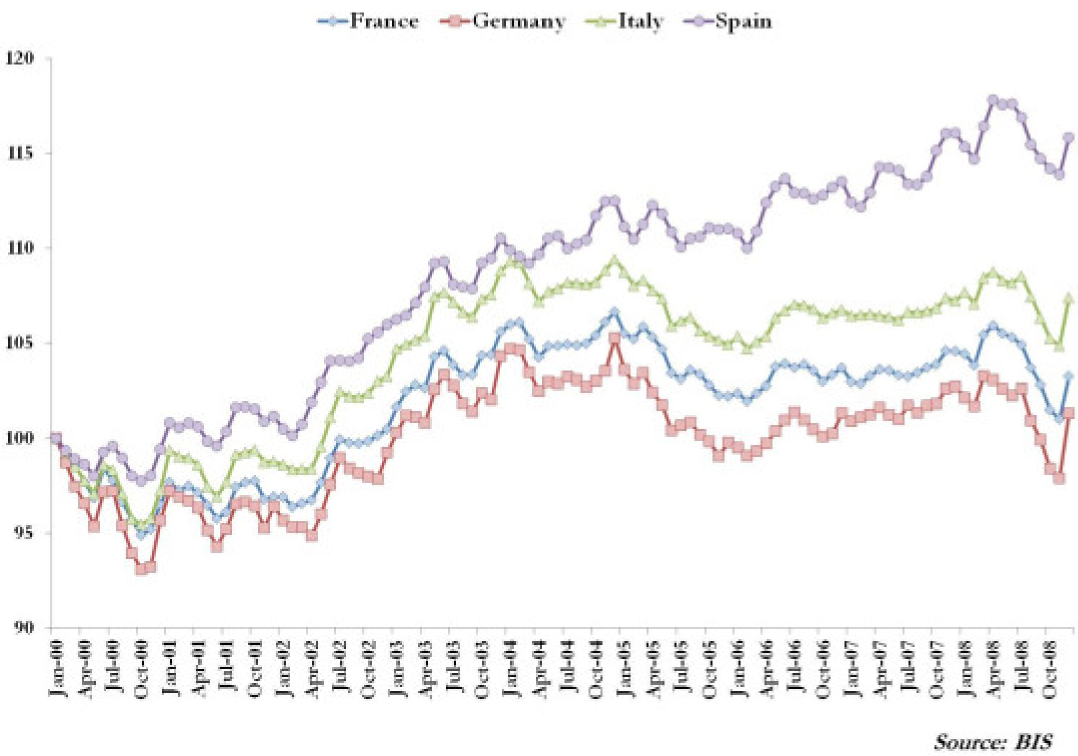


Figure 1 – Real Effective Exchange Rate for selected Eurozone countries: 2000-2008 (January 2000=100)

In turn, larger competitiveness gaps have led to within-union external imbalances, as it results from the divergent dynamics of the current account balance of Southern and Central-Northern European countries.

Figure 2 compares the current account balance (as percentage of GDP) of the two subsets of countries from 2000 to 2017, highlighting the prevalence of the described dynamics up to 2008. Then, some form of convergence has shown up, characterized by a recovery in the current account of peripheral countries that, however, is mainly associated with the collapse of imports in the broader context of the collapse of domestic demand caused by the crisis and the austerity policies required by the Euro-bureaucracy.

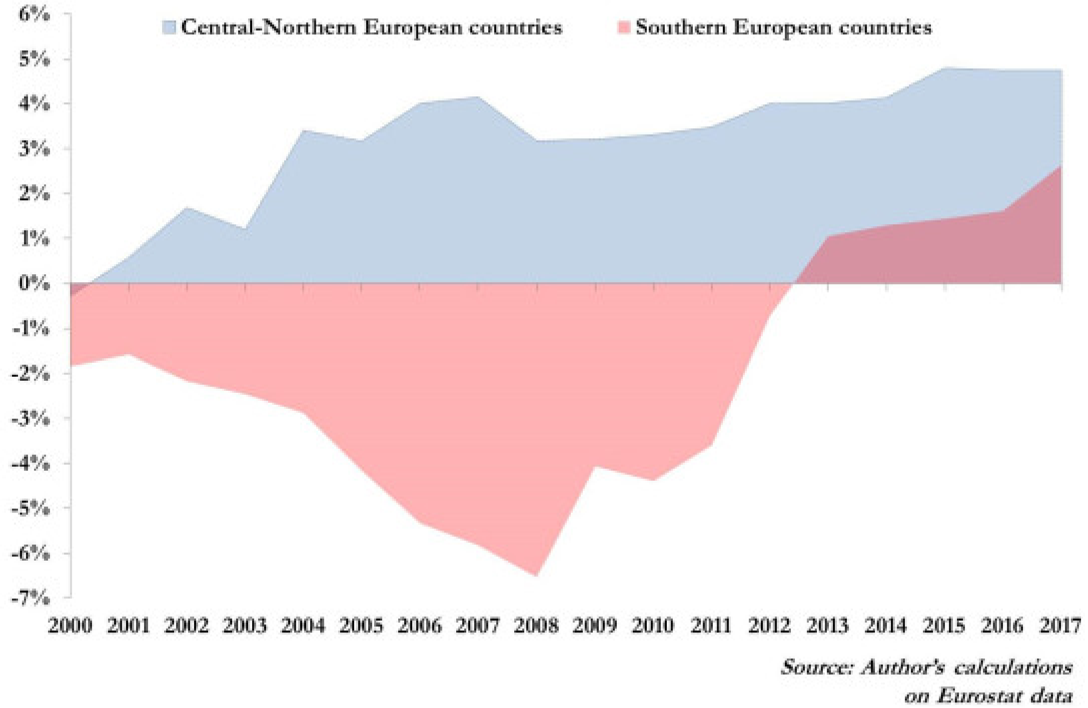


Figure 2 – Current Account Balance (in % of GDP) of Central-Northern and Southern European countries: 2000-2017([3])

Moreover, the contribution of the current-account surplus to the GDP of Central-Northern countries remains still significantly higher than the one seen in Southern countries: 4.7% against 2.6%.

Among Central-Northern countries, Germany deserves a special mention: since end-2000, its current account balance has posted an unprecedented growth that, after a temporary stop in 2009, has resumed to new record highs with values steadily over 7% of the GDP since September 2014. The maximum was reached in mid-2016 when – pushed by the euro devaluation with respect to the US dollar entailed by the ECB Quantitative Easing – it has arrived to 8.76% in GDP terms.

Entry into the euro area allowed German economy to successfully pursue its mercantilist vocation, supported also by the domestic financial system. In fact, in the pre-crisis period, banks and other professional investors resident in Germany have generously granted credit to neighboring countries in order to finance the external demand for 'made-in-Germany' according to a classic vendor financing scheme [MINENNA, 2016].

The subsequent eruption of the crisis has pushed German lenders to close the credit taps to the Eurozone periphery, while it has reserved however other important advantages to the German manufacturing on the financial field, which will be discussed shortly.

Despite the anomaly of the German current account data, the European officialdom has avoided decisive action in this regard [THE ECONOMIST, 2018]. Formally, the European Commission recognizes that excessive and persistent current account surpluses cause an erosion of competitiveness. Since Autumn 2011 it also has set forth specific limits in this regard by including a 3-year backward moving average of the current account balance as percent of GDP over the +6% threshold in the list of macroeconomic imbalances that threaten the well-functioning of the monetary union as a whole([4]). Yet, so far, Germany has received only pale addresses from the Commission, usually in the form of policy recommendations to stimulate domestic demand and imports. For its part, Germany has essentially been turning a deaf ear and its current account is expected to remain the world's largest in 2018 at a value of about $300 billion [CESIFO, 2018], a position that the country has been holding for many years, placing itself in front of large export-driven economies such as China and Japan.

Inflation differentials affect the relative competitiveness of countries also in relation to the funding costs effectively faced by the government, corporates and households and measured by real interest rates. Paraphrasing Boschen [1994], the real interest rate is the price at which current consumption/investment opportunities via savings can be converted into future consumption/investment.

Also from this point of view the euro is a strange animal compared to the other main currency areas. The major central banks around the world have an inflation target which is combined – more or less explicitly – with some kind of commitment on the real economy. In the case of the FED, for example, this combination takes the form of a dual mandate([5]) with a target both in terms of inflation and in terms of maximum employment. And even where the central bank's mandate is stated exclusively in terms of price stability, still generally experts talk about 'flexible inflation targeting' precisely because the monetary authority also pursues employment and output stabilization together with the inflation target([6]).

In addition, even where they are formally independent from the respective Treasury Ministries, central banks can make open market operations to buy government bonds on the secondary market and, thus, finance government spending through more or less direct actions that obviously impact on inflation.

By virtue of this wide-spread set-up, monetary policy significantly affects the inflation rate and, through this, the riskiness of government debt. In other words, inflation represents an endogenous source of risk for government bonds and, therefore, it is appropriate to examine their yields in nominal terms, i.e. including the inflation risk premium.

At the same time, in most currency areas, inflation is also the main source of risk for public debt securities, whose value for bondholders, in fact, suffers a deduction when money loses its purchasing power.

Inflation risk (together with the exchange rate risk) compensates for the substantial absence of outright default risk because the (more or less explicit) backing of the central bank that acts as a lender of last resort guarantees that the government repays its debt at maturity.

The euro area, however, obeys a different scheme. The ECB primarily pursues a price stability objective with an inflation target «below, but close to 2%». Subject to this objective, it can support the general economic policies of the European Union including those aimed at pursuing full employment and a balanced GDP growth.

More noticeably, the inflation target pursued by the ECB does not have a one-to-one correspondence with any national government, as it refers to the Eurozone as a whole and, thus, it is a weighted average value([7]) between the different member countries. In addition, the ECB is statutorily forbidden to monetize the public spending of any member government.

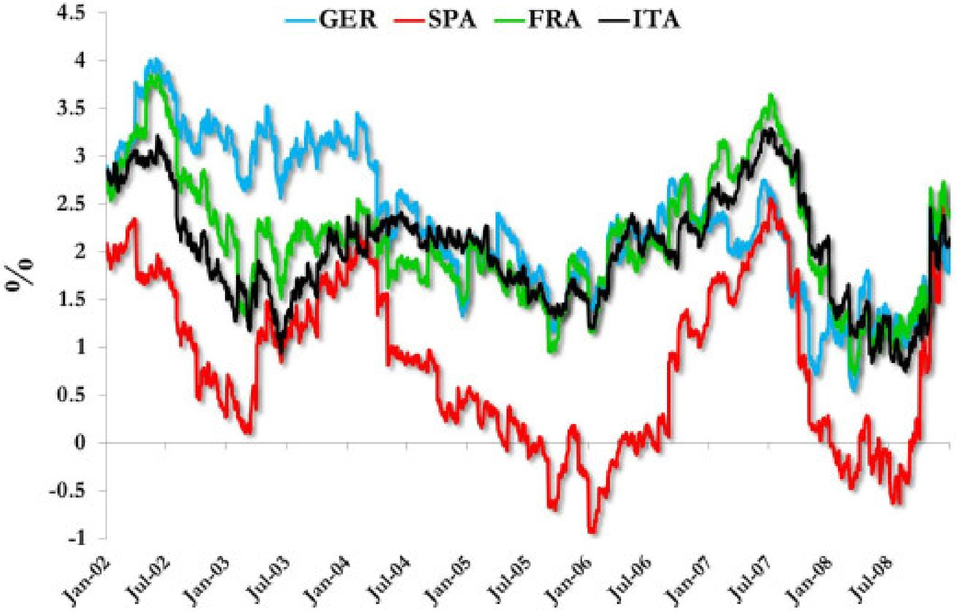
A prominent consequence of this peculiar set-up – which the same founding fathers of the European monetary union considered transitory pending the upgrade to a full fiscal and political union – is that, paradoxically, the effective ECB ability to affect the inflationary dynamics of individual countries is minimal([8]).

In practice these dynamics end up responding mainly to other impulses (e.g. labor cost, energy prices), which in turn are often driven by idiosyncratic factors at the national level. This makes the euro area naturally predisposed to inflation differentials across member countries.

Looking at the riskiness of public debts, inflation can be regarded as an exogenous source of risk for bonds issued by individual governments within the Eurozone. On the other hand, these bonds – not being guaranteed by the European Central Bank – are endogenously exposed to the insolvency risk of the respective national Treasury([9])([10]).

For these reasons, the comparison between the sovereign yields of the member countries in real terms (i.e. after adjusting for inflation differentials) offers a more correct assessment of their different insolvency risk.

Looking at real sovereign yields over the pre-crisis period – when the odds of a sovereign default were essentially zero – it can be observed that, in a certain sense, even then the Eurozone was strongly fragmented (Figure 3).



Source: Bloomberg

Figure 3 – Long-term real interest rates for selected Eurozone countries: January 2002 – December 2008

On the one hand, the moderate price growth in Germany has supported relatively high real yields and a reduction in the propensity to invest (without much critical consequences, given the export-driven orientation of the Teutonic economy). On the other hand, several peripheral economies (such as Spain, Ireland, Greece and Italy) have been over-heated by the low real interest rates resulting from a high inflation environment. Spain, for instance, has even experienced negative real interest rates that have contributed to boost the investment boom and the real estate bubble [ODENDAHL, 2014].

Precisely as predicted in 1986 by Alan Walters, the British economist who had advised Margaret Thatcher not to join the Exchange Rate Mechanism (the preparatory phase for the launch of the single European currency), highlighting the inherent instability of a fixed exchange rate system. In the absence of rebalancing mechanisms replacing bilateral exchange rate adjustments, such a system is vulnerable to large gaps between participating countries and to dynamics that amplify economic cycles at the national level.

The advent of the crisis has favored the progressive reversal of these trends, as it emerges at a glance from Figure 4 which shows the trend of 10-year real interest rates of selected Eurozone governments over the last decade.

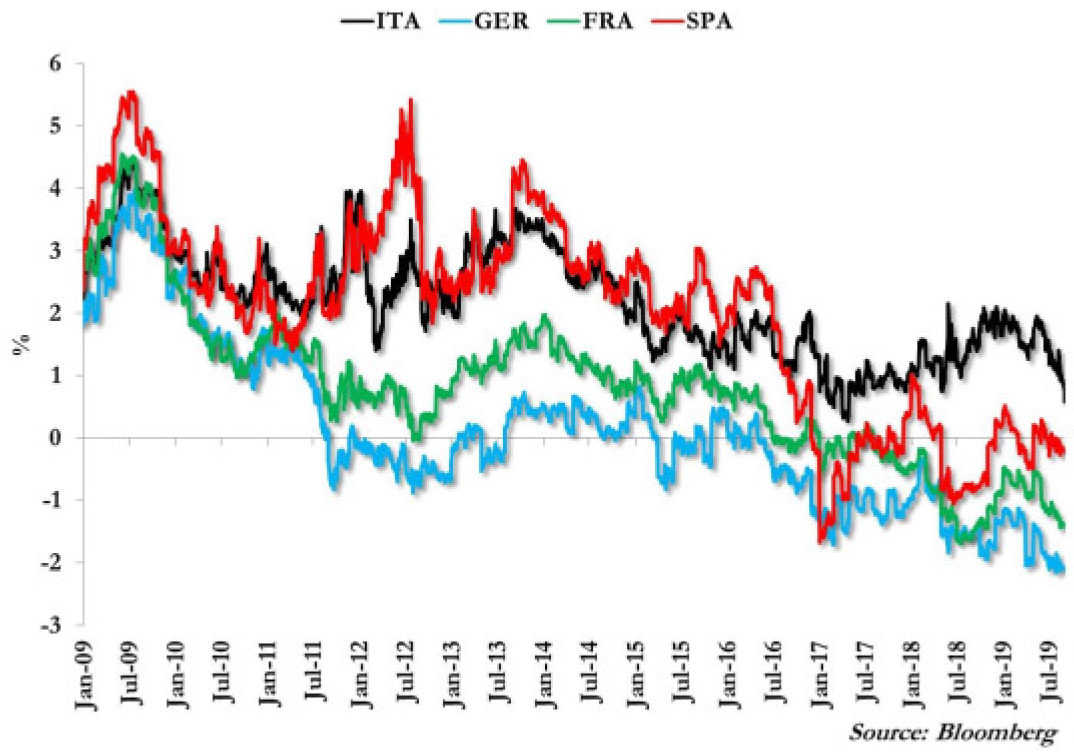


Figure 4 – Long-term real interest rates for selected Eurozone countries: January 2009 – August 2019

Germany has got increasingly descending real interest rates, which – after having been hovering around the zero threshold for a while – are now steadily negative; similar pattern for France. Italy, Spain and other peripheral countries, instead, have seen rising sovereign yields in real terms as result of two driving forces: a widening credit risk premium – which has boosted their yield curve in nominal terms – and the shift to a deflationary environment.

In recent years, however, there has been a progressive decoupling between the two major peripheral economies – Italy and Spain – mainly due to the different impact of the European rules and supervision and to the different attitude shown by the political leaderships of the two countries towards the Europe (more confrontational the Italian one and more conciliatory the Spanish one). In particular, for Italy the markets have priced a growing sovereign risk because of the climate of political and fiscal uncertainty, also due to the fear of losses from redenomination of the public debt in a new national currency. The perception of these risk factors began to decline only in the summer of 2019 in the face of the reassurances coming from the country's changed political environment (as well as from the renewed ECB's accommodative stance).

It is well-established that the crisis has brought to the attention of the financial markets the importance of credit risk not only for the private sector but also for the public sector, starting with the first Greek debt crisis of Spring 2010. Shortly thereafter, Germany and France have agreed that the best way to reduce the risk of contagion was to confine risks in the periphery, avoiding solutions based on risk sharing.

The consequences of this policy have been the dissolution of the single Eurozone interest rate curve, the appearance of sovereign yield spreads and the flight-to-quality, i.e. the flight of investors from peripheral countries towards the German Bund, which has become the safe asset of the entire Euro bloc. At the same time, the crisis of confidence has gradually destroyed the inter-bank market of the periphery through a number of well-known phenomena including collateral discrimination and spread-based intermediation, forcing the ECB to intervene as liquidity supplier of monetary and financial institutions located in the Southern euro area [MINENNA, 2016].

Through the inter-bank market the large and persisting divergence in sovereigns' funding costs has propagated to the banking sector: given the broad financialisation of modern economies and the high reliance of European businesses and households on banking funding, problems have promptly reversed also on the real economy leading to a prolonged credit crunch with profound recessionary implications. In turn, as in a classical vicious circle, the collapse in economic growth has translated into higher debt-to-GDP ratios making it harder and harder for peripheral governments to remain compliant with a budgetary discipline that – in accordance with the continental predicament for fiscal virtue – was being made even more binding (with amendments to the Stability and Growth Pact and with the Fiscal Compact) despite the foreseeable pro-cyclical effects.

All these phenomena have impacted the competitiveness of the various members of the euro area, making the real effective exchange rate an incomplete indicator of their different competitive strength (Figure 5).

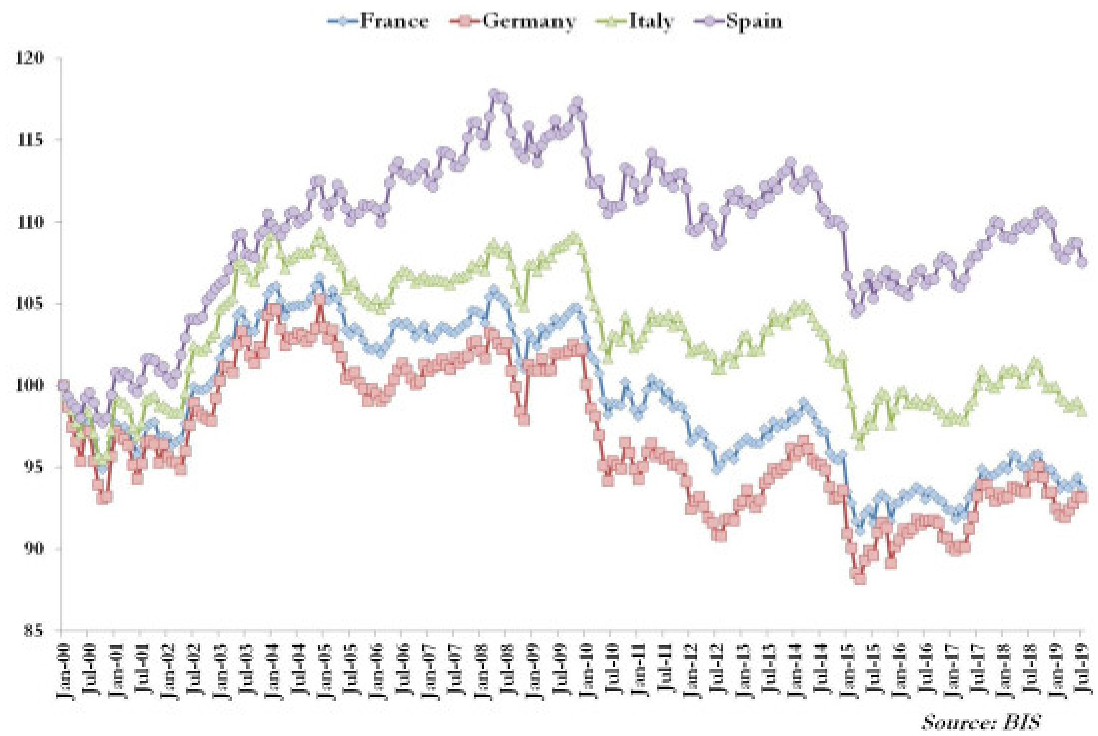


Figure 5 – Real Effective Exchange Rate for selected Eurozone countries: 2000-July 2019 (January 2000=100)

In order to take into account the joint effect of the above described disaggregating factors (inflation differentials and sovereign yield spreads) on the relative competitiveness of the real economies of Eurozone members, it is useful to adjust the real effective exchange rate for the part of the sovereign yield of any given country exceeding a threshold that is common to all countries within the monetary union (for instance, the weighted average of the sovereign yields of all member governments). The indicator obtained in this way can be baptized Financial Real Effective Exchange Rate (in brief, F-REER).

Figure 6 reports the evolution of the Financial Real Effective Exchange Rate for selected Eurozone countries, highlighting the progressive consolidation of much larger competitive gaps than those displayed by the standard REER indicator. In mid-2019 the gap between Spain and Germany is 36% in favor of the second, that between Italy and Germany of around 30% (again in favor of Germany).

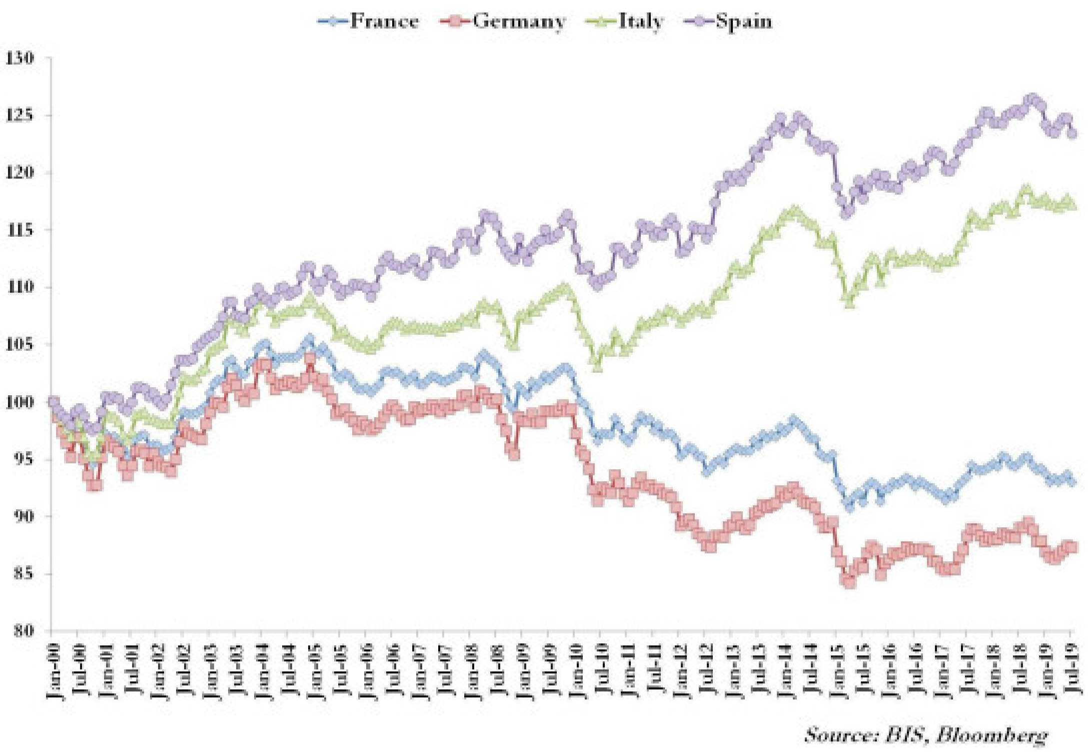
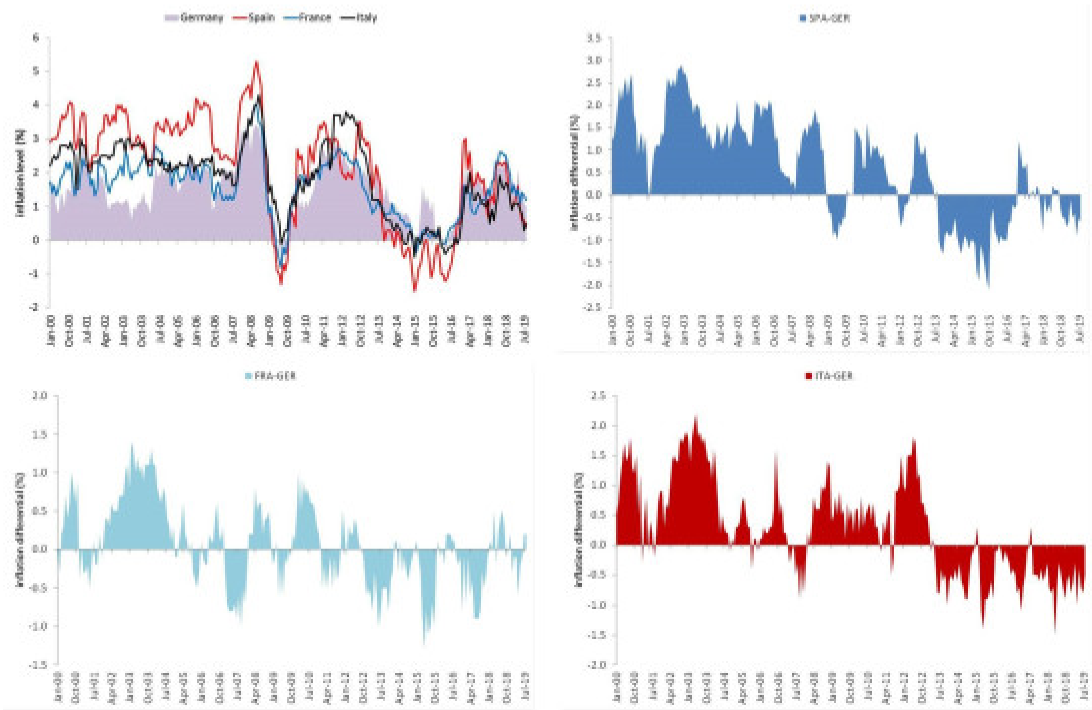


Figure 6 – Financial REER for selected Eurozone countries: 2000-July 2019 (January 2000=100)

Until the eruption of the crisis, inflation differentials have been the main cause of the growing competitive gaps between member countries. In the following period, however, the contribution of the sovereign spreads became predominant, in line with the market assessment of the credit risk but also – starting from mid-2013 – because of the deflationary impact that the crisis and the fiscal containment policies have had on the peripheral economies. Consequently, inflation differentials between Central-Northern and Southern European countries have progressively shrunk and, then, even changed sign. As shown by Figure 7, this is particularly evident when considering inflation differentials with respect to Germany.



Source: Eurostat

Figure 7 – Inflation levels for selected Eurozone countries and inflation differentials w.r.t. Germany: 2000-August 2019

In the new set-up that took shape since 2014 Germany exhibits among the highest inflation values in the Eurozone, also due to the abandonment of the wage containment policy. Meanwhile, the Bund has retained its status of safe haven and, therefore, yields on German sovereign bonds have remained very low (when not negative) also thanks to the effect of the Euro-system's purchases under the Public Sector Purchase Programme (PSPP), where the capital key criterion guarantees to Germany the highest share of the ECB's monetary stimulus [MINENNA, 2019a].

The combination of low nominal interest rates and steady but controlled inflation ensures Germany the opportunity to borrow at highly negative real interest rates. Conversely, countries in the periphery of the euro area have begun to face higher interest rates in real terms, which have contributed to hinder government spending and economic recovery.

This is the new face of competitiveness gaps in the post-crisis era and suggests that the real sovereign yield spread is a very good indicator to measure these gaps.

A similar measurement is of particular interest for Italy with respect to Germany([11]). The latter is considered the safest issuer of the euro area, whereas the former is often referred to as the sick of Europe, because of the huge public debt-to-GDP ratio. Nevertheless, Italy is also the only peripheral country which has never received customized financial assistance packages from the European Official Sector; rather it has joined as third contributor after Germany and France to all aid packages granted to the rest of the periphery. And, precisely because of the huge public debt, Italy has also been required to make domestic reforms (encompassing the job market, the retirement expenditure, the budget for public investments, etc.) which have heavily hit its economic and social landscape.

Figure 8 reports the real yield spread between 10-year Italian BTP and 10 year German Bund from January 2011 to August 2019.

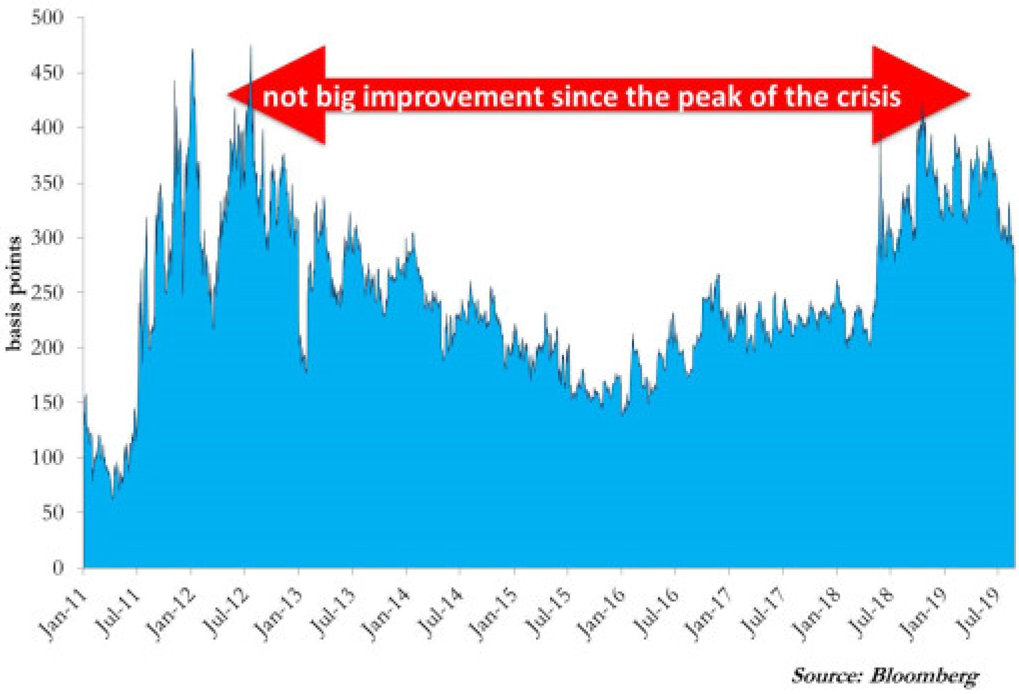


Figure 8 – Yield spread between 10-year BTP and 10-year Bund adjusted for the inflation differential between Italy and Germany: 2011-August 2019

Impressively, it can be observed that recent levels of the real BTP-Bund spread are very close to those experienced at the peak of the crisis (late 2011-early 2012). At that time, this indicator had an average value of 350 basis points, more or less the same as the one recorded, on average, over the last 15 months of the observation period.

Apart from a bit of volatility, Italy's real sovereign spread has not significantly improved over the last seven years: it never went below the 150 basis points floor since mid-2011 and has been almost always above the 200 basis points threshold since September 2016. To be relevant over time, as better explained in Section 4, has been the contribution of the key-factors to the sovereign risk.

Information conveyed by this indicator returns a snapshot of Italy's risk profile which is less oscillating than the one provided by the corresponding nominal indicator (see Figure 9), revealing that – despite the crisis management toolkit deployed at the European level – Italy's risk profile has remained critical with little improvement since the peak of the Eurozone sovereign debt crisis.

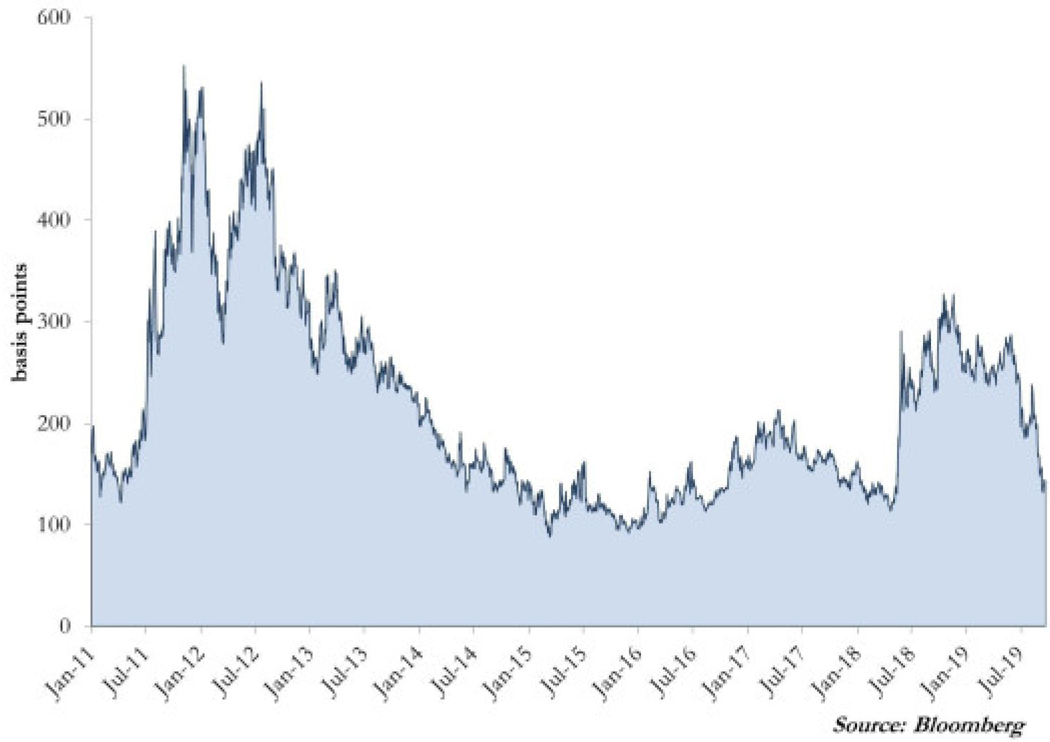


Figure 9 – Nominal yield spread between 10-year BTP and 10-year Bund: 2011-August 2019

Nor the situation is significantly better elsewhere, even if elsewhere the yield spread with respect to the German benchmark is much more contained than in Italy. This is due to the fact that until recently the spread on Italian government bonds has been incorporating a significant component due to the 'sovereignism risk' (and related fear of losses from debt redenomination in a new lira) which instead has been absent for some time in the other peripheral countries of the Eurozone.

In this regard, it is useful once again a comparison with Spain, a country that in recent years has gradually reduced the excess-risk perceived by the markets compared to the core countries, also following its conciliatory attitude towards Europe. It remains understood that even in Spain the spread compared to the Bund in nominal terms shows greater inertia than the one in real terms, as shown in Figure 10.

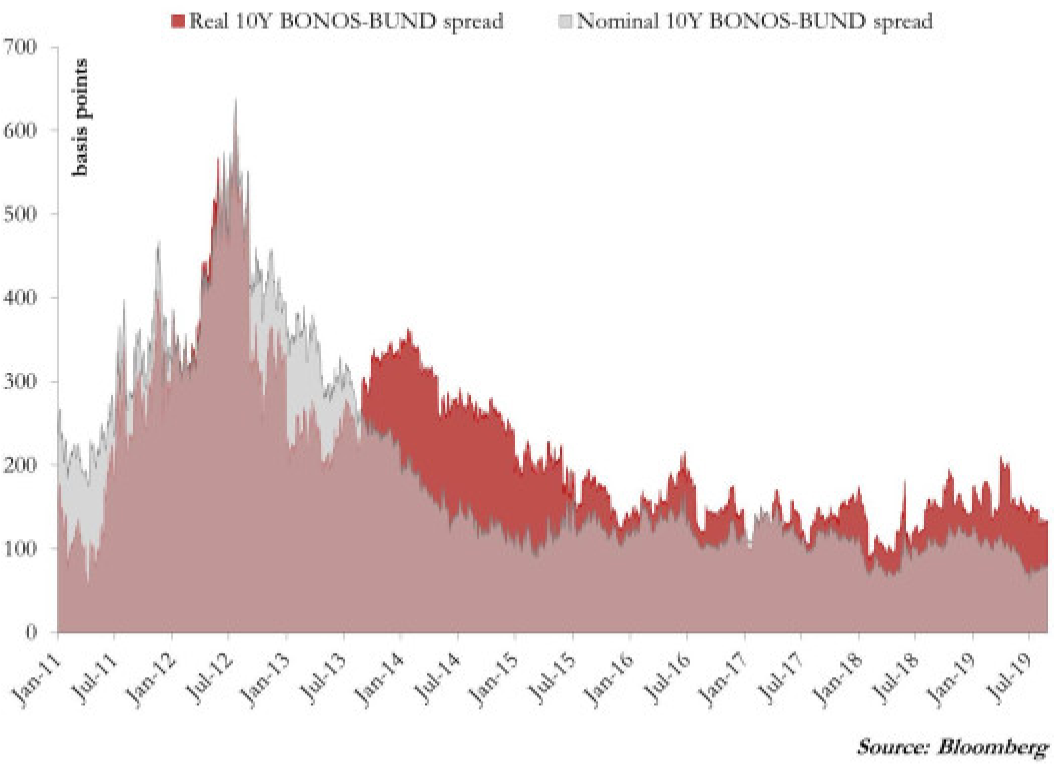


Figure 10 – Real and Nominal yield spread between 10-year Bonos and 10-year Bund: 2011-August 2019

The relevance of the sovereignism/redenomination risk for the assessment of the markets appears, however, only partially proportionate to the total debt level of a country. In fact, in terms of total leverage – meant as the ratio between aggregate debt (public and private) and GDP – Italy and Spain have been at very similar levels for several years.

