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GERMANY IN FUNDAMENTAL MACROECONOMIC DISEQUILIBRIUM – THE EXTERNAL SURPLUS

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ABSTRACT

Despite performing very positively on some key macroeconomic indicators in recent years, the German economy is in grave disequilibrium if the high current account surplus is included in the analysis. The paper scrutinises the evolution of Germany's external surplus since the inception of the Euro in 1999. This is done by identifying the main determinants of exports and imports and by analysing the accounting identity in which the current account is national saving less total fixed investment. While price competitiveness measured by real exchange rates is strongly improved by German imports for exports within international value chains, also by real undervaluation against other member countries, the focus is on the combination of price- and non-price competitiveness. The latter is mainly determined by the global income elasticity for imports from Germany, relative to the income elasticity for imports to Germany. Despite heavy fluctuations, the past trend shows a clear wedge between the growth of exports and imports of almost one percentage point. If this trend continues the German trade balance would reach 15% of GDP in 2026 which would be a time bomb for the cohesion of the European Monetary Union. Market-based rebalancing is not in sight. It is the built-in dynamics of the external surplus that is hazardous. The problem is aggravated as Germany sits in the same boat with three other hard-core surplus seeking countries (Netherlands, Ireland, Luxembourg). In recent years the imbalances within EMU have changed, pulling former deficit countries in mild surplus but leaving the diversity of current account balances among EMU members at a spread of 8-10 percentage points, with an external trade surplus of EMU as a whole of 4.5% and 3.5% current account surplus. Germany carries nearly 77% and 55% of the current account and the trade surplus, respectively, and has – far ahead others – become the largest surplus country on the globe, in absolute terms. This constellation is unsustainable and requires policy action in Germany, in the European Union, the Euro Area and also by global authorities.

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Germany in fundamental macroeconomic disequilibrium – the external surplus

Berlin, July 2018

Abstract

Despite performing very positively on some key macroeconomic indicators in recent years, the German economy is in grave disequilibrium if the high current account surplus is included in the analysis. The paper scrutinises the evolution of Germany's external surplus since the inception of the Euro in 1999. This is done by identifying the main determinants of exports and imports and by analysing the accounting identity in which the current account is national saving less total fixed investment. While price competitiveness measured by real exchange rates is strongly improved by German imports for exports within international value chains, also by real undervaluation against other member countries, the focus is on the combination of price- and non-price competitiveness. The latter is mainly determined by the global income elasticity for imports from Germany, relative to the income elasticity for imports to Germany. Despite heavy fluctuations, the past trend shows a clear wedge between the growth of exports and imports of almost one percentage point. If this trend continues the German trade balance would reach 15% of GDP in 2026 which would be a time bomb for the cohesion of the European Monetary Union. Market-based rebalancing is not in sight. It is the built-in dynamics of the external surplus that is hazardous. The problem is aggravated as Germany sits in the same boat with three other hard-core surplus seeking countries (Netherlands, Ireland, Luxembourg). In recent years the imbalances within EMU have changed, pulling former deficit countries in mild surplus but leaving the diversity of current account balances among EMU members at a spread of 8-10 percentage points, with an external trade surplus of EMU as a whole of 4.5% and 3.5% current account surplus. Germany carries nearly 77% and 55% of the current account and the trade surplus, respectively, and has – far ahead others – become the largest surplus country on the globe, in absolute terms. This constellation is unsustainable and requires policy action in Germany, in the European Union, the Euro Area and also by global authorities.

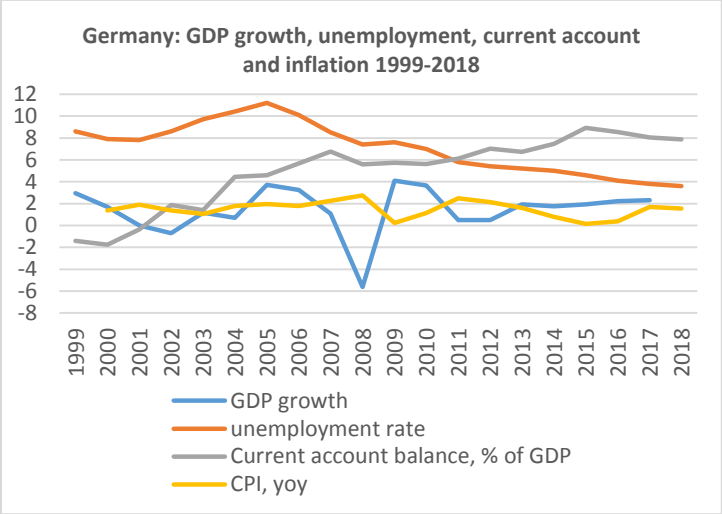
Keywords: balance of payments, global imbalances, real exchange rates, competitiveness, European Monetary Union

JEL-codes: E5, E6, F14, F15, F41, F42, F45

1. Macroeconomic performance

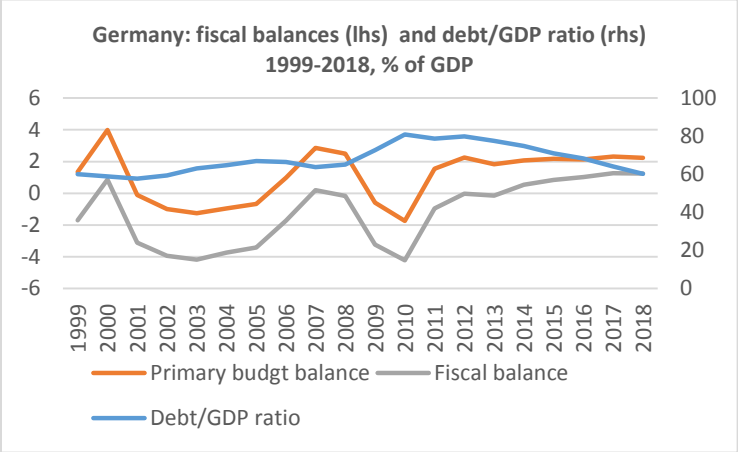
After the financial crisis 2008-9, the German economy recovered quickly. The GDP reached its peak of 2008 after the crisis in 2011. Overall growth 1999-2018 was 1.35% p.a., clearly a modest performance compared to other OECD countries. Unemployment dropped from above 10% to less than 4% from the peak in 2005 until 2018, inflation (HCPI) averaged 1.5% after inception of the Euro until 2017, hence performing below the 2% target (graph 1)[1]. In 2015-16, the German inflation almost touched zero, thus firing deflationary fears in the Euro Area (EA). The combination of growth and extremely low long-term interest rates for sovereign debt allowed shrinking the debt from 81% 2009 to about 60% in 2018, with an overall fiscal surplus of 1.3% of GDP and a primary budget surplus of even 2.3% (graph 2). A triple sectoral surplus had occurred: surplus of private households, firms and government, pushing the external surplus upwards.

Graph 1



Source: AMECO. Unemployment: international definition. Estimation for 2018.

Graph 2



Source: AMECO. Estimation for 2018

The strong internal disequilibrium with erstwhile high unemployment mutated into a macro disequilibrium in the current account, reaching 8% 2017 – and thus becoming the country on the globe with the highest surplus in absolute numbers and also relative to GDP when looking at large and medium-size economies. Since the start of the Euro, the current account rose by 10 percentage

[1] 1.8% HCPI 1999-2008 and 1.2% 2008-2017.

points, by far outpacing all peaks in the post-World War German history. It seems that the external balance got out of control.

The question can be raised whether the imbalance is so excessive that it can be considered a disequilibrium. Qualifying a deficit or surplus as disequilibrium would imply that it is not sustainable so that it will collapse or drop slowly in the future or cause an outright crisis either in the deficit partner countries or in the surplus country itself. The "Macroeconomic Imbalance Procedure" (MIP) of the European Commission (EC 2016, 2017) considers the surplus as too high but robust, without tendency to rebalance in the medium term. Policy action would be necessary, however, the surplus s not classified "excessive" because such a statement would necessitate a formal excessive imbalance procedure against Germany. Yet it is stated that the surplus margin for current account surpluses of 6% of GDP, a concession to Germany, Netherlands and others, is breached (EC 2016, 2017). The IMF is also concerned for global reasons, as Germany is heading a small group of countries with very high surpluses which replaced the traditional OPEC-surpluses. By contrast, the German Council of Economic Experts (GCEE, majority of members), an advisory group to the government, sees problems in the deficit countries, not in Germany. Germany is not seen in pathological disequilibrium. It seems that a large fraction of the Germany economics profession follows a "Sonderweg", a special view, in contrast to the mainstream view in the rest of the world.

The official statement of the German Federal Government, in an answer to a query of an opposition party in the parliament, follows the GCEE:

"The current account surplus is not an excessive imbalance. Besides, in a monetary union the surplus must not be viewed in national isolation. From a worldwide perspective, the overall current account balance of the Euro Area with the rest of the world is crucial. The surplus of the Euro Area (3.6% of GDP 2016) is not considered by the Federal Government as part of global imbalances." (Deutscher Bundestag 2017, own translation)

In this paper we review briefly Germany's current account performance (section 2), analyse the main causes of the rising surplus since 1999 theoretically (section 3) and empirically (section 4), analyse the role of Germany's manufacturing sector (section 5), the supply-side core of the surplus, and present a projection for the next ten years based on the past trends (section 6). Finally, we turn to policy conclusions for Germany, the deficit countries and the European Union (7). This paper is based on an in-depth analysis (Priewe 2018).

