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Macroeconomic Policy Making and Current Account Imbalances in the Euro Area

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Abstract

The paper analyses the role of fiscal and monetary policy for the development of the current account imbalances in the euro area, including the most recent developments during the coronavirus crisis. Several financial transmission channels such as international bank lending, changes in TARGET2 balances, international rescue credit and government bond purchases of euro area central banks are identified. It is found that differing fiscal policy stances which have interacted differently with the ECB's monetary policy have been at roots of first diverging and then converging current account positions in the euro area. Since the European financial and debt crisis, public financing mechanisms and the unconventional monetary of the ECB have contributed to the persistence of intra-euro area current account imbalances.

JEL-Codes: H620, F320, F330, F420.

Keywords: current account, current account imbalances, financial account, euro, EU, European Monetary Union, monetary policy, fiscal policy, TARGET2.

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1. Introduction

Traditionally, linked to different macroeconomic policy stances, northern and southern European countries have tended to exhibit different current account positions (Schnabl 2018). In southern Europe, expansionary fiscal and monetary policies tended to be paired with high real interest rates, government expenditure-based growth and current account deficits. In Germany and some neighboring countries, tight monetary and fiscal policies tended to come along with low real interest rates, high investment, export-orientation and current account surpluses.

After the introduction of the euro, fast-growing current account deficits of several southern, eastern and western member states of the European Union became the breeding ground for the European financial and debt crisis (Litsios and Pilbeam 2017). Previous to the crisis, the growing current account deficits were associated with real appreciation in the course of the catch-up process of the southern euro area countries (Belke and Dreger 2014). After the crisis, different socio-economic models[2] and wages policies were seen to be at roots of the intra-euro area current account imbalances (Bonatti and Fracasso 2013, Horn and Watt 2017).

Since the European financial and debt crisis, macroeconomic surveillance was strengthened to avoid new imbalances and crises in the future (Belke et al. 2016). Fiscal consolidation was seen as an important step to adjust intra-euro area competitiveness (Pisani-Ferry and Merler 2012). Periluigi and Sondermann (2018) show that current account imbalances in the euro area were largely corrected, whereas the imbalances in international debt and assets have persisted. In specific, the TARGET2 payment system started to play an important role in stabilizing intra-euro area current accounts (Sinn and Wollmershäuser 2012, Abad et al. 2013).

[2] Bonatti and Fracasso (2013) argue that there is a widespread consensus in Germany to preserve the competitiveness of exports, for instance via fiscal and wage austerity. In their view, essential components of the German socio-economic model are the production of high-quality consumer and capital goods, a cost-effective vocational training program and a close relationship of enterprises with commercial banks (bank-based financial system). The (relatively) tight fiscal and monetary approach is seen to support the export-led growth model.

The paper analyzes the impact of macroeconomic policy making in a heterogeneous monetary union on (intra-)euro area current accounts based on the absorption approach (Alexander 1952) and the Mundell-Fleming framework (Mundell 1962, Fleming 1962). Macroeconomic policy making is treated as exogenous, with a focus on the financial flows as transmission channels to current accounts.[3] Current account imbalances are understood as a divergence of current account positions of different euro area countries or persistent surpluses or deficits.

It is shown that uncoordinated fiscal policies, which have interacted differently with (an increasingly loose) monetary policy, made current account balances first diverge and then converge, yet with real imbalances in the euro area remaining unresolved.

2. Pre-Crisis Divergence of Fiscal Policies and Current Account Imbalances

Fiscal policies and monetary policy interact as determinants of current account imbalances as they influence investment, consumption and imports dependent on the exchange rate regime (Mundell 1962, Fleming 1962). In the institutional setting of the European Monetary Union, whereas for (meanwhile) 19 euro area countries a common monetary policy exists, competence for fiscal policy making remains at a national level. This is in particular the case as attempts to coordinate fiscal policies and to constrain the level of public debt via the Stability and Growth Pact and related mechanisms have tended to fail (Ioannu and Stracca 2014).

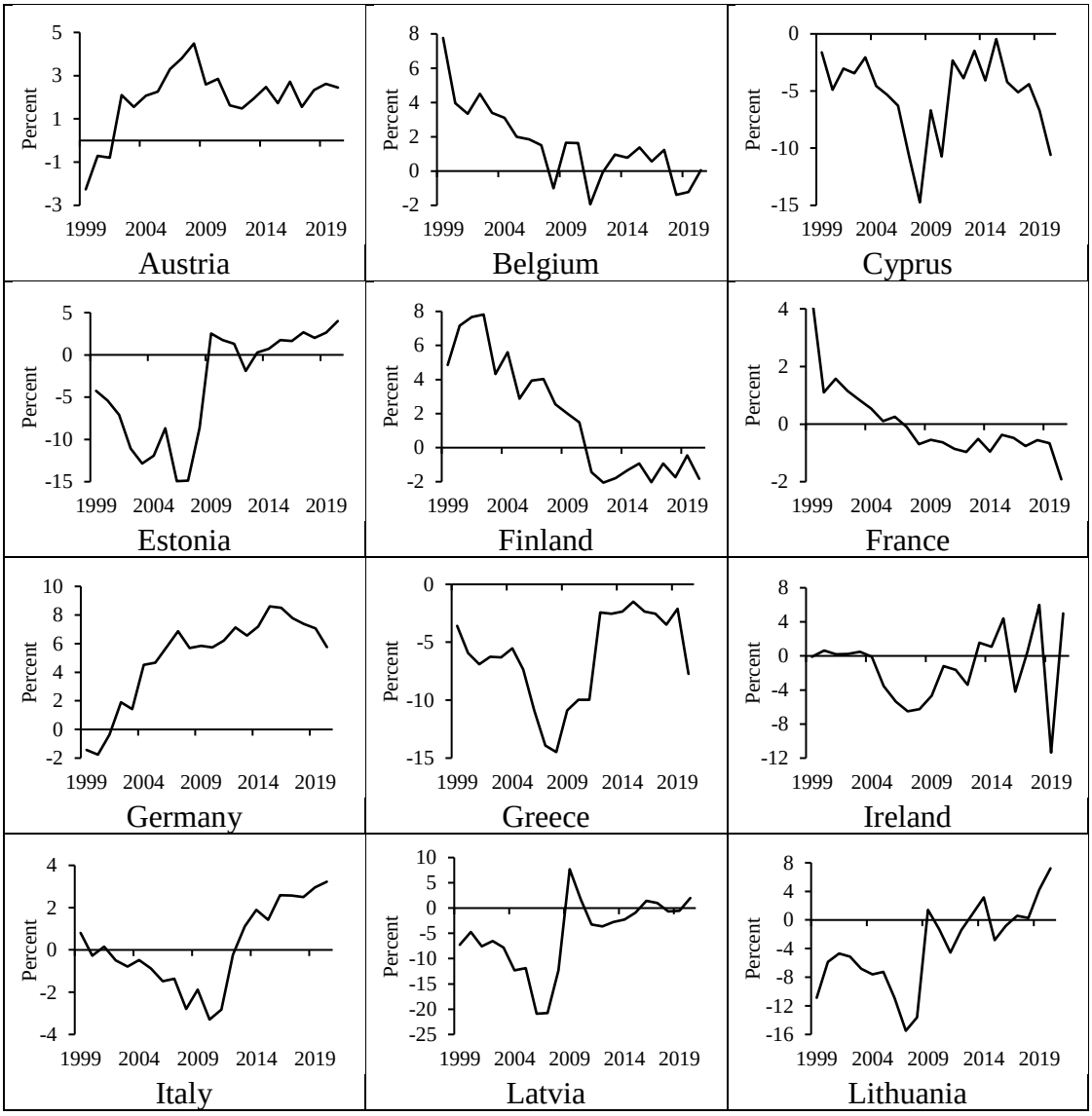
Previous to the European financial and debt crisis, diverging fiscal policy stances have contributed to diverging current account positions, also as membership in the monetary union prevented nominal exchange rate adjustment to rebalance international competitiveness.[4] As shown in Figure 1 the current account surpluses of Germany, the

[3] In line with Böhm von Bawerk (1914) who argued that the current account follows the financial account.