Moreover, even in several core countries (e.g. France, Luxembourg and the Netherlands) the total debt (public plus private) significantly exceeds the Italian one in GDP terms (see Figure 11).

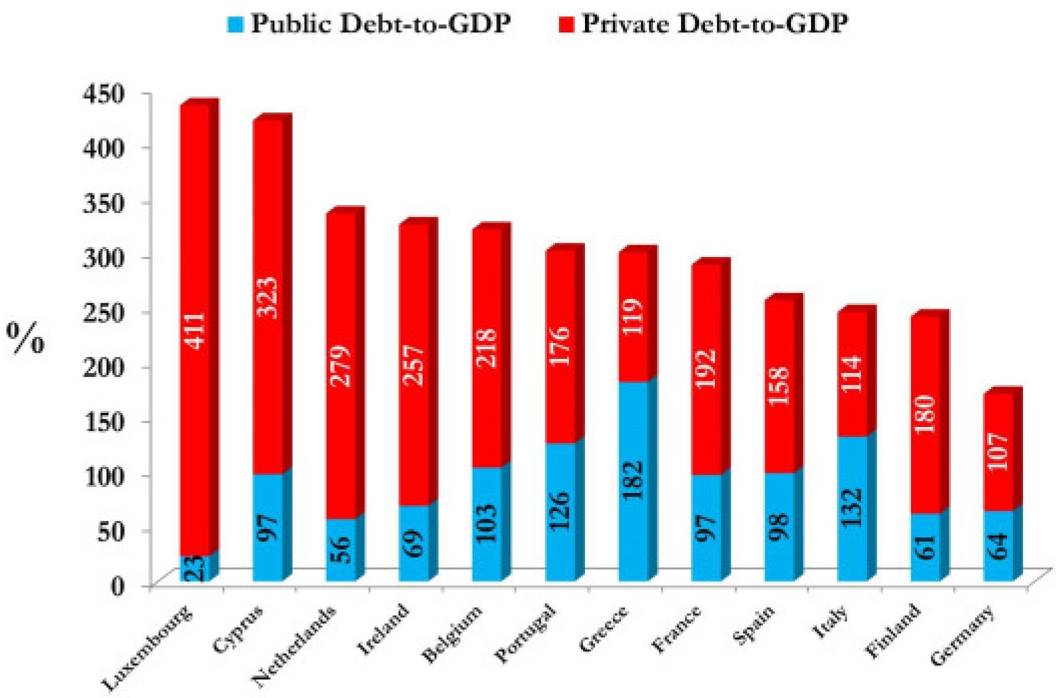


Figure 11 – Total debt (public and private) to GDP for selected Eurozone countries: 2017

Actually, as soon as one widens the eye to other key indicators, such as the NCBs' imbalances on the Target2 system, it is straightforward to see how no country (not even Germany) is immune. Still, we are all in the same boat.

The ECB Quantitative Easing has temporarily reduced the distances between member countries; but inflation, growth and unemployment still display relevant differences across national economies, and the lack of a fiscal, political and (authentic) economic union remains the main fragility of the Eurozone. In turn, persisting divergence in economic fundamentals becomes more and more a disaggregating factor that needs to be addressed by the ongoing reform process of the euro area not disregarding the resort to out-of-the blue solutions.

3. The second 'backbone' of the Eurozone risk morphology is the risk segregation paradigm adopted by the private sector and by the EU institutions since the eruption of the crisis.

Private investors resident in core countries – Germany, France, Luxembourg and the Netherlands – have moved first in this direction. After having contributed to spread the crisis within the borders of the euro area because of their large exposures to US-made structured finance products, banks located in the center of the Eurozone have suddenly cut their credit supply to indebted peripheral economies making them hard to sustain their current account deficits (see previous section).

Then it was the time of the official institutions. At the Deauville meeting of October 2010, the leaders of the first two Eurozone economies confirmed the strengthening of the budgetary surveillance on national governments and the principle of Private Sector Involvement, which subordinates any European financial assistance to the participation of private creditors to losses. The losses on the debt issued by bankrupted banks and corporates as well as those on government bonds in case of sovereign default. The latter despite the prudential regulation continued to consider risk-free all government bonds held by banks, insurance and asset management companies.

The official argument for risk segregation is that each country must be virtuous and rely only on itself, leaving no wiggle room to supranational fiscal transfers or concrete stabilizing facilities in favor of a member hit by asymmetric shocks. It is the well-known argument against a transfer union, which appears more or less explicitly in the positions expressed by economists coming in prevalence from the core countries. This is the case of the manifesto signed by 154 German economists and published by the FAZ in May 2018([12]); but even more moderate and reformist economists are still hesitant to accept concrete steps towards a fiscal policy framework that includes a federal budget and automatic transfers to member countries [BAGLIONI et. al, 2018]

The true version of the story has to be researched in the unwillingness of core countries to undertake authentic risk sharing solutions. In order to preserve themselves from the turmoil in the periphery, these countries have used their influential position within the key Eurozone institutions to strengthen the fiscal discipline in the currency area, pretend harsh internal reforms from Southern countries and let their banks getting rid of the large exposures towards the periphery that had been accumulated in the run-up of the crisis.

A look at BIS statistics on Franco-German banks claims against peripheral economies (Italy, Spain, Portugal, Greece and Ireland) provides for clear-cut evidence of these dynamics: from 2008 to 2017 these banks have scaled down their exposures by almost two-thirds (see Figure 12).

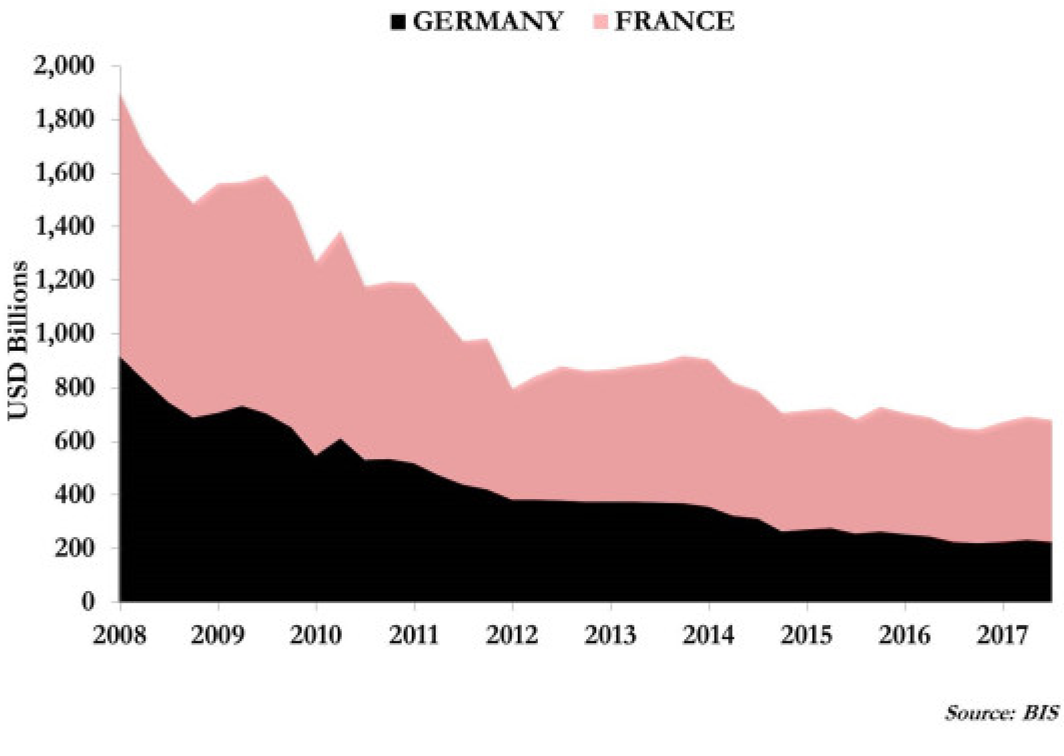


Figure 12 – Consolidated exposure of Franco-German banks to counterparties resident in the Eurozone periphery([13])

It is commonly agreed [ALCIDI, GROS, 2013] that the flight of private investors was offset by public capital inflows to the benefit of peripheral countries in the form of official loans and unconventional ECB interventions. This set of measures is usually referred to as risk sharing at the level of the European public sector (apart from the IMF involvement) [MILANO, 2017].

A less emphasized point is that, by means of these risk sharing episodes, the Eurozone leadership has favored the deleveraging of peripheral exposures by lenders from the core countries. German banks, in particular, had intermediated the excess saving arising from the large current account surplus by redirecting those funds to countries such as Ireland and Spain where they were used to boost real estate and investment bubbles [SCHELKLE, 2017].

When the crisis arrived, governments in Germany and France had to face a hard choice to save their banks from the danger of huge losses on their claims towards the periphery: either resorting to funds from their public budgets (at the expense of their taxpayers) or agreeing on financial assistance programs to be granted at the European level to the individual peripheral country that, time-by-time, had arrived close to sovereign default or banks' collapse [THOMPSON, 2013].

Obviously, they selected option n. 2 by which risky exposures to the periphery were transferred to the whole public sector of the monetary union, and, thus, to all Eurozone governments, including those whose private financial sector had negligible exposures to the beneficiary country up to then.

This 'twin bailout' policy began with the first Greek bailout in 2010 [FUHRMANS, MOFFETT, 2010]. In February of that year the consolidated exposure of French and German credit institutions to Greece was of 120 billion dollars, over ten times that of their Italian and Spanish colleagues (see Figure 13).

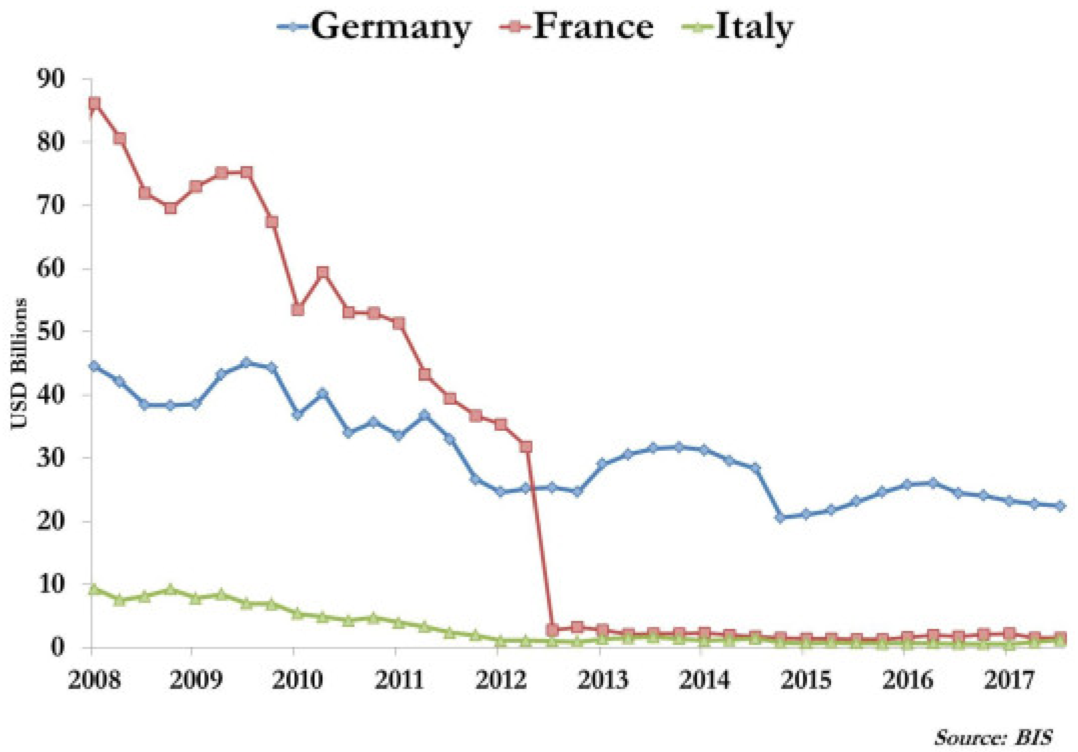


Figure 13 – Consolidated exposure of German, French and Italian banks to counterparties resident in Greece

In May 2010 the Euro-group gave the green light to 80 billion euros([14]) of financial aid to the Hellenic Republic, which took the form of bilateral loans by Eurozone governments (Greek Loan Facility): this way, the Greek risk was redistributed also on countries that were essentially unexposed such as Italy and Spain. The disbursement for the French government (€11.38 billion) has been just slightly higher than that of the Italian government (€10 billion). And, thanks to this bail out by the official sector, French and – more smoothly – German financial institutions had the time to get rid of their 'toxic' Greek claims: as shown in Figure 14, by March 2012 they had almost completely dismantled their sovereign Greek exposures.

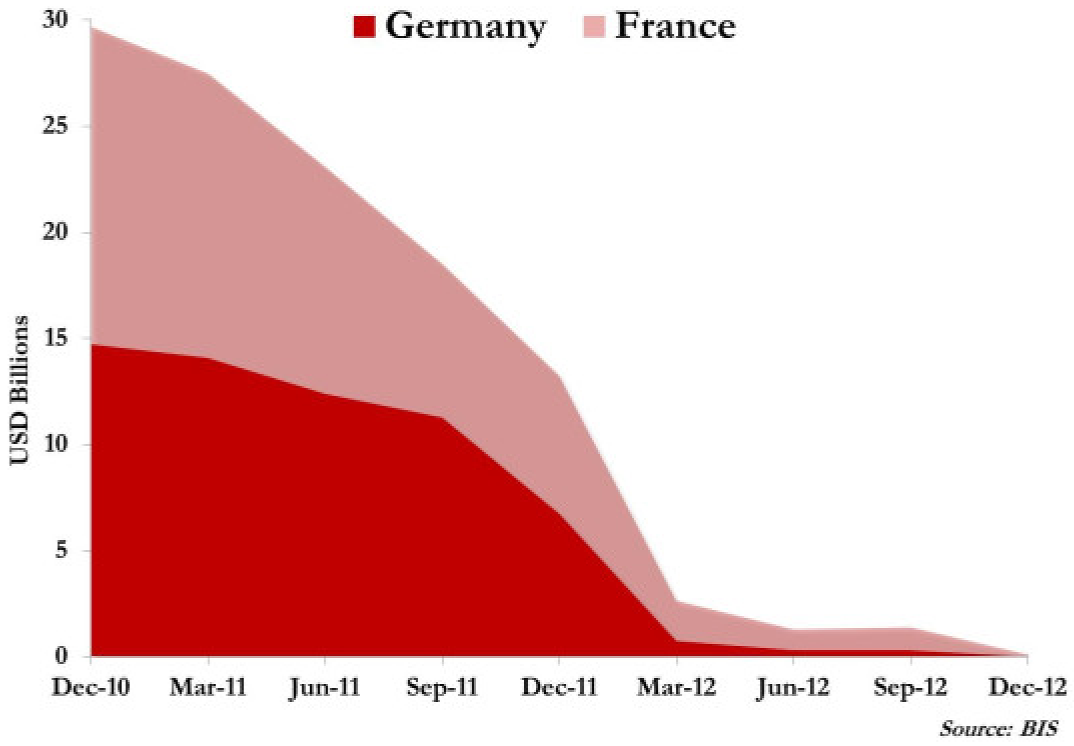


Figure 14 – Consolidated exposure of Franco-German banks to counterparties resident in Greece: December 2010-December 2012

After Greece, it came the Irish rescue. The Celtic country had stopped its impressive performance in 2008 following the burst of a massive property bubble inflated by reckless credit. When the collapse in property prices turned most of this easy credit into bad loans, the Irish government had to intervene. Nevertheless, in September 2010 Irish banks were on the brink of the bankruptcy with 26 billion euros (one-fifth of the country's national income) coming due [BOONE, JOHNSON, 2010]. German and French credit institutions had an aggregate exposure of over 200 billion dollars, whereas claims of Spanish and Italian banks to Irish counterparties amounted to less than 30 billion dollars (see Figure 15).

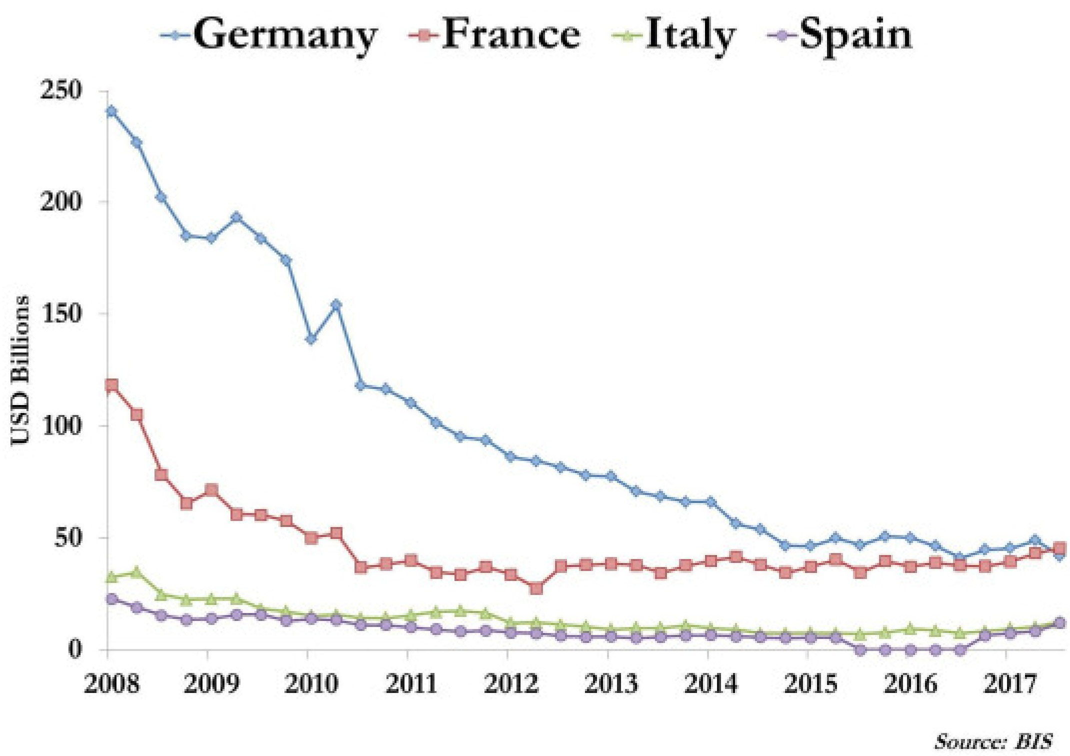


Figure 15 – Consolidated exposure of German, French, Italian and Spanish banks to counterparties resident in Ireland

Instead of letting private creditors bear some of the losses associated with their unwary lending policies, the Official Sector granted Ireland an 85 billion euro aid package: of these, 45 billion were disbursed by the two bailout funds EFSF([15]) and EFSM([16]) under the financial backing of the European countries. In this way banks of the core countries were safeguarded and risks were transferred to the taxpayers of all member countries. This time it was Germany to reduce its private exposure more with a deleveraging of 58.7 billion dollars between the end of 2010 and the end of 2011, while the indirect involvement of the German government (through the two bailout funds) amounted to less than 15 billion euros.

In mid-2011, it was the turn of Portugal that – to overcome a sovereign debt crisis, a large part in the hands of foreign investors – applied for and received a 78 billion euro financial rescue package, two-thirds of which came again from European governments through funding from the two bailout funds, EFSF and EFSM. At the time, French and German lenders had a total exposure to the Lusitanian country of about 70 billion dollars, second only to that of Spain (first European partner of Portugal); while elsewhere (e.g. Italy), the exposure of the financial system to Portuguese counterparties was laughable (see Figure 16). Aid from the Official Sector allowed Portugal to emerge from the crisis and Franco-German banks had the time to halve their exposure abundantly.

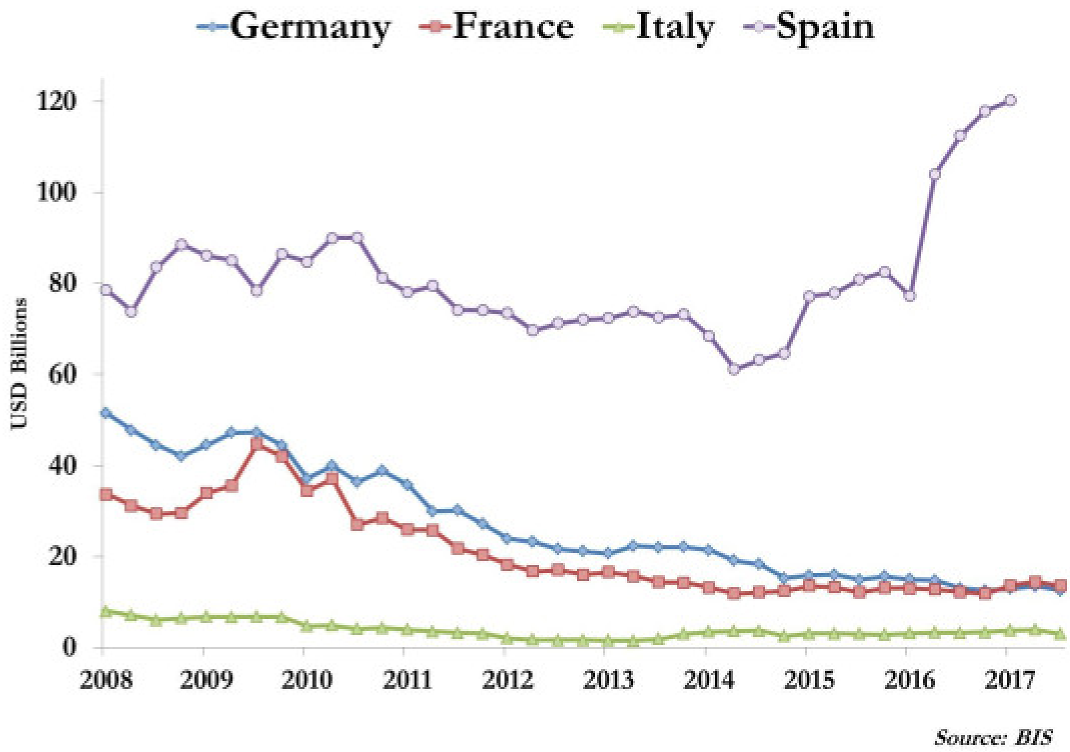


Figure 16 – Consolidated exposure of German, French, Italian and Spanish banks to counterparties resident in Portugal

Same story with the rescue of the Spanish banking sector in 2012. A bankruptcy of Spanish lenders would have caused large impairments to their Germany and French peers, exposed for 140 and 128 billion dollars, respectively (see Figure 17). Not surprisingly Moody's had cut the rating outlook of six German institutions from stable to negative [GORE, ROY, 2012]. In such scenario the Euro-bureaucracy gave the green light to the transfer of the assets of distressed Spanish banks to a government-owned bad bank (SAREB) whose intervention capability, in turn, was guaranteed by the support of the European Stability Mechanism (ESM), established in those months with the contribution of all countries of the euro area. In December 2012, the ESM provided 41 billion euros for the indirect recapitalization of Spanish banks: funds that, in part, served to repay to the German counterparties the loans generously granted before the crisis. Meanwhile countries with a marginal exposure to the Spanish financial sector were called to play their part: 14.4 billion euros the bill for Italy.

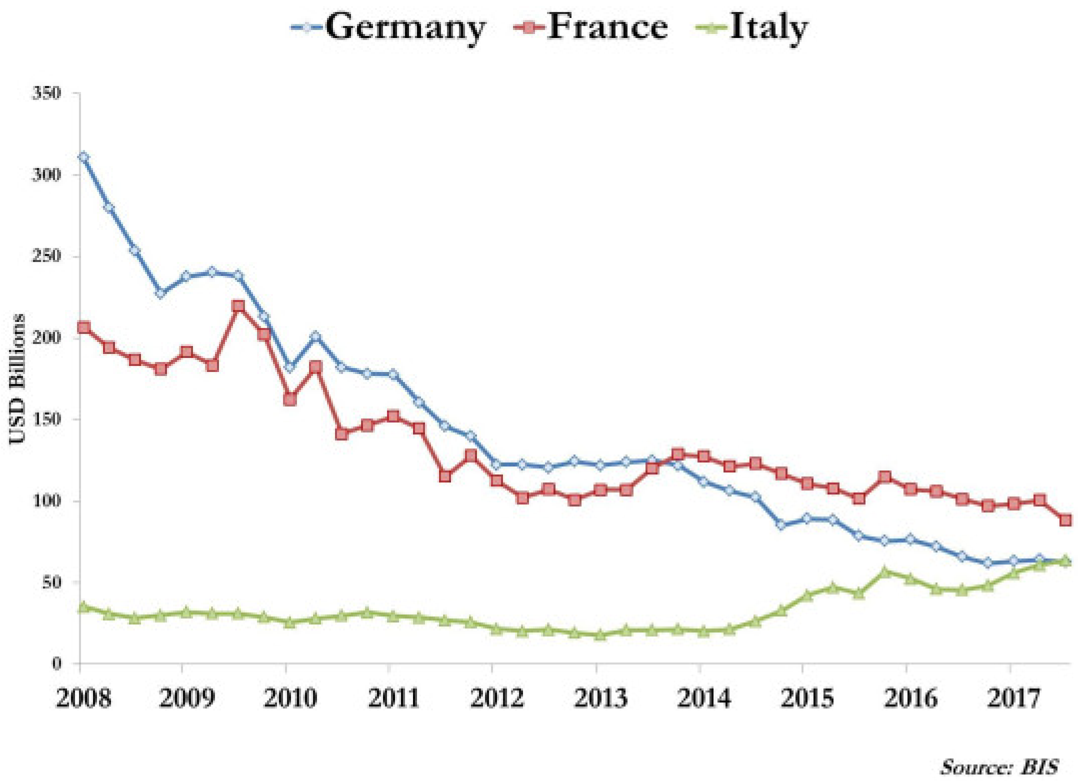


Figure 17 – Consolidated exposure of German, French and Italian banks to counterparties resident in Spain

Apart from these episodes, the risk segregation paradigm has recurrently inspired the measures adopted by the Euro-bureaucracy after the emergency years of the crisis. The most striking example has been the second Greek bailout: in March 2012 the Private Sector Involvement has been designed to cut by 74% the Greek public debt not held by the EU and the IMF.

Looking at the whole Eurozone the list of measures that – calling for risk reduction – took care of confining risks within the periphery is long. With regard to the financial sector, it includes the shift to a regulatory framework aimed at legalizing the PSI principle. In August 2013 – after that banks of core countries had been secured also through more or less direct interventions of their respective governments([17]) – it has entered into force the Communication of the EU Commission on the banking sector([18]) that has introduced burden sharing provisions to address banking crises. In essence, in case of bank collapse, any involvement of public funds is conditioned upon a prior reduction in the value of receivables held by shareholders and holders of subordinated debt.

Starting from 2016, the discipline governing this matter has become even more rigid: the Bank Recovery and Resolution Directive([19]) has established the bail in, which extends the plethora of private investors called to bear the losses from bankruptcy prior any public sector involvement also to holders of senior bonds and large deposits. In both cases, a main side effect has been the request of a larger risk premium by private investors to fund banks, especially if located in the periphery. At the same time stress tests and asset quality reviews conducted by the European banking supervision have exerted an enduring pressing for fast disposals of non-performing assets, forcing many credit institutions of the Eurozone periphery to fire sale troubled assets to vulture funds and suffer large impairments. Last but not least, there has been the systematic postponement of the European Deposit Insurance Scheme (EDIS), despite it had to be the third pillar of the Banking Union. In such an adverse context it becomes understandable that banks located in the peripheral countries have long maintained the credit to the real economy at subdued level by acting on both the cost and the availability of funds.

Risk segregation has been applied also to the public sector, by means of an extended list of provisions and practices that, ultimately, have spoiled the uniqueness of the yield curve for Eurozone members and fueled the nationalization of the public debts of peripheral governments with critical implications also for the balance sheets of both private banks and National Central Banks.

The argument is delicate and deserves a flash-back to the origins of the euro. The birth of the single currency had spread among market participants the belief in the safe status of all central government debt [ARGHYROU, KONTONIKAS, 2010; ORPHANIDES, 2018]. Such a belief was the result of the equal treatment of all Eurozone governments' debt securities within the ECB collateral policy and also of the prudential provisions for banks and asset management companies, that assign zero risk to sovereign exposures. But in the mid-2000's the ECB has introduced a minimum credit-rating threshold to collateral eligibility, which – after the Deauville meeting – has led the monetary authority and the interbank market to apply different collateral haircuts to the bonds issued by different member States. This collateral discrimination and the deleveraging by banks resident in Central-Northern European countries have reinforced each other, contributing to the dissolution of the single yield curve of the monetary union and to the above mentioned nationalization of the public debts of Southern European countries.

Faced with the discrimination of bonds issued by their domestic governments, credit institutions within the periphery have been forced to 'patriotically' take over these sovereign exposures. Figure 18 offers a graphical evidence of this phenomenon, reporting the evolution of the share of public debt held by resident and non-resident investors for Italy, Portugal, Spain and Greece. The share held by non-resident investors has steadily increased up to 2007-2009, then it started declining for several years during the Eurozone sovereign debt crisis; eventually, since the beginning of the PSPP in March 2015, it has essentially stabilized on levels that, however, remain lower than those pre-crisis.

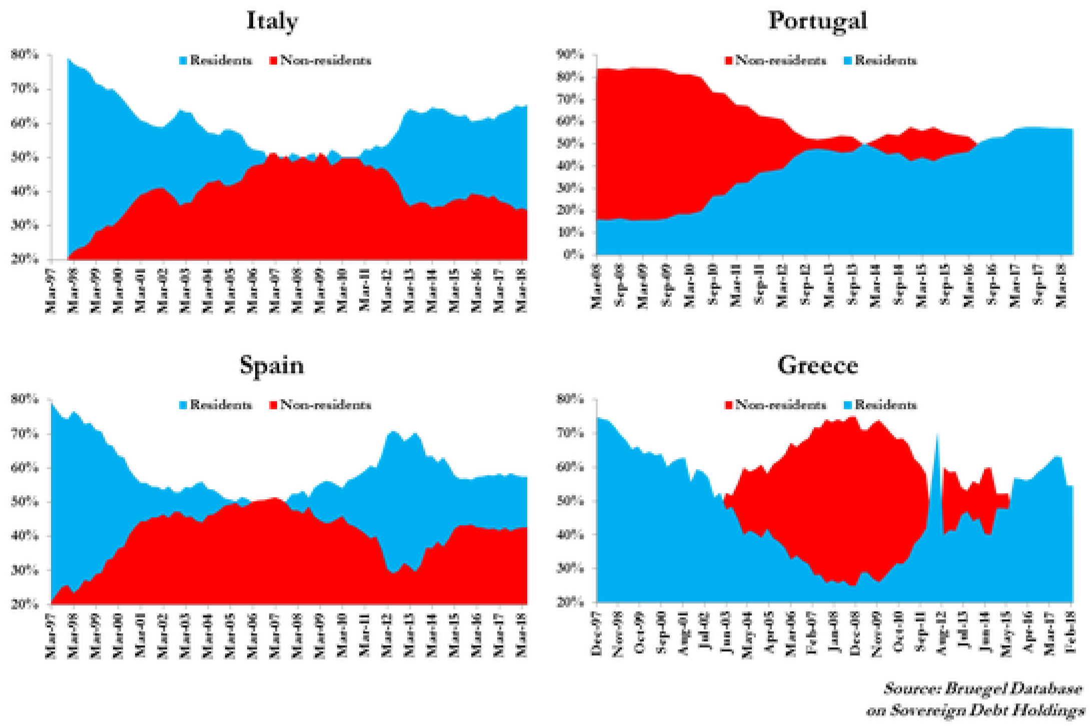


Figure 18 – Breakdown of public debt of peripheral countries held by resident and non-resident investors

The nationalization process took place in two main stages that essentially overlap with the most famous ECB's extraordinary interventions of the last decade: the Long-Term Refinancing Operations (LTROs) and the PSPP. Consistently, the nature of the resident investors (i.e., private banks and National Central Banks, respectively) that have played a leading role in each stage is strictly related to the specific features of the ECB intervention.

Figure 19 provides an aggregate picture of the public debt domestication in the periphery and shows graphically that it has been inversely correlated to the deleveraging by Franco-German banks.

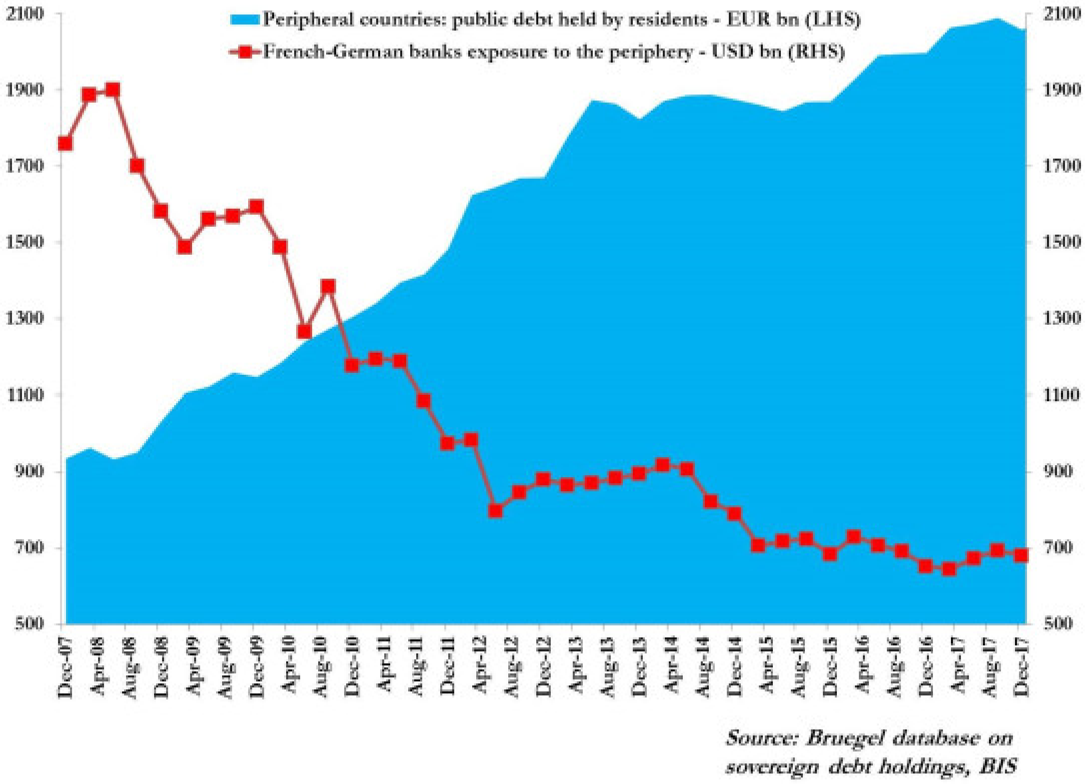


Figure 19 – Public debt nationalization in the Eurozone periphery and deleveraging by French-German banks

With the two exceptional LTROs of December 2011 and February 2012, the ECB has injected 1 trillion euros in the banks of the monetary union in the form of central bank reserves. Most of this liquidity was taken up by peripheral credit institutions to cope with the sharp contraction of inter-bank funds. In particular, banks located in Italy and Spain had an aggregate uptake of approximately the 68% of the total aggregate uptake [DAETZ et al., 2016]. A large part of this central bank money was redirected to the purchase of domestic government securities that Franco-German banks were selling off; the remaining part was used to settle commercial liabilities owed to those same banks and to face the collapse of domestic deposits, which were departing for Northern Eurozone destinations [MINENNA, 2018a].

These dynamics have been particularly manifest for Italy: as shown in Figure 20, Italian lenders have taken up about 280 billion euros of LTROs and have used most of this amount to support the market value of the debt issued by their central government. A significant part of the remaining funds made available by the ECB served to repay commercial liabilities to banks located in Central-Northern European countries as these banks were scaling down also their exposures to Italian businesses and households.

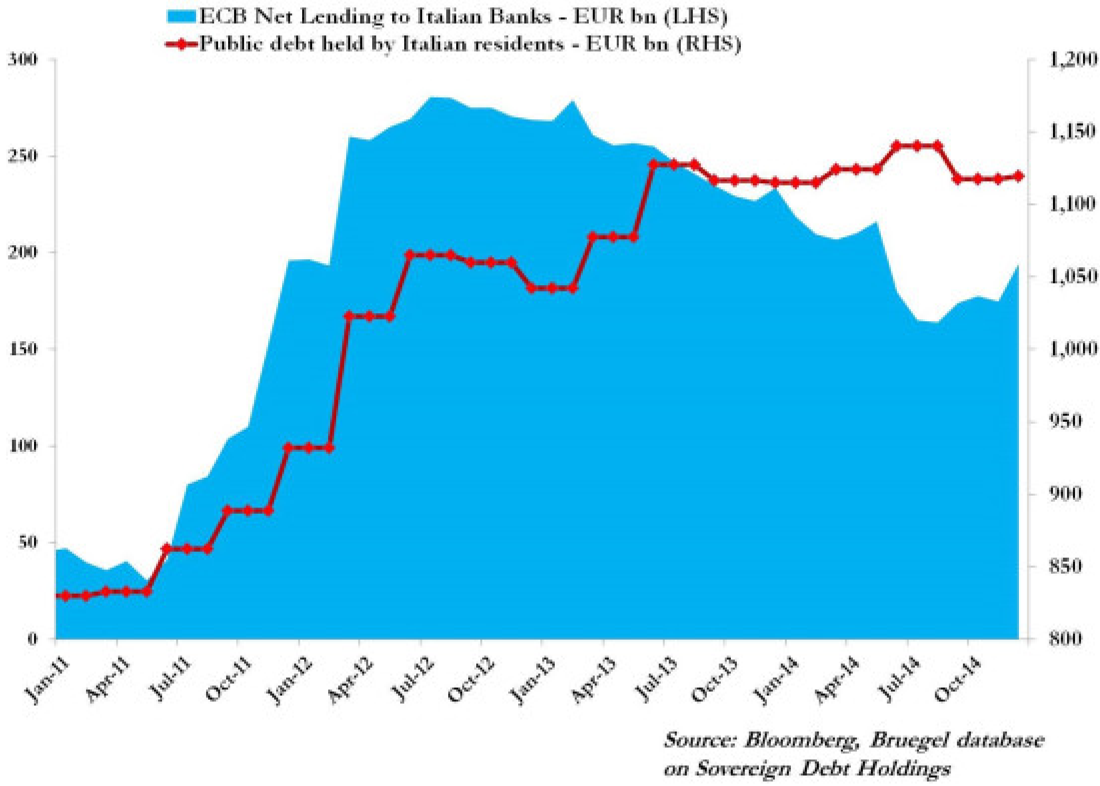


Figure 20 – Public debt nationalization in Italy and ECB lending to Italian banks

In the case of Spain (see Figure 21), correlation between the variables at stake is less pronounced but still present. From March 2011 to September 2012 net ECB loans have soared by 300 billion euros, supporting the increase in the exposures of domestic banks to the government debt, even if the biggest slice has served to settle commercial liabilities with credit institutions located elsewhere in the Eurozone.