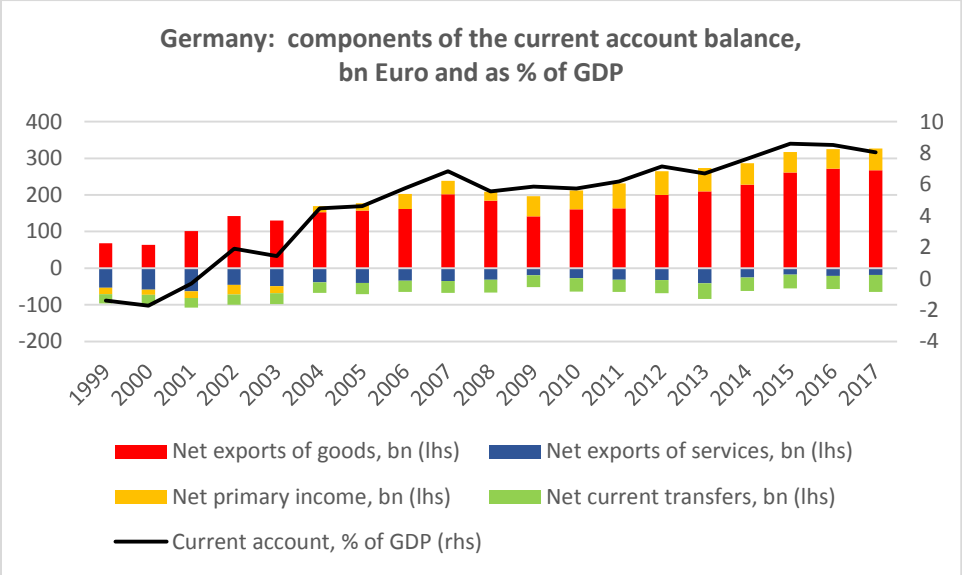
The main findings can be summarised as follows:

- The dynamic of the surplus results out of Germany's structural change since inception of the Euro, focused on manufacturing, the main base for tradables.
- This dynamic was supported by neo-mercantilist policies of various kind, especially by wage and fiscal restraint geared toward undervaluation of the real effective exchange rate, outsourcing to international value chains in low wage countries and specialisation on medium and also partly high-technology investment and intermediate goods. It was also supported by the neglect of industrial policies in other EMU countries.
- Demographic reasons are virtually irrelevant for the emergence of the surplus.
- The focus on export goods facing an above average income elasticity and imports with below average income elasticity, combined with low price elasticity of ex- and imports, boosted global exports and impeded imports.
- This pattern has led to path dependency. It has shaped a specific supply structure that cannot easily be reverted. Pushing domestic demand for boosting imports is necessary for curbing surplus growth but insufficient for rebalancing.
- There is a built-in mechanism for further increase of the surplus. This is a time-bomb for Germany and the EA which deepens the antagonistic divide between domestic-demand-led and export-led economies.

2. Current account performance – brief overview

For readers not familiar with the debates on Germany's current account, the basic facts will be recapitulated. All sub-balances of the current account – the balance of goods, of services and of primary incomes (mainly profits and interest) – have contributed to the rise, with the exception of the transfer balance which remained stable; but the biggest chunk came from the rise of the surplus in goods, mainly manufactured goods (graph 3). Germany has bilateral surpluses against almost all other countries, except China and Russia as the larger ones. The traditional service sector deficit shrank too. The rise of the balance of primary incomes since 2004 is subdued, as the cumulated current account surplus exceeds the growth of net private wealth abroad. At times it is held that Germany invested its net capital exports, the flip side of the current account surplus, poorly.

Graph 3

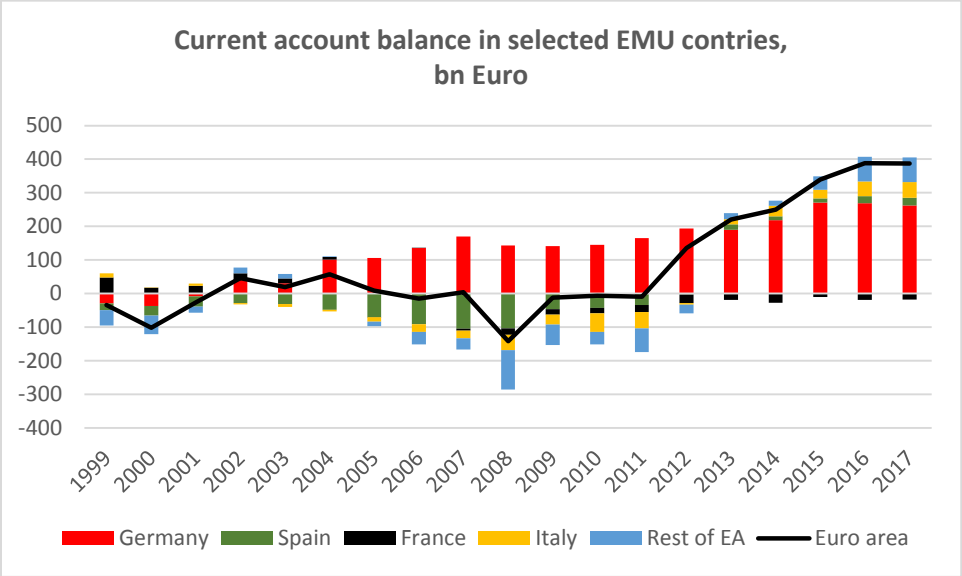


Source: AMECO

The main reason for this paradox is that almost half of the net assets held abroad is Target 2 claims of the Bundesbank against the ECB[2]. This reflects the fact that a large part of the surplus accrued – and still accrues – against other EA members which had to finance their deficits in part by money creation via refinancing with the national central banks, reflected in Target 2 deficits, due to the collapse of the interbank money market 2008/9 and capital flight or other financial outflows to "Northern" EA countries. Spain, Italy, Greece and Portugal were the main deficit partners within EMU (graph 4). The polarisation of the "Net International Investment Position" (NIIP), i.e. gross private and public assets abroad minus liabilities to abroad, rose strongly, showing the unsustainability of ever rising surpluses and deficits within EMU (graph 5). The NIIP is the stock analogue of cumulated flows of current account balances. In 1999 Germany's NIIP was zero, similarly France, Spain and Italy (Priewe 2018, 21).

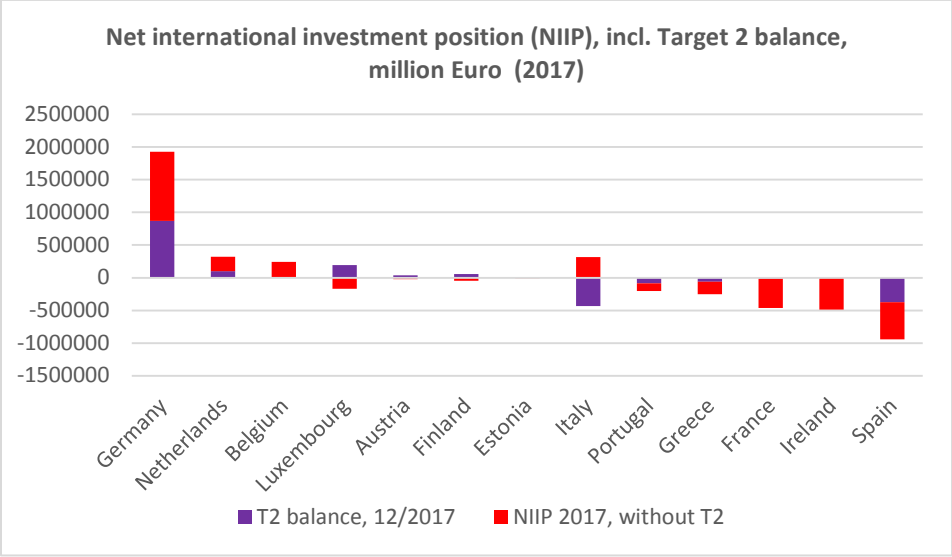
[2] Target 2 balances show claims and liabilities of national central banks (CB) against the ECB. Although national CB are part of the European System of Central Banks (ESCB), they are considered part of the member state, whereas the ECB is seen as an external supranational institution, although it belongs to the member states as shareholders. This implies that de facto fully sovereign national Balances of Payments are abandoned as there is no longer a truly national capital account ("financial account" in the IMF terminology). The ECB is considered as part of the "rest of the world", although it belongs nations. This means that national NIIPs are in a way fictitious as ECB is considered a foreign entity, and national CBs as part of nation states. Of course, claims and liabilities against ECB sum up to zero (if there were no EU members outside the EA participating in Target 2).

Graph 4



Source: AMECO

Graph 5

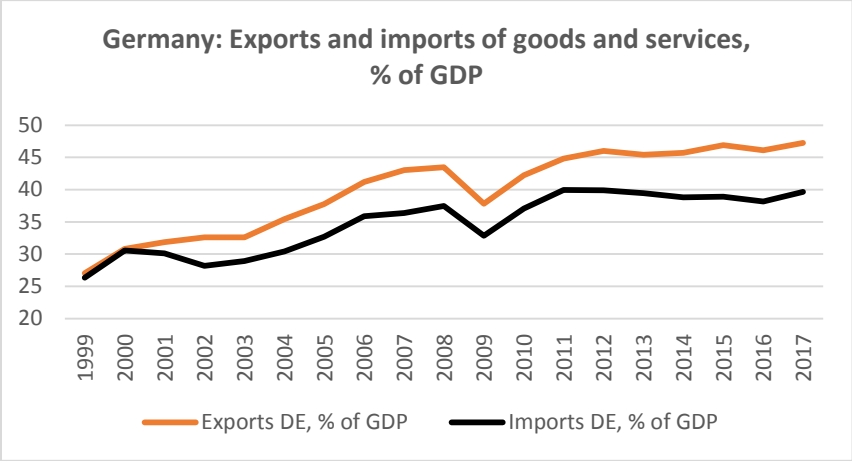


Source: Eurostat

Germany started the Euro era with a small current account deficit which turned positive in 2002 and rose briskly until the financial crisis to 6.8% of GDP (2008). This is amazing since the Euro, starting weak after birth, appreciated massively against most non-Euro countries until 2008, reflecting a strong overvaluation of the Euro. Germany could offset this barrier to exports by surging exports to EMU partners, who received strong capital inflows from Germany and other countries attracted by slightly higher interest rates (Chen et al. 2012). Further, German superior price and non-price competitiveness facilitated the acquisition of more market shares by German companies in Europe. After the financial crisis, when the Euro devalued strongly against the US-Dollar, when most European partners remained in the doldrums and slid in the double-dip recession 2012-2014, Germany earned net exports more and more outside EMU, mainly vis à vis the UK and the US. Yet, according to data from the German Statistical Office, 62% of the trade surplus is made with EU

partners (33% with EMU and ca. 29% other EU) and 38% against non-EU countries (2016, see Destatis 2017a)[3].

