Policy options against macroeconomic imbalances within the EMU

how to address the surplus countries

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Outline

- 0. Introduction
- 1. Germany's high and rising surplus
- 2. Understanding the surplus some accounting identities
- 3. What has caused the German surplus?
- 3.1 Excess of saving
- 3.2 The wedge in growth of exports and imports
- 3.3 Growth of net capital exports
- 3.4 Do the deficit countries cause the surpluses or vice versa?
- 3.5 Bottom lines
- 4. Why is there a problem with surpluses, in particular with Germany's surplus? Are the problems grave?
- 5. Trade balance projections 2016-2026
- 6. Policy options

0. Introduction

Current account imbalances are one of the key problems of the European Monetary Union (EMU) and the entire EU. The EMU was divided in a surplus bloc headed by Germany and a deficit bloc which improved current account balances (CAB) recently to more or less zero. Yet, the entire EMU faces an unprecedented surplus, driven mainly by Germany, Netherlands, Ireland and Luxembourg. The spread between top and low balances of members, as share of GDP, is for many above 8 percentage points (ppts) When addressing the imbalances, first and foremost we have to understand the genesis of the surpluses, in particular Germany's surplus that accounts for around 70% of the EMU surplus. Much has been written about it, but opinions could not differ more, also among mainstream economists. The other smaller surplus countries are out of the focus in this paper.

Before we turn to policy options which address mainly surplus countries, we analyse the causes of the main surplus producer in the EMU using a three-pronged approach: looking at excessive saving, growth differentials between ex- and imports and the role of net capital exports. Then we discuss the highly controversial issue whether Germany's surplus is really a problem and, if it is, how grave it is. We continue with projections of Germany's current and trade account for the next ten years, showing that there is a dynamics at work that accelerates the surplus while stabilisers seem weak or absent. Hence, if the German surplus has features of a structural surplus with some sort of super-competitiveness properties, it is even more important to address policy options for the surplus bloc. Such policy options are discussed in the last section.

Readers with a primary interest in policy options are advised to jump after section 1 to 3.5, then to sections 5 and 6.

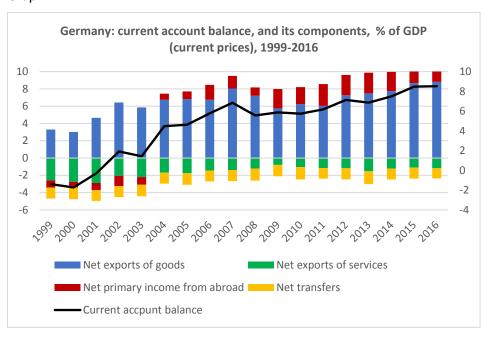
1. Germany's high and rising surplus

In 2016 Germany's current account surplus (CAS) is the highest on the globe, viz. 8.3% of GDP (measured in Euro, 8.5% in US-dollar). Germany is the 4th biggest economy in the world, using the GDP in current prices. In terms of the absolute value of the surplus, number 2 and 3 are China and Japan, both around one third less than Germany's. Germany's surplus is roughly 20% of all surpluses held globally, and therefore also of 20% of all deficits. The next biggest surplus makers are Korea, Switzerland, Netherlands and Taiwan whose combined surplus is only a bit larger than Germany's.

The German surplus emerged from a small deficit of -1.5% 1999, the birth of the EMU, to balance in 2001, reached 6.8% (2008) before the financial crisis during which it dropped somewhat and reached then its record peak 2016 (graph 1). Hence there are four phases, the short period 1999-2001, the rise by 6.8 ppts 2002-2008, after the subsequent fall in 2009 by 1.2 ppts came another rise by 2.9 ppts 2010-2016. While most of the surplus 2002-2008 occurred against other EMU and EU members which fell in strong deficits, the rise after 2009 came about with a switch toward surplus with extra EMU countries, especially the US, apart from UK after the demise of the Pound Sterling (graph 2).

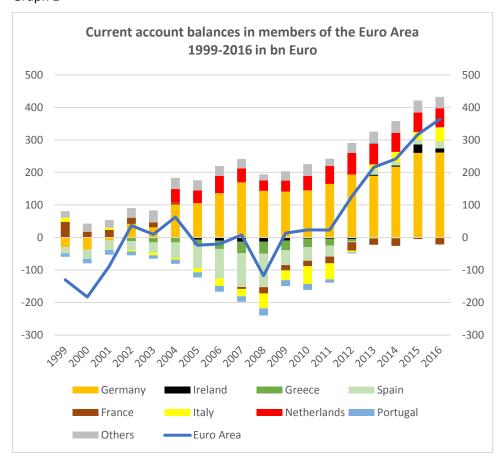
Current account balances comprise the trade balance, which accounts for Germany in 2016 7.6% of GDP, and the difference of the net income balance and the net transfer balance with the rest of the world, which rose to 1.7% of GDP. The net income balance results mainly out of net property income from abroad (profits, interest, dividends) which reflects the income from net assets held abroad. This component rises the longer the trade surplus persists and the higher the latter is. Even a constant trade balance would lead to rising net incomes from abroad and hence a rise in the current account. The net income balance reflects the high net international investment position (NIIP) of Germany's wealth owners (including central bank reserves), which rose from around 100% of GDP to 48.7% in 2015 (EC 2017), thus turning other countries with long standing current account deficits into ever increasing net debtor countries. The accounting counterpart of the CAS is – according to the rationale of the balance of payments (BoP) accounting system – the net capital exports of Germany, meaning rising foreign assets held by German residents relative to Germany's liabilities owed to abroad. In other words, without the parallel capital exports the CAS would not exist.

Graph 1



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Graph 2



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Germany has nowadays (2016) a trade surplus against almost all other countries on the globe except China, including most oil and gas exporting countries. On average over the period 1999-2016, nominal

exports of goods and services rose faster than nominal imports, namely by 5.7% and 4.8% (graph 4 below), respectively. Note that measuring the trade and current account balances is based on *nominal* values of exports, imports and GDP, meaning that inflation and terms of trade feed in the values. If this growth divergence would continue, we would slide into an explosive situation with an ever-increasing surplus in trade and subsequently in the NIIP and the current account.

Before we turn briefly to the causes of the increased surplus, we look at the analytical categories and macroeconomic interdependencies needed for the analysis of the causes.

2. Understanding the surplus - some accounting identities

Total national saving (S) is defined by the gross income earned (Y = Gross National Income (GNI)) minus consumption of private households and consumption of the government (recurrent spending without public investment). The rest of national spending of income for purchasing goods and services is for fixed investment of firms, including residential investment, and public investment (altogether I). If national saving exceeds national investment, excess saving is done abroad in the form of net capital exports which are identical, as mentioned above, with the current account balance. If we assume for the sake of simplicity that GDP = GNI, meaning that net foreign income and net transfers cancel out to zero, we can conclude:

(1)
$$S-I = X-M = NKX > 0$$
 (surplus country)

A trade surplus (net exports NX) is identical with excess national saving over domestic investment, and also identical with net capital exports (NKX). The surplus economy produces more than it spends for goods and services; the over-production (or under-consumption) is sold to abroad, financed via net borrowing of the rest of the world from the net lending country. Running a surplus can now be interpreted as too high saving, relative to domestic investment, or too low investment relative to saving, and relative to the rest of the world. Whether the surplus is caused by net exports or by net capital exports cannot be recognised when looking at the identities. However, it has to be kept in mind that *net* capital exports are in modern economies small relative to *gross* capital exports. More than 90% of gross capital exports have normally no impact on net capital exports, because they are pure financial flows into and out of the country which cancel out.

When we analyse the growth of the CAS of Germany, we conclude for equation (1) that the increase of S (Δ S) exceeds the increase of investment (Δ I), and the increase of exports (Δ X) exceeds the increase of imports (Δ M); the increase of net capital outflows matches the increase of the trade surplus and the increase of foreign assets Δ FA exceeds the increase of liabilities to abroad, Δ FL. Hence, we can write

(2)
$$\Delta(S-I) = \Delta(X-M) = \Delta(FA-FL) > 0$$

If (S-I) is denoted as total national saving SS, and X-M as net exports NX and FA-FL is net capital exports NKX (or increase of net foreign assets) we can write for the increase of the current account surplus in a certain period:

(2a)
$$\triangle CAS = \triangle SS = \triangle NX = \triangle NKX = \triangle NFA > 0$$

Unfortunately, equations (2) and (2a) do not show any causality. Many interpretations may be possible. It becomes even more open to different interpretations, if we include the mirror image equation for the rest of the world (denoted with *), which runs a current account deficit.

$$(3) SS + SS* = 0$$

Assume the home country, say Germany, has a saving surplus SS, the rest of the world has a saving deficit SS* (S*- I*) < 0). Does the surplus country cause the deficit abroad, or the net borrowing abroad the net lending in the home country? Normally it is a mutual causation, but reality may differ at times. The pull or push question depends also on the kind of capital exports (see below)

National saving is composed of net saving of private households SH, of the government, i.e. the budget balance SG (= T-G, i.e. a budget surplus if tax revenues T exceed spending G) and net saving of firms SF

(sometimes also called corporate saving). Note that saving in this context is a flow measure for the period, not the stock of savings. Total investment stems from firms IF, residential investment IR and public investment IG. Now we can write

(4)
$$(SH + SG + SF) - (IF + IR + IG) = NX = -SS*$$

All sectoral savings add up to zero:

$$S - I - NX = 0.$$

NX is equal to negative total foreign saving which can be split in its different components as well.