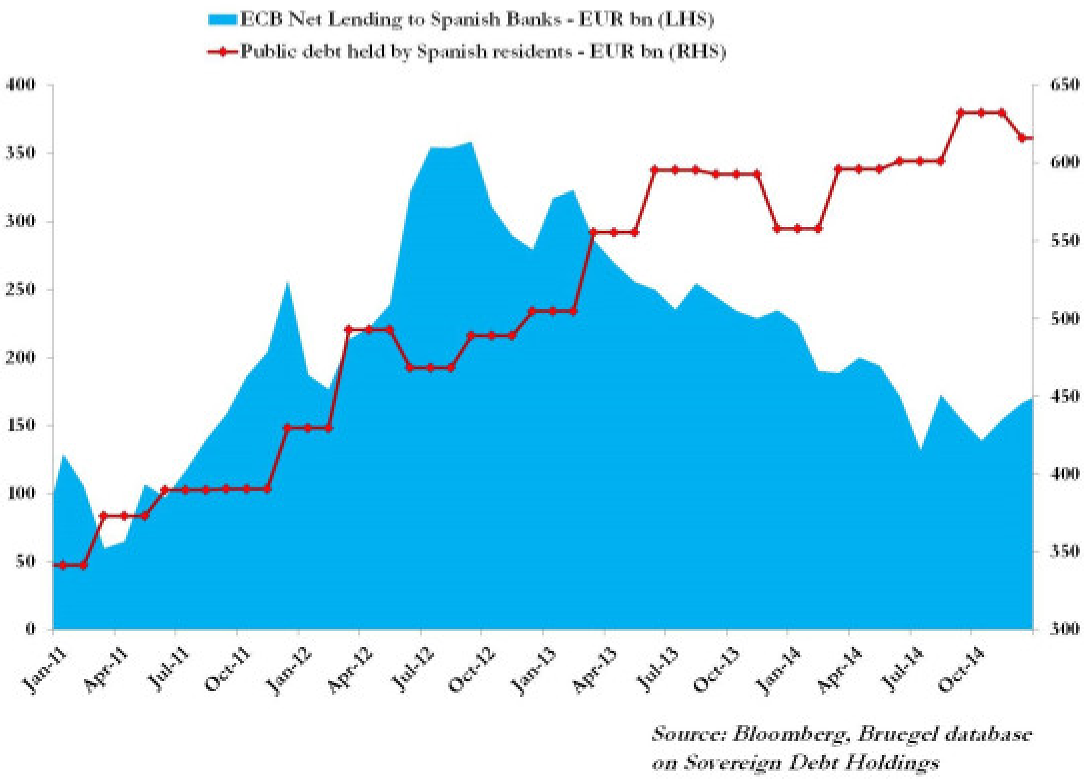


Figure 21 – Public debt nationalization in Spain and ECB lending to Spanish banks

Of course, it could be argued that by bearing the insolvency risk of peripheral banks on the enormous amounts disbursed with the LTROs, the European Central Bank has mutualized that risk across all member States. But, in this way, it has also allowed the segregation of risks inside the balance sheets of peripheral banks.

The targeted loans (T-LTROs) arrived between September 2014 and March 2017 have allowed peripheral lenders to turnover most of the LTROs liquidity and keep the degree of public debt nationalization at high levels.

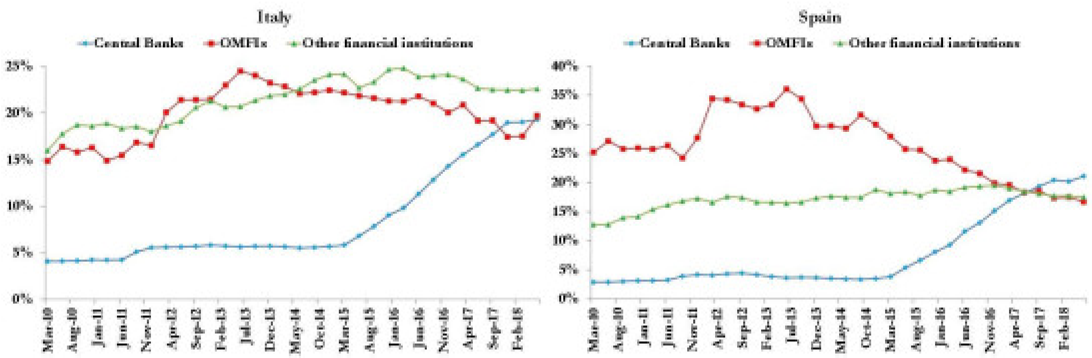
The PSPP did the rest. There is no doubt that, by ensuring a stable and large demand for government bonds, the ECB has played a leading role in the narrowing of sovereign yield spreads, putting peripheral countries safe from the risk aversion of the markets. Nevertheless, at least two peculiar features of the PSPP architecture have been pivotal to the design of segregation of risks within the periphery: the capital key as criterion to allocate securities purchases across member countries and the negligible amount of risk sharing admitted on these purchases.

As known, the capital key represents the subscription share of each National Central Bank in the ECB capital and it has a direct correspondence with the contribute of each country to the population and economic growth of the European Community. The allotment of securities purchases in proportion to the capital key has favored countries (e.g. Germany and France) where deflationary pressures were much less relevant than in other countries (e.g. Italy and Spain) that, however, had a smaller capital key([20]).

The other specificity of the PSPP is the very limited risk sharing: only the 10% (initially only the 8%) of the purchases allotted to the debt of each member government is carried out directly by the ECB, whereas NCBs are appointed to buy the remaining 90% with funds borrowed from the ECB. As a consequence, each NCB results the only entity exposed to the default risk of its national government on purchased securities: in such an extreme scenario, it would bear the related losses while remaining obligated to repay to the ECB the full nominal amount borrowed. Precisely, what in finance is called Credit Default Swap (Minenna, 2015), where, indeed, NCBs act as protection sellers of the sovereign risk of their respective country to the rest of the Euro-system.

In this perspective, the main novelty of the PSPP with respect to the LTROs is that this time the nationalization of public debts takes place inside the balance sheets of National Central Banks rather than inside those of private banks.

Figure 22 highlights the trend just described for Italy and Spain, showing how from March 2015 (beginning of the PSPP) to June 2018 the sovereign debt held by the National Central Banks has climbed from around 5% to around the 20% of the total, accompanied by a downsizing (more marked for Spain) of the share of public debt held by the private financial system.



Source: Bruegel database on sovereign debt holdings

Figure 22 – Public debt nationalization in Italy and Spain: the role of National Central Banks during the PSPP

Apart from this novelty, risk segregation remains at work resulting in massive capital flights from Southern to Central-Northern European countries and in the abnormal phenomenon of negative yields, particularly pronounced for Germany because of its privileged position as recipient of bonds' purchases by virtue of the capital key criterion.

Besides the nationalization of the peripheral public debts, the Euro-bureaucracy has also carried out a series of initiatives aimed at immunizing as much as possible foreign investors (especially those belonging to the Official Sector) against the sovereign risk of the peripheral States. These initiatives include not only the tightening of the European rules on public budget and debt sustainability (through the Six Pack and the Fiscal Compact) but also provisions aimed at facilitating the restructuring/reprofiling of the public debt of the countries with excessive debt.

In particular, the ESM establishing treaty has stipulated that, starting in January 2013, a growing share of new issues of Eurozone government bonds with maturity beyond the year would have embedded Collective Action Clauses (CACs) to make it easier to unlock resolution or restructuring solutions that are welcome by the Official Sector. In addition, CACs allow a qualified minority of bondholders to hinder the potential attempt of the issuing State to redenominate in a new currency government bonds that include such clauses [MINENNA, 2018b and 2018c].

In more recent times, as part of the debate on the reform of economic and monetary union, various proposals([21]) have been presented aimed at harnessing within national borders possible episodes of public debt crisis, for example by strengthening the institutional and legal underpinnings of sovereign debt restructuring [BUNDESBANK, 2016; ANDRITZKY et al., 2016; SCHÄUBLE, 2017; SAPIR, SCHOENMAKER, 2017; BÉNASSY-QUÉRÉ et al., 2018]. Some of these proposals have suggested the adoption of automatic restructuring mechanisms. This way, the restructuring solutions liked by the European establishment – typically those inspired by the 'extend-&-pretend' logic applied, for example, to the third Greek debt bailout – would automatically activate in front of predetermined trigger events without the need to achieve the green light from qualified majorities of bondholders([22]). The solution selected at the Euro-group of December 2018 – and endorsed in the same month by the European Council – provides for the switch of the CACs voting procedure from the current two-limb procedure to the single-limb procedure starting from 2022([23]). With the new voting procedure, the consensus expressed by a qualified majority of the holders of all affected bonds would be enough to give the green light to a restructuring proposal without the need to reach also a qualified majority of the holders of each bond series involved in the restructuring project (as instead currently foreseen)([24]).

The best indicator of the high degree of risk segregation in the euro area are the net Target2 balances of the different National Central Banks participating in the Euro-system. Target2 is the real-time cross-border interbank payment system for the Euro-system. Before the crisis, Target2 balances were essentially nil because the easy availability of interbank funding to banks to replenish shortfalls of their reserve accounts allowed an offsetting between current account and capital account [CECCHETTI et al., 2012]. But the crisis and the collateral discrimination policies made increasingly difficult for banks in peripheral countries to access interbank funds. As a consequence, interbank payment transactions between banks residents in different Eurozone countries began to involve their respective National Central Banks, which, in turn, began to experience increasing imbalances in their Target2 official settlements balance with the ECB. More precisely, as shown by Figure 23, National Central Banks of peripheral countries experienced growing Target2 deficits whereas those of core countries growing Target2 surpluses [DE GRAUWE et al., 2017; CESARATTO, 2017].

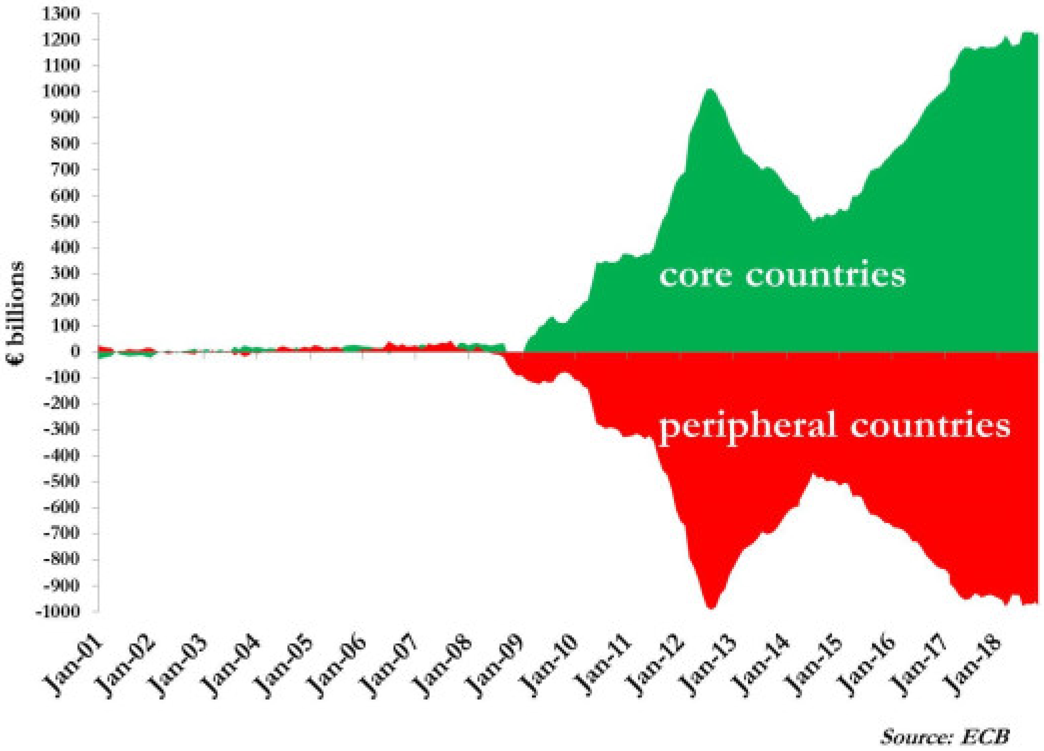


Figure 23 – Evolution of the net Target2 balances of Eurozone core and peripheral countries

In detail, it is possible to identify two distinct phases of enlargement of the Target2 imbalances [MINENNA, 2017a and 2017b]: the first one took place between 2009 and 2012-2013, while the second one has started in 2015. These timings are not random and, in fact, should be read and interpreted along with the main ECB interventions in the last ten years. In particular, the first diverging pattern overlaps with the above mentioned exceptional ECB lending activity (LTROs); in that period, the liquidity injected into the system by the ECB has de facto replaced the interbank funding for banks of the Eurozone periphery. The subsequent phase of re-absorption of the Target2 imbalances starts in has started with the announcement of the Outright Monetary Transactions (second half of 2012) and with the begin of LTROs' repayments. As for the second divergent pattern, it is chronologically superimposed on the launch of a new targeted loan program for European banks (T-LTROs) and of the QE, whose largest chunk is represented by the PSPP with the direct involvement of the National Central Banks in the bond-buying activity as above said.

A compared analysis with the main components of the balance of payments offers interesting insights about the drivers of the Target2 imbalances [DOSI, MINENNA, ROVENTINI, 2018]. The larger and larger deficits displayed by Southern European countries between 2009 and 2012-13 essentially reflect the flight of foreign investors from the peripheral risk, the related nationalization of the public debts of peripheral governments and the collapse of the interbank funding opportunities for banks all around the Eurozone periphery.

With regard to the second sharp deterioration of the Target2 balances of peripheral NCBs, the comparison with the data of the balance of payments reveals a new phenomenon: the flight of domestic capitals towards safe havens located in Central and Northern Europe. As of March 2015 (beginning of the PSPP), non-financial private investors resident in countries such as Italy or Spain have moved their financial wealth from domestic assets – such as domestic government bonds – to foreign bonds, mutual funds and shares. Another salient feature of the second divergent pattern is the close correlation with the trend in the share of government bonds held by the National Central Banks. This confirms what was said above about the fact that the limited amount of risk sharing admitted by the PSPP has favored the nationalization of public debts while the pass-through effect of the monetary policy to the real economy has been rather limited since the liquidity deriving from the sale of government bonds to the NCBs has fled abroad [MINENNA, 2017a and 2017b; DOR, 2016; DOSI, MINENNA, ROVENTINI, 2018].

Figure 24 and Figure 25 give a graphical representation of the above described relationship between Target2 balances and the components of the balance of payments for Italy and Spain, respectively.

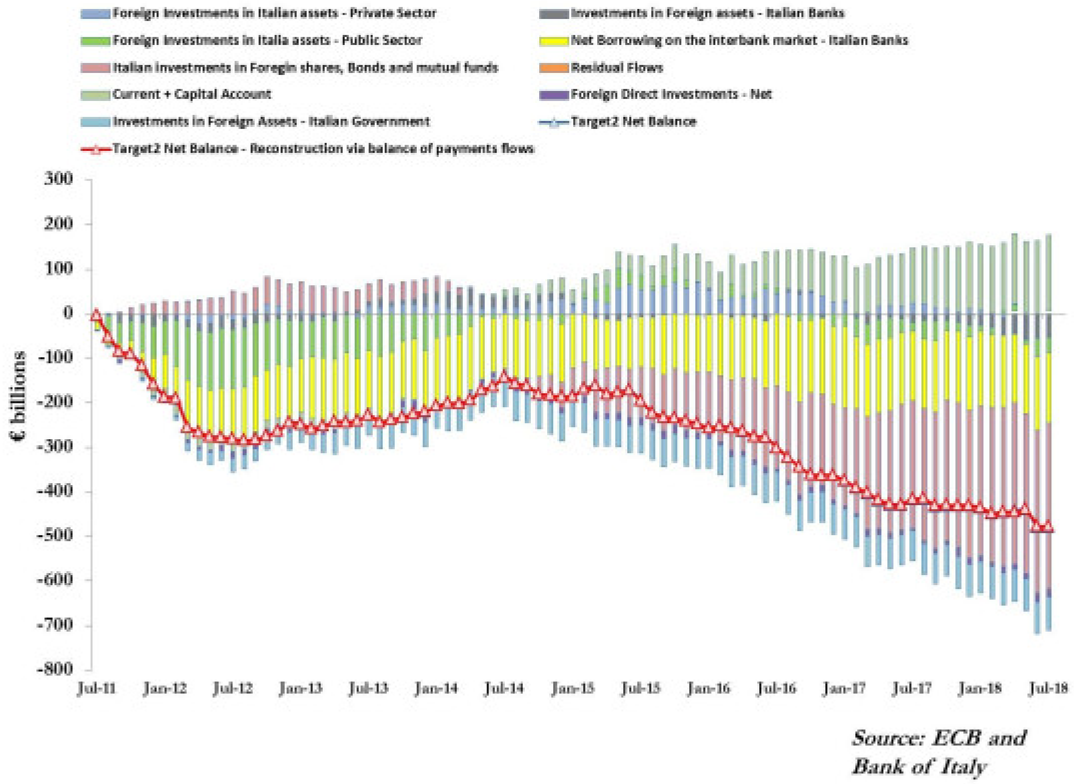
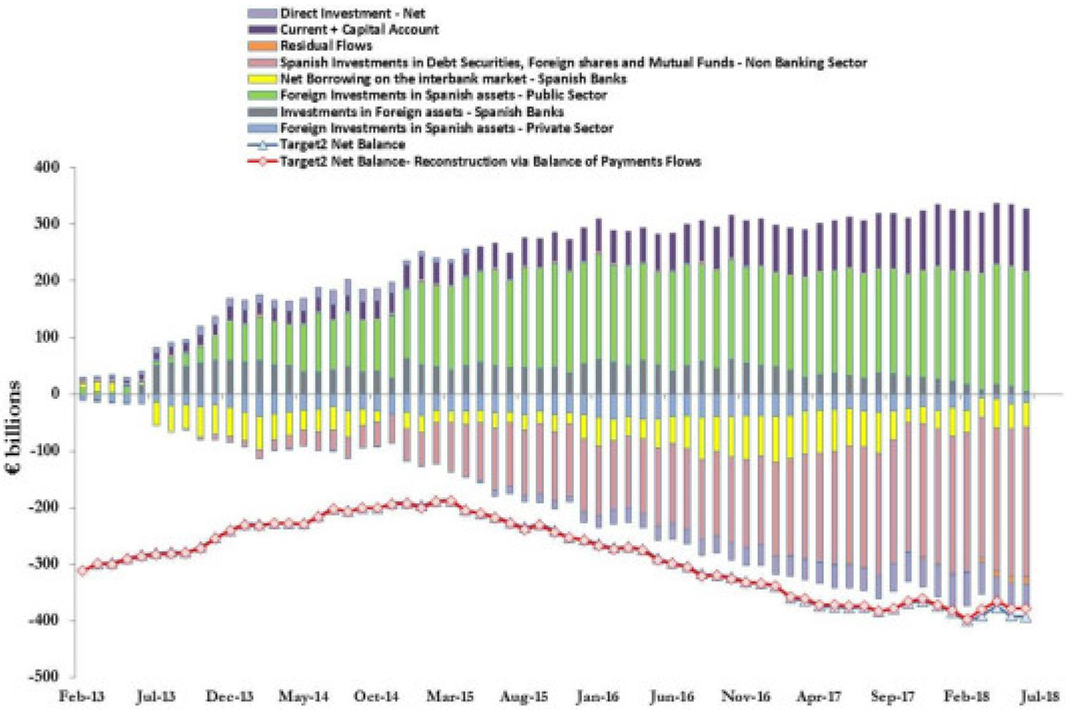


Figure 24 – Italy: Target2 Net Balance – Decomposition via balance of payments flows

The other coin side of the large negative imbalances of peripheral NCBs is the huge Target2 surplus recorded by the Bundesbank and other NCBs of core countries, such as Luxembourg, Finland and the Netherlands.

Target2 imbalances are among the strongest proofs of the systematic risk segregation that has characterized the European monetary union in the last decade and are at stake with the other anomalies discussed in this paper, such as the nationalization of peripheral public debts and the exceptional performance of the German current account.



Source: ECB and Banco de España

Figure 25 – Spain: Target2 Net Balance – Decomposition via balance of payments flows

As long as the integrity and compactness of the euro area will be preserved, Target2 imbalances will remain accounting entries among the NCBs joining the Euro-system([25]). However, the situation would change if the Eurozone would break-up or a State would leave the monetary union. In an exit scenario, a ‘debtor’ National Central Bank might consider not to settle its Target2 liabilities with the rest of the Euro-system. This explains why Target2 imbalances have become one of the hottest issues of the scientific and institutional debate within the Eurozone.

The position expressed by the ECB President([26]) is that if a country were to leave the Eurosystem, its National Central Bank’s claims on or liabilities to the ECB would need to be settled in full.

In practice, however, no one can know in advance what would really happen in a similar scenario. Indeed, the central bank of a secessionist country with a high Target2 deficit could refuse to settle all or part of its ‘debt’ with the Euro-system, thus imposing a loss on the central banks of countries with a positive balance.

Several political and economic representatives from core countries have a completely different view: they claim that – since the advent of the crisis – Target2 has become an hidden bailout system for the periphery at the expense of the center of the Eurozone [HOMBURG, 2011; SINN, 2011; BAGUS, 2012]. They interpret the Target2 surplus of their NCBs as a credit to the periphery and have developed numerous proposals aimed at minimizing the risk of loss on these credits; for instance by freezing the current negative balances and introducing a new Target3 system subject to periodic settlement and backed by high-quality collateral [SINN, 2018; FRANKFURTER ALLGEMEINE ZEITUNG, 2018]. More recently [MINENNA, 2019b]([27]), two political parties (FDP and AFD) have submitted to the German Parliament specific motions to guarantee the Bundesbank's huge Target2 credit in the event of a debtor country leaving the euro area. In particular, FDP proposed that in such a scenario any Target2 liabilities of the leaving country should be previously converted into euro-denominated government bonds so as to hedge the Bundesbank against any possible loss, including that associated with the redenomination risk.

Yet, these proposals seem not to consider the actual causes of the huge Target2 imbalances, and of the divergent paths between the center and the periphery of the monetary union. In fact, the dynamics recorded by the Target2 system reflect large trade and financials imbalances that have progressively consolidated in the Eurozone and the big distrust of private investors in peripheral assets([28]).

These imbalances make membership in the Eurozone less and less sustainable for peripheral countries and represent a constant concern for core countries and for financial markets. No coincidence that some experts have discussed about the need for an exit clause from the Eurozone([29]).

Similarly, trends in real sovereign spreads – already examined in Section 2 – reflect the risk imbalance between the center and the periphery of the euro area. This is not surprising given that real spreads are clearly linked to Target2 balances. For example, if a German bank disposes of a BTP by selling it to an Italian bank, the settlement of this transaction will result in an increase in the Target2 balance of the Bundesbank and a simultaneous reduction in that of the Bank of Italy; at the same time, the sale of the BTP will create upward pressure on the Italian spread. Also cross-country trade deals entail financial flows that are relevant for both spreads and Target2. If, for example, an Italian family buys a car from a German company, the Target2 balance of the Bank of Italy will worsen, that of the Bundesbank will improve; meanwhile the greater demand for cars will contribute to reinvigorate inflation in Germany and to increase the spread in real terms.

The link between real spreads and Target2 balances is particularly evident for Italy and can be grasped, as a first approximation, by a simple graphic comparison between the dynamics of the two quantities (Figure 26). Since the beginning of the crisis, Italy's real spreads and Target2 balances have moved in unison, albeit in opposite directions: while the spread went up, the Target2 balance fell.

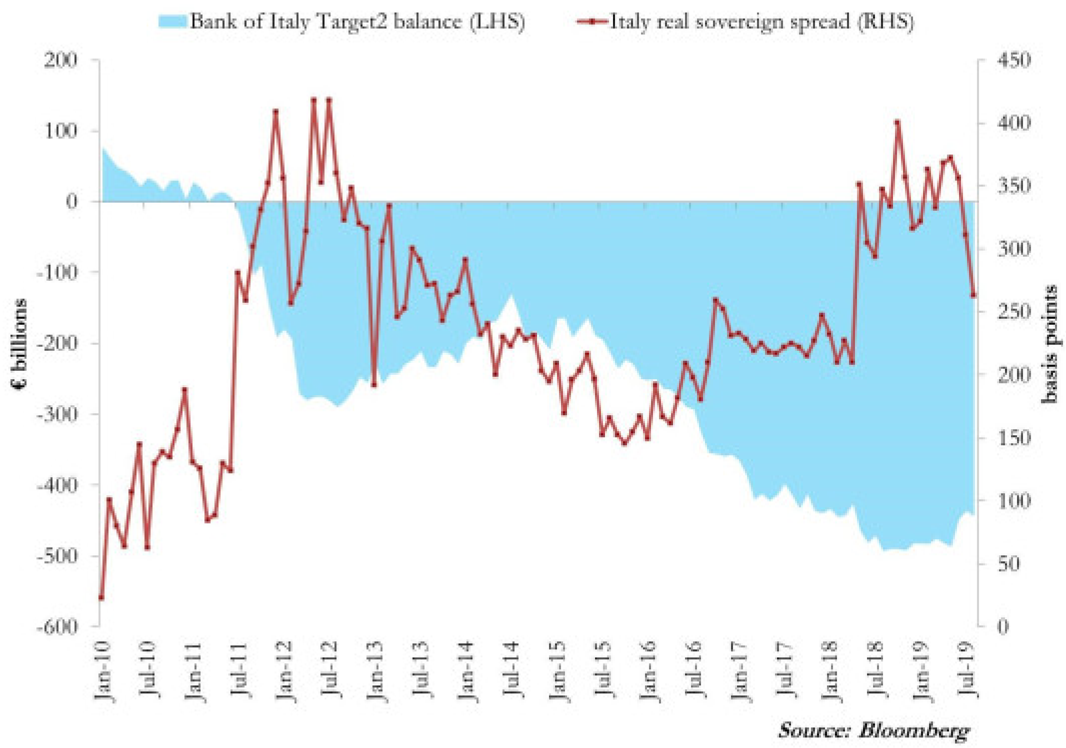


Figure 26 – Italy: Target2 Net Balance and real sovereign yield spread

In order to quantify the relationship between Target2 imbalances on the one hand and real sovereign spreads on the other, it is useful to explore how much of the spread variability is explained by Target2 dynamics through ordinary least squares (OLS) techniques, after controlling for other variables that may have significantly affected real spread dynamics.

Over the period from January 2010 to August 2019, the most significant event in terms of downward pressure on interest rates in the Eurozone and, therefore, also on the level of spreads, was undoubtedly the PSPP carried out by the ECB from March 2015 to December 2018. I thus estimated a linear OLS model by regressing the real 10-year BTP-Bund spread on the Target2 balance (in billions of euros) of the Bank of Italy and on a dummy variable which is equal to 1 in the period from March 2015 to December 2018 and zero otherwise (the model also encloses an intercept).

The following table displays the regression output.

Linear Regression Model: y ~ 1 + x1 + x2

Estimated Coefficients:

	Estimate	SE	tStat	pValue
(Intercept)	159.8	8.8139	18.13	3.0629e-35

x1 Target2 balance				
(€ billions)	-0.48446	0.035893	-13.497	2.6099e-25
x2 Dummy PSPP	-104.42	11.818	-8.8361	1.4933e-14

Number of observations: 116, Error degrees of freedom: 113
Root Mean Squared Error: 52.1

R-squared: 0.621, Adjusted R-Squared: 0.614

F-statistic vs. constant model: 92.6, p-value = 1.54e-24

The R2 of the regression is 62.1% and all estimated coefficients are statistically significant, confirming the strong (inverse) connection between Target2 and real spread movements. More in detail, on average (and after controlling for the PSPP), an increase of 100 billion euros in the Target2 liabilities of the Bank of Italy results approximately in an increase in the real spread of around 48 basis points.

Figure 27 compares the observed real spread with its fitted values according to the estimated coefficients of the linear model.

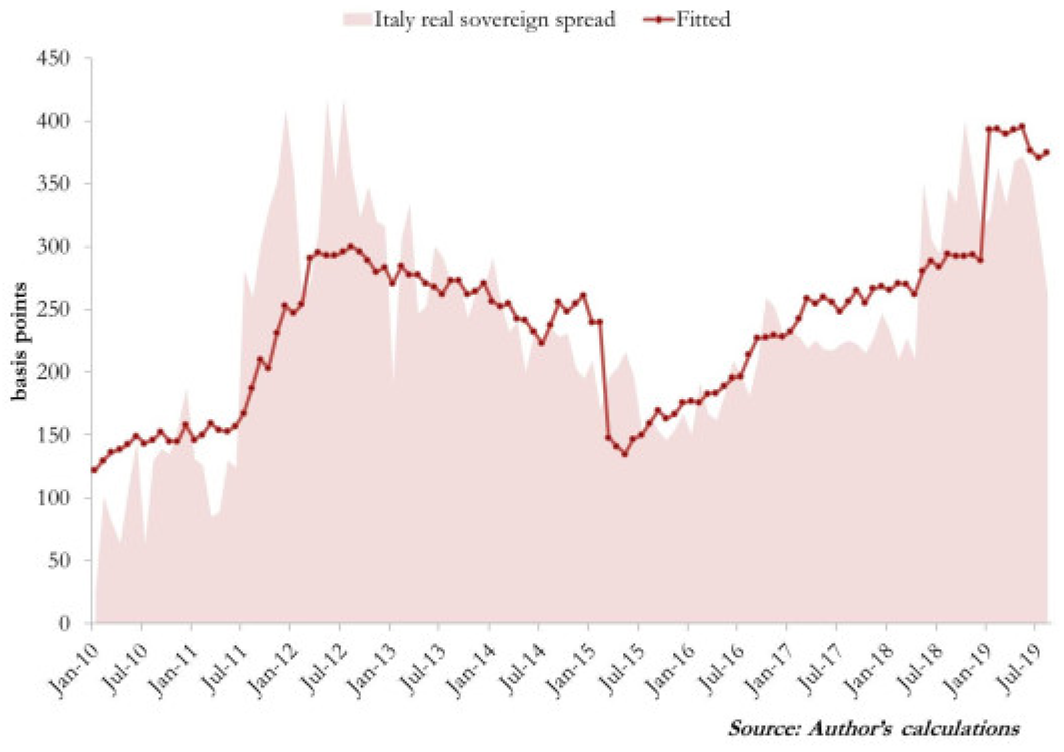


Figure 27 – Italy: Observed versus Fitted Real sovereign yield

The inverse relationship between real sovereign spread and Target2 balance has been experienced also by Spain, as shown in Figure 28, but for a shorter time period. In fact, it has progressively faded since years 2014-2015, roughly at the time when it became clear that the ECB would have started a large-scale asset purchase program and that the Spanish leading political class would have accommodated the requests of the Euro-bureaucracy.

Something similar can be argued also with regard to Italy if focusing on the very end of the observation period: the circumstances are pretty the same as those just mentioned for Spain, that is the evident approaching of a new season of monetary stimulus and the fading of the Euro-adverse attitude in Italian government parties.

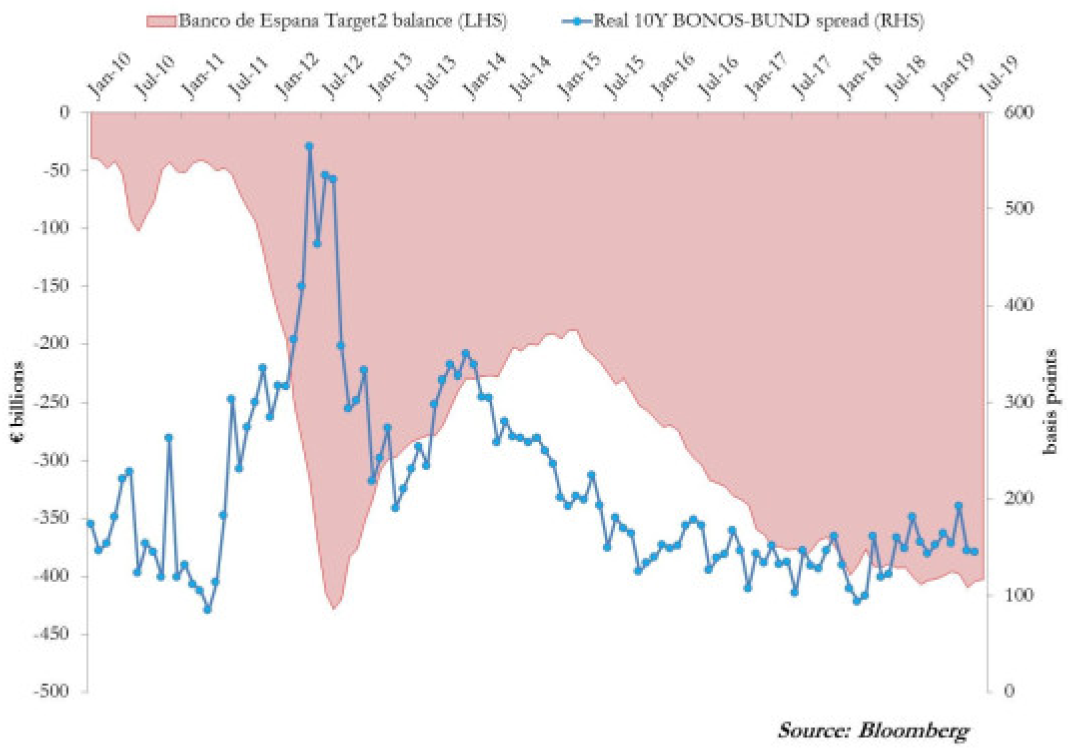


Figure 28 – Spain: Target2 Net Balance and real sovereign yield spread

4. Large competitiveness gaps and prolonged risk segregation raise serious concerns about the compactness and resilience of the Eurozone. The symptoms of this controversial set-up are manifold: social discontent, prolonged absence of fiscal stimuli despite an anemic growth, exacerbation of the Euro-skeptical debate, rise of political parties featuring a confrontational attitude toward the European institutions.

So far the broad compliance of national governments with the rules and the guidance defined by the Euro-bureaucracy and the implementation of austerity-based domestic reforms have allowed – in the context of an accommodative monetary policy – the Eurozone to stay alive.

However, since the beginning of the crisis, the economic and monetary union physiognomy has changed profoundly.

Because of the systematic segregation of risks, the dichotomy between center and periphery – which in the early years of the euro had remained under track – has exacerbated, becoming an important component of the sovereign risk of the peripheral countries.

This explains why, in the post-Deauville era, the risk indicators of Italy and Spain – the two largest peripheral economies – have shown very similar trends despite their differences, for example with regard to the different balance between public and private debt. In Spain the private component represented the 75% of the total debt and the public debt represented only the remaining 25%, while in Italy the situation was more balanced, with government bonds around 40% of the total debt of the country and projected in a trend of increasing incidence as it happened in fact (see Figure 29).

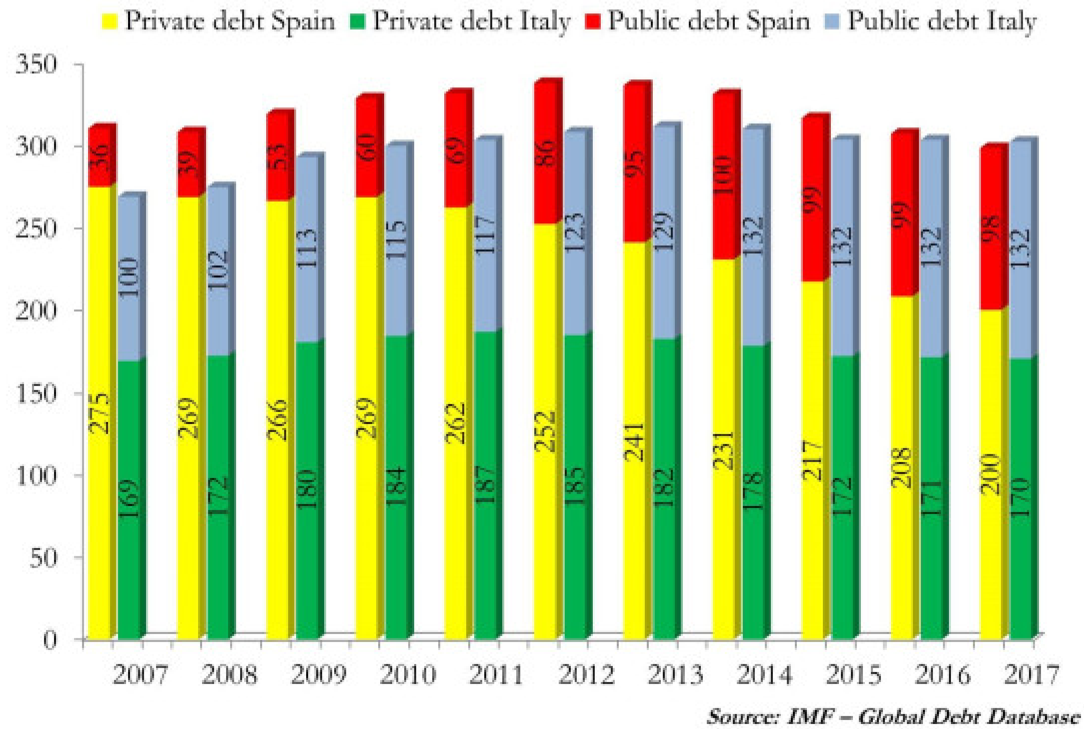


Figure 29 – Spain and Italy: private and public debt in GDP terms

It should however be noted that the two countries were very similar in terms of aggregate leverage (both around the 300% of GDP), which – along the common belonging to the Eurozone periphery – explains why the markets' assessment of their risk profile was similar.

In practice, given the then current European regulation on risks markets' participants were expecting that a private debt crisis would have been addressed through subsidiarity by the public sector and vice versa.

And actually so it was. The crisis in the Spanish banking sector in 2012 was managed through the establishment of a bad bank owned by the government – and backed by the ESM also to avoid losses to the Franco-German banks heavily exposed to Spanish counterparties([30]) – which over the years have translated in an increase of about 25 percentage points in the public debt-to-GDP ratio. On the other hand, in Italy the banking system – supported by the ECB's LTROs – has bought government bonds for over 200 billion euros in order to absorb the excess supply of these securities due to the deleveraging of foreign banks, many of which resident in core Eurozone countries.

It is no coincidence therefore that the two spreads (ie, BTP-Bund and BONOS-Bund, respectively) have shown quite aligned trends for several years hence qualifying a proxy of the peripheral risk within the Eurozone.