Graph 6



Source: AMECO

Graph 6 shows the trend of divergent growth of exports and imports of goods and services over the long haul since 2001, relative to GDP. The dent in 2009 was quickly overcome; then the gap between exports and imports broadened. Exports as a share of GDP rose from 26% of GDP to 46% in the period 1999-2016, imports from 26% to 38% - an extreme internationalisation of the production structure, outstanding in Europe. This reflects a huge wave of outsourcing and off-shoring to Eastern Europe, i.e. low-cost production locations. The import content of exports reached some 39.5% by 2014, according to input-out-analyses of Destatis[4]. So, the export growth could only be achieved with strong growth of imports of commodities and intermediate input goods by establishing international value-chains to a much stronger degree than in Italy, France and Spain. Graph 6 shows clearly that even the same growth of exports and imports would not close the gap between exports and imports but keep the trade balance rising as long as GDP growth underperforms relative to the growth of exports and imports.

The uniqueness of the German trade performance in the Euro era 1999-2017 can be better recognised when compared with former periods in Germany's post-war economic history. West-Germany experiences in the period 1970-1989 a rise of the trade surplus from 2.1% to 4.9%, the then peak after World War II. Yet, nominal exports rose only by 0.3 percentage points faster than imports (goods and services), namely 8.7% p.a. compared to 8.4% p.a., while nominal GDP grew faster than later with 6.5% annually. Export-led growth was prevalent but seemingly more or less under control. After the reunification, exports grew by 5.1% p.a., again somewhat faster than imports (4.5%) in the period 1991-1999, while nominal GDP growth was 3.4%. This led to a reversion of the trade deficit of -0.5% 1991, caused by bulging domestic demand in the first wave of the unification boom, to a mild surplus of 0.7% 1999. Both periods – 1970-1989 and 1991-1999 – were accompanied by strong rebalancing exchange rate fluctuations, absent in the Euro era afterwards (all data from AMECO).

US-President Trump complained about the German and the EU surplus. Facts and figures are as follow, using the database of the US Bureau of Economic Analysis (BEA 2018): Germany runs a bilateral current account surplus with the US of $66.4bn (2017) which is almost identical with the

[3] Eurostat (and AMECO) report for 2016, in contrast to Destatis, only 29.5% share of intra-EU surplus for Germany, hence 60.5% extra EU-surplus, following a different statistical methodology.

[4] Destatis (2018) reports 25.0% imports of intermediate goods for exports and 15.9% of re-exports of imports, as a percentage of exports. The latter include intra-firm imports and exports. The distinction between intermediate goods imports and imports for re-exports may be blurred. See Priewe 2018, p. 14, for details.

bilateral trade balance (BEA 2018). This amount is not more than 11.7% of the overall US trade deficit in this year, but 22% of the German current account surplus (and nearly 24% of the German trade surplus). BEA database reports a mild bilateral current account surplus of the US with the EU and only a tiny deficit with the EA for 2017. Of course, the bilateral view is misleading. In 2017, the total EA current account was 3.5% of GDP, the trade balance (goods and services) even 4.5% - in absolute numbers the EA current account balance is 14% small than the one of the US and the trade balance are identical in absolute numbers. As is well known, in absolute figures the US runs by far the highest deficit in the current account and in trade on the globe, and conversely does the EA as the largest surplus bloc. They represent the two sides of the same coin, in this respect.

There is no doubt that Germany, had it still – or again – a currency of its own, the exchange rate would strongly appreciate in nominal and real terms, and other EA member currencies, would they be resurrected, would depreciate conversely – but nobody can quantify the hypothetical realignments. After 1999, Germany de facto, willingly or unintended, exploited the Euro for the sake of real undervaluation, benefitting export industries and the financial sector, not the entire economy, since overall growth remained slow. If the changes in the income distribution would be accounted for, the median income growth would show likely a very meagre performance.

3. Understanding the causes of the surplus

The current account balance can be viewed in principle from three angles. First, by analysing the determinants of nominal exports and imports relative to nominal GDP, while disregarding for the sake of simplifying the primary and transfer balances (or assuming they sum up to zero). Second, one can look at the identity from National Accounting, which shows that the current account equals national saving minus aggregate investment. Third, according to National Accounting, the current account balance equals the capital account balance vis à vis the rest of the world. Hence one might assume that the capital account impacts the current account, as some analysts contend.

Determinants of exports and imports

The export value in domestic currency depends, simplified, on three variables: the rest of the world's income (Y_w), the propensity of the rest of the world to purchase domestic goods ($ß_w$), the real effective exchange rate (re), while the price elasticity of exports (ε_{px}) and the terms of trade (t) are assumed to be given for the period analysed:

(1) $XV = f(Y_w , ß_w , re)$

The import value (MV) in domestic currency depends on the nominal exchange rate as far as imports have to be paid in foreign currency ($e_{\$€}$), on aggregate domestic demand (Y_D), the propensity to buy foreign goods rather than domestic ones for final domestic demand ($ß_D$), the propensity to purchase imports as intermediate goods for exports ($ß_x$) and on the real effective exchange rate, again assuming that the price elasticity of import goods (ε_{pM}) and the terms of trade are given for the period analysed.

(2) $MV = f(e_{\$€}, Y_D, ß_x , ß_D , re, \varepsilon_{pM})$

Therefore, the trade balance TB depends on the following variables shown in (3):

(3) $TB = f(Y_w , re, e_{\$€}, Y_D, ß_w, ß_x , ß_D)$

Looking at the change of the TB (^TB) from t_0 to t_1 shows the dynamics of the trade balance:

(4) $\hat{}TB = f(y_w / y_D , \varepsilon_{wy}/\pi, \hat{}t, r\hat{e})$

y_w is nominal growth of income of the (rest of the) world, y_D is growth of domestic aggregate income; the world propensity to import is now replaced by the income elasticity of the (rest of the) world to import domestic goods (ε_{wy}), π is the domestic income elasticity to import (either for domestic final demand or for exports), ^t is the change of terms of trade und rê is the change of the

real effective exchange rate (REER). Again, for simplicity we assume that the price elasticity does not change in the period analysed.

Equation (4) shows that explanatory variables boil down to three if we ignore changing terms of trade. An appreciation of the REER tends to reduce the trade balance, if the price elasticities of exports and imports suffice the Marshall-Lerner-criterion (MLC, i.e. the sum of absolute values > 1). With low price elasticities on markets with heterogeneous, highly differentiated goods "elasticity pessimism" is well grounded. If the MLC does not hold even an adverse impact on TB may occur. Yet, this special case is unlikely over long periods - otherwise costs of traded goods could rise infinitely without impact on the trade volume. For Germany, several analyses found price elasticities of exports of around -0.5, and for imports -0.15 (Horn et al. 2017)[5]. It is likely that there are nonlinear effects once thresholds are surpassed[6]. This means that extreme exchange rate changes are necessary to balance trade imbalances, likely with huge effects on the valuation of financial assets and liabilities. Given low price elasticities in case of depreciation, hence only small change in the export volume, profits surge or fall due to exchange rate changes (because costs in local currency are reduced or increased, respectively).

With limited impact of REER changes, changes of the trade balance are generated from a growth differential (between the domestic economy and foreign economies) and from divergence of income elasticities. Countries that specialise on export products with high income elasticity and markets with high growth, and further specialise imports on other goods, will tend to encounter a surging surplus. They may also specialise on imports needed for exports. This is precisely Germany's export success formula, accompanied with mild REER appreciation 2001-2008, apart from fiscal restraint that dampened domestic demand and dampened the GDP deflator.

The term "export competitiveness" is used here as the rise of the share of domestic nominal exports relative to competitors. Other countries would lose export shares by definition. Since imports are others' exports, domestic exports growing faster than domestic imports implies gains in market shares compared to the trade partners. Hence, by definition not all countries can improve "competitiveness" in the sense used here. It is a zero-sum-game.[7] Price competitiveness refers to the real exchange rate and change in terms of trade, while so-called "non-price competitiveness" refers to favourable changes of the income elasticities of the rest of the world via à vis domestic goods, and lower domestic income elasticity for foreign goods. Normally non-price competitiveness is based on innovations in a broad spectrum of variables, including international marketing, but it includes also – as a second element – gains in monopoly or oligopoly power, economies of scale etc. Mercantilist export promotion of governments by direct and indirect support regarding regulations, education and training, infrastructure, insurance and subsidies, trade policies etc. may be added as a third element to non-price competitiveness. In sum, non-price competitiveness (in its various elements) seems to be much more important for the size of current accounts than price competitiveness, at least for Germany.

*Saving minus investmen*t

From National Accounting the following identity is well-known:

(5) $S_p = I_p + G\text{-}T + X\text{-}M$

[5] GCEE 2014 (chart 24, no. 461) explain 2 percentage points of the German surplus by price elasticity. Similarly Naastepad/Storm (2015, appendix).