Knowing the identities is important, but now we have to investigate what the causal drivers for Germany's rising surplus have been.

3. What has caused the German surplus?

The question will be decomposed into four questions, following equation (2a) and (3):

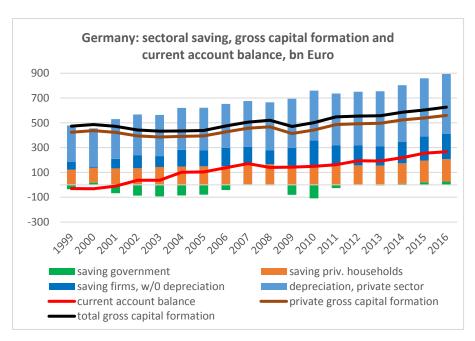
- Why did national saving grow faster than aggregate investment?
- Why do exports grow so fast and imports seem dampened?
- What has driven net capital exports?
- Did the deficit countries cause the German surplus, or vice versa?

3.1 Excess of saving

The empirical performance of saving and investment for the whole period 1999-2016 shows that the major part of the rising gap came from increased saving, but a considerable part from investment. Regarding saving, household saving as a share of disposable income hovered around 10% with a band of around 2.5 ppts. Traditionally the household saving propensity is somewhat higher and quite stable, compared to other countries. Often it is asserted that high household saving is caused by demographic reasons, name stronger saving of people in working age but soon entering the age group 65+. They would save now more, not least because of changes in the state pension insurance system in the early 2000s, and will save less once the baby boomer generation moves into the old-age phase. Hence, due to aging of society, more saving now and less in the future is rational forward-looking behaviour, reflected in a current account surplus now and moderation of the latter in the near future. There is no evidence for a higher household saving propensity, apart from short-term fluctuations, hence demographic change was irrelevant or offset by other factors that lowered the saving propensity. Household saving relative to GDP even dropped somewhat over the whole period analysed.

In contrast, public saving did play a role after 2014 when the total state surplus (including social security) moved into a surplus of around 2% of GDP. The bulk of the saving increase came from the corporate sector where the cash flow exceeded more and more investment so that this sector had turned into a net saving sector (mainly producing firms, to a smaller extent financial institutions). This sector includes non-incorporated firms ("Personengesellschaften"). Overall, equity was increased and debt reduced. Profitability of firms is considered high. Net investment is reduced too in all its three parts reflecting negative net public investment and long-standing neglect of housing investment until recently, but also low investment in corporate equipment. In other words, investment in financial assets domestically and abroad was preferred relative to fixed investment. To what extent rising capital productivity (higher efficiency of physical capital) is involved is empirically not clear. It is much more likely that lack of final demand, besides exports, had been the key barrier for investment in face of frozen real aggregate consumption over a long spell.

Graph 3



AMECO, own calculations

The focus on net domestic saving – either in absolute terms or relative to GDP - obfuscates the fact that Germany's growth performance was in in the period 1999-2016 characterised by low growth (1.3% p.a.) and below target inflation. The growth of GDP is similar to Japan among the most sluggish economies in OECD countries, also compared to the performance in the 1990s. This impacts imports negatively. The growth of net exports contributed to real GDP growth 1999-2016 by 35%, consumption only by 40% (and this mainly after 2009) and total investment by just 12%.

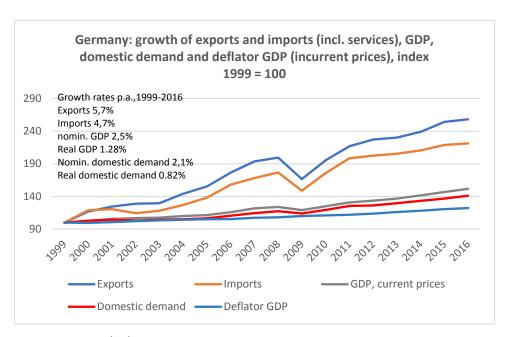
3.2 The wedge in growth of exports and imports

This leads us to the second question, the exports and import dynamics. The growth of the nominal export value XV and the import value MV of a country are determined as follows (^ stands for growth rate):

(5)
$$^{N}NV = f(y_{w_{1}}p_{w_{2}}, t, \epsilon_{wy_{3}}, r\hat{e})$$
 $^{N}NV = f(e_{\xi\xi}, y_{D_{1}}p_{w_{3}}, t, \pi_{x_{3}}, \pi_{D_{3}}, r\hat{e})$

The growth rate of the export value in local currency, say Euro, depends mainly on five independent variables. Growth exports is higher if the growth rate of the nominal world income is high, if the deflator of world exports is high, if terms of trade are high for the domestic economy, if the world income elasticity of domestic exports are high and if the real effective exchange rate depreciates, presuming that the price elasticity of the export value is above zero (more local currency per unit of forex indicates depreciation). Conversely, the growth of the value of imports, measured in local currency while imports are denominated in the first place in US-dollar, depends here on seven variables: the nominal exchange rate of the Euro against the US-dollar (a strong dollar buys more Euro), domestic nominal GDP growth, the deflator for imports on the world market, terms of trade, the elasticity of imports needed for exports, the income elasticity of those imports needed for domestic final demand and the change of the real exchange rate. Normally the most important independent variables are the growth of domestic demand and both elasticities mentioned. Graph 4 shows the wedge of growth rates for exports, imports and nominal GDP.

Graph 4



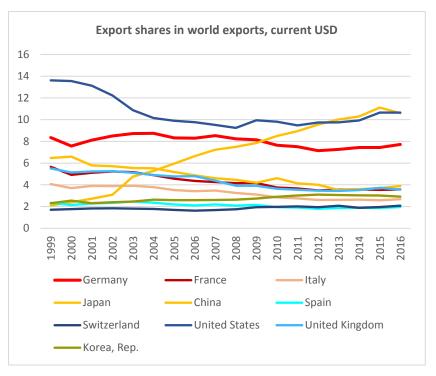
AMECO, own calculations

Germany's export share in the world market, focused on investment and intermediate goods, is fairly high and even rose somewhat (despite fluctuations) in the period analysed; this is a unique performance among OECD countries, especially among all EU countries (graph 5). Germany was capable to withstand the new competition from emerging economics, predominantly China, thus benefitting from trade globalisation and liberalisation. Yet, there are some countries with higher persistent export growth among OECD and EU countries, such as Korea and some smaller catching-up countries like the Baltic states. There is little evidence that German export prices are below average. Quality competition seems more important than low prices, although the price-quality relation is decisive. There is no pure non-price competitiveness as it is asserted so often. Much of Germany's cost-competitiveness in exports stems from below average unit labour cost (ULC) rise in EMU and via increase of imports of intermediate goods from Eastern Europe and elsewhere. The rise of the import share of exports to 40% (2012, reported by Destatis) explains the outstanding and unique rise in Germany's exports and imports shares in GDP – the latter rose also blusteringly, but not as much as the export share which almost doubled in this period.

Key for the strong rise in exports were not the price competitiveness but "structural" factors which can be summarised in the world income elasticity of exports. World trade rises much faster than Germany's GDP, and German exports are targeting sectors and regions of above average growth, i.e. medium and high investment goods and emerging markets, apart from the US. What is more, Germany is much less squeezed by low-cost Chinese or Eastern European imports than other countries. Germany did not follow the deindustrialisation road which the US and UK took, and Germany could outpace the most advanced EMU competitor such as France or Italy.

There is no other country of medium or larger size that has such a wedge between exports and imports growth among OECD countries. The puzzle stems from low imports of those goods not needed for exports. Almost half of German imports are intermediate goods for exports, hence they are part of the buoyant exports dynamics; the other part depends mainly on sluggish German domestic demand, and also on prices for raw material and fossil energy imports. After the financial crisis commodity prices dropped, hence improved terms of trade, and reduced nominal imports (in contrast to the earlier 2000s). Overall, the too low growth of imports reflects the increase of national saving relative to investment and low GDP growth.

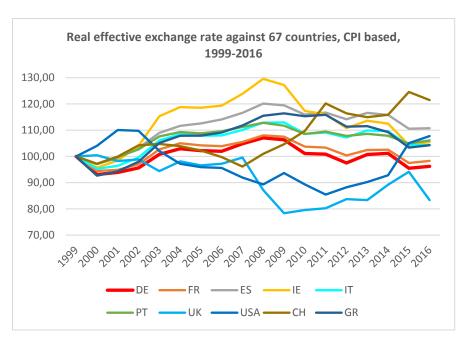
Graph 5



World Bank, World Development Indicators

There is much debate about the role of low ULC growth and the undervalued real exchange rate in Germany. There is no doubt about evidence of low relative ULC growth, especially if the whole economy including the service sector is analysed. This has contributed to the fall in the wage share in Germany. A disaggregation of the wage share shows that a large part of low wage earners experienced a fall in real wages, similarly low-income households. Econometric studies show in unambiguous clarity that relative ULC and also real effective exchange rates play a minor role for export competitiveness, both in Germany and other EMU member states. But this evidence (graph 6) requires more scrutiny. The Euro appreciated against the US-dollar heavily from the low in 2002 until 2008, in nominal and real terms. Germany managed to cope with this impediment for its exports by squeezing labour costs and importing inputs from Eastern Europe, more flexibly and harsher than in rest of the EMU. High unemployment in the early 2000s, price pressures from emerging and Eastern European countries and from the labour market reforms in the context of the Hartz reforms (partly anticipated already in the late 1990s) had changed the wage bargaining system especially in the non-tradable sectors with low productivity increases. All this dampened consumption, investment and imports. The fact that companies had become super-competitive in terms of quality and innovation, so to speak in Schumpeterian terms, coupled with reduced costs through wage restraint, productivity increase, outsourcing etc., pushed corporate saving analysed above. This way, low ULC dynamics led to internal devaluation in the EMU, and in the long haul 1999-2016 also continuous mild real devaluation against all industrial countries. For exports, this was not so relevant, for imports it was, and here not because of prices for imports, but because of impeded import demand growth.