However, starting from the last quarter of 2016, the transition to a new structure began in which Italy has progressively deviated from the other peripheral countries and its risk profile has worsened for reasons that go beyond the high public debt-to-GDP ratio (which, in a certain way, represents a structural feature of Italy and is offset by one of the highest private savings in the world).

Figure 30 confirms the pattern just described by contrasting the two spreads.

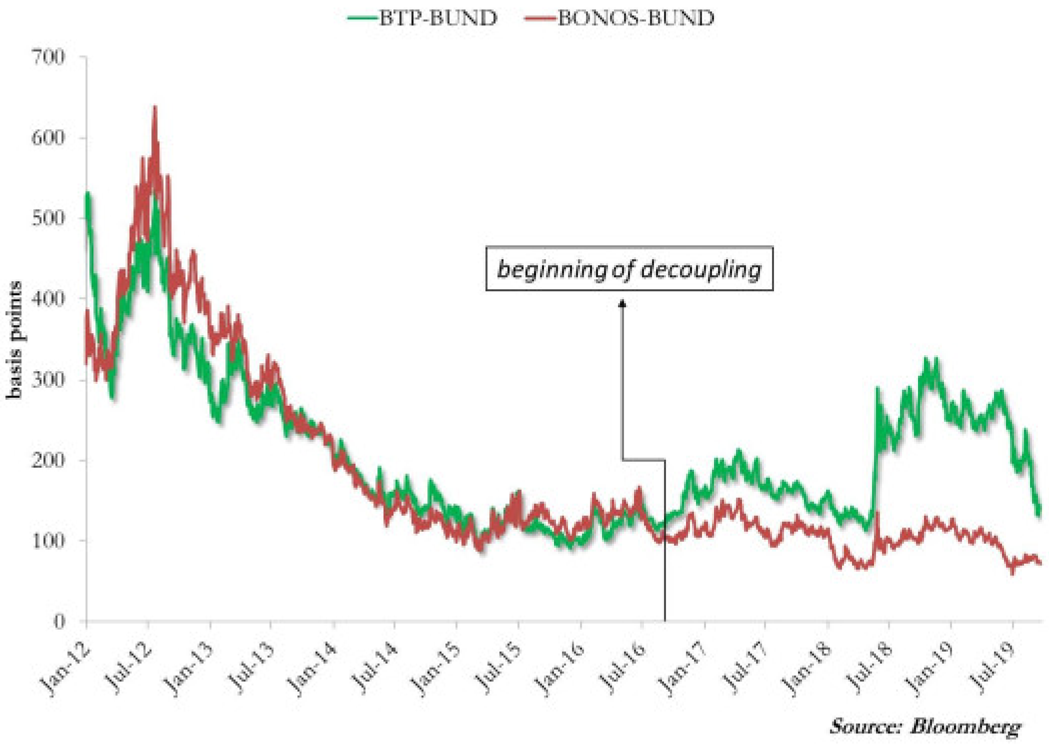


Figure 30 – Nominal yield spread of Italian and Spanish 10-year government bonds with respect to the German Bund

The progressive isolation of Italy within the Eurozone appears due to a gradual deterioration of the interaction with the European interlocutors([31]), developed partly in response to a series of regulatory decisions and supervision of the European institutions that have put the spotlight on Italy.

Indeed, the European Union has tightened budgetary discipline and surveillance – with particular attention to issue of public debt sustainability and, thus, also of the excessive values of the debt-to-GDP ratio – while it has clearly adopted a softer approach towards other macroeconomic imbalances, such as those deriving from the excessive private debt or trade surplus.

Furthermore, Europe has adopted increasingly stringent regulations on the banking system. Provisions on burden sharing (August 2013) and, later, on bail in (January 2016) have reduced the possibility of intervention by national governments to support their banks in crisis. For Italy, this new regulatory framework intervened after the banking system had made a huge effort in terms of public debt nationalization. Until that time, Italian banks had not benefited from significant State support measures as had happened in many other member countries, even in the form of large cash disbursements.

The tightening of the rules on credit institutions also concerned the increasingly severe treatment of non-performing loans – in terms of precautionary provisions and of pressures for a rapid disposal of these exposures – to be considered almost a regulatory obsession if compared to the substantial indifference of Europe to the risks of structured finance exposures very common in the balance sheets of the banks of the main member countries with the exception of Italy. The new regulation has exacerbated the negative and pro-cyclical effects of the banks-sovereign doom-loop and increased the power of the spotlight on Italy, fueling the perception that the country had now become the sick man of Europe.

The described strengthening of the European provisions and oversight on national public accounts and banking systems has contributed to nourish a growing intolerance of a part of the Italian public opinion towards the European institutions also because of some unpopular measures adopted by governments over time in order to comply with European constraints, such as the pension reform at the end of 2011 and the management of some serious banking crises with high losses for the citizens-savers.

Starting from the last months of 2016, this discontent was compounded by a climate of growing political uncertainty linked to the constitutional referendum and related change of government but also, during the first months of 2017, to the developments of the presidential campaign in neighboring France (where it seemed possible the victory of anti-Europeanist parties). All this has contributed to increasing the risk perception by the financial markets.

After a pause in the second half of 2017, Italy has started again to move away from Spain with the overheating of the campaign for the March 2018 political elections; the divergence process then accelerated starting in May of the same year in conjunction with the formation and establishment in Italy of a critical government towards Europe.

Since then the markets have begun to ask for an additional risk premium for Italy essentially connected to concerns about a fiscal policy not complying with the indications and recommendations of the European Commission but also to the fears of a possible Italexit. The confrontational attitude of the new Italian executive was, therefore, interpreted by the markets as a higher fiscal and redenomination risk.

Conversely, such risks did not glimpsed for the other peripheral countries, including Spain, which since 2012 has been overall compliant with the guidelines and requests of the Euro-bureaucracy with regard to the restructuring of the banking system and to several issues of economic policy (labor market reform, competition law, productivity growth, bankruptcy discipline, etc.).

Figure 31 provides a clear-cut evidence of the above described dynamics, by plotting the time series of the 10-year BTP-BONOS yield spread in real terms (which, for the arguments detailed in Section 2, offers a more correct assessment of their different insolvency risk than its nominal equivalent).

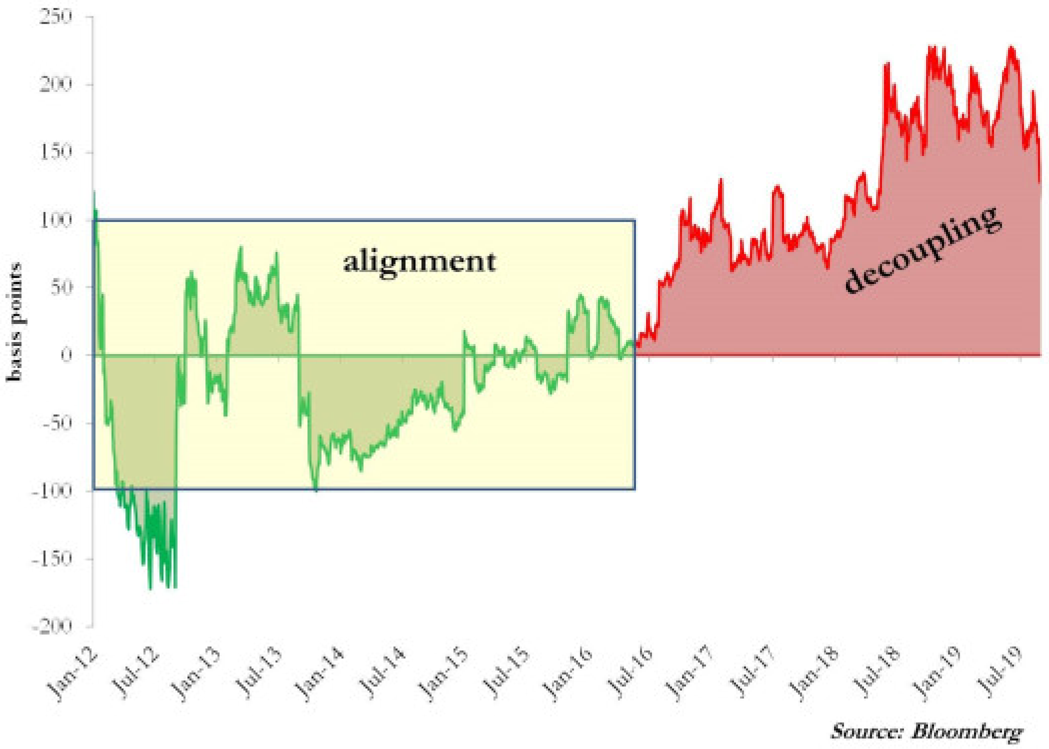
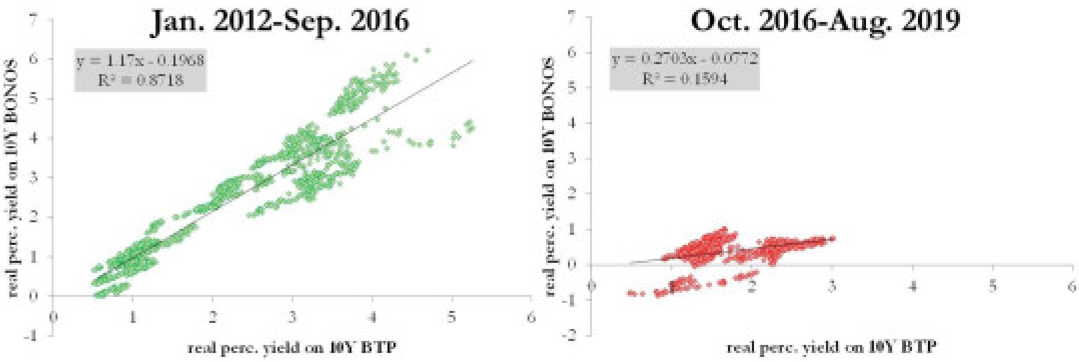


Figure 31 – Real yield spread between Italian and Spanish 10-year government bonds

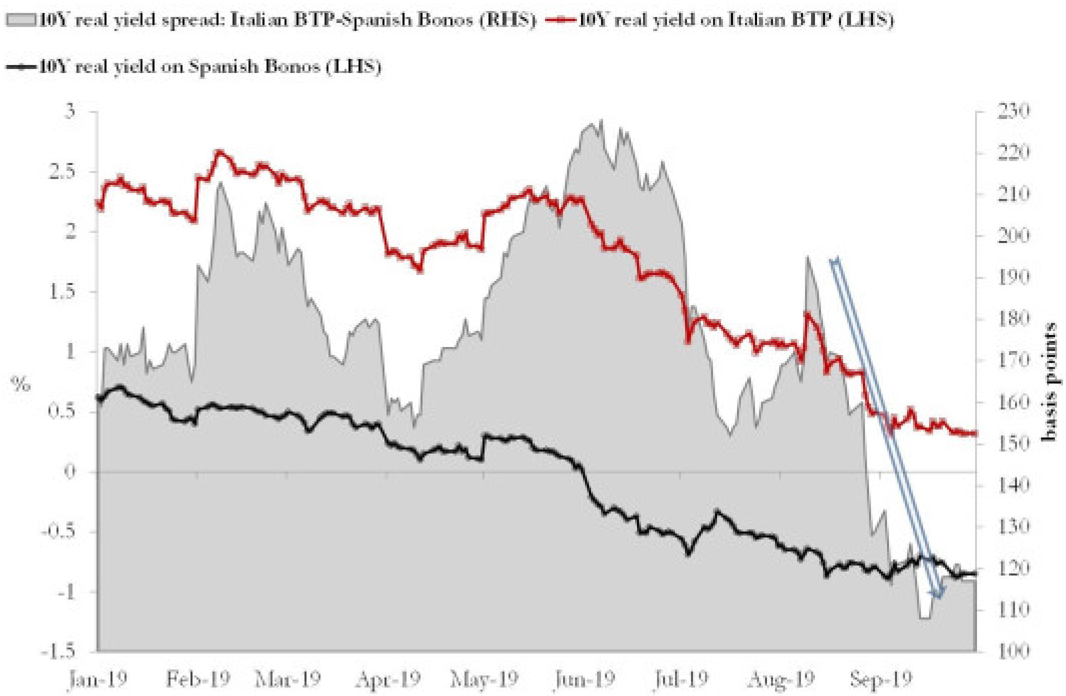
Until the third quarter of 2016 real yields on BTP and BONOS were broadly aligned with the alternation of positive spread phases for Spain and positive spread phases for Italy depending on the greater or lesser investors’ appetite for the two countries and in any case the gap tended to not exceed 100 basis points. During this period the time series of the two yields exhibited a linear dependence relationship in the order of 87% which instead disappeared in the subsequent period of decoupling (see Figure 32).



Source: Author's calculations on Bloomberg data

Figure 32 – Scatter plot of the 10-year real yield on Spanish Bonos and Italian BTP over two distinct periods (2012-Sep. 2016 versus Oct.2016-Aug. 2019)

Consistently with the above-illustrated rationale on the existence of a link between the nature (conflictual or not) of the relationship with European institutions and the markets' assessment of the riskiness of a given country, it is worth noting that Italy's risk indicators have improved whenever clear signs of détente have arrived. This happened, for example, at the end of June 2019 when a solution was agreed to avert the opening of an infringement procedure for excessive debt against Italy and, to a greater extent, with the establishment in Italy of a new non-Euro-skeptical government between late August and early September 2019 (see Figure 33).



Source: Bloomberg

Figure 33 – New executive effect on the real yield spread between BTP and Bonos

In the light of what has been said so far, the decoupling between Italy and Spain in terms of (premium to the) country risk expressed by the financial markets is attributable to investors' perception of an additional risk source for Italy that has been added to the riskiness deriving from belonging to the disadvantaged areas of a non-optimal monetary union, the latter characteristic shared openly with Spain since the beginning of the crisis (and to some extent since the dawn of the euro).

In general terms, this new risk component reflects the deterioration of relations with the European establishment; something similar happened episodically in other member countries like Spain itself, but also France and even before Greece at the time of the third public debt crisis in 2015. These considerations imply that, starting from the described decoupling, Spain has become the most appropriate proxy of the peripheral risk within the Eurozone.

In order to better understand the contribution of the new risk component to the structure of the risks of the Eurozone periphery it is appropriate to recall the concept of redenomination risk (also called convertibility risk), that is the risk that euro-denominated government bonds could be converted into the newly minted national currency of a hypothetical secessionist country. Indeed, according to the Lex Monetae [MEDIOBANCA SECURITIES, 2017], the leaving country could convert its government bonds in the new currency, especially if this currency is expected to depreciate against the euro/mark([32]), as this would mean a relief on the debt burden. In addition, a similar argument could also hold for the Target2 liabilities of the NCB of a leaving country.

A first boost of the redenomination risk for peripheral countries had already occurred during the Eurozone sovereign debt crisis (2010-2012) [MINENNA, 2014] and it began to deflate essentially since summer 2012 when the ECB made it clear that it was preparing the anti-spread shield. Subsequently, the drop in yields and sovereign spreads (especially in nominal terms) induced by the Quantitative Easing helped to keep investors' concerns under control.

However, from 2015, redenomination risk has surged episodically in sync with critical events in a given member country with a partial contagion to its neighbors. It has happened in Greece at the time of the clash with the European institutions that led to the referendum on the bailout conditions in the country's government-debt crisis. In the first half of 2017 it was the turn of France, where an electoral victory of Euro-skeptical political forces was feared, and a few months later the Catalan crisis fueled the redenomination risk in Spain. In late 2018 there has been also a new surge of the redenomination fears on French public debt in relation to intensified social tensions expressed by the protest of the yellow vests.

In Italy the redenomination risk has resumed growth since the end of 2016, first in a creeping manner with episodic peaks and, since 2018, in a more sustained manner with the rise to the government of parties that were critical towards the European constraints on the public budget and, more broadly, towards the overall European architecture.

The standard proxy for redenomination risk is the so-called ISDA basis [MINENNA, 2017d], which is the difference between the premium on the sovereign CDS contract under the 2014 ISDA standard and the premium on the same contract under the 2003 ISDA standard. The different pricing of the two contracts depends on the fact that only the 2014 standard includes debt redenomination – provided that it involves a loss for investors – among the events triggering a restructuring and, consequently, the protection offered by the CDS([33]).

Figure 34 shows how the movements of the ISDA basis for France, Spain and Italy over the above mentioned critical periods have indicated the soaring redenomination risk perceived from time to time by markets participants.

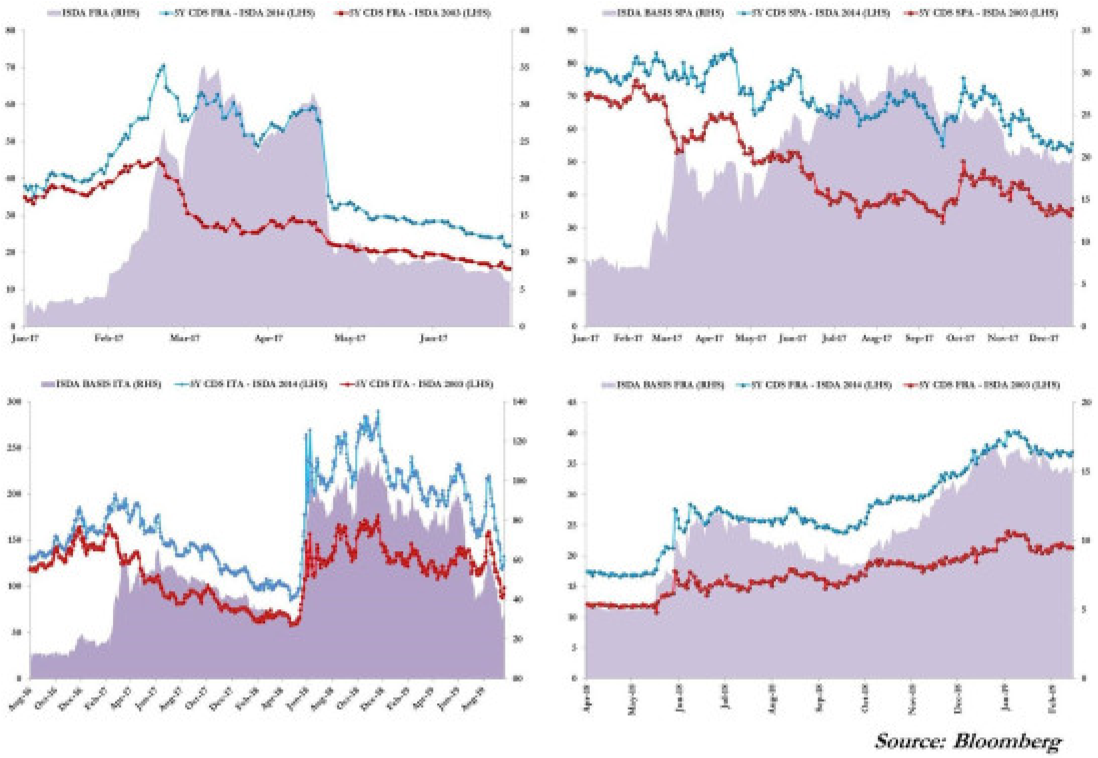
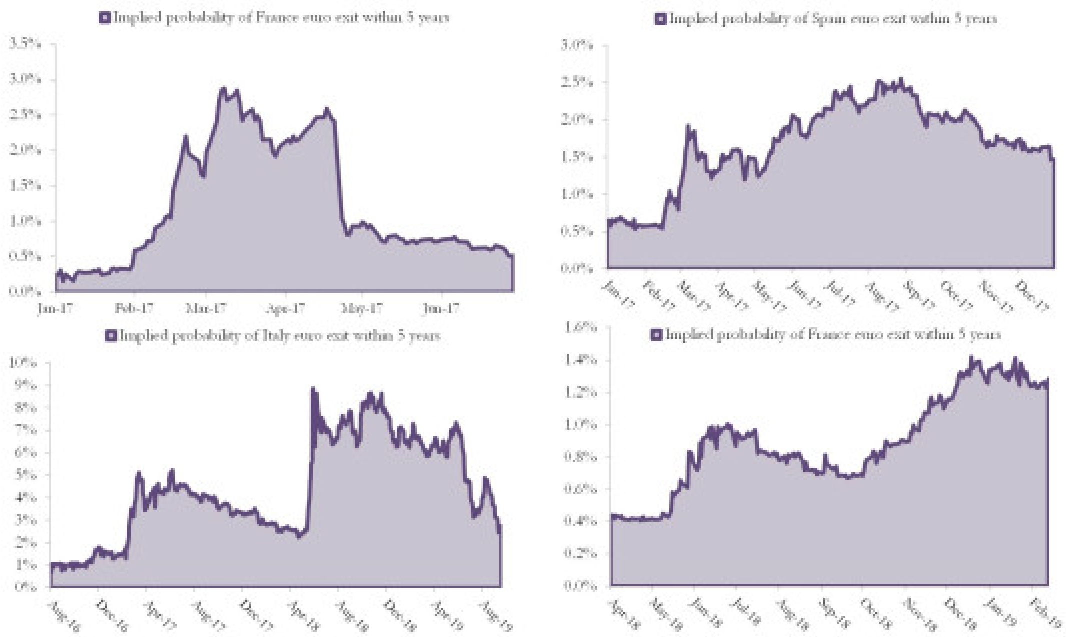


Figure 34 – 5-year CDS according to ISDA 2014 and ISDA 2003 standards, and ISDA Basis for France, Spain and Italy (bps)

By applying standard bootstrapping techniques to the ISDA basis, it is possible to calculate the implied exit probability within 5 years for each member country. Figure 35 performs these calculations with respect to the countries and periods considered in the previous Figure 34. Among the three countries at stake Italy is clearly the one that has reached the highest exit probability with a peak around 9% at the end of May 2018.



Source: Author's calculations

Figure 35 – 5-year implied probability of a euro exit derived from ISDA Basis for France, Spain and Italy

Another proxy of the redenomination risk is the CAC-coupon basis. As already mentioned([34]), since 2013 a growing share of government bonds issued by the Eurozone countries embeds standardized CACs standards that make certain resolution or restructuring solutions easier after the Greek default of March 2012. When investors' main concern is a redenomination outcome, CAC bonds are perceived as safer than non-CAC bonds as a qualified minority of their holders may hinder the issuer's willingness for such a contractual change. The ECB unconventional interventions occurred since 2014 (just over a year after the introduction of the new CACs) have reduced yields in the euro area: as a consequence, CAC bonds typically also present lower coupons than securities issued before 2013. Other things being equal, a lower coupon generates a lower loss for bondholders in case of a credit event; thus, low-coupon securities are considered less risky than high-coupon securities [MORGAN STANLEY, 2017]. The joint effect of these two factors (CACs and low/high coupon) suggests to investigate the presence of a CAC-coupon basis in the pricing of sovereign bonds; indeed, it is reasonable to expect that CAC bonds with low coupons trade higher than non-CAC bonds with high coupons issued by the same sovereign entity([35]).

This insight is confirmed by Figure 36, which displays the CAC-coupon basis for a pair of Italian government bonds with similar time to maturity.

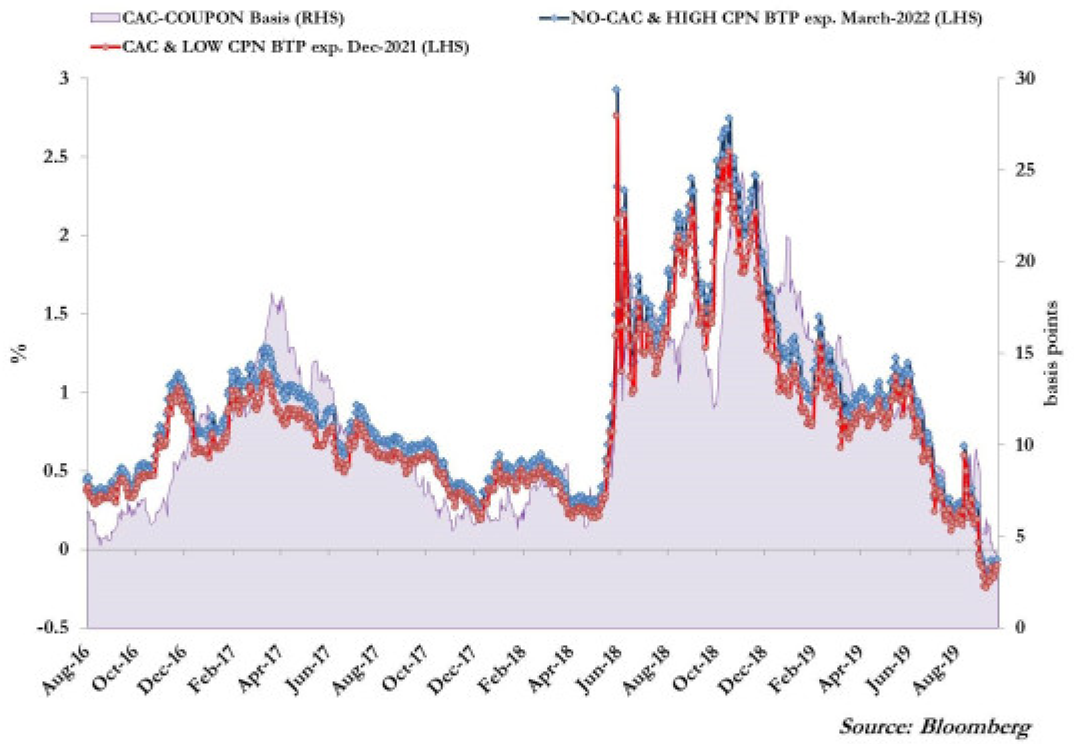


Figure 36 – CAC-coupon basis for a pair of comparable Italian government bonds

It should be observed that, after the peaks reached in autumn 2018 – when there was a tug of war with the European Commission on the Italian budget plan for 2019 – the CAC-coupon basis moved on a substantially downward trend and, since the end of August 2019 (with the shift to a new government welcomed by the Euro-bureaucracy), it continued to shrink until reaching weakly negative values.

A third market indicator of the redenomination risk is the Quanto-Legal basis [MINENNA, 2018c], that is the yield spread between USD-denominated Foreign Law bonds and Euro-denominated Local Law bonds of the same sovereign issuer. In pressure times Foreign Law bonds trade comparatively higher than Local Law bonds because the former are not subject to the Lex Monetae and, in addition, the USD-denomination represents a contractual hedge against the depreciation risk of the currency of denomination (the same does not necessarily apply to EUR-denominated bonds). This leads to a yield spread, which can be called Quanto-Legal basis. In order to properly compare bonds denominated in different currencies (and, thus, priced with respect to different risk-free curves) a standard metric is their asset swap spread, adjusted for the cross-currency basis.

Figure 37 displays the Quanto-Legal basis for a pair of Italian government bonds expiring in 2033: a euro-denominated Italian-Law BTP and a USD-denominated bond issued by the Republic of Italy under an international issuance program and subject to New York law. Since second quarter 2018 the bigger uncertainty surrounding the future of Italy as a member of the euro area has pushed investors to short the first security and go long on the second. This trade strategy continued up to Autumn 2018, then investors started to opt more and more often with the opposite strategy as the political and fiscal situation in Italy evolved overall towards conditions of greater stability that reduced the markets' estimates of the probability of an Italexit.

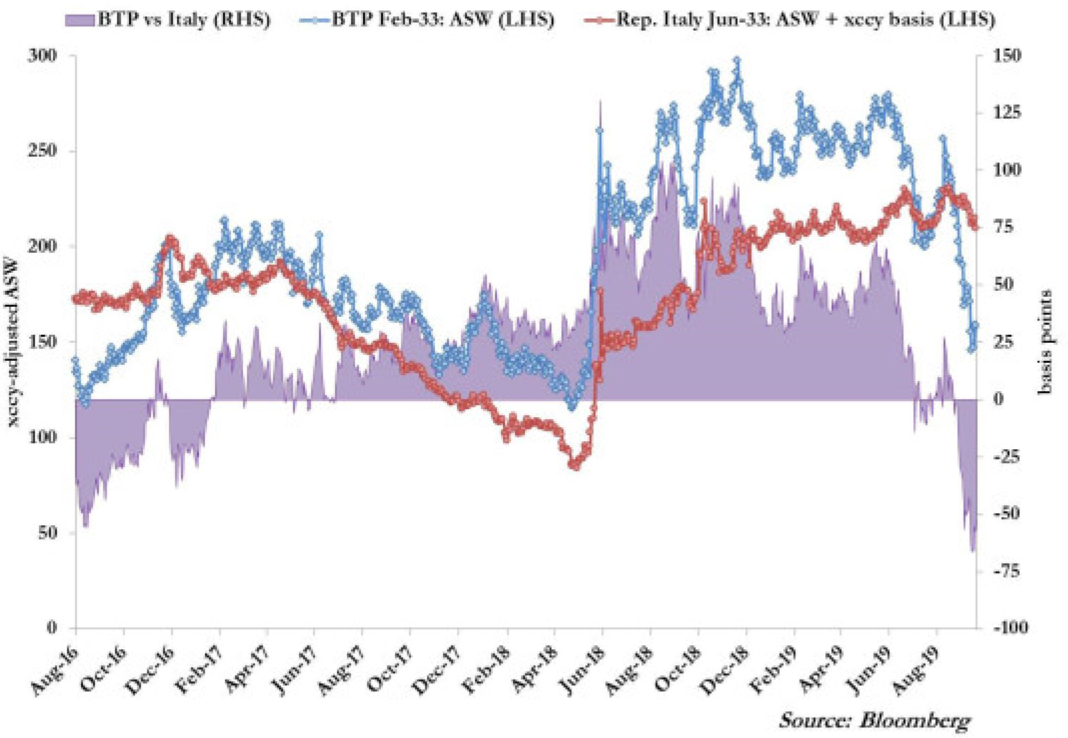


Figure 37 – Quanto-Legal basis for a pair of Italian government bonds expiring in 2033

Inflation-linked government bonds (linkers) also embed interesting information about the redenomination risk perceived by the financial markets. As stressed in Section 2, the Eurozone inflation is a weighted average of the inflation values of its member countries; this means that, usually, none country-specific reading coincides with the Eurozone reading, but there is a more or less wide gap.

Over time, some member governments have issued linkers indexed to the domestic inflation and others indexed to the Eurozone inflation. Coeteris paribus, the key difference between the two kinds of bonds (in the following also domestic linkers and Euro-linkers, respectively) are the different markets' expectations on future domestic and Eurozone-wide inflation dynamics. In turn, markets' expectations on future domestic inflation – and, thus, also on the future performance of domestic linkers – depend in some extent on the investors' assessment of the likelihood of an exit scenario for that specific country.

In particular, for some countries – such as Italy – expected inflation is completely different under either a stay or exit scenario: indeed, under a stay scenario, Italy is currently expected to experience stronger deflationary pressures than the Eurozone's average, whereas under an exit scenario, expectations on future Italian inflation would be dramatically reversed, as market's participants essentially believe that in such a scenario Italy would devalue its currency with respect to the euro fueling a sustained growth in domestic prices.

Let us now consider the difference between the implied yield of a domestic linker and that of a Euro-linker, both issued by the Italian government and comparable for residual life. For the simplicity, hereinafter this difference will be referred to as Linker basis. In the light of the above illustrated reasoning, the Linker basis is a proxy for the redenomination risk perceived by investors. On the one hand, if Italy is considered a stable member of the Euro area (low redenomination risk), the Euro-linker issued by the Italian government will tend to over-perform compared to the domestic linker of the same issuer, resulting in a widening of the Linker basis. On the other hand, in front of increased redenomination fears markets' participants should price larger inflation expectations in their quotes of domestic linkers; as a consequence, these securities should appreciate with respect to Euro-linkers issued by the Italian government resulting in a narrowing pressure on the Linker basis.

Figure 38 displays the Linker basis for a pair of Italian government bonds expiring in 2024: a BTP indexed to the Italian inflation and a BTP indexed to the Eurozone inflation. The basis went negative in early 2017 in conjunction with concerns about the outcome of the presidential vote in France and then began to widen again starting from the second quarter of 2017, indicating fading Italexit fears from markets' participants. The Linker basis started to shrink again in the first months of 2018 as the political climate overheated due to the approaching of the political elections at the beginning of March and then, after a pause of a few months, it experienced a marked narrowing at the end May 2019 (with a negative peak of -70 basis points on May 29th) in sync with the formation of a government which was expected to have a critical attitude towards Europe and perhaps even a possible return to the lira. Since March 2019, the Linker basis has steadily returned positive but has nevertheless remained sensitive to internal political events. In particular, after a drop of around 23 basis points due to the opening of a government crisis in the first half of August 2019, it started to rise again in the second half of the same month as it took shape the hypothesis of a new executive that would not have questioned Italy's membership in the Eurozone.

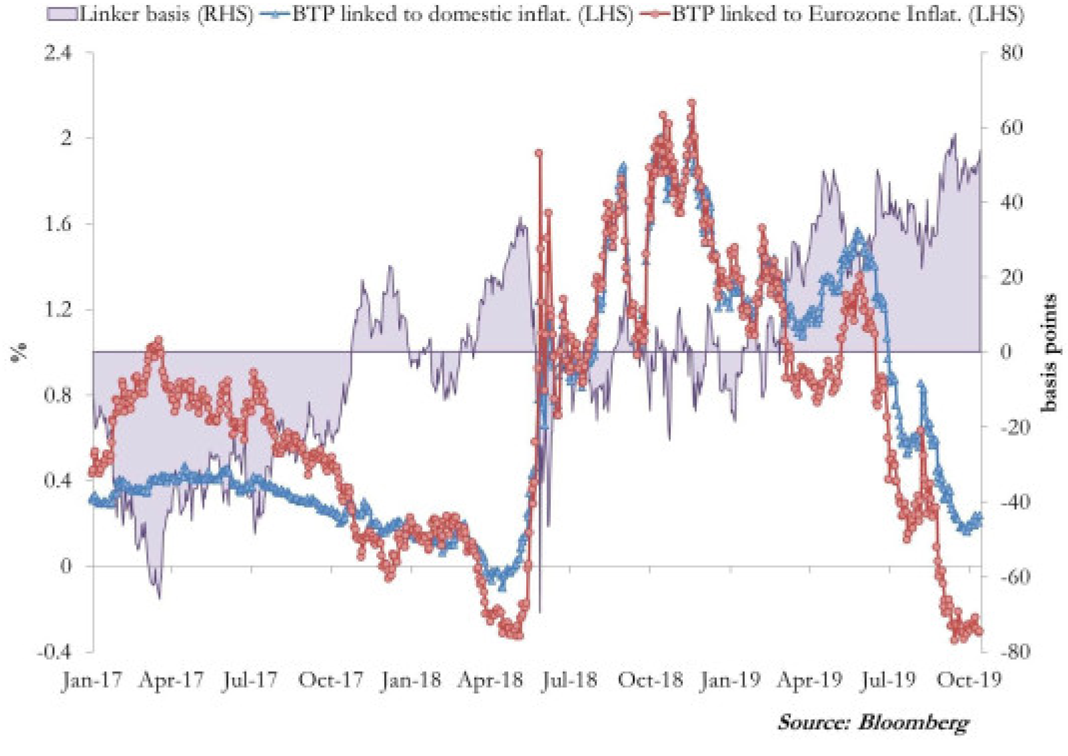


Figure 38 – Linker basis for a pair of Italian government bonds expiring in 2024

The goodness of the Linker basis as proxy of the redenomination risk can be verified also by comparing it with the ISDA basis, which – being unanchored from the technical features of specific bond issues – represents the main thermometer of the amount of redenomination risk of a given Eurozone sovereign issuer. As shown by Figure 39, the pattern of the Linker basis for the pair of inflation-linked Italian government bonds considered in Figure 38 is fairly specular to the pattern of the Italy's ISDA Basis, especially over the period starting from the second half of May 2018.

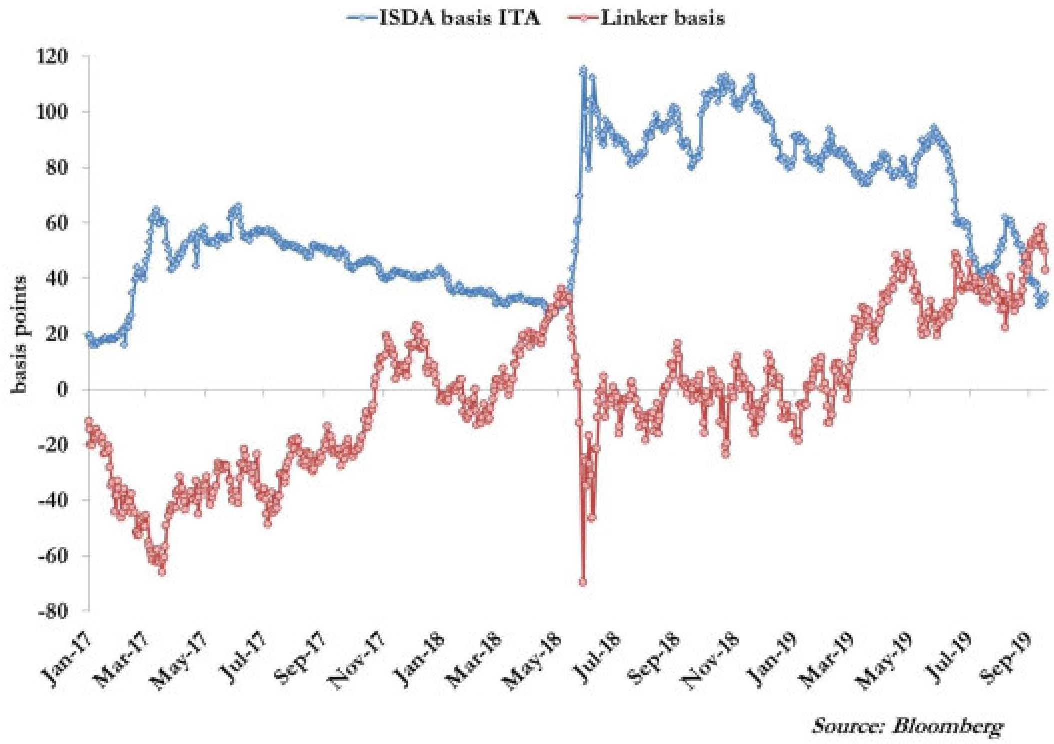


Figure 39 – Italy: Comparison between Linker basis and ISDA basis

A look to the two series suggests that, during this last period, Italian domestic affairs have weighed relatively more on the Linker basis dynamics than other possible drivers such as the expectations on Eurozone inflation. In order to roughly quantify the weight of Italy's internal developments and, in particular, of the markets' perception of the redenomination risk on the evolution of the Linker basis, the following table reports the output obtained from the linear regression of the Linker basis on the ISDA basis (and on an intercept) over the period spanning from mid-May 2018 to September 2019.

