



## What Should Surplus Germany Do?

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Since the beginning of the economic and financial crisis in Europe in 2010, Germany has come under fire for running a large current account surplus that critics say has impeded economic growth in the euro area periphery, especially Greece, Spain, Italy, and even France. The European Commission's most recent *Alert Mechanism Reports* (EC 2013a and EC 2014) and the US Treasury's latest *Report to Congress on International Economic and Exchange Rates Policies* (UST 2014) are only the latest to target external surpluses that have averaged 6.5 percent of German GDP over the last three years.

According to the European Commission, Germany "is experiencing macroeconomic imbalances, which require monitoring and policy action."<sup>1</sup> The commission does not see the

1. EC (2013a, 14) notes that Germany exceeds the respective indicative thresholds on several indicators: the current account surplus, the depreciation of the REER, the losses in export market shares, and the government sector debt. The commission notes that Germany's external surplus now "is well above the indicative threshold and...the surplus is expected to remain above the indicative threshold over the forecast horizon, thus suggesting that it is not a short-lived cyclical phenomenon."

problem as excessive and offers no solutions. The US Treasury, however, suggests that Germany, like China, must undertake steps to boost growth in domestic demand.

To what extent is Germany a culprit and, if so, what could or should be done about it? The EU's powers are extremely limited, and Berlin is not likely to take any advice on its macroeconomic policies from Washington. Since the original postwar discussions about the new international economic order at Bretton Woods in 1944, it has been historically difficult to persuade surplus countries to change their policies (Williamson 2011). The United States, then a surplus country, rebuffed John Maynard Keynes on such a request (Williamson 2011, 1).<sup>2</sup> Likewise, Germany today is not responding kindly to demands that it raise wages or to criticism of its policies as selfish and beggar-thy-neighbor in nature, especially when the criticism comes from countries with lower manufacturing wage levels and with residents who happily buy German cars and machine equipment.

**Surpluses of the magnitude amassed by Germany exposes the nation's savers to huge potential financial losses, bailout costs, and opportunity costs associated with low (negative) domestic real interest rates.**

This Policy Brief argues that Germany must act to reduce its current account surplus, but not for the reasons that the critics cite. Reducing the surplus is the right policy both for Germany's partners and especially Germany itself. Surpluses of the magnitude amassed by Germany exposes the nation's savers to huge potential financial losses, bailout costs, and opportunity costs associated with low (negative) domestic real interest

2. John Maynard Keynes proposed that countries would finance their payments' imbalances by building up and running down bancor balances at the putative IMF, and that excessive balances in either direction would be penalized through interest payments. Under this scheme, surplus countries would build up large bancor balances on which they would be charged interest.

rates. The associated excessively low German domestic rate of investments from its high savings surplus also risks condemning the German economy to the secular stagnation that Lawrence Summers, the former Treasury secretary and Obama administration economic adviser, has recently discussed in the context of the United States and the global economy (Summers 2013).

Germany should change its economic policies to address the problem of its rapidly rising net international investment position because of the risks of investment losses on large and wholly privately intermediated excess national savings. Raising the domestic cost structure of German industry through accelerated wage growth in excess of productivity, as some advocate, would not solve the problem. Instead, the German government should more aggressively increase its public investments in the domestic economy, at least to the levels seen in Germany's advanced economy peers. Indeed, surpassing its peers for a period seems prudent for Berlin. Such action would require reform of the German constitutional limit on indebtedness, or "debt brake," to accommodate such a move. Germany should invest a minimum of 1 percent of German GDP more a year to add to the current 1.65 percent annually (Eurostat 2011 data), or an additional annual investment expenditure of €25 billion to €30 billion. A more appropriate German catchup level would be an increase of 2 percent of GDP—or €50 billion to €60 billion annually—for a number of years.

Given Germany's currently low output gap of around 0.5 to 0.7 percent of GDP and low levels of unemployment,<sup>3</sup> such an increase in public investments in Germany—in excess of Germany's potential economic growth rate of 1.5 percent—would likely fuel domestic inflation, but only modestly, while expanding Germany's future productive capacity. A likely related effective increase in Germany's real exchange rate driven by this inflation would, all other factors being equal, lower the external surplus.<sup>4</sup>

3. IMF (2013a) estimates potential German growth at 1.25 percent annually and the output gap in 2014 at -0.5 percent, while EC (2013b) suggests a 1.5 percent potential growth rate and a -0.7 percent of GDP output gap.

4. General equilibrium effects make the direct impact on the current account surplus difficult to estimate, because higher public investments will induce higher interest rates and hence likely lower private investments. At the same time, higher economic activity should lead to inflationary pressures in Germany, which again affects external competitiveness and the current account surplus. As such, a 2 percent annual increase in public investments will likely not eliminate a 6 to 7 percent surplus, but merely be a step in the right direction of reducing it in a sound manner to more sustainable levels.

**Table 1 Average real per capita GDP growth rate<sup>a</sup> (percent)**

Country/region	Average, 1991–2012	Average euro era, 1999–2012
Germany	1.2	1.40
France	1.0	0.80
Italy	0.4	0.01
United Kingdom	1.9	1.20
United States	1.6	1.20
Japan	0.7	0.80
Canada	1.5	1.40
Spain	1.3	1.00
EA-17	n.a.	0.90
EU-27	n.a.	1.20
OECD total	1.4	1.20

a. Shown in US dollars, constant prices, constant exchange rates/purchasing power parities, and OECD base year.

Source: OECD Main Economic Indicators.

## UNIFIED GERMANY'S ECONOMIC PERFORMANCE AND EXTERNAL BALANCE

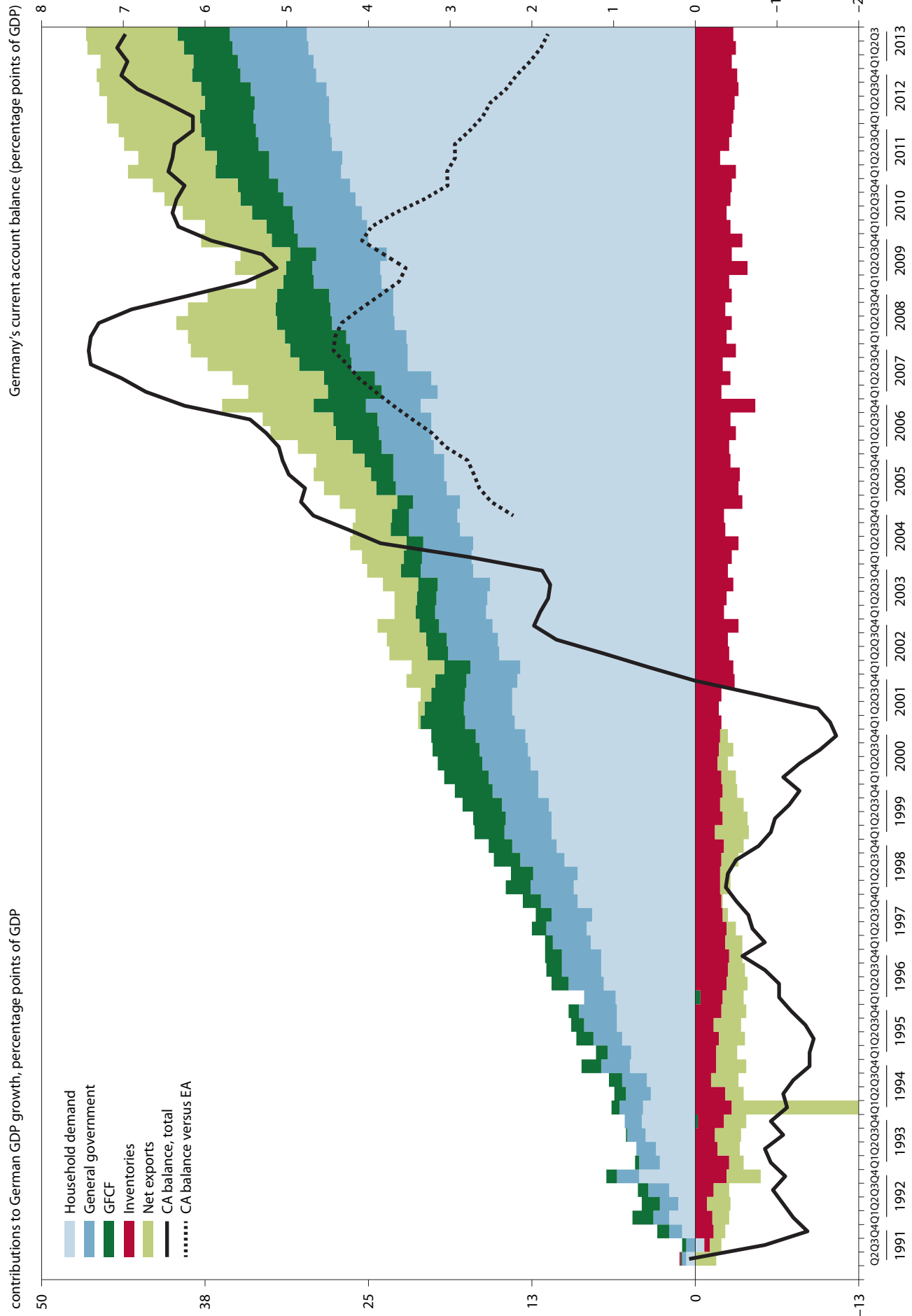
The German economy has performed well since reunification in 1990, and notably since the euro introduction in 1999, achieving more per capita growth than other G-7 countries except for Canada (table 1). Germany also has the highest employment and labor force participation rates among major industrialized nations (Kirkegaard 2014).