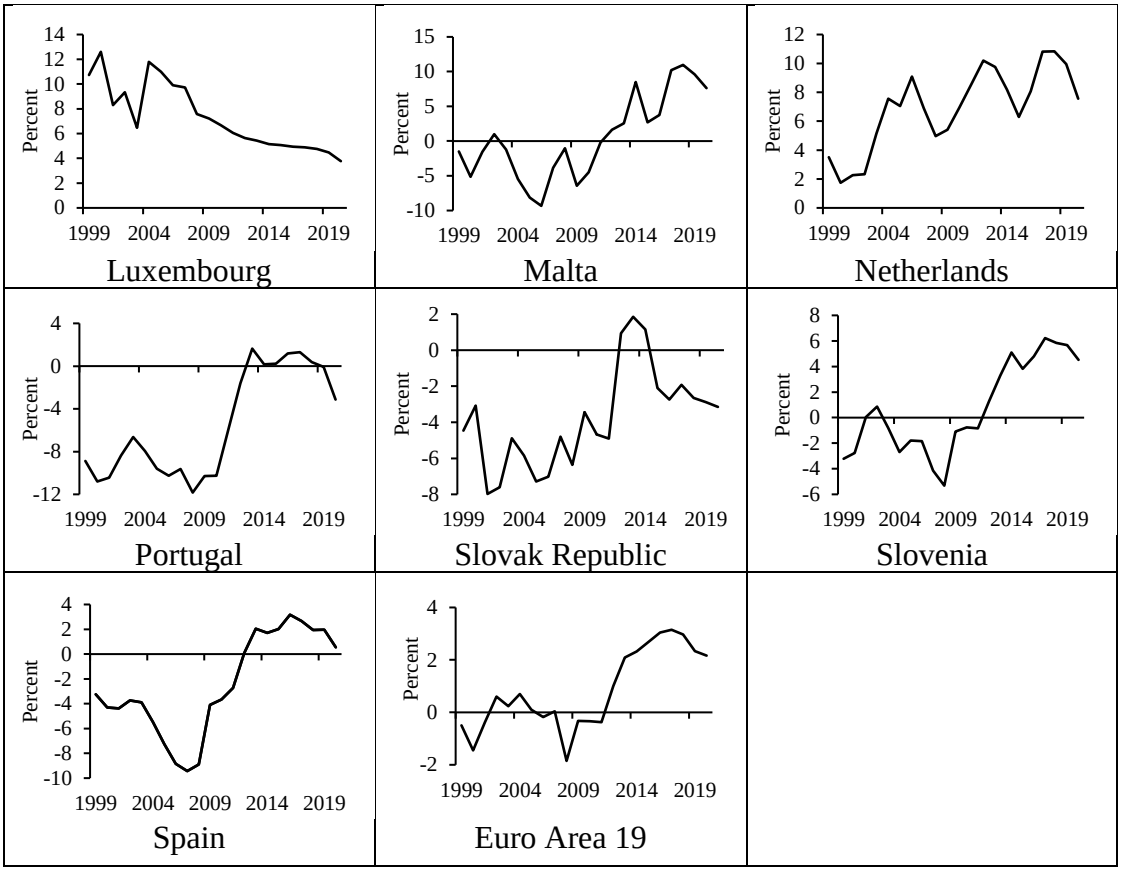
[4] Under the Bretton-Woods-System, fiscal austerity has been the ultimate tool to reduce current account deficits and maintain exchange rate stability. A current account deficit led to a growing demand (supply) for foreign (domestic) currency and thereby depreciation (appreciation) pressure on the domestic (foreign) currency. If foreign exchange reserves or international credit were insufficient to sustain the

Netherlands and Austria strongly increased since 2003, whereas the current account positions of many southern euro area countries as well as of Ireland strongly declined. Also, the current account positions of the Baltic countries deteriorated.

Figure 1: Current Account Balances of Euro Area Member States



foreign exchange intervention in favor of the domestic currency, public expenditure had to be curtailed to reduce the upward pressure on the domestic wage and price level.



Source*:* Eurostat.

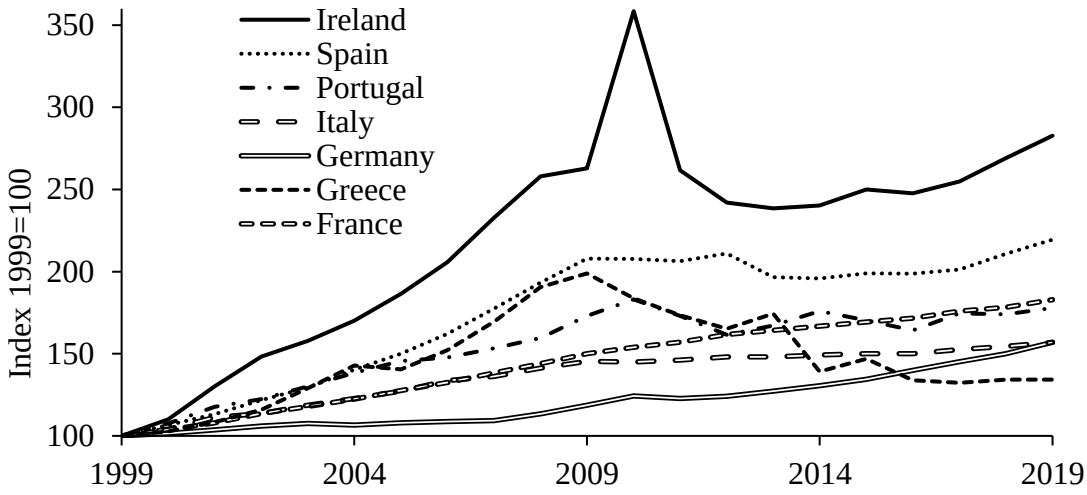
2.1. German Reforms as an Asymmetric Shock for the Euro Area

The rise in intra-euro area current account imbalances originated in Germany. In the second half of the 1990s, the costs of the German unification had brought the general government debt level close to the Maastricht limit of 60% of GDP (Schnabl and Zemanek 2011, Strauch et al. 2006). Since the year 1997 – given the goal of qualifying for the Economic Monetary Union –, high public deficits triggered an intense debate on a fiscal discipline (Deutsche Bundesbank 2005).[5] The German government started to curtail government expenditure (OECD 1998, Rodden 2003), including the sensible wages in the public sector (Obstfeld 1999). The pressure for fiscal austerity was

[5] A so-called national stability pact proposed in 1996 was central to the debate; the German federal government attempted to establish intergovernmental procedures for the deficit allocation among the federal government, federal state governments and municipalities to meet the Maastricht deficit criteria (which were fitted to general government debt). To avoid running afoul of the Maastricht 3% deficit ceiling the proposal targeted a reduction of public debt by 25.5 billion euros by 2000, 12.75 billion euros by federal state governments and 12.75 billion euros by the federal governments, respectively (Kaarlejärvi 2007). The proposal failed as the federal state governments did not agree (Wendorff 2001).

particularly strong in Germany, because the country had pushed the debt rules into the European Treaties.[6] The German government put a restraint on overall expenditure and wage growth in the public sector, with public expenditure growing significantly slower than in other euro area countries (Figure 2). Also wage growth remained sluggish (Figure 3).

Figure 2: Public Expenditure Paths in the Euro Area



Source: Eurostat.

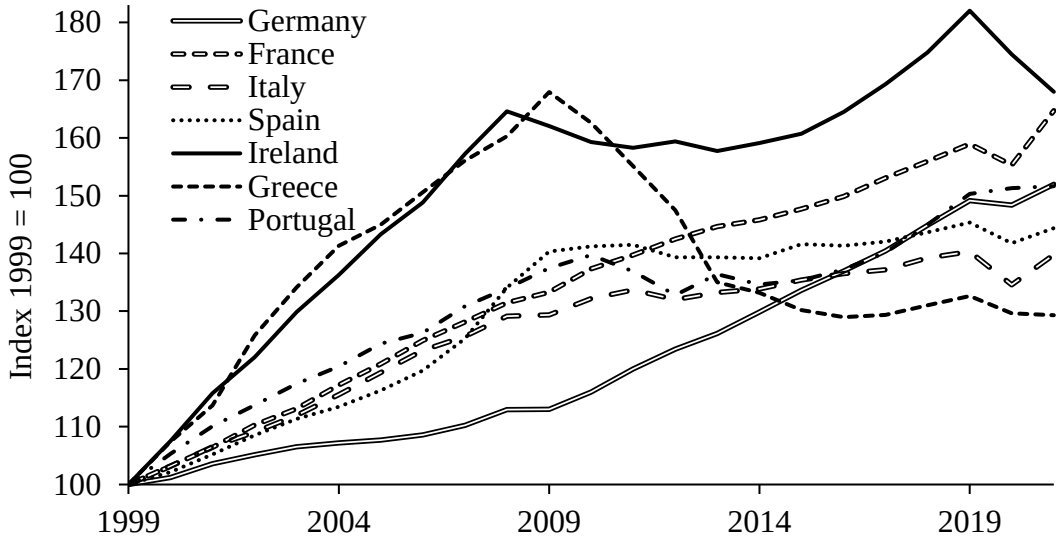
The economic reforms were intensified from the year 2003 under the government of Gerhard Schröder (2013), which cut back the future obligations of the social security system, implemented labor market reforms[7] and created incentives for private savings for

[6] Particularly before Stage Three of EMU, from May 1995 onwards the German Federal Ministry of Finance launched initiatives to supplement the Maastricht Treaty with additional fiscal rules. The main consideration was to prevent countries after accession to the EMU from unsound fiscal policies, which would bring them in conflict with the ECB's price stability objective, and to improve the German public opinion in favor of the new currency (Stark 2001, Langenus 2005). The German government had already brought the idea in the negotiations over the 1991 Maastricht Treaty (Garrett 1993). In November 1995, the German finance minister proposed a "Stability Pact for Europe", which inter alia contained a mechanism for automatically imposing fines on member countries with general government deficits exceeding 3% of GDP. The result was Stability and Growth Pact, which sets limits to the general government deficits to 3% of GDP and the outstanding stock of general government debt at 60% of GDP. See also Buti et al. (1998).

[7] Labor markets tend to be more flexible in the northern and eastern part of the euro area than in the southern part (Nickell 1997, King 2002, Kogan 2006, Fialová and Schneider 2009). The German labor market reforms made German labor markets even more flexible (Eichhorst and Marx 2011, Rinne and Zimmermann 2013), whereas German capital flows (and transfers) tended to perpetuate or even strengthen the labor market rigidities in the southern euro area (Schnabl 2019, see also Gros and Alcidi 2014).

retirement.[8] The aggregate savings substantially increased, as the reforms curtailed the public deficit[9] and promoted household savings via tax incentives as well as an increase in consumption tax.[10] In addition, the reforms increased corporate savings due to the overall wage austerity, which was triggered by the reforms. Furthermore, the euro introduction encouraged the corporate savings as it removed the appreciation pressure on German, Dutch and Austrian enterprises for trade with other E(M)U member states.[11]

Figure 3: Nominal Wage Paths in the Euro Area



Source: OECD, IMF.