Linear Regression Model: y ~ 1 + x1

Estimated Coefficients:

	Estimate	SE	tStat	pValue
(Intercept)	76.01	3.2066	23.704	2.1494e-74
x1 ISDA basis	-0.78867	0.038476	-20.498	1.2267e-61

Number of observations: 347, Error degrees of freedom: 345

Root Mean Squared Error: 14.4

R-squared: 0.549, Adjusted R-Squared: 0.548

F-statistic vs. constant model: 420, p-value = 1.26e-61

The R2 of the regression is 54.9% and estimated coefficients are statistically significant, confirming an inverse connection between the ISDA basis and the Linker basis. More in detail, on average, an increase of 100 basis points in the ISDA basis results approximately in a drop of 78.8 basis points in the Linker basis.

The market-based indicators discussed so far shown that until recently Italy has experienced a prolonged period of significant redenomination risk; over such period – and in particular from May 2018 – this component has inflated in tandem with the idiosyncratic risk of the country, that is the risk component related to the markets' assessment of the values and expected dynamics of the key economic and financial variables of the country and of the governments' economic policy decisions. The transition to a new internal political order starting from the second half of August 2019 has supported the progressive reduction of these risk components. In parallel, there has been a rapprochement of Italy to Spain in representing the Eurozone peripheral risk.

In order to better illustrate these arguments, Figure 40 breaks down the Italy's ISDA-2014 sovereign CDS premium into three distinct components:

the redenomination risk, measured by the ISDA basis;
the peripheral risk, measured by the Spain's ISDA-2003 sovereign CDS premium;
the idiosyncratic risk of Italy, measured as difference between the Italian and the Spanish ISDA-2003 CDS premia.
The rationale underlying this decomposition is that in the last years Spain has become the country that better represents the risk of the Eurozone periphery, thus, its ISDA-2003 CDS is a fairly acceptable proxy of the risks deriving from the belonging to the disadvantaged area of the monetary union.

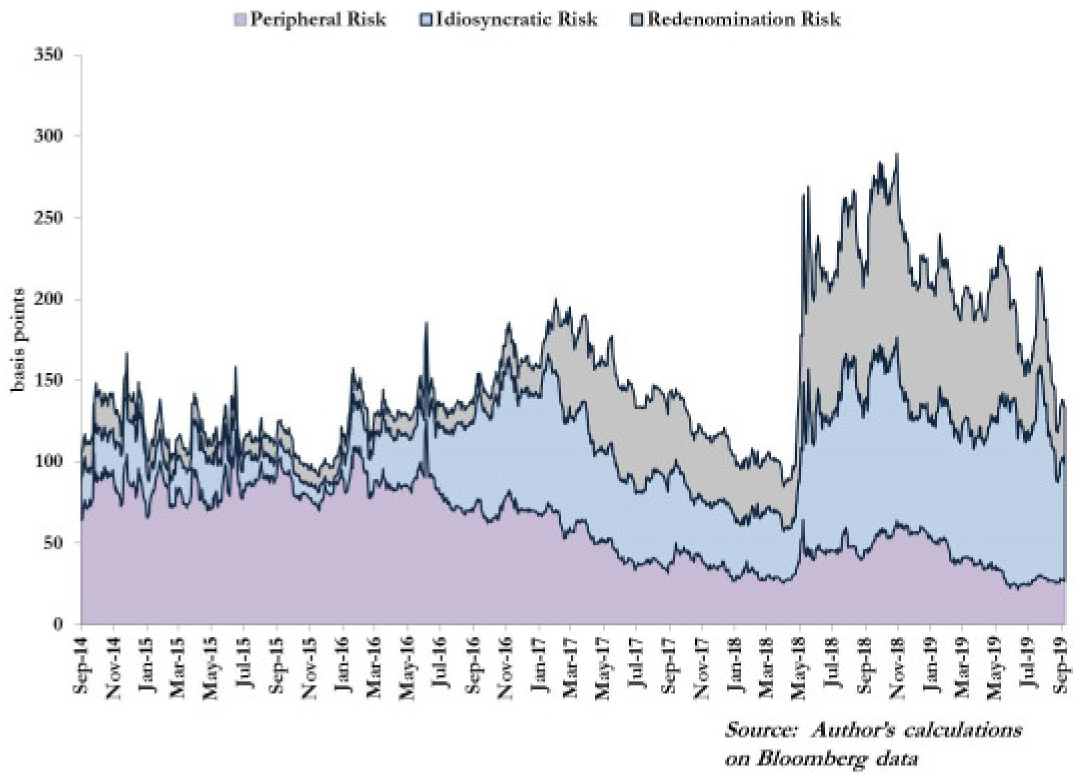


Figure 40 – Breakdown of the Italian 5-year sovereign CDS

As shown in Figure 40, until September 2016, Italy's sovereign risk was very close to that of Spain and was essentially connected to the fact of belonging to the periphery of a non-optimal currency area that was clearly unwilling to apply concrete risk-sharing policy measures.

Since September 2016, however, this risk component is progressively lower while the criticalities on the other two components are increasing. In detail, the risk component typical of the Italian economy (idiosyncratic risk component) has gradually grown over time although its deterioration is to some extent counterbalanced by the fact that financial operators give a positive assessment the great capacity of reaction to the crisis by the Italian manufacturing industry (made up of small and medium-sized enterprises with high flexibility and innovation capacity) and the high level of private savings that requires only a noble space to mobilize. The third component of the Italy's risk is associated with the scenario of public debt redenomination debt in another currency and of a related loss from the devaluation of such new currency; for the reasons illustrated above this component has increased significantly since Autumn 2016, with accelerations in conjunction with situations that have led financial markets to consider an Italexit more likely. In the period between the end of May 2018 and the end of May 2019, this component came to represent more than 40% of the Italy's risk mainly reflecting part the government's intolerance towards European fiscal rigidity in the presence of strong financial tensions and high debit balances with the other member countries. Subsequently, the relevance of the redenomination risk began to fall, apart from some rebounds in sync with the rumors of opening an infringement procedure for excessive debt against Italy (June 2019) and with the fall of the government (August 2019). The decreasing trend – clearly favored also by the return of the ECB to an accommodative monetary policy – underwent a new acceleration starting from the last decade of

August 2019 as the probability of formation of a new non-Euro-skeptic government soared and, therefore, from the investors' standpoint, the Italexit hypothesis became less and less likely.

5. The present work has analyzed the two backbones that characterize the current Eurozone risk morphology: large competitiveness gaps and systematic risk segregation. These two sources of divisiveness are measured by the critical values of some indicators: real (or inflation-adjusted) sovereign yield spreads, financial (or inflation-adjusted) real effective exchange rates and Target2 imbalances.

All of this threatens the compactness and resilience of the euro area by feeding an insane opposition conflict between center and periphery that from the economic and financial ground propagates to the political and social one. The confirmation comes from the recurrent surge of the redenomination risk in reaction to domestic developments that question the membership of a State, as recently happened in Italy.

Unfortunately, the ongoing Eurozone reform process does not seem to include enough guidance to remove the sources of instability in the economic and monetary union. Some timid progress has been made – for instance, with regard to the operationalization of the common backstop to the Single Resolution Fund – but most of the key issues (such as the European Deposit Insurance Scheme or the adoption of a stabilization function) are still on the table. The Euro-bureaucracy sticks to its historic workhorses: strengthening of the budgetary surveillance([36]) and promotion of the debt sustainability in the euro area by means of tighter conditions to access ESM credit lines and by envisaging the shift to single-limb CACs on government bonds to make debt restructuring or reprofiling easier.

Given also the numerous references to risk reduction, the overall impression is that the Eurozone continues to play defense in a climate of mutual mistrust between its members.

But the revision of EMU architecture requires a much deeper rethinking, which takes into account the anomalies in the financial and trade flows between the center and the periphery, and that has the willingness to remove their causes through a road map able to guarantee the gradual transition to a true fiscal and political union.

A first area of intervention should regard the ECB. A few months after the end of a €2.5 trillion bond-buying program, Eurozone downside risks have been mounting again pushing the ECB to deliver a new round of targeted long-term loans to the banking system and, then, to resume its asset purchase program from November 2019.

While it is undeniable that part of the difficulties of the Euro bloc come from international problems such as the escalation of tensions on global trade, on the other hand some problems are instead completely endogenous. Starting right from the ECB mandate and constraints: a monetary policy exclusively focused on price stability is flawed especially if there is no fiscal union charged with redistribution and stabilization functions. The proof comes from the persistent inflation and interest rate differentials between countries that cannot rely on exchange rate adjustments to remove competitive imbalances. The unwillingness to undertake effective risk sharing measures fits into this context making it even more difficult to overcome the current fragmentation of the Euro area.

Looking at the ECB – also in light of the re-opening of net assets purchases– a first step in the right direction would be to get rid of the capital key criterion when calibrating the intensity of the monetary stimulus between countries in favor of a criterion that is more in keeping with the actual needs of each State [MINENNA, 2019a]. This change – which could have been already introduced as part of the never-interrupted QE reinvestment policy – would require to calibrate the monetary stimulus according to criteria such as the public debt-to-GDP ratio and/or the level of sovereign yields, possibly having a look also to their real values.

The ECB has already implemented a similar measure with the Securities Markets Programme (SMP) of years 2010-2012 when it has purchased more than 200 billion euros of securities, most of which were government bonds of the peripheral countries. The SMP had limited success mainly because of the small size and some technical details of the program, including a partial short-term sterilization and the distribution of coupons earned on purchased securities among the National Central Banks of the Euro-system in proportion to the capital key.

The success of a second release of the program would depend on how much risk sharing it allows for. Thus, a first difference with respect to the SMP should concern precisely the policy on coupon rebates: rather than transferring funds from the periphery to the center of the Euro area, the program should prescribe that coupons are remitted to the sovereign issuer([37]). In addition, it should provide for a long lasting support to the price of the government bonds of Southern European countries: a possibility could be targeting securities with a long residual life([38]) (in a coordinated action with the issuance policy of national Treasuries). This way, a good chunk of the public debt of peripheral governments would be frozen within the balance sheet of the central bank with a consequent reduction in the amount of the duration risk to be absorbed by financial markets. By mitigating the refinancing problems faced by peripheral States, this would deliver a certain drop in sovereign yield spreads between Eurozone members([39]).

The measures just outlined would realize an implicit risk sharing within the Euro area given that, by guaranteeing the funding of the NCBs' purchase activity, it would allow them to bear higher levels of risk for some countries compared to the current levels.

It remains understood, however, that as long as purchases will remain decentralized at the National Central Banks, risks will be kept essentially segregated and the Target2 balances will not normalize.

A more ambitious program would necessarily require the centralization of the bond purchases at the ECB – meaning a full risk sharing on the sovereign bonds held by the Euro-system – and a larger size of the intervention (the new QE edition will be carried on at an average rate of 20 billion euros per month). This could be done by means of a risk sharing swap, that is an exchange in the relative positions of the ECB and of the various NCBs in order to allow the former to take over its national branches in the new net purchases as well as in the re-investment of the principal obtained from maturing bonds.

Such a move would certainly have a greater impact in terms of normalization of Target2 balances as well as of the shape and the slope of the yield curves of the different States, favoring the return on a convergent path.

Nevertheless, a complete zeroing of sovereign spreads could hardly ignore a review of the ECB institutional objectives with a direct targeting in terms of interest rates as the Bank of Japan has decided in 2016 when it has shifted to the yield-curve-control. In the multi-national environment of the Euro area, such a target would operatively require a constant monitoring of the sovereign financing conditions – in both nominal and real terms – and, therefore, the implementation of country-specific interventions also to take into account the different inflation dynamics of the involved economies.

A similar revision of the ECB targets would have a breaking effect on investors' expectations and interest rate dynamics, as happened in 2012. Then, the announcement of the anti-spread shield (the OMTs) has pushed market players to make convergence trades across sovereign bonds of different Eurozone governments as in the pre-crisis period [ARGHYROU, KONTONIKAS, 2010].

On the other hand, in the long run, even a complete ECB reform in the terms described above could not solve all the Eurozone problems neither curb the centrifugal forces generated by imbalances in macro-economic, financial and trade variables. The only antidote to these imbalances – as understood by the founding fathers – is a greater integration among the member countries, starting from the fiscal union because «without decisive progress to foster fiscal risk sharing, EMU will continue to face existential risks» [BERGER, DELL'ARICCIA, OBSTFELD, 2018].

Clearly a fiscal union is an ambitious goal but still attainable provided that the right choices are made and they are implemented gradually.

In this regard, a practical and effective solution would be a step-by-step reform of the European Stability Mechanism with the aim of realizing – in a reasonable timeframe – a complete mutualisation of Eurozone sovereign risks compliant with market rules and with conduct rules designed to minimize moral hazard.

As explained in a recent work [DOSI, MINENNA, ROVENTINI, VIOLI, 2018], this risk mutualisation would take the form of a supranational ESM guarantee with the ECB financial backing and would provide for a non-redenomination clause to be embedded in government bonds that benefit from the guarantee. Compliance with market rules would require that – in exchange for the guarantee received – countries pay the ESM a periodic premium proportional to their excess risk over the average Eurozone sovereign risk, to be calculated from the current market price of liquid financial products such as sovereign CDS premia and implied yields on governments bonds. The premia collected from member countries would be directed to the recapitalization of the Stability Mechanism that today displays a large discrepancy between subscribed and paid in capital with the risk of running a liquidity squeeze in the moment of greatest need. In addition, a recapitalization would allow the ESM to raise funds on the financial markets through the issuance of debt securities without affecting its current low-leverage and low-risk profile (unless of extreme outcomes requiring it to meet its guarantor obligations). The proceeds of this new fund-raising activity could be used to finance profitable public investment projects concentrated in the weakest regions of the EMU (predictably the same that will be called to contribute more to the ESM recapitalization because of their higher risk). This way, the Stability Mechanism would give a concrete stimulus to the real economy of peripheral countries, favoring the realignment of the economic cycles among the EMU members and, therefore, also of their risk profiles.

At the end of a transition period in which – thanks to risk sharing, the non-redenomination clause and their powerful message for financial markets – sovereign yields of the member countries would be boosted to converge on a common trajectory, the Eurozone would be ready to become a fiscal union with a genuine federal budget, a unified debt market and a single finance minister.

Hopefully the proposed solutions should gradually deflate the overall risks, bring to physiological levels the above identified indicators of the Eurozone risk morphology (i.e. real yield spreads, F-REER and Target2 imbalances) and ensure a long-term stability to the euro area.

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[1]In this paper, the expression 'risk backbone' will be used to mean a source of divisiveness across the members of the European economic and monetary union. Therefore, it has nothing to do with common references to risk factors, such as: credit risk, counterparty risk, interest rate risk, exchange rate risk, etc..

[2] See https://www.boj.or.jp/en/announcements/release_2016/k160921a.pdf .

[3] Here, Central-Northern European countries include Germany, France, the Netherlands, Finland, Austria, Luxembourg and Finland; Southern European countries include: Italy, Spain, Greece, Portugal and also Ireland.

[4] There is also a bottom limit for the current account balance – namely a 3-year backward moving average lower than the -4% of the GDP – which is included in the list of macroeconomic imbalances.

[5] For the sake of precision, since 1977 the FED formally pursues three goals: stable prices, maximum employment, and moderate long-term interest rates, though the last one is rarely mentioned in policy discussions. For this reason the Fed is commonly viewed as having only a 'dual mandate'. See: https://www.federalreservehistory.org/essays/fed_reform_act_of_1977

[6] See: https://www.federalreserve.gov/monetarypolicy/monetary-policy-strategies-of-major-central-banks.htm

[7] The weight applied to the Harmonized Consumption Price Index (HICP) of each member country is based on the share of the Household Financial and Monetary Consumption Expenditure (HFMCE) in the total.

[8] See also DUNBAR [2018], who highlights this point with regard to the calibration of the QE tapering: «This divergence [among national inflation trends] suggests that the Eurozone average is a misleading target for the purpose of QE tapering».

[9] Because of this set-up, the position of national governments joining the Eurozone is often resembled to that of emerging countries that issue debt in a foreign currency, usually the dollar, and that are exposed to the risk of sudden stops in capital inflows and, thus, of liquidity crises [DE GRAUWE, JI, 2013].

[10] On a similar line of arguments, BOFINGER [2018] claims that euro area membership entails a specific insolvency risk.

[11] Up to 2016, Spain also has been showing high real interest rates; however, since 2014-2015 their level was on a clear descending path and continued on this path in the following years thanks to the mix of accommodative monetary policy and moderate reflation.

[12]See: https://www.faz.net/aktuell/wirtschaft/eurokrise/oekonomen-aufruf-euro-darf-nicht-in-haftungsunion-fuehren-15600325.html

[13] I.e.: Greece, Ireland, Portugal, Italy and Spain.

[14] The amount effectively disbursed was 52.9 billion euros.

[15] The European Financial Stability Facility, which was created as temporary crisis resolution mechanism for the euro area and later replaced by the ESM.

[16] The European Financial Stability Mechanism, the emerging funding programme guaranteed by the European Commission.

[17] Governments' support to the domestic banking sector has been provided through a wide mix of measures, including capital injections, guarantees on banks' liabilities and impaired assets measures. German State, in particular, has been quite profligate with its banks, providing them up to 240 billion euros of fresh funds, plus another 20 billion euros in the form of contingent liabilities.

[18] See Communication of the EU Commission n. 2013/C 216/01.

[19] Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014.

[20] Not to mention the decision to exclude Greece from the program.

[21] For a detailed taxonomy of these proposals see COMMITTERI, TOMMASINO, [2018].

[22] It is worth remembering that several experts have underlined the inappropriateness of such proposals, highlighting their destabilizing potential for the Eurozone [TABELLINI, 2017; BOITANI, BORDIGNON, 2018].

[23] For details see: https://www.consilium.europa.eu/en/press/press-releases/2018/12/04/eurogroup-report-to-leaders-on-emu-deepening/ and https://www.consilium.europa.eu/en/press/press-releases/2018/12/14/statement-of-the-euro-summit-14-december-2018/

[24] It is reasonable to expect that the revision of the CACs technical features in the near future could explicitly address also the redenomination risk, for example by excluding this option from the set of available choices to the sovereign issuer.

[25] Technically, Target2 balances are – depending on their sign – uncollateralized perpetual claims or liabilities of the NCBs with respect to the ECB.

[26] See the reply of the ECB President to the question posed by some members of the European Parliament: https://www.ecb.europa.eu/pub/pdf/other/170120letter_valli_zanni_1.en.pdf .

[27] See also https://www.bundestag.de/resource/blob/645486/18be4afb646ce65e2d2e2c1bcd988de0/03-Dt-BBank-data.pdf

[28] This distrust first manifested itself with the massive deleveraging enacted by foreign investors resident in Central-Northern European countries, and subsequently with the flight of domestic investors from Southern European countries as precautionary strategy against the risk of capital controls associated, for instance, to a mandatory collateralization of Target2 deficits [BROUSSEAU, 2017; MINENNA, 2017c], but also against the redenomination risk associated to the foreseeable devaluation of their new national currency with respect to the euro/mark in case of exit.

[29] On March 2018 the ESMT business school of Berlin has hosted a conference on the euro sustainability; in that venue a panel entitled "Thinking the unthinkable" has addressed the opportunity of introducing an exit clause from the single currency.

[30] See Section 3.

[31]Something similar had happened in Greece at the time of the third public debt crisis in the first half of 2015. The establishment of an extremely critical government towards Europe and the fears of a Grexit added to the difficult situation of the Greek public finances pushing upward the risk indicators of the country, which returned to 'more acceptable' levels as soon as the relationship between the national government and Europe has normalized.

[32]In case of exit of a member country, the monetary union could stay alive, or it could break up, with the consequent return of national currencies. In the latter case the new Deutsche mark would reasonably replace the euro as benchmark European currency.
[33] During the first Eurozone sovereign debt crisis, a good proxy for the increased redenomination risk was the widening of the Quanto-CDS spread, i.e. the difference between the premium on the USD-denominated sovereign CDS and the premium on the EUR-denominated contract, due to the better hedging offered by the first contract [MINENNA, 2014]. However, precisely because of the poor hedging offered by the EUR-denominated contract, it has subsequently become less and less liquid and its prices have become unavailable.
[34] See § 3.
[35]With regard to the CAC-privilege argument, it is worth to observe that it remains an indirect indicator of the redenomination risk because CAC-inclusive bonds could result unhedged or only partially hedged against the losses arising from a possible redenomination. For instance, it could be the case that the super-majority required to approve the redenomination is reached or that the sovereign issuer willing to redenominate its public debt accepts to pay a higher recovery value on these bonds than on non-CAC bonds in order to not engage in litigation with the holders of CAC-bonds (Gulati and Weidemaier, 2017).
[36] At its meeting in December 2018, the Eurogroup agreed to enlarge the ESM competence on the assessment of the financial stability risk, establishing that the Mechanism will contribute to the overall assessment of the European Commission, especially with regard to the public debt markets and the related sovereign financing aspects.
[37] In its QE (November 2008-October 2014), the Fed periodically remitted the interests earned to the Treasury Department, hence making the securities purchased factually not interest-bearing.
[38] ECB data on the weighted average (residual) maturity of purchased securities under the 2015-2018 program exhibit a generalized decreasing trend.
[39] These spreads are inflated also because the large amount of Bunds involved in the PSPP has reduced their free float, hence contributing to fuel a scarcity effect that keeps yields on German sovereign bonds at subdued levels.

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The views and opinions here expressed are those of the author and do not necessarily reflect the official policy or position of the opinions of the institution to which he belongs.

Open Review of Management, Banking and Finance

«They say things are happening at the border, but nobody knows which border» (Mark Strand)

Innovations in asset management under a regulatory perspective: which rules can support the success of fintech?

by **Valerio Lemma**

Abstract: *This analysis focuses on the application of fintech to collective portfolio management, as a result of a regulatory intervention that arise from the directions of EU policymakers and authorities. Our research aims at understanding if the effects of the use of technology improves the current techniques of the asset management, and then if the latter require further regulation. The outcome suggests that the regulatory framework based on the UCITS Directive and the AIFMD is out-of-date and it does not consider the role of technology in this sector. In this respect, the analysis of the most common fintech innovations has led to the need for regulatory innovations that may lead to the supervision of the services related to the 'digital portfolio management', which includes the algorithmic trading, digital ID verification, predictive/descriptive/prescriptive analytics, and algorithmic trading tools.*

1. New market failures arise from the combination of globalization, financialization and digitalization. These failures has been a challenge to both understand the importance and the influence of the crisis in the evolution of legal forms, but also to deal with the problem of coordination of the public intervention, provided that the financial markets is not ruled by an unified set of rules. And this has led to the identification of new needs for regulating finance.[1]

In this respect, this analysis focuses on the regulatory interventions that arise from the directions of policymakers and from understanding the effects of the oversight of the use of technology for improving the asset management. In particular, it refers to the "new business models, applications, processes or products with an associated material effect on financial markets and institutions and the provision of financial services" (as FSB stated in 2019 in the document named "Monitoring of FinTech").[2] This now leads to recall that past researches have highlighted that policymakers had generally avoided a disciplinary intervention overt the status of the technical structure of the asset managers.

Fintech cannot be considered in a reductive way as a sort of 'tool-box' which managers can make use to pimp their business. In the first place, fintech is a node in which the innovations, the culture and the trends belonging to the most brave firms own experience. From this perspective, the analysis of fintech cannot go deep into the contents of such experience: it is only possible to appreciate partially it through the information collected in the market. Thus, the need for understanding the aforesaid contents calls for the public intervention in regulating and supervising the application of innovation to the collective portfolio management.[3]

Hence, it is worth investigating the role of the regulation in the opening of the asset management industry to the technological environment, and then in the use of algorithms, software and any other high-tech tools devices or autonomous tools based on machine learning and artificial intelligence.[4] Most of the conclusion will refer to the need for regulating the use of technology in order to protect savings, market integrity and price stability.[5] Indeed, as the use of algorithms makes the foundation of artificial reasoning visible, the supervisors may control what programmers and coders have written in the logical sequence underlying the high-tech investment process; hence, it is possible to control how software will provide an output in respect of certain inputs. Therefore, we expect new ways of regulation and control over asset managers that apply the fintech solutions to their activities.

2. It is possible to consider the juridical difference between in-house providing and outsourcing, provided that the second model requires other entities and therefore would place certain decisional power out of the organizational structure of the asset manager.[6]

In this context, the contracts between the mangers and the fintech outsourcers may refer to the execution of the investment policies, and then with the asset management itself because of the relevance of the algorithms, big data and any other specific chosen by the outsourcers themselves. Hence, it is possible to question the current schemes provided by the law to regulate such contracts, which have not been designed to regulate the current digitalization and, in particular, the possibilities due to sharing, common usage, duplicability, intermediation, etc. [7]

As a result, these schemes may not suit to an extensive use of outsourcing policies in asset management, whose content shall comply with the investment policies agreed with the investors (and written in the fund rules)[8]. Indeed, the application of fintech solutions does not refer to the same policies that drives the choice for outsourcing certain functions, but to the evolutionary innovation of the business configuration. In this respect, the current rules on outsourcing appear inadequate to regulate the use of fintech solutions, provided that the activities of the fintech firms running platforms may influence the sound and safe management of the savings collected by asset managers.

Fintech is not an exception to the above, because the relevant rules belongs to national or regional legal system, even if the globalization made national borders transparent to business relations. According to the above, the Europeanization of financial law may help in gaining a convergence towards a common framework for implementing financial innovations in the capital market.[9] As the ESFS supervise the end-users of such innovations, the public control may drive the circulation of ideas and models which contribute to maturing a shared concept of concrete solutions in this topic deemed acceptable and shareable also by market participants. According to the use of involve the participants themselves in the regulatory processes, the relevant authorities may discuss the support of fintech with stakeholders, representatives of businesses, investors and savers.

Hence, it has been envisaged that these fintech firms should obtain an authorization (as it is provided for the exercise of similar activities managing the multilateral systems that bring interests together as alternative venues for financial instruments).[10] On the contrary, there are no evidences that may justify putting such firms out of the supervision of any public authority.

Keeping this topic in the current perspective, there is no suitable justification to allow fintech firms to seize new opportunities without following a safe process (similar to that provided to take possession of the authorization to carry out one of the reserved activities that these firms intended to replace, supplement or improve). In this respect, we should recall the European Central Bank's "Guide to assessments of fintech credit institution licence applications", which shows a comprehensive approach to the business of banking (including the business model in which the production and delivery of banking products and services are based on technology- enabled innovation).[11]

From a law and economics perspective, it is possible that the monitoring of the industry cloud led to the extension of control to the fintech providers and in particular to decentralized financial technologies, artificial intelligence, big data analytics, open banking and programming interfacing (APIs).[12] It is worth recalling that, with respect to banking, EBA stated that the "materiality of cloud outsourcing determines whether an institution is required to adequately inform its competent authority about it".[13] This may suggest including in the scope of the public supervision the fintech tools used in risk-taking, decision-making and record-keeping. Accordingly, it may lead also the compliance of the mechanisms used for organizing and running the platforms used by asset managers. According to the above, this undertaking may refer to both economic efficiency and social utility.

The same attention should be paid to the growing importance of the firms' running the fintech platforms, as their use in the provision of varied services to support asset managers in implementing the investment policies of their investment funds, by a system that allows the sale and purchase of the relevant assets.[14] With regard to what has been experienced so far, it is useful to consider the evidence of platforms that with respect to the supervised activities are (i) alternative (so called non-bank financial intermediation), (ii) instrumental (aimed at improving the use of traditional services, e.g. websites comparing the offer), or (iii) similar (and then they need a special authorization, e.g. FinTech Banks).[15] Indeed, the use of such platforms refers to the contents of the agreements concluded between the platform's managing firm and the asset manager, with respect to the rules on the access and the functioning of such platforms, as well as the ancillary services provided by the aforesaid firm. Hence, there is the expectation of specific rules to govern this way of innovating the operating model of traditional operators.

3. The asset management may access to platform in order to gain advantages from a virtual shared-resource system where individual users, acting independently, may offer or demand money or risks.[16] Indeed, all the above refers to platforms that allow the execution of exchanges (or the provision of

services) that in the past were exclusively related to the performance of reserved activities (by credit institutions, brokerage firms, asset managers, insurance companies, etc.), and today these platforms are based on the possession of a compatible electronic instrument (a device), the use of a computer program (an application), and the access to an interconnection network (even immaterial). [17]

Hence, the asset manager who aims at using the platforms shall verify, on the one hand, the contents of the 'supporting infrastructures' of the platforms and, on the other hand, the relevant failures, also in case of cross-border transactions.[18] It shall take into account both the above and the management of these platforms. In this respect, any asset manager should be in the position to verify the resilience of the infrastructure (digital or traditional) behind the website, through which it can exercise its negotiations (on behalf of the fund), and – as this infrastructure is not supervised – it should asses the compliance of the relevant mechanisms to the disciplinary framework. This requires the transferring of in-formation from the fintech firm to the asset manager.

It is worth noting that the systematic use of ICT tools for the execution of the investment policies management of the contents of the relative relationship (from new infrastructures, to new devices, to new block programming).[19] In addition, it has been observed the use of mechanisms able to auto-operate the activity of asset management, the accessing to significant aggregations of information (so-called big data) and the application of new software architectures (including blockchain technology). This highlights the importance of the platforms in this sector of the financial markets, their effects on competition and the new conditions for performing asset management on the basis of cloud computing, big data analysis, artificial intelligence, blockchain and distributed ledger technologies.

It is useful to consider also certain objections to the application of fintech to asset management.[20] The first concerns directly the general intention to promote this process. This objection also emerged during the analysis of the shadow banking system. It stems from the risk that savings may be jeopardized for the benefit of a competitive model, which would end up in marginalizing the purposes of social utility that the public intervention should pursue. It is easy, however, to reply to such objection, not only by leveraging the benefits of fintech and other economic aspects of the latter, but also by referring to the evidence that an uniform technology would guarantee an equal status to all the market participants. Obviously a quantitative analysis may confirm if the benefits outweigh the costs.

A second objection may attack the technological evolution having regard the possibility that it excludes certain citizens from accessing to this new form of finance. In this respect, any rule aiming at protecting individual rights (of savers or consumers to access to the market) may be seen as aimed at protecting also certain positions or at slowing down the progress. In this respect, it is clear that the balance between technology and rights may never lead to the detriment of the latter, which constitute the inflexible core of the market relationships. This may be sufficient to avoid the risk that the regulation of innovation can sacrifice the standards of protection set by the policy makers.

However, the risk of an abuse of the power held by the ICT service providers, the platform's managing companies and the fintech firms must also be taken into account. All of the above challenges the reliance of asset managers that are using these innovations. It is worth recalling the approach proposed by the European Commission (through the 'Financial Technology Action Plan' COM_2018, 109), which aims at encouraging new types of financial activities under a legal order able to avoid asymmetries within the capital market (between asset managers that use a traditional approach and the others that use platforms and other fintech tools). Obviously, the EU policy maker is called to ensure the neutrality of the technology with respect to the protection of the private interests and the social utility.[21]

From a regulatory standpoint, any asset manager has to consider that the technological platforms perform a dual function: referring to the provision of services (alternative or instrumental to the exercise of reserved activities) and to the circulation of capital (and so, to the meeting of supply and demand).[22] The result is a dualism between the functions of providing service and those of managing the market, so that the relationships do not exhaust their value in a bilateral linkage (related to servicing), but extend their relevance to any user of the platforms. Hence, the need for controlling these platforms and avoiding asymmetries in their use by the asset managers.

4. In asset management, the fund's rules set forth an investment policy and the legislator reserves to the managers the business of executing such policy. As any investment policy is made by a set of purchases and sales, the human directors of the asset manager usually develop the relevant instructions, but these instructions can also be settled by an algorithm, and then it can be executed by software and any machine learning tool would suggest any specific change to them.[23]

It is worth considering that the use of such ICT tools may be direct or indirect, by the use of fintech firms as software suppliers or outsourcers, even if the power to take any investment decision remains with the board of directors of the asset manager. In this respect, the automation of the investments requires that every aspect of the investment policy can be so precisely described that a machine can execute it (on the basis of the relevant inputs).[24] Thus, this refers to the capability of the programmers to develop an algorithm able to support the performance of the relevant tasks required for the ordering of sales and purchases that leads to the result expected by the investors (in compliance with the fund's rules). Hence, an asset manager may gain advantage also by a machine-learning system that can solve cognitive problems commonly associated with investment activities (such as gaining information, problem solving, and pattern recognition). It can also use software that supports the human resources that manage the assets of the fund.

All the above lies under an out-of-date regulatory framework, based on the UCITS Directive and the AIFMD.[25] The analysis of the most common fintech innovations leads to the need for regulatory innovations that may lead to the supervision of the services related to the 'digital portfolio management', which includes the algorithmic trading, digital ID verification, predictive/descriptive/prescriptive analytics, and algorithmic trading tools.

Firstly, the need for regulation refers to the risk that the internal features of the relevant software may reduce competition among asset managers.[26] Indeed, there is the possibility that that the decision-making processes may rely on the same set of data or algorithms, and this may align the output of the ICT tools. Hence, the policymaker should intervene to prevent any market failure related to such possibility. Secondly, asset managers must consider the operational risks associated with both cyber security and cloud outsourcing, and then have to provide technical standards able to verify that the ICT tools have a coherent and resilient infrastructure and software. Indeed, both these considerations lead to a concentration of market failures and risks that raise the awareness in respect of modernity and technology. [27]

In considering the main contents of the supervisory approach to fintech as a whole, the most relevant authorities revealed a propensity for adopting an open and general approach aimed at a cross-sectorial coordination of the supply and demand of capital, by leveraging the possibility of a horizontal harmonization of the rules concerning cross-border and domestic asset management.[28] Within the EU, this refers to the choice between 'minum directives' or 'maximum regulations', as the firsts would establish a mere common standard consisting of mandatory principles to guide the individual legislative action of each Member State. The choice of such directives has the advantage to maintain the national level of protection (in the States where it is high), however this choice has the disadvantage to permit a run for the shopping of a forum that, at the same time, has low legal duties and allows any kind of cross-border activity.

In this respect, the implementation of a European regulatory framework refers to the principle of effectiveness, combined with the principle of subsidiarity and the principle of the preliminary recourse to the remedies provided by the national courts.[29] In a globalized and digitalized context, the financial relations refers to rights that are within the competence of such courts, as the effective judicial protection of such rights require an effective legal remedy against any kind of infringements. According to the above, the implementation of fintech tools in the asset management industry may require EU rules designed to specifically address the remedies regarding the protection of investors and the financial stability, both in case of bilateral disputes or market crisis. On its own turn, these rules require substantive provisions regarding the relations with individuals.

In this case, an evident example is the action plan on fintech, adopted to foster a more competitive and innovative European financial sector.[30] The implementation of such action plan may led to a proliferation of remedies in national legal system. This would also imply that there will be Member States where the compliance would be protected by a remedy of absolute nullity and an automatic enforcement (i.e. ex officio), and other Member States where nullity would be relative and/or partial. At the same time, in certain Member State, the judge may be able to change, rectify or adapt the contractual terms that he/she considers unfair (in respect of the criteria of good faith, balancing of advantages, and composition of interests). Thus, the implementation of EU standards by means of public or private enforcement, which aims at protecting the general and collective interests and at safeguarding the rights of individuals.

This leads to the conclusion that the application of fintech to asset management comply with the principles set forth by the EU regulation. This kind of innovation are in line with the goal of collective portfolio management, whose efficiencies are gained by unifying the savings of several investors on the basis of a common interest for a specific investment policy. As EU managers are able to manage and market AIFs to professional investors across the Union with a single authorisation (according to directive 2011/61/EU), certain issues have been raised in the 'Report from the Commission to the

European Parliament and the Council assessing the application and the scope of Directive 2011/61/EU", and these issues could possibly require further action to respond to technological developments ensuring that the AIFMD legal framework is fit for the purpose of a safe implementation of fintech.[31]

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[2] See FSB, Monitoring of FinTech, 2019

[3] See Report of the European Parliament with recommendations to the Commission on hedge funds and private equity (A6-0338/2008) ['Rasmussen' Report] and on the transparency of institutional investors (A6-0296-2008)

[4] It follows another analysis published by Lemma, Fintech regulation: the need for a research, in Open Review of Management, Banking and Finance, 2018, which raised certain questions on the definition of 'fintech' and its fundamental elements, in order to highlight that the evolution of the European regulation (of the internal market for capitals, banking and financial services) suggests that the path will continue through the use of new technologies in banking and finance.

Indeed, this preliminary research suggested that the efficiencies of fintech should be the rationale for the development of the intermediation processes.

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[6] See Masera, La (non) proporzionalità della sorveglianza bancaria nell'UE: problemi e prospettive, in Rivista Trimestrale di Diritto dell'Economia, 2020, fasc. 1, pt. 1, p. 40 ff.

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[8] See Recommendation of the European Systemic Risk Board of 7 December 2017 on liquidity and leverage risks in investment funds ESRB/2017/6, 2018/C 151/01

[9] See Letter of 3 February 2020 to DG FISMA from the ESRB on its considerations regarding the AIFMD.

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[11] See also ESMA Annual Statistical Report EU Alternative Investment Funds 2019, 21.01.2019, ESMA 50-165-748, (ESMA Statistical Report 2019) and ESMA Annual Statistical Report EU Alternative Investment Funds 2020, 10.01.2020, ESMA50-165-1032, (ESMA Statistical Report 2020).

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[14] It is worth pointing out that the primary area where regulatory gaps and issues have been identified by national authorities is the one where fintech firms do not fit neatly within the existing rules; and this is more evident if these firms exploit also crypto- assets, ICOs and DLT. In this respect, see ESMA, Licensing of fintech business models, 12 July 2019 on the mapping of current authorising and licensing approaches for innovative FinTech business models in Europe where it is reported that the responses of national authorities served to confirm ESMA's Crypto Asset Advice, that certain tokens are financial instruments and subject to the full attendant regulation, while those tokens that are not deemed financial instruments should be subject to some minimal level of regulation. In this respect, it is noteworthy that ESMA continues to foster supervisory convergence on the topic of crypto assets across Member States.

[15] See Canepa, Il dilemma della regolazione delle piattaforme., in AA.VV., I servizi pubblici. Vecchi problemi e nuove regole, Torino, 2018, p. 143 f.

[16] See again ESMA, Licensing of fintech business models, 12 July 2019 on the maping of current authorising and licensing approaches for innovative FinTech business models in Europe.

[17] See Lemma, Fintech Regulation, London, 2020; see also Id., Le piattaforme nel mercato dei capitali, in AA.VV., L'attività delle banche, Padova, 2020; Lemma, Fintech Regulation, London, 2020

[18] Commission staff working document Impact Assessment on cross-border distribution of collective investment funds, SWD(2018) 54 final, 12.3.2018

[19] See ECB Advisory Group on Market Infrastructures for Securities and Collateral "The potential impact of DLTs on securities post-trading harmonization and on the wider EU financial market integration", 2017

[20] In this context, we will not consider the structure of the costs related to the use of such tools; in general, see 4 ESMA Guidelines on sound remuneration policies under the AIFMD, 03 July 2013, ESMA/2013/232.