Graph 6



Bruegel, REER database, own calculations

Germany's export competitiveness is praised by many authors. What is ignored is that industrial upgrading and innovation improves also domestic competitiveness of firms against imports if a country has a broad-based industrial sector with a much higher share of domestic value added than most other economies. It is also noteworthy that imports of final products are estimated to have a share of domestic value-added of around 10% (cp. EC 2017). The innovation strengths have also contributed to import substitution regarding energy imports and service imports. Since more and more consumptions is tilted toward services, most of them non-tradables, the economy seems to need less imports apart from those related to exports. At this junction we just mention that deliberate export promotion and import substitution, similar to industrial policy and some sort of tacit protectionism (e.g. protection of lignite mining) also play a role, as in other countries too.

If there is a systematic wedge between export and import growth, not necessarily for each and every year, but as trends, the surplus must be qualified as structural on three counts. Here we assume now, in contrast to the simplified identities shown above, that net transfers remain a constant share of GDP, by and large, following the historical trend in Germany. This means that rising net incomes from abroad tend to exceed net transfers progressively (in 2016, this part of the surplus accounted for around 0.9 ppt of GDP or 9% of the absolute value of the CAS).

- If exports continue to grow by almost 1 ppt faster than imports, the current account will rise much faster than the trade surplus, if the transfer balance remains as in the past stable (as a share of GDP). The net creditor position of Germany, will rise persistently, increasing thereby the net income balance.
- If the export surplus remains constant, as a share of GDP, because growth of exports matches import growth, the current account will rise too, since the net income balance rises, although less quickly than in the first path.
- If the trade balance were reduced, say to 5% of GDP, the current account will also rise persistently, albeit more slowly, because of the continuous accumulation of net foreign assets. The CAS would reach the tolerated cap of 6% according to the Macroeconomic Imbalance Procedure of EU, but the margin would not be sustainable.

3.3 Growth of net capital exports

We had seen that net capital exports match the current account balance. Could it be, as many hold, that excessive capital exports are at the roots of the German surplus, and therefore as a remedy better control of them (cp. Wyplosz 2017)

The traditional view, stemming originally from Böhm-Bawerk, that the capital account drives the current account, is untenable. If the assertion were true, we should not care about the trade and current account balance, we should only look at capital flows. However, the opposite is also not true. What matters is the interaction of the current and capital account. This will be shown in this section.

Day by day, there are huge capital flows from Germany to other countries, and also in the opposite direction. As mentioned, most of them are gross capital outflows, booked as credits and debits only in the capital account of the BoP, not in the current account balance. If I, a German resident, purchase US-shares on the stock market, I pay with Euro, assume by using my saving account, exchanged in US-dollars at my German bank which may procure the dollars from a US Bank. At the end of the transaction, Germany holds more assets abroad, namely my US-shares, but the US-bank has more Euro and less dollar. The Euro in the vault of the US bank is an additional asset of the US and a liability of Germany. Hence in the German BoP, more assets match more liabilities. There is no net capital export. However, if the former US-shareholder who sold his shares to me, uses the revenue he earns for buying a German car, paying with Euro which he changes against those dollars which he received from me, we see increased German net exports. They are matched by the Euros paid to the German carmaker, which is a debit in the US and a credit for the German BoP. Only the fact that the former US-shareholder wanted to buy the German car led to net capital exports (or increase of German net assets). In the end, it was an exchange of shares against the car.

The first example shows that ordinary cross-border capital flows are irrelevant for the current account balance, since they are gross, not net flows. When do gross flows become net flows? The channels are often indirect and quite diverse if we abstract from individual change of preferences – buying a German car – as in the second example. (i) Assume German banks lend massively to Spanish banks short-term since interest rates are marginally higher in Spain. The Spanish banks lend out to housing companies constructing and selling houses, thus triggering a construction boom, house price increase and we there is a rise in GDP. With given Spanish income elasticity for imports, Spaniards will import more, from Germany and elsewhere. Similar may occur if "productive" investment is spurred in Spain rather than a bubble. However, the German banks lending to Spanish banks know little about bubble risks or more productive growth opportunities. Even in the cases mentioned, Spaniards will only purchase goods from Germany if the price-quality balance is favourable for them. Hence export competitiveness of Germany matters. (ii) Another widespread channel from gross to net exports is via foreign exchange markets, if different currencies are involved. Strong capital outflows from Germany may increase demand for foreign currency, appreciate the latter which makes imports from Germany less expensive. Here it is a depreciation of the currency for Germany. (iii) Similarly, strong capital exports from Germany, targeting sovereign and corporate bonds abroad, may increase bonds prices and reduce effective interest rates which triggers investment and growth abroad; this leads with constant income elasticity of imports to more imports, perhaps from Germany.

In sum, gross capital flows lead only to net capital flows and net exports of goods if the conditions for German exports, as mentioned in equation (5) improve, especially growth of domestic demand, and here in particular – if we look at the long-run – growth of investment. Empirical evidence shows that capital inflows not necessarily affect domestic demand, and if they do, they affect all components of demand in normal proportion, i.e. investment and consumption as well. No effect on the real economy occurs if capital inflows are used for redemption of old debt and if domestic credit is crowded out, among others. Of course, repayment of credits or, in case of equity, profit, interest and dividend payments lower GNI abroad.

Can wealth owners who manage private capital outflows control the use and the riskiness of the outflows? Yes and no. The highest degree of control is achieved when outflows occur as credit given directly to the debtor, or as foreign direct investment with majority ownership of the foreign investor. The least control occurs with short-term financial investments, especially interbank wholesale credit, which is extended to financial intermediaries, mutual funds, hedge funds or commercial banks. The more financial intermediaries with short-term engagement are involved, fairly remote from the real economy, the less controllable are capital exports for the creditors or shareholders. However, this short-time finance is the great majority of gross capital flows. The share of net FDI for Germany in GDP is small (outward minus inward FDI as a share of GDP hovers around 2%, a quarter of the CAS). Therefore, assessments of financial risks or productive usage of capital inflows depends strongly on rating agencies and prudential regulation of banks, including the newly established macroprudential regulation. Improvements in this respect make beneficial and productive effects of current account surplus more likely. In the past until recently, the opposite was true and progress is slow.

3.4 Do the deficit countries cause the surpluses or vice versa?

Deficit countries spend more than they produce, i.e. they save too little in order to achieve a balanced current account, and their imports grow too fast relative to exports. Foreign capital inflows may be pulled into the country via strong credit demand. The issue is whether this is advantageous for the country and whether risks of over-borrowing and the emergence of asset bubbles can be controlled.

If authorities do not intervene, borrowing as well as lending amongst deficit and surplus countries is done by private decisions, if we exclude external borrowing of sovereigns. Borrowers and lenders cooperate, both are involved. This applies to credit of all kind, but not to securities markets, such as bonds, shares and other financial instruments. Without capital outflow or inflow controls, financial investors can inject almost infinite amounts of finance into another country. That is the rationale of free capital mobility across borders. This applies in particular to the single capital market in the EU, even more in the EMU, since financial markets are strongly integrated and a common currency is used so that transaction costs are low and nominal exchange rate changes are abandoned.

The EMU makes financing current account deficits easier. Surplus countries face no appreciation risk which might dampen net exports, and deficit countries face no depreciation risks. As long as nominal interest rates are strongly harmonised, even huge current account divergence seems acceptable at first glance. The architects of the EMU (even of the earlier Werner Plan) ignored BoP issues in the same way as they are ignored among regions of a federal state. With the wisdom of hindsight, EMU and a capital market union, as part of the single market, can be understood as opportunity for – seemingly – low-risk massive short-term financing of deficits by surplus countries. This is then an incentive to excessive saving and lending on the side of the surplus bloc of countries. For both sides, it implies large opportunities for moral hazard, unless regulations are in place.

The interdependence of surplus and deficit countries has been compared to dancing a tango. It takes two, and both are mutually involved. However, a tango requires leadership. It is very likely that the predominant side in the financial tango are the surplus countries. In case of short-term lending, their risks are less than the ones of the debtors. The former can easily withdraw their finance, especially in case of pending roll-over, the latter face harsh financial dependency. The power balance between lenders and borrowers is tilted toward the former. They have more pull, in particular in critical situations. This applies mainly to creditor countries (or groups of them) which are larger and economically and financially more advanced than the debtor countries.

