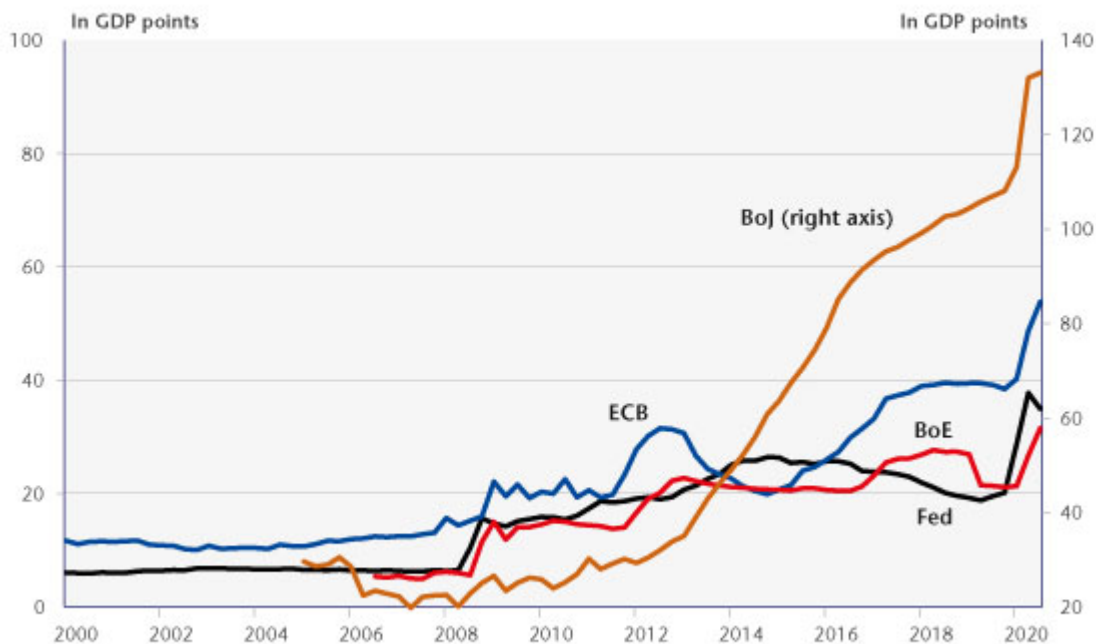


Public debt: Central banks to the rescue?

By [Christophe Blot](#) and [Paul Hubert](#)

In response to the health and economic crisis, governments have implemented numerous emergency measures that have pushed public debt up steeply. They have nevertheless not experienced any real difficulty in financing these massive new issues: despite record levels of public debt, the cost has fallen sharply (see [Plus ou moins de dette publique en France ?](#), by Xavier Ragot). This trend is the result of structural factors related to an abundance of savings globally and to strong demand for secure liquid assets, characteristics that are generally met by government securities. The trend is also related to the securities purchasing programmes of the central banks, which have been stepped up since the outbreak of the pandemic. For the year 2020 as a whole, the European Central Bank acquired nearly 800 billion euros worth of securities issued by the governments of the euro zone countries. In these circumstances, the central banks are holding an increasingly high fraction of the debt stock, leading to a de facto coordination of monetary and fiscal policies.

Figure 1. Size of central bank balance sheets

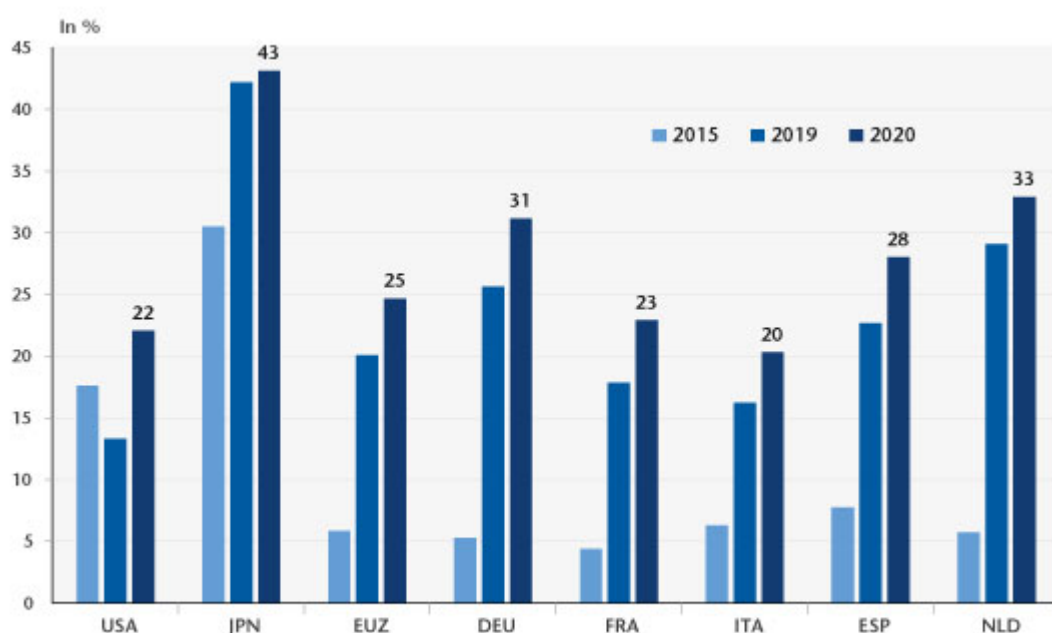


Source: Thomson Reuters Datastream.

Back in 2009, central banks launched asset purchase programmes to reinforce the expansionary impact of monetary policy in a context where the banks' key interest rates had reached a level close to 0% [1]. The stated objective was mainly to ease financing conditions by holding down long-term interest rates on the markets. This resulted in a sharp increase in the size of the banks' balance sheets, which now represents more than 53 GDP points in the euro zone and 35 points in the United States, with the record being held by the Bank of Japan, at 133 GDP points (Figure 1). These programmes, financed by issuing reserves, have focused heavily on government securities, meaning that a large proportion of the stock of government debt is now held by central banks (Figure 2). This proportion reaches 43% in Japan, 22% in the United States and 25% in the euro zone. In the euro zone, in the absence of euro bonds, the distribution of securities purchases depends

on the share of each national central bank in the ECB's capital. The ECB's distribution key stipulates that the purchases are to be made pro rata to the share of the ECB's capital held by the national central banks [2]. Consequently, the purchases of securities are independent of the levels and trajectories of public debt. As the latter are heterogeneous, there are differences in the share of public debt held by the national central banks [3]. Thus, 31% of Germany's public debt is held by the Eurosystem compared to 20% of Italy's public debt.

Figure 2. Stock of public debt held by the central banks

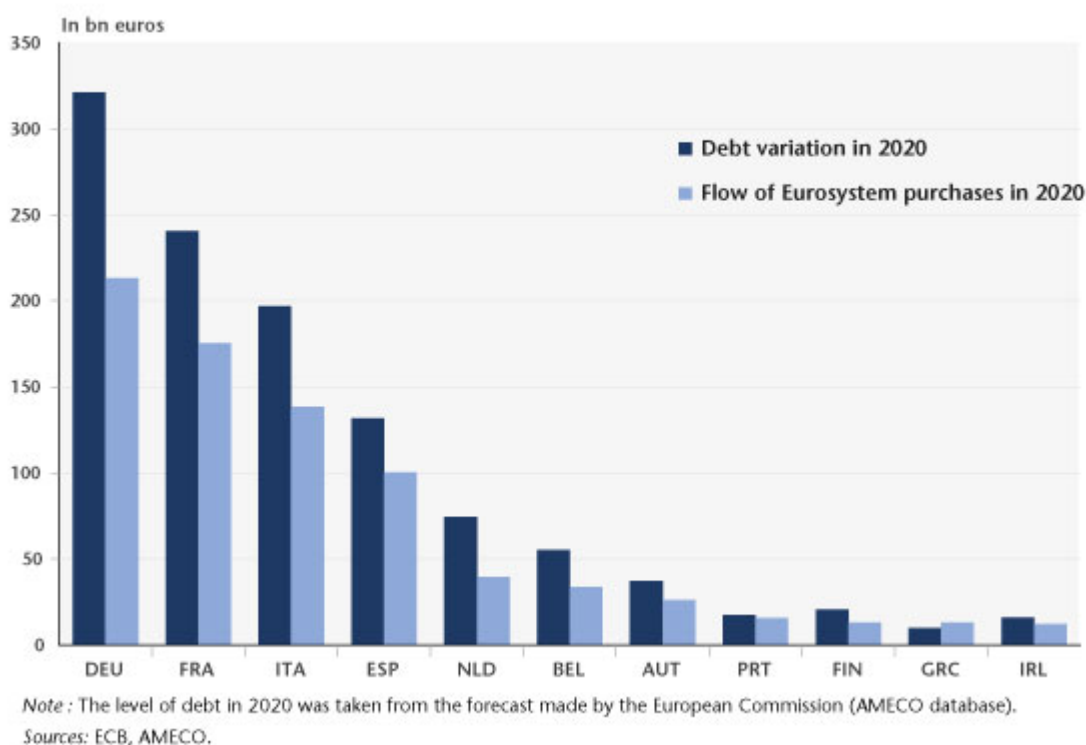


Note: The 2020 figures are calculated based on the data available in Q3 for the United States and in Q4 for Japan. In the euro zone, the level of debt in 2020 is taken from the forecast made by the European Commission (AMECO database).
Sources: Federal Reserve (flow of funds), Eurostat, ECB, AMECO, Bank of Japan.