[6] Adverse price elasticities of exports and imports can, in principle, be offset by pricing to market which is a common pricing strategy in trade. It should also be mentioned that the export and import values, measured in domestic currency, are influenced by exchange rate changes in case of elasticities of zero under the condition of imperfect competition if trade is denominated in foreign currency. Furthermore, even if elasticities were zero profits were strongly influenced by exchange rate changes, hence saving of firms and households to which profits are distributed and therefore the imbalance of S and I.

[7] This does not imply that international trade is a zero-sum game. In principle, trade can be beneficial for all sides, as long as imbalances which qualify as disequilibria are avoided. among other conditions.

Private gross saving (including depreciations) equals private fixed gross investment plus the budget balance (a deficit can be regarded as negative government saving while G includes public investment) and the trade balance. Hence, national saving, i.e. private and government saving – minus fixed investment equals the trade balance or net exports (NX):

(6) $S - I = X – M = NX$

An increase in the trade balance from t_0 to t_1 would show the increase of the current account balance (CA), assuming that the transfer and primary income cancel out. The current account matches net capital exports and the change of net foreign assets (NIIP) if other factors like valuation changes of assets and liabilities are excluded:

(7) $\Delta CA = \Delta S - \Delta I = \Delta NX = \Delta NKX = \Delta NFA = \Delta NIIP$

If S > I, excess domestic saving is saved abroad, by way of "capital export", meaning purchasing foreign financial assets including foreign currency. The focus in the determination of the trade balance leads to reading (6) from left to the right: more national saving of private households, firms or government raises net exports, other variables constant, especially national income or GDP. This interpretation obfuscates the generation of income and output, especially investment, but also disregards the determinants of exports and imports as analysed above. Two often heard interpretations go as follows: (i) mature economies tend to save more, since basic acquisitions of households are to a higher degree satisfied, so that national saving is high, domestic investment low, also because of decreasing marginal returns on investment, so that these countries tend to be surplus countries with net capital exports. Developing and emerging countries would be "natural" deficit countries, spending more than they earn, but capable to pay back foreign debt once growing faster and catching-up with advanced economies. (ii) Aging economies, such as Germany or Japan, tend to save more for the old age, basic acquirements done; once the old-age-share in the population rises, pensioners will spend more and save less, thus contributing to rebalancing their current account or even falling in deficit.

The national saving of the surplus country should be split up in its components. In the extreme, all sectors, households, firms, banks and government, run surpluses which results in an overall super surplus. The mirror image can be seen in the deficit countries.

A better interpretation would be to integrate the view in exports and imports with the saving view. National savings can be broken down in sectoral saving, all with specific saving rates s_1, s_2 and s_3 for household, firms and government. Saving of banks would be net lending or borrowing. Fixed investment depends on a number of variables summarised as Z. Exports X are the imports of the rest of the world M*. M* is determined as shown in (2), now for the rest of EMU, if EMU had a balanced current account against the rest of the world. Hence the trade balance of a specific economy, say Germany, is shown in (8):

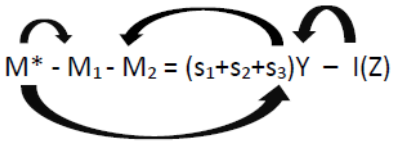
(8) $M^*-M_1-M_2 = (s_1+s_2+s_3)\, Y – I(Z)$

Solving for Y gives (9):

(9) $Y = (I[Z] + M^*-M_1[X]-M_2[DD])/(s_1+s_2+s_3)$

The tentative causal interpretation is shown by the arrows below: M* is considered exogenous, although dependent on all the variables listed in (2). M2, the export induced part of imports, for Germany around 52% (2013) of all imports[8], is pulled by exports alias M*. Y is influenced by exports and domestic demand variables indicated by the three s and by investment which is - for the sake of simplification - made exogenous by summarising its determinants in Z.

[8] Calculated with data from Destatis 2017.



It is clear that all partner countries, assume again all of them are in EMU, must run corresponding deficits, be it their private households, firms, banks or governments. Deficits mean incurring debt, either vis à vis the surplus countries or against ECB. The deficit bloc always has to struggle with external debt, striving for primary surplus in the balance sheets of all sectors. To curb external debt, spending of all sectors must be reduced since they are compelled to austerity. The main creditor are domestic banks which in turn get indebted to the national central bank or to foreign banks. Hence, the deficit bloc of countries in the EMU is in a trilemma: either it runs into a debt trap, or it dampens deficits which dampens growth, or it starts to run surpluses with countries outside the EMU. The first road was taken until 2008, the second until 2014/15, the third with the recovery in 2015 until today.

The third view on the current account shall be mentioned only briefly. One could contend that the current account is driven mainly by the capital account balance, i.e. by saving relative to investment. This view disregards the difference between gross and net capital exports. Most capital outflows, be they bank lending, FDI or portfolio investment, are gross flows and hence pure financial flows without any impact on trade. Gross flows are not the saving in the accounting identity. Net capital outflows – alias national saving S – happen only if they directly or indirectly influence exports or imports, for instance via exchange rate changes or changes of GDP in the recipient countries. Capital outflows can only mutate into net outflows (or inflows) if changes of exports and imports are somehow influenced by gross capital flows. Therefore, the old Böhm-Bawerk view that the capital account commands and the current account obeys is not tenable. Both balances interact with each other in different and often complex ways.

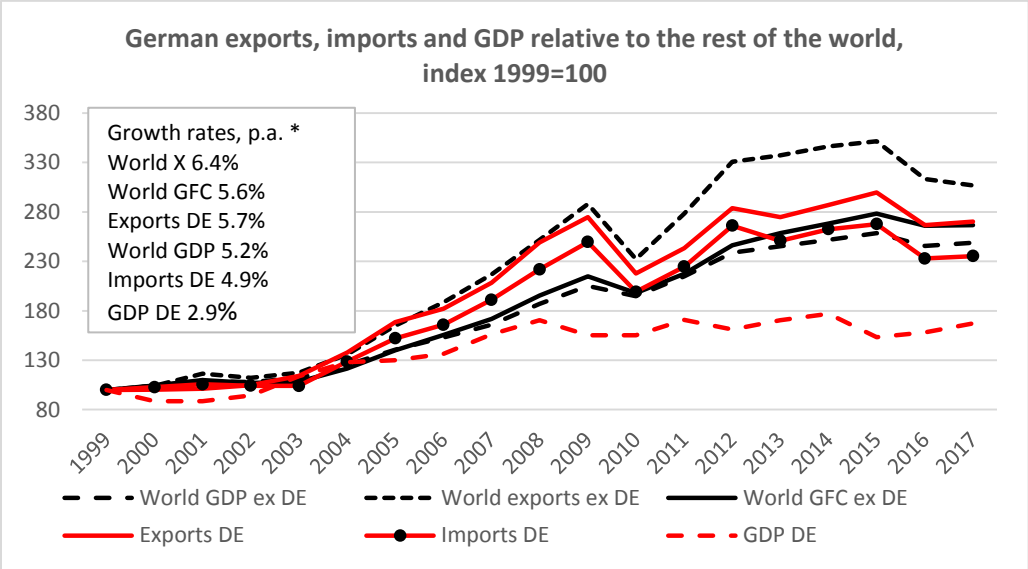
4. The empirical view on trade determinants and saving less investment

The key point is that German exports grow alongside world exports (ex Germany, growing by 6.3% 1999-2017), more precisely alongside growth of world gross capital formation (GFC), to which Germany mainly delivers investment goods. German exports grew in nominal terms by 5.7% p.a. in the period 1999-2017 (graph 7). Import growth in nominal terms was all but one percentage point lower (4.9% p.a.) but grew much stronger than nominal GDP (2.5% p.a.) due to imports for exports[9]. It is not only this wedge but also the low growth of nominal GDP, the denominator for the trade balance relative to GDP. The latter results both from low inflation and low real GDP growth, relative to trade partners. German exports grew considerably faster than world GDP (exGermany), so one can conjecture that the income elasticity of exports is way above 1, which is also true for imports. But we estimate that imports used for domestic final demand grew much slower than aggregate imports. Note that the import content of consumption is only 19.4% (2014) and the import content of domestic fixed investment is 27.5% (Destatis 2017, see Priewe 2018, p. 15)[10], average import content of final domestic demand is 21%.

[9] If the base year for calculating the growth rates is shifted by 1 year forward or backward, the trend growth rates change little.

[10] Unfortunately, there is no longer time series with same methodology available.

Graph 7



Source: World Development Indicators (World Bank). Notes: GFC gross fixed capital formation. * Growth rates for the World without DE, p.a. 1999-2017. Exports and imports include goods and services.

Germany's wedge between growth of exports, imports and GDP is not totally unique as there are a few countries in EMU with similar performance (cp. Table 1). Ireland and Luxembourg faced even higher annual growth of exports, but data for Ireland may be flawed due to changes in statistics in recent years, and Luxembourg as a financial centre may not be representative. That Germany's growth of imports is not extremely low can be explained with high imports for exports, a unique feature in EMU. Portugal and Greece are countries with a spread of 2 percentage points between growth of ex- and imports, much more than Germany, but they started with high trade deficits, suppressed domestic demand and GDP and hence imports to improve the trade balance. Spain had a similar spread as Germany, but much stronger GDP growth. In sum, Germany was unique in the combination of all three variables compared here, and regarding the starting point with only a mild trade deficit. Germany's extreme performance becomes pronounced if compared to Italy and France, the largest neighbours. Their poor exports growth shows how knocked-off they had become. The sharp divide between the core surplus bloc in EMU (Germany, Netherlands, Luxembourg and Ireland) and the rest-EMU, the last lines in Table 1, is reflected in the rising surplus up to 10.3% of GDP compared to 0.8%.

