

## 2. Fiscal and Monetary Consequences of Covid-19

The consequence of Covid-19 has been a simultaneous shock to demand and output, as governments imposed lockdowns in order to contain the spread of the pandemic and avoid the possibility of hospitals and medical facilities becoming overburdened. Governments responded to the shocks with a broad range of stimulus measures, as well as targeted spending on health equipment and research, at a time when the reduction in economic activity drastically cut tax revenue. At the same time, monetary authorities all over the world, including the European Central Bank (ECB), responded with a wide range of extraordinary accommodative measures. A European peculiarity has been the extent of the support given through loans and guarantees to businesses hit by the lockdowns. In both fiscal and monetary action, the old rule books were thrown out. There has been an intellectual shift, and (fiscal) austerity is now a dirty word. There is little dispute that the overall policy response was necessary in order to prevent much wider collateral damage from the virus and the epidemiologically necessary shut-down operations.

The result of the policy response has been the sharpest ever increase in fiscal deficits outside wartime, and, in fact, many key policy makers made explicit comparisons to wartime decisions. Xi Jinping, on February 6, 2020 talked of a “people’s war;” Boris Johnson, on March 17, 2019 stated, “We must act like any wartime government and do whatever it takes to support our economy;” and Donald Trump, on March 19, 2020 stated that in “... our big war, ...we continue our relentless effort to defeat the Chinese virus.” European Union policy makers were only a little more restrained in making the wartime analogy: Emmanuel Macron, speaking outside a military hospital explained that, “When we engage in a war, we engage completely, we mobilize united. I see in our country factors of division, doubt, all those who want to fracture the country when we must have only one obsession: to be united to fight the virus. I am calling for this unity and commitment.” When Emmanuel Macron declared “war” on the virus, he spoke with a framed Anglo-French war bond from the First World War behind him. Angela Merkel was characteristically more sober. In a rare television address, she said: “The situation is serious. Take it seriously. Since German unification, no, since the Second World War, there has been no challenge to our nation that has demanded such a degree of common and united action.” Wars are inherently uncertain in their outcome, and the economic consequences are all at the moment seen only through what Clausewitz thought

of as the “fog of war.” In particular, this observation is relevant for the oft-repeated call for a clear “exit strategy.” Of course that would be highly desirable, but it is sometimes hard to tell when a war has been won or lost (the fiscal and economic costs remain); and obviously even harder to say when a war will be won or lost. In this case, it is even unclear what ending the war means. Macron rightly told the *Financial Times*, “I don’t know if we are at the beginning or the middle of this crisis – no one knows.”