The criticism of Germany's large external surpluses is hardly new. After the modern German state was created in 1871, it was common even then to speak of its "export fetish," linked to its latecomer status as a colonial power unable to rely on automatic markets abroad. Germany also did not benefit from expanding immigration to grow its domestic market. Its historical penchant for large external surpluses was revived during the West German recovery after 1949 in the "economic miracle," *Wirtschaftswunder*, of the postwar era. The shock of reunification in 1990, when West Germany absorbed the previously communist and underdeveloped East Germany—adding roughly a fifth to the German economy—opened a new chapter in 1991.

Figure 1 illustrates the contributions to unified Germany's growth from different sources and the country's external balance from 1991 to the present.

Initially, following reunification, net exports were actually a drag on Germany's growth. This situation changed dramatically between 2000–2007, when Germany's external balance shot up and net exports accounted for the majority of German GDP growth. Since the global financial crisis, Germany's external

**Figure 1 Unified Germany's cumulative sources of GDP growth and external balance, 1991 – present**

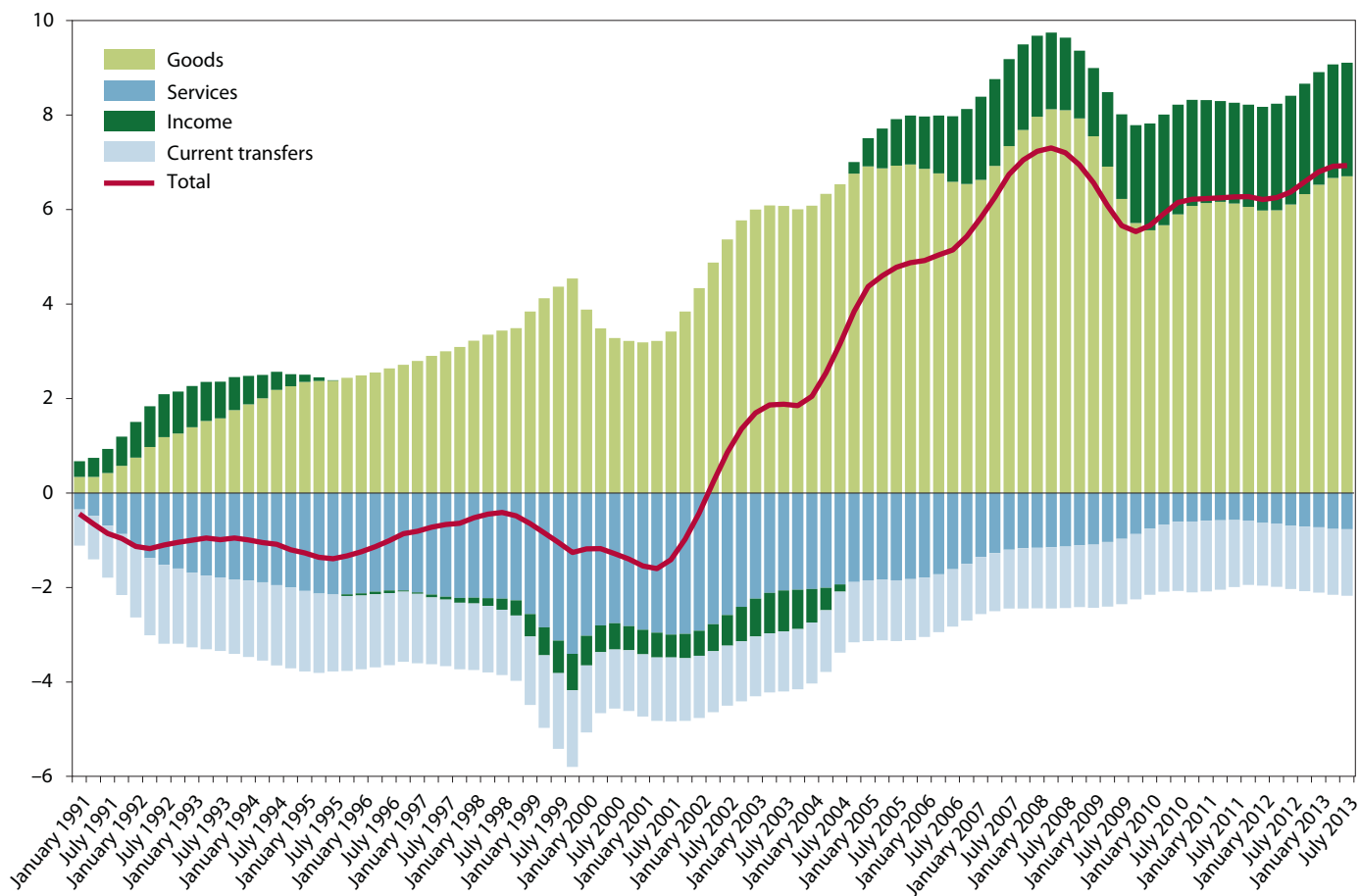


GFCF = gross fixed capital formation; CA = current account; EA = euro area

Source: Bundesbank Online Time Series Database and Eurostat Online Database.

**Figure 2 Germany's total current account balance, by sector, 1991–present**

percent of GDP, rolling 4Q averages



Source: Bundesbank Online Time Series Database.

surplus has remained high, but has not been a major source of GDP growth after 2009.<sup>5</sup> The surplus is increasingly with countries outside the euro area rather than with countries using the euro.

Figure 1 indicates that the German external balance has stabilized in recent years at an extremely high level of 6 to 7 percent of GDP. Figure 2 shows that exports of goods dominate Germany's current account balance, after rising steadily in the early 1990s, reaching 3 to 4 percent of GDP around 2000 and its present level in the euro era. Improvements in German manufactured goods' competitiveness hence began well before the introduction of the euro.

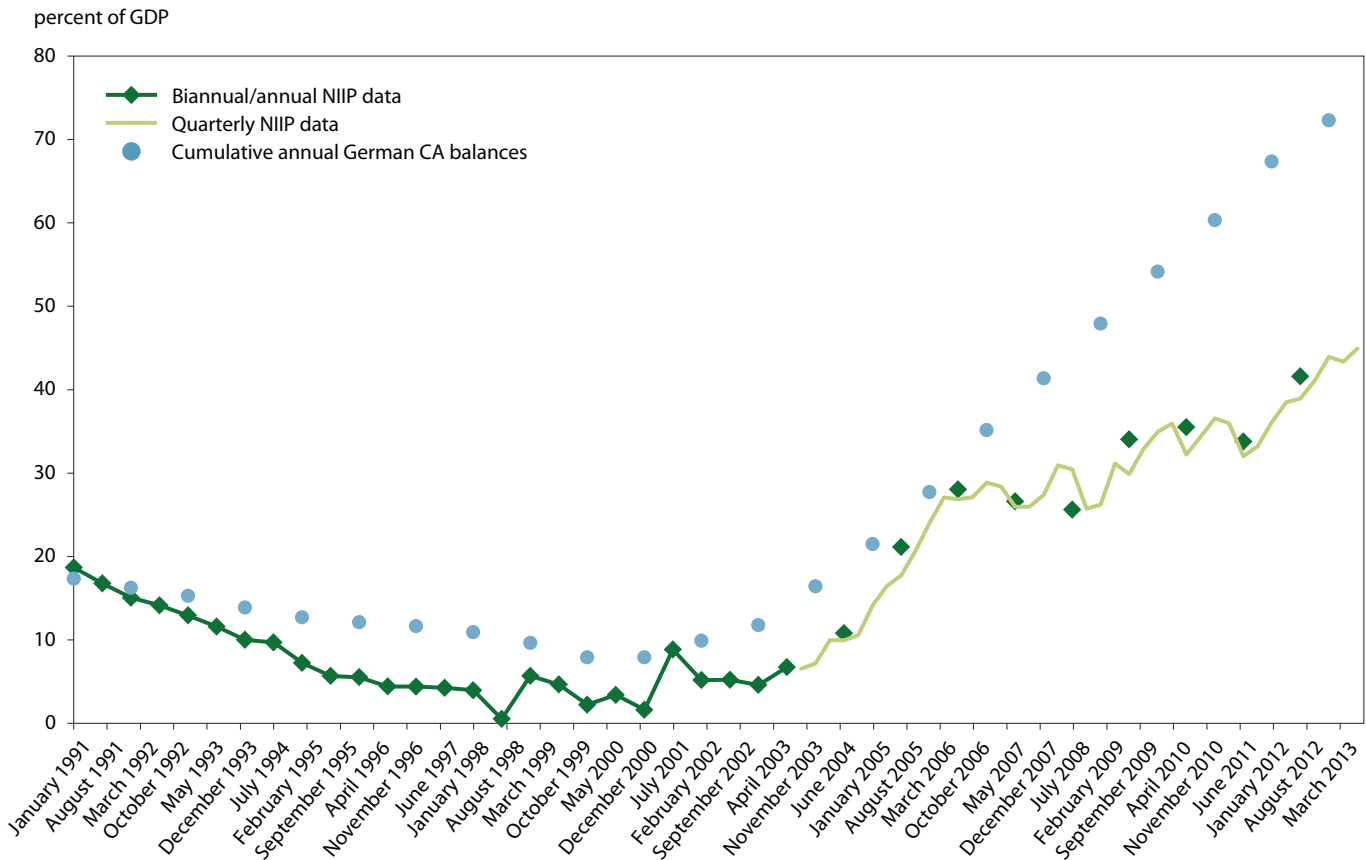
In light of Germany's resilience, its surplus in tradable goods is unlikely to decline. Being in the monetary union ensures that

Germany virtually by definition will enjoy a lower exchange rate than its surpluses would have produced. This is because the euro invariably will trade much lower than a hypothetical D-mark would have. Moreover, broader economic turmoil seems most likely to erupt elsewhere in the euro area, potentially putting crisis-induced downward pressure on the euro. This again would benefit the German goods export sector. In the absence of major policy changes in Germany, the country's manufacturing goods surplus appears increasingly structural in nature.