The decentralization of fiscal policies in the euro zone is also leading to tensions in the sovereign debt markets of some member countries, as seen between 2010 and 2012 and more recently in [March 2020](#). This is why Christine Lagarde has launched a new asset purchase programme called the Pandemic emergency purchase programme (PEPP). While the distribution key is not formally abolished, it may be applied more flexibly

in order to allow the ECB to reduce the sovereign spreads between member countries. Analysing the flows of securities purchases made by the euro zone central banks and the debt issues of the member states, it can be seen that the Eurosystem has absorbed on average 72% of the public debt issued in 2020, i.e. 830 billion euros out of the 1155 billion of additional public debt. The share amounts to 76% for Spain, 73% for France, 70% for Italy and 66% for Germany (Figure 3).

Figure 3. Flow of issues of public debt absorbed by the Eurosystem



Unlike purchases made under the APP programme, which aim to hit the inflation target, the PEPP's objective is first and foremost [to limit rate spreads](#), as Christine Lagarde reminded us on 16 July 2020. In fact, even if there is a structural downward trend in interest rates, some markets may be exposed to pressure. The euro zone countries are all the more exposed as investors can arbitrate between the different markets without incurring any exchange rate risks. This is why they may prefer German

securities to Italian securities, thereby undermining the homogeneous transmission of monetary policy within the euro zone. In addition to arguments about the risk of fragmentation, these operations also reflect a form of implicit coordination between the single monetary policy and fiscal policies, providing countries with the manoeuvring room needed to take the measures required to deal with the health and economic crisis. By declaring on 10 December that the allocation to the programme would increase to 1850 billion euros by no later than March 2022, the ECB sent a signal that it would maintain its support throughout the duration of the pandemic[\[4\]](#).

[\[1\]](#) This policy, generally referred to as quantitative easing (QE), was launched in March 2009 by the Bank of England and the US Federal Reserve. Japan had already initiated this type of so-called unconventional measure between 2001 and 2006, and resumed this approach in October 2010. As for the ECB, the first purchases of securities targeted at certain countries in crisis were made from May 2010. But it was not until March 2015 that a QE programme comparable to those implemented by the other major central banks was developed.

[\[2\]](#) In practice, this share is relatively close to the weight of each member country's GDP in euro zone GDP.

[3] Securities purchasing operations are decentralized at the level of the national central banks. Doing this reduces risk-sharing within the Eurosystem since any losses would be borne by the national central banks, unlike assets held directly by the ECB, for which there is risk-sharing that depends on the share of each national central bank in the ECB's capital.

[4] The initial allocation was 750 billion euros, which was increased in June 2020 by a further 600 billion. As of 31 December 2020, securities purchases under the PEPP came to 650 billion.

What more could the central banks do to deal with the crisis?

By [Christophe Blot](#) and [Paul Hubert](#)

The return of new lockdown measures in numerous countries is expected to slow the pace of economic recovery and even lead to another downturn in activity towards the end of the year. To address this risk, governments are announcing new support measures that in some cases supplement the stimulus plans enacted in the autumn. No additional monetary policy measures have yet been announced. But with rates close to or

at 0% and with a massive bond purchase policy, one wonders whether the central banks still have any manoeuvring room. In practice, they could continue QE programmes and increase the volume of asset purchases. But other options are also conceivable, such as monetizing the public debt.

With the Covid-19 crisis, the central banks – the Federal Reserve, the Bank of England and the ECB – have resumed or amplified their quantitative easing (QE) policy, to such an extent that some are viewing this as a de facto monetization of debt. In a recent [Policy Brief](#), we argue that QE cannot strictly be considered as the monetization of public debt, in particular because the purchases of securities are not matched by the issuance of money but by the issuance of excess reserves. These are distinct from the currency in circulation in the economy, since they can be used only within the banking system and are subject to an interest rate (the deposit facility rate in the case of the euro zone), unlike currency in circulation.

Our analysis therefore makes it possible to look again at the characteristics of QE and to specify the conditions for monetizing debt. It should result in (1) a saving of interest paid by the government, (2) the creation of money, (3) being permanent (or sustainable), and (4) reflect an

implicit change in the objective of the central banks or their inflation target. The implementation of such a strategy is therefore an option available to central banks and would allow the financing of expansionary fiscal policies. The government, in return for a package of fiscal measures – transfers to households or health care spending, support for businesses – would issue a zero-coupon perpetual bond, purchased by commercial banks, which would credit the account of the agents targeted by the support measures. The debt would have no repayment or interest payment obligations and would then be acquired by the central bank and retained on its balance sheet.

Monetization would probably be more effective than QE in stabilizing nominal growth. It would reduce the risk to financial stability caused by QE, whose effect depends on its transmission to asset prices, which could create asset-price bubbles or induce private agents to take on excessive debt.

Monetization has often been put off because of fears that it would lead to higher inflation. In the current environment, expansionary fiscal policy is needed to sustain activity and to prepare for recovery once the pandemic is under control. A pick-up in the pace of inflation would also satisfy the central banks, and insufficient demand should greatly reduce the risk of an out-of-control inflationary spiral. Monetization requires stronger coordination with fiscal

policy, which makes it more difficult to implement in the euro area.

Europe's recovery plan: Watch out for inconsistency!

by [Jérôme Creel](#) (OFCE & ESCP Business School) [\[1\]](#)

On 27 May, the European Commission proposed the creation of a new financial instrument, [Next Generation EU](#), endowed with 750 billion euros. The plan rests on several pillars, and will notably be accompanied by a new scheme to promote the revival of activity in the countries hit hardest by the coronavirus crisis. It comes on top of the Pandemic Crisis Support adopted by the European Council in April 2020. A new programme called the Recovery and Resilience Facility will have firepower of 560 billion euros, roughly the same amount as the Pandemic Crisis Support. The Recovery and Resilience Facility stands out, however, for two reasons: first, by the fact that part of its budget will go to grants rather than loans; and second, by its much longer time horizon.

The Pandemic Crisis Support (and the complementary tools adopted at that time, see [Creel, Ragot & Saraceno, 2020](#))

consists exclusively of loans, and the net gains that the Member States could draw from them are by definition low: European loans allow a reduction in interest charges for States subject to high interest rates on the markets. The gain for Italy, which was hurt badly by the coronavirus crisis, is in the range of 0.04 to 0.08% of its GDP (this is not a typo!).

Under the Recovery and Resilience Facility, the euro zone Member States would share 193 billion euros in loans and 241 billion euros in grants, or in total 78% of the amounts allocated (the rest will go to EU states that are not euro zone members). The loans will generate small net gains for Member States (savings on the infamous interest rate spreads), while the grants will lead to larger gains, since they will not be subject to repayment, other than via higher contributions between 2028 and 2058 to the European budget (if the EU's own funds have not been created or increased by then). In the short term, in any case, the grants received represent net gains for the beneficiaries: they will neither need to issue debt nor pay interest charges on such debt.

Expressed as a percentage of 2019 GDP, the net gains from grants are far from negligible (Table 1)[\[2\]](#): 9 GDP points for Greece, 6 for Portugal, 5 for Spain and 3.5 for Italy. This will be even more significant given the expected fall in GDP in 2020. The determination of the Commission is therefore clear.