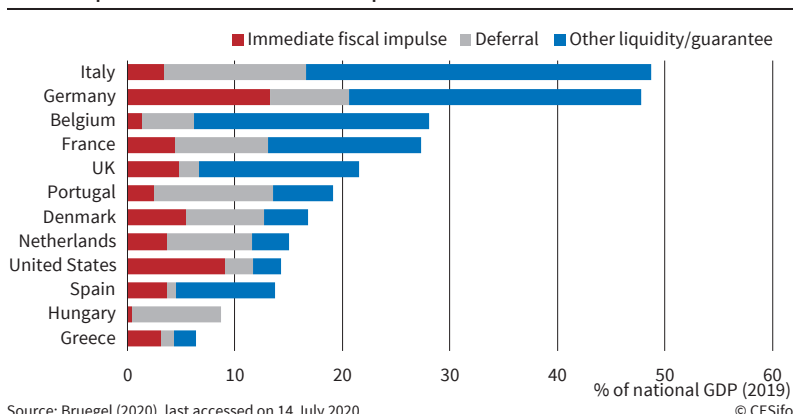
### 2.1. FISCAL CONSEQUENCES

In the large Eurozone countries, Germany initially voted a supplementary budget of EUR 156 billion (4.5 percent of 2019 GDP); in June, an additional package of EUR 130 billion (or 3.8 percent of 2019 GDP) followed. In the first package, through the economic stabilization fund (WSF) and the public development bank “Kreditanstalt für Wiederaufbau” (KfW), the government is expanding the volume and access to public guarantees for firms of different sizes and credit insurers, some eligible for up to 100 percent guarantees, increasing the total volume by at least EUR 757 billion (23 percent of GDP). In Italy, the fiscal package began with the “Cura Italia” program of March 17, a EUR 25 billion (1.4 percent of GDP) emergency package. On May 15, the government agreed on a further EUR 55 billion (3.2 percent of GDP) “Relaunch” package of fiscal measures. On April 6, the Liquidity Decree allowed for additional state guarantees of up to EUR 400 billion (25 percent of GDP). In France, the government announced an increase in the fiscal envelope devoted to EUR 110 billion (nearly 5 percent of GDP), including liquidity measures. In addition, there is a package of bank loan guarantees and credit reinsurance schemes of EUR 315 billion (close to 14 percent of GDP). The United Kingdom has adopted a similar path of large-scale guarantees, and public sector borrowing in April 2020 alone was equivalent to that of the whole previous year. State guarantees for loans to firms and other liquidity support are currently estimated to amount to almost 24 percent of GDP. Guarantees are an especially large part of the fiscal response in Germany (27 percent of GDP), and Italy (32 percent). The contrast to the United States (less than 3 percent) is especially striking (Bruegel 2020).

The plans for a European-level response, including the EUR 500 billion Franco-German proposal for a European Recovery Fund borrowing for the European Union for measures in support of the worst affected

Figure 2.1

## Fiscal Response to the Pandemic in European Countries



Source: Bruegel (2020), last accessed on 14 July 2020.

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areas to be taken up to 2027, and the EUR 750 billion European Commission scheme (EUR 500 billion in grants, the rest as loans) are treated in Chapter 3 of this report. The Commission proposal is that additional own resources from four suggested sources would be used to repay the borrowing after 2027 and by 2058 at the latest: an emissions trading scheme, a carbon-border-adjustment mechanism, a corporation tax applied to companies that draw benefits from the EU single market, and a digital tax on companies with a global annual turnover of above EUR 750 million (European Commission 2020a).

There are some major uncertainties going forward. The first one concerns the timing and speed of recovery as well as what the post-recovery world will look like. Even if a successful and affordable combination of vaccination and antiviral treatment is discovered relatively soon, once new habits are formed it may be difficult, undesirable, or even impossible to return to the old ways. Social-distancing measures have become a powerful catalyst for speedy digitalization and automation of the economy. Supermarket checkout clerks and other exposed workers might simply be replaced by technology. Digitalization helps increase productivity while simultaneously reducing both health risks and many types of costs. It opens new business opportunities but also causes restructuring across many sectors of the economy. Importantly, in such an IT-innovation driven economy a few winners typically take all, leaving other players losing ground or disappearing altogether from the market (see EEAG 2020, Chapter 2).

Some of the crisis-era shifts are likely to become permanent: For instance, there will be a substantial shift to remote-office working and internet conferencing. Many sectors and occupations will be made obsolete. The commercial real estate sector may be seriously impacted as a result of the collapse in demand for offices, with little new construction. That development will have major fiscal consequences, as taxes from real estate development are an important source of local as well as central government finance. Offices are also a substantial generator of employ-

ment in accompanying services: cleaning, hospitality (cafés, bars, restaurants), other personal services. Medical services (apart from those related directly to the pandemic) also saw a collapse in demand, and a shift to new models (telemedicine). In general, services were (unusually) more severely affected by the downturn than manufacturing. The movie industry is also likely to be reshaped with movie theaters losing ground and viewing relegated, mostly, to a few online platforms. While many of these processes were already underway pre-covid, the pandemic has sped them up. Not only cruise ships, tourism, restaurants and hospitality, fashion and clothing, trade fair and conference business, but also commercial real estate, universities, even clothing and textiles are all likely to take a longer-term hit. The shifts will be fundamental – but we cannot be sure how precisely each sector will respond.

All in all, it is quite possible that longer-term alterations in the global and European economies may materialize. What are the immediate fiscal consequences? A large proportion of the loans given to businesses subject to structural or long-term decline will likely never be repaid, leaving a substantial fiscal burden. High levels of unemployment are also likely to remain in sectors where the drop in demand is a consequence of structural shifts. In those cases, there will be pressure for more permanent support mechanisms once the very widespread (and successful) short-term support (*Kurzarbeit*) expires. *Kurzarbeit* was brilliantly successful in the Global Financial Crisis, especially in German export-oriented factories which quickly benefited from the large infrastructure investments of emerging markets, and during the corona crisis it has been widely applied across Europe, with 45 million workers covered in France, Germany, Italy, Spain, and the United Kingdom. Of that total, 9 million workers are in jobs that are thought to be vulnerable in the longer run. So, what happens when there is no quick economic revival? In that case, the *Kurzarbeit* or subsidized furloughing program becomes a bridge to nowhere, with no substantial long-term benefits but rather costs that add to the fiscal burden.