Nor can one expect other factors to offset the surplus in goods. Figure 2 shows that Germany's services deficit is less than 1 percent of GDP and the transfer deficit is stable at 1.5 percent. The income component has increased to more than 2 percent of GDP, driven by the rising German holdings of foreign assets, as seen in the German net international investment position (NIIP) in figure 3.<sup>6</sup>

5. Net exports declined dramatically as a contributor to German GDP during the global financial crisis. They have since returned to the immediate precrisis levels, rendering their overall post-2008 contribution to growth broadly neutral.

6. NIIP data includes the foreign assets of the public and private sectors and both sectors' external debt.

**Figure 3 Unified Germany NIIP and cumulative CA balances, 1991–Q3 2013**

CA = current account; NIIP = net international investment position

Note: Cumulative CA balance time series estimated as 1991 NIIP plus cumulative annual current account balances. Data for 2013 = 1Q–3Q of 2013 (estimated at 4.9 percent of period GDP).

Figure 3 shows how Germany's NIIP fell gradually during the 1990s and was near external stock balance at the euro's introduction in 1999. During the euro era, Germany's NIIP rose to more than 40 percent of GDP by 2012, making Germany one of the industrialized world's largest creditor countries (table 2), though still substantially below Japan's 57 percent of GDP.<sup>7</sup>

With an aging population, Germany can argue that it needs a large foreign savings cushion to sustain its standard of living. The question is how large that cushion should be.<sup>8</sup> The answer would depend on the return earned from these assets.

7. Following the nuclear accident at Fukushima and associated rapidly rising cost of energy imports, Japan's trade and current account surplus have declined rapidly. It thus seems a matter of a few years before Germany eclipses Japan as the advanced world's largest foreign creditor, when measured as a share of own country GDP. See Bank of Japan Balance of Payment Online Database for details.

8. EC (2014, 9) diplomatically notes how the "accumulation of moderate surpluses is a welcome development given the need for saving part of current income to cope with the challenge raised by the demographic outlook, and provide savings to be invested abroad."

Figure 3 shows that Germany's net international investment position has remained at around 30 percent of GDP during the period 2006–11, whereas the cumulative current account balance rose from 40 to 60 percent of GDP in the same period. The divergence of these two measures suggests that substantial valuation losses have occurred on German net foreign assets from 2006–11, coinciding with the global financial and euro area sovereign debt crises.<sup>9</sup>

Many factors affect the valuation of a country's stock of foreign assets and liabilities during a given period, and the Bundesbank does not publish a breakdown of the individual

9. The Bundesbank (2009) notes about the year 2008: "With regard to external assets, the increase in claims which accompanied the current account surplus of €165 billion was outweighed by a broad-based market-price-related decline in asset values." And Bundesbank (2012) explains regarding 2011 how, "Overall, the negative effects of the revaluation of all assets and liabilities and of other adjustments were thus greater than the current account surplus."

**Table 2 G-7 NIIP positions, 1991–2012** (percent of GDP)

Year	Germany	Japan	United Kingdom	Canada	United States	France	Italy
1991	16.7	11	-0.4	-28	-3	n.a.	n.a.
1992	14.0	15	1.7	-31	-4	n.a.	n.a.
1993	11.5	16	4.3	-32	-3	n.a.	n.a.
1994	9.6	15	2.5	-32	-3	-1.8	n.a.
1995	5.5	18	-2.1	-30	-4	-3.5	n.a.
1996	4.3	22	-7.4	-29	-4	-3.2	n.a.
1997	4.1	26	-6.3	-27	-7	-0.2	-4.8
1998	0.4	29	-18.9	-27	-7	-1.6	-9.0
1999	4.5	18	-20.1	-22	-6	-8.0	-5.0
2000	3.3	28	-9.7	-18	-11	-7.6	-7.2
2001	8.7	38	-13.2	-17	-15	-2.0	-5.8
2002	5.1	37	-11.1	-17	-16	3.0	-12.4
2003	6.6	36	-10.2	-18	-16	-4.2	-13.6
2004	10.7	37	-18.2	-14	-16	-4.7	-15.8
2005	21.0	36	-19.8	-13	-14	1.1	-16.8
2006	27.9	42	-28.6	-8	-15	1.1	-22.2
2007	26.5	48	-22.6	-10	-12	-1.5	-24.5
2008	25.5	44	-6.9	-4	-22	-12.9	-24.1
2009	34.0	55	-20.8	-10	-16	-9.4	-25.3
2010	35.4	50	-23.5	-13	-15	-12.5	-23.9
2011	33.7	52	-16.8	-11	-25	-18.8	-21.7
2012	41.5	57	-9.1	-15	-25	-21.1	-26.4

Source: IMF International Financial Statistics (IFS) Online Database.

effects of exchange rate movements and valuation effects.<sup>10,11</sup> The sectoral breakdown of the German NIIP in figure 4 illustrates unified Germany's increasingly negative position against foreign investors after 1991. Its bonds became a euro safe-haven asset for global investors while Berlin (like any other government) owned few assets outside its borders. Meanwhile the relentless driver of Germany's rising total NIIP has been the rising position of German enterprises and individuals. As will be discussed further, part of this trend reflects rapidly rising outward FDI by German businesses since the early 1990s, but the majority (almost two-thirds) remains accounted for by the sector's rising foreign portfolio investments.

10. The Bundesbank merely briefly discusses the scale of these effects qualitatively in its annual September press release on the previous year's NIIP. See the latest press release for Germany's 2012 NIIP; see Bundesbank (2013a) and footnote 11 for an example.

11. Simultaneous changes in the value of Germany's foreign liabilities may have yielded a stable NIIP number, despite changes in the value of German assets and the current account surplus. The decline in German government bond yields during the financial crisis drove up the market value of these German liabilities, including the increasing foreign holdings of German government bonds.

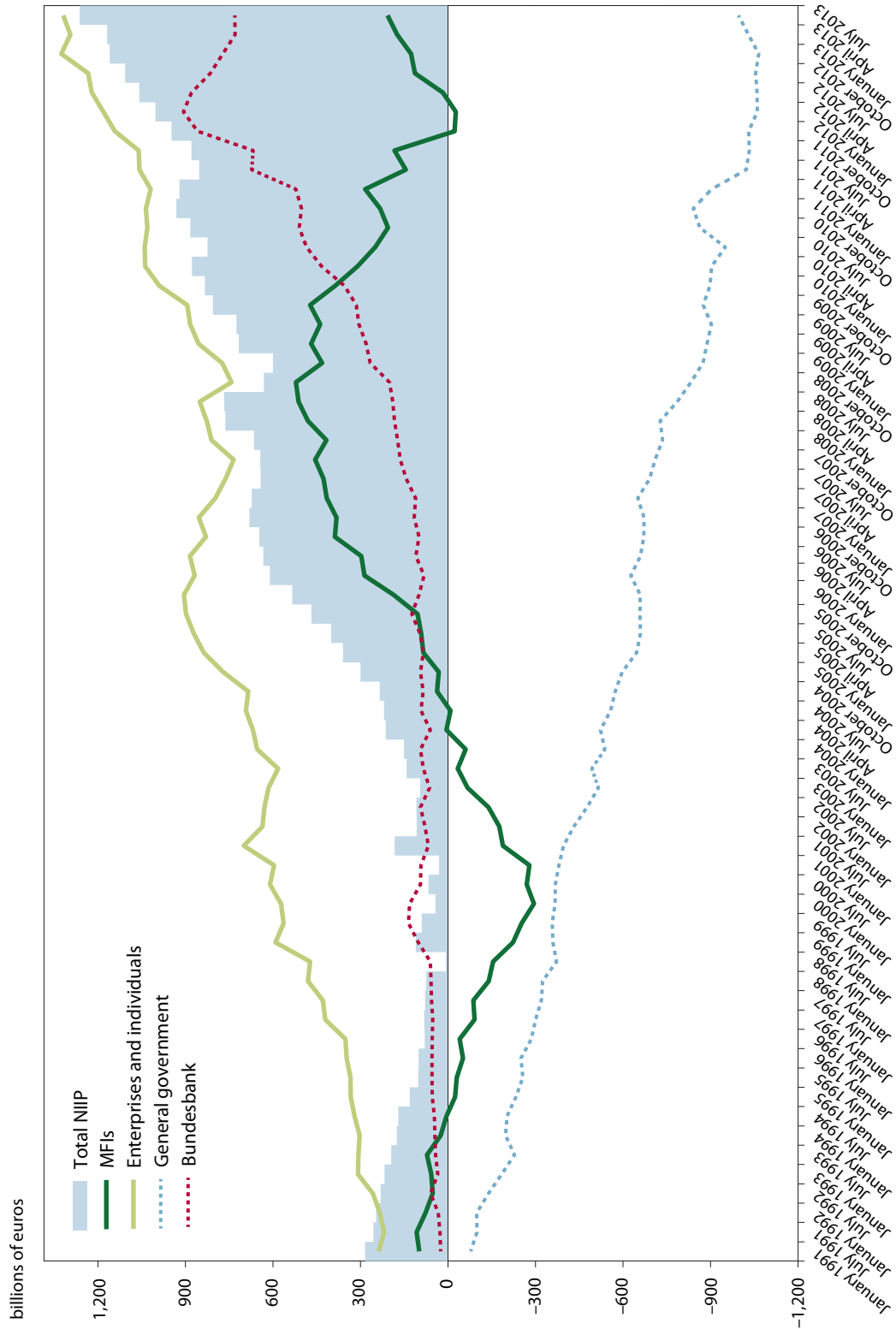
The divergent foreign net position of the German private banking sector and the Bundesbank<sup>12</sup> results from the euro area financial crisis. German banks scaled back their lending to foreigners after 2008. Meanwhile the European System of Central Banks (ESCB) through the Target2 payment system took over credit intermediation in the euro area. The European Central Bank (ECB) therefore supplanted German banks in providing liquidity to many peripheral euro area banks, effectively bailing out Germany's private banks by ensuring that their peripheral euro area clients could repay them.<sup>13</sup>