[21] See Jagtiani, J. – Lemieux, C. 2018 "Do Fintech Lenders Penetrate Areas that are Underserved by Traditional Banks?" FRB of Philadelphia Working Paper No. 18-13 on the role of innovation in shaping financial and banking landscapes

[22] See Committee on Economic and Monetary Affairs, 'Report on FinTech: the influence of technology on the future of the financial sector', 2016/2243(INI), 28 April 2017.

[23] It is worth considering that 'Innovation hub' usually means an institutional arrangement where regulated or unregulated entities (i.e. unauthorised firms) engage with the competent authority to discuss FinTech-related issues (share information and views, etc.) and seek clarification on the conformity of business models with the regulatory framework or on regulatory/licensing requirements (i.e. individual guidance to a firm on the interpretation of applicable rules). At the same time, we shall recall the regulatory 'sandboxes', as the choice of the policymakers to provide financial institutions and non-financial firms with a controlled space in which they See EBA/DP/2017/02 can test innovative FinTech solutions with the support of an authority for a limited period of time, allowing them to validate and test their business model in a safe environment; see Discussion Paper on the EBA's approach to financial technology (FinTech), 4 august 2017

[24] See McCormick – Minto, Governance of Banks in an Era of Regulatory Change and Declining Public Confidence, in Law and Economics Yearly Review, 2014, Vol. 3, I, p. 6 ss.;

[25] Let us merely recall Lemma, Collective portfolio management, in VV.AA., Italian law on banking and financial markets, Palgrave MacMillian, London, 2015, p. 62 ff.

[26] See Cœuré, B. "Fintech for the people. Keynote speech by the chair of the CPMI and Member of the Executive Board of the ECB, at the 14th BCBS-FSI high-level meeting for Africa on strengthening financial sector supervision and current regulatory priorities", Cape Town, 2019

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[30] Let us recall EC, FinTech action plan: For a more competitive and innovative European financial sector, 8 March 2018 with respect to Fintech impacts on the way financial services are produced and delivered, as this document clarifies that FinTech sits at the crossroads of financial services and the digital single market

[31] See EC, 'Report from the Commission to the European Parliament and the Council assessing the application and the scope of Directive 2011/61/EU", 10 June 2020

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Open Review of Management, Banking and Finance

«They say things are happening at the border, but nobody knows which border» (Mark Strand)

The EU budget powering the recovery plan for europe

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Abstract: *The European Stability Mechanism (ESM) took the decisive step towards granting loans to states that are in danger of losing market access. Since then, public risk sharing in the euro area has risen sharply. Requirements for mobilization are designed to ensure fiscal sustainability. Additional fiscal capacity, in the sense of insurance through purely temporary transfers, does not increase the debt capacity. However, it creates strong political economic disincentives which weaken the regulatory framework of the monetary union and the sustainability of public debt at Member State level. The common monetary policy can only compensate for heterogeneous economic developments in the Member States to a limited extent. Different output gaps and inflation rates would require different monetary policies. With the loss of national monetary policy in the Monetary Union, national fiscal policy therefore has an important stabilizing function. Since discretionary measures can only take effect with delay (Michaelis et al., 2015), automatic stabilizers such as the tax system and unemployment benefits play the main role (Elstner et al., 2016). For them to work, public finances must be sustainable and public debt must be sustainable. There are now various calls for the creation of new fiscal instruments at European level. For example, the plan proposed from the European Commission (Next Generation EU). French President Emmanuel Macron has renewed previous French demands for a budget and a finance minister for the monetary union. Similarly, ECB President Mario Draghi has called for the creation of new fiscal capacity and instruments for a stabilization policy at Union level (Draghi, 2018a). The necessity of a permanent new tax source requires an amendment of the Lisbon- Treaty, where Member States should renounce on part of their tax sovereignty in favor of the European union in order to provide a more effective macroeconomic stabilization function to resist towards asymmetric shocks like for example Covid- 19. The following article attempts to provide an insight into the future of the EU Commission's plans. Furthermore, aspects of transfer payments within the financial equalization are given to the best of their ability to clarify how shocks are better smoothed out within a federal state. The aim of this article is to clarify the inevitable strengthening of the European fiscal union and to highlight the characteristic of the federal states in the sense that of the central revenue collection of certain taxes.*

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1. The Commission has drawn up a bold and comprehensive plan for the recovery of Europe[2]. This plan, which is based on the common principles and values of the Union, is based on solidarity and justice. It sets out how to boost Europe's economy, how to make it fairer, more robust, and sustainable for future generations, and how to drive the green and digital transition. The COVID-19 pandemic is felt throughout Europe and around the world. However, not only the economic and social impact of the pandemic varies considerably between Member States, but also their ability to cushion and counter the shock. This threatens to create damaging economic disparities between Member States and puts a heavy burden on the internal market as well. In Europe, ambitious coordinated measures need to be taken quickly, targeting where they are most needed. Massive public and private investment is needed to implement the development plan. Decisive measures are needed to reduce the overall public and private investment gap of at least 1.5 bio. EUR, remedied the immediate economic and social damage caused by the pandemic and the[3]Commission proposes to exploit the full potential of the EU budget to mobilize investment and bring forward financial support in the crucial first years of reconstruction. These proposals are based on: towards a path of sustainable and robust recovery: a European Building Instrument (Next Generation EU) for emergencies amounting to EUR 750 billion [4]. This instrument will temporarily provide the EU budget with new funds mobilized in the financial markets. The mobilized funds will be made available through EU programs to support the immediate actions needed to secure livelihoods, boost the economy and strengthen sustainable and robust growth; strengthened Multiannual Financial Framework for the period 2021-2027. The Commission proposes to create new instruments and to increase key programs through Next Generation EU so that investment can quickly reach where it is most needed, strengthen the internal market, strengthen cooperation in areas such as health and crisis management, and provide the Union with a long-term budget that will help drive the green and digital turnaround and build a fairer and more robust economy. Together with the three main safety nets for workers, companies and Countries totaling €540 billion, which the European Council 23 April, these exceptional EU-level measures would be €1290 billion in targeted and early support for the 4 reconstruction in Europe. Conservative estimates of the leverage effect of the multiannual financial framework and Next Generation EU, the total investment that could be generated by this package of measures amounts to 3.1 bio. Eur. These measures are in line with the European Parliament's calls for a comprehensive economic and reconstruction package for investment under the new Multiannual Financial Framework to support the European economy after the crisis[5] and the calls of the Heads of State or Government for a recovery fund with a sufficiently high volume, targeted at the most affected sectors and geographical parts of Europe and, in particular, to dealing with this unprecedented crisis.[6] This common understanding forms the basis for a rapid and comprehensive agreement between the institutions. The Commission calls on the European Parliament and the Council to cooperate very

closely on all elements of this development plan and invites them to review annually expenditure financed by external assigned revenue under the Next Generation EU instrument. The principles of such a review could be laid down in an interinstitutional declaration. A swift agreement on “Next Generation EU” and an ambitious long-term budget will reaffirm European solidarity and determination at a time when the challenges could hardly be greater. A budget for Europe´s recovery and resilience contains: Sure/ ESM Pandemic Crisis Support /EIB Guarantee Fund for Workers and Businesses about 540 billion; Next generation EU with a temporary reinforcement of 750 billion and last but not least the multiannual financial Framework with 1 100 billion. The EU’s long-term budget, strengthened by the Next Generation EU, is predestined to drive recovery in Europe. The EU budget provides a transparent and trustworthy framework for the forthcoming massive investment program, as it enshrines the Community method of governance and decision-making. It is a proven engine for investment, cohesion and solidarity and strengthens the European internal market.[7] In recent weeks, the Commission has used the remaining flexibility of the current EU budget to spend the money available to save lives and secure livelihoods. These measures have shown that the EU budget is capable of supporting Member States in a crisis in a timely and comprehensive way. These instruments have also made full use of the flexibility remaining in the current EU budget, which highlights the urgent need for new measures to advance the next crucial phases of recovery. The principles followed by the Commission in drawing up its proposals for a modern and flexible long-term budget closely aligned with the Union’s priorities are still valid. The Commission now recommends adapting and strengthening these proposals in order to promote reconstruction in Europe. The considerable progress already made in the European Parliament and the Council is the best possible starting point for a rapid agreement. The dual transition to a green and digital Europe remains the key challenge of this generation. This is reflected in all the Commission’s proposals. Investing in a large-scale renovation wave, renewable energy and clean hydrogen solutions, clean transport, sustainable food and a smart circular economy have enormous potential for economic growth in Europe. The support measures should be in line with the Union’s climate and environmental objectives. Investing in digital infrastructures and skills will help to strengthen competitiveness and technological sovereignty. Investing in resilience to future health challenges and strategic autonomy will better prepare the Union for future crises. “Next Generation EU” will give the EU budget the extra impact needed to tackle the most pressing challenges. This will be a one-off emergency instrument, set up for a limited period of time and used exclusively for crisis response and reconstruction. The funds will be made available to Member States through the EU budget to support investment and reform priorities and will be used to strengthen the key financial programs for reconstruction, due to expire on 31 December 2024.[8] Mobilizing funds on the financial markets will help to spread financing costs over a longer period, so that Member States do not have to make significant additional contributions to the EU budget over the period 2021-2027. In addition, the Commission will propose new own resources that could facilitate the repayment of funds raised under the Next Generation EU instrument on the financial market. The rapid introduction of ‘Next Generation EU’ will be crucial to tackle the economic crisis. In order to provide funds to meet the most urgent needs as soon as possible, the Commission is also proposing to amend the current Multiannual Financial Framework 2014-2020 to provide additional funding of €11.5 billion as early as 2020. This additional funding would be allocated to REACT-EU, the Solvency Assistance Instrument and the European Fund for Sustainable Development, which would take into account the urgency of the need.[9]

2. ESM or not ESM? The reference is to the possible decision of Italy to join the Pandemic Support Crisis, the precautionary credit line approved and regulated on 8 May in Eurogroup and on 15 May by the Board of Governors of the ESM. A very different (and not examined here) issue is that of the revision of the Treaty establishing the ESM, as known to have run aground in December 2019. It should be noted that the intervention of financial assistance indicated is only one piece of a broader strategy put in place by the European institutions in the face of the exceptional nature of a crisis which, affecting all countries in a symmetrical manner, can, however, determine completely different and asymmetrical consequences, thus jeopardizing the very stability of the European design; a strategy of which it is highly desirable to include the instrument of genuine common policy announced by Chancellor Merkel and President Macron[10], based on the issue of European bonds and the subsequent distribution of resources to the countries most affected by COVID-19 for investments in the environment, digital and other crucial sectors for the relaunch of economic systems. The adhesion or not of Italy to the credit line of the ESM is among the most recurrent questions in these weeks in the institutional debate and in the comparison between economists, much less widely among jurists. And yet, the critical positions taken are frequently based on arguments which, at least implicitly, are also exquisitely legal in nature. As will be said, a first (albeit not unique) argument is that, as a result of sources of European law (Article 136(3) TFEU) and international law (Article 136(3) TFEU), it is not possible to find a single argument. It is feared, in particular, that these conditions, even if not provided for in the act in which the competent bodies of the ESM deliberate the aid, can be reactivated at a later time, as a result of a decision of the same ESM or as a result of judicial mechanisms that attest the contrast of the financial support operation with the European or international regulations. Here we intend to review and analyze the legal perplexities expressed by those who argue that the possible choice of our country to join the Pandemic Support Crisis is not without risks[11]. For an easier understanding of the legal issues that have emerged, however, it is useful even before framing the ordinary ways of functioning of the ESM: it is also appropriate to put before the indication of the implications in a broad economic sense to be taken into account in assessing the appropriateness of the decision under discussion.

2.1. In 2012, in the midst of the sovereign debt crisis, the ESM was born with the main purpose of providing financial assistance to Member States whose crisis could put at risk the entire Euro Area; as an instrument of European solidarity in the financial stabilization of the Euro Area, the ESM replaces already existing temporary institutions, in particular the European Financial Stability Fund (EFSF) and the European Financial Stabilization Mechanism (EFSM). The need for a stabilization and rescue mechanism was already felt in 2010 when some countries were on the verge of financial collapse. One of the fundamental principles of monetary union, the so-called bail-out ban, had to be taken into account. As a result of this ban, “the Union is neither liable nor responsible for the commitments undertaken by state administrations”: a substantial ban on the Union rescuing countries in difficulty. A temporary fund was therefore set up (the EFSF, which had already granted 175 billion euros in loans to Ireland, Portugal and Greece) and then a permanent one, the ESM.[12] The ESM is therefore an institution of international law, not of the law of the European Union, although it is linked to it by Article 136(3) TFEU (added in 2013). It is established and regulated by an international treaty; it is governed by three main bodies: the Board of Governors, composed of the Finance Ministers of each State and chaired by the President of the Eurogroup; the Board of Directors, composed of the Treasury Directors (or similar figures) appointed, together with an alternate, by each member of the Board of Governors; the Director General, appointed by the Board of Governors. The Board of Governors is responsible for the most important decisions, including the definition of the instruments of intervention and the recognition of financial support (Article 5, Treaty ESM). It has a subscribed capital of €704 billion, of which €80.5 billion is actually paid up; the capital is divided among the member countries into shares corresponding to the capital shares held by the national central banks in the ECB. Italy owns 17.79 per cent of the shares and is the third largest country after Germany (26.94 per cent) and France (20 per cent). Decisions are taken unanimously and, only in cases of particular urgency, by a reinforced qualified majority, equal to 85% of the shares subscribed: which means that Germany, France and Italy have de facto veto power. In framing the institutional and legal debate that is taking place on whether or not the Italian choice to join the anti-COVID-19 credit line approved by the Council of Governors of the ESM on 15 May is even more important to consider that, on the basis of the founding Treaty, the instruments of intervention of the ESM are varied. They may, in fact, consist:

– not only in loans to countries in crisis, the granting of which is expressly subject to the definition of macroeconomic adjustment programs (Article 16);[13]

– but also in precautionary credit lines (art. 14, Treaty ESM), distinct into precautionary lines in the strict sense of the term, PCCL (Precautionary Conditioned Credit Line), which involve a very attenuated conditionality; and ECCL (Enhanced Conditions Credit Line), the release of which requires a higher conditionality to be provided for in the Memorandum of Understanding (MoU).

The MoU, therefore, can grant not only aid to States in crisis, but also precautionary loans to countries that, while in sound macroeconomic conditions, still need help. Unlike loans to countries in crisis, the precautionary credit line does not presuppose but aims to prevent crises by acting as a safety net that strengthens the creditworthiness of the recipient country. The Pandemic Support Crisis is the second type of financial assistance intervention. It is no less important to note that adherence to the precautionary credit lines is a necessary condition (it is not certain that it is also sufficient) for the ECB to activate, under certain conditions, the OMTs (Outright Monetary Transactions), thus subscribing to the country's securities also on the primary market and to an unlimited extent.

Conversely, the ESM stands as a "privileged" creditor with respect to other creditors.[14]

2.2. This being the institutional framework of reference, on 8 May 2020 the Eurogroup and on 15 May the Board of Governors of the ESM decided that countries could access the enhanced credit line (ECCL) accompanied by a single conditionality, i.e. that the resources would be used to support direct or indirect health costs related to the Coronavirus emergency. The credit line will be operational from 1 June, it can be used for expenses up to 2% of GDP (for Italy about 36 billion), will have a total amount of 240 billion euros and a maximum average duration of 10 years. Referring to the following considerations regarding the legal validity of this agreement, the first question to be asked is whether Italy's accession to this credit line is economically advantageous. The issue deserves to be examined from a number of angles. The first aspect concerns the cost that Italy would incur by accessing this credit line, compared to the cost it would incur by using the market. As has been indicated [15], the ESM credit line would be at a rate close to zero against an interest rate of about 1.8 per cent that Italy today pays for 10-year government bonds: it has therefore been calculated that the use of the ESM credit line, as an alternative to the issue of government bonds of the same amount and duration, would lead to savings of about 600 million per year, for a total of 6 billion. Italy would, moreover, be the country that would make the greatest profit. If it is true, in fact, that Greece is in worse conditions (paying more than 2% interest on its securities), it is also true that it could benefit from a much lower level of financing: this, in fact, cannot exceed 2% of GDP (therefore no more than 4 billion for Greece). Other countries (Portugal and Spain) would have a more limited advantage, paying interest rates of around 0.9 and 0.8 per cent on their 10-year government bonds. For other countries, joining the credit line of the ESM could even be economically inconvenient by paying similar or even lower interest rates on their government bonds than those to be paid to the ESM (such as France and Germany). The assessment of economic convenience or inconvenience cannot, however, be exhausted by the above calculation. On the one hand, Italy's access to the credit line made available by the ESM would allow the ECB to activate the MTOs, subscribing to our country's securities, even on the primary market and to an unlimited extent. It seems to be an argument destined, in the first instance, to significantly strengthen the assessment of the economic convenience in the broad economic sense of Italian membership of the credit line made available by the ESM, only if we consider the advantages that the mere activation of the MTOs can produce in terms of reducing the spread. So why not do it? What are the doubts for the economic moment? It has been argued that Italy's failure to join, after weeks of hard negotiations, could even lead to the passing of inappropriate messages of exquisitely political positioning[16]. In truth, it is correct to observe that the adherence to the ESM does not automatically imply the activation of the MTOs, it is up to the ECB alone to decide it; it is a matter of verifying that the ECB considers the condition established for the Pandemic Support Crisis to be sufficient. In this respect, it should be considered that the assessment of debt sustainability, as well as the assessment of the fulfilment of the other conditions for access to the precautionary lines, have already been successfully carried out by the European Commission, the ECB and the ESM itself. In addition, it is necessary to compare the undoubted and reported advantages with the possible effect that, according to some, could have on the markets if adherence to the credit line were isolated and not collective: this is the argument of those who argue that individual adherence could signal to the markets that they are in greater difficulty than others. It is an assessment that it is up to the political institutions to make: with the clarification, however, that an isolated membership (though to be carefully assessed in all its implications) could not signal an objective difficulty linked to the economic fundamentals of the applicant country, as already positively evaluated. The evaluation therefore concerns the purely political sphere, at least as long as the State maintains adequate conditions of access to the markets.

2.3. In carrying out the broader political assessment, account must also be taken of the concerns expressed by some in the more strictly legal field.

To sketch out the doubts involved:

– the legitimacy of interventions of the ESM that are not accompanied by the provision of strict conditionality or with light conditionality, such as that relating to the health nature of the expenditure to be incurred;

– the importance to be assigned to Article 2(3), Reg. 472 of 2013, where it provides that the Member State receiving financial assistance on a precautionary basis from the ESM is subject to enhanced surveillance by the Commission. These concerns have been raised relatively:

– the possibility that, depending on the evolution of the debt-to-credit ratio that is established with the activation of the credit facility, the ESM itself will review in the future the original conditions, formalized in the Memorandum accompanying the granting of the financial assistance;

– the possibility that, in view of previous case law (Pringle 2013 case), a financial assistance intervention by the ESM not accompanied by strict conditionality may be declared contrary to European or international law.[17]

2.4. It is useful to briefly reconstruct the regulatory framework, citing three main provisions: Article 136(3) TFEU, Article 3 of the Treaty on the Functioning of the European Union, Article 2(3) of Regulation No 472 of 2013. Article 136(3) TFEU provides that "Member States whose currency is the euro may establish a stability mechanism to be activated when indispensable to safeguard the stability of the euro area as a whole. The granting of any financial assistance required under the mechanism will be subject to strict conditionality"[18]. Article 3 ESM Treaty states that "The objective of the ESM shall be to mobilize financial resources and provide stability support, under strict conditionality commensurate with the financial assistance instrument chosen, for the benefit of ESM Members that are already experiencing or are threatened with serious financial problems, if indispensable to safeguard the financial stability of the euro area as a whole and that of its Member States". Finally, Article 2(3) of Regulation 472 of 2013 provides that "If a Member State benefits from financial assistance on a precautionary basis from one or more other Member States or third countries, the EFSM, the ESM, the EFSF or another relevant financial institution, such as the IMF, the Commission shall place that Member State under enhanced surveillance"[19].

2.5. Is an enhanced credit line (ECCL) accompanied by a single conditionality relating to the medical nature of the expenditure to be incurred in using the resources obtained legitimate?

For a position expressed in doctrine, that of the ESM is a functionalized activity, not free in its purposes, so that the ESM and its deliberative bodies could not depart from the conditions indicated in the founding Treaty, first of all those outlined in the cited art. 3, that is, the indispensability of the intervention with respect to the need to safeguard the financial stability of the Euro Area and the provision of strict conditionality.[20] The activation of credit lines in the absence of these conditions would constitute an ultra vires or, using a terminology in use in administrative law, a misuse of power, making the action of the ESM illegitimate.[21] The argument, in its clarity, is of fundamental importance and deserves to be examined by carefully analyzing the provisions of the Treaties. As mentioned above, Article 136(3) TFEU requires that the granting of any financial assistance be subject to strict conditionality, the exact consistency of which, however, is not indicated. More precise regulatory elements are provided by the ESM Treaty, i.e. the Treaty governing the stability mechanism to which Article 136(3) TFEU refers: it is difficult to think that there is a lack of coordination between the two sources and that what is regulated in the ESM Treaty with regard to the consistency of the conditionalities is irrelevant in interpreting and applying Article 136(3) TFEU. Well, the ESM Treaty states in principle in the aforementioned Article 3 that the conditions must be ‘commensurate with the financial assistance instrument chosen’, thus expressing an unquestionable need for gradualness of those conditions. A gradualness which is then clearly and explicitly expressed in the following Articles 14 and 16 of the same Treaty ESM. In distinguishing between mere credit lines (Article 14) and loans to countries in crisis (Article 16), the ESM Treaty makes the granting of the latter only subject to the definition of macroeconomic adjustment programmes. What is certain, therefore, is that the Treaty “excludes” that the imposition of a macroeconomic adjustment program is the conditionality to be applied to a country that merely adheres to a precautionary credit line.[22]

For these, in fact, Article 14, Treaty ESM, merely states that “the conditions associated with the precautionary financial assistance of the ESM are specified in detail in the Memorandum of Understanding, in accordance with Article 13, paragraph. Article 13(3) provides for the procedure to be followed when defining the MoU to accompany the granting of the financial assistance, while specifying that the MoU must be ‘fully consistent with the economic policy coordination measures provided for in the TFEU, and in particular with any legislative act of the European Union, including opinions, warnings, recommendations or decisions addressed to the ESM Member concerned’[23].

Unlike for loans to countries in crisis, with respect to which the ESM Treaty does not give the decision-making bodies of the ESM any margin of discretion in identifying the type of conditionality (which must always consist of an infrastructural adjustment programme), for precautionary credit lines, on the other hand, a discretion is recognized: Article 14, in fact, does not define the content of the conditionality, limiting itself to providing that it must comply with the economic policy coordination measures provided for by the TFEU. Furthermore, it is explicitly clarified that the content of the Memorandum of Understanding, i.e. the detail of the conditionality attached to the financial assistance, should reflect the seriousness of the weaknesses to be addressed and the financial instrument chosen. Was this discretion legitimately exercised in the case of the Covid credit line?[24] As is well known, when considering a discretionary power it is necessary, when verifying whether it has been exercised legitimately, to take into account the reasons underlying the decisions and choices made. Well, the reasons that supported the decision to impose the sole condition relating to the health nature of the expenditure to be incurred do not seem at all unreasonable. It is decisive in this respect to take into account how closely the health reasons are intertwined with the economic and macroeconomic ones; said otherwise, it cannot escape the fact that a solid and lasting recovery of economic systems cannot but presuppose a stable overcoming of the health emergency and a strengthening of national health systems. In this exceptional context, the conditionality relating to the health nature of the expenses to be incurred with the resources of the ESM has a very strong economic value. This is what the deliberative bodies have highlighted in explaining the reasons underlying the definition of health conditionality: the exogenous and symmetric nature of the shock induced by the COVID-19, the previous application of the so-called “safeguard clause” under the Stability and Growth Pact, the fact that none of the euro area Member States is part of the corrective arm of the Stability and Growth Pact, have in fact led to believe that the provision of conditions limited to the obligation to use the funds for health expenditure related to the COVID-19 emergency is also appropriate in order to achieve the objective set out in Article 125(1).

TFEU, i.e. the need to ensure sound budgetary policies of States. It does not seem irrelevant, after all, to consider that the documentation underlying the Pandemic Support Crisis (with the conditions of access to the credit line) was approved by the Parliaments of Germany, Finland, Austria, Holland and only later by the Board of Governors of the ESM.[25]

2.6. A further legal problem is posed by Article 2(3) of Reg. 472 of 2013, which provides that the Member State benefiting from the precautionary financial assistance of the ESM is subject to enhanced surveillance by the Commission. It is argued that enhanced surveillance may lead to "different assessments from the initial ones as the budgetary situation changes; ... and in that case the Commission – by a majority, and therefore without the consent of the State concerned – may adopt a recommendation leading to a macroeconomic adjustment programme."[26]However, the surveillance can only be calibrated to the concrete modalities of the financial assistance operation. More in detail, the enhanced surveillance, its logic, its objectives, its modalities are bound to be inevitably different depending on whether there is to "monitor" compliance with the macroeconomic adjustment program to be imposed on the country in crisis that obtains a loan under Article 16, Treaty ESM, or on the conditions established for the granting of the precautionary credit line. This is what has not unreasonably led the European Commission to argue that, in this case, such surveillance will be fully adapted to the circumstances and nature of Pandemic Crisis Support (letter from Commissioners Dombrovskis and Gentiloni). Thus, for example, reporting will only be limited to the actual use of funds for health expenditure and not for anything else; there will be no ad hoc verification missions other than those already planned for the European Semester.

2.7. As much clarified as the main legal issues, for the sake of completeness, it is appropriate to ask whether it is possible in practice (and with what remedies) to contest or challenge the precautionary credit line issued under the conditions defined by the Board of Governors of the ESM.[27]

It does not seem likely that it could be the ESM itself and its deliberative bodies to question the legitimacy of the operation, given that the ESM is bound, as much as the State that has obtained the credit line, to the memorandum and its conditionality. B. The risk has also been raised that the Court of Justice may find that the acts by which financial assistance is authorized without strict conditionality are unlawful. Reference is made to the substance of the previous Pringle in which the Court of Justice held that 'the planned conditionality does not constitute an instrument for the coordination of the economic policies of the Member States but is intended to ensure compliance of the activities of the ESM, in particular, with Article 125 TFEU and the coordination measures adopted by the Union' (27 November 2012, Thomas Pringle v Governement of Ireland and others, Case C 370/12, No 69 and 111)'. Without prejudice to what has been observed above, when examining the merits of the issue of the legitimacy of a health-only conditionality, can the act by which the ESM decides on a precautionary credit line be challenged before the Court of Justice? The question is answered by Article 37 of the ESM Treaty, which expressly provides for an arbitration clause under which a Member State, after having challenged before the Board of Governors the compatibility with the Treaty of the decisions taken by the ESM (for example, that of issuing a credit line with light conditionality), may challenge the decision taken by the Board of Governors before the Court of Justice.[28] It seems difficult, however, to hypothesize that, after having decided in favor of the conditions of the precautionary credit line against

Covid, the individual countries, in application of the arbitration clause cited above, appeal before the Court of Justice against the intervention of financial assistance made by the ESM on the sole ground that, in execution of the decision taken with their decisive contribution, a condition of a purely health-related nature has been laid down. It should be considered that, as noted, all the documentation underlying Pandemic Crisis Support, as well as being unanimously approved by the Eurogroup and the Board of Governors, has been validated by some national parliaments, in particular those of Germany, Finland, Austria and the Netherlands. Nor does it seem that the individual countries can appeal against the act of granting the credit line with the general remedy of annulment before the Court of Justice: this remedy is in fact available against the acts adopted by the European institutions and these cannot be considered the bodies of the ESM.[29]

There remains the abstract possibility of an intervention of the national Constitutional Courts and the possibility that they decide to put before the Court of Justice the interpretation of Article 136, par. 3, TFEU (on which we refer to par. 4.2.) or, even, to evaluate the relationship of the ESM and its initiatives with the respective fundamental laws. It should be noted that there is no lack of precedents in this sense (even very recent ones) in the jurisprudence of the German Constitutional Court.[30]

It does not seem, however, that the case in question has similar scope and character to those that have called for interventions by the Court of Karlsruhe. On the sidelines the perplexities that some of those recent positions have aroused[31], here is under discussion a management act of an international institution approved also by the German Parliament and Government (as well as unanimously by the Eurogroup and the Supervisory Council) to face a very serious health emergency with strong economic-financial implications. A management act that, moreover, commits a share of the capital ESM well below the total subscribed capital, so that one of the two conditions that the Court of Karlsruhe itself indicated in 2012, ruling on the law ratifying the Treaty ESM, is certainly met.

3. Financial equalization

3.1. In financial equalization, financial strength is generally understood to mean the ability of a local authority to dispose of financial resources. This general definition is not very satisfactory when one considers the purpose of financial equalization[32]: the regulation of financial relations between local authorities is intended to ensure the financing of public tasks. However, the question of financial needs raised by admit requires, as a first step, the operationalization and measurement of financial capacity. Only after the financial scope of the local authorities has been explored can negotiations be held to determine which local authority has an allocation requirement and which is eligible for contributions. The financial strength is thus an indicator of the scope for planning and redistribution in financial equalization. This provokes the question of how to quantify financial strength. In the literature and in financial equalization there is little agreement when it comes to measuring financial power economically and developing appropriate measures. The legal definitions of financial strength in the respective regulations of fiscal equalization law also show a quite heterogeneous picture. Economic and legal definitions of financial strength are repeatedly criticized for leaving out of consideration a number of characteristics or indicators specific to financial strength. This criticism is and has been repeatedly taken as an opportunity to develop alternative concepts of financial strength definition and messing.[33] As far as can be seen, however, the majority of the concepts are based on purely economic-institutional considerations, although generally on a specific financial equalization system. The reference will only be sporadic and for singular problems often our cross-references to the legal concepts will be analyzed on the margins.[34] It is therefore a central concern of this section to develop an operationalization of financial strength that is valid for the current financial constitutional system, which can withstand a financial equalization-theoretical indicator criticism and at the same time can be a parameter for measuring financial strength. the operationalization should on the one hand be the basis for the subsequent positive-legal analysis, which examines the legal framework of the financial strength of the federal, state and local governments and compares legal definitions of financial strength with the operationalized financial strength. Secondly, it will create the basis for legal policy proposals to the fiscal equalization legislator.

3.2. Financial equalization theoretical considerations

3.2.1. Financial strength is regularly discussed in the economic literature on fiscal equalization in connection with the allocation of tax revenues: [35]

on the one hand, the question is asked whether state revenues from certain taxes should be distributed according to financial power or to what extent the corresponding tax revenues should be allocated to the local authorities according to local revenue. In this context, we speak of allocations according to financial strength in a positive sense. On the other hand, financial strength is discussed as the basis for claims in burden sharing. The prerequisite for financial allocations from a central financial mass to a local authority should be that the financial strength of a local authority falls short of a comparative figure (e.g. financial requirements, but also average financial strength). Popitz describes the financial strength on which such an allocation system is based as reverse financial strength, since for a given benchmark the lower the financial strength, the higher the allocation. However, the financial strength can also be the basis for the obligation to make contributions (apportionments). According to this, the more financially strong a local authority is, the higher its contribution will be. The characterization of financial strength as inverse financial strength seems too narrow in this respect; it is more appropriate to speak of redistributive financial strength in the following.

3.3. If, to a welcome extent, levies are to be distributed according to revenue, a decision is to be made on the basis of the respective applicable financial constitution with regard to a specific financial equalization target. According to for example § 4 F-VG of the Austrian legal order, the distribution of taxation rights and tax revenues has to be carried out with due regard to the constraints of public administration and the limits of efficiency. Within this framework, the financial strength is determined according to the state law and economic objectives of the financial equalization partners. The determination and distribution of the positive financial power between the federal government, the states and the municipalities is determined by constitutional policy determinants. Horizontally between comparable local authorities, the postulate of a fair, i.e. equal, distribution comes to the fore. This problem of justice arises independently of the type of redistribution measure used as a basis: if allocations or contributions are calculated on the basis of financial strength, the principle must be that operationalization does not make any entitled or obliged party poorer than they actually are. This applies even if the meaningfulness of redistribution according to financial strength is denied and the amount of compensatory allocations (contributions) is not calculated on the basis of financial strength.[36] Regardless of its concrete objectives (e.g. equality of start, uniformity of living conditions, minimum pension level, etc.) and compensation instruments, financial equalization cannot, of course, take place without affecting the financial strength of the regions involved in the equalization process. Only the postulate of the justice of the intervention always leads to a comparison between needs and financial possibilities and thus to the demand for justice in the measurement of financial strength. Particularly with regard to its function as a calculating factor, the problem of justice that becomes apparent in the operationalization of redistributive financial power is not insignificant. The legal financial power regulations show a quite heterogeneous picture. The differences concern, on the one hand, the measured variables involved and, on the other hand, the conditions under which the measurement is to take place. In the following, an overview of the differences of opinion existing in the literature on fiscal equalization theory is given.[37]

3.4. Among the operationalization models, a distinction can be made between those in which financial strength is calculated on the basis of the tax revenues collected and those in which financial strength is derived from regional economic variables (e.g. regional national income). In addition, the inclusion of other indicators is also being discussed, with special emphasis on other autonomous revenues, transfers and debt capacity.

3.4.1. In the case of the tax revenue models[38] triton encounters difficulties above all when the regions (local authorities) have fiscal sovereignty and the tax sources differ from region to region or comparable tax sources are exhausted to a different extent. If one limits oneself in such a non-uniform system to nationally uniformly regulated levies, then one must not accept, depending on their yield, that the financial power of the regions (local authorities) is distorted and incorrectly represented. The smaller the amount of the uniform levies, the more the inclusion of the non-uniform taxes is postulated. However, these should not be included in the amount of the financial power actually used, but rather, for the purposes of comparison, fictitious tax revenues should be remitted for the levies on the basis of a representative levy system. The requirements for the representative tax system depend on the financial constitutional leeway of the regions and local authorities. If the regions (local authorities) exploit different tax sources, it is suggested that uniform tax bases and notional tax rates be used. The fictitious tax rates are regularly determined by applying an averaging procedure by dividing the total revenue actually used by the sum of the fictitious tax bases. The construction of homogeneous tax bases regularly proves to be problematic. If the tax base is uniform in the federal state and only the tax rate is variable, a fictitious tax rate (quotient of actual revenue and sum of the tax bases) is applied to the actual tax bases.[39] The income models assume that taxes are paid for from running income and thus income is considered an indicator of financial strength. The nature of the income calculation with regard to the legal objective of measuring financial strength differences is not clear.[40] The questions are discussed as to whether the income generation for the regional allocation of income is to be assumed or whether it should be decisive where the incomes flow; which components of income sizes are not indicators of taxation (e.g. subsistence minimum); which tax sources are used up in the regions which are not accurately recorded by income figures and whether they should be taken into account in addition; whether there are differences in financial strength when regional incomes correspond to each other per capita, but the intraregional income distributions vary widely. The discussion reveals many different approaches to correcting income models, so that the advantage of easier handling compared to tax income models does not appear to exist.[41]Other own income as financial strength. In addition to taxes, the literature examines very different types of autonomous incomes in terms of their consideration as financial strength. In this context, public-law revenues (e.g. fees and contributions) such as private-law companies (e.g. from own companies) are discussed. It is disputed in the individual case whether the respective revenue is to be qualified as a financial force at all[42] and, if so, whether it must be taken into account in its actual amount accrued or whether the representative tax system should be extended to a representative revenue system. The Advisory Commission on Intergovernmental Relations (ACIR) takes the broadest view that fees and private revenue should be included in a representative revenue system. The same should apply to income (interest, rent) from the use of financial and physical assets. Insofar as the incursion of revenue is withdrawn from the sphere of influence of the local authority (e.g. gifts, penalties), it is assumed that their actual amount is taken into account.[43]

3.4.2. Transfers are services at one local authority level for tasks of another (taking over tasks without reimbursement of costs, cost-sharing for external tasks), and reimbursements are payable by the local authority responsible for the task to the local authority which takes care of the task on behalf of the local authority.[44] As far as can be seen, there is broad agreement in the writing that revenue from contract tasks (cost rates) is not to be taken into account when determining regional financial strength. The reason for this is task-oriented: since the tasks taken over are functionally attributed to the contracting authority, the cost-replacement cannot be characterized as revenue for the purpose of providing (unattributable to him functionally) public services. In the case of transfers, however, the views differ: if financial strength is understood as the ability of a local authority to finance its tasks from its own autonomously procured resources, transfers are completely eliminated from financial strength.[45]However, the more financial strength operationalizations are dominated by the objective of recording the state activity of the respective regions, the sooner transfers are also included in the tax base of financial strength. In part, a distinction is also made according to the earmarking of the funds received: whereas general transfers should not be included, since (if) they are primarily intended to compensate for differences in financial strength, specific transfers should be taken into account.[46]The less beautiful term intragovernmental transfers, common in Anglo-Saxon language and used in OECD statistics, is adopted in this study. It focuses on the existence of several levels of government in a federal state.[47] Transfers between states on the one hand and between international or supranational institutions on the other hand must be distinguished from this and can be described as international transfers.

Both in economics and in the practice of national accounts transfers are seen primarily as an (intersectoral) instrument of transfer of services between different economic sectors and not with in an economic sector (intrasectoral). It follows that the objective of explanation is to analyse or present the reciprocal influence of the various economic sectors.The transfer of this knowledge to transfer relations with in a functionally similar sector is only possible to a limited extent in that a different explanatory objective has to be formulated. In the present case, it is a question of determining transfers as distribution instruments between public bud gets in the context of a comprehensive financial equalization. In the legal sciences, the concept of transfer is neither common or substantive, which is why the legal scholar is required to identify transfers with in the framework of financial equalization from the forms of the financial constitution and the financial equalization law as a special complementary way of distributing funds.