Finally, the corporate tax reforms in 2000 and 2008 not only reduced the tax burden on German enterprises, but also abolished the favorable tax treatment of dividends for shareholders compared to retained earnings with both tax reforms encouraging the rise of

8 The so-called "Hartz IV reforms" and "Riester-Rente".

9 Nevertheless, in the first years of the reforms the budget deficit increased, as the reforms had a negative impact on growth and tax revenues.

10 The German government raised the consumption tax from 15% to 16% in April 1998 (also tax increases on fuel from 1999 to 2003 in course of an "ecological" tax reform) to prevent an increase of social security contributions. This decreased the tax burden on production and increased the tax burden on consumption which corresponds to an exchange rate devaluation (Farhi et al. 2014). An even stronger fiscal devaluation occurred in January 2007, when the German government raised the consumption tax from 16% to 19% to avoid raising the social security contributions (Gadatsch et al. 2016). This favored exports and discriminated imports because the consumption tax hikes strengthened the saving motive and reduced the labor costs (Ruppert and Stähler 2020).

11 Before the euro introduction, the exchange rate had constituted a persistent threat to the profits of the northern European export enterprises, when the southern and western European currencies depreciated. On the exchange rate developments previous to euro introduction see Gros and Thygesen (1994).

corporate savings.[12] All in all, bank deposits in Germany strongly increased. At the same time, the negative impact of the reforms on German public and private consumption led to a stagnation of domestic investment.

According to the absorption approach (Alexander 1952) the difference between savings and investment is equivalent to the current account. More savings than investment imply a current account surplus, which increased in Germany sharply, from -1.8% of GDP in 1999 to 8.6% in 2015. Furthermore, according to the balance of payment identity, the sum of the current account and the financial account in the wider sense – i.e. private and public cross-border capital flows – have to balance out to zero. In absence of public capital flows[13], the current account positions are equivalent to private net capital flows. Net private capital exports are equal to a current account surplus, whereas net capital imports are equal to a current account deficit. This implies that the sharply rising current account surpluses of Germany, the Netherlands and Austria were matched by respective net capital outflows. As the Eurosystem did not engage in foreign exchange intervention, mainly private international capital flows were at work.

The private capital outflows were boosted since the turn of millennium by the European Central Bank (ECB), which cut in response to the bursting of the dotcom bubble the main refinancing rate from 3.75% in October 2000 to 1.0% by June 2003. Thus, the restrictive fiscal policy in Germany was paired with an expansionary monetary policy of the ECB. Capital outflows from Germany (Figure 4), in particular in form of international bank lending, accelerated fast and became reflected in the sharp improvement of the current account balance (Figure 1).

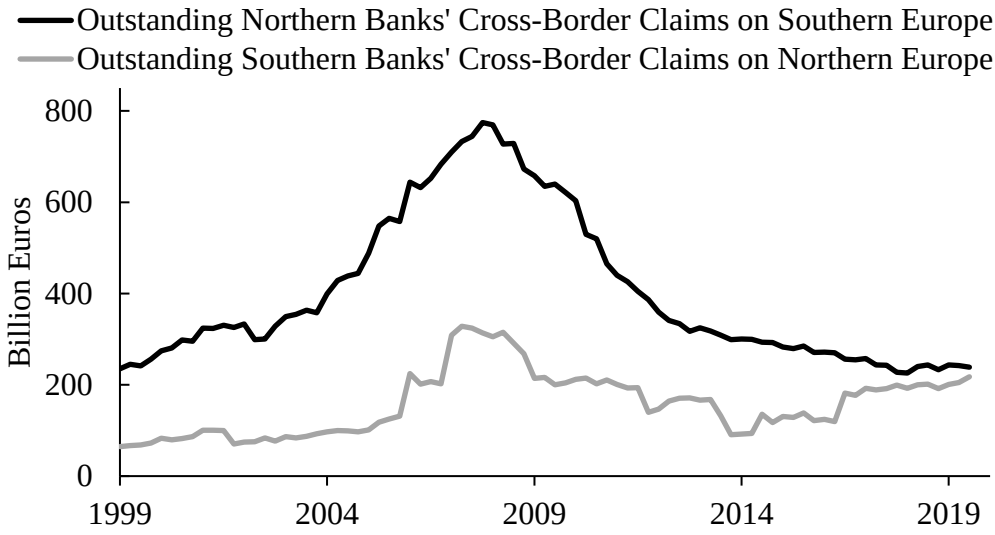
[12] The 2000 corporate tax reform lowered the tax rates on retained and distributed profits from 51.8% and 43% to a uniform rate of 38.6%. The resulting favorable tax treatment of retained profits discouraged German firms to distribute profits to the household sector via dividends and encouraged the rise of corporate savings in form of retained earnings (IMF 2014, Sørensen 2003). With the 2008 corporate tax reform the corporate tax rate decreased from 38.4% to around 29% (30% at present). The reform extended the favorable tax treatment of retained profits to non-incorporated firms as well (IMF 2014, Radulescu and Stimmelmayr 2010).

[13] In countries with fixed exchange rates, central banks buy and sell foreign exchange to stabilize the exchange rate. The resulting changes in foreign reserves are equivalent to public capital flows. Growing stocks of foreign exchange are equivalent to capital exports. Falling stock of foreign exchange are equivalent to capital imports. In addition, public international credit provision is a public international capital flow.

2.2. Current Account Deficits in the Southern Euro Area and Beyond

Intra-euro area current account imbalances previous to the European financial and debt crisis were mainly driven by international bank lending (Unger 2017). Major recipient countries of German bank lending were several southern euro area countries, Ireland and also countries outside the euro area such as the Baltic countries and the United States. Figure 4 shows that the outstanding bank credit from Germany, Netherlands, Austria and Luxembourg to Italy, Spain, Greece and Ireland strongly increased since the turn of the millennium, with a peak in the year 2008.

Figure 4: Outstanding Bank Claims in the Euro Area



Source: BIS, Consolidated Banking Statistics. Immediate counterparty basis is used. Cross-border claims are defined as total claims minus local claims. Northern banks are defined as those in Austria, Germany, Luxembourg and Netherlands. Southern banks are those in Greece, Italy, Ireland, Portugal and Spain.

Cross-border bank lending could also take place via third countries. For instance, French banks could provide credit to the southern euro area countries and sell the financial claims to German banks. Austrian banks raised funds in Germany which they transferred at high returns to several central and eastern European countries. Thus, the financial liabilities, which financed the growing current account deficits in the southern euro area countries and Ireland as well as in some central and eastern European countries before the year 2008, were to a significant part financed by bank lending from Germany and some

neighboring countries such as the Netherlands, at low interest rates and without currency risk.

Before the euro introduction many southern European countries had suffered from high inflation rates. Their accession to the euro area was linked to a macroeconomic stabilization process and strongly declining nominal and real interest rates, which boosted growth (Belke and Dreger 2014). The interest rate cuts of the ECB following the bursting of the dotcom bubble and the bank credit inflows from the northern euro area countries (Figure 4) contributed to the fast expansion of low interest-rate credit, further boosting investment, consumption and growth.