Accordingly, a large share of Germany's private banking sector external investment position was shifted to the public sector. Declines in foreign asset values wiped out the value of Germany's current account surplus, exposing the risks, which

12. For simplification purposes, the Bundesbank in figure 4 includes both (the relatively stable) "reserve assets" and (the highly volatile) "other investments," e.g., Target2 positions.

13. Extension of credit through central banks in the Target2 system is however not costless to Germany. It saw negative real interest rate yield "earned" on Target2 balances, even if this result is of course strongly preferable to a collapse of the euro area banking system.

**Figure 4 German net international investment position, by sector, 1991–2013**



NIIP = net international investment position; MFI = monetary financial institutions (banks)

Source: Bundesbank Online Time Series Database.

are growing again, associated with Germany's large holdings of foreign assets.

What should Germany do with its accumulating surpluses? No country with such large surpluses has in modern times relied as exclusively as Germany on the private sector to intermediate them. Germany has no large government-mandated pension fund industry like the Netherlands to do so.<sup>14</sup>

In addition, Germany is effectively barred by euro area rules from building up large foreign exchange reserves. And, because the surpluses do not arise from large commodity-based earnings from often state-controlled or heavily taxed individual entities, but rather from the export competitiveness of countless German firms, Germany cannot easily set up a sovereign wealth fund (SWF) as other export powerhouse countries have done.<sup>15</sup> With monetary policy residing with the ECB, Germany cannot rely on its central bank to manage its surplus as Japan and Switzerland do.<sup>16</sup> Establishing a sovereign wealth fund, as suggested by some (Gros and Mayer 2012, 5), would be further problematical without coercion or illegal state aid requiring private deposits into it. Such a fund would not likely achieve better investment returns than Germany's existing financial system.

A better option would be to restructure Germany's banking and financial system to make it more globally oriented and focused on achieving investment returns. Channeling the surplus to get long-term investment returns however would require the reform of Germany's pay-as-you-go government pension system into something like in the Netherlands, which is not likely to happen soon.

Lacking any obvious way to safeguard its expanding foreign asset stock, Germany must continue to rely on its widely

distrusted domestic banking sector to do the job. Germany's bank-intermediated savings are thus likely to remain inside the euro area to avoid exchange rate risks (Gros and Mayer 2012).

Like China, which is building up its reserves to maintain its currency peg to the dollar to promote its export sector (Goldstein and Lardy 2009, 24–26), Germany today faces a dilemma. Its increasingly chronic and large current account surplus will in the coming years see the nation accumulate far more foreign assets than its demographic outlook warrants or its domestic financial system can safely intermediate. It is thus in Berlin's interest to reduce its external balance or risk a diminution of its poorly invested foreign savings. Such losses have happened before.

Figure 5 lists the amounts of private financial liabilities that the euro area public sectors had to absorb as part of shoring up national financial systems at the peak of the crisis in 2010.<sup>17</sup> At more than €300 billion, or more than 12 percent of GDP, the German financial sector accounted for more than two-thirds of liabilities absorbed by taxpayers in the euro area and nearly half of all EU-absorbed liabilities.<sup>18</sup>

According to Eurostat (2013), the direct budgetary costs immediately recognized by the German government from 2008–12 at €42 billion exceeds the direct budgetary costs of the banking crises in both Ireland and Spain, respectively (Eurostat 2013).<sup>19</sup>

The takeover in recent years by the ESCB through the Target2 system of credit intermediation in the euro area is another example of German banks and savers having to be bailed out by official sector financial flows in the face of the “sudden stop” of euro area private credit flows.

## GERMAN COMPETITIVENESS, DOMESTIC COST STRUCTURE, AND UNIT LABOR COSTS

A widely disseminated critique of Germany's recent economic performance holds that it has resulted from policies to hold down wages to spur exports. Critics cite comparisons of unit

14. The Dutch NIIP is currently slightly higher than Germany's at around 52 percent of GDP in 2013. The large Dutch current account surpluses are generally intermediated out of the Netherlands by the country's large pension fund industry, which invests heavily outside the euro area. The only other euro area country with a sizable positive NIIP today is Belgium at around 45 percent of GDP. However, Belgium does not run a massive current account surplus (like Germany and the Netherlands) and hence does not add much to its NIIP on a regular basis. Moreover, the Belgium financial system is dominated by several large banks (BNP Paribas, BNP Paribas Fortis, Dexia, and KBC), all of which needed government support during the crisis (IMF 2013b). As such, unlike the Netherlands, Belgium is demonstratively not a potential role model for Germany to follow for how to safely intermediate a rapidly rising NIIP.

15. Singapore with a NIIP of well over 200 percent of GDP is one example of a country with a relatively diversified source of persistent external surpluses. However, the degree of direct government intervention in the Singaporean economy to facilitate the operations of Singapore's two sovereign wealth funds—Temasek and GIC—is unrealistic in Germany.

16. Such management would take place by occasional central bank intervention to maintain an exchange rate producing a politically desired external surplus.

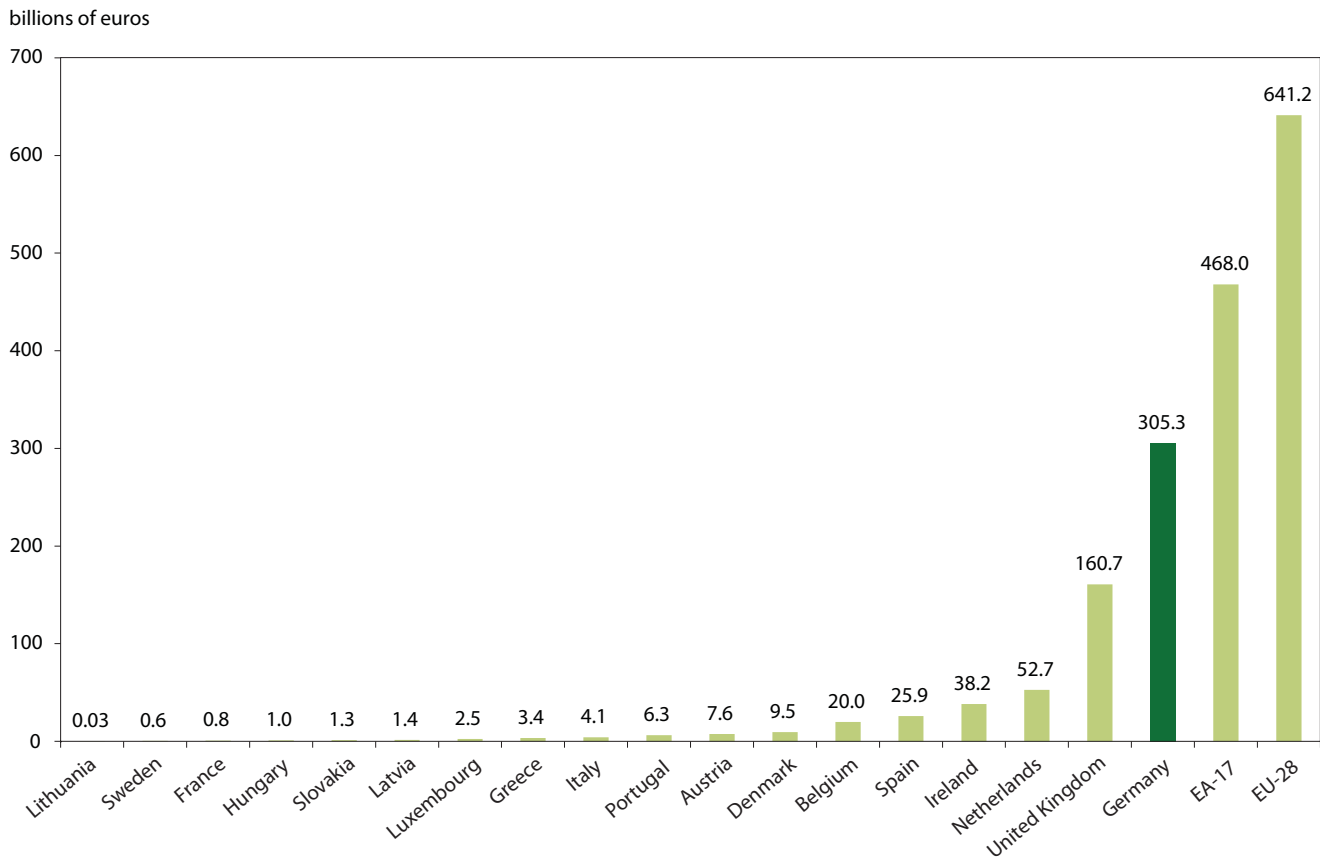
17. Figure 5 does not include wider economic stimulus packages or central bank actions.