Table 1: Growth rates of nominal exports, imports and GDP 1999-2017 in selected countries

	growth of exports p.a.	growth of imports p.a.	difference of growth of X and M	growth of GDP p.a.	trade balance, % of GDP, 1999	trade balance, % of GDP, 2017
Euro area	5.3	5.0	0.33	2.9	1.3	4.5
Germany	5.8	4.9	0.87	2.6	0.7	7.6
Ireland*	8.6	7.7	0.88	6.7	13.1	32.1
Greece	4.7	2.7	1.99	1.3	-8.5	-1.0
Spain	5.3	4.4	0.88	3.8	-1.9	2.6
France	3.6	4.6	-1.0	2.7	2.2	-2.5
Italy	3.8	3.7	0.1	2.1	1.8	3
Luxembourg	8.9	9.0	-0.1	5.6	22.4	36
Netherlands	5.3	5.0	0.3	3.2	5.3	11.6
Austria	5.2	4.9	0.3	3.4	0.5	3.3
Portugal	5.5	3.5	2.05	2.7	-10.3	1.0

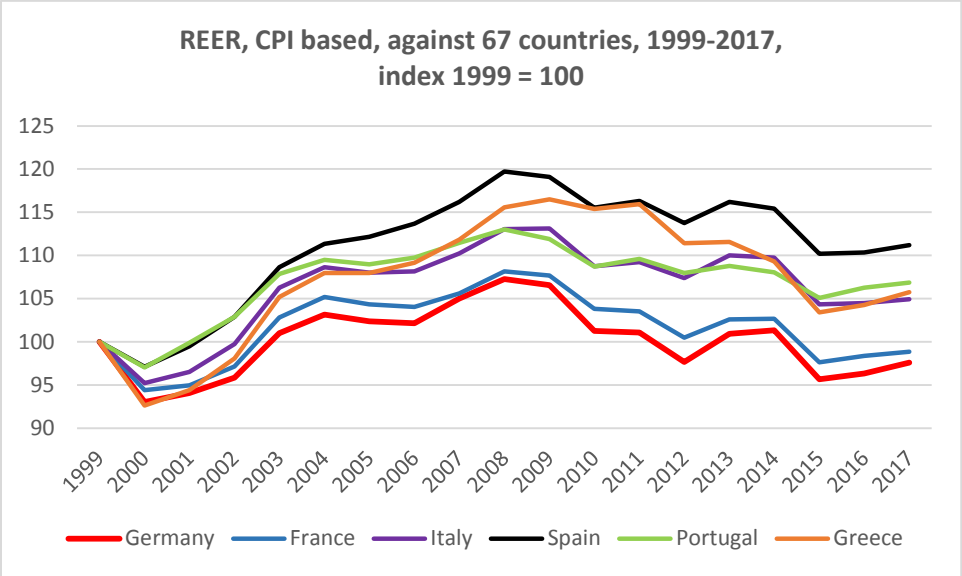
EA w/o DE, IRE, LUX, NL	4.6	4.6	-0.04	2.9	0.8	0.8
DE, IRL, LUX, NL	6.1	5.4	0.7	2.9	2.1	10.3

Source: AMECO. *Data for Ireland are dubious due to changes in official data.

We have not estimated income elasticities by controlling for exchange rate changes. Yet we can see that REER fluctuated strongly but the trend 1999-2016 is almost flat so that appreciation until 2008 and depreciation thereafter offset each other. However, the relative REER compared to other countries is more important. Many other EMU members appreciated considerably relative to Germany, and the gap could not be reduced much after 2009 due to a strong co-movement. France performed very close to Germany, in contrast to the other large EMU economies. So, Germany had a comparative advantage against EMU partners regarding price competitiveness most of the time since 1999.

REER, unit labour costs and export prices show different degrees of competitiveness, as the indicators deviate considerably. We prefer the REER, since low-price imports of intermediate goods feed into the REER, not into ULC. Measuring REER with consumer prices underestimates price competitiveness, at least in the case of Germany. Export prices tend to range below consumer prices. Nevertheless, the price competitiveness of German exports and competitiveness of domestic production against imports are much less important than non-price competitiveness. Moreover, the combination of price- and non-price competitiveness make exports highly profitable, not despite but because of low price elasticity, frequently seen in monopolistic and oligopolistic markets.

Graph 8



Source: Bruegel 2017. CPI: consumer price inflation index

Regarding saving and investment, national saving relative to GDP grew 1999-2016 by 12.6 percentage points, of which 10 points came from corporate undistributed profits and a bit more than 2 points from government surplus; weak residential and corporate investment contributed 2.6 points to the gap between S and I in this period (for details see Priewe 2018, p. 50). It was mainly increased corporate saving abroad, predominately purchases of short-term financial assets, bank lending short-term and some FDI. Household saving did not increase relative to GDP but fluctuated a bit up and down. There is no sound evidence for increased private saving due to demographic change. Some hold that dropping house investment was partly caused by the fact that the average household age increased (GCEE 2014), but there may be other causes.

Finally, it is important mentioning that financing current account deficits in EMU and other deficit countries was, of course, a precondition for growing imbalances, first, until 2009, within EMU and

EU, later against non-EMU countries, especially the UK and the US. Within EMU, channelling finance to deficit countries was mainly facilitated via the interbank money market. The financial flows did not always move directly from surplus to deficit countries. Banks from France and Germany were heavily involved in lending to Greece, and German financial investors had been more interested in US asset markets than in Mediterranean countries (Chen et al. 2012).

After 2010, when the Greek crisis broke out, refinancing options via the national CB enabled crisis countries to provide sufficient liquidity, apart from "rescue programmes". ELA and ANFA[11] allowed National Central Banks to create money and credit. ECB lowered lending constraints by softening the collateral conditions for monetary policy. Mario Draghi's "Whatever it takes"- announcement and the belated start of Quantitative Easing in 2015 had prevented a crash of the Euro and eventually overcome the recession 2012-2014, together with less strict interpretation of fiscal policy rules by the EC. It was not the Target 2 payment system that created credit in a quasi-clandestine and exploitative manner, as held by Sinn (2012); Target 2 is not a credit generating mechanism but only a booking system. The claims and liabilities of national central banks do not reflect genuine creditor-debtor relations between nations.

All this helped crisis countries to stay afloat, replace missing deposits due to sudden capital outflows or outright capital flight to safe havens. Without the refinancing opportunities in common currency and respective monetary policies, the surpluses of Germany et al. would have dropped massively and the Euro would likely not have survived.

Despite strong real devaluations in crisis countries with falling unit labour costs and compression of domestic demand, the spread of real exchange rates vis à vis Germany was to a considerable extent maintained (see Graph 8). Even though current account deficits are overcome since 2013/2014 in the crisis countries, the spread of current account balances between Germany and the former deficit bloc is around +/-8 percentage points. Except France, almost all EMU countries mimic Germany and run surpluses with countries outside EMU and thus free-ride on demand dynamics in the world economy. In the catching-up recovery since 2015, GDP growth recovered, investment grew, but national saving grew much faster in EMU.

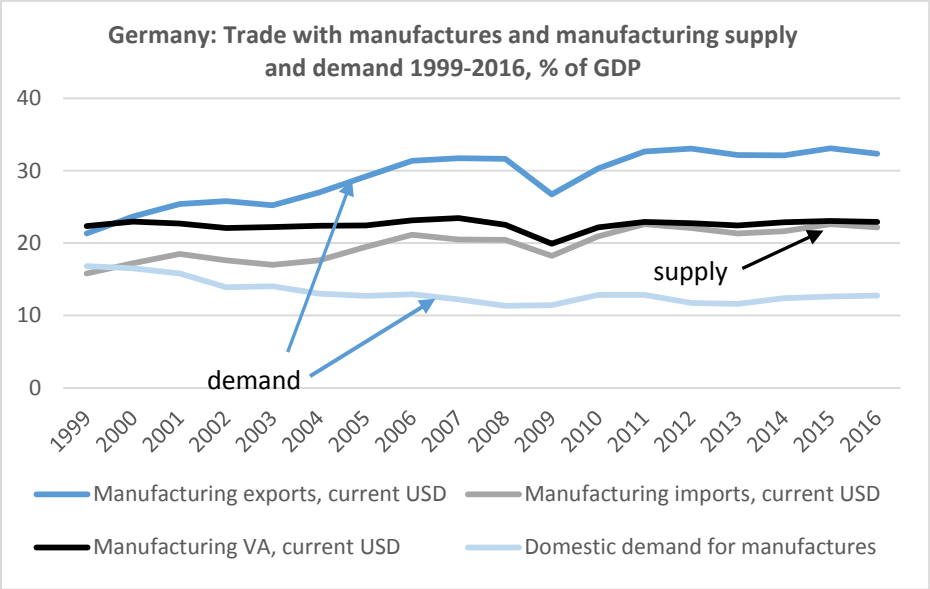
5. Boosting manufacturing in Germany

The main sectoral base for German tradables is manufacturing, accounting for 70% of all exports. Germany is – together with Korea – the only OECD country that resisted deindustrialisation despite a trend toward the service economy and knowledge society. Nurturing manufacturing and export competitiveness is the business model of the country, quasi the "Raison d'Etat".

Germany exports manufactures at a size 2.5 times as large as what is needed for domestic final demand. Manufactures of a magnitude of 32% of GDP are exported (2016, see Graph 9), only 13% of GDP are needed for final domestic consumption and investment. Manufactures of around 23% of GDP is homegrown value added, and the same amount is imported as (mainly) intermediate goods. The rise in exports came mainly from the rise of imported manufactured input goods, while the share of manufacturing value added in GDP was maintained at 23% with some fluctuations. This pattern is unique in Europe. Note that much of this manufacturing is medium technology whereas Germany is still a laggard in so-called high technology, especially in ICT and related services. With its "Industry 4.0" initiative the German government intends to promote transiting into the high technology frontier.

[11] "Emergency Liquidity Assistance" and ECB's „Agreement on Net Financial Assets" with national central banks.