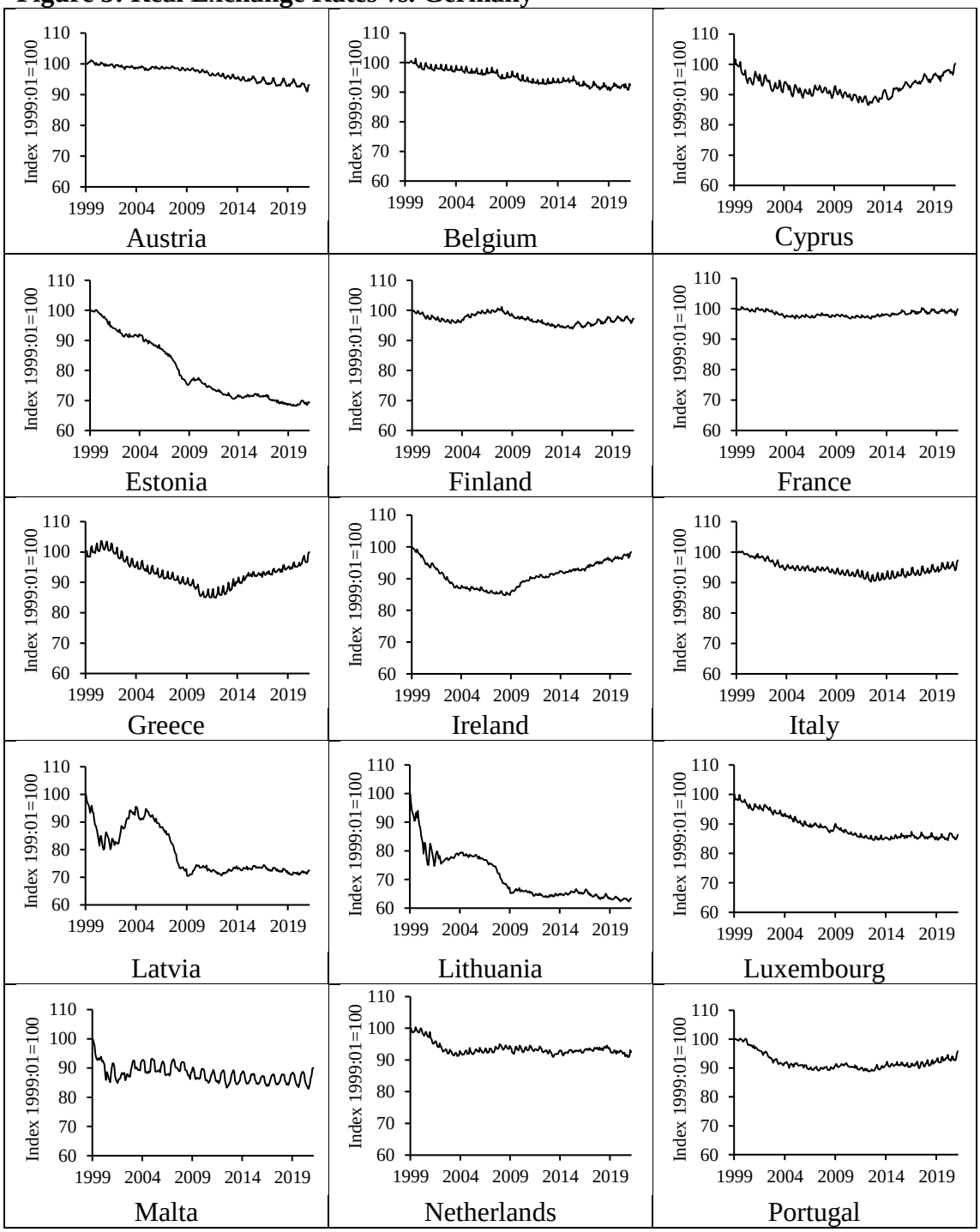
As tax revenues strongly increased, government expenditures in the southern euro area countries strongly expanded, in particular relative to Germany (Figure 2). In response to the sharp decline in interest rates, real estate prices hiked (Müller and Schnabl 2019). The boom phases in Cyprus, Greece, Spain, Portugal and Ireland[14] came along with rising wages (Figure 3), which were not backed by respective productivity gains (Belke et al. 2016). Thus, the policy mix of an expansionary monetary and expansionary fiscal policies stimulated imports via the growth of consumption, investment and government expenditure (Mundell 1962, Fleming 1962). High wage growth (relative to Germany) undermined the competitiveness of exports.

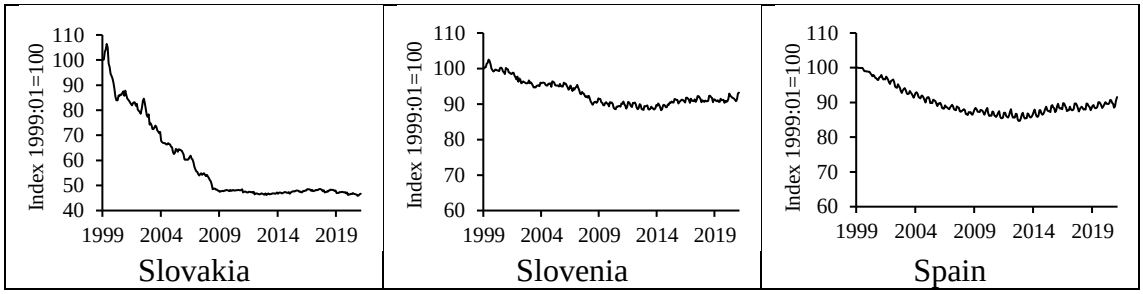
Surpluses in government budgets – as in the case of Spain and Ireland – were not sufficient to bolster the stimulating impact of growing government expenditure on imports, because wages grew beyond productivity gains. The real exchange rates of most euro area member states appreciated against Germany (Figure 5). The international competitiveness of export enterprises relative to Germany declined and the current account positions worsened (Figure 1). Thus, up to the year 2008 the rise of current account deficits in the southern euro area and Ireland was strongly linked to the growing current account surplus of Germany, Netherlands, Austria and Luxembourg. The strong

[14] A similar development was observed in the Baltic countries which maintained tight euro pegs.

rise of external debt built the breeding ground for the European financial and debt crisis (Litsios and Pilbeam 2017).

Figure 5: Real Exchange Rates vs. Germany





Source: IMF and own calculations based on consumer prices. Different scale for Slovakia.

3. Crisis, Emergency Credit and Fiscal Rescue Packages

The overinvestment theory of Hayek (1931) explains how too low central bank and capital market interest rates can cause overinvestment and speculation booms, which inevitably lead into crisis, once monetary policy is tightened (Müller and Schnabl 2019). In line with Hayek (1931), credit provision of banks to many southern, central, eastern and western European countries abated in 2008, after the US Federal Reserve and the ECB had increased interest rates (Müller and Schnabl 2019). The outbreak of the US subprime crisis led to a global reassessment of credit risk, triggering the European financial and debt crisis. As the crisis countries suffered from the collapse of tax revenues and high costs for the recapitalization of ailing banks, government debt levels strongly increased, far beyond the Maastricht limit of 60% of GDP.

High current account deficits, the collapse of tax revenues and capital flight initiated emergency credit and fiscal rescue packages for Cyprus, Greece, Portugal, Spain and Ireland. In course of the European debt crisis starting from 2012, also Italy became involved in public rescue measures. For instance, Fabiani et al. (2021) argue that EU-IMF financing as well as financing via TARGET2 has contributed to a substantial smoothing of the current account adjustment in the euro area countries in the aftermath of the global financial crisis.

3.1. Monetary Rescue Measures

As – threatened by international credit defaults – the northern European banks started to withdraw their credits from the southern euro area countries and Ireland (Figure 4) and beyond, private financing of the large current account deficits dried out. The net private

capital outflows from the crisis countries – which reflected the non-renewal and repatriation of international credit – would have necessitated a sharp reversal of the current account deficits into positive realms (Merler and Pisani-Ferry 2012).

Yet, in the early years of the crisis the TARGET2 payments system of the Eurosystem helped to finance the current account deficits of the crisis countries (Sinn and Wollmershäuser 2012, Cecchetti et al. 2012). The TARGET2 net payment flows of these days can be understood as rescue credit for two reasons. First, in contrast to non-euro area countries – such as Denmark, Bulgaria, Romania and Poland – the central banks of euro area countries are not obliged to keep their TARGET2 positions balanced.[15] Thus the TARGET2 payment system ensures an efficient monetary policy transmission within the EMU, i.e. an unlimited supply of liquidity at the prevailing interest rate to all euro area commercial banks with sufficient collateral (ECB 2011). Second, at several points of time the ECB eased the collateral requirements of commercial banks for credit from their national central banks. Without the easing of collateral requirements, the divergence of TARGET2 balances would not have been possible to the observed extent.[16]

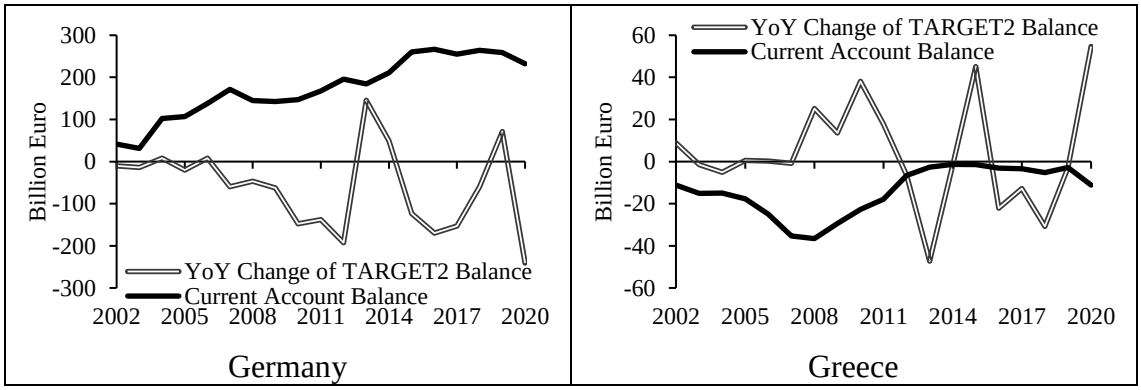
Sinn (2020: 45-46) argues that Greek banks replaced the funds that they received before in the European credit market by credit from the National Bank of Greece. With the National Bank of Greece refinancing herself at the ECB, a negative TARGET2 balance emerged, which is equivalent to a public capital inflow. Thus, the financing via TARGET2 enabled for instance Greece to continue to import. In Germany the resulting export revenues were deposited at commercial banks which reduced the need for refinancing at the Deutsche Bundesbank. As the Eurosystem intermediates via the TARGET2 system the transfer of capital to the Deutsche Bundesbank, TARGET2 claims of the Deutsche Bundesbank on the Eurosystem increased.

[15] Limiting central bank liquidity quantitatively would provoke frictions in the payment system. An uncontrolled rise of short-term interest rates in the crisis countries would cause a collapse of the local banking systems with repercussions on the creditor banks in the non-crisis regions. Furthermore, diverging money market rates would not be in line with a monetary union (Abad et al. 2013).

[16] The ECB made regulations on temporary changes to the rules relating to eligibility of collateral on 23.10.2008, 14.11.2008, 21.11.2008, 10.12.2009, 21.3.2012, 2.8.2012, 10.10.2012, 19.12.2012, 23.1.2013, 20.3.2013 (2), 26.9.2013 (2), 12.3.2014 (2), 9.7.2014, 1.9.2014, 7.5.2020, 25.9.2020. See also ECB (2020).