18. See Eurostat (2013) for details about the scope of financial rescues in the EU during the crisis and their impact on government finances. The German government also in 2010 took over private financial assets valued at more than €265bn, ensuring that the likely ultimate financial loss from these rescue operations will be substantially smaller.

19. Direct budgetary costs from 2008–12 were €39bn in Ireland and €40bn in Spain. Given Germany's much larger GDP, budget costs are proportionally smaller at 1.6 percent of 2012 GDP, compared to 3.9 percent in Spain and a staggering 24.1 percent in Ireland.



**Figure 5 Private liabilities taken over by the general government as part of activities undertaken to support financial institutions, 2010**



Source: Eurostat Online Database.

labor costs (ULCs) in Germany and elsewhere, as shown in figure 6.<sup>20,21</sup>

20. Figure 6 relies on the OECD's annual benchmarked ULC data, which has the advantage of having its constituent component data (total labor cost and real output) available on a comparable country by country basis, enabling the construction of valid subcountry groupings. The OECD produces two unit labor cost series: Early Estimates of Quarterly ULCs (EEQ ULC) and benchmarked ULCs. To derive EEQ ULCs, total labor costs are obtained by multiplying compensation of employees with a self-employment ratio (e.g., ratio of total employment to employees), while constant price GDP by expenditure is used for real output. The adjustment for self-employed assumes that labor compensation per hour or per person is equivalent for the self-employed and employees of businesses. This assumption may not be totally valid across different countries and activities negatively affecting the comparability of EEQ ULC level data. Benchmark ULCs are fully consistent with all country annual SNA data, are available for eight economic sectors, relies on gross value added as output variable, and are generally comparable across countries. Regrettably, benchmarked data are available only with a substantial lag.

21. The ULC data relied upon in this Policy Brief will be data for the entire economy. This choice is made as the data will draw comparisons between real and nominal ULC data series, and it is

Figure 6 shows that Germany's euro era ULCs have been flat, however, with a slight rising trend after 2008. By contrast, the rest of the euro area,<sup>22</sup> particularly the peripheral countries, experienced increases in their national economy ULCs between 1999–2008. After 2008, ULCs in Greece, Portugal, Ireland, and Spain have declined, bringing the gap with Germany back at the range of 2004–05. France and Italy meanwhile experienced slower ULC increases after 2008.

But the ULC data is flawed, making it simplistic to blame Germany for alleged wage restraint policies.<sup>23</sup> ULC data trends

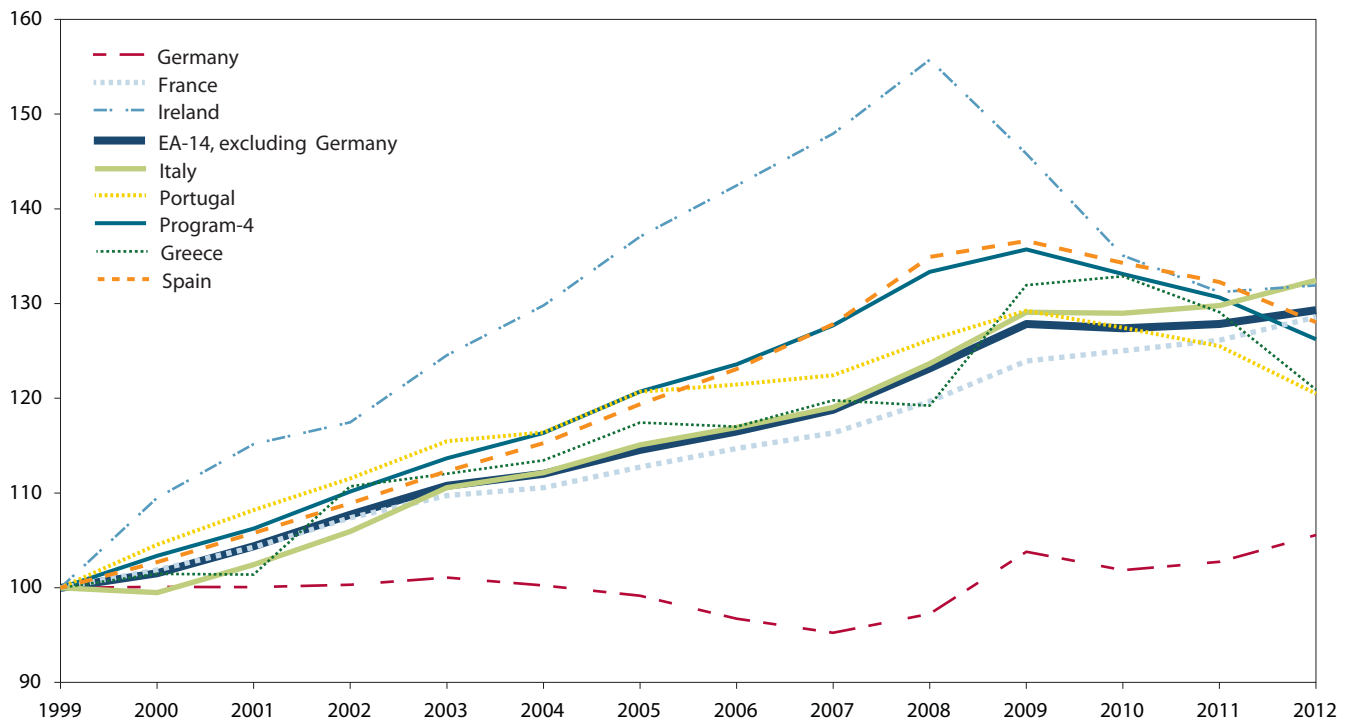
not self-evident what deflator to appropriately use for sector-specific ULC data. The broader conclusions drawn from the following figures using total economy ULCs are moreover not materially different from results relying on data series of countries' sector-specific ULCs in the manufacturing sectors.

22. Estimation of the euro area-14, excluding Germany time series, is only possible relying on the published benchmarked ULC data, for which country data can be added up with a reasonable degree of validity.

23. Paul Krugman (1994) first made the observation that firms, not countries, compete with each other.

**Figure 6 OECD benchmarked annual ULC, total economy**

index, 1999 = 100



ULC = unit labor costs; EA = euro area

Note: No complete time series for EA members Cyprus, Malta, and Latvia.

Source: OECD Main Economic Indicators.

cannot be reduced to just wage differentials. Euro area country differences in figure 6 are driven by differences in the size of the GDP deflator for different countries, which depends on much more than just wages. To be sure, German wage restraint in the euro era has been present in 2003–07 (Kirkegaard 2014), one of several factors improving German competitiveness after 1999. Others include increases in foreign demand from countries where German goods had a large market presence, German companies’ reliance on offshoring, and Germany’s specialization in capital goods desired by businesses seeking to improve productivity (Allard et al. 2005, Stahn 2006, Bundesbank 2006, Danninger and Joutz 2007, OECD 2010, Koske and Wörgötter 2010).

It is thus misguided and unworkable to demand that Germany raise wages to atone for past sins. Because of Germany’s decentralized and flexible wage bargaining institutions, a policy to increase wages is impractical. No government would go along with an action that would effectively legislate a negative supply shock.

More broadly, inflating Germany’s domestic cost base is conceptually flawed. Negative supply shocks have little effect on a country’s external position, because both imports and

exports respond to an economic downturn. Higher German wages are not undesirable. They could help Germany move away from surpluses. But the only practical way to bring higher wages about is by stimulating demand to enhance the productive capacity of the German domestic economy, and creating a positive demand shock to stimulate market pressures for higher wages, as the next section lays out.