It is worth pointing out the political or political economy dimensions of this problem: if the money is perceived to have been spent effectively, as with the *Kurzarbeit* schemes after 2008, there are substantial benefits in terms of voter support and political legitimacy, and the model would become more widely imitated. But if the money is thought to have been wasted on white elephant or vanity projects, the consequence is political opprobrium and delegitimization. War spending may sometimes look good in retrospect, but even in the case of victory it may look like an endless saga of lost chances, failure and policy mistakes instead.

There is at present a substantial lack of clarity about the exit from the emergency. Since no one

can gauge when the crisis will end, the overall extent of the fiscal legacy is incalculable. In that sense, the analogy often made with major wars is accurate: People at the beginning of a major conflict frequently have unrealistically optimistic assessments of the duration of hostilities, and the fiscal costs are thus not correctly anticipated.

## 2.2. MONETARY CONSEQUENCES

The second uncertainty concerns the monetary consequences of the new environment. Central banks everywhere moved to highly accommodative stances. As with the fiscal response, there is little controversy about the response to the immediate emergency. The ECB expanded asset purchases until the end of 2020 under the existing program (APP), and agreed to temporary additional auctions of the full-allotment, fixed-rate temporary liquidity facility at the deposit facility rate and more favorable terms on existing targeted longer-term refinancing operations (TLTRO-III) between June 2020 and June 2021. Recently, the ECB introduced a new liquidity facility (Pandemic Emergency Longer-Term Refinancing Operations, PELTRO), at an interest rate that is 25 basis points below the average MRO rate prevailing over the life of the operation; and an additional EUR 750 billion asset purchase program of private and public sector securities (Pandemic Emergency Purchase Program, PEPP) until the end of 2020. It also announced a broad package of collateral easing measures for Eurosystem credit operations in early April. The June 2020 announcement of widening of the PEPP purchases took the volume of asset purchases to EUR 1.35 trillion (by comparison, the volume of public sector bonds acquired under the PSPP since 2014 amounted to EUR 2.1 trillion).

While most stock market indices in the industrial world were rising in the past months and others were stabilized at a lower level than before the onset of the corona crisis, bond yields on the debt of major governments have been held down by the large and highly concentrated central bank purchasing programs, with the Fed in 2020 buying in a few weeks the same amount of bonds as in the major QE2 and QE3 programs. The ECB will probably buy more government bonds than are issued by governments. The calculation of likely developments in 2020 suggests government debt issuance of some EUR 1280 billion, compared with the pre-corona projection of around EUR 875 billion. This is a net new supply of EUR 590 billion, i.e., after subtracting bond redemptions. The central bank will buy around EUR 870 billion in public sector assets, i.e., almost EUR 300 billion more than the net issuance of new debt (ING 2020).

In addition, there are purchases of private sector debt. US companies are helped through the Secondary Market Corporate Credit Facility (SMCCF). It is owned by the US Treasury and allowed to purchase ETFs,

Figure 2.2  
Growth Rate of Monetary Aggregate M3 since January 2010



Source: ECB, Statistical Data Warehouse, last accessed on 14 July 2020.

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including high-yield ETFs. The Federal Reserve lends money to the SMCCF so that it can buy ETFs. Currently, BlackRock is acting as an outside investment manager for the SMCCF, i.e., it helps select ETFs that will be purchased by SMCCF. At the same time, BlackRock is the globally dominant creator and seller of ETFs. If BlackRock purchases their own ETFs on behalf of SMCCF, it gives it a discount by waiving some fees (Tchir 2020). Through this vehicle it becomes possible for the Fed to, directly or indirectly, own defaulted corporate bonds among other things. This, in turn, props up company coffers and helps support asset prices, at least for a time. From April 2020, the ECB accepted as eligible for use as collateral in Eurozone credit operations “fallen angels,” i.e., investment-grade bonds that have been downgraded to a rating of at least BB. There had been major outflows in March 2020, especially driven by large investment funds (Lane 2020), and the operation was immediately successful in that it preserved the integrity of the Eurozone. Viewed in a longer-term perspective, however, such mechanisms pose a serious moral hazard potential because of the difficulty of calling a halt to operations. The question of formulating an exit strategy is thus acute.