Despite all this, these grants are not intended to be used in the short term. The European Commission purportedly wanted the allocated amounts to be spent as quickly as possible, in 2021, 2022 and in any case before 2024. This is what it calls “front-loading”: do not put off till the morrow what can be done today. Except that the key to the distribution of the grant expenditures over time is somewhat in contradiction with this principle (Table 2). The grant commitments would be concentrated in 2021 and 2022, but the actual disbursements are planned for later: less than a quarter by 2023, half in 2023 and 2024, and the remainder after that. This kind of gap is frequent: it takes a little time to design an investment project and to ensure that it complies with the European Commission’s digital ambitions and low-carbon economy.

As a result, the grants to the Member States will take a little time to actually be disbursed (Table 3), and the countries facing the greatest difficulties will have to be resilient before receiving the stimulus and... resilience funds. This seems contradictory. It will take until 2022 in Greece and Portugal and 2023 in Spain and Italy to actually collect around 1 GDP point apiece. This corresponds to 3 billion euros for Greece, 2 billion for Portugal, and 14 for Spain and Italy, respectively. By way of comparison, Germany, France and the Netherlands will by then receive 5, 7

and 1 billion

euros, respectively, i.e. between 0.2 and 0.3 percent of their GDPs.

One can imagine the cries of outrage from the representatives of the frugal countries (Austria, Denmark, the Netherlands, Sweden) that these immense outgoings reward countries that are not virtuous. They should be reassured: this is no boondoggle!

Table 1. Net gains from various recent European programmes, expressed as a percent of 2019 GDP

	Max gain from use of Pandemic Crisis Support, SURE and the BEI*	Max gain from use of the Recovery & Resilience Facility loans**	Max gain from use of Recovery & Resilience grants***
Belgium	0.02	0.00	1.02
Germany	0.00	0.00	0.63
Estonia	—	—	3.60
Ireland	0.02	0.00	0.35
Grece	0.08	0.16	9.45
Spain	0.05	0.04	4.96
France	0.02	0.00	1.33
Italy	0.08	0.06	3.57
Cypru	0.07	0.08	4.99
Latvia	—	—	7.14
Lithuania	—	—	5.75
Luxembourg	—	—	0.16
Malta	0.03	0.01	1.51
Netherlands	0.01	0.00	0.64
Austria	0.02	0.00	0.75
Portugal	0.04	0.06	6.12
Slovenia	0.04	0.03	3.53
Slovakia	0.03	0.04	6.46
Finland	0.01	0.00	0.91

Note: The order of the countries corresponds to that set by the European Commission.

**Source:* Creel, Ragot & Saraceno (2020).

** Calculation of the amount of loans per country by applying to the total amount of loans announced by the Recovery & Resilience Facility the distribution rule for transfers between countries as set out in the document COM(2020) 408 final/3 of 2 June 2020, page 2, then using spreads (the same as in Creel, Ragot & Saraceno, 2020) to deduce the net gain.

*** *Source:* COM(2020) 408 final/3 of 2 June 2020, page 2.

Table 2. Temporal breakdown of loans and grants under the Recovery & Resilience Facility, expressed as a percent of their total respective amounts

		2021	2022	2023	2024	2025	2026	2027	>2027
Loans	Signatures	49.5	50.5						
	Payments	14.8	27.5	25.0	22.5	10.1			
Grants	Commitments	39.3	40.1	10.2	10.4				
	Disbursal	5.9	15.8	23.4	26.0	17.7	7.7	3.1	0.5

Note: In 2021, 49.5% of loans will have been signed, versus 50.5% in 2022.
Source: COM(2020) 408 final 28 May 2020, Table p. 40.

Table 3. Schedule of disbursement of grants per country, expressed relative to the 2019 GDP of each country

	2021	2022	2023	2024	2025	2026	2027
Belgium	0.06	0.16	0.24	0.26	0.18	0.08	0.03
Germany	0.04	0.10	0.15	0.16	0.11	0.05	0.02
Estonia	0.21	0.57	0.84	0.94	0.64	0.28	0.11
Ireland	0.02	0.06	0.08	0.09	0.06	0.03	0.01
Greece	0.56	1.50	2.21	2.45	1.67	0.73	0.29
Spain	0.29	0.79	1.16	1.29	0.88	0.38	0.15
France	0.08	0.21	0.31	0.35	0.24	0.10	0.04
Italy	0.21	0.56	0.83	0.93	0.63	0.27	0.11
Cyprus	0.29	0.79	1.16	1.30	0.88	0.38	0.15
Latvia	0.42	1.13	1.67	1.86	1.26	0.55	0.22
Lithuania	0.34	0.91	1.34	1.49	1.02	0.44	0.18
Luxembourg	0.01	0.03	0.04	0.04	0.03	0.01	0.00
Malta	0.09	0.24	0.35	0.39	0.27	0.12	0.05
Netherlands	0.04	0.10	0.15	0.17	0.11	0.05	0.02
Austria	0.04	0.12	0.18	0.20	0.13	0.06	0.02
Portugal	0.36	0.97	1.43	1.59	1.08	0.47	0.19
Slovenia	0.21	0.56	0.82	0.92	0.62	0.27	0.11
Slovakia	0.38	1.02	1.51	1.68	1.14	0.50	0.20
Finland	0.05	0.14	0.21	0.24	0.16	0.07	0.03

Note: The order of the countries corresponds to that set by the European Commission.
Sources: COM(2020) 408 final/3, 2 June 2020, p. 2; COM(2020) 408 final 28 May 2020, Table p. 40; author's calculations.

[1] This text appeared in the 23 May 2020 edition of [Les Echos](#), without the tables.

[2] The rule for the distribution of transfers between countries appears in the document COM (2020) 408 final/3 of 2 June

2020. For each country it depends on the size of its population, on the inverse of GDP per capita compared to the EU-27 average, and on the difference between its 5-year unemployment rate and the EU-27 average. In order to avoid an excessive concentration of grants to a few countries, ad hoc limits are imposed based on these three criteria. Germany will for example receive 7% of the transfers, France 10%, and Spain and Italy 20%, respectively.

How to spend it: A proposal for a European Covid-19 recovery programme

[Jérôme Creel](#), [Mario Holzner](#), [Francesco Saraceno](#), [Andrew Watt](#) and [Jérôme Wittwer^{\[1\]}](#)

The Recovery Fund recently proposed by the EU Commission marks a sea-change in European integration. Yet it will not be enough to meet the challenges Europe faces. There has been much public debate about financing, but little about the sort of concrete projects that the EU should be putting public money into. We propose in [Policy Brief n°72](#) a 10-year, €2tn investment programme focusing on public health, transport infrastructure and energy/decarbonisation.

The investment programme consists of two pillars. In a national pillar Member States – broadly as in the Commission proposal – would be allocated €500bn. Resources should be focused on the hardest-hit countries and front-loaded: we suggest over a three-year horizon.

The bulk of the money – €1.5tn – would be devoted to finance genuinely European projects, where there is an EU value added. We describe a series of flagship initiatives that the EU could launch in the fields of public health, transport infrastructure and energy/decarbonisation.

We call for a strengthened EU public health agency that invests in health-staff skills and then facilitates their flexible deployment in emergencies, and is tasked with ensuring supplies of vital medicines (Health4EU).

We present costed proposals for two ambitious transport initiatives: a dedicated European high-speed rail network, the Ultra-Rapid-Train, with four-routes cutting travel times between EU capitals and regions, and, alternatively, an integrated European Silk Road initiative that combines transport modes on the Chinese model.

In the area of energy/decarbonisation we seek to “electrify” the Green Deal. We call for funding to accelerate the realisation of a

smart and integrated electricity grid for 100%-renewable energy transmission (e-highway), support for complementary battery and green-hydrogen projects, and a programme, modelled on the SURE initiative, to co-finance member-state decarbonisation and Just Transition policies.

The crisis induced by the pandemic, coming as it does on top of the financial and euro crises, poses a huge challenge. The response needs to take account of the longer-run structural challenges, and above all that of climate change. The European Union should rise to these challenges in the reform of an ambitious medium-run recovery programme, appropriately financed. An outline of such a programme is set out here by way of illustration, but many permutations and options are available to policymakers.