### GERMAN NATIONAL SAVINGS AND INVESTMENTS

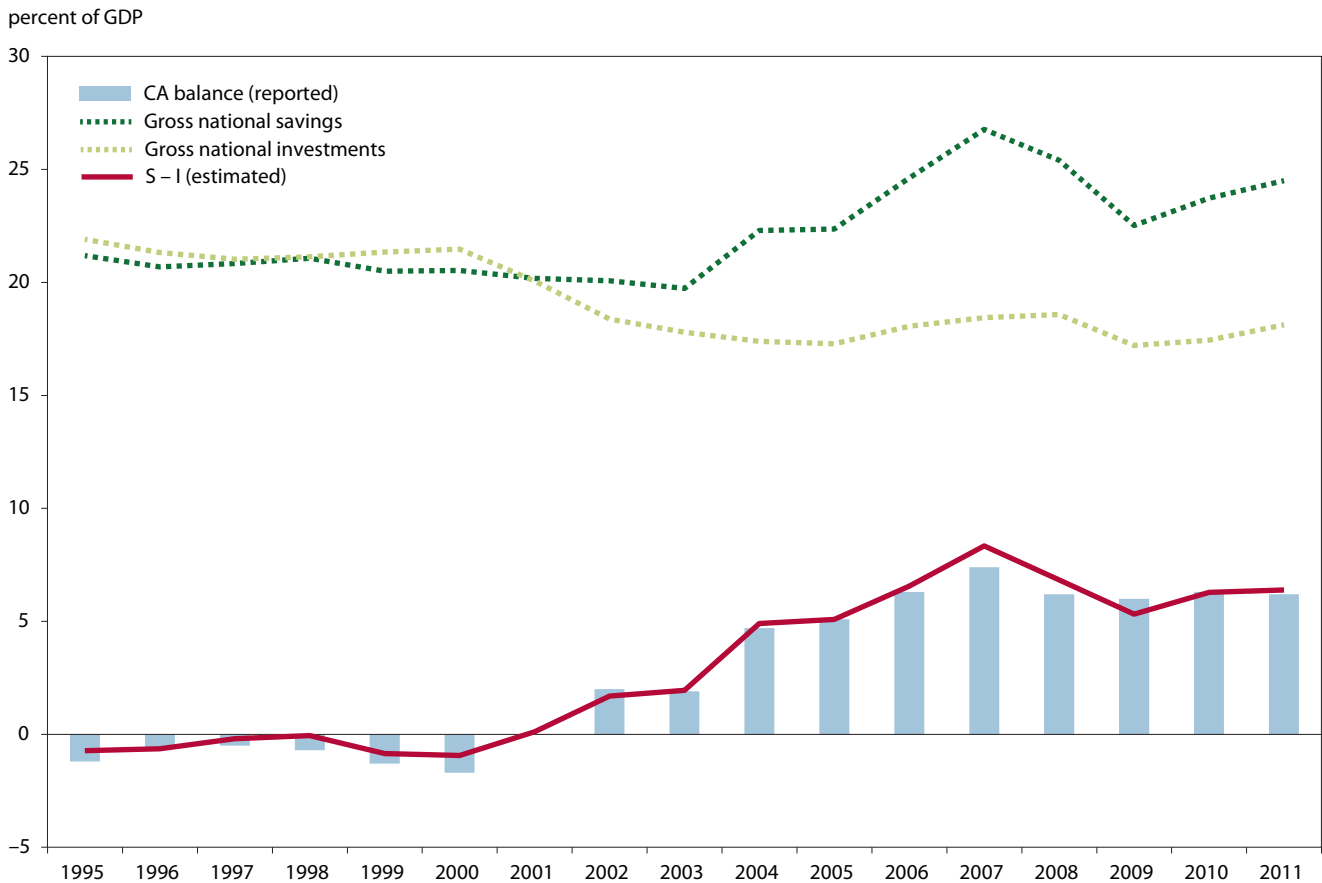
Generally a country’s gross national savings minus its gross national investments equals its current account balance, stated this way:

$$S - I = CA$$

Figure 7 compares Germany’s estimated  $S - I$  with its reported external balance.

As expected, the estimated identity holds up after 1995, but an external surplus opens after 2000, caused by a decline

**Figure 7 Germany's current account balance and national savings and investments, 1995–2011**



CA = current account

Source: Eurostat Online Database.

in national German investments and a post-2003 increase in savings. National German savings and investments by sector are shown in figures 8 and 9, respectively.

Figure 8 shows how German gross national savings is characterized by a stable household savings rate of 10 to 12 percent of GDP, an increase in gross corporate savings from 9 to 10 percent of GDP to 12 percent after 2003, and the general government sector netting out over the business cycle.<sup>24</sup> The rise in gross national savings after 2003 is driven by corporate saving, as is the case with other Organization for Economic Cooperation and Development (OECD) countries in this period.

Gross corporate investments remained relatively stable at around 10 to 11 percent after 1995, yet declined after 2000 and again after 2008. By contrast, household investments declined after 2001, and general government investments in Germany

also declined from the mid-1990s to 1.5 percent after 2003, though a marginal postcrisis pickup is visible.

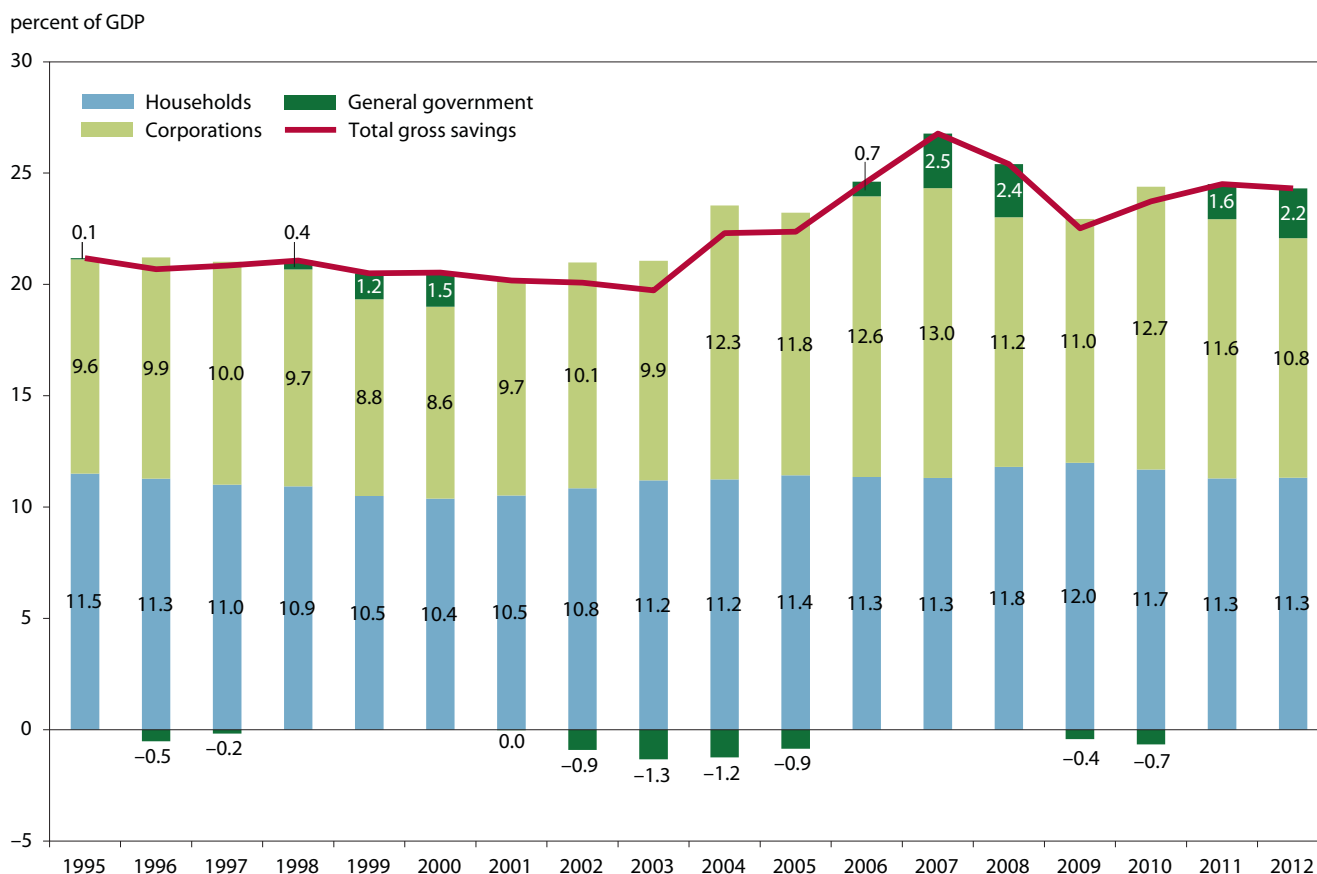
The sectoral gross savings and investment levels produce the contributions to Germany national S – I time series by sector, shown in figure 10, indicating that the household sector is an increasing contributor to Germany's savings surplus. The corporate sector becomes a contributor after 2004, and the German government moves from being a dis-saver to a neutral contributor over time.

From these trends, one could conclude that simply reducing German national saving levels would help address the nation's chronic external surplus. Doing so would not be easy, however. The savings rate of German households is the most stable in the OECD, and it seems immune to demographic changes<sup>25</sup>

24. This approximates a “golden rule” concept of general government current expenditures minus current receipts in balance over the cycle and can also be described as general government disposable income minus final consumption.

25. Bundesbank (2013b) shows how older German households continue to save, indicating that the life-cycle theory of saving has limited empirical support in Germany.

**Figure 8 German gross national savings, by sector, 1995–2012**



Source: Eurostat Online Database.

and the business cycle (figure 11).<sup>26</sup> Wealth effects caused by increases in asset prices are unlikely to change this behavior (ECB 2013a, OECD 2013, Bundesbank 2013b, Börsch-Supan

et al. 2001).<sup>27,28</sup> Germany also has the lowest home ownership ratio in the euro area (ECB 2013a)<sup>29</sup> and low levels of owner-

26. Figure 11 includes data for net household savings rate as a share of disposable income, because the longest time series is available in this format. Net saving rates are measured after deducting consumption of fixed capital (in respect of assets used in unincorporated enterprises and in respect of owner-occupied dwellings) from saving and from the disposable income, so that both saving and disposable income are shown on a net basis. Hüfner and Koske (2010) discusses several other reasons for the relative stability of German household savings rates, including higher precautionary savings in the 2000s from higher job uncertainty and higher retirement ages, stock market losses after 2001 (which saw many Germans lose money on their first stock market foray into telecoms and technology stocks), and relatively low real interest rates.