Later on, the TARGET2 payment system counterbalanced the capital flight from the crisis countries (Sinn 2020). If for instance Italian citizens reduced their deposits at Italian banks and increased their deposits at German banks, the Italian banks could fill the financing gap by raising credit at the Banca d'Italia.[17] The liabilities of the Italian commercial banks at the Banca d'Italia increased. The Banca d'Italia refinanced herself at the Eurosystem with the consequence of the increase of the Italian TARGET2 liabilities to the Eurosystem. In Germany, foreign deposits at commercial banks increased and the need for refinancing at the Deutsche Bundesbank declined. The aggregate liabilities of the Deutsche Bundesbank to German commercial banks increased, which brought about the increase of the German TARGET2 claims on the Eurosystem.

Figure 6: Germany and Greece: Current Account and Changes in TARGET2 Balances



Source: European Central Bank, Deutsche Bundesbank and IMF.

As the changes of TARGET2 balances correspond – independent from the driving force – to an international credit provision or credit taking (via the public sector),[18] they have a respective impact on the current account positions. Countries with rising TARGET2-liabilities, such as Italy and Spain, can be assumed to have sustained via the respective capital imports their capacity to import, with a negative impact on the current account positions. Countries with growing TARGET2 claims, such as Germany and the

[17] To facilitate the process the respective collateral requirements were eased. See footnote 16.

[18] In the balance of payments, the changes of TARGET2 positions of national central banks show up under the category "*financial account* / *net domestic investment abroad* / *other investment* / *currency and deposits* / *domestic sector: central banks* / *rest of the world*".

Netherlands, have sustained their current account surpluses via the respective public capital exports.

Figure 6 shows that the changes in TARGET2 positions of the Deutsche Bundesbank have – with the major exception of the years 2013 and 2019 – substantially contributed to the persistence of the German current account surplus. In Greece, the current account deficit was financed in the early years of the crisis via TARGET2. Later TARGET2 seems to have taken the role of counter-balancing capital flight. Given public capital imports via TARGET2 in the southern euro area countries, the improvement of their overall current account positions were paired with persistent trade deficits versus Germany (Figure 1 and Figure 7).

The destabilization of commercial banks suffering from capital flight in some crisis countries was counteracted by the ECB's Emergency Liquidity Assistance (ELA). ELA enabled national central banks in the euro area to provide liquidity to financial institutions in their jurisdiction unrelated to the ECB monetary policy, and against collateral unrelated to the Eurosystem's collateral framework.[19] The ELA from the National Bank of Greece to Greek commercial banks reached 124 billion euros in May 2012. Likewise, Cypriot, Irish and Portuguese banks received ELAs by the central banks in their jurisdictions.[20]

The ELAs cannot be assumed to be reflected in the financial accounts and therefore not directly in the current accounts. Yet due to the positive impact on aggregate demand and wages, imports can be assumed to be affected positively and exports negatively. Otherwise, the forced tightening of credit would have caused a strong recession with a negative impact on imports and a positive impact on exports (due to declining wages).

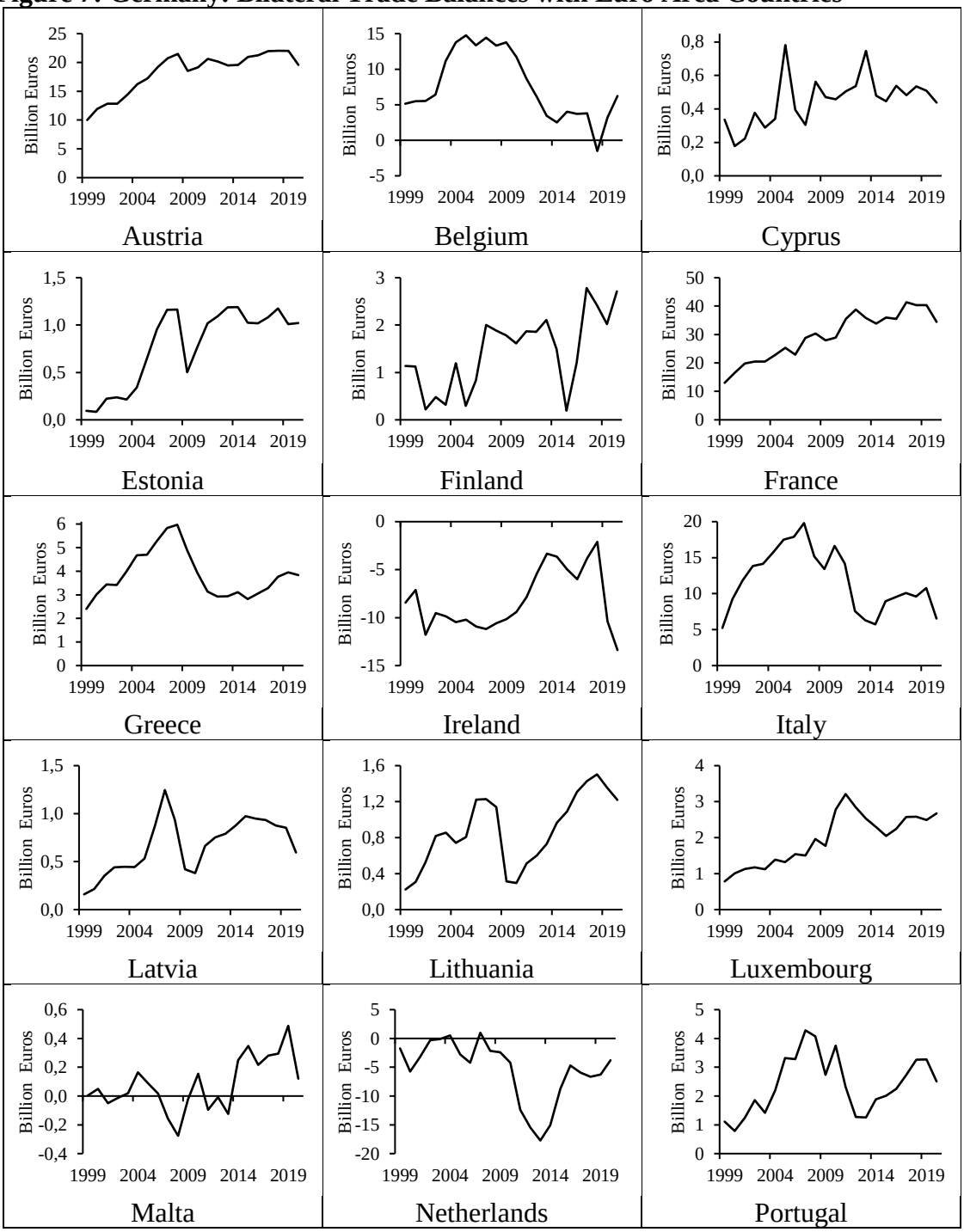
From May 2010 to September 2012 the ECB counteracted the hiking risk premiums on government bonds of southern euro area countries with the Special Market Programme (SMP), i.e. purchases of government bonds of the crisis countries (Figure 8). The

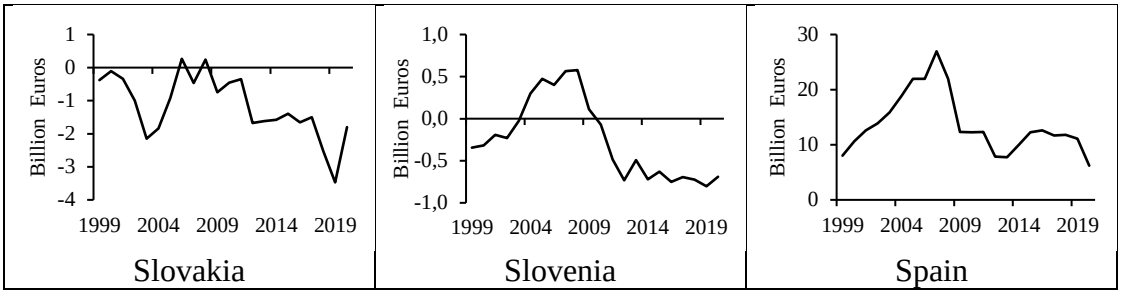
[19] In May 2017, the "Agreement on Emergency Liquidity Assistance" set a limit of 2 billion euros. Financial assistance greater than 2 billion euros to a financial institution or a group of financial institutions is to be approved by the Governing Council of the ECB.

[20] The ELA is recorded as "*other claims on euro area credit institutions denominated in euro*" in the balance sheets of national central banks in the euro area. Buiter et al. (2011) attempt to calculate the ELA provided by Banco de Portugal.

purchases of Greek, Irish, Portuguese, Spanish and Italian bonds amounting to 218 billion euros as well as the subsequent announcement of Outright Monetary Transactions stabilized the risk premiums on the respective government bonds.

Figure 7: Germany: Bilateral Trade Balances with Euro Area Countries





Source*:* The Federal Statistical Office, Germany.

This enabled the countries to continue to raise debt. The sustained government spending prevented a sharp downward adjustment of the capacity to import. As far as these bonds were sold abroad, this corresponds to a capital import with a negative impact on the current account. If the bonds were sold domestically, this can be assumed to have had a positive impact on wages, aggregated demand and imports. Respectively, exports from Germany and the neighboring countries to the crisis countries were promoted, with the German bilateral trade balance with the crisis remaining positive (see Figure 7).