Monetary aggregates are rising in the Euro Area and in the United Kingdom and the United States. 2020 will see the highest annual percentage increase in the broadly defined quantity of money in the United States in peacetime, with the peak figure above 20 percent and possibly even exceeding 25 percent (Congdon 2020). Measuring the effects in terms of inflationary/deflationary impact is extremely hard at the outset. Velocity has fallen, as in previous economic downturns (the effect is comparable to that of the United States in 2001 and 2008-9).

Savings have increased during the shutdown. The European Commission spring forecast suggested that Eurozone household savings would rise from 12.8 percent of disposable income in 2019 to a record high of 19 percent this year and fall only to 14.5 percent in 2021 (European Commission 2020b). The result is a build-up of potential demand.

The collapse of demand has unsurprisingly led to major price reductions for a range of consumer goods, including textiles and automobiles. Oil and petroleum prices fell by record amounts (with negative prices for forward contracts because of the shortage of storage facilities) before a partial recovery. There may now be a long period of sluggish demand and growth, and a generally deflationary environment. Assessments of a long-term low inflation future are sometimes predicated on a prolonged weakness of energy prices (European Commission 2020b) but this is already partially being reversed.

On the other hand, the collapse of supply chains and a politically driven reversal of globalization is likely to make many goods scarce and more expensive, including food products, as well as pharmaceutical and medical products. Food prices show a substantial measure of inflation worldwide. There is likely to be a rapid increase in “felt inflation,” in that trips to the supermarket are already becoming much more expensive. If the structure of demand permanently changes because of the crisis, the calculation of consumer price indices will need rethinking, as consumers no longer buy the same sorts of goods. The increases in food prices, moreover, affect poorer consumers, often additionally impacted by the disappearance of low paid service sector employment, more severely. While inflation projections for the short term show a deflationary impact of the corona crisis (the IMF in June estimated consumer prices in industrial countries to rise by only 0.3 percent in 2020 and 1.1 percent in 2020, IMF 2020), there is a possibility of an inflation whiplash, in which deflation is followed by sharper rise in inflation.

Asset prices already look as if they are being driven by a monetary overhang, and increased savings rates, as the initial post-corona losses have been reversed. The asset price inflation is also driven by new investment technologies, with a rapid increase in the popularity of platform-based trading systems that substantially eliminate commissions, such as Robinhood and Revolut. Major gains in asset prices historically drive up spending, as investors want to

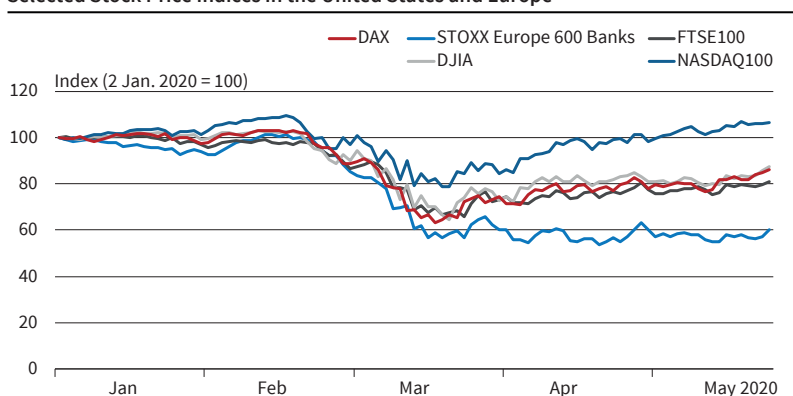
benefit from their paper gains, but the consumer price response usually follows only after a lag. Influential commentators such as Martin Wolf are now speaking about a possibility of a recurrence of 1970s run-away inflation, and a likely combination of inflation and stagnation (stagflation). For at least a few months, or even a very few years, however, the tug of war between inflation and deflation may be unresolved, and policy uncertainty will prevail.