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It seems like it's raining billions

[Jérôme Creel](#), [Xavier Ragot](#), and [Francesco Saraceno](#)

The second meeting of the Eurogroup did the trick. The Ministers of Finance, after having once again laid out their divisions on the issue of solidarity between euro area Member States on Tuesday 7 April 2020, reached an agreement two days later on a [fiscal support plan](#) that can be put in place fairly quickly. The health measures taken by the Member States to limit the spread of the Covid-19 pandemic will enjoy better short-term financing, which is good news. The additions to Europe's tools for dealing with the crisis will be on the order of 500 billion euros – this is certainly not negligible, and note that this comes on top of the efforts already put in place by governments – but this corresponds mainly to a new accumulation of debt by the Member States. The net gain for each of them, as we shall see, is actually quite marginal.

The Eurogroup will propose the creation of a credit line (Pandemic Crisis Support) specifically dedicated to the management of the Covid-19 crisis within the framework of the

European Stability Mechanism (ESM), without strict conditionality (meaning that recourse to the credit line will not imply any control on the part of the EMS over the future management of the Member State's public finances). The creation of the credit line was inspired by the proposal by [Bénassy-Quéré et al. \(2020\)](#), the [advantages and disadvantages](#) of which we presented to the Eurogroup meeting on 9 April 2020. The amount allocated to this credit line represents around 2% of the GDP of each euro area Member State, or nearly 240 billion euros (in 2019 GDP).

The lending mechanism proposed by the European Commission to supplement the partial unemployment programmes of the Member States – [it goes under the name of SURE](#) – will clearly see the light of day and will be endowed with 100 billion euros. For the record, the three main beneficiaries of SURE cannot receive a combined total of more than 60 billion euros in loans.

Finally, the European Investment Bank (EIB) will grant an additional 200 billion euros, mainly to small and medium-sized enterprises in the EU Member States. In total, the euro area countries will have 480 billion euros in additional financing capacity.

Table 1 below presents a breakdown by country of the amounts in play. As part of the 240 billion euros of Pandemic Crisis Support, Germany will be able to benefit from

a borrowing capacity of nearly 70 billion euros, France nearly 50 billion euros, and Italy and Spain 35 and 25 billion euros respectively. These amounts correspond to 2% of the 2019 GDP of each country. At this point, there is no indication of whether the Member States will draw on this capacity. The advantage in doing so depends crucially on the difference between the interest rate at which they can finance their health and economic expenses without using the EMS and the interest rate on loans made by the EMS. The financing cost without going through the EMS is the interest rate on the country's public debt. The cost of financing through Pandemic Crisis Support is the interest rate at which this credit line is itself financed, that is to say, at the lowest rate on the market, i.e. the German rate. So it is obvious that Germany has no interest in using this credit line. Of the 240 billion euros allocated to Pandemic Crisis Support, the 70 billion euros for Germany is thus useless. For countries other than Germany, the use of Pandemic Crisis Support depends on the difference between their interest rate and Germany's rate, the infamous spread. If the spread is positive, using the EMS effectively reduces the cost of borrowing. But as shown in Table 1, the gain enabled by Pandemic Crisis Support is rather low. For Greece, whose spread vis-à-vis Germany is the highest in the euro zone, the gain would come to around 0.04% of GDP in 2019, i.e. a 215

basis point spread multiplied by the amount allocated to Greece for Pandemic Crisis Support (3.8 billion euros, which corresponds to 2% of its GDP of 2019), all relative to its 2019 GDP. For Italy, the gain is on the same order: 0.04% of its GDP. Expressed in euros, Italy stands to gain 700 million euros. For France, whose spread vis-à-vis Germany is much lower than that of Italy, the gain could be 200 million euros, or 0.01% of its GDP in 2019.

Assuming that the amounts allocated by the EIB are prorated to the country's size (measured by its GDP in 2019), and that Spain, Italy and France benefit from 20 billion euros each under SURE, the total interest rate savings would reach, respectively, 680 million, 1.5 billion and 430 million euros (0.05%, 0.08% and 0.02% of GDP). At a time when it seems to be raining billions, these are not big savings. Unless you think of it as a metaphor. Like rain before it falls, the billions of euros are not really euros before they fall.

Table 1. Distribution of amounts allocated as part of Pandemic Crisis Support (PCS), and each country's potential gains, including from the use of additional EIB and SURE financing

	Max amount of PCS	10-year spreads	Max. gain from use of PCS and other additional financing				
	Billion euros	Base points	PCS	EIB*	SURE**	Total	Total
			Million euros				% of GDP
Germany	68,5	0	0	0	0	0	0
Austria	8	43	34,3	20,9	5,8	61,0	0,02
Belgium	9,4	52	49,1	30,0	8,3	8,8	0,02
Cyprus	0,4	204	9,0	5,5	1,5	16,0	0,07
Spain	24,8	113	280,7	171,3	226,0	678,0	0,05
Estonia	0,6	nd	nd	nd	nd	nd	nd
Finland	4,8	40	19,3	11,8	3,2	34,3	0,01
France	48,3	44	212,6	129,8	88,0	430,4	0,02
Greece	3,8	215	81,5	49,7	13,7	145,0	0,08
Ireland	6,9	55	38,0	23,2	6,4	67,5	0,02
Italy	35,5	195	693,1	423,1	390,0	1506,2	0,08
Latvia	0,6	nd	nd	nd	nd	nd	nd
Lithuania	1,0	nd	nd	nd	nd	nd	nd
Luxembourg	1,3	nd	nd	nd	nd	nd	nd
Malta	0,3	90	2,4	1,5	0,4	4,2	0,03
Netherlands	16,1	26	41,9	25,6	7,1	74,6	0,01
Portugal	4,2	124	52,3	31,9	8,8	93,0	0,04
Slovakia	1,9	77	14,5	8,9	2,4	25,9	0,03
Slovenia	1,0	107	10,3	6,3	1,7	18,3	0,04

* Assuming that the use of additional EIB financing is fully distributed in proportion to the country's relative GDP compared to that of the EU (in 2019).

** Assuming that Italy, Spain and France obtain 20 billion euros each and that the remaining 40 billion euros are distributed in proportion to the relative GDP of the countries compared to that of the euro zone (in 2019).

Sources: Ameco (PIB 2019), Financial Times (Spreads, 10 April 2020).

What do the fiscal stimulus strategies in the United

States and Europe reveal?

By [Christophe Blot](#) and [Xavier Timbeau](#)

In parallel with the decisions taken by the [US Federal Reserve](#) and the [European Central Bank](#) (ECB), governments are stepping up announcements of stimulus packages to try to cushion the economic impact of the Covid-19 health crisis, which has triggered a recession on an unprecedented scale and pace. The confinement of the population and the closure of non-essential businesses is leading to a reduction in hours worked and in consumption and investment, combining a supply shock and demand shock.

The responses to the crisis in both the US and Europe are unfolding over time, but the choices already made on either side of the Atlantic have lessons about their ideologies, the fundamental characteristics of their economies and the functioning of their institutions.

Federal budget: whether or not to have one

After several days of negotiations between Democrats and Republicans, the US Congress approved a plan to support the economy worth 2,000 billion dollars (9.3 points of GDP) [\[1\]](#). It provides, in particular, for transfers to households, loans to SMEs and measures to support sectors in difficulty in the form of deadline extensions. On the other side of the pond, the European Commission has proposed the creation of a 37-billion euro fund as part of an investment initiative. The EU will also reallocate one billion euros “as a guarantee to the European Investment Fund to incentivise banks to provide liquidity to SMEs and midcaps” [\[2\]](#). EU-wide, these sums represent 0.2 percentage point of GDP, which may seem all the more derisory since this does not involve allocating

additional funds but rather reallocating funds within the budget.

These major differences point out in the first place that, by construction, the European budget is limited, and that it is not set up to respond to an economic slowdown affecting all the Member States. Within the EU, fiscal prerogatives are the responsibility of the Member States, as are the main sovereign instruments for responding to a crisis.