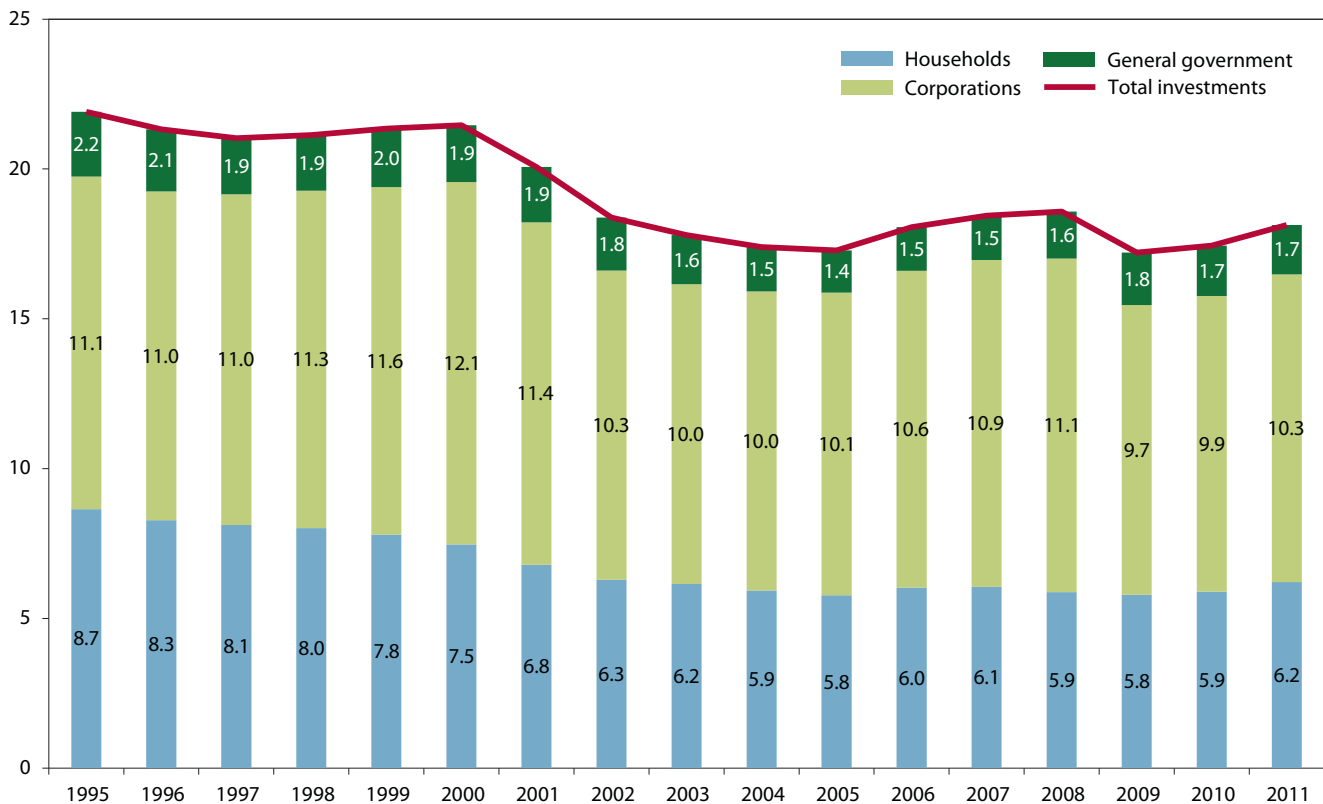
27. A sizable 47 percent of German households report participating in voluntary private pensions and life insurance schemes. The direct impact from asset price changes through changes in distant retirement wealth to current savings decisions is muted because about two-thirds of German retirement income continues to come from public pensions.

28. German renters moreover save less in financial assets than homeowners, despite also lacking the real asset of a home. This is likely partly related to their relatively lower income and the lack of a precautionary savings motive in Germany, due to the country's comprehensive and generally well-functioning welfare state.

29. Germany's low home ownership ratio is historically rooted in the destruction of large parts of the German housing stock during WWII and the large-scale and very successful public housing program after the war. Due to the lack of available credit in Germany after the war, public housing programs completely dominated the reconstruction of the (West) German housing stock. German reunification similarly introduced a large number of publicly owned flats from the former communist East Germany into the German economy.

**Figure 9 German gross national investments, 1995–2011**

percent of GDP



Source: Eurostat Online Database.

ship in stocks and bonds, so causing Germans to save less would be challenging (ECB 2013a).<sup>30</sup>

Policy initiatives to lower corporate savings are unlikely to prove effective, given the global trend toward higher corporate savings and Germany’s improved corporate profits resulting from globalization, technological change, lower interest costs, and some wage restraint. Another impediment to lowering the savings rate is Germany’s constitutional debt brake, enacted in 2009, aimed at achieving general government structural budget balance in the absence of a downturn.<sup>31</sup>

All these factors make it imperative to increase investments rather than lowering savings, starting with increasing household sector investments and the home ownership ratio, perhaps with tax incentives<sup>32</sup> and changes to rental market regulations

(Andrews and Sánchez 2011). Yet increasing German homeownership ratios would not be an easy route given that most Germans express satisfaction with their current housing situation<sup>33</sup> and that the German population is aging and household sizes are declining.<sup>34</sup> Trying to increase homeownership in defiance of these trends could risk a loss of labor mobility and excessive mortgage indebtedness for some groups. A cultural shift toward a more “my home is my castle” attitude in Germany might generate higher homeownership and household investments, but only in the long run.

Getting German corporations to invest more domestically from the current level of 10 percent of GDP<sup>35</sup> would be another option. The low level of investment is partly related

30. Just 11 percent of German households own stocks and just 5 percent, bonds.

31. The federal German government cannot run a structural deficit of more than 0.35 percent of GDP by 2016, and state governments must eliminate their structural deficits entirely by 2020.

32. Germany has no mortgage interest rate deduction today.

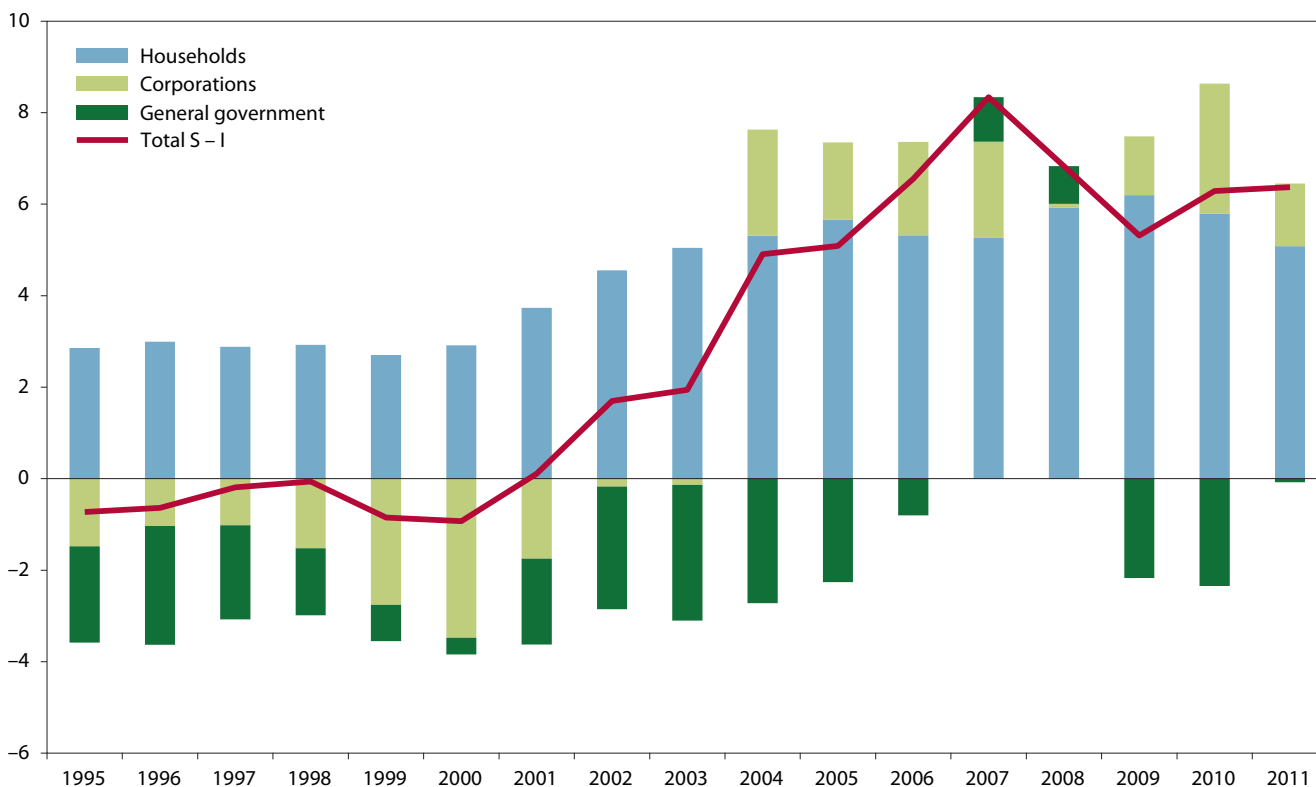
33. According to the OECD Better Life Index 2013, 93 percent of Germans declare themselves satisfied.

34. Single-headed households in Germany are more likely to be renters than homeowners.

35. As a comparison, US corporate investments, often described as being very low in recent years, have in the 2000s averaged around 12 percent of GDP.