3.5 Bottom lines

Many analyses of the German current account surplus focus only on saving relative to domestic investment. Although important, nominal GDP growth remains unheeded in this approach, namely real growth and inflation and their causes. In highly open economies it is likely that export dynamics play the key role, if exporters manage to ride on the dynamics of high world exports growth which is

higher than world output growth (both in real and in nominal terms) and much higher than in Germany. Moreover, the income elasticity of exports is key, signifying the structure of exports and the respective growth relative to global GDP. Germany's structure of investment and intermediate goods with high medium and partially high technology content is unquestionably outstanding among OECD countries and dwells on a decades-long path-dependency, strongly supported by various exports-promoting institutions and supply-side policies. By contrast, imports grow more in line with domestic demand, apart from the growing portion which move alongside exports. Subdued domestic final demand explains excessive saving and lacklustre investment dynamics, strongly driven by retarded wage growth and firms' saving exceeding investment. High exports competitiveness spills over to competitiveness of domestic manufacturing relative to imports, being exports from rest of the world. Rising global exports share of Germany means falling exports share of other nations, mainly OECD and other EMU countries, and falling imports growth. The sectoral surplus of the state budgets is an addon on top of the surplus. Low inflation and at times positive terms of trade feed into restrained imports growth and low nominal GDP growth. After the inception of EMU, there is no longer nominal appreciation possible as stabiliser of the surplus. A phase considerable real effective devaluation 2008-2015 followed a phase of real appreciation until 2008. The response to the appreciation was pressing ULC downwards and exporting mainly to countries where exports are denominated in Euro. The impact of appreciation and depreciation on exports remained small (low price elasticity). Mainly in the appreciation phase the wage share dropped, but did not recover much thereafter. Saving in the corporate sector grew, and corporate investment growth remained weak in most years so that the corporate financial surplus emerged since 2006 and rose almost continuously (see graph 3).

There is no consensus on the role of the (real) exchange rate for the current account in Germany and in general. Some hold wage restraint and low ULC growth in Germany is one of the roots of the German surplus (Flassbeck/Lapavitsas 2013, and also more mainstream authors as Dustmann et al. 2014), while others hold that both ULC and real exchange rate are almost irrelevant, hinting to the low price elasticity of exports and imports and the predominant drivers, namely GDP growth in the rest of the world versus domestic demand and domestic GDP - hence, quantities not prices matter (Gaulier/Vicar 2012, Naastepad/Storm 2015 and Storm/Naastepad 2015). Both views miss the point. If so-called nonprice competition predominates and ULC growth is low or the REER depreciates, profits rise, surmount investment and spur corporate saving and capital exports, push the wage share down and are a drag for domestic demand. The financialisation of corporations with their sector surplus and predominance of raising shareholder value rather than investment and growth are here in the focus (Detzer/Hein 2014) It is the indirect way where ULC and REER do matter. This view supports the role of "Thirlwall's Law" – focussing on exports' and imports' growth and on income elasticities, but stresses in contrast to Thirlwall the impact of exchange rates on domestic demand. Of course, the role of low price elasticities of ex- and imports is pervasive and empirically not contestable, but elasticities differ among countries.

This is in a nutshell our narrative for explaining the German surplus and its evolution. It has nothing to do with demographic change, viz. aging of society (Felbermayr et al. 2017), or a sequence of accidental adverse shocks which will soon come to an end, as many observers hold (Kollmann et al. 2014, Grömling/Matthes 2016, Deutsche Bundesbank 2013). It is a structural, chronic surplus with the built-in property to rise. This makes it very unique — and hazardous.

4. Why is there a problem with surpluses, in particular with Germany's surplus? Are the problems grave?

There are many analysts and politicians, mainly in Germany, who see more benefits than problems with the German surplus or with other surplus countries and hence no value in reducing the surpluses actively in these countries. Some even hold that these debates are much ado about nothing (Gros, Busse 2013). Others are reasoning Germany cannot do much, it is mainly the task of the deficit countries to improve their export competitiveness. Put simply in this view, German products are much liked and demanded on the markets, other EMU members' exports not. There is much confusion about

the problems, the consequences of maintaining the status quo and the benefits of rebalancing. This includes the questions whether only intra EMU imbalances are problematic or also extra EMU imbalances. Some argue the surplus is a bit too high presently (2016-17) but will come down soon. In general, an aging highly industrialised and well-developed country is a natural net capital export country providing scarce capital to the rest of the world (Bundesbank 2013). We can address here only a few arguments of the debate.

"Problems exist – but only in the deficit countries"

Those who admit that there is a problem with intra EMU imbalances assign the task of rebalancing solely to the deficit countries, to be implemented by "internal devaluation", austerity and "structural reforms". The point is that if this were done the intra EMU surpluses would fade away. It is, in a way, rebalancing through the backdoor with passive surplus countries. The counter-arguments are clear cut: internal devaluation increases unemployment, risks deflation, has small effects on exports and aggravates the burden of debt, and supresses GDP growth. This bounces back on the surplus countries. Furthermore, relying on internal devaluation overloads monetary policy with extremely lose monetary policy in absence of common centralised fiscal policy options.

"Imbalances reflect rational intertemporal allocation of resources"

Those who favour optimal intertemporal allocation within EMU opt for rational surpluses and deficits, for instance for catching-up in member states with low income levels, or for demographic reasons. This means that quickly aging countries need to save more now in order to consume more of incomes in the future once the share of pensioners rises strongly. For the past 17 years since 1999 there is no evidence, at least in Germany, that saving increased for reasons of more provisioning of future pensions. Debt-financed growth over extended periods involves many downsides and should be practiced with great caution. The model of the US in the 19th century may not be easily replicated in the 21st century.

"Expansionary policies in surplus countries are ineffective"

An indeed serious argument against massive expansionary fiscal policy or strong wage expansion in surplus countries holds that German imports would increase only slowly, given the low income elasticity of imports and also the low import content of imported final goods (except imports as intermediate goods for exports). This problem will be discussed below in more detail.

"Germany's surplus is highly diversified over the globe and less problematic"

It could be argued that Germany's surplus is matched by highly diversified deficits within EMU and over the globe. If deficits are concentrated on one or a few countries, critical margins are more easily surpassed. This argument may similarly apply to super-high surpluses, as a share of GDP, in small countries. The less innocuous mirror image of these arguments is however that Germany as the 4th largest economy exerts pressure on many countries with global outreach.

The key arguments for the need of rebalancing, thereby including surplus countries or assigning them the main part of the task, are as follows.

Risks of surplus hit deficit countries more severely but bounce back

Members of EMU with persistent high current account deficits, caused by private sector deficits, run into risks of over-indebtedness, reflected in an increasing NIIP with roll-over risks, possible maturity mismatch, elevated interest rate spreads, poor country rating and over-indebted commercial banks faced with scaled-up bad loans. Furthermore, such countries are likely to be confronted with BoP-constrained growth – their GDP growth is limited by the need to constrain imports, in the absence of strong export competitiveness. Improving export price and non-price competitiveness via structural change, innovations, restructuring etc. is necessary but requires time and some sort of industrial policy.

If growth in BoP-constrained countries remains subdued, due to chronic imbalances, growth in both deficit and surplus countries will be dampened.

Internal revaluation is superior to internal devaluation

In face of limited effectiveness of internal devaluation combined with fiscal austerity and structural reforms, internal revaluation of surplus countries may be preferred, or practiced as a complement. This would be a symmetric approach to rebalancing.

Intra and extra EMU imbalances are intertwined

Intra EMU (or EU) imbalances can be understood in two ways: as differential current account balances (% of GDP), or as low deficits and surpluses among EMU (or EU) members, i.e. above/below the critical thresholds of the EU Macroeconomic Imbalances Procedure (MIP) of -4% and +6%, whereas deficits or surpluses against the rest of the world may exist. The first criterion, not addressed in the EU MIP framework, is more sensible than the second. Once intra EMU imbalances are to an extent abandoned that allows balanced current accounts in former deficit countries, bilateral imbalances with the surplus countries can still prevail and external imbalances with the rest of the world emerge. In recent years the spread in current account balances, as shares of GDP, among member countries stands above eight ppts. This implies that the Euro exchange rate against the US-dollar and other currencies is always a grand misfit for one country group or for all members of EMU. This constrains massively the monetary policy space of the ECB and the effectiveness of monetary policy.

For one reason, the external EMU surplus or deficit could be of less concern if the possibility of exchange rate realignment is taken into consideration as a policy tool. However, this advantage evaporates if relative trade balance differences between members are stark. And this is the reality of imbalances till now.

All said, extra EMU imbalances do matter, especially when there are interdependencies with intra EMU imbalances. The MIP framework should be reformed in this respect. Running current surpluses for the EMU (or EU) is harmful for the world economy even if the surplus relative to GDP is small since the absolute impact is decisive. If it occurs, it should be temporary.

Surpluses may look like championship but are not beneficial for surplus countries

In the process of building-up the German surplus, Germany did not benefit from its surplus-strategy. Growth and employment performance was dismal, inflation below ECB-target, income inequality rose sharply connected with the saving surplus. Germany may be praised as export-superstar, but not as model performer. The external disequilibrium reflects deep internal disequilibria between aggregate supply and demand. Improved growth and labour market performance in recent years are doped by zero interest rates, under-valuation of the real effective exchange rate (REER) and low productivity increases based on low fixed investment. The growth trend for the future is seen by many analysts as not much more than 1.0%. The country has become extremely export-dependent and vulnerable to any shock on the globe. Germany's performance has negative spillovers on the other EMU countries and also on the global economy:

- + Low growth in Germany implies a low German contribution to total aggregate demand in the EMU and also globally, but living to a considerable extent from usage of foreign demand, within EMU and outside. This would not matter if there were no demand problem inside or outside EMU. From a Keynesian perspective, this is the exception, not the rule.
- + Other countries are pushed into deficits, until recently inside the EMU, since then mainly outside. Yet, Germany still has sizable bilateral surpluses with most EMU-members, especially with France. Some countries are strongly exposed to German demand.