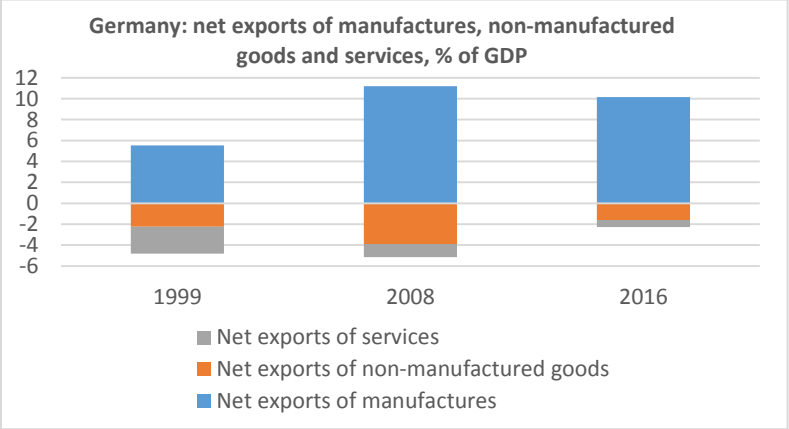
Graph 9



Source: World Development Indicators (World Bank), own calculations. VA is value added.

Graph 10 shows that Germany shrank the service trade deficit strongly since 1999, and also the deficit in non-manufactured goods (energy, other commodities, agriculture) via import substitution. Since 2008, the manufacturing surplus of 11% of GDP melted slightly to 10% in the year 2016 but it is almost twice as high as 1999. Other EMU countries have a quite different mix of exports, more tilted to services (Spain) or non-manufactured exports (France).

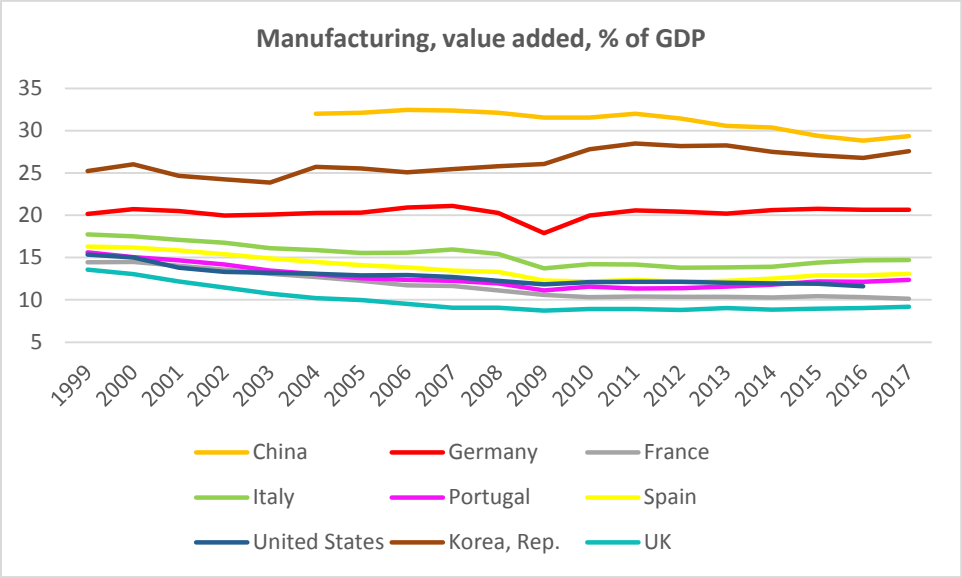
Graph 10



Source: World Development Indicators (World Bank), own calculations.

Germany's share in manufacturing was more or less defended against the US, China and Korea, as the main competitors, whereas the larger EMU neighbours (France, Italy, Spain) fell back (graph 11). As long as manufacturing is seen as engine and epicentre for technical progress, supported by related services, the technology divide in EMU is deepened. France's share shrank to half of Germany's (2016), reaching the same level as in deindustrialised US, while Spain and Portugal improved slightly after the financial crisis, coming from a very low level.

Graph 11



Source: World Development Indicators (World Bank), own calculations. Note: WDI uses here a slightly different definition of manufacturing compared to graph 9.

Germany's manufacturing value added per capita differs sharply from other EMU members (Table 2) and improved in the Euro era until 2017 while other EMU members fell back. 48% of the increase in manufacturing value added in EMU 1999-2017 (in constant prices) came from Germany.

Table 2: Manufacturing (value added) in selected EMU countries

Manufacturing value added per capita, constant prices 2005				Share of manufacturing in EA		
	1999	2017	change 1999-2017, %	1999	2017	change 1999-2017, %
Germany	5026	7215	43.5	34.9	38.1	9.2
France	3164	3455	9.2	16.2	14.9	-8.0
Italy	3944	3694	-6.3	19.0	14.3	-24.7
Spain	2831	2870	1.4	9.7	8.5	-12.4
Portugal	1922	2034	5.8	1.7	1.3	-23.5
Greece	1332	1263	-5.2	1.2	0.9	-25.0
Ireland*	6339	16028	152.8	2.0	4.9	145
Netherlands	3753	4515	20.3	5.0	4.9	-2.0
Euro Area	3688	4590	24.5	100	100	

Source: eurostat, own calculations. *Data for Ireland may be flawed due to changes of statistical methodology.

Of course, the rise of Germany and the demise of the rest of EMU has many causes, not only rooted in Germany. Obviously, France, Italy and Spain neglected what Germany had pushed and promoted with stubborn perseverance. Without doubt, the most incisive change is the loss of the nominal exchange rate adjustment and the difficulty and risk to respond with wage and price deflation. It was clear from the very beginning of the single European market, that competition in a unified market with a single currency increases competition and generates winners and losers[12]. Industrial policy was ousted from a neo-liberal policy agenda but deliberately promoted under different labels in Germany.

[12] Some observes hold that Germany and the EMU neighbours do not really compete on the same markets because of the sectoral and intra-sectoral specialisation. This may be true to some extent, but is rather the result of continuous deindustrialisation in most other EMU countries, especially in France and Italy, pushed by the more successful competitors inside and outside the EMU.

Once countries start to change their production structure, including the structure of the fixed capital stock, also the stock of human capital, hysteresis is likely to occur: reversion is difficult, short-term effects linger on and become long-term structural constraints. Path dependency emerges as a consequence: the winners improve further, backed by profits and learning effects, reinforced by positive external effects, and the losers likewise as a mirror image, with increasing hurdles for catching up.

Yet, one has to bear in mind that a mercantilist road of development is not necessarily beneficial for the economy as a whole. As long as countries can avoid continuous current account deficits, they may serve domestic demand expansion. This requires, by and large, that a minimum of an export base is given and maintained. We noted that Germany needs for its own domestic demand not more than around 13% of manufacturing, while producing domestically 23%. What looks for a country like Germany like "export-led growth" is a deception: in the long-run, the current account surplus cannot rise for ever; the country's growth since 2009 is mainly domestic-demand led. "Only" 25% of jobs are directly or indirectly dependent on exports, and 70% of GDP growth 1999-2017 depended on domestic final demand (Destatis 2017, calculated in constant prices). GDP growth (in constant prices) was 1.35% p.a. 1999-2017, of which 0.4 ppts was due to the increased trade surplus – growth of domestic demand was only 0.9% p.a.[13] Unemployment was to some extent exported and domestic demand of neighbours exploited, but Germany exploited itself by depressing domestic demand and employment.

Germany's production structure is neither clearly superior to countries with a more or less balanced current account, nor is it a general model for others. Even worse, it is a risk, even a time-bomb for the others, as it is not a sustainable road for itself and for its trade partners since the surplus tends to rise. This will be shown in the next section.

6. Projections - Germany's surplus tends to rise

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 and the transfer balance and focus only on the trade balance.

As shown in Table 3, the past trends of trade and output would lead to a trade surplus of 15% in 2026. Variations in the nominal growth rate (3 and 4% p.a.) have not so much impact on the trade balance. Besides, reaching higher real growth, say 2.0% p.a., might be elusive since a reduction of the trade balance reduces growth of output which would have to be more than compensated by domestic drivers for growth. Hence, assuming 3.0% nominal growth (with target inflation of 2.0%) in a scenario with shrinking surplus might even be optimistic.

If imports would rise with the same rate as exports, the trade balance would reach 9-10 % of GDP (#4 and #6). Only if imports rise faster than exports, a reduction of the current account can be achieved (#5, #7, #8). Reaching a current account surplus of 2% of GDP requires a 1.5 percentage points wedge of higher imports than exports, over ten years. Running trend exports growth with one percentage higher imports growth is highly unrealistic (#5), so that a reduction in the growth of exports seems unavoidable. The ambitious trajectories #7 and #8 can likely only be achieved if considerable real appreciation and an increase of the import content of exports and domestic final demand materialise.

[13] In the sub-period 1999-2008, real growth was 1.5% p.a., of which 0.7% growth p.a. was caused by domestic demand. In the second sub-period 2008-2017, growth was only 1.2% p.a., but domestic demand grew by 1.1% p.a. (calculated with AMECO-data in constant prices).

Table 3

Germany: Eight projections for the trade balance (goods and services) 2016-2026					
Numbers pertain to current prices (Euro)	Exports	Imports	Trade balance	GDP	Trade balance
2016	1441.7 bn	1202.6 bn	239.1 bn	3132.7 bn	7.6% of GDP
1999-2016, growth trends, % p.a.	5.74%	4.78%		2.48%	
	Growth rate p.a., %				% of GDP
2026, trend, 1.	5.74	4.78	601.0 bn	2.48	15.0
2026, 2.	5.74	4.78	601.0 bn	3.0	14.3
2026, 3.	5.74	4.78	601.0 bn	4.0	13.0
2026, 4.	5.74	5.74	417.8 bn	3.0	9..9
2026, 5.	5.74	6.74	210.4 bn	3.0	5.0
2026, 6.	5.0	5.0	389.5 bn	3.0	9.25
2026, 7.	5.0	6.0	194.7 bn	3.0	4.6
2026 8.	4.5	6.0	85.2 bn	3.0	2.0

AMECO, own calculations

The explosive growth of the trade balance in the trend projection has – among other factors – to do with the base effect. Once exports are initially much higher than imports (+20% 2016!), even the same growth rates of exports and imports let the trade balance increase. Since German exports are correlated with global growth, which has grown boisterously in the past, the assumption of exponential growth is as justified as the assumption for the much slower GDP growth trend for Germany, the key driver for its imports for domestic final usage.