The development of securities markets indicates a decoupling between the real economy and financial markets. Some stocks have outperformed – particularly in the tech sector (in the US NASDAQ), which unsurprisingly benefits from the reasonable belief that the pandemic-inspired turn to IT will be a permanent phenomenon (see Figure 2.3). It is hard to tell whether the move into securities reflects some investors’ concept of an inflation hedge, or simply a response to the accumulation of money balances.

If and when the inflationary scenario materializes, central banks – including the ECB – will be faced with a profound dilemma. Unlike the Federal Reserve, which since 1977 has had what is usually termed a dual mandate, to “promote effectively the goals of maximum employment, stable prices, and moderate long term interest rates,” the ECB statutes (Article 2) give a clear priority to price stability primary objective, adding “Without prejudice to the objective of price stability, it shall support the general economic policies in the Union with a view to contributing to the achievement of the objectives of the Union as laid down in Article 3 of the Treaty on European Union.” Article 3 of TEU provides that the EU “shall work for the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress, and a high level of protection and improvement of the quality of the environment. It shall promote scientific and technological advance[ment]. It shall combat social exclusion and discrimination, and shall promote social justice and protection, equality between women and men, solidarity between generations and protection of the rights of the child.” Can the ECB simply ignore demands to take action to stabilize output for the sake of price stability, especially when the definition of price stability becomes increasingly contested? The Federal Reserve is beginning to think about taking labor market inequalities (including especially the labor market consequences of racial injustice) into account in its monetary policy decisions (Politi 2020).

The most pressing ECB concern will be over interest rates. Any significant rise in interest rates alters the calculations of debt sustainability in member countries with high debt levels. The solution to the European debt crisis after 2015 came above all as a consequence of new debt sustainability calculations that depended on a long-term low rate of interest

Figure 2.3  
Selected Stock Price Indices in the United States and Europe



Source: Bloomberg, London Stock Exchange, Blackrock.

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on the now mostly official debt of the EFSF and ESM program countries. There are multiple equilibria: a good equilibrium when interest rates are low and debt service is manageable; and on the other side a bad equilibrium with high interest and high defaults both in the public and private sector (and a correlation between the two in that insecurity about public finance imposes worse terms on private borrowers, who will face a future tax hit). States as well as businesses have become dependent on – in fact, addicted to – a low-interest-rate regime. Just as the Federal Reserve legislation speaks of moderate long-term interest rates, there will be a substantial pressure to hold interest rates at a level that continues to allow for a sustainable debt burden. That was a pattern seen in the aftermath of the twentieth-century world wars, in particular in the United Kingdom and the United States after the Second World War, when debt management became a key part of the central bank’s task (in a way that it is not in the setting of a modern central bank) (Allen 2018). The wartime analogy suggests that thinking about debt management will come back – that policy reflection may become fiscal dominance (Gordon and Leeper 2006). In addition to the fiscal dominance, thinking about the effects of monetary policy on the financial sector will also come back, so that financial dominance will come alongside fiscal dominance (Brunnermeier 2016; for a historical example in 1920s Germany see James 1998).

Any substantial increase in interest rates would lead to a rapid move away from the fixed yield instruments, and government financing will become much more expensive. That outcome would see a return to the Euro debt crisis of the early 2010s. However, circumstances would likely be much worse than at that time. It is now Italy, the third largest European economy that faces a severe economic and fiscal crisis. Furthermore, if the fights observed in recent months are any indication, Eurozone governments may have a hard time agreeing on a coherent set of measures that would have sufficient bite in handling the crisis. The Covid-19 pandemic initially looks as if it may have served populists and nationalists among European and global leaders and politicians well, making it easier for them to sell my-nation-first types of pseudo-solutions to the scared and confused public. Moreover, the overall levels of debt are higher than before and the expected drop in economic activity across Europe much stronger. In addition, the ECB is under pressure from the German Constitutional Court regarding its current and potential quantitative easing programs. Under such circumstances, the European banking system, under pressure ever since the Global Financial Crisis, may encounter renewed strain as much of its assets are held in European government bonds. As an indication of potential serious trouble, one can see that European banking stocks are now worth only around 60 percent of their January 2020 value (see Figure 2.3).