- + With rising export competitiveness, a technological divide is foreseeable in EMU, procrastinating the divergent performance and pushing many EMU members into a competitive situation where they are squeezed by emerging economies on the one hand and Germany plus some others on the other.
- + Net capital exports are predominantly short-term finance, generating sudden stop problems in recipient countries.

What is competitiveness and is it desirable?

The term "competitiveness" should be used with more caution. The term could be understood as competitiveness of exports, indicated by rising market shares compared to other companies. This is the usual understanding for individual firms in a microeconomic perspective, now aggregated to all exporters of a country, indicated as a rising share of this country in world exports. Of course, not all countries can have rising export shares. This would be a zero-sum game, but in all traditional trade theories trade is a positive sum game. Furthermore, a country that gains export shares will import less, otherwise other countries would also gain market shares. This implies, that a higher market share of one country goes along with a trade surplus and a trade deficit in the country losing market shares. Hence, there is a fallacy of aggregation. The term export competitiveness of a nation makes no sense. A third argument against the term chips in. Export competitiveness in the sense of improved price-quality relationship of export goods implies that less goods in this sector are imported. If the competitive advantage spills over to other sectors, the country's import share in global imports will fall while the export share rises. This implies trade imbalances which aggravates with further improved relative competitiveness.

If the term competitiveness is understood as "competitiveness of nations" (nota bene: plural), it is undefinable and nonsensible unless it has the trivial meaning that all countries improve their productivity regarding the production of export goods. If the term means having a higher share than other countries in global exports, but not a rising one, two questions pop up: what is the optimal market share, and, if a country is below its optimal share, it should raise its share thereby pushing other countries downwards. Besides, it is self-evident that smaller countries have normally smaller world market shares so that comparisons would only be sensible with respect to GDP. But this is a totally different issue and there is ostensibly no clear answer (France has a much lower export-GDP ratio but similar GDP growth as Germany over a long stretch, and the US has a much lower export share in GDP but higher GDP growth). In sum, Krugman (1994) was right when he called competitiveness a dangerous obsession. If the term is used as a general benchmark for exports in a microeconomic perspective, by way of aggregation as national competitiveness it implies a mercantilist bias.

Surplus as export of unemployment?

The traditional Keynesian argument against current account surpluses criticises redistribution of global aggregate demand: surplus economies provide less demand to the rest of the world and absorb more from it, compared to external balance. Employment improves in the surplus country and is reduced in the deficit bloc. However, for Germany the export-led pattern of growth has not improved employment growth relative to balanced growth driven mainly by domestic demand. In the short and medium term, the EU deficit countries experienced growing deficits alongside high growth (until 2008), albeit on an unsustainable path. So, the argument may be truer in the long than in the short term. Some countries managed to run on a high growth trend, such as China, elevated by building-up the surplus until 2005. Whether China had exported unemployment to the rest of the world is a matter of an unfinished debate. The matter seems to be much more complex (see also the next paragraph).

Germany's surplus is structural and trends towards persistent rise

What is more, if our diagnosis of a structural German surplus is correct, the trend of German exports to outpace imports, coupled with below average EMU-GDP growth, trends towards ever rising trade and current account surplus. Without any doubt, this would not be sustainable, undermining EMU

coherence and harming the world economy. But a surplus cannot grow for ever. Determining an equilibrium surplus (or deficit) or a turning point is difficult.

Put differently, a chronic surplus would be less harmful or even innocuous if the surplus country trails on a high growth avenue. Then it offers dynamic demand growth to other countries. Furthermore, if capital exports are more long-term, more stable and targeting productive investment in deficit countries with catching-up growth, they can have conducive effects for both sides. China's export-led high growth strategy until 2005 and Norway's state pension fund, fuelled with oil and gas revenues, could be seen as models for the first and second avenue mentioned, differing markedly from Germany.

In the economic history after the demise of the Bretton Woods era (with few global imbalances), we experienced several episodes of high surpluses which were resolved or alleviated eventually by price busts (OPEC countries), exchange rate corrections, political coordination or unilateral action: the oil price booms in the early and late 1970s and the last one starting in the late 1990s, high surpluses in Japan, Taiwan, Korea and Germany (and others) in the early 1980s, which led to the Plaza and subsequently the Louvre Accord (1985 and 1987), and China's and Germany's surplus in the run-up to the financial crisis 2008. In most cases, there was one major deficit country, the US being able to exert countervailing power on the surplus countries. Germany's surplus and the corresponding deficits differ from this experience markedly.

Germany has tended to current account surplus over its history since the end of World War II. However, high surplus episodes, especially in 1974 (2.7%) and 1989 (4.6%) were reigned in quickly. The increasing surplus 1999-2016 over such a long period is unprecedented.

Graveness of surpluses and deficits

Surpluses pose a very grave problem if accompanied by low growth in the surplus country bloc, if they are high relative to GDP and trending upward, if the corresponding deficits are less dispersed, if the deficits accrue to countries without adjustable nominal exchange rates, if financial outflows from surplus countries are primarily short term and not used productively. In business cycle upswings and growth episodes, imbalances look innocuous or even benevolent or irrelevant, but in bad times they unfold their hazardous potential. Then they spur asymmetric repercussions which look like asymmetric shocks but are in essence endogenous.

5. Trade balance projections 2016-2026

A simple trend analysis of the German trade balance, based on the growth rates for nominal exports and imports (goods and services) in the period 1999-2016 and assumptions for nominal GDP growth rates for the period 2016-2026 shows amazing results. We take the data for 2016 for exports, imports and GDP as the starting point and calculate the trade balance as share of GDP for 2026. In 2016 the trade balance stood at 7.6% of GDP, the current account at 8.3%. We neglect for simplicity the net income from abroad minus the transfer balance and focus only on the trade balance.

| Germany: Six projections for the trade balance 2026 and 2021 | | | | | | |
|--|-------------|-------------|---------------|-------------|---------------|--|
| | Exports | Imports | Trade balance | GDP | Trade balance | |
| 2016 | 1441.7 bn | 1202.6 bn | 239.1 bn | 3132.7 bn | 7.6% of BDP | |
| 1999-2016, growth | 5.74% | 4.78% | | 2.48% | | |
| trends, % p.a. | | | | | | |
| | growth p.a. | growth p.a. | growth p.a. | growth p.a. | % of GDP | |
| 2026, 1 st | 5.74 | 4.78 | 9.6 | 3.0 | 14.25 | |
| 2026, 2nd | 5.74 | 4.78 | 9.6 | 4.0 | 12.9 | |
| 2026, 3rd | 5.74 | 5.74 | 5.74 | 3.0 | 9.9 | |
| 2026, 4th | 5.74 | 5.74 | 5.74 | 4.0 | 9.0 | |
| 2026, 5th | 5.74 | 6.64 | -0.003 | 4.0 | 5.0 | |
| 2021, 6th | 4.0 | 6.0 | -9.8 | 3.0 | 3.9 | |

AMECO, own calculations

- In the first projection, exports grow along the trend 1999-2016 with 5.74% p.a., imports with 4.78%. For nominal GDP we assume 3.0% trend growth (a bit more than in 1999-2016), based on 2.0% target inflation and 1.0% real GDP growth. The trade balance would stand in 2016 at 14.25% of GDP, i.e. rise by 6.3 ppts.
- In the second projection, we assume real growth of 2.0% p.a., nominal growth of 4.0%, other assumptions unchanged. The trade balance will reach 12.9%, i.e. rise by 5.3 ppts.
- The 3rd projection assumes 3.0% nominal growth of GDP, and imports growth accelerates to the same speed as exports in the first projection, namely 5.74% p.a. The trade balance will still rise up to 9.9% of GDP. If growth reaches 4.0% p.a. in the 4th projection, other assumptions unchanged, the trade balance would be 9.0% of GDP in 2016, still 2.4% more than 2016.
- In the 5th projection we reduce the trade balance to 5.0% of GDP after 10 years which might fit to around 6.0% current account balance, the upper limit in the EU Macroeconomic Imbalances Procedure. GDP grows 4.0% p.a. Without lowering export growth which remains 5.74% p.a., imports have to grow at an annual rate of 6.64%, around 1.8 ppts faster than in the trend of the past. In this case the imports-GDP-ratio rises from 38% to 49% of GDP, and the marginal increase of imports, as a share of the GDP increase, would rise from 64% to 80%.
- In the 6th projection over 5 years until 2021, the trade balance will drop to 3.9% of GDP, which might be close to a current account of 6%. Growth of exports decelerates to only 4.0% p.a., and imports rise by 6.0%, while nominal GDP trends with 3.0%. Net exports contribute negatively to GDP growth. The trade balance shrinks strongly in absolute terms.