3.2. Fiscal Rescue Funds

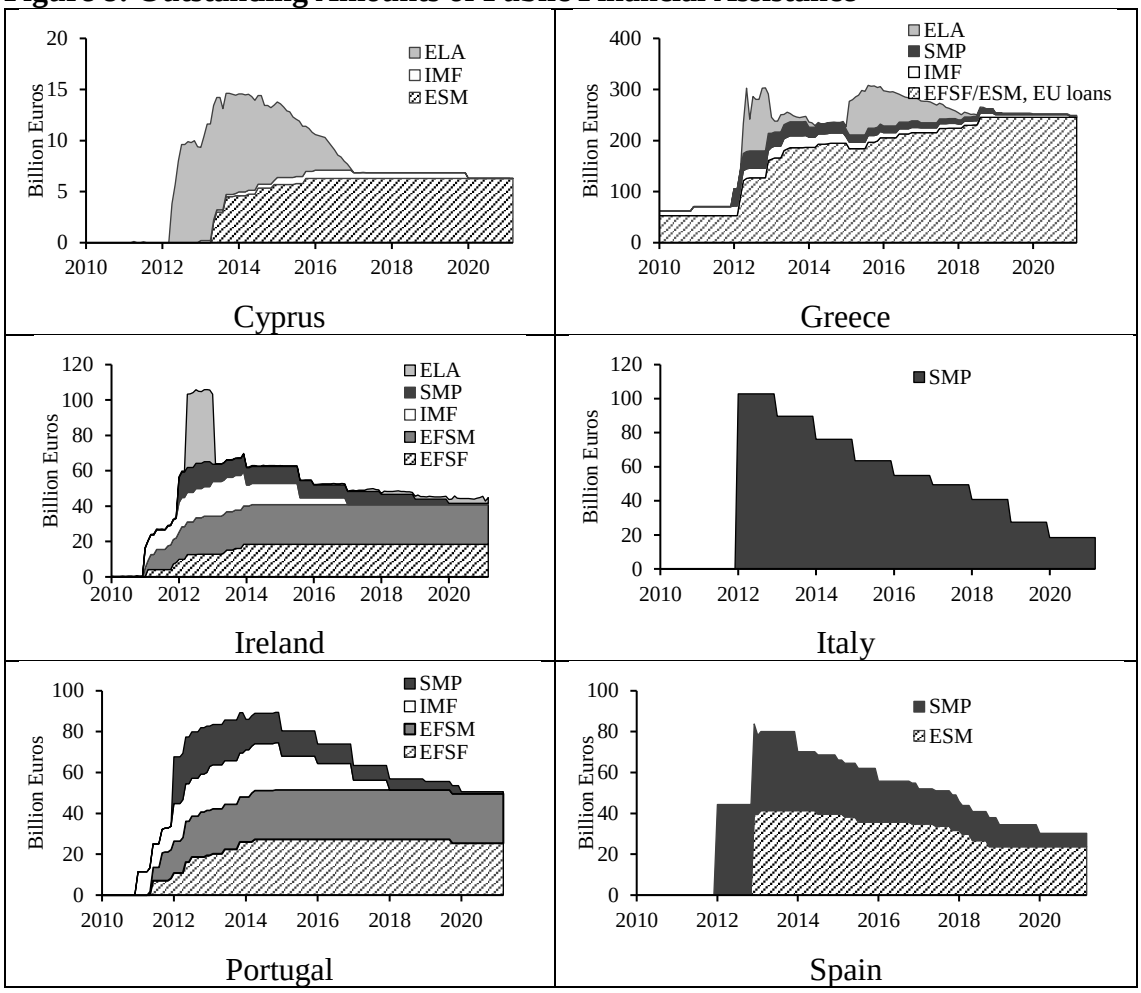
In the course of the crisis, the governments of the crisis countries received public rescue funds, which could be used to pay wages, pensions and public procurement. The recipients could continue to buy foreign goods as the funds helped to avoid strong cuts in public spending and wages in the public sectors. Figure 8 summarizes the respective public provision of funds, also including monetary rescue tools.[21] The financial distress in Greece was softened by the Greek Loan Facility of 73.0 billion euros in May 2010. The IMF provided 20.1 billion euros and the euro countries provided 52.9 billion euros in the form of bilateral loans.[22]

[21] The provision of public funds in the year 2013 can be assumed to match the changes of TARGET2 balances. The German current account surplus was kept high and capital outflows from the crisis countries were compensated by public capital inflows.

[22] The ECB capital key guided the share of bilateral loans of 52.9 billion euros for Greece: Germany with 15.2, France with 11.4, Italy with 10.0, Spain with 6.7, the Netherlands with 3.2, Belgium with 1.9, Austria with 1.6, Portugal with 1.1, Finland with 1.0, Ireland with 0.3, Luxembourg with 0.1, Cyprus with 0.1 and Malta with 0.1 billion euros. Slovakia did not agree on the loan. Ireland and Portugal stopped contributing to the Greek loan facility later.

In May 2010 the European Commission established the European Financial Stabilization Mechanism (EFSM) which mainly issued bonds with the EU budget as a collateral. Ireland borrowed 22.5 billion euros and Portugal 24.3 billion euros between 2011 and 2014.[23] In the following month, the euro area countries established the European Financial Stability Facility (EFSF), which lent in total 142 billion euros to Greece, 18.4 billion euros to Ireland and 27.3 billion euros to Portugal between 2011 and 2014.[24]

Figure 8: Outstanding Amounts of Public Financial Assistance



Source: ECB, IMF, European Stability Mechanism, European Commission, Central Bank of Cyprus, National Bank of Greece, Central Bank of Ireland.

[23] The Greek government received 7 billion euros from the EFSM in July 2015 to avoid a default; the short-term bridge loan was repaid in August 2015.

[24] The EFSF, an intergovernmental institution, mainly issues EFSF bonds with joint guarantees from the euro area governments.

The euro area countries established the European Stability Mechanism (ESM) in October 2012 as a permanent institution replacing the temporary EFSF. Since then, the ESM enables the euro area countries and euro area banks in financial distress to receive funding based on conditionality. In the years 2012 and 2013 Spain borrowed in total 41.3 billion euros for the recapitalization of Spanish banks. From 2013 to 2015, Cyprus borrowed 6.3 billion euros. From 2015 and 2018, Greece borrowed 61.9 billion euros.

4. Post-crisis Macroeconomic Policy Mix

After Mario Draghi had calmed down markets at the peak of the European debt crisis in July 2012 ("whatever it takes"), the need for ad hoc rescue measures abated. However, as high government debt became a threat for the macroeconomic and fiscal stability in the southern euro area countries, the ultra-expansionary unconventional monetary policy of the ECB took over the role of stabilization. Again, different national fiscal policies interacted in different ways with the ECB's monetary policy. The unconventional monetary policy measures of the ECB, which mainly intended to stabilize the crisis countries, had various impacts on the current accounts of both the southern and the northern euro area member states.

4.1. Fiscal and Monetary Policy Mix

The European Monetary Union and the Treaty on the Function of the European Union – Art. 121 (multilateral surveillance) and Art. 126 (excessive deficit procedure) – provided the legal framework for macroeconomic rebalancing in the southern euro area crisis countries (now also including the highly indebted Italy). Fiscal discipline was imposed on the crisis countries via a reform of the Stability and Growth Pact. The "Six Pack" entered into force in December 2011. It included both fiscal policy supervision by the Council of Ministers including sanction mechanisms for countries with too high deficits (budget deficits above 3% of GDP, government debt above 60% of GDP). The supervision of macroeconomic imbalances aimed inter alia at forestalling new current account imbalances (Belke et al. 2016).

Following the outbreak of the European financial and debt crisis in 2008, the monetary policy stance of the ECB became even more expansionary. This implied a low interest

rate and in combination with tight fiscal policies (Figure 2) an acceleration of capital flight from the southern euro area crisis countries, with a negative impact on aggregate demand and wages relative to Germany (Figure 3). In many southern, eastern, central and western European countries the real appreciation was halted or reversed (Figure 5). The current accounts of most countries with high deficits before the crisis substantially improved and – in some cases – even turned positive (Figure 1).

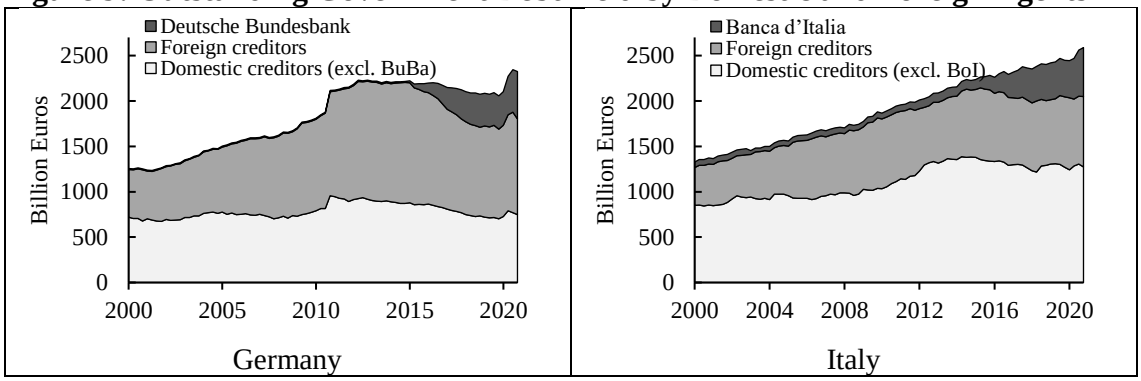
In contrast, starting from 2012 the fiscal policy stance in Germany was loosened (Figure 2). Despite the introduction of a debt brake in 2009, public expenditure could rise because tax revenues increased, favored by the loose monetary conditions. In particular, real estate price started to increase fast, thereby stimulating construction activity. In addition, the euro was weakened which promoted German exports to countries outside the euro area, while exports to the southern euro area countries were stabilized via the rescue measures. Also, the German wage levels rose faster than before (Figure 3) contributing to a real appreciation (depreciation) in Germany (in the southern euro area countries). Thus, the German current account surplus declined from 8.6% of GDP in 2015 to 7.1% in 2019. This trend continued with the global coronavirus crisis. In the year 2020 the German current account was slightly above 5% of GDP. The current account surpluses of Austria declined to 2.4% and of the Netherlands to 7.6% of GDP (Figure 1).