It is the national budgets that are used to prop up economic activity. So turning to these and bringing together announcements made at the level of the EU's five largest countries, the total sum allocated exceeds 430 billion euros (3.3% of GDP), to which must be added guarantees, which could come to more than 2,700 billion euros, or more than 20 points of EU GDP [3]. The measures taken by the US and by European countries are thus on a comparable order of magnitude and are distinguished by the level at which they are taken as well as by the way in which the sums are allocated. In the United States, the federal budget represents 33% of GDP, which makes it possible to carry out a common, centralized action that benefits all households and businesses, based on decisions approved by Congress, in a way that implicitly ensures stabilization between the different States. In practice, the taxes paid by households and businesses in the States hit hardest will fall relatively, and these same States will also be able to benefit more from certain federal measures. Moreover, the US Congress can vote a deficit budget, which can be used to implement intertemporal stabilization measures [4].

In contrast, the EU does not have the capacity to go into debt, whereas the Member States can. Their stabilization capacity can be constrained by the difficulty of self-financing, which initially leads to a rise in interest rates or subsequently to the drying up of markets. The different Member States are not on an equal footing in the markets, due to their macroeconomic situation or to the level of their

debt, as in the case of Italy. But beyond these differences, the main issue is that savers, through the financial markets, can make trade-offs between the debts of different countries within a legal space (the EU) that guarantees the free movement of capital, so interest rate movements can amplify small macroeconomic differences and fuel self-actuating dynamics. The 2012 sovereign debt crisis showed that a contagion by sovereign rates, which, after Greece, sucked Italy and Spain into a whirlpool of doubt in the financial markets, could lead to substantial transfers from countries in difficulty to countries considered virtuous. The counterpart of the trade-off was the lowering of rates for Germany and France. These transfers can amount to several points of GDP, a level that is creating a risk of the break-up of the euro zone: it might be preferable to end the free movement of capital, so as to capture national savings to finance the public debt (and therefore monetize the public deficit) rather than letting the debt load soar and having to submit to a humiliating recovery plan in exchange for European aid.

The surge in Italian sovereign rates, prior to the clarification by the ECB's announcement, then logically enough relaunched the debate about the possibility of issuing euro-bonds (called "corona-bonds"), which would make it possible to pool part of the budgetary expenditures of the euro zone States so as to avoid this wholly unjustified spiral of trade-offs between sovereign debts, whose impact could be sufficient to lead to the break-up of the euro zone.

As long as these common debt securities are not set up or the ECB is reluctant to intervene to buy back this or that European public debt, the role of Europe's institutions will be on another scale. First of all, what is needed is to promote the coordination of decisions taken by the Member States and to encourage governments to take strong measures to avoid stowaways who expect to benefit from measures taken by their neighbours [\[5\]](#). These effects are likely to be limited,

however, and it is hard to imagine that a country will not take the steps necessary to directly help households and businesses cope with the shock.

More than coordination, it is essential to soften the fiscal rules announced and in force in order to give the Member States the manoeuvring room they need by invoking the exceptional circumstances clause. Furthermore, beyond a short-term response, it is important that the crisis does not provide an opportunity to exert pressure for greater fiscal discipline. The legitimacy of the Member States in the crisis and the relevance of their responses will be closely scrutinized after the crisis. The EU must not engage in an untimely debate that could lead only to compromising its political legitimacy definitively.

Since there is no tool for pooling debt, the ECB plays a crucial role in maintaining a low level of interest rates for all the States of the Union, both today and tomorrow.

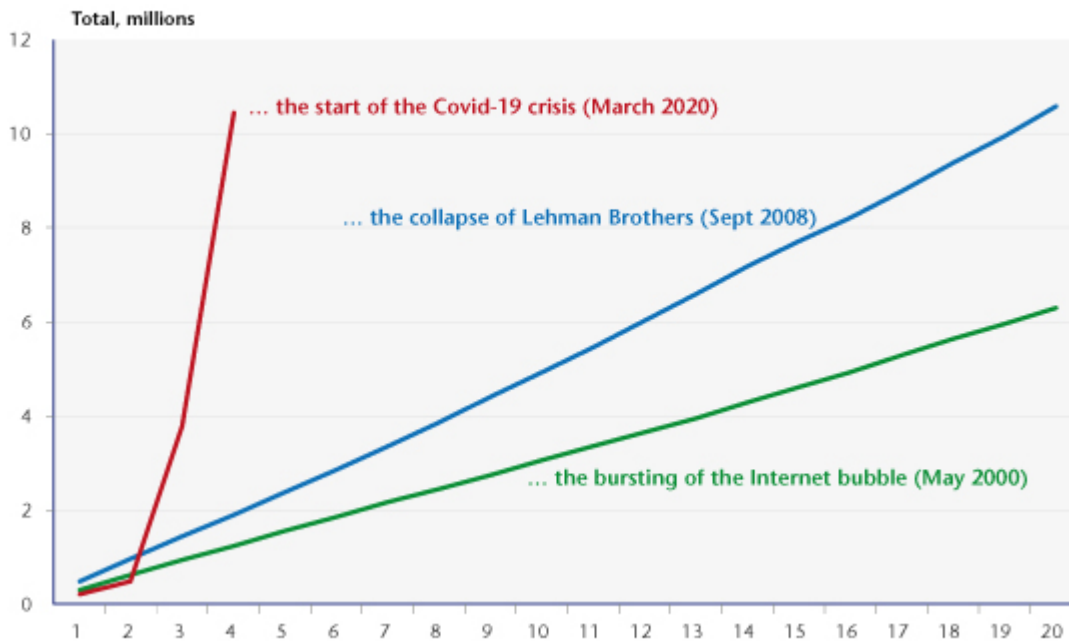
Adapting plans to the way the labour market function

Beyond the sums committed and the institutional level at which decisions are taken, the content of the respective plans is a reminder that the labour markets function very differently on the two sides of the Atlantic. The euro zone Member States have favoured the use of short-time working, or partial unemployment, which keeps workers employed and socializes the loss of income at source. The productive fabric is preserved because there is no breach of the employment contract, and the States offer, based on existing mechanisms, partially to make up lost wages in order to maintain consumer purchasing power. These mechanisms, already in wide use in Germany and Italy, have recently been expanded in France and developed in Spain. This approach should provide better conditions for the economy to re-start once the recession is over, since companies will already have a workforce, thus avoiding the costs of recruitment and training.

In the United States, these mechanisms are not widespread, and the American labour market is very flexible. Notice times for dismissing employees are very short, so that companies can quickly adjust their demand for work. The drop-off in activity will quickly translate into a higher unemployment rate, as is indicated by the initial increases recorded by the federal employment agency (see the figure). In two weeks, the cumulative number of registered unemployed exceeded 10 million, much more than what was observed after the bankruptcy of Lehman Brothers in September 2008 or following the burst of the Internet bubble in 2000. Furthermore, the duration of unemployment benefits, set at the State level [\[6\]](#), is generally shorter, which quickly puts households at risk of a loss of income. This is why a large part of the measures enacted in the aid plan approved by Congress provide for direct support to households through transfers or tax cuts, based on their income level. The measures also provide for the extension of benefit periods and additional assistance to laid-off workers, which may be added to the benefits received under standard unemployment insurance. But rather than directly targeting those losing their jobs, these are broad spectrum measures. A vigorous recovery plan will no doubt be necessary after the health crisis. But here, too, the windfall effects will consume a large part of the stimulus, and it will be very expensive to get the economy back on its pre-crisis footing.

As the November elections approach, these choices also probably explain why Donald Trump sometimes seems reluctant to prolong the confinement of Americans, arguing that the economic crisis could do more damage than the health crisis [\[7\]](#). But by letting the virus spread, the number of people infected with a serious illness risks exploding and exposing the United States to a major health crisis. It is not certain that the US President's record will prove to be more favourable, or the US strategy more effective, whether in terms of health or economics.

Figure. Weekly registrations for unemployment benefits in the US after ...



Source: U.S. Employment and Training Administration.

[1] This plan builds on previous measures, whose value totalled just over USD 100 billion. This includes all measures for households and businesses (loans and liquidity support).

[2] See https://ec.europa.eu/commission/presscorner/detail/en/IP_20_459

[3] It should also be noted that certain measures were taken based on an assumed duration of confinement, and that these could therefore be recalibrated depending on how the situation evolves.

[4] The vast majority of States, however, have deficit or debt constraints. Faced with the scale of the crisis, some of them are also freeing up spending which can therefore be adjusted to the federal support plan.

[5] If country A decides to increase its spending, country B can hope to partially benefit by the increase induced in

country A's imports from B, particularly if B is small compared to A.