The almost explosive growth of the trade balance in the first four projections has – among other factors – to do with the base effect. Once exports are initially much higher than imports, exponential growth of exports and imports lets the trade balance grow much faster. In the case of linear growth, the trade balance would rise too, but much slower. Since German exports are correlated with global growth, which has grown boisterously in the past, the assumption of exponential growth is as justified as for the much slower GDP growth trend for Germany, the key driver for its imports. Let's look whether the period 1999-2016 is exceptional for Germany's long-term pattern after the reunification in 1991. In the table below we see that the wedge between exports and imports growth was even slightly bigger than in the period 1999-2016, however, growth was around 1 ppt higher in the 1990s. The slower rise of the trade balance in the 1990s was due to the lower base effect in the initial year 1991.

| Growth of nominal exports and imports (incl. services), GDP and the trade balance in Germany 1991-2016 | | | | | |
|--|-------------|------------|------------|--|--|
| Growth of nominal, % p.a. | 1991-1999 | 1999-2016 | 1991-2016 | | |
| exports | 5.08 | 5.74 | 5.64 | | |
| Imports | 3.97 | 4.78 | 4.65 | | |
| GDP | 3.56 | 2.48 | 2.62 | | |
| Trade balance, % of GDP | -1.7 (1999) | 0.7 (1999) | 7.6 (2016) | | |

AMECO, own calculations

The unfavourable base effect of 2016 with the high trade imbalance constitutes an accelerating, i.e. explosive and hazardous factor.

Note that projections are not forecasts. Reality does not always follow trends. Forward looking rational expectations, functioning as self-fulfilling prophecies, might be at work – but all too often not or too late and at high social costs. If there is no clear and current account stable equilibrium, neither country-specific nor generic, then there are is a multitude of short-term equilibria, some of which may be advantageous, others less, some disastrous. Policy rules have to chip in. This also the logic of IMF's "External Balance Assessment" (EBA, see IMF 2017).

Potential stabilising mechanisms

Aren't there any stabilising or rectifying factors at work? Candidates are exchange rate changes, less growth in importing countries due to BoP constrained growth or other impediments, higher imports from countries delivering intermediate goods for German exports, more imports due to rapid aging in Germany, lower growth in OECD or in emerging economies, or new emerging competitors. All these factors are ambiguous in their effects on the trade and current account balance:

- Exchange rates: The Euro might rise against the US-dollar and other currencies. This would impede growth in other EMU countries and also in Germany, which dampens the growth of imports too. The direct effect of a real appreciation of the Euro on German exports is small due to the low price elasticity (apart from adverse effects), but the indirect effect on profits and aggregate saving is more important.
- BoP-constrained growth: An increasing trade and current account surplus will affect likely both intra and extra EU imbalances. This will indeed push other countries into deficits again and on a reduced growth trend. Again, the negative effects on German exports will dampen Germany's growth and its imports with an ambiguous overall effect on the trade balance.
- Eastern Europe: More imports from Eastern Europe and emerging economies: This seems to be already the trend of the past whose mirror image is growth in Eastern Europe which conversely fuels German exports.
- Aging population: It is true that the propensity to save might drop in private households, thus reducing aggregate saving. But counter-effects have to be heeded: strong decline of the population (absent strong immigration) with normally lower growth, in particular via less residential investment and less consumption. The aging argument is highly speculative and strongly exaggerated in German debates.
- Lower growth in OECD and emerging countries: This is indeed likely to happen, including lower growth in the flagship of emerging economies, China. Again, growth of German exports may falter, but growth of imports too.
- New competitors: This may occur, but Germany's standing in its segment of investment goods, based on long-standing human capital accumulation, is hard to contest severely.

It looks as if there is no realistic stabiliser in sight. In most cases mentioned exports might grow slower, dampening export-led growth and subsequently imports. Once a rising surplus was not prevented, path dependency is at work. Yet, we have not addressed opportunities to raise domestic demand and excluded other policy measures. A country that runs on export-led growth is likely to perform poorly on growth of GDP. Excessive export dependency rests essentially on low absorption. It can only be surmounted by a regime change of turning to consumption-led balanced growth. The rebalancing period will be longer the longer the wrong way was tolerated. Despite our simple trend projections, we repeat: surpluses can never grow forever, neither can deficits.

6. Policy options

In this section, we discuss only policy measures that address primarily surplus countries, with one exception (structural change). In the end we propose changes in the EU MIP. We do not discuss the standard proposals for "internal devaluation", "structural reforms" and fiscal austerity in deficit countries. We assume these policies are in most cases not very efficient in reaching their goal of sustainable current accounts, that they are painful and destructive in their side effects and besides this take long to achieve traction. If these policies would work, they would indirectly reduce the surpluses of the surplus bloc, as far as there no external surplus. This raises the question why not target the surplus countries directly (cp.. Stiglitz 2016). In reality a mix of measures addressing both country groups may emerge, a more symmetric approach as stipulated also by the European Commission and the "Five Presidents Report" (De Grauwe 2016).

First and foremost, reducing current account surpluses (and imposing limits on further increases) should be put on the policy radar in the surplus countries – presently they have hardly any such radar. Surplus countries, in particular German authorities, praise their "competitiveness" and explain all too often that they see hardly any problem and have no appropriate policy tools. If there are problems, they should be assigned to the deficit countries. However, without a severe commitment of policy makers in surplus countries successes are unlikely.

If a hard landing in the form of appreciation shocks or financial crises are to be avoided, the rebalancing needs probably a longer time frame of reversing the trend and returning to the 6% cap in the MIP regulatory framework. Remember our 5th and 6th projection for the German trade balance which require strong changes in the growth of imports, exports and/or nominal GDP. This would involve a massive structural change in trade, the entire production structure and of course also in employment.

Standard policy proposals for rebalancing of deficit and surplus countries, using exchange rate realignments, fiscal and monetary policy cannot apply in a monetary union. We discuss here the following policies for the surplus bloc, in passing comment on some proposals already on the table; then we turn reforms of the EU MIP:

- real internal revaluation
- expansionary fiscal policy
- wage policy, including related labour market policy
- reducing fiscal protectionism and semi-mercantilism
- structural change via innovation policies
- transfers from surplus to deficit countries
- other administrative measures
- reforms MIP.

Real internal appreciation

This policy should raise costs and prices above the past trend for a limited medium-term period for rebalancing. Given the low price elasticity of exports and the widespread pricing-to-markets (PtM), the effect of an appreciation on nominal exports would be small unless extreme appreciation is conducted. If increased prices could be passed-through onto export prices (meaning no or reduced PtM), adverse effects, viz. rising nominal exports, cannot be excluded. The main effect of real appreciation is to be expected from reduced firm saving and less saving relative to investment. The bloated corporate saving-investment surplus would shrink, perhaps also saving of households, since profits transferred to households would shrink. This means the profit share in national income and GDP would be reduced. The reduced trade deficit would lower output and employment if not offset by higher consumption and government spending, better more than offset to raise nominal growth. The appreciation effect could also be achieved by temporary above-target inflation, say by 3% p.a. during the adjustment period. Yet, Germany is still below target inflation (2017) which is a goal for the medium term, meaning higher inflation in boom phases and lower in slumps. In the years 2016-17 Germany is in a phase above the long-term average, fuelled by extraordinary favourable conditions (low real interest rates and costs on public debt, undervalued Euro exchange rate, low oil and commodity prices). If higher real GDP were achieved, rather than higher inflation, the output potential will likely rise by more net investment.

The main driver for cost and price increases would be gross wage increases, including social security contributions of employers. This implies stronger nominal ULC increases relative to other trading partner countries. Labour shortage in certain segments, rising minimum wages and rising civil service wages could take the lead, complemented by extending wage tariffs bargained between employers and unions to all employees in the respective sector, thus achieving universal coverage by collective

bargaining, including closing loopholes. If wage policies could implement higher wages in high-profit sectors or above average firms with special firm-specific bargaining, the macroeconomic efficiency of rising wages would improve strongly. This applies also to wages in the precarious jobs segments, often based on "mini wages".

The appreciation of the German cost and price level could be reinforced by appreciation of the Euro against the US-dollar and the Pound Sterling. To some extent this would however lower import costs denominated in these currencies, unless these firms can practice PtM so that they follow the higher price trend in Germany.

Expansionary fiscal policy

Since 2014 Germany has a surplus in the public sector, including social security budgets. In a strategy to reduce the surplus, fiscal balances have to readjusted and subordinated under the new goal, with less priority for reducing the debt-GDP ratio down to 60% which is an arbitrary goal lacking a prudent rationale. Running balanced fiscal budgets or even surpluses is hidden fiscal mercantilism as it is a driver for the national surplus over investment. It is a clear manifestation of defying the need for surplus control and awareness. However, the strategy propose would be a regime change for fiscal policy. The latter should not only be geared toward the Stability and Growth Pact goals but also to contributing to external stability.

In a surplus reducing strategy, output losses due to squeezed net exports need to be offset, to maintain or increase output and employment. The return to positive net public investment including more concomitant personnel. In a fiscal strategy coupled with wage increases as mentioned above, it is unlikely that deficits and debt rise markedly. Bubbly revenues are more likely.