If the high inflation scenario is realistic, it would change policy incentives, and create in particular a great attractiveness to quickly fund as much debt as possible, including very long-term maturities, or even as suggested by Giovazzi and Tabellini (2020) and by George Soros, non-maturing permanent debt, modeled on the very successful British “consols” (British government consolidated stock) launched in the eighteenth century (which were themselves based on a Dutch model originating in the middle of the seventeenth century, when the instrument was used to finance dike construction). There is a particular advantage to shifting to a longer maturity structure: When long term debt is present, the government can trade current inflation for future inflation by debt operations; this tradeoff is not present if the government rolls over short-term debt. Optimal debt policies should minimize the variance of inflation (Cochrane 1998). Before the corona crisis, US Treasury officials were discussing the possibility of introducing very long term (50- or 100-year) bonds; a non-maturing instrument is only a logical extrapolation of that idea. Such instruments can, however, only be issued by very secure borrowers; if there is any doubt as to the credibility, they would not be likely to find much of a market. The ECB, without an adequate long-term fiscal arrangement, would simply look like a version of the post-World War I German Reichsbank. Small European countries, or emerging markets, will not be able to access this type of instrument. The proposal thus depends on a very radical move to some form of debt mutualization in Europe, a move for which there is perhaps no political appetite. The European Commission project for EUR 750 billion borrowing relies on an idea of only moving quite gradually to the market and launching a tax that would not deliver a funding stream until 2027.

At present, however, there exist multiple plausible scenarios. Some see a possibility of a return to the 1970s, in which central banks worried about inflation are engaged in a struggle with governments concerned with keeping debt financing costs down, a struggle they would probably lose as governments insist on their higher political legitimacy (fiscal dominance). Based on this scenario, when the gap before the onset of inflation is short-lived, the issuing of long-term debt looks like an opportunity to surprise investors with unanticipated inflation, an exercise which redistributes wealth from governments (where debt is a liability) to investors (where debt is an asset). Under such a scenario, however, unpleasant consequences follow. The holders of government debt may be banks and insurance companies, whose balance sheets would be threatened by an eventual surge in yields and fall in prices if central banks would attempt to normalize interest rates in Volcker-style disinflation. In that case, the exit from the low-interest-rate regime might involve a financial crisis, possibly requiring new government bailouts.

Alternately, in a different scenario, the low-inflation, low-growth setting might be durable. But that scenario is fraught with dangers as well. The worry about a resurgence of inflation or a clash between central banks and governments would then be unrealistic (or unrealized). The debt-to-GDP ratio rises because of low nominal GDP growth, and the prospect of an eventual debt crisis increases. The low returns on secure government assets drives investors to undertake more risky investments in search of higher yield, thus raising a different risk of financial crisis. A new asset bubble emerges as in the Greenspan years. The low-yield environment penalizes pension funds and pensioners find that their expected income is unrealizable. They may push to have the shortfall compensated by the government. In this scenario, too, higher demands for payments from the government (transfer payments) are an outcome.

The substantial provision of guarantees as a response to the corona crisis holds another potential danger. Guarantees in some European countries might be called on, leading to a fiscal cost, while in other countries the purpose of the guarantee is simply providing a safety net that avoids a bad equilibrium succeeds and there is no fiscal cost. The question then arises regarding how the cost is allocated between these countries. This is a scenario that looks back to the Euro debt crisis in the eventuality that northern Europe experiences a rapid rebound (a V-shaped recovery) while southern Europe is plunged into a renewed structural crisis (an L-shape trajectory).

A risk to government debt is thus a risk of reviving the “doom loop” that gripped Europe in the Eurozone debt crisis. The doom loop had two components, one fiscal and another macroeconomic. The first was that banks held large amounts of government debt as assets, so that a collapse in debt prices eroded their solvency and ultimately required recapitalization by the government (adding to the fiscal strain). Second, other assets of the banks suffered as the economy shrank; but the likelihood of a higher fiscal burden in the future to deal with the cost of bank recapitalization also weighed on economic growth. Fiscal and monetary measures are needed to avoid a new shock of the kind that became evident in the notorious press conference when ECB President Christine Lagarde ex-

plained (correctly, from a legal perspective) that the central bank was “not here to close spreads” between the borrowing costs of member states. She rapidly needed to walk that statement back. The central bank is thus locked into an effective interest rate guarantee – for the moment. A fundamental, and highly political, question will arise the moment that policy is tested by substantial price movements, if those are identified as long-term trends rather than a response to a short-term supply shock.

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