[6] The US unemployment insurance system is specific to each of the States. The federal government plays its role in managing the costs of the system as a whole. See Stéphane Auray and David L. Fuller (2015): "[L'assurance chômage aux Etats-Unis](#)".

[7] See [here](#) for an analysis of the economic and health risks.

The transmission of monetary policy: The constraints on real estate loans are significant!

By Fergus Cumming (Bank of England) and Paul Hubert (Sciences Po – OFCE, France)

Does the transmission of monetary policy depend on the state of consumers' debt? In this post, we show that changes in interest rates have a greater impact when a large share of households face financial constraints, i.e. when households are close to their borrowing limits. We also find that the overall impact of monetary policy depends in part on the dynamics of real estate prices and may not be symmetrical for increases and decreases in interest rates.

From the micro to the macro

In a [recent article](#), we use home loan data from the United Kingdom to build a detailed measure of the proportion of households that are close to their borrowing limits based on the ratio of mortgage levels to incomes. This mortgage data allows us to obtain a clear picture of the various factors that motivated people's decisions about real estate loans between 2005 and 2017. After eliminating effects due to regulation, bank behaviour, geography and other macroeconomic developments, we estimate the relative share of highly indebted households to build a measure that can be compared over time. To do this, we combine the information gathered for 11 million mortgages into a single time series, thus allowing us to explore the issue of the transmission of monetary policy.

We use the time variation in this debt variable to explore whether and how the effects of monetary policy depend on the share of people who are financially constrained. We focus on the response of consumption in particular. Intuitively, we know that a restrictive monetary policy leads to a decline in consumption in the short to medium term, which is why central banks raise interest rates when the economy is overheating. The point is to understand whether this result

changes

according to the share of households that are financially constrained.

Monetary

policy contingent on credit constraints

We find that monetary

policy is more effective when a large portion of households have taken on high levels

of debt. In the graph below, we show how the consumption of non-durable goods, durable

goods and total goods responds to raising the key interest rate by one

percentage point. The grey bands (or blue, respectively) represent the response

of consumption when there is a large (small) proportion of people close to

their borrowing limits. The differences between the blue and grey bands suggest

that monetary policy has greater strength when the share of heavily indebted households

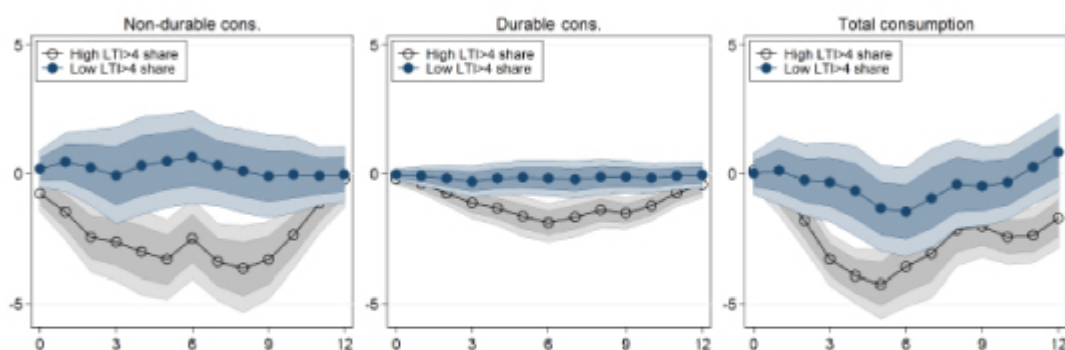
is high.

It is likely that there are at least two mechanisms behind this differentiated effect: first, in an economy where the rates are partly variable^[1], when the amount borrowed by households increases relative to their income, the mechanical effect of monetary policy on disposable income is amplified.

People with large loans are penalized by the increase in their monthly loan payments in the event of a rate hike, which reduces their purchasing power and thus their consumption! As a result, the greater the share of heavily indebted agents, the greater the aggregate impact on consumption. Second, households close to their borrowing limits are likely to spend a greater proportion of their income (they have a higher marginal propensity to consume). Put another way, the greater the portion of your income you have to spend on paying down

your debt, the more your consumption depends on your income. The change in income related to monetary policy will then have a greater impact on your consumption. Interestingly, we find that our results are due more to the distribution of highly indebted households than to an overall increase in borrowing.

Figure. The impact of monetary policy on consumption



Note: The grey line represents the response of the consumption of non-durable goods (on the left) and durable goods (in the centre) as well as of total consumption (on the right) to a one percentage point hike in the central bank's key interest rate when the share of households having a loan to income ratio (LTI) above 4 is high. The blue line represents the same response when the share of households with a loan to income ratio above 4 is low.

Source: Authors' calculations.

Our results also indicate some asymmetry in the transmission of monetary policy. When the share of constrained households is large, interest rate increases have a greater impact (in absolute terms) than interest rate cuts. This is not completely surprising. When your income comes very close to your spending, running out of money is very different from receiving a small additional windfall.

Our results also suggest that changes in real estate prices have significant effects. When house prices rise, homeowners feel richer and are able to refinance their loans more easily in order to free up funds for other spending. This may offset some of the amortization effects of an interest rate rise. On the

other hand, when house prices fall, an interest rate hike exacerbates the contractionary impact on the economy, rendering monetary policy very powerful.

Implications for economic policy

We show that the state of consumers' debt may account for some of the change in the effectiveness of monetary policy during the economic cycle. However, it should be kept in mind that macro-prudential policy makers can influence the distribution of debt in the economy. Our results thus suggest that there is a strong interaction between monetary policy and macro-prudential policy.

[\[1\]](#)

Which is the case in the United Kingdom.

Europe's fiscal rules – up for debate

By [Pierre Aldama](#) and [Jérôme Creel](#)

At the euro zone summit in December 2018, the heads of state and government hit the brakes hard on the reform of fiscal governance: among the objectives assigned to the euro zone's common budget that they are wishing for, the function of

economic stabilization has disappeared. This is unfortunate, since this function is the weak point of the fiscal rules being pursued by the Member States.

In a [recent article](#), we assessed how governments use the fiscal tools at their disposal to respond to information about trends in the public debt or the economic cycle that is at their disposal when they make their budgetary decisions. Thus, instead of evaluating the properties of fiscal rules using data that may well be revised retrospectively, we evaluated them “in real time”.[\[1\]](#)

Three main results emerged from our study. On the one hand, European governments ensure that their public debts are sustainable by improving their fiscal balance when the public debt increases. On the other hand, we found a trend towards fiscal consolidation at the bottom of the cycle in the euro area: fiscal policy is then rather destabilizing. Finally, euro area Member states have adopted a behaviour that was not found in the non-European countries in our sample: the euro zone Member states, unlike the others, continued to stabilize their public debts at the bottom of the cycle and during the crisis years. Thus the fiscal policy in the euro zone countries appears rather clearly to be untimely and inappropriate.

The results obtained as a whole for the euro area argue for a reform of Europe’s fiscal rules, but not necessarily in the sense most commonly accepted. The issue of stabilizing the public debt does not seem to be essential in so far as this is already being taken care of by the fiscal policies being implemented. Rather, what is needed is to rebalance these fiscal policies in favour of macroeconomic stabilization, especially if no common mechanism – such as a euro zone budget – has been set up for this purpose. European fiscal policies need to be more flexible and less prescriptive, with a focus on the dynamics of macroeconomic stabilization. Since no progress is envisaged at the European level, national

automatic stabilizers need to be reinforced, increasing tax progressivity and the responsiveness of social spending to changes in economic activity in order to deal with the next cyclical downturn, both individually and collectively.

[1] One of if not the first article that focuses on evaluating fiscal policy using “real-time” data is by Golinelli and Momigliano ([Journal of Policy Modeling, 2006](#)). This literature is summarized in Cimadomo ([Journal of Economic Surveys, 2016](#)).

The euro is 20 – time to grow up

By [Jérôme Creel](#) and [Francesco Saraceno](#) [1]

At age twenty, the euro has gone through a difficult adolescence. The [success of the euro](#) has not been aided by a series of problems: growing divergences; austerity policies with their real costs; the refusal in the centre to adopt expansionary policies to accompany austerity in the periphery countries, which would have minimized austerity’s negative impact, while supporting activity in the euro zone as a whole; and finally, the belated recognition of the need for intervention through a quantitative easing monetary policy that was adopted much later in Europe than in other major countries; and a fiscal stimulus, the Juncker plan, that was too little, too late.