Wage policy, including related labour market policy

Wage policy was already mentioned when the appreciation strategy was explained. Wage policy should not substitute for free wage bargaining among labour and employers. But as in ordo-liberalism, the legal framework for labour market institutions is of paramount importance for the outcome of collective bargaining. In the past 15 years, a strong and continuous swing to decentralisation of wage formation has taken place in Germany, alongside weakened trade unions. "Flexibilisation of labour markets" was the truly neoliberal mantra in the framework of outdated supply-side policies that were implemented step by step (cp. Dustmann et al. 2015 in positive valuation and Flassbeck/Lapavitsas 2013 in negative). In contrast to analyses (and others too) we do not follow the idea that German export competitiveness is driven directly by this trend in a major way. Yet, real wages, especially in the 40% percent of bottom wage earners, and consumption had been constrained, and subsequently imports. Excess national saving over imports was facilitated by the wage formation changes starting long before the Hartz reforms. This contributed strongly to the rise in income inequality, as far as it evolved at the bottom of the income pyramid. Besides the legal framework governing the labour markets, governments are involved in wage bargaining or fixing the floor as employers in the civil service, the minimum wage policy, social security contributions, income taxes and indirectly also via controlling rentals for flats, as far as the purchasing power of net wages is concerned. All this has a considerable effect on growth of consumption expenditure and imports.

It is true that the import content of wages is low, lower than the one of exports and of fixed investment. But the share of consumption in GDP is much higher than the share of investment, private or public. Besides this, rising consumption and reduced income inequality can necessitate more investment in a virtual circle. Even more residential investment with small direct import content will follow-up consumption for durable consumer goods.

A side effect of rising wages (and a rising wage share) could be further relocation of some low-end industries to peripheral countries in Eastern Europe or elsewhere. This could spur imports, and loss of domestic value-added could be offset by higher incomes and production of non-tradables. As mentioned above, it might also trigger additional exports, but the balance is uncertain.

Reducing fiscal protectionism and semi-mercantilism

The German government is not following intentionally a protectionist or mercantilist strategy in the normal sense of terms. What can be observed is more like unintended side-effects which are in actuality similar to outright protectionisms and mercantilism in the sense that the results – the rising surplus – is tolerated and carelessly ignored. Such policies are also used in other countries, but with less success, apart from some smaller countries like Ireland or Luxembourg. But such practices have much more traction in Germany which had – as a large OECD economy – not gone the road of deindustrialisation, as the US and UK did, and other countries like France and Italy being at the brink of losing market shares, especially in high-end segments. We list a number of measures and policies which indirectly promote national saving relative to investment or more directly exports. Many of the measures listed (and further ones not listed here) are justified by the set phrase "increase of competitiveness" which often serves as blanket justification of all sorts of tacit or at times even outright mercantilist practices.

- "Locational competition" and related policies ("Standortpolitik") meant as a broad package of policies to lower corporate taxation and ULC growth, attract more multinational enterprises to invest in Germany etc. relative to other countries. Although the term is not precisely defined, it should be interpreted of the German version of supply-side policy.
- Labour-market reforms that halved the unemployment benefits relative to wages with repercussions on stretching the wage structure at the bottom, reducing the duration of granting unemployment benefits, establishing "mini-jobs" with reduced social security contribution etc.
- Exerting wage restraint such as keeping wage increases in the civil service below productivity rise and inflation.
- Increasing the VAT by 3 ppts in 2007 from 16 to 19 %, which is not only a tax increase for consumers but also for imports.
- Tax reforms lowering the capital gains tax below the income tax rate, also applied to property income, thus granting privileges to financial investments.
- Tax privileges for electricity consumption of industrial firms, relative to private households.
- Introduction of the "debt brake" 2011 for the federal and the provincial governments, requiring balanced structural budgets (except 0.35% of GDP for the federal budget). This has contributed to budget surpluses which have led to triple sectoral surplus (households, firms, government). The debt brake is a policy instrument that increases the current account surplus.
- Many regulations for specific products and sectors, e.g. the pollution standards for the automotive industry, a key pillar for exports, had been defined in close cooperation of government and industry with forbearing controls by authorities.
- Subsidies are granted to lignite mining and lignite based power generation, partly substituting energy imports. In former times, iron and steel production as well as ship-building were heavily subsidised.
- Exports are favoured by "Hermes guarantees", a government managed insurance against payment default of importers and other contingencies. Although firms pay fees, insurance would not be granted for such uncertainties by private insurance companies. Tail risks would be borne by the government, in case needed by exporters.
- Germany exports strongly beyond the EU (relative to other European countries), facing with its focus on investment and intermediate goods the WTO regulatory framework which is only a relative small barrier; for imports from countries outside the EU, EU trade policies, especially for agriculture and regarding rules, norms and standards for all sectors, barriers may be higher. Besides this, German multinational corporations opted for export-favouring strategies rather than re-importing (import-substituting) strategies (as e.g. in the US).

More indirectly, government support for R&D in general and specifically for small and medium enterprises is geared to support industrial innovations with effects on export competitiveness. De facto this is a kind of "industrial policy" which is often more efficient than direct subsidies for certain sectors. In this regard, energy policies to boost regenerative energy and environmental technology in general, has massive import substation and export promotion effects. All this deserves in many aspects appraisal, but it is similar to mercantilist practices, not only in Germany, and stands in contrast to ordoliberal ideas on the relationship of state and markets.

Many of the policies listed here should be reversed or changed, and if for good reasons not changed, compensation elsewhere is needed. The fact that other countries conduct at times similar policies, should be considered from the perspective of being a deficit or top surplus country. Deficit countries need industrial policies, surplus countries should shrink them. The impact of such reforms on imports and exports is hard to foresee in quantitative terms.

Structural change via innovation policies

Changing the income elasticity of imports and of exports are key targets for improving exports. Germany has done a great deal to improve product and process technologies, thus continuously playing at the global frontier. Naturally, these achievements cannot and should not be reversed unless mercantilism is involved. The goal of restructuring and innovating the export base applies first and foremost to the deficit countries in EMU and the EU as whole. France, UK and Italy are in the forefront of having fallen behind Germany, especially in the advanced technology-heavy product segments where Germany is strong. Reasons are country-specific, but some reasons are general. Economies with a precarious current account deficit which can only be moderated by low growth or wage restraint, apart from fiscal austerity, are in deep trouble to innovate when growth is sluggish, profits are meagre, public support is weak and EU innovation policies have little traction. The financial crisis and the double-dip Euro crisis 2012-14 have aggravated impediments for structural change. Internal devaluation may cut costs and prices, apart from employment, but has no innovative function at all. Structural reforms, mostly focused in their orthodox connotation on pension reforms, labour market deregulation, less dismissal protection for workers and decentralised wage bargaining do not target the main causes of structural weakness regarding the current account.

Structural reforms to improve technological competitiveness of the export base are key, and should be supported financially by the EU. It is evident that such support should not be granted to the top surplus countries. Deficit countries in this context should be those with a low current account balance relative to the surplus bloc in EMU or EU. In contrast, it would be helpful if surplus countries beyond a certain threshold were obliged to contribute more than others to a European innovation fund within the EU budget.

Transfers from surplus to deficit countries

Keynes' had proposed in 1944 in the debate on the rules for the Bretton Woods system that surplus countries should pay transfers to deficit countries, among other proposals. This would help deficit countries to avoid deflationary devaluation races and maintain growth and employment in the world economy. Yet, unbalanced growth would continue, i.e. current account imbalances would be narrowed but trade imbalances would persist.

In the EU and EMU context, such measures could help to fund structural reforms and innovation policies in the weaker countries, avert or attenuate fiscal austerity and improve export competitiveness in the medium term. If successful, the surplus countries would lose a slice in market shares, but growth of their export markets would be stabilised. A higher degree of contestability of dominant export markets is in the long-term interest of surplus countries like Germany. To put it bluntly, reducing the surplus in the surplus bloc in the EU/EMU is also highly beneficial for these countries.

If the transfers of surplus countries to deficit countries (or countries with weak export base) were high enough to offset the positive net income balance, the current account surplus would be contained. The spread between the NIIP of creditor and debtor countries would shrink somewhat. Some might argue that this is the road to a transfer union, not envisaged by most member states. However, the idea of surplus-transfers is to reduce the imbalances and earmark the transfers for usage for innovation and restructuring goals. The transfers should therefore be temporary as a medium-term adjustment support.

Administrative measures

Even though regulations obliging surplus countries to transfers is a kind of administrative measure, other measures proposed are much stricter. Stiglitz had supported Warren Buffet's proposal for "trade chits", initially thought as a mechanism to reduce the US trade deficit. In short, the government provides "trade chits" or tokens for every Euro of imports in a country to the importing firms (Stiglitz 2016, 287ff.). This chit is a tradable export permit for exports of one Euro. If the trade surplus should be brought down to zero, exporters would have to buy the chits from the importers, making exports more expensive and prohibiting the excess exports over imports. Of course, the export chits must not be traded among EMU-members. In surplus countries importers would earn a lot of revenue which could make imports cheaper. The system mimics real appreciation but goes further as quantitative restrictions are included. The export chips could also be provided at other rates, e.g. at 1.10 export permit per 1 Euro of imports. In deficit countries chits would be provided to exporters allowing them to import a certain amount. In both cases exports and imports will balance (or target certain controlled trade imbalances).