The unfavourable base effect of 2016 with the high trade imbalance constitutes an accelerating and hazardous factor. Another factor for the low impact of higher growth on the trade balance is the low import content of domestic final demand (21% in 2014, as mentioned above).

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 stable current account equilibrium, neither country-specific nor generic, then there is a multitude of short-term equilibria, some of which may be advantageous, others less, some disastrous. Policy rules have to chip in. This is also the logic of IMF's "External Balance Assessment" (EBA, see IMF 2017) which calls for multilateral action.

Yet, our proposition is that there is a built-in path dependency which is not easy change. The supply-side structure of the German economy, its stock of fixed and human capital and its institutional underpinning, is shaped for exports rather than imports.

Potential stabilising mechanisms

Aren't there any self-stabilising or rectifying factors at work? Candidates are real effective exchange rate changes, less growth in importing countries due to Balance-of-Payments constrained growth or other impediments, higher imports from countries delivering intermediate goods for German exports, more imports due to rapid aging in Germany, supply constraints in Germany due to labour shortage, 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. We review only a few factors here.

- *Higher GDP growth*: Germany might return to stronger dynamics of domestic demand pushed by rising wages, due to selective labour supply bottlenecks, which however can be overcome by

reducing unemployment, increasing the participation rate of the labour force, especially by transforming involuntary part-time into full-time work and by immigration. This would be limited to the medium term (labour supply cannot be raised infinitely) and might induce rising labour productivity. However, reducing the trade surplus dampens growth. Whether Imports would rise is ambiguous.

- *Labour shortage* in Germany and higher wages: This functions like a real appreciation with likely small effects on the trade balance, in face of low price elasticity of ex- and imports. A change in income distribution might strengthen consumption and related imports and weaken saving of firms (profits).
- *Expansionary fiscal policy in Germany:* Expansionary fiscal policy is necessary to compensate the contractionary effect of reducing the external surplus. Increasing the growth trend would require a strong dose of fiscal policy. This could raise domestic demand and pull more imports, if accompanied by slightly rising prices it would add a bit of real appreciation. Active fiscal policy would require a procyclical stance in good times so that the current account is directly targeted, in addition to a stronger countercyclical stance in recessions.
- *Euro appreciation:* The Euro might rise against the US-dollar and other currencies. This would impede growth in other EMU countries and also somewhat in Germany, which dampens the growth of German imports from other EMU countries and strengthens imports from outside. Which effect predominates is ambiguous.
- *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 will likely materialise not before the 2020s when big cohorts of elderly, the post-war baby-boomers, retire.
- *Price increase of imports for exports*: should wages and other costs increase in low-cost countries where input goods are produced within international value chains for German exports, the value of imports might rise. This depends very much on growth and labour market conditions in Eastern Europe.

It seems that reducing an entrenched surplus is quite difficult and requires drastic measures. There is scant experience from other countries and from history: China changed course in 2009 in a dramatic sudden turn to a massive dose of expansionary fiscal policy and appreciation of the currency; Germany appreciated in the early 1990s in the course of its reunification the Deutsche Mark and pushed domestic demand (but reversed the appreciation 1995-1999). In the 1970s, after the end of Bretton Woods, Germany appreciated in real terms with higher inflation. Switzerland stopped pegging the Swiss Franc to the Euro, appreciated after the financial crisis heavily but the current account surplus changed not very much.

The IMF (2017a, b) endorses the view that current account surplus countries tend to have continuous surplus with little change unless policy intervention takes place. Increasing a surplus seems easier than reducing it, since the production structure needs to change. Nevertheless, higher nominal and real growth with higher wage increases coupled with expansionary fiscal policy, even when procyclical, can be done with some probability of success, especially if combined with real appreciation. This is more difficult within a monetary union than for a country with its own currency.

7. Policies

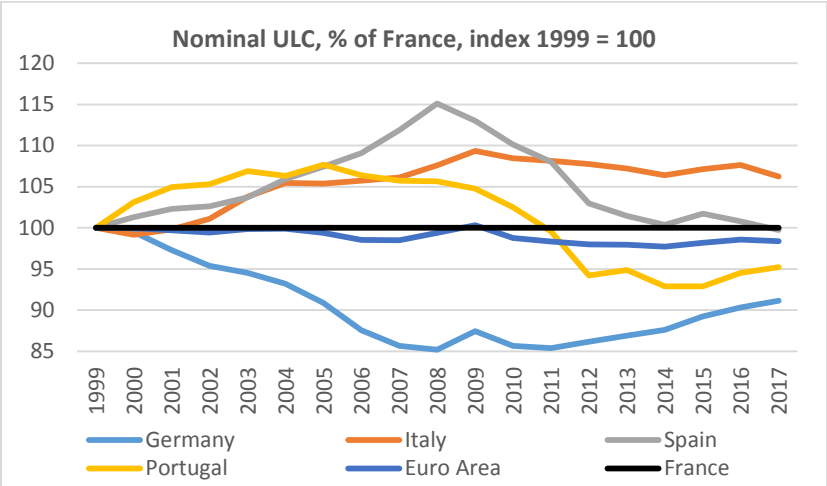
The principal issue is which current account surplus or deficit should be considered sensible or economically justified. Here we cannot resume the vast literature (cp. Priewe 2018). The European Commission has set arbitrary limitations in its “Macroeconomic Imbalance Procedure” with -4% and +6% of GDP. Insiders know that the asymmetry came from German political pressures. As an alarm

line, -35% of the NIIP was set, no upper alarm line mentioned. External imbalances with the rest of the world are not addressed in the MIP framework.

The IMF has developed a complex regression-based framework "External Balance Assessment" (EBA) (IMF 2017). For Germany they found an average 4.5% surplus justifiable, based on considerations of intertemporal optimal allocation (2017b), strongly anchored in demographic reasoning based on international cross-country panel analyses. In another publication (IMF 2017a) the excessive part of the German surplus ranges between 2-6%, on average 4.5%, considered as the 3rd highest among all surplus countries. The Peterson Institute for International Economics (PIIE) sees a range of -3% to +3% for all countries (and EMU as a bloc without differentiating members) as sustainable or tolerable, where debt sustainability considerations and global coherence play a pivotal role (Clyde 2017).

Based on the identification of the "current account gap" the IMF authors estimate a REER-undervaluation for Germany in the range of 10-20% (IMF 2017b). Looking at the REER-undervaluation of Germany relative to other EMU members, we find under-valuation of Germany against Spain of 15% ppts, against Italy of 9 ppts and only 2 ppts against France (see graph 8 for 2016). A view on unit labour costs gaps, here with France as benchmark (where nominal wages performed almost in line with the "golden rule" of productivity increase and ECB's target inflation), Germany is in 2017 undervalued by 9 ppts, Italy overvalued by 6 ppts, hence by 15 ppts vis à vis Germany, other countries range in between (see graph 12). Also, the GCEE (2014) holds that Germany would face a severe appreciation if it had a currency of its own. Going a step further, they would have to admit that the under-valued REER requires realignment and that Germany's performance is based on grave misalignment. Calling for "laisser faire" regarding the current account despite misalignmen of REER would be a contradictory reasoning.

Graph 12



Source: AMECO

As a first approach to excessive surpluses, one should look at sustainability of external deficits and also at the stock of external debt, on potential adjustment mechanisms, furthermore, on the maturity of external debt and on the concrete usage of external deficits and at their specific risks. The bigger the net external debt (NIIP), the more it is tilted to short-term liabilities, be it private or public, the more it is not linked to fixed investment for production of tradables, and the more deficits reflect hollowing-out of the export base of an economy, the less beneficial for a country. A general alarm line of -3 or 4% of GDP may be appropriate, but for a preventive approach still too high. This implies that surpluses should be small, in particular those which go alongside low domestic growth.

Applying such an approach to EMU as a whole means that EMU should not have a surplus, let alone if it is short-term. The reason is that even a small persistent surplus of EMU is large in absolute terms and can be a burden for many other countries. If this rationale were accepted by and large, it implies

that internal imbalances within EMU must be kept small as well, especially in the absence of nominal exchange rate adjustments and existence of moral hazard for current account indiscipline, be it for running large surpluses or deficits.

Let us assume now that EMU intends to continue its former course of a balanced current account for the entire EMU as a target, with some flexible over- and undershooting allowed. The hard-core surplus group over the whole period since 1999 embraces Germany, Netherlands, Ireland and Luxembourg, together with a current account surplus in 2017 of €375bn or 8.6% of GDP of which Germany contributed €263bn or 70%. Now we assume that this surplus of the four remains, but the corresponding deficit has to be borne by the other 15 EMU members. In 2017, they would have – as a group – a deficit of -5.5% of GDP, much below the red line in the Excessive Imbalances Procedure of -4%. If the surplus of the four countries were 6.0%, it would amount to -3.8% of the remaining 15 countries. If Germany's surplus alone would be shouldered as a deficit of the remaining 18 countries, the burden would be -3.3% of their combined GDP, supplemented by the surpluses of Netherlands and the others (calculation based on AMECO database). A further rise of the surplus according to the status quo projections above would push the group of 15 in untenable deficit.