Furthermore, the problems facing the euro zone go beyond

managing the crisis. The euro zone has been growing more slowly than the United States since at least 1992, the year the Maastricht Treaty was adopted. This is due in particular to the inertia of economic policy, which has its roots in the euro's institutional framework: a very limited and restrictive mandate for the European Central Bank, along with fiscal rules in the Stability and Growth Pact, and then in the 2012 Fiscal Compact, which leave insufficient room for stimulus policies. In fact, Europe's institutions and the policies adopted before and during the crisis are loaded down with the consensus that emerged in the late 1980s in macroeconomics which, under the assumption of efficient markets, advocated a "by the rules" economic policy that had a necessarily limited role. The management of the crisis, with its fiscal stimulus packages and increased central bank activism, posed a [real challenge to this consensus](#), to such an extent that the economists who were supporting it are now questioning the direction that the discipline should take. Unfortunately, this questioning has only marginally and belatedly affected Europe's decision-makers.

On the contrary, we continue to hear a discourse that is meant to be reassuring, i.e. while it is true that, following the combination of austerity policies and structural reforms, some countries, such as Greece and Italy, have not even regained their pre-2008 level of GDP, this bitter potion was needed to ensure that they emerge from the crisis more competitive. This discourse is not convincing. [Recent literature](#) shows that deep recessions have a negative impact on potential income, with the conclusion that austerity in a period of crisis can have long-term negative effects. A glance at the World Economic Forum competitiveness index, as imperfect as it is, nevertheless shows that none of the countries that enacted austerity and reforms during the crisis saw its ranking improve. The conditional austerity imposed on the countries of the periphery was doubly harmful, in both the long and short terms.

In sum, a look at the policies carried out in the euro zone leads to an irrevocable judgment on the euro and on European integration. Has the time come to concede that the Exiters and populists are right? Should we prepare to manage European disintegration so as to minimize the damage?

There are several reasons why we don't accept this. First, we do not have a counterfactual analysis. While it is true that the policies implemented during the crisis have been calamitous, how certain can we be that Greece or Italy would have done better outside the euro zone? And can we say unhesitatingly that these countries would not have pursued free market policies anyway? Are we sure, in short, that Europe's leaders would have all adopted pragmatic economic policies if the euro had not existed? Second, as the result of two years of Brexit negotiations shows, the process of disintegration is anything but a stroll in the park. A country's departure from the euro zone would not be merely a Brexit, with the attendant uncertainties about commercial, financial and fiscal relations between a 27 member zone and a departing country, but rather a major shock to all the European Union members. It is difficult to imagine the exit of one or two euro zone countries without the complete breakup of the zone; we would then witness an intra-European trade war and a race for a competitive devaluation that would leave every country a loser, to the benefit of the rest of the world. The costs of this kind of economic disorganization and the multiplication of uncoordinated policies would also hamper the development of a [socially and environmentally sustainable European policy](#), as the European Union is the only level commensurate with a credible and ambitious policy in this domain.

To say that abandoning the euro would be complicated and/or costly, is not, however, a solid argument in its favour. There is a stronger argument, one based on the rejection of the equation "euro = neoliberal policies". Admittedly, the

policies pursued so far all fall within a neoliberal doctrinal framework. And the institutions for the European Union's economic governance are also of course designed to be consistent with this doctrinal framework. But the past does not constrain the present, nor the future. Even within the current institutional framework, different policies are possible, as shown by the (belated) activism of the ECB, as well as the exploitation of the flexibility of the Stability and Growth Pact. Moreover, institutions are not immutable. In 2012, six months sufficed to introduce a new fiscal treaty. It headed in the wrong direction, but its approval is proof that reform is possible. We have worked, and we are not alone, on two possible paths for reform, a [dual mandate](#) for the ECB, and a [golden rule for public finances](#). But other possibilities could be mentioned, such as a [European unemployment insurance](#), a [European budget](#) for managing the business cycle, or modification of the European fiscal rules. On this last point, the proposals are proliferating, including for a rule on expenditures by [fourteen Franco-German economists](#), or the [replacement of the 3% rule by a coordination mechanism](#) between the euro zone members. Reasonable proposals are not lacking. What is lacking is the political will to implement them, as is shown by the slowness and low ambitions (especially about the euro zone budget) of the decisions taken at the [euro zone summit on 14 December 2018](#).

The various reforms that we have just mentioned, and there are others, indicate that a change of course is possible. While some policymakers in Europe have shown stubborn persistence, almost tantamount to bad faith, we remain convinced that neither European integration nor the euro is inevitably linked to the policies pursued so far.

[\[1\]](#) This post is an updated and revised version of the article "Le maintien de l'euro n'est pas synonyme de politiques néolibérales" [Maintaining the euro is not synonymous with

neoliberal policy], which appeared in *Le Monde* on 8 April 2017.

Italy's debt: Is the bark worse than the bite?

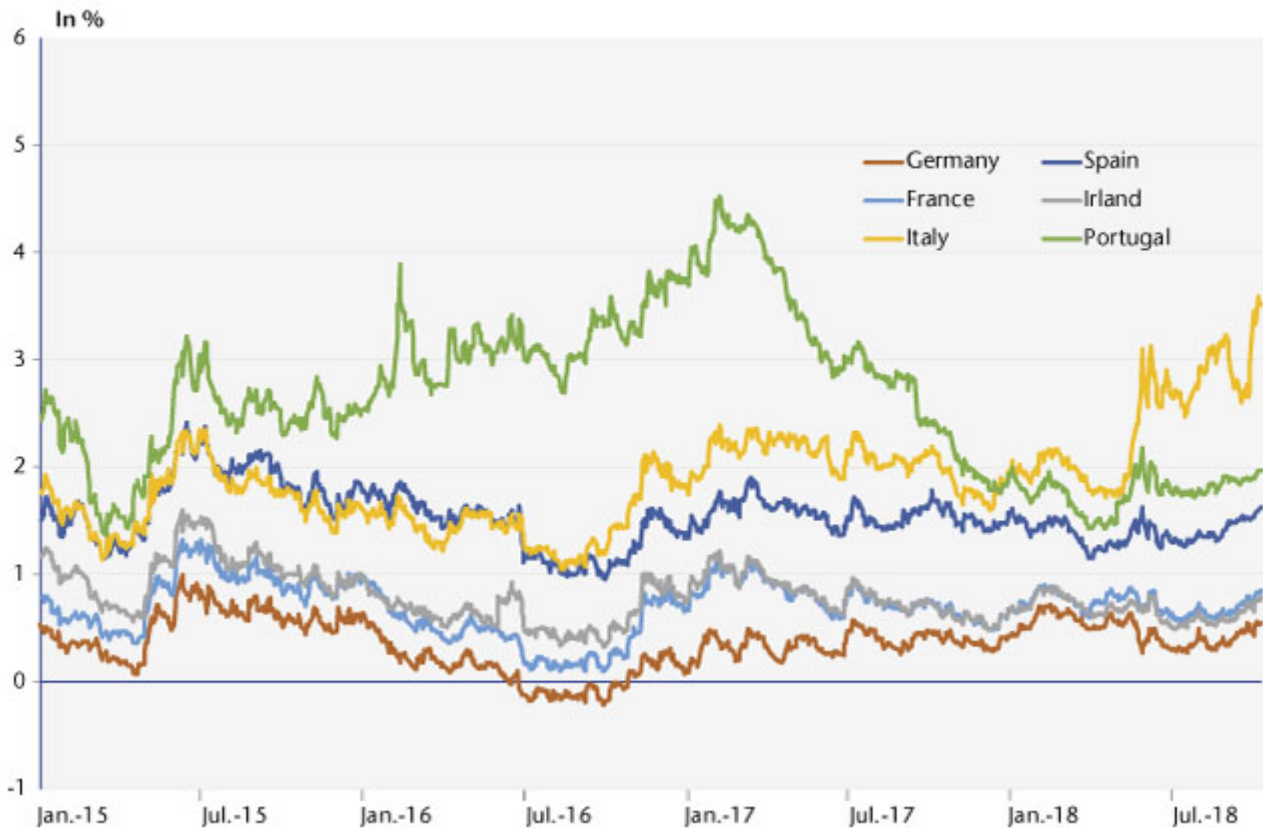
By [Céline Antonin](#)

The spectre of a sovereign debt crisis in Italy is rattling the euro zone. Since Matteo Salvini and Luigi di Maio came to power, their headline-catching declarations on the budget have proliferated, demonstrating their desire to leave the European budgetary framework that advocates a return to an equilibrium based on precise rules[1]. Hence the announcement of a further deterioration in the budget when the update of the [Economic and Financial Document](#) was published at the end of September 2018 frayed nerves on the financial markets and triggered a further hike in bond rates. ([graphic](#)).