In addition, the different evolvement of the outstanding stocks of government debt affected the current account positions via portfolio rebalancing. According to Branson (1977) monetary policy shocks lead to a rebalancing of domestic assets relative to foreign assets. This finding can be put into the context of government bond issuance and government bond purchases of the Eurosystem, which interacted with the uncoordinated fiscal policies of the euro area member states (see section 4.2.). For instance, from 2012 to 2019 Germany kept – given the policy of a balanced budget – the level of outstanding debt mainly constant, whereas the amount of outstanding debt in Italy strongly increased (Figure 9).

Assuming a constant demand for government bonds in the international capital market the changing relative supply of the Italian and German government bonds had a different

impact on the financial accounts and current accounts of Germany and Italy. For Germany a positive impact on the current account position can be assumed compared to periods when the German government issued government bonds.[25] If international investors stop buying government bonds due to the missing supply, German capital imports decline. Ceteris paribus public net capital exports increase with a positive impact on the current account balance. In contrast, as Italy continued to issue government bonds, foreign purchases of government bonds could continue, contributing to a persistence of net capital imports and contributing to the finance of imports.

Figure 9: Outstanding Government Debt Held by Domestic and Foreign Agents



Source: Deutsche Bundesbank and Banca d'Italia. ESA2010 liabilities items (currency and deposits, debt securities and loans).

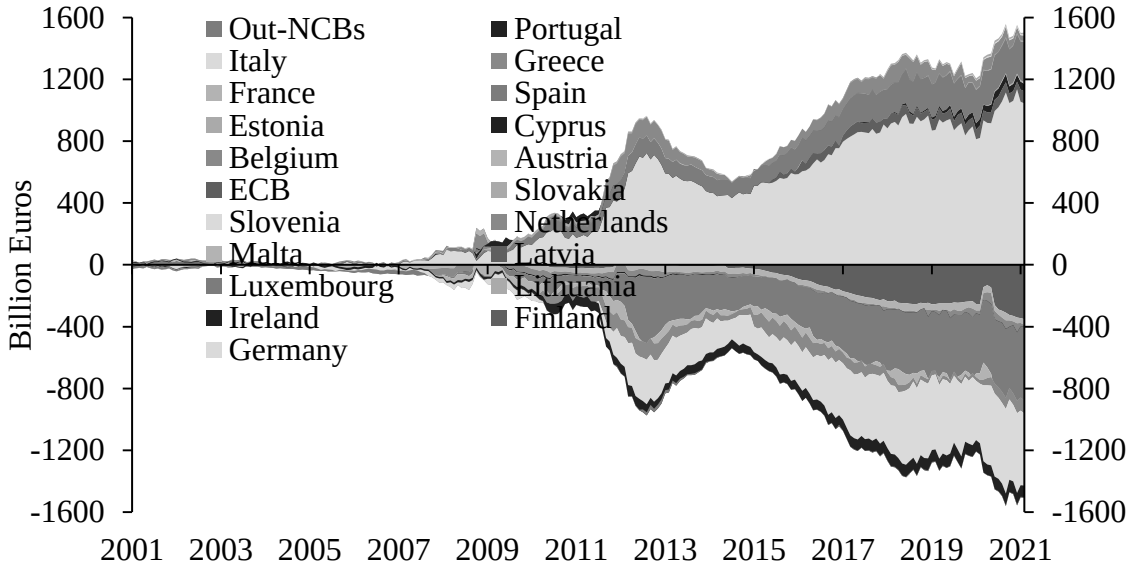
4.2. ECB Unconventional Monetary Policy

Since the outbreak of the European financial and debt crisis, the TARGET2 payments system of the Eurosystem has evolved as a quasi-credit mechanism within the euro area balancing out current account deficits and capital flight (see section 3.1.). With the start of the quantitative easing – i.e. large purchases of government bonds, corporate bonds, asset-backed securities and covered bonds – the ECB had an additional impact on the current accounts via the impact of these purchases on TARGET2 balances.

[25] Instead of only revolving outstanding bonds.

The ECB has bought and held growing amounts of government bonds in the course of the Special Market Programme (SMP)[26], the Public Sector Purchase Programme (PSPP) and the Pandemic Emergency Purchase Programme (PEPP).[27] The purchases of government bonds (and other bonds) by the euro area central banks had an impact on the public international capital flows (including third countries). As shown in Figure 9, the Banca d'Italia has not only purchased all newly issued government bonds, but also reduced the government bond holdings of foreign investors. As the latter is equivalent to a net capital export, the government bond buying program of the Eurosystem has contributed to the improvement of the overall Italian current account balance.

Figure 10: TARGET2 Balances of the Eurosystem



Source: ECB, national central banks. Notes: Out-NCBs cover NCBs, which participate in TARGET2, but not in the euro (Bulgaria, Denmark, Poland and Romania).

Similarly, the Deutsche Bundesbank purchased large amounts of German government bonds mainly from abroad (Figure 9). The purchases are equivalent to net capital exports, which sustained the overall current account surplus of Germany. Given the large size of the government bond purchases of the Eurosystem, they can be assumed to have

[26] See section 3.1. The SMP was discontinued and faded out.

[27] Currently, by June 2021 the Eurosystem holds government bonds equivalent to about 3.500 billion euros.

significantly contributed to the current account surpluses of both the northern and southern euro area countries. Up to the year 2020, the government bond purchases of the Eurosystem were operated proportionally to the capital key of the euro area member states at the ECB. Because the government bond purchases of the Eurosystem, which restarted from March 2020, became tilted towards the southern European countries, they can be assumed to have an additional positive impact on the current account surpluses of the southern European countries.

The government bond purchases of the Eurosystem, which accelerated with the Asset Purchase Programme in 2015 up to the year 2019,[28] also influenced the TARGET2 balances. If, for instance, the Banca d'Italia purchased Italian government bonds from financial institutions outside the euro area, which had an account at the Deutsche Bundesbank, the respective amount was credited at the account of the foreign financial institutions at the Deutsche Bundesbank. At the same time, the Deutsche Bundesbank received a TARGET2 claim on the Eurosystem, which reflected a respective TARGET2 liability of the Banca d'Italia. From the balance of payments perspective of Germany, the transaction implies de facto a public capital export from Germany to Italy, sustaining the current account surplus (deficit) of Germany (Italy) versus Italy (Germany).[29] Similar effects can be assumed for other euro area crisis countries.

In 2019, German capital exports via the build-up of TARGET2 claims of the Deutsche Bundesbank were reversed (left panel of Figure 6) because the ECB's asset purchase program (APP) stopped. Nevertheless, net capital exports of Germany remained at a high level, as deposits of foreign commercial banks at the Deutsche Bundesbank saw a sharp reversal in the year 2019 from strongly positive (capital import) to strongly negative (capital export) (Figure 11) for two reasons (see also Deutsche Bundesbank 2020). First,

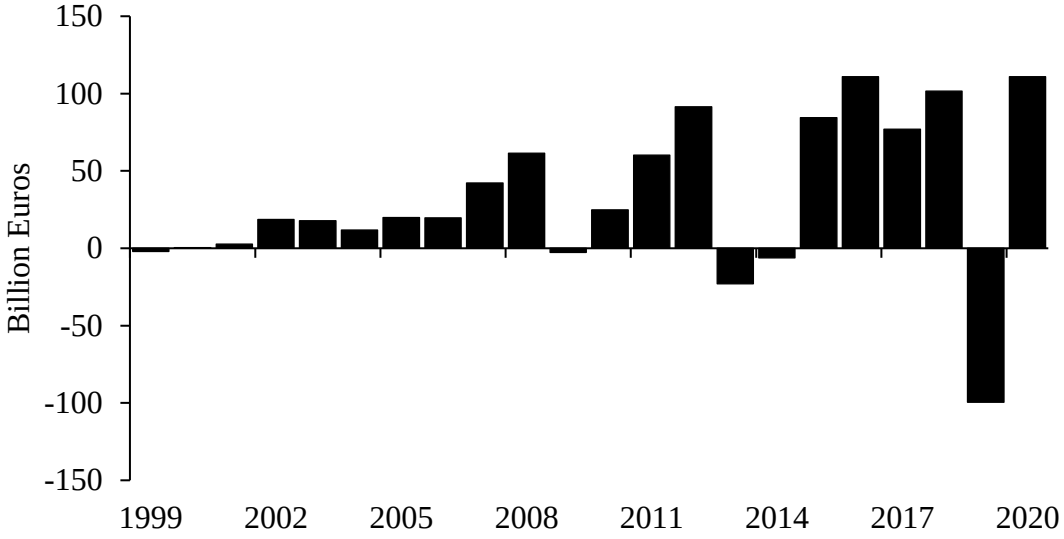
[28] The most important components were the Public Sector Purchase Programme (PSPP) and the Corporate Sector Purchase Programme (CSPP).