Technically, such a system could simulate a Ricardian trade system without any imbalances, hence without (net) capital flows in the (extreme) case that imports match precisely exports. In a way exports would be "taxed" by the costs of chits which diminishes corporate saving, and it incentivises also relocation of production to abroad – export substitution. The proposal involves hard to foresee results for both the surplus and the deficit countries. Controls for the usage of revenues from chit sales are needed. Much depends on how the system effects growth in surplus and deficit countries. Checking the workability and possible adverse effects by simulations is necessary. Yet, it is a radical and interesting proposal.

The quantitative effects of the measures discussed so far are hard to assess. An estimation of a mix of a wage policy according to the "golden rule" and expansionary fiscal policy for more public investment over a prolonged period shows that limited success is possible so that the 6% cap may be approached (cp. Horn et al. 2017, Hein/Truger 2017 on limitations of a wage-led strategy). One has to take into account that the import content of final consumption goods is around 20%, the import content of gross investment is 27%, and the import content of exports is 40% (2013, see Destatis 2017). The latter account for almost half of total imports. The price elasticity of exports is estimated at 0.5%, the one for imports much lower. The income elasticity of exports is clearly higher than for imports, if imports for exports are disregarded. For elasticity estimations see Horn et al. (2017) and Storm/Naastepad (2015, 978ff. appendix). Change will take time, since production structures, cast in fixed investments and in human capital, has to be restructures, hopefully without structural hard breaks and crisis-driven rectification.

Searching for a new growth model for Germany with less export dependence is also a question of how much export- and import-dependence is seen as optimal and which price has to be paid for leaning to an extreme, let alone the surplus. Choosing not the extremes, say the US or UK structure, nor the extreme of China until 2005 or some smaller economies which have little other options than specialising, may be a good vision. The idea of rebalancing is to avoid these extremes, especially for large economies.

Reforming the EU Macroeconomic Imbalances Procedure (MIP)

MIP is asymmetric in its overly forbearing attitude to surplus and too harsh to deficit countries. There is only vague reasoning for the -4/+6 % asymmetry of thresholds. Besides, it makes a difference whether a small country has a 6% surplus or a huge country (compare Germany as the 4th largest economy on the globe and Luxembourg). A 10 percentage points spread between surplus and deficit countries would render the Euro-US dollar exchange rate (and other exchange rates) an outright misfit for some or all members, and would thus undermine also the effectiveness of monetary policy.

- For current account balances, +3% and -3% and a deviation from the mean of the others of maximum 3 ppts might be better benchmarks for thresholds. These thresholds should apply to both internal and external imbalances alike. Long-standing extra EMU (and EU) imbalances should be seen as matter of concern. For small countries other margins for surplus may apply.
- An upper threshold for the net international investment position should be introduced, perhaps also 35%; presently only a floor for debtor countries of -35% exists. Note, the thresholds are alarm lines, not necessarily targets.
- Among the 14 indicators, there is no inflation divergence indicator, with upper and lower thresholds, the latter in particular for surplus economies with undervaluation performance. In principle, target inflation should apply to each member. Thresholds could be set at 1% and 3% inflation p.a. over three years. Regarding ULC, instead of having presently only an upper margin with 9-12% within 3 years, the "golden rule" should apply for the preventive arm of MIP: target inflation of 2% in the medium term plus national productivity increase with a small flexibility buffer. Exceptions under the "corrective arm" in the case of excessive imbalances should be possible.
- Size and structure of capital outflows of surplus countries, gross and net, including their destinations and their term structure should be included in the scoreboard.
- In case of excessive imbalances, deficit and surplus countries should be addressed symmetrically. Surplus countries should be obliged to pay transfers (in their transfer balance) so that net income and transfer balance sum up to zero (see above).
- In case of excessive surpluses, the countries should be exempted from the budget rules of the "Stability and Growth Pact" and the "Fiscal Compact". They should be assigned to run much higher fiscal deficits thus contributing to higher domestic absorption and reducing the surplus. Twin or triple surpluses (households, firms, government) ought to be banned.

Other proposals on the table for surplus countries look to us unsatisfactory. A standard proposal is liberalising (deregulating) services so as to strengthen service growth (and subsequent imports) as well as service imports. Most proposals would either undermine quality standards or lower wages in the service sector. Efficiency increases in the service sector are of course welcome, but they would also feed into stronger export growth. Other proposals focus on tax reduction or tax exemptions, especially for R&D (cp. Felbermayr et al. 2017). Whether this incentivises higher investment and growth or higher corporate saving remains ambiguous. More indirect impact can be expected from higher residential investment with dampening effects on the rise of rentals and house price inflation, allowing more spending for consumption.

The proposal for a reduction of the German VAT by several points, made by Christian von Weizsäcker (2017), financed with a heavy increase of the budget deficit and breaching the debt brake and instituting a surplus brake, is a good signal, but the expected rise of imports is small. The key point is that *continuous* rise of imports is needed, not a one-time level effect. This is only possible with higher GDP growth and a balance of consumption and investment. Therefore the rise of the wage share during a transition period is key, supplemented by a higher structural deficit used for continuously increasing public investment. All this would likely increase growth of corporate investment. This growth process finds its limitations if full employment is reached unless new productivity increases evolve. This should provide a medium-term time frame for adjustment.

References

De Grauwe, P., 2012, In search of symmetry in the eurozone. CEPS commentary www.ceps.eu

Destatis, 2017, Globalisierungsindikatoren.

https://www.destatis.de/DE/ZahlenFakten/Indikatoren/Globalisierungsindikatoren/Tabellen/16VGR 17 18 19.html

Deutsche Bundesbank, 2013, Hohe Leistungsbilanzüberschüsse seit Mitte des letzten Jahrzehnts. Geschäftsbericht, 44-65.

Dustmann, Ch., et al., 2014, From Sick Man of Europe to Economic Superstar: Germany's Resurgent Economy. 28,1, 167-188.

EC (European Commission), 2017, Country Report Germany 2017 Including an In-Depth Review on the prevention and correction of macroeconomic imbalances. COM(2017) 90 final https://ec.europa.eu/info/sites/info/files/2017-european-semester-country-report-germany-en.pdf

Felbermayr, G., Fuest, C., Wollmershäuser, T., 2017, The German current account surplus: where does it come from, is it harmful and should Germany do something about it? Ifo Institute. EconPol Report, Vol. 1, no. 2, July. 1-11.

Flassbeck, H., Lapavitsas, C., The Systemic Crisis of the Euro – True Causes and Effective Therapies, Berlin, Rosa Luxembourg Foundation.

Gaulier, G., Vicard, V., 2012, Current account imbalances in the euro area: competitiveness or demand shock? Banque de France, Quarterly Selection of Articles, No. 27.

Grömling, M., Matthes, J., 2016, Der deutsche Leistungsbilanzüberschuss – Fluch oder Segen? Wirtschaftsdienst, 11, 787-793.

Gros, D., Busse, M., 2013, The Macroeconomic Imbalance Procedure and Germany: When is a current account surplus an 'imbalance'? CEPS Policy Brief, No. 301, 13 November.

Hein, E., Detzer, D., 2014, Financialisation and the Financial and Economic Crises: The Case of Germany. IPE-Working Paper, No. 44, Berlin School of Law and Economics.

Hein, E., Truger, A., 2017, Opportunities and limits of rebalancing the Eurozone via wage policies: Theoretical considerations and empirical illustrations for the case of Germany. Working Paper, unpublished.

Horn, G.A., et al., 2017, The Role of Nominal Wages in Trade and Current Account Surpluses. An econometric analysis for Germany. IMK Report 125e, June.

IMF, 2017, External Balance Assessment (EBA). Data and Estimates. Washington D.C. https://www.imf.org/external/np/res/eba/data.htm

Kollmann, R., et al., 2014, What drives the German current account? And how does it affect other EU member states? European Economy, Economic Papers, No. 516, Brussels.

Krugman, P., 1994, Competitiveness: a dangerous obsession. Foreign Affairs, March/April, 28-44.

Marin, D., 2010, Germany's super competitiveness: A helping hang from Eastern Europe. VOX, 20 June 2010

Naastepad, C.W.M., Storm, S., 2015, Crisis and recovery in the German economy: The real lessons. Structural Change and Economic Dynamics, 32, 11-24.

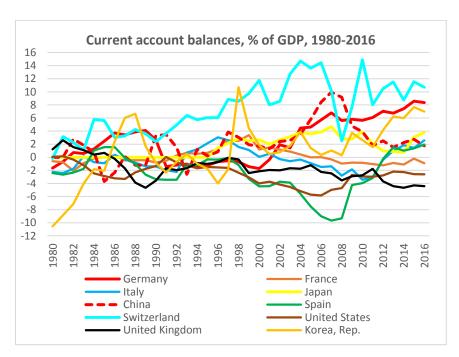
Stiglitz, J., 2016, The Euro. How A Common Currency Threatens the Future of Europe. New York – London.

Storm, S., Naastepad, C.W.M., 2015, Europe's Hunger Games: Income Distribution, Cost Competitiveness and Crisis. Cambridge Journal of Economics, 39, 959-986.

von Weizsäcker, Ch., Interview in Spiegel-online "Wie Deutschland seine Importe rasch steigern könnte". http://www.spiegel.de/wirtschaft/unternehmen/handel-wie-deutschland-seine-importe-rasch-steigern-koennte-a-1131912.html

Wyplosz, Ch., 2017, The Deficit Tango. Project Syndicate, August 11.

Appendix



World Bank, World Development Indicators, own calculations