But should we really give in to panic? The crucial question is just how sustainable the Italian public debt really is. Looking up to 2020, the situation of the euro zone's third-largest economy is less dramatic than it might appear. Stabilizing interest rates at the level of end September 2018 would leave the public debt largely sustainable. It will decline in 2019, from 131.2% to 130.3% of GDP. Given our assumptions[2], only a very sharp, long-lasting rise in bond interest rates in excess of 5.6 points would lead to an increase in the public debt ratio. In other words, the bond rate would have to exceed the level reached at the peak of the 2011 sovereign debt crisis. Should such a situation occur,

it's hard to believe that the ECB would not intervene to reassure the markets and avoid a contagion spreading through the euro area.

Figure. Interest rate on 10-year sovereign bonds



Source: Datastream.

A

very strong fiscal stimulus in 2019

Changes in the public debt ratio depend heavily on the assumptions adopted. The ratio varies with the general government balance, the GDP growth rate, the deflator, and the apparent interest rate on the public debt (see calculation formula below).

In budgetary matters, despite their differing views, the two parties making up the Italian government (La Ligue and the 5 Star Movement) seem to agree on at least one point: the need to loosen budget constraints and boost demand. In any case the government contract, published in May 2018, was unequivocal. It announced a fiscal shock amounting to approximately 97 billion euros over 5 years, or 5.6% of GDP over the five-year

period. But although the measures have been gradually reduced, the draft presented to the Italian Parliament plans for a public deficit of 2.4% of GDP for 2019, far from the original target of 0.8% set in the Stability and Growth Pact forwarded to the European Commission on 26 April 2018. We assume that the 2019 budget will be adopted by the Parliament, and that the deficit will indeed be 2.4% of GDP. We therefore anticipate a positive fiscal impulse of 0.7 GDP point in 2019. This stimulus breaks down as follows:

- A decrease in compulsory taxation of 5 billion, or 0.3 GDP point, linked to the gradual introduction of the “flat tax” of 15% for SMEs, a measure supported by the League. The extension of the flat tax to all businesses and households was postponed until later in the mandate, without further clarification;

- An increase in public spending, calculated roughly at 7 billion euros, or 0.4 GDP point. Let’s first mention the flagship measure of the 5 Stars Movement, the introduction of a citizens’ pension (in January 2019) and a citizens’ income (in April 2019), for an estimated total amount of 10 billion euros. The citizens’ pension will supplement the pension of all pensioners, bringing it to 780 euros per month. For the working population, the principle is similar – supplementing the salary up to 780 euros – but subject to conditions: recipients will have to take part in training and accept at least one of the first three job offers that are presented to them by the Job Centre. The revision of the pension reform, which provides for the “rule of 100”, will also allow retirement when the sum between a person’s age and the years worked reaches 100, in certain conditions. This should cost 7 billion euros in 2019. Finally, an investment fund of 50 billion euros is planned over 5 years; we are expecting an increase in public investment of 4 billion euros in 2019. To finance the spending increase without pushing the public deficit above 2.4%, the government will have to save 14 billion euros, equivalent to 0.8 GDP point. For the moment,

these measures are very imprecise (further rationalization of spending and tax amnesty measures).

For 2020, the Italian government has declared that the public deficit will fall to 2.1% of GDP. However, to arrive at this figure, given our growth assumptions, would require tightening up fiscal policy somewhat, which is not very credible. We therefore assume a quasi-neutral fiscal policy in 2020, which means that the deficit would remain at 2.4% of GDP.

With a very positive fiscal stimulus in 2019, annual growth (1.1%) should be higher than in 2018. This acceleration is more visible year-on-year: growth in Q4 of 2019 will be 1.6%, compared with 0.6% in Q4 of 2018. Although low, this level is nevertheless higher than the potential growth rate (0.3%) in 2019 and 2020. The output gap is in fact still large and leads to 0.4 GDP point of catch-up per year. Spontaneous growth^[3] thus amounts to 0.7 GDP point in 2019 and 2020. In addition, we anticipate a much stronger fiscal impulse in 2019 (0.7 GDP point) than in 2020 (0.1 GDP point). Other shocks, such as oil prices or price competitiveness, will be more positive or less negative in 2020 than in 2019.

Changes in the public debt ratio also depend on developments in the GDP deflator. However, prices should remain stable in 2019 and 2020, due in particular to wage moderation. Thus, nominal growth should be around 2% in 2019 and 2020.

Finally, we assume that the interest rate on the debt will stay at the level of the beginning of October 2018. Given the maturity of the public debt (seven years), the rise in rates forecast for 2019 and 2020 will be very gradual.

Reducing the public debt up to 2020

Under these assumptions, the public debt should decline continuously until 2020, falling from 131.2% of GDP in 2018 to 130.3% in 2019 and then to 129.5% in 2020 (table). In light of our assumptions, the public debt will fall in 2019 if the

apparent interest rate remains below 3.5% of GDP, i.e. if the debt-service charge relative to GDP is less than 4.5%.

Table. Changes in the public debt to GDP ratio based on our hypotheses

	2017	2018	2019	2020
Public debt /GDP (d_t)	131.8%	131.2%	130.3%	129.5%
Apparent interest rate on the debt (i)	2.9%	2.7%	2.9%	3.0%
GDP growth in value (g)	2.2%	2.1%	2.3%	2.1%
<i>GDP growth in volume</i>	1.6%	1.0%	1.1%	1.0%
<i>GDP deflator</i>	0.6%	1.1%	1.2%	1.1%
Primary deficit in % of GDP (s_t)	1.5%	1.8%	1.5%	1.6%
<i>Public deficit in % of GDP</i>	-2.3%	-1.8%	-2.4%	-2.4%
<i>Debt-service charge in % of GDP</i>	3.8%	3.6%	3.8%	4.0%
Projected public debt/GDP (d_{t+1})	131.2%	130.3%	129.5%	129.1%
<i>Apparent interest rate stabilizing the debt</i>	3.4%	3.4%	3.5%	3.3%
<i>Primary deficit stabilizing the debt</i>	0.9%	0.8%	0.8%	1.1%
<i>Public deficit stabilizing the debt</i>	-2.9%	-2.7%	-3.1%	-2.8%

Sources: AMECO, author's calculations..

Note : Changes in the public debt depend not only on the primary deficit, but also on the apparent interest rate and the growth rate, according to the formula: $d_{t+1} = d_t \frac{(1+i)}{(1+g)} - s_t$ which g = growth rate of nominal GDP, i = apparent interest rate on the debt, s = primary public deficit / GDP, d = public debt / GDP.

Reading note: the public debt/GDP ratio in 2017 was 131.8% and should fall to 131.2% in 2018.

However, for the apparent interest rate to rise from 2.7% in 2018 to 3.5% in 2019, given the 7-year maturity on the debt, the interest rate charged by markets would have to rise by about 5.6 points on average over the year, for one year. While this scenario cannot be excluded, it seems certain that the ECB would intervene to allow Italy to refinance at lower cost and avoid contagion.

Still, even if interest rates do not reach this level, any additional rise in interest rates will further limit the Italian government's fiscal manoeuvring room, or it will lead to a larger-than-expected deficit. Also, the deficit forecast by the government is based on an optimistic assumption for GDP

growth of 1.5% in 2019; if growth is weaker, the deficit could widen further, unsettling nerves on the market and among investors and jeopardizing the sustainability of the debt.

[\[1\]](#) L. Clément-Wilz (2014), “Les mesures ‘anti-crise’ et la transformation des compétences de l’Union en matière économique” [“‘Anti-crisis’ measures and the transformation of the competences of the EU in economic matters”], *Revue de l’OFCE*, 103.

[\[2\]](#) For more information, see the forthcoming 2018-2020 forecast for the global economy, *Revue de l’OFCE*, (October 2018).

[\[3\]](#) Spontaneous growth for a given year is defined as the sum of potential growth and the closing of the output gap.