3.4.3. The economic concept of transfer is based on income transfers between persons or sectors, which do not change the amount of national income (income theory view) or increase the volume of economic goods (production theory view). Hence the objective of explaining the different modes of action of transfers on the one hand and exchange-related agreements on the other hand on national income and, as a distinguishing criterion, the gratuitousness or remuneration of the service relationships. An institutional distribution of income (property rights) is a prerequisite for both transfer and exchange relationships. Transfers can in principle be granted in monetary or real terms, directly or indirectly (non-benefit compensation) from income (or resource) owners. These four types make it possible to explain the transfer phenomena in both intersectoral and intrasectoral areas. However, the explanation of intra-governmental transfers raises the additional problem that is not typical of this sector of exchange-economy relations and therefore the delimitation of these intrasectoral transfers from exchange-economy operations is not in the foreground.[48]In the public sector, it is rather a question of delimiting compulsory transfers between the private and public sectors, taxes on transfers between households within the public sector. However, an exchange-economic analogy can be formed in the public sector in that services are exchanged for cost-sharing on a case-by-case basis between public budgets (intrasectoral cost rates).In the practice of national accounts, transfers are primarily understood as an intersectoral instrument for the transfer of services between different economic sectors. Although the principle of free travel is maintained, the delimitation of services for consideration and free of charge is carried out in a narrow market economy sense by means of the criterion of the purchase of goods (i.e. the statistical classification of goods). This means that national accounts within the public sector generally exclude an exchange-based analogy and consider cost rates between public sector budgets to be transfer payments. When specifying intrasectoral transfers, the national accounts are based on budgetary effectiveness. Only monetary benefits which permanently burden the paying budget and favour the receiving households should be classified as transfer payments. Indirect transfers are alien to national accounts. Since the objective of national accounts is to record transfers of resources between and within sectors, it is irrelevant to them whether intragovernmental transfers are made for the performance of external or own tasks. It is essential that a household’s decision to make free payments to another budget and the possibility of the receiving household having the amount within the framework of its own household economy.[49]

3.4.4. In contrast to the formal definition in national accounts, the legal analysis derives the transfer concept from foredetermined legal norms. Constitutional and simple legal standards can be used as a starting point. The above article assumes constitutional norms. If the principle of non-remuneration is to be maintained, Paragraph 2 of the Financial Constitution Act must be used to determine transfers as free transactions between local authorities. It stipulates that local authorities must in principle bear the costs incurred in the course of fulfilling their tasks themselves (cost-bearing rule). Performance of tasks financed by other non-competent local authorities or carried out for other local authorities responsible for this purpose (without remuneration) is given the character of intragovernamental transfers from the point of view of the financial constitution, in the first case direct monetary transfers, in the second case they are indirect real transfers. If this derivation of direct and indirect transfer relationships between local authorities is conclusive, it logically follows that there are cost estimates. Payments with the purpose of paying costs for the performance of tasks by another (non-competent) level or local authority must be classified as cost charges. When assessing what their or their own tasks are, the financial constitutional analysis must be based on the distribution of competences of the Federal Constitution.[50] As a separate task, those which fall within the jurisdiction of the Confederation or the Länder or within the independent sphere of activity of the municipalities, regardless of whether they are fulfilled by their own or foreign bodies, are to be understood as their own task. In principle, a simple legal approach would also be possible for tasks and thus transfer determination. If the tasks of a local authority are defined as all those obligations that are to be performed on the basis of a constitutional or federal obligation, the scope of transfer relationships is considerably reduced compared to the constitutional approach. Only those services of a local authority are to be classified as transfers, which are paid as discretionary expenditure.[51]

The consequence of a division of tasks between local authorities, which is based on simple statutory standards, is that the administrative tasks of the individual local authorities vary greatly depending on the national or federal regulations and are often subject to frequent legal changes over time. The consequence of this, in turn, is that transfers from country to country, between the federal government and the Länder, as well as between states and municipalities, must also be classified differently in their quality, quantity and over time. Development of an intra-governmental transfer concept for financial equalization purposes Delimitation of the public sector In order to be able to record transfers as intra-governmental phenomena of the public sector, a demarcation of the public sector is necessary. The public sector is understood as the sum of local authorities. The distribution of financial resources among the various local authorities is the subject of financial equalization in the strict sense. Functional self-governing bodies (parafiscal households) are excluded from the study. Municipal associations provide for the tasks of their own communities without financial autonomy. Financial transactions between municipal associations on the one hand and the Länder or the Confederation on the other, on the other hand, must therefore be dissolved on the members of the association. in statistics, however, this encounters difficulties because the transactions of the municipal associations are reported in aggregate and it is not possible to return them to the respective municipalities.

Major demarcation difficulties arise in the case of budgetary spin-offs in public (fund) and/or private organisational forms. Financial transactions to and from public funds are, in principle, intersectoral relationships. In cases where a public-legal fund is exclusively concerned with the tasks of the dispersed household, the financial transactions may be allocated to the aging budget. Financial transactions by local authorities with private law organizations leave the intrasectoral sector and are formally statically attributable to the intrasectoral sector. However, in so far as the activities of the operators organized by private law are substantively public tasks, the corresponding financial transactions must undoubtedly be included in an intersectoral analysis. For the classification and attribution of transfer relationships, it is then necessary to determine which local authority has the dominant decision-making power with regard to the execution and final jurisdiction under substantive law.[52]

3.4.5. In federally organized communities with multi-member statehood, intergovernmental transfer relations have a vertical and horizontal dimension. Vertical transfer relationships between territorial levels must be distinguished from horizontal transfers between local authorities within a political level. Horizontal transfer agreements are therefore only possible between countries on the one hand and between municipalities on the other.[53] the Austrian financial equalization system does not have any direct horizontal distribution arrangements. Horizontal financial equalization elements are only incorporated into the distribution of tax income shares in the municipal financial system (graduated population key, financial strength – financial needs compensation). if, however, direct horizontal compensation payments take place between municipalities or between countries, they have the character of cost-based payments which have the purpose of repaying benefits that go beyond a local authority (e.g. contributions from schooling to school-maintaining municipalities).[54]

Explanatory objective of an intra-governmental transfer concept for financial equalization. The distribution of funds in a federal state must be task-appropriate. It therefore presupposes standardization of the distribution of tasks between the levels of government (passive financial equalization). The assessment of the distribution of revenue and of the individual types of revenue allocated, in turn, in turn makes it more relevant to examine whether or to what extent this enables the various levels to carry out their tasks.[55] The Austrian Finance Constitution Act takes this idea into account in Section 2 (Cost-bearing Regulation). If this question is transferred to the vertical intragovernmental transfer system, the delimitation of transfer revenue from other revenue from a public budget can only have the purpose of showing the extent to which the given task of a territorial level must or can be used. The transfer concept derived from this is task-oriented and includes the objective of identifying payments (and services) that are used to finance (fulfillment) of issues issued by another local authority. For the purposes of fiscal equalization, this allows the following conclusions to be drawn: the ability of a local authority to finance its tasks with its own resources (financial capacity); Comparison of the financial performance of several levels; extent of local government benefits to other levels of local government. Comparison of benefits to other levels of local government between different levels (transfer balance); possible interdependence between local and receiving local authorities, Distribution of funds across the financial equalization system (vertical financial equilibrium – vertical financial imbalance). The objective of comparing financial performance also includes the inclusion of indirect transfers. If one political level takes over the fulfilment of tasks for another local authority without obtaining or receiving reimbursement of costs from the latter, there is an indirect transfer to the level responsible for the fulfilment of tasks. When considering intra-governmental transfer relationships in a task-oriented manner, it must be borne in mind that each local level can be not only a transfer recipient, but also a transfer guarantor. It is only from the formation of a net transfer balance that it becomes clear whether a level has more (surplus situation) or less (deficit situation) own budget than is necessary to carry out its own tasks.The existence of a surplus or deficit situation must not be combined with hasty assessments. The objectives and effects achieved through intra-governmental transfer relationships must be reserved for an in-depth analysis of the objectives and effects.[56]

3.5. The task-oriented concept of transfer developed for the purposes of financial equalization mentioned above is, of course, normative in nature. he draws his constructive explanatory material from the standardization and distribution of tasks in the state. If one relates the distribution of funds in the financial compensation to the respective intergovernmental division of tasks, where one will have to link to the constitutional distribution of tasks (usually the power of execution) in accordance with the interpretation of Section 2 F-VG (Cost-sharing rule). The division of the concept of transfer from a simply legally standardized division of tasks (and thus the division of responsibilities) means a departure from the constitutionally stipulated binding of the entire distribution of revenue in the financial equalization to the distribution of tasks. This would make it impossible to classify the concept of transfer into the entire revenue system of local authorities. If one wants to understand intra-governmental transfers as a (secondary) revenue method in the system of Austrian financial compensation, one will have to assume the given financial constitutional standards. In addition, therefore, a task-oriented transfer concept is assumed in accordance with the Financial Constitution Act. The normative task-oriented transfer concept derived here differs fundamentally from the fundamental definition of concept in national accounts. Since the aim of national accounts is to classify cash flows between and within the sectors according to their economic effects, the question of their own or external tasks is irrelevant to them. The exclusive criterion for determining intergovernmental transfers is the decision of one household level to make another payment without any consideration. From this point of view, cost rates within the public sector are transfers; indirect transfer payments do not exist in the national accounts.[57] This is ultimately also a consequence of the accounting of goods as public consumption or public investment in the specifying household; a further pursuit of this transaction towards a third budget affected is therefore unnecessary for the national accounts. The use of a normative concept of task for determining transfers must not obscure the disadvantages which result in the fact that normative system of distribution of tasks loses its meaning if they do not reflect economic and social development, but may even stand in the way of it. In these cases, legal regulations can only be staffing for matters that have long since obeyed other laws. The government's objectives in financial equalization Financial equalization is legally understood as the regulation of financial relations between local authorities. The need for fiscal equalization is not necessarily limited to federally organized state hoods, but its economic effects and arrangements are discussed almost exclusively on the basis of a federally organized multi-stage state-building.[58] From the discussion about the non-economic, state-law justification of federal state forms of state can now be derived a state-law target system, which, although not able to legitimize the federal state as such, is based on it and is also inherent in the financial equalization through the active, task-related and passive, financial transformation of the federal program. Essentially, this state-law target system distinguishes between two dimensions:[59]The dimension of the division of violence: this was initially seen only as a horizontal division of force in legislation, administration and jurisprudence under state law. However, the distribution of these powers in federal state structures also leads to their vertical division between the levels of local authorities, thus making the individual state powers more differentiated and controllable. The dimension of citizen participation (subsidiarity): this is where the democratic-political consideration comes into play, according to which the will of the citizen to participate actively in the execution is the greater, but also seems all the more practical to execute, the smaller the region is conceived with its own decision-making powers.[60]

3.5.1. the economic target spectrum of fiscal equalization is recognized in the literature above all in the allocation efficiency of income redistribution and economic stabilization. The postulate of allocation efficiency requires, in the case of scarce resources, the best possible coordination of public services in terms of scope and structure to the needs (preferences) of citizens. For welfare-economic reasons, a monitorization in the determination of the supply of goods should be eliminated as far as possible and a supply of state services commensurate with regional and local needs should be achieved. The assignment of tasks to local or regional authorities is an optimization problem (choosing the optimal group size). The allocation problem essentially presupposes that local (regional) user groups with different preference structures exist and that supra-regional external effects can be internalized in contrast to the performance of the task at a higher level. The redistribution objective is discussed in two main directions in connection with fiscal equalization: on the one hand, the question arises as to whether the task of redistribution of income (interpersonal redistribution) should be assigned to the supra-regional headquarters or to the regional, decentralized bodies: on the other hand, it is checked in a horizontal perspective whether and to what extent differences in the budget and in the supply of individual sub-regions should be accepted (intra-governmental redistribution). According to the prevailing view in the federalist state, the stabilization objective is only achieved by the greatest possible centralization. An orientation towards the stability objective therefore suggests either coordinating economic policy in the state (which entails the cost of coordination) or assigning the revenue sovereignty from high-income taxes to the central government and those from uncountable levies to the regions.[61]Financial strength and its impact on the financial equalization target system. On the basis of the target functions of the financial equalization, it will now be examined what functions financial strength has in this target system. The following discussion assumes a general linguistic concept of financial strength. The implementation of the target system of state law depends on the distribution of financial strength between local authorities. In other words, the distribution of financial power gives its content to the target system of state law: The more vertical autonomous divisions of tasks are guaranteed by financial revenue-based autonomy, the more a matter of secondary authorities is the role of a power limitation function in the sense of the vertical separation of powers. The distribution of financial power is thus a measure of vertical distribution of powers/violent financial power). in this context, the significance of financial strength is based less on a quantitative view than on a qualitative one: the financial power that divides the force is financial power from its own tax sources. On the other hand, the allocation of full income sovereignty already constitutes a qualitatively strong weakening of financial strength if the local authority does not at the same time have material competence to participate in legislative sovereignty. The passive position of the recipient of the profit shares limits the decision on desirable self-selected tasks.[62]Vergable considerations apply to the aspect of civic participation. It can be assumed that the relationship between responsibility and revenue-raising in the subordinate local authorities is only transparent to the citizen if the local authority responsible for the task is at the same time the one which creates and collects the taxes for these levies. Full transparency is ultimately guaranteed only in the separation system and is lost with the advance of the tax interconnection, insofar as the revenue network is not an expression of an interdependence of integrated task programs. However, this transparency is a prerequisite for the efficiency of citizen participation. the distribution of financial strength in the sense of revenue from own levies thus indicates the efficiency of citizen participation.

The economic target system is also ultimately determined by the distribution of financial strength: if allocation efficiency is discussed in writing primarily from the point of view of the distribution of tasks, the mechanism for achieving an efficient supply also places special demands on the responsibility for expenditure. If we want to ensure that the size and structure of the regional offer are based on the preferences of the regional user group, it would make sense to require that the person offering the services should also be responsible for the associated expenditure. maximum efficiency occurs when the users of the services offered are also payers. The identity of beneficiaries and payers prevents the provision of services for which there is no demand and the non-demand services from being offered through political regulatory mechanisms. From an allocation policy point of view, it is therefore inferred that, in principle, the right or the obligation to finance should lie with the region that decides on the offer. In this systematic interaction, financial strength indicates the ability of a local authority to finance its own tasks in an allocative efficient manner. Maximum efficiency is achievable when financing from own levies.[63] Shares of income in taxes without legislative sovereignty, on the other hand, indicate an allocatively weakened financial strength. although the provider still has to take political responsibility for its allocation decision before the potential user group, the provider's expenses and disadvantages are not immediately verifiable for the user group.

Transfers must be assessed in a fictitious manner from an allocation theory point of view: insofar as they are allocated exclusively on the basis of meritorious assessments of the granting local authority with conditions of use, they do not constitute an allocative financial force, separate from regional user preferences; however, with the appropriate preferential structure of the receiving local authority, there is an increase in allocative financial strength in terms of non-conditional resources due to the take-up effects. Allocations without conditions of use lead to a financial strength comparable to the yield shares. Financial allocations for services produced on behalf of another local authority are not to be taken into account as financial strength in theory, since they are granted to finance a foreign task.[64]

4. Emmanuel Macron and Angela Merkel scored a major political victory on Wednesday. the European Commission's proposal to create a reconstruction fund to overcome the corona recession is exactly what the French President and the German Chancellor have in mind. EUR 500 billion in transfers is to be made over the next three years. This represents around 1.2% of the Union's total annual economic output. In addition, EUR 250 billion in loans, which are managed through the European Investment Bank and passed on to companies as guarantees. The Commission would issue bonds on the financial markets to fill the fund. Commission President Ursula Van der Leyen called this in her debate with the European Parliament that this was an urgent and extra-woven need for an urgent and extra-woven situation. According to the Commission, tourism in the non-profit sector, the creative industries and culture could suffer a drop in sales of more than 70 percent in the current second quarter alone.[65] The textile s, transport, energy-intensive industries and the energy sector would also be hit hard. By contrast, sectors with higher consumer confidence, such as manufacturing, retail, or healthcare, would likely return faster. The Commission hopes to close at least part of the huge investment gap that the pandemic has ripped. In 2021 and 2022 alone, at least €1.5 trillion in additional public and private investment would be needed to put Europe on the path to sustainable recovery. The Commission proposes 30-year bonds repaid from the Union budget: not before 2028, and not after 2058. This is the first problem with the plan, which is called the Next Generation EU. After all, 2028 is the beginning of the next financial period. And the negotiations for the next one (2021 to 2027) are already tough. The Union is in danger of getting into an even greater dispute over money in the future than it has been in

the past. In addition to the already controversial budget items, one would also have to make provision for the repayment of the bonds. The Commission is aware that an increase in membership fees is tricky. It therefore proposes four new sources of money: a part of the revenue from the emissions trading, a levy on imports from states that have less stringent climate protection targets, a digital tax and a single market levy for large companies. This is where the next pitfall lurks. After all, the revenue from CO2 trading is already included in the national budgets. Von der Leyen spoke of a kind of surcharge. the digital tax, on the other hand, has been stuck with finance ministers for just over two years. The carbon tax would exacerbate trade conflicts with China and the US. And whether finance ministers agree to a new corporate tax in the midst of the biggest recession since 1929 is questionable. The question arises as to which countries will benefit most from these transfers. First and foremost Italy and Spain. Almost a third is reserved for them. Poland would receive about as much as France, Austria would receive just over four billion euros. However, it would be necessary to deduct future membership fees and add up other inflows. They must be dealt with seriously. In order to do this, we must take into the view of the thrifty Vie , such as the Netherlands, Austria, Sweden and Denmark. The Dutch prime minister, Mark Rutte, was far tamer on Wednesday than he was last. He had spoken to Italy's head of government, Giuseppe Conte, whose reform plans were in the making, and for a strong EU we need strong member states>>. Chancellor Kurz also expressed himself more conciliatory: "I expect that the proposals of the EU Commission will also take into account the ideas of the thrifty four.>> A, 19 June, the Heads of State and Government will debate this for the first time. The path around the four: the discounts on their membership fees. The proposal of the EU commission on corona reconstruction to tap new sources of money could fix the rift between Germany and Italy. As paradoxical as it sounds, the pandemic, which, with the exception of the research stations on the North- South Pole, has not left a patch of the earth, offers the opportunity to rebuild the EU, which has been in a state of disarray for more than ten years. Why? Because there won't be a return to day-to-day business anytime soon – if at all. because the epidemic is driving this already ailing day-to-day business straight into insolvency. Since the US financial crisis spread to Europe in the autumn of 2008, we know that the introduction of the euro has not compensated for structural imbalances within the monetary union, but has exacerbated them in the opposite direction. Today, Germany and Italy are not only Austria and the Alps, but fiscal galaxies. Thanks to permanent repair work and the courageous intervention of the European central bank, Euroland has been stabilized halfway. However, we are still light years away from a sustainable balance between north and south.[66]Corona has shown how inadequate all these repairs have been in the end. Debt remains debt- no matter how nicely packaged and how well you cover it up. it is, above all, the Italian public debt, which has reached a level that threatens the existence of the eurozone. Italy is too big to be caught, even this truism has become topical again through Corona. Does this mean that the Union must combine its savings in order to absorb the south? Not. The plague has confused many old certainties, but the old principle of no taxation without representation is still valid. It cannot be that Austrian tax money is managed in another capital of the Union. Those who define solidarity in this way obviously did not understand how democratic responsibility works. So much for the crisis. But where is the chance?[67] it is hidden in yesterday's proposal from the EUROPEAN Commission. The idea of recovering the costs of post-corona reconstruction, at least in part, through European funding, is, firstly, a one-off, a move in the right direction and, secondly, shared by many governments – including, incidentally, the Austrian one. In a sum, such levies (provided they are clearly defined and strictly limited) could be compared with a kilometer-based toll of European policy. The ideas range from a plastic recycling tax to a digital tax to CO2 import duties. Cleverly constructed, such sources of revenue would have at least three advantages. first, they would be an elegant way out of the old north-south conflict, which is about austerity versus furiousness, and which is eating up the eurozone from within. The dispute over the EU, which has become more vehement since Britain's exit, could also be defused. And it would be too good to legitimize the raising of funds thanks to its embedding within the triangle Of the Commission – Council- European Parliament.

For too long, the EU reform debate has been conducted in an overly moralizing tone. But Corona makes no distinction between the supposedly brave and the supposedly evil ones. Europe's response to the challenge of the disease must not make this difference either. A third of the money for Italy and Spain. Commission internal calculations show that about 32 percent of the transfers from the new fund would go to the two Mediterranean countries. The mediation of the distribution struggle between Eastern and South-Eastern Europe will require delicate concessions. According to an internal table of the European Commission, it is clear who should benefit to what extent from the direct payments from the new EU Reconstruction Fund, which was presented by the President of the Commission, Ursula von der Leyen, on Wednesday. Italy and Spain are to receive the lion's share: 81.8 billion euros went to Rome, 77.3 billion euros to Madrid. Together, this represents around 32 percent of the EUR 500 billion by which the Union's next financial framework for the years 2021 to 2027 is to be increased , and which is to be spent primarily in the first three years.[68]This is followed by France with EUR 38.8 billion and Poland with EUR 37.7 billion. The large Polish sum may come as a surprise, as the country came through the pandemic rather gloomyly. But the Polish economy is extremely dependent on its integration into the internal market – and especially on German industry. In addition, it grew faster than others. as a result, the year-on-year decline in the economy was also more severe than where growth was already anemic before the crisis. Poland is followed by Germany with 28.8 billion euros, Greece with 22.6 billion euros and Portugal with 15.5 billion euros. Austria would receive EUR 4.043 billion in transfers from this fund. All these figures will be officially presented by the Commission. The calculations began in the state law firms of the Member States as to who pays or gets out of the European project in net terms, how much in the years 2021 to 2027. You have to include the membership fees, the discounts on them, as well as expected returns from Brussels in the calculation.[69] The struggle for distribution between East and Southern Europe for agricultural and regional pots, which has been simmering since the wave of enlargement in 2004/2007, is now likely to intensify. After all, a good part of the new transfers is intended to temporarily grease these two and other existing budget items in the Union budget. The southern Europeans will be even more wary that the Eastern Europeans do not dig up the funds for them. And in the East, it is not unjustifiably argued that enormous and shameful reforms have been carried out in order to get fit for EU membership, and that they are now suffering fewer victims of the pandemic, but also serious economic damage. Hungary, Romania and Bulgaria have experienced some of the highest recessions since the beginning of the year. The rule of law negotiation path. One of the cards that Eastern Europeans will put on the table is how respect for the rule of law is linked to the receipt of subsidies, one of the conditions for EU membership. The Commission has proposed that funds be frozen if the gagging of free justice or the politicization of the administration affects the correct handling of these funds. In the Council, in the case of the governments, this is a question: should such a Commission recommendation only be stopped by qualified majority (which Hungary, Poland, the Czech Republic reject) – or should it need such a heavy majority to confirm it (against almost all other states).

The solution could be a fiscal union for the time of the crisis. We are in the most serious economic crisis of the Second World War. some Member States are significantly more affected than others – without their own guilt. the European Commission is proposing an ambitious reconstruction plan so that, after corona, we do not get back on our feet as the last continent, but as one of the first. We have been working on the proposal for a month and we assume that it is grosso modo consensual. The decision was already made by EU leaders at the end of April, when the Commission was mandated to link the planned instrument of reconstruction with the EU budget. There is now a consensus on this – in this crisis we do not want to create a new institution such as the ESM, but use the EU's tried and tested budget framework. The EU Commission will therefore issue large-volume bonds for the first time – there is consensus among Member States on this. On the whole, it is also possible to agree that we want to use most of these funds as grants – although the mix in the Council is still being discussed.[70] The Commission proposes to provide the reconstruction instrument with EUR 750 billion. two thirds will be awarded in the form of grants, and a third in the form of loans. What we can be pleased about, however, is the fact that we are now able to achieve a reform in such difficult times that we would not have been able to achieve under normal circumstances: economic and monetary union will be supplemented by a fiscal union for the time of the crisis. So far, the European Central Bank has only been able to buy national bonds, but not European bonds as such. the planned innovation will also make Europe more attractive to financial markets. if we issue bonds jointly and on a large scale in the financial markets, then these are safe securities that can be bought from London to Singapore. This gives Europe security and importance. Our internal market has so far lacked such a secure security, which all EU members are behind. It is more expensive to pay national money into the ESM or the EU budget than to raise the funds together in the financial markets.[71] This fiscal union should be turned into a permanent institution.In the absence of access to financial markets for the Member States of the European Monetary Union, the instruments of the European Stability Mechanism (ESM) are available. These were created to prevent the euro area from getting into another sovereign debt crisis and are immediately available. The ESM was created as a fiscal instrument to ensure the indebtedness of Member States in a crisis. The Community of Member States, in particular those Member States with greater fiscal room for manoeuvre, guarantees the ESM's borrowing.[72] The ESM has at its disposal various instruments which can be used subject to conditions at the request of an ESM member (JG 2017 paragraphs 122 e.g.). Precautionary grants may take the form of primary market refueling of government bonds or loans where the country's economic situation is stable and refinancing through the financial market is possible. If an ESM Member State fulfils several criteria, for example in relation to public debt, deficit limits and a stable banking system, the Precautionary Conditioned Credit Line (PCCL) is available to it. If the economic situation is stable but these criteria are partially not met, the Enhanced Conditions Credit Line (ECCL) is eligible with the obligation to strive to meet these criteria. In both cases, there is an enhanced monitoring of the country's economic and financial situation. One should only spend the money you really need. The Corona crisis has significantly increased the EU's financial needs. Over the next two to three years, we will need an additional EUR 1 trillion at European level to combat the consequences of the pandemic. In order to be able to cope with this, we need a temporary expansion of our overall framework. This is necessary for this time, but no more after that. In this context, the financial burden could be shifted somewhat – away from national contributions to European own resources, such as a plastic tax. It is true that the Commission's proposal paves the way for greater financing of the EU through own resources in the longer term. The entry into own resources also makes sense because we want to refinance the corona-related expenditure in the longer term – i.e. beyond the next budget framework 2021 -2017. the extent to which these own resources can be absorbed depends on the will of the Member States. In the United States, factor incomes, but also government transfers to and between states play a greater role than in the euro area (Asdrubali and Kim, 2004). The results for other federal states are mixed, but mainly point to a larger role of the savings or factor income channel (see the table in field et al., 2018). After all, financial markets would provide less risk-sharing in times of crisis – especially when it is most needed. This would mean more fiscal transfers in the euro area (Berger et al., 2018). Proponents expect that[73], together with a more advanced banking union, they would make it easier for states to enact fiscal rules. The Member States of EMU show large differences in average per capita income. This also applies to the extent of domestic redistribution between households with higher and low incomes through the national tax and transfer system. Political support for a substantial redistribution of income between Member States is at least not yet available. Existing proposals for a fiscal capacity therefore mostly seek to achieve a insurance function.[74] Only temporary intergovernmental transfers are to be made available, so that there will be no permanent net transfers. Moreover, no Member State should be able to expect a transfer ex ante. Fiscal capacity at European level should therefore be fundamentally different from transfer mechanisms such as the German land-based fiscal equalization, with which a systematic and long-term redistribution is explicitly intended (Jg 2014 paragraphs 606 ff.). For this reason, the proposals rely in part on ex ante conditionality (Arnold et al., 2018). This approach is often adopted in private insurance solutions that want to avoid moral hazard. A theoretically ideal solution would be to make transfers dependent on the realization of an asymmetric shock (Persson and Tabellini, 1996a). However, since shocks are unobservable and difficult to appreciate, this is not feasible. Ex ante conditionality would instead make transfers from fiscal capacity conditional. This includes, for example, compliance with European fiscal rules, as demanded by the proposals of the European Commission (2018) or Bénassy-Quéré et al. (2018). Moreover, a deductible could be introduced for states in order to reduce the misincentives from fiscal capacity. Fiscal capacity then takes the form of reinsurance.[75]The financial considerations have led to the fact that a valid operationalization of financial strength is only possible with a view to a concrete financial constitutional system and concrete financial lending targets. This means that in order to provide a new financial tax to the European Union, an amendment of the Lisbon treaty is required where the Member States renounce on a part of their tax sovereignty in favor of the European Union.

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[1] Although this article is the result of a joint reflection of the authors, paragraph 1 and its subparagraphs are edited jointly by Antonio Felice Uricchio and Filippo Luigi Giambrone, paragraph 2 and its subparagraphs are edited by Antonio Felice Uricchio, paragraph 3 and its subparagraphs are edited by Filippo Luigi Giambrone, paragraph 4 is edited jointly by Antonio Felice Uricchio and Filippo Luigi Giambrone.
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Open Review of Management, Banking and Finance

«They say things are happening at the border, but nobody knows which border» (Mark Strand)

The ESM Treaty and the Single Resolution Fund: The Unfinished Reform

by **Andrea Miglionico**

Abstract: *The establishment of banking union with a centralised structure of supervision and enforcement has recently raised criticisms on the long-waited reform of third pillar, namely the Single Resolution Fund. Notwithstanding the successful progress of supervisory mechanism for dealing with failing banks, the deposit insurance scheme remains controversial. In this context, the revision of the European Stability Mechanism (ESM) Treaty has been questioned with respect to negotiation and monitoring of conditionality in financial assistance programmes. This article argues that the policymakers should move towards completing the banking union by introducing a deposit insurance system and a form of risk sharing on the government debt issued by countries in the Eurozone. The pandemic crisis has inflamed the debate on the ability of the ESM to deal with euro area countries with non-sustainable government debt. The task of the ESM to provide financial assistance, subject to strict conditionality to Eurozone countries, has irritated some Member States, i.e. Italy which claimed that the debt restructuring should not be imposed from political desire but designed and implemented based on Italian initiatives. This article also suggests that the approach taken on the revision of the ESM should be reconsidered. With its focus on possible debt restructuring for countries receiving stability support it has led to further political tensions between Italy and the European institutions, thereby making a deal between them less likely.*

1. In 2011 the European Council adopted a comprehensive package of measures to respond to the ongoing crisis at the time, as well as to guard against such crises materialising in the future [1]. The main features of this package relate to the strengthening of the preventive and corrective mechanisms to address internal and external imbalances, particularly fiscal imbalances, and competitiveness problems of individual Member States. In this context, the Council set up a permanent crisis resolution mechanism, namely the European Stability Mechanism (ESM). This includes the establishment of a

regulatory tool as an ultima ratio safeguard against imbalances in individual countries [2]. The ESM is an intergovernmental institution designed under public international law through a Treaty signed by the euro area countries and based in Luxembourg [3]. It has been established to provide financial assistance, subject to strict conditionality, to Euro countries experiencing severe financing difficulties [4]. Specifically, the ESM grants assistance in the form of loan disbursements; precautionary facilities; facilities to finance the recapitalisation of financial institutions in an Euro Area Member States (EAMS) through loans including non-programme countries; and facilities for the purchase of bonds in the primary and secondary markets [5]. The ESM may also exceptionally intervene in the debt primary market under the same conditionality. The main rationale is to ensure financial stability in Europe by supporting EAMS. It has indefinite duration and, in terms of ranking, preferred creditor status: it enjoys preferred creditor status in a similar fashion to the IMF, while accepting the preferred creditor status of the IMF above the ESM.

The active participation of the IMF (in all circumstances) is sought on a technical and financial level. The debt sustainability analysis is jointly conducted by the Commission and the IMF in liaison with the European Central Bank (ECB). In parallel, the policy conditions attached to a joint ESM and IMF assistance are negotiated by the Commission and the IMF in liaison with the ECB. EAMS may participate on an ad hoc basis alongside the ESM in financial assistance operations for EAMS. This means that the ESM would not require the credit enhancements of the EFSF to secure a Triple-A rating. In this context, Article 136 of the of the TFEU provides that "the Member States whose currency is the euro may establish a stability mechanism to be activated if indispensable to safeguard the stability of the euro area. The granting of any required financial assistance under the mechanism will be made subject to strict conditionality" [6]. The financial assistance programmes operate as follows: the ESM Stability Support (ESS) request from an EAMS; the EU Commission together with the IMF and, in liaison with the ECB, assess the actual financing needs of the EAMS; the Commission, the IMF and ECB negotiate a macroeconomic adjustment programme with the EAMS in an MoU; the EU Council endorses the macro-economic adjustment programme and the Commission signs the MoU on behalf of the EAMS; the ESM's Board of Directors then approves the financial assistance agreement containing the technical aspects of the assistance; and the Commission, the IMF and ECB are responsible for monitoring compliance with the policy conditionality.

2. The revised text of the Treaty establishing the ESM has been agreed by the Eurogroup on 4 December 2019 although the final version is still under discussion for legal obstacles advanced by some Member States [7]. The revisions of the ESM Treaty focus on the following areas: activities of the ESM, including clarifying and expanding the ESM mandate on economic governance; ESM governance issues; the precautionary financial assistance instruments; and the establishment of the ESM as a backstop to the Single Resolution Fund (SRF) [8]. Specifically, the revised text should expand the ESM mandate on economic governance, particularly vis-a-vis the Commission. This new role is reflected in Article 3 ("Purposes"), which allows the ESM to "follow and assess the macroeconomic and financial situation of its Members including the sustainability of their public debt and carry out analysis of relevant information and data". The ESM will have a stronger voice in the design, negotiation and monitoring of conditionality in future financial assistance schemes. For instance, when an ESM Member requests support, the Commission in liaison with the ECB will work closely together to prepare the assessments

supporting the decision to grant a loan. The ESM will perform its analysis and assessment from the perspective of a lender. Further, the ESM will be involved in the design of policy conditionality and any future Memorandum of Understanding (MoU) detailing the conditionality attached to the financial assistance facility will be signed by both the Commission and the ESM Managing Director. In terms of debt sustainability, the revised text will also require the confirmation of a country's repayment capacity. The assessments on debt sustainability and repayment capacity will be conducted by the European Commission, in liaison with the ECB, and the ESM, on a transparent and predictable basis, while allowing at the same time a sufficient margin of judgement.

The revised Treaty establishes ESM Managing Director (and staff) independence and reinforces submission to EU law. That could help in providing a clearer separation between the ESM managing Director and staff and the ESM Member States. The revisions include amendments to the precautionary financial instruments. The new features aim at enhancing the precautionary financial instruments effectiveness while ensuring the appropriate level of conditionality. The revised eligibility criteria are stricter than in the current precautionary instruments. Firstly, according to the current ESM Treaty, Member States under a procedure for excessive imbalances could still be eligible for precautionary assistance. That element is absent in the revised text. Secondly, the revisions require compliance with the eligibility criteria for the two years preceding the request for financial assistance; currently this is not required, at least explicitly. It remains unclear whether a precautionary credit line would qualify for access to the ECB outright monetary transactions programme (OMT), which might be one of the reasons why a Member State could consider a precautionary financial assistance. The current wording of the ESM and the ECB technical explanatory note on OMT do not clarify this either.

The reform of the ESM Treaty will come into force once it has been ratified by all ESM Member States. This involves approval in all national parliaments: the ratification process will start following the signature of the agreement amending the Treaty. However, Italy opposed the draft text claiming that the 'done-and-dusted ESM revision will force the country to default on its debt to small savers' [9]. Italy has not agreed on the proposed revision, partly on the grounds that conditionality would be imposed from the political pressure of some Member States. Most importantly, the reform does not address the question on what happens in financial markets on the occasion when a country's debt level is declared non-sustainable. There would be an immediate and possibly large increase in the interest rate resulting in an immediate crisis that would make the need for rescue funds immediate and possibly much larger. In other words, if the country has not already implemented credible structural reforms and fiscal adjustment, it would be too late to avert a crisis at the time the debt burden is deemed non-sustainable.

3. The reform of the ESM has posed serious questions on the willingness of Member States to adopt the strict conditionality imposed by the bailout fund. Specifically, the issue is the proposed inclusion of text in an annex to the Treaty that would require Euro area governments to include collective action clauses (CACs) in future bond issues [10]. These would make it easier to secure agreement among creditors to a debt restructuring. The idea of annexing the CACs to the Treaty raised the challenge of debt sustainability that is a highly charged in Italy since it has the highest public debt burden in the bloc after Greece. CACs allow modifying the terms of sovereign bonds [11]: with the revision of the ESM Treaty, this would be possible with a simple rather than a double majority, making it easier to carry out debt

restructuring. Italy, with a debt rate of 138% GDP, considers this would jeopardise its position in the financial markets [12]. As mentioned, there is still a controversial debate and the revised text has not been fully agreed. Specifically, the reform of the ESM Treaty is being held up because of the Italian opposition. Italy insists that the new ESM Treaty will impose losses on retail investors who put their savings in government bonds [13].

The main argument of some opponents of the ESM reform is that these CACs (single limb CACs) [14], by making it easier for the sovereign to conduct a debt restructuring, will send a signal to the market that the sovereign is more likely to restructure. This means yields to rise and end up causing the very crisis that the clauses are intended to protect against [15]. As has been argued, 'the small and uncertain benefits of a debt restructuring mechanism must be weighed against the huge risk that the mere announcement of its introduction may trigger a perverse spiral of expectations of default, which may prove to be self-fulfilling' [16]. In the revised Treaty, ESM Members will commit to introducing single-limb CACs [17] into new euro area sovereign bonds issued starting from 1 January 2022. However, in absence of an agreed text, if a country accesses the ESM for emergency loans there will be an automatic bail-in of existing private investors along with the CACs on new government debt issued [18]. Another issue regards the ESM's undemocratic governance system, with only Germany, France and Italy given a veto; unbalanced capital composition (only 11 per cent of the subscribed capital is already paid in, the remainder takes the form of callable shares); and a sort of self-financing paradox which sees countries applying for stability support not being exempt from capital contributions [19].

The idea of offering EU's financial support to a member country conditional on its implementing structural reforms has been suggested as a way out in several occasions. However, a reform plan that appears dictated from outside the country can be politically ineffective as the reform plan should be prepared and presented by Italy. It can be immediately matched by some important financial help, for instance with well targeted EU financed investments. However, after this first exchange the Eurozone should come up with a deep reform plan to complete the banking union and to help the solution of the doom-loop problem also with the creation of a risk-free asset. Once pre-emptive action has been taken to make Italian debt levels sustainable and the threat to the Euro averted, the EU can turn its attention to risk-sharing for the future to mitigate the risk for future crises as a result of the "doom-loop" between sovereign debt and banking crises. The first step would be to implement a European deposit insurance system for the Eurozone as suggested in the banking union.

4. The lack of international convergence of deposit insurance schemes raised concerns among bank regulators and policymakers, particularly after the failure of cross-border banks which highlighted the domestic prerogative of protection systems [20]. In response to this regulatory loophole, the EU legislature introduced the Deposit Guarantee Scheme Directive (DGSD) that set a comprehensive legal framework on depositor protection [21]. The directive provided for substantial harmonisation of deposit insurance policies and enhanced the integration of retail banking [22]. The EU regulators amended the directive in 2009 abolishing co-insurance and introducing a coverage level set at Euro 100,000 [23].

The amending directive of 2009 addresses cross-border issues providing that home state schemes cover deposits taken in any branch anywhere in the EU; host state schemes manage payments, but home state schemes must reimburse; and non-EU branches may accept deposits covered by their home schemes if those schemes are equivalent – otherwise they must join the host scheme [24]. It can be argued that these regulatory measures reflect the existing voluntary lending and borrowing mechanisms between EU Deposit Guarantee Schemes (DGSs), particularly once extraordinary contributions have been raised and in an amount not exceeding 0.5% of covered deposits of the borrowing DGS [25].