The least problems for the 19 EMU members occur to them if the EMU continues to run a high but dispersed surplus against the rest of the world. But this is unlikely to be tolerated by the main deficit countries and the IMF, and it would severely disturb the world economy. It should also be kept in mind that the turn to surplus in most EMU member economies that used to be deficit countries depends to some extent on suppressed domestic demand. As soon as this normalises, the present surpluses of Italy, Spain and Portugal will likely shrink and slide again into negative territory. Further, a strong appreciation of the Euro against the US-Dollar would push the former deficit countries back into deficits and dampens growth in EMU, unless countered by fiscal or monetary policy.

Of course, our assumption that all 15 members of EMU carry the deficits generated by the surplus group of four is not realistic. The deficits of some may be higher, of others lower. Anyway, their NIIP would be aggravated further, clearly trespassing the alarm margin of -35% as stipulated in the scoreboard of the MIP. Such a scenario of continuous imbalances within EMU or external EMU imbalance against the rest of the world is a risky macroeconomic disequilibrium. External debt, no matter whether private or public, would become unsustainable and possibly subject to speculation by financial investors; increasing external debt might seduce deficit countries to increase domestic demand by further borrowing and over-leveraging, potentially undermining their financial stability.

The GCEE (2014) had argued that a special policy rule for surplus countries in EMU is unnecessary. They reason that the main problem is only excessive public deficits which are addressed already by the Growth and Stability Pact (SGP) and the Fiscal Compact of the EU. Potential problems with excessive private debt, excessive financial inflows and subsequent sudden stops should be addressed in the framework of the new Banking Union. Further problems are addressed under the rubric "structural reforms". This view neglects that many problems leading to high public deficits and high private borrowing in deficit countries emanate, at least partly, from current account imbalances. This way, the GCEE puts the cart before the horse. They argue implicitly or explicitly that trade imbalances have to be addressed by structural reforms, aka structural adjustment, essentially by reduction of unit labour costs in deficit countries via flexible labour markets, hence by internal devaluation or wage deflation. Thus, the missing policy rule for surplus countries is replaced by a policy rule for the deficit countries. This would cause the well-known deflation problems, assuming that prices for goods are not sticky in the medium term. The IMF has criticised this line of reasoning forcefully (2017a, p. 27), comparing it to the deflationary risks of the world economy in the 1920s. Arguing that short-term pain is unavoidable, but long-term gains loom, disregards that short-term problems tend to become chronic, due to hysteresis.

Others argue that a reduction of the surplus has only small effects on the deficit countries so that it can be considered unnecessary – much ado about nothing. Assume that the four notorious surplus countries reduce their surplus of €375bn (2017) by one percentage point, i.e. €37.5bn which is 0.9%

of their combined GDP, say by importing more from the other 15 EMU members. This would be not more than 0.5% of the combined GDP of these 15 members. With a multiplier, say of average 1.5, it would however be a noticeable impulse for these countries. But this calculation might be a naïve fallacy. First, a reduction of the surplus would have to be implemented by higher growth of the surplus group via fiscal stimulus or by stimulating wage increases, requiring additional supply capacities when excluding inflationary effects. Second, the proclivity to import is low, at least in Germany where the import content of consumption is extremely low and a considerable share of imports is delivered from outside EMU. Third, the 15 deficit countries need to have sufficient supply capacities, both quantitatively and qualitatively. All these caveats dwarf the expansionary effects for the 15 deficit countries.

Indeed, econometric simulations show that the effects of surplus-reduction on deficit countries are limited (Hein/Truger 2017, Picek/Schröder 2017, Horn et al. 2017). In bouts of negative output gaps in both country groups the effects are stronger than under full-capacity growth. This points up that mere demand management does not suffice. The output structure in both country groups must change, especially toward better non-price competitiveness in deficit countries which requires industrial and innovation policies. They need time and public funding. A complementary rebalancing of real exchange rates is indispensable, better by real appreciation of the surplus bloc rather than real depreciation of the deficit bloc to avoid deflationary risks. Realignment of real exchange rates will likely have more effects via the demand channel than on the costs/price channel due to low elasticities. Internal appreciation reduces profits and hence saving of firms, therefore lowers the S-I imbalance, conversely real depreciation.

Reduced surpluses and reduced deficits give the deficit countries more fiscal space, more leeway for productivity-led wage increases with increased domestic demand and less pressure on borrowing. These indirect effects are more important than direct demand effects and crucial for higher growth and employment (Picek/Schmidt 2017).

The combination of expansionary fiscal policy and wage performance above the “golden rule”, supported by appropriate labour market regulation and wage policy in the civil service, is the main policy package for the surplus countries. Reduced VAT, compensated by fiscal deficit, as proposed by Weizsäcker 2016, can be part of the package. This implies procyclical fiscal policy in strong phases of the economic cycle, departing from the triple-surplus doom loop (surplus of households, forms and government). “Black zero” policy fur public budgets fires the external surplus policy. More targeted measures would exert a special tax or fee on exports in surplus countries or impose tradable permits for imports in deficit countries, as proposed by Stiglitz (2016)[14]. Such regulations are not in line with the single market for goods and service, but these markets are distorted anyway due to severe REER misalignment. Another route for “rebalancing”, though without changing the current accounts, would be turning to a full fiscal union based on fiscal redistribution amongst members, based on fiscal transfers as in normal nation states. However, the resistance against such changes is likely so strong that a break-up of the currency union would be preferred.

If such administrative reforms shall be avoided, clear rules for imbalances for the EMU are necessary, meaning a reform of the “Macroeconomic Imbalance Procedure” must be set on the policy agenda. Part of such a reform would be a symmetric -4/+4% alarm line with clearer operational definition what excessiveness means, linked to incentives and sanctions that bite. Incentives should be granted to deficit countries to improve non-price competitiveness with industrial and innovation policy; sanctions are needed for notorious surplus countries striving for prerogatives and exploitation of moral hazard, be it strategic undervaluation via wages and other costs, be it via tax competition, mercantilist practices and other special regulations. Prevention of external imbalances of the EMU as a whole should be part of the rules. Most importantly, awareness of the problems and a sense of

[14] Governments of deficit countries would issue trade permits for imports, close to the value of exports. The market for such permits (“chits”) simulates an equilibrium exchange rate. Stiglitz borrowed the idea from Warren Buffet.

macroeconomic responsibility are key. The statement of the German government cited above is telling.

Behind the smoke screen of media perception, Germany has a huge structural reform agenda which is massively underestimated or even unaddressed in political, academic and media discourses. The production capacities are designed on the assumption of trade surplus. A shift from foreign to domestic demand is necessary but insufficient. Avoiding a severe adjustment crisis by throttling exports requires strong growth of production capacities for non-tradables and a period of domestic-demand led growth with real internal appreciation via wage increases. From this angle, Germany's rise from the sick man of Europe to a super hero (Dustmann et al. 2014) is a fatal deception. Ever growing surplus is a time bomb. A peaceful coexistence between domestic-demand led EMU-members and those de facto maximising their surplus is not possible.

References

AMECO (2018), European Commission, AMECO Database. http://ec.europa.eu/economy_finance/ameco/user/serie/SelectSerie.cfm

BEA (2018): U.S. Bureau of Economic Analysis. https://www.bea.gov/

Chen et al. 2012, Chen, R., Milesi-Ferretti, G.M., Tressel, Th., 2012, External Imbalances in the Euro Area. IMF Working Paper, WP/12/236, Washington D.C.

Cline, W.R., 2017, Estimates of Fundamental Equilibrium Exchange Rates, November 2017. Peterson Institute for International Economics, Policy Brief PB 17-31. Washington D.C.

Destatis, 2017, Globalisierungsindikatoren. https://www.destatis.de/DE/ZahlenFakten/Indikatoren/Globalisierungsindikatoren/Tabellen/16VGR_17_18_19.html

Destatis, 2017a, Deutscher Außenhandel. Exporte und Importe im Zeichen der Globalisierung. Ausgabe 2017. Wiesbaden.

Destatis, 2018, Exporte, exportinduzierte Bruttowertschöpfung und exportinduzierte importierte Vorleistungen 2010 bis 2013. Data sent to author on 23 January, 2018.

Deutscher Bundestag, 2017, BT-Drucksache 18/12197, 02.05.2017.

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

EC (European Commission), 2016, Macroeconomic Imbalance Procedure: Rationale, Process, Implication. A Compendium. Institutional Paper 039. Brussels.

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

Eurostat (2018): European Commission, eurostat database. http://ec.europa.eu/eurostat/data/database

GCEE, 2014, German Council of Economic Experts: Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung, Jahresgutachten 2014/15. Mehr Vertrauen in Marktprozesse. Wiesbaden.

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., Lindner, F., Stephan, S., Zwiener, R., 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

IMF, 2017a, External Sector Report. IMF Policy Paper. Washington D.C.

IMF, 2017b, Germany. Staff Report for the 2017 Article IV Consultation. June 13. Washington D.C.

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.

Picek, O., Schröder, E., 2017, Euro Area Imbalances: How Much Could an Expansion in the North Help the South? IMK Working Paper No. 180. Düsseldorf.

Priewe, J., 2018, A Time Bomb for the Euro? Understanding Germany's Current Account Surplus. IMK Study 59, Düsseldorf.

Sinn, H.-W. (2012): Die Target-Falle. 3rd edition. Hanser Verlag, München

Stiglitz, J.E., 2016, The Euro. How a Common Currency Threatens the Future of Europe. Norton & Co., New York-London.

Von Weizsäcker, C.Ch., 2016, Europas Mitte. Mit einer Leistungsbilanzbremse könnte Deutschland für neuen Zusammenhalt unter den Partnern sorgen. Perspektiven der Wirtschaftspolitik, 17(4), 1-10.

WDI (2018): World Bank, World Development Indicators. http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators

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