[29] To be specific, the build-up of a TARGET2 claim of the Deutsche Bundesbank, which reflects a public capital export from Germany to Italy in the given example, is recorded as a debit entry in other investment of the German balance of payments; a corresponding credit entry, which reflects a private capital import from a third country to Germany, is also recorded in other investment. The Deutsche Bundesbank thus incurs financial liabilities to the third country and obtains financial assets – TARGET2 claims which have a yield of the ECB's main refinancing rate, i.e. 0% – from the financing of Italian government bond purchases. The resulting impact on the German current account vis-à-vis Italy is ceteris paribus positive because the German financing of aggregate expenditure in Italy expands.

as the ECB suspended the net purchases of bonds under the asset purchase program (APP) from January to October 2019, there were little foreign capital inflows to Germany originating in the sale of financial assets to national euro area central banks by foreign financial institutions which hold an account at the Deutsche Bundesbank.

Second, in September 2019 the ECB changed the framework of negative interest rate policy with the introduction of the two-tier system for deposits of commercial banks at the ECB. For one part of their excess reserves at national central banks in their jurisdiction commercial banks were required to pay an interest rate of 0.5% (Deposit Facility Rate), and for another part 0%. The new calculation of the volume of excess reserves to be exempted from the negative deposit facility rate was set to be equal to six times minimum reserve requirements at the respective national central banks.

Figure 11: Deutsche Bundesbank: Currency and Deposit Liabilities to Non-residents



Source: Deutsche Bundesbank, Balance of Payments Statistics. The data corresponds to yearly flows. The currency and deposit liabilities of Deutsche Bundesbank are increasing when in Germany issued cash is circulating abroad and foreign banks increase deposits at their accounts at Deutsche Bundesbank.

To reduce the payments of negative interest rates for excess reserves, commercial banks in the euro area, especially large banks operating internationally, reallocated their deposits from the Deutsche Bundesbank to other central banks, which triggered capital

outflows from Germany. The decrease of foreign capital inflows and the increase of foreign capital outflows vis-à-vis the Deutsche Bundesbank led to the strong decrease of net foreign capital inflows, which kept Germany's net capital exports at a high level.

Finally, the so-called (Targeted) Longer-term Refinancing Operations ((T)LTROs) of the Eurosystem were strongly expanded in response to the European financial and debt crisis and even more during the coronavirus crisis (Lagarde 2020, Sonnenberg und Schnabl 2020). By the end of February 2021, the outstanding amount of longer-term refinancing operations were at 2.276 billion euros, with the maximum announced limit being currently set at 3.330 billion euros. The (T)LTRO credit has become along with government bond purchases the most important stabilization instrument. As (T)LTRO credit is provided by national central banks to domestic commercial banks (with the obligation to hand them over to the enterprises), there is no direct effect on the current accounts via intra-euro area capital flows.

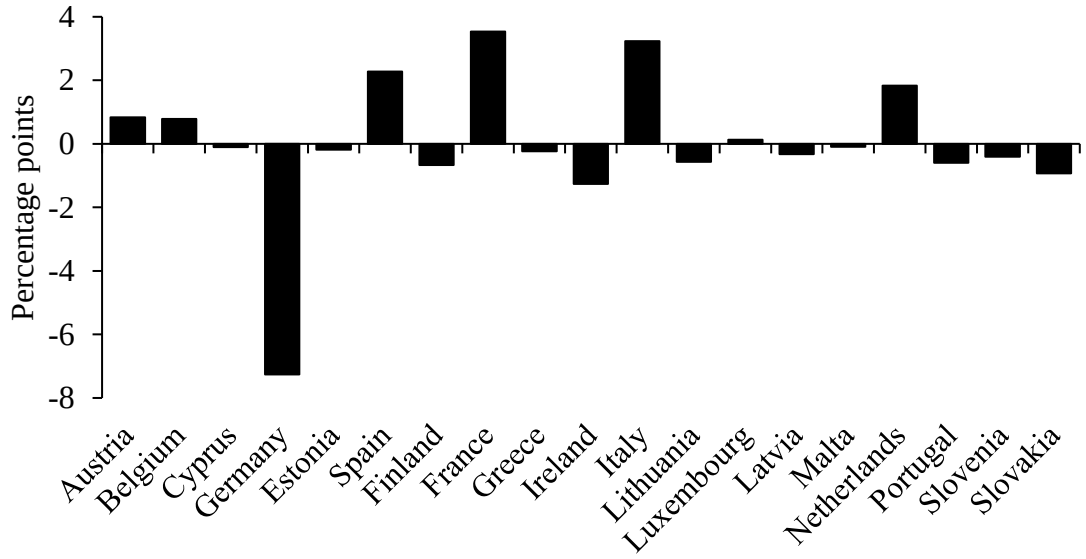
Nevertheless, in the European financial and debt crisis the ECB played an important role in the substitution of foreign private bank credit by longer-term refinancing operations of the Eurosystem. As the longer-term refinancing operations allowed the repayment of private credit to northern European banks (Figure 4), TARGET2 liabilities of the crisis countries increased, whereas TARGET2 claims of the northern European countries rose. The intra-euro area current account deficits of the crisis countries were sustained. The pressures for real adjustments through labor market reforms and wage austerity declined. Respectively, the German current account surplus was sustained. During the coronavirus crisis, the mechanism did not work in the same way, because no international private bank credit has been repaid from the southern euro area to northern euro area as in the wake of the European financial crisis (see Figure 4).

The allocation of (T)LTRO credit has not been proportional across the euro area countries as, for instance, measured by the countries' capital keys of the ECB. In Figure 12 a positive (negative) value indicates that the commercial banks of a euro area country have requested (T)LTRO-credits over-proportionally (under-proportionally) according to this criterion. With credit in particular being over-proportionally allocated to Spain, France,

Italy and the Netherlands, it can be assumed to have – sooner or later[30] – a negative impact on the current account position as aggregate demand is stimulated relative to other euro area countries. Inversely, in particular for Germany a positive impact on the current account can be assumed.

All in all, the private credit financing of current account deficits in the southern European countries, e.g. Italy, Spain and Portugal, before the European financial and debt crisis has become substituted by credit provided via their national central banks and international rescue credit. Post-crisis, persistent trade deficits vis-à-vis Germany as well as capital flight to the northern euro area and third countries can be seen as the main driving force of the build-up of growing international liabilities of southern euro area central banks. The capital inflows via the Eurosystem and the EU rescue funds helped financing the trade deficits versus Germany and compensated the capital outflows to third countries, which financed the overall current account surpluses of the southern European countries. The resulting growing financial imbalances within the euro area are reflected in the (still growing) divergences in the TARGET2 balances of euro area countries.

Figure 12: Outstanding Amount of TLTRO Credit by Country Compared with Capital Key



Source: ECB. By 28.2.2021. Capital key calculated as a share of the respective euro area countries out of aggregate ECB capital of euro area countries.

[30] Parts of the funds were deposited in the current accounts of the commercial banks at the national central banks.

5. Outlook: The Consequences of the Coronavirus Crisis

More than 20 years after the introduction of euro, the imbalances in the euro area persist although current account balances have (superficially) converged after the peak of the imbalances in 2008. The analysis has shown that the specific institutional setting of the European Monetary Union – fiscal policies decided on the national level and interacting with the ECB's common monetary policy – had via various and partially opposed channels a significant impact on the current account positions of the euro area countries. It stands out that most measures have helped to stabilize German exports, Germany's bilateral trade surpluses versus other euro area countries and the overall current account surplus of Germany (see Figure 1 and Figure 7).

The coronavirus crisis has further contributed to a real divergence within the euro area (Mayer and Schnabl 2020). The lockdown measures had a stronger negative impact on the southern euro area countries, which are more dependent on the service and tourism sector. In contrast, the industrial sector which is clustered in Germany and some neighboring countries has suffered less, in particular because China and the United States are recovering faster.

As TARGET2 imbalances have further increased during the coronavirus crisis and the 750 billion euro-EU Next Generation (Rescue) Fund (European Commission 2021) has been put in place, the pre-corona development of growing public capital flows provided from the northern euro area to the southern euro area is likely to continue. As the persistent public transfers in favor of the southern euro area can be assumed to keep – at constant nominal exchange rates – wages and prices in the southern euro area relatively high (as they also soften the negative impact of capital flight), a Dutch disease (Gordon and Neary 1982) in the southern part of the euro area is likely to prevail.

Private economic activity in the southern euro area countries is likely to continue to be substituted by public transfer flows from the northern part of the euro area via the

European Commission in Brussels and the ECB in Frankfurt. The public capital flows help to maintain income levels in the southern euro area, but at the cost of weakening the industries in the southern euro area.

By contrast, the German export enterprises enjoy the up-held demand from the recipient countries in southern Europe, but the persistent public transfers take place at the price of lower wages and aggregate demand in Germany. This implies that domestic market-oriented small and medium enterprises in Germany suffer. As the macroeconomic policy response to the ongoing coronavirus crisis does not seem to be a remedy for intra-euro area current account imbalances, real economic divergence within the euro area is likely to remain unresolved in the long run.

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