In November 2015, the Commission published a Communication setting out the European deposit insurance scheme (EDIS) for bank deposits [26], accompanied by a Proposal for a Regulation [27] that marked a notable step towards the creation of a third pillar of the Banking Union, namely the Single Deposit Guarantee Scheme [28]. The intervention of the EU legislature culminated with the adoption of the Deposit Guarantee Scheme Directive of 2014 (DGSD 2014) that introduces minimum standards for bank DGSs [29]. The main objectives of the DGSD 2014 are: (1) to ensure financial stability in the banking sector after the global financial crisis; and (2) to recover deposits by mandatory bank contributions [30]. Although the political agreement among Member States for the establishment of the EDIS is still far from an overall consensus, the rationale of designing a common deposit protection scheme falls under the prudential supervision of credit institutions [31]. Specifically, the common deposit guarantee system aims to achieve uniform administrative practice resolution financing; to establish the reimbursement of a limited amount of deposits to depositors whose bank has failed; and to prevent depositors from making panic-driven withdrawals.

The EDIS should reduce the moral hazard effects of banks’ misbehaviours as well as pooling the risk of unexpected failures, however different views in the Eurozone and wide discretion of domestic authorities create serious obstacles in the achievement of an effective DGS [32]. In academic terms, it has been proposed to establish a European deposit insurance and resolution authority (EDIRA) “financed by a fund fed through regular risk-based deposit insurance premiums from the banks, whose customers benefit from its protection” [33]. This proposal aims to incentivise the private sector to cover solutions to resolve banking failures and contain moral hazard. Private funds should be available for resolution based on the principle of (self-)insurance by the banking sector.

In parallel, deposit guarantee schemes are regulated by the Bank Recovery and Resolution Directive (BRRD) which provides a system through domestic DGS to cover deposits up to Euro 100,000. All member States must set up national resolution funds with resources which after ten years must amount to one percent of insured deposits [34]. According to Article 31(2) of the BRRD, where resolution has the effect of protecting depositors, a relevant EU DGS is liable for the amount by which covered deposits would have been written down had they been written down to the same extent as other creditors of equal priority [35]. However, the DGS liability shall not be greater than the amount which it would have had to pay out in a conventional insolvency, or 50% of its target pre-funding level. In case the DGS exposure turns out to be in breach of the “No Creditor Worse Off than in Liquidation” (NCWOL) principle, the BRRD provides a mechanism for compensation [36].

The Single Resolution Fund (SRF) operates as a back-up option when additional capital is needed, e.g., for the purposes of providing guarantees, making loans, purchasing assets, providing compensation to shareholders or creditors, providing capital to a bridge bank [37]. Further, SRF is not to be used directly to absorb losses of a failing institution or for direct recapitalisation. It can be noted that the DGS is relevant to bank resolution because credit institutions are funded primarily by deposits than are financed primarily by wholesale markets. As most retail deposits are insured, the strength of the DGS is ultimately based on its recourse to financing from the sponsor national government [38]. The use of deposit guarantee schemes in resolution involves liability to contribute up to the amount of losses that the schemes would have had to bear if the relevant institution had been wound up [39].

A major change of the ESM reform concerns the establishment of the “common backstop” (set with a nominal cap of 68 billion euro) that will be used only as a last resort, in the situation that the SRF is diminished, and the Single Resolution Board (SRB) is not able to raise sufficient contributions or borrow funds from other sources at acceptable rates [40]. In case the SRF is reduced, the ESM can act as a backstop and lend the necessary funds to the SRF to finance a resolution. The common backstop is covered by the banking sector and should not involve costs for non-Banking Union Member States [41]. Decisions on loans and disbursements will be taken by the ESM Board of Directors (consisting of high-level officials from the Euro area finance ministries) by mutual agreement and on a case-by-case basis, guided by certain criteria. Such decisions should be taken within 12 hours of the SRB’s request, but in the case of a particularly complex resolution operation, the ESM Managing Director may agree to lengthen the deadline to up to 24 hours.

5. The Covid-19 crisis has ignited the debate on how to secure the stability of the Eurozone and how to reinforce the solidarity of members [42]. During the lock-down the pandemic has tested the resilience of EU institutions that intervened with controversial regulatory responses, determining unprecedented suspensions of current legal framework (e.g. capital buffers, payment holidays, mortgage and loans relief) [43]. However, the emergency situation has showed unexpected reluctance among Member States to adopt harmonised measures for containing the outbreak: it is instructive the ongoing divergence between some countries in the agreement reached for some economic instruments namely the Recovery Fund [44] and the ESM [45]. The opposite views on various mechanisms in support of sovereigns severely impacted by the coronavirus have resuscitated a sentiment of Euroscepticism that characterises the ideology of populist movements. Indeed, the economic policy response against Covid-19 has struggled the euro area countries in the implementation of the ESM measures particularly in negotiating certain conditions to funding schemes. Specifically, the Pandemic Crisis Support is based on the existing Enhanced Conditions Credit Line and subject to ‘standardised terms agreed in advance by the ESM governing bodies, reflecting the current challenges, on the basis of preliminary assessments by the European institutions’ [46]. Such assessment of the EU institutions represents the “Gordian knot” of the debate that left on the spot several Member States (i.e. France, Italy, Spain, Austria and the Netherlands) apparently unwilling to agree a common position [47].

Few commentators point that since the ESM is a natural disaster, this could attach very light conditions to the loans, e.g. to some IMF facilities designed for this type of events [48]. Similar debate around EU countries raised on the use of Eurobonds: despite they are not the only instrument of sharing the financial burden of the pandemic, they have been advocated as the best way to express solidarity (the ill-named corona-bonds) [49]. Some in Germany after opposing the issuance of common bonds as a way of condoning some European countries’ lack of budgetary discipline, with the onset of the Covid-19, have started to support such joint ‘European Crisis bonds’ to help the sovereigns worst affected by coronavirus [50]. To add oil to an already inflamed debate, the ECB policies have recently been contested in the German Constitutional Court’s decision that denied the European Court of Justice (ECJ) jurisdiction on the ECB’s Public Sector Asset Purchase Programme (PSPP) [51]. The ruling raises concerns on the limits of ECJ power: the German court noted that the ECJ had only conducted a limited review of the effects of the PSPP programme and could not assess if the ECB had breached the principle of proportionality, under which the content and form of any EU action must be limited to what is necessary to achieve the pursued aim [52]. The German judges’ decision poses the problem whether the hierarchy of EU law is clearly demarcated as it seems the ECJ judgment being ultra vires in Germany [53]. The current discussion over the ESM and Recovery Fund is a stark reminder of the dangers posed to economic and financial stability by Covid-19 crisis. The pandemic situation facing Europe today reveals the difficulties to achieve political consensus on emergency economic measures which, on the contrary, should consolidate the spirit of cohesion and unity among Member States.

6. The Banking Union represents a welcome approach to avoid the involvement of depositors into the rescue programmes and to contain the disruption of collapses. The DGS and the SRF establish innovative tools to provide financial assistance to fragile economies in the Eurozone. However, EU regulators leave wide discretion to national governments to adopt domestic depositor protection schemes which is a legacy of the past to protect deposits and national financial stability under the public interest. State level deposit insurers are not viable inside a monetary union because even the liquidation of several small banks could overwhelm the capacity of national deposit insurance. Mutualisation of deposit insurance requires full harmonisation of insolvency laws because the effectiveness of the bank liquidation process will have an impact on the financial situation of the deposit insurance over which insured depositors have a legal claim [54].

The Covid-19 crisis has raised criticisms about the use of the ESM to support euro area countries with non-sustainable government debt. What makes the debt problem for Italy especially urgent from the perspective of the Eurozone is the size of the country and its debt. Italy can be considered “too big to fail” since a substantial haircut on its debt could threaten the solvency of Italian banks in particular, but also financial institutions elsewhere and, not least, taxpayers would have to accept large losses at the ECB with its large holdings of Italian government bonds [55]. Italy with its national debt may also be deemed “too big to save” since the amounts that other countries would have to contribute would be so large that political resistance may prevent a rescue. Political risk should not be underestimated: such risk may originate in an increase of populism or increased divisions between richer “frugal” Member States and the likely biggest recipients of EU pandemic emergency funds [56]. Further, political risk may result in higher default risk and higher spreads in sovereign debt. The most dangerous situation is when high public debt correlates with political risk and unwillingness to take the necessary economic reforms, limiting support from other Eurozone members.

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[15] Theresa Arnold, Ugo Panizza and Mitu Gulati, 'The Ridiculous Drama in Rome Over Proposals to Reform the ESM Treaty', Oxford Business Law Blog, 10 December 2019, available at https://www.law.ox.ac.uk/business-law-blog/blog/2019/12/ridiculous-drama-rome-over-proposals-reform-esm-treaty. The authors observe that that over 99% of Italy's sovereign debt is governed by local Italian law. That means that any Italian government that wishes to restructure its debt has a wide variety of options it can turn to. And most, if not all, of these options are a lot easier to implement for a government that affirmatively wishes to force a restructuring on its creditors than CACs (enhanced or not).

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[17] Sovereign state's bonds are typically divided into multiple different issuances, or "series" (with different maturities, interest amounts, etc.). Single-limb CACs allow the majority vote to take place at the level of all these "series" combined, without the need for a majority at the level of the holders of each individual "series". This reduces "holdout" risk, i.e., that a small group of bondholders decides not to take part in the restructuring, forming a minority to block it, in the hope of getting a better deal for themselves. These "holdouts" can result in delays in resolving a debt crisis.

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«They say things are happening at the border, but nobody knows which border» (Mark Strand)

From remote to smart working during the COVID-19 era, and after. First evidences from Italy

by **Pamela Palmi**, **Marco Pichierri** and **M. Irene Prete**

Abstract: *Despite the increasing attention to remote working – i.e., the possibility for employees to work outside their main office supported by technological connections and devices – due to the worldwide emergency related to the spread of COVID-19, there is currently a shortage of studies related to this phenomenon in the Italian context. This research aims to shed light on the remote working modality, investigating its possible impact on current job satisfaction, as well as the role of prior experience with this modality in affecting employees' judgements related to job productivity and personal benefits. The research also examines possible motivations for future remote working adoption in order to attain further comprehension on the phenomenon from an employee's perspective. Theoretical and managerial implications for organizations are also discussed.*

1. Within the current social discussion, the COVID-19 emergency has brought out themes like "smart working", "agile working", "remote working", and "teleworking". A quick glance on the amount of resources on the Internet, examined through Google Trends, shows a rising interest on these terms starting from February 2020, at the time when the news related to the contagion in Italy started spreading. However, the first example of flexible working comes from Jack Nilles, who worked remotely on the design of space vehicles and communication systems for NASA and the U.S. Air Force. He introduced the term "telecommuting" (Belanger, 1999; Nilles, 1975, 1988) and, after that, the option to work far from one's office has developed into what is called remote working, also known as telework, anywhere work, and virtual work. Remote working can be defined as work tasks that are carried out outside the employee's organizational office by making use of various technologies to communicate with colleagues and customers (Collins et al., 2016). This concept is strictly linked to "flexible working", an option provided by the organization to allow employees to devise their own schedule and location to get their work completed (Bentley et al., 2016).

Compared with other countries, the practice of remote working has been extremely scarce in Italy, thus occupying the bottom position among the 28 European countries as a percentage of employees doing telework/ICT-mobile work across various locations (home, office or another location) (Eurofound, 2017). A hasty change has been determined by the spread of the COVID-19 emergency, which required social isolation and, consequently, severe restrictions on movements and a lockdown of productive activities.

All of the above occurred in the midst of an unprecedented systemic crisis, which distraught the real economy and redesigned the power relationships throughout the threads of the global value chain, yielding unprecedented pitfalls on the way to work. As part of the measures adopted by the Italian Government for the containment and management of the epidemiological emergency from COVID-19, the President of the Council of Ministers issued on March 1 2020 a Decree that intervenes on how to access smart working, also confirmed by the Decree of March 4 2020. As indicated in the Prime Minister Decree of 11 March 2020, it was recommended that organizations should make maximum use of agile working methods for activities that could be carried out at home, or remotely. According to the same Decree, "agile work" (or smart working) is a mode of execution of subordinate employment relationships characterized by the absence of hourly or spatial constraints, as well as an organization by phases, cycles and objectives, established by an agreement between the employee and the employer. It is a modality that helps workers reconcile life and working times and, by the same token, encourage the growth of one's productivity. The definition of smart working, envisaged by the Italian Law no. 81/2017, focuses on organizational flexibility, on the voluntariness of parties who sign the individual agreement, and on the use of equipment that allows remote working (such as portable PCs, tablets, and smartphones).

With the lockdown and reorganization of many production activities, millions of workers have experienced new ways of working, communicating and producing. Despite this growth, very little is known about the organizational effects of remote working in the Italian context. Existing literature, which mainly consists of case studies, management surveys and descriptive analyses, does not allow to appropriately identify the boundaries and effects of this phenomenon (Angelici and Profeta, 2020; Errichiello and Pianese, 2019; Neri, 2017). This paper fills this research gap and provides more insights on its main management antecedents and consequences.

The purpose of this research is three-fold. First, it aims at shedding light on the use of smart working and, specifically, on the use of the remote working mode, during the COVID-19 pandemic disease, investigating its possible impact on employees' perceptions (i.e., current job satisfaction). To this aim, the research takes into account possible antecedents such as the attitude toward this way of working and the number of hours spent in remote working due to the COVID-19 emergency, as well as the level of satisfaction with the current working activity. Second, the research investigates the role of prior experience with this modality in affecting employees' judgements related to work productivity (i.e., self-assessed work effectiveness and efficiency) and personal benefits (i.e., self-assessed well-being and work-life balance). Third, it examines the factors that lie behind future remote working solutions by employees, investigating the impact of the number of hours worked in remote working due to the emergency, of the previous experience of remote working, of the attitude toward this working method, of satisfaction with the current working activity on the intention to reuse this way of working in the future.

This study is structured as follows. The first section describes the theoretical context in which the remote working phenomenon has its roots, reviewing the role of digital transformation on knowledge management and organizational processes. The second section briefly reviews some of the studies that previously investigated remote working and proceeds with research hypotheses, which link remote working to job satisfaction, investigate the role of prior experience with this modality, and examine the possible factors behind the employees' intention to adopt it in the future. To these ends, the third section describes the methodology and the results of a preliminary study carried out with a sample of Italian remote workers. Then, a fourth section discusses the main findings emerging from the study, relating them with extant literature on the topic, thus drawing practical implications for organizations. Finally, a closing section offers some conclusions and discusses the possible limitations of this research.

2. Several studies in the organizational field (e.g., Palmi et al., 2019; Reischauer, 2018; Roiko, 2017; Stock and Seliger, 2016) have underlined how the pervasive digital transformation, if properly managed, represents an opportunity for companies to address problems and create value, thanks to the close human-machine interaction. However, this opportunity could also derive from the response to the challenge of rethinking a new way of working, with a request to manage the redesign of corporate structures and processes, during this particular period of recession and crisis (Kane et al., 2016).

Knowledge Management methods and the tools through which work practices are accomplished have changed radically over the last decade (see Hamel, 2012; Palmi et al., 2019). Successful organizations are increasingly characterized by the ability to eliminate inappropriate working configurations (Birkinshaw et al., 2008) and embrace new organizational principles, such as emerging collaboration (Vlaar et al., 2008), autonomy in the choices of work settings (Leonardi and Balley, 2008), talent enhancement, responsibility and widespread innovation (Hamel, 2007), and innovation in competence management (Palmi et al., 2019). Furthermore, prior research shows that the generation of value within the corporate domain is no longer linked to the implementation of business models (McGrath, 2013) but, rather, to the way employees interpret, adapt, and customize them, and this appears to be particularly true in competitive or highly critical contexts (Brown and Eisenhardt, 1998).

In this view, it is reasonable to state that inappropriate organizational models may have a negative impact on business results, neglecting the employees' potential for innovation and creativity (Oksanen and Stähle, 2013). Therefore, an increasing number of companies, especially during crisis times, are rethinking traditional organizational models, thus encouraging new working approaches, such as smart working (see Raguseo et al., 2015). Smart working is defined as "an approach to organising work that aims to drive greater efficiency and effectiveness in achieving job outcomes through a combination of flexibility, autonomy and collaboration, in parallel with optimising tools and working environments for employees" (CIPD, 2008, p. 4). This concept is particularly meaningful in the light of Industry 4.0, a paradigm that includes a new approach to organization and changes in traditional, centralized control structures in favor of decentralized ones (Prause and Weigand, 2016) thanks to the new tools made available by technology (Holland and Bardoel, 2016). This revolution is changing traditional views of time and workspace (see Harvey, 2010): work becomes ever more intelligent, agile, with real-time feedback supporting development and motivation (Sonnentag et al., 2008). Additionally, technological changes also modify the same boundaries of the organization, re-conceptualizing the new way of working as intelligent or “smart” (Howcroft and Taylor, 2014). As Ahuja and colleagues (2007) argued, the development and dissemination of digital technologies – in particular those supporting communication, collaboration and social networks – together with the pervasive spread of mobile devices, all concur to supporting organizations in developing an intelligent work system.

While some studies have analyzed how ICTs have made work more flexible and ubiquitous when compared to the past (e.g., Yoo et al., 2010), there is still a lack of comprehensive understanding and empirical evidence in the Italian context with regard to the remote working phenomenon. Although according to some authors remote working is becoming an increasingly popular research topic (e.g., Wilkinson and Jarvis, 2011) with possible benefits for organizations (e.g., cost reduction, Dowling, 2012), there is currently a shortage of studies related to this modality as applied to the Italian context, probably due to its scarce diffusion (e.g., across all job sectors). Some attempts have tried to offer a critical viewpoint (Neri, 2017), examining models and contingent aspects that impact its adoption across Italian companies (Neirotti et al., 2011) as well as the role of smart work centers (Errichiello and Pianese, 2019). A recent experiment investigates the role of smart working flexibility on productivity, well-being and work-life balance (Angelici and Profeta, 2020), although neglecting the role of prior experience and the main determinants that could influence the remote workers’ intention to adopt home working in the future.

However, the new scenario imposed by the COVID-19 emergency represents a huge opportunity for organizations and HRM, especially considering new governmental measures that do not allow physical proximity. Thus, a further understanding of the phenomenon might foster the diffusion of remote working modality, which could be associated with the creation and implementation of innovative digital methods, as well as ground-breaking managerial structures and processes (e.g., Bondarouk and Brewster, 2016).

3. The emergence and massive adoption of remote working has a significant impact not only on organizations and their managerial systems, but also on individual workers. The current academic literature has provided findings on the impact of employees’ working conditions on organizational consequences, such as, for instance, individuals’ job satisfaction, performance and well-being (Orhan et al., 2016).

A number of studies investigated the influence of flexible working on employees’ satisfaction. While some studies underlined the occurrence of stressful consequences (e.g., Curzi et al., 2020; Suh and Lee, 2017), most results showed a positive relationship between remote working and a greater level of employees’ satisfaction (Bentley et al., 2016; Coenen and Kok, 2014; Felstead and Henseke, 2017; Göçer et al., 2018; Morrison and Macky, 2017; Vega et al., 2014).

As major findings of remote working provide empirical evidence of a greater level of job satisfaction, it is plausible to hypothesize the following:

H1a: Worked hours in remote working positively influence the current job satisfaction.

Furthermore, as prior evidence in the literature related to technological acceptance suggests the crucial role of the individuals' attitude – i.e., "a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor" (Eagly and Chaiken, 1993, p. 1) – in explaining technology use (e.g., Yang and Yoo, 2004), and several models and theories in the consumer behavior domain (e.g., Oliver, 1999; Shuv-Ami, 2012) suggest that attitude affects subsequent satisfaction, it is advanced that:

H1b: Attitudes toward remote working positively influence the current job satisfaction.

Theories related to learning suggest that previous experience with technology tend to affect satisfaction (e.g., Hung et al., 2009). Thus, it is reasonable to investigate the role of prior experience with remote working in the subsequent employees' perceptions. Indeed, when changing to remote working, adopters could suffer a disruption, due to the lack of face-to-face interaction, in terms of difficulties in communications, change in social relations, and achievement recognition (Zhang, 2016). However, due to the COVID-19 emergency, all citizens were obliged to adopt social distancing and stay isolated: away from workplaces, relatives, friends, and support systems. Since all workers could have some benefits in terms of time and money saved while working from home and not commuting to the workplaces (He and Hu, 2015), it is reasonable to hypothesize that, in terms of current job satisfaction, first-time remote workers do not experience a difference if compared with experienced workers. Thus, it is posited that:

H2a: Experienced and first-time remote workers have a similar level of current job satisfaction.

With regards to productivity, a number of studies have investigated the impact of remote working on employees' performance, showing mixed findings. For instance, in a review on this theme, de Menezes and Kelliher (2011) found indications that remote working may positively influence work performance, but any association differs on the nature of remote working, as well as on employees' perceptions. To maintain or boost performance, it is indeed crucial to modify or fine-tune organizational systems, procedures, methods and practices (McKinsey, 2020); however, at the beginning of the pandemic emergency, most organizations within the Italian context were forced to adopt social distancing and were thus not well organized to shift to remote working. Therefore, it is reasonable to hypothesize that experienced remote workers tend to report higher levels of perception of work effectiveness and efficiency in comparison with first-time remote workers, probably due to their greater familiarity with this working mode:

H2b: Experienced remote workers have a higher level of perception of work effectiveness and efficiency in comparison with first-time remote workers.

Although some studies (Charalampous et al., 2019) have evidenced certain negative facets of remote working, such as social and professional isolation, the majority of empirical findings related to well-being revealed a positive association between remote working and employees' health (see Tavares, 2017, for a review). Several studies reported that telecommuters may benefit from this work opportunity, showing higher levels of health-related variables and, moreover, workers who remotely spent a significant amount of time per month were considerably less likely to experience depression than traditional in-office workers (Henke et al., 2015). Concerning work-life balance, while some studies have shown negative outcomes, for example in terms of family-work conflict, depression, and one's partner overall satisfaction with life (Kossek et al. 2006; Lapierre and Allen, 2006; Ordoñez, 2012; Vittersø et al., 2003), the majority of studies proved evidence of the advantages of remote working. It has a beneficial impact on income and out-of-home activities (He and Hu, 2015), provides autonomy and flexibility for people to carry out free time activities, facilitates their family duties and the overall organization of household responsibilities (Allen, 2001; Ammons and Markham, 2004; Crosbie and Moore, 2004; Gajendran and Harrison, 2007; Hilbrechtet al., 2008; Hill et al., 2003). As remote workers may benefit from this working mode, regardless of their prior experience with this modality, it is reasonable to hypothesize that experienced and first-time remote workers may have similar, high levels of well-being and work-life balance. Thus, it is advanced that:

H2c: Experienced and first-time remote workers have a similar level of well-being and work-life balance.

The pandemic emergency has imposed on companies and institutions to reduce or, in many cases, eliminate the number of in-office workers. Despite the massive use of remote working during the COVID-19 lockdown, it is necessary to verify the factors that could induce or hinder the intention to adopt this type of working mode in the future. Following the Theory of Planned Behavior (Ajzen, 1991), it is plausible to hypothesize that the attitude toward remote working, and past behavior (i.e., the number of hours worked in remote working, as well as the previous experience with remote working) positively influence the intention to adopt remote working in the future. Furthermore, since prior literature in the domain of technology acceptance links satisfaction with the users' continuance intention (Roca et al., 2006), it is posited that:

H3: The number of hours worked in remote working, previous experience with it, attitudes toward remote working and the existing job satisfaction, all positively influence the intention to adopt this modality in the future.

In the following sections, the adopted methodology, as well as the results obtained from an online-based questionnaire administered to a sample of Italian participants, will be presented and explained in detail in order to test the above illustrated research hypotheses.

4. Two hundred fifty-five Italian participants (Mage = 37.36 yrs.; 45% females), who were currently carrying out their working activity through remote working, agreed to complete an online-based questionnaire. After reading a brief introduction, in a first section of the questionnaire participants were asked whether they had already experienced forms of remote working before the COVID-19 emergency, and were asked to rate their attitude toward this modality on a single 7-point Likert scale (Not useful at

all/Very useful). Participants were subsequently asked whether they plan to work in the future using remote working (if available) on one 7-point Likert scale (Definitely not/Definitely yes).

In a second section, participants were asked to briefly think about their current working activity and to self-evaluate their productivity. Specifically, they were asked to rate their self-perceived work effectiveness and their self-perceived work efficiency on two 7-point Likert scales (Very low/Very high) using two items adapted from Angelici and Profeta (2020) ("How do you rate your capacity to achieve assigned goals"; "How do you rate your capacity to achieve assigned goals within an appropriate time"). Then, participants were asked to state the average number of daily working hours that, due to the Covid-19 emergency, they were currently carrying out via remote working.

In a third section of the questionnaire, participants were thus asked to report their overall satisfaction with their current job on a 7-point Likert scale (Not at all/Very much), as well as the degree of organizational commitment and the level of moral responsibility toward their organization using two 7-point Likert scales (Not at all/Very much) ("How attached do you feel to the organization in which you work?"; "Do you feel a sense of moral responsibility toward the organization in which you work?").

Then, in a fourth section of the questionnaire, participants were asked to provide a self-assessed measure of their current well-being, along with an evaluation of their current work-life balance through two 7-point Likert scales (Not at all/Very much) developed by Angelici and Profeta (2020) ("Overall, are you satisfied with your working hours and with how they match your private life?"; "Do you feel able to balance your work with your personal and family life?").

Lastly, participants provided data regarding their gender, age, education and job sector (e.g., whether they worked in public administrations or private companies).

Key sample demographics of the participants are shown in Table 1.

Table n. 1 – Key sample demographics

Variable	
Gender (%)	
Female (%)	45
Male (%)	55
Prior experience with remote working	
Yes (%)	35
No (%)	65
Job sector	

Public Administration (%)	15.7
Company (%)	45.1
Self-employed (%)	14.1
Education (%)	11.8
Other (%)	13.3

Note: Mean age of the whole sample: 37.36 years (SD = 12.51).

5. In order to investigate the impact of the attitude toward remote working and the number of daily hours spent in remote working due to the COVID-19 emergency on individuals' current job satisfaction, a multiple linear regression was conducted. The total variance explained by the model as a whole was 19%, $F(2, 252) = 30.06$, $p < .001$. Regression model estimates (Table 2) show that the attitude toward remote working ($\beta = .41$; $p < .001$) positively affects individuals' current job satisfaction, thus supporting H1b. Additionally, the number of daily hours worked in remote mode due to the COVID-19 emergency positively influences individuals' current job satisfaction ($\beta = .12$; $p < .05$). Hence, H1a was supported.

Table n. 2 – Regression analysis summary for variables predicting current job satisfaction

Variable	***B***	***SE B***	***β***	***t***	***p***
Attitude toward remote working	.41	.06	.40	6.93	*.000*
Number of daily hours spent in remote working due to the COVID-19 emergency	.09	.05	.12	1.99	*.047*
Constant	2.48	.38		6.60	.000

Note: $R^2 = .20$ *(N = 255,* $p < .001$*).*

To verify whether possible differences in terms of current job satisfaction, productivity perceptions (i.e., self-perceived work effectiveness and self-perceived work efficiency), as well as in terms of well-being and work-life balance between workers who already had previous experience of remote working and those who approach it for the first time, a one-way multivariate analysis of variance (MANOVA) was performed. Results of the analysis yielded a statistically significant difference between groups on the combined dependent variables ($F(5, 249) = 4.43$, $p < .01$, Wilks' Lambda = 0.92; partial eta squared = 0.08). When the results for the dependent variables were considered individually, the only differences that reached statistical significance were self-perceived work effectiveness ($F(1, 253) = 18.44$, $p < .001$, partial eta squared = 0.07) and self-perceived work efficiency ($F(1, 253) = 13.55$, $p < .001$, partial eta squared = 0.05). A closer inspection to the mean scores indicated that individuals who already had previous experience of remote working reported higher levels of self-perceived work effectiveness (M =5.92, SD = .87) and self-perceived work efficiency (M =5.73, SD = 1.03) than those who declared to approach it for the first time (self-perceived work efficacy: M =5.30, SD = 1.19; self-perceived work efficiency: M =5.13, SD = 1.33). Thus H2b was supported.

No significant univariate effect was found, instead, for current job satisfaction ($p = .064$), with experienced (M = 5.49, SD= 1.26) and first-time remote workers (M = 5.16, SD= 1.40) displaying high and similar levels of the examined variable (supporting H2a). Finally, no significant univariate effects were found for workers' well-being ($p = .699$), nor for their work-life balance ($p = .749$), with experienced and first-time remote workers reporting similar level of the aforementioned variables (well-being: MExperienced =4.91, SDExperienced = 1.59; MFirstTime =4.83, SD FirstTime = 1.52; work-life balance: MExperienced =5.16, SDExperienced = 1.34; MFirstTime =5.23, SD FirstTime = 1.48). Therefore, H2c was supported.

Mean scores and standard deviations for measures related to all the dependent variables are shown in Table 3.

Table n. 3 – Means and standard deviations for measures of current job satisfaction, self-assessed productivity (effectiveness and efficiency), well-being and work-life balance as a function of prior experience with remote working

Prior exp. with remote working	Satisfaction		Effectiveness		Efficiency		Well-being		Work-life balance	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Yes	5.49	1.26	5.92	.87	5.73	1.03	4.91	1.59	5.16	1.34
No	5.16	1.40	5.31	1.19	5.13	1.33	4.83	1.52	5.23	1.48

Note: $N_{Yes} = 89$; $N_{No} = 166$.

Finally, in order to assess the linear predictors of the individuals' intention to adopt remote working in the future, a second multiple regression was carried out. In the model, the number of daily hours spent in remote working due to COVID-19 emergency, the previous experience with remote working, the attitude toward this this modality, and the individuals' existing job satisfaction were entered as independent variables. The model also included as possible predictors the individual commitment and the feeling of moral responsibility toward the organization.

The total variance explained by the model as a whole was 40%, $F(6, 248) = 27.15$, $p < .001$. An inspection to the regression model estimates (Table 4) show that the best single predictor of the intention to reuse remote working is the individual's attitude toward this modality ($\beta = .50$; $p < .001$). Furthermore, previous experience with remote working ($\beta = .16$; $p < .01$) and, with a lesser extent, individuals' current job satisfaction ($\beta = .15$; $p < .05$), positively affect participants' intention to adopt remote working in the future. There is also a positive association between the number of daily hours spent in remote working due to the COVID-19 emergency (β = .11; p < .05) and participants' intention to reuse remote working. Hence, H3 was supported. However, neither the individual commitment toward the organization (β = – .11; p = .16), nor the perception of moral responsibility toward it (β = – .03; p = .65) significantly affect the intention to adopt remote working in the future.

Table n. 4 – Regression analysis summary for variables predicting participants' intention to adopt remote working in the future

Variable	***B***	***SE B***	***β***	***t***	***p***
Previous experience with remote working	.65	.20	.16	3.23	*.001*
Number of daily hours spent in remote working due to the COVID-19 emergency	.12	.06	.11	2.14	*.033*
Attitude toward remote working	.71	.08	.50	8.99	*.000*
Current job satisfaction	.21	.09	.15	2.23	*.026*
Commitment toward the organization	–.14	.10	–.11	–1.41	.159
Perception of moral responsibility toward the organization	–.05	.11	–.03	–.453	.651
Constant	.29	.56		.52	.606

Note: $R^2 = .40$ *(N = 255,* $p < .001$*).*

6. This research helps shedding light on the remote working modality in the Italian context, investigating its possible effect on employees' perception (i.e., current job satisfaction), as well as the role of prior experience with this modality and the factors behind future remote working adoption by employees. To this end, an online-based survey was administered to a sample of 255 Italian participants who were experiencing this working mode during the COVID-19 emergency.

Firstly, results show that workers' attitude toward remote working influences their current job satisfaction. This evidence is aligned with prior literature in the context of technology acceptance: for instance, Ho (2010) found that the attitude toward an electronic platform (i.e., its perceived usefulness) positively affects individuals' satisfaction with it. Additionally, results showed that the number of hours spent in remote working positively influence the current job satisfaction. This result is in line with prior works in the human research management field, showing a positive relationship between flexible working and job quality (Kelliher and Anderson, 2008). Additionally, if the amount of time spent working remotely appears to be associated with job satisfaction, organizations should encourage the adoption of this modality, as it may bring benefits to employees in terms of satisfaction, which has been related by prior literature in the organizational field to reduced turnover intentions and higher levels of retention (e.g., De Ruyter et al., 2001). Moreover, if a positive attitude toward this modality influences job satisfaction, organizations should strive to enhance employees' perceptions related to remote working (e.g., promoting communications that highlight the beneficial effects of this modality to the workers).

Secondly, results show that prior experience with remote working does not significantly influence current job satisfaction. Specifically, experienced and first-time remote workers showed high and similar levels of current job satisfaction. This result seems to exclude the impact of prior experience with remote working on participants' current job satisfaction, suggesting that both groups of workers received benefits from this modality. However, the high mean values related to current job satisfaction for the two groups are in line with the stream of research supporting the positive relationship between telecommuting and job satisfaction (e.g., Belanger, 1999; Norman et al., 1995). Again, this result could encourage organizations to implement remote working modalities. Regardless of their prior experience with the modality, either they had the opportunity to work remotely because forced by law (during the pandemic emergency) or because facilitated by the organization in which they worked, employees appreciated this opportunity and considered it a useful option, as they reported to be satisfied with their current job.

Instead, experienced remote workers reported higher levels of perceptions of job effectiveness and efficiency in comparison with first-time remote workers. This result appears to be in line with what suggested by Staples and colleagues (1998), who surmised that more experience and training in remote working lead individuals to report higher judgments of self-efficacy when evaluating their capability to work remotely. In this vein, organizations should foster the diffusion of remote working modalities, as prior experience with them may lead to higher productivity perceptions, which are likely to be due to a greater familiarity with the working mode. Furthermore, although this finding is based on self-reported evaluations, it is worth to notice that perceptions of self-efficacy appear to be associated with performance (e.g., Parker, 1998).

Additionally, no significant differences in terms of self-assessed well-being and work-life balance were found between participants with prior experience with remote working and those who approached it for the first time. This result seems to suggest that both experienced and first-time workers had similar benefits in terms of personal well-being and work-life balance, regardless of their prior experience with the remote working modality. As both groups reported high values for the examined variables (mean values around 5), organizations should not neglect the possible beneficial effects of remote working in terms of how employees perceive it affects their personal lives.

Finally, findings show that the number of daily hours spent in remote working and the previous experience with this modality significantly affect individuals' intention to adopt remote working in the future. This evidence finds support in the role of past behavior in influencing behavioral intention since, as remarked by the psychological literature (e.g., Bamberg et al., 2003), frequency of past behavior is an indicator of habit strength, and a capable predictor of later action. Taken together, these results highlight the need for organizations to enhance the diffusion of remote working among their workforce, as a more frequent use of it may break down potential barriers (e.g., by increasing workers' knowledge) and foster its future adoption when necessary.

Furthermore, the individuals' intention to adopt remote working in the future is also influenced by their attitude toward remote working, and this finding appears to be in line with prior research investigating the role of attitudinal factors in influencing individual decisions to telecommute (e.g., Mokhtarian and Salomon, 1997).

Lastly, an individual's intention to adopt remote working in the future is also influenced by current job satisfaction. This finding relates the extent to which people like their job activities (cf., Spector, 1997) with the intention to re-adopt the remote working modality, and adds to prior literature in the organizational field, which associate job satisfaction to several workers' behavioral intention (e.g., turnover intention, Huang, 2011). With this in mind, organizations should carefully monitor workers' rate of satisfaction with remote working, in order to keep it high and resolve any problems that could, instead, hinder the future adoption of it.

7. A disruptive external event, such as the spread of COVID-19, is accelerating, especially in Italy, the adoption of remote working as the only way for organizations to continue their activity and survive. Despite the growing attention on the phenomenon, current scientific knowledge on the topic appears to be scarce, leaving organizations devoid of useful information on this working modality.

To this aim, this research attempts to shed light on the remote work modality, investigating its possible impact on current job satisfaction, as well as the role of prior related experience and the possible motivations for future remote working adoption.

Considering results as a whole, organizations should encourage the adoption of remote working modality, as it may bring benefits to employees in terms of satisfaction, perceived productivity (both effectiveness and efficacy), and personal benefits (in terms of well-being and work-life balance). From an employee's perspective, the current overall job satisfaction, as well as the perceptions of well-being and work-life balance, all appear to be high regardless of prior experience with remote working, thus suggesting the usefulness of this modality for all workers. The need to foster the diffusion of remote working is also supported by the evidence that prior personal experience with it may lead to higher judgments of job productivity and encourage its future adoption by workers.

Therefore, results of this study offer useful insights in order to gain a more fine-grained comprehension on the phenomenon from employees' perspective, providing organizations with preliminary evidence that could assist them in implementing effective remote working applications.

However, as this study only offers preliminary evidence gathered from the Italian context, future research on the topic is obviously needed to add more robust evidence. For instance, it should be acknowledged that, unlike previous studies, participants to this research were forced to work remotely due to the COVID-19 emergency and were thus not free to choose remote working as an option.

It should also be acknowledged that this study only took into account a limited set of aspects related to remote working, and only considering the employees' perspective. Thus, future studies could investigate the potential impact of other factors neglected herein (e.g., the lack of traditional social interaction that may be suffered by workers) and examine in depth the corresponding employers and teams' perspectives of the phenomenon. This could lead the organizational transition from a first "forced" remote working instance to a real smart working model, which also requires a transformation of managerial models and the organizational culture.

In this vein, the COVID-19 emergency indeed represents a valuable test of organizational robustness and resilience. Companies and public administrations that had already introduced smart working models probably had many benefits, absorbing the discontinuity with greater easiness, resulting surprisingly more prepared and resilient. Within these organizations, in fact, workers might have already had the tools, skills, culture and resources to work effectively outside the traditional office. Although the emergency forced organizations and people to complete in a few weeks paths of learning and awareness that in normal conditions would have taken years, many workers have learnt the use of innovative collaboration tools, administering their efforts across remote teams through a multiplicity of digital tools. Managers and workers, once skeptical of the application of remote working activities, have probably realized that many of them – traditionally and up to that moment carried out in-office – could be carried out remotely through digital tools, with equal or superior efficacy.

Following what Mann (2012) underlines, the implementation of smart working models should pursue several gradual steps: introducing advanced solutions based on ICT; innovating human resources practices and organizational models; and, finally, reconfiguring the workplace. In this perspective, remote working could represent a first step in move to re-organize processes, the workplace and work models which might guide companies, public administrations and society as a whole toward the development of smart working environments.

It is therefore crucial that people and organizations learn, once more, that responding quickly to change may represent the most important solution to effectively relaunch our personal and working lives: fostering remote working by helping workers and organizations to implement it could aptly be the smart move for organizations and policymakers.

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