**Figure 10 Sectoral contributions to German “estimated S – I,” 1995–2011**

percent of GDP



Source: Eurostat Online Database.

to the temporary effect of the remarkable increase in German outward FDI in recent years, especially in Eastern Europe,<sup>36</sup> making Germany more outward FDI-intensive than the United States (Barefoot 2012).<sup>37</sup> See table 3.

Many German firms do not see profitable opportunities at home. Germany should therefore undertake domestic economic reform and liberalization programs. Price declines for investment goods (especially in information and communications technology) ought to have led to domestic capital investment increases, but they have not done so,<sup>38</sup> perhaps because of

36. This is the core argument of the so-called “bazaar economy” presented in Sinn (2006). Numerous other empirical studies however fail to find a negative long-term effect on domestic investment from outward German FDI. See for instance Bundesbank (2006); Snower, Brown, and Merkl (2009); Moser, Urban, and di Mauro (2009).

37. Germany’s rapidly rising FDI intensity—though rising offshoring in the tradables sector—accounts for a large share of German cost-competitiveness improvements in the 2000s. German firms by 2010 had more than half the total level of employment and turnover of US foreign affiliates, despite their domestic home economy being just slightly more than a fifth of the United States.

38. OECD (2007a) finds that roughly half of the decline in recorded

declining potential growth rates or overaccumulated corporate investments in the past.<sup>39</sup>

Germany could try to increase corporate investment by employing accelerated appreciation schedules and other tax incentives, as the United States has done.<sup>40</sup> But such measures usually have only a short-term effect. A better approach—which Germany should adopt for reasons of broader economic efficiency alone—would be to foster procompetitive reforms, especially in the rigid professional services sectors.<sup>41</sup> But again, such steps typically take years to have an effect.

For all these reasons, the general government sector must serve as the primary source of additional short-term domestic investment spending. Germany’s constitutional debt limit (*schul-*

nominal German corporate investments in the early 2000s can be attributed to relative price declines.

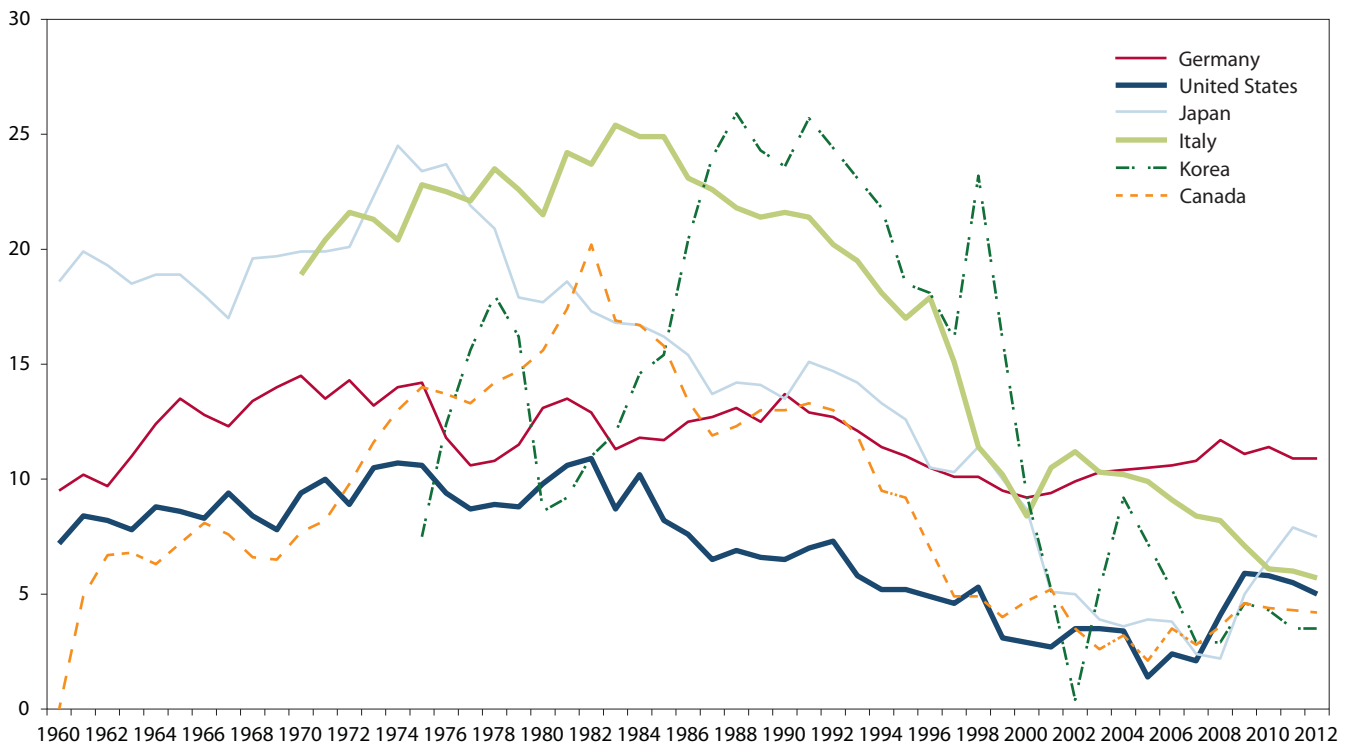
39. See for instance André et al. (2007).

40. The US American Recovery and Reconstruction Act (ARRA) fiscal stimulus in 2009 included a number of such provisions.

41. See OECD (2010, 2012) for a detailed description of such liberalizing reforms of Germany’s services sectors.

**Figure 11 Household net savings ratio, 1960–2012**

percent of disposable income



Source: OECD Main Economic Indicators.

*denbremse*) has—in contrast to a golden rule framework—barred the government from borrowing for long-term investments since 2009. The debt limit, however, effectively requires the government to finance any new investments by raising new revenue. But the government led by Chancellor Angela Merkel could still pursue the revenue measures or, through its supermajority in the German Parliament, change the constitution and adjust the so-called debt brake.

After all, general government investments in Germany are lower (at 1.66 percent of GDP) than levels in other advanced economies in Europe, other export-oriented countries, and elsewhere, as shown in figure 12.

The 1 percent of GDP average shortfall measured against G-7 and European averages equals roughly €27 billion annually and €350 billion relative to the euro area as a whole.

Germany's infrastructure, moreover, suffers from low public investment, and German businesses rate its road transport networks, communications networks, and power availability as a hindrance to business (IW 2014 survey).<sup>42</sup> A political reluctance

to raise more revenue to invest more is manifest in Berlin. After all, in the Grand Coalition the main thing that politically separates the CDU/CSU from the SPD seems to be their reluctance to contemplate higher taxes. Its government investment proposals for the coming four years—just €23 billion or 0.2 percent of GDP annually—are inadequate<sup>43</sup> and in danger of hampering competitiveness and discouraging business investment. After all, if the German government is not willing to invest, why should German businesses do so?

## REFORMING THE DEBT BRAKE TO REDUCE GERMANY'S EXTERNAL SURPLUS

Germany has a long constitutional history of restrictions on central government indebtedness, going back to West Germany's Basic Law of 1949, which was based on the earlier Weimar Imperial Constitution (Bundesbank 2007). A provision enacted in the late 1960s enabled government borrowing to avert a macroeconomic disruption. Under the 2009 changes,

42. The extent to which these survey data are comparable to other countries cannot be discerned, but it remains possible that German infrastructure in a relative sense remains less inhibitive to businesses' development than in other countries. This possibility should however be cold comfort to German policymakers to the extent they are interested in maximizing the growth prospects of German businesses.

43. For a discussion of the new Grand Coalition agreement, see Jacob Kirkegaard, "The German Grand Coalition Agreement: A Triumph for Merkel," Peterson Institute for International Economics, December 3, 2013, <http://blogs.piie.com/realtime/?p=4127> (accessed April 19, 2014).

**Table 3 German outward FDI trends, 1991–2011**

Year	FDI stock (trillions of euros)	Number of employees at German foreign plants (millions)	Annual turnover at German foreign plants (trillions of euros)
1991	0.13	2.4	0.40
1992	0.14	2.5	0.42
1993	0.16	2.5	0.45
1994	0.17	2.6	0.49
1995	0.19	2.8	0.53
1996	0.23	3.1	0.60
1997	0.28	3.2	0.72
1998	0.31	3.7	0.88
1999	0.41	4.1	1.00
2000	0.58	4.4	1.20
2001	0.70	4.6	1.40
2002	0.66	4.5	1.40
2003	0.65	4.5	1.30
2004	0.67	4.6	1.30
2005	0.78	4.9	1.60
2006	0.82	5.2	1.70
2007	0.90	5.5	1.80
2008	0.95	5.9	1.80
2009	0.98	5.8	1.70
2010	1.00	6.1	2.00
2011	1.10	6.2	2.20
1991–2011 change (percent)	752	160	463
Pre-euro change, 1991–99 (percent)	206	70	170
Euro era change, 1999–2011 (percent)	178	52	109

Source: Bundesbank Online Time Series Database.

central and state governments must achieve a balanced budget without incurring new debt (Bundesbank 2011). Cyclically adjusted net borrowing for the central government must not exceed 0.35 percent of GDP after 2016, while German states must balance their budgets by 2020.

Exceptions for additional deficit spending are possible in emergencies beyond the government's control, such as the 2008 global financial crisis or a major natural disaster. However, any debt incurred in such an emergency in excess of the annual 0.35 percent limit must be tied to explicit repayment provisions

during good times.<sup>44</sup> The fact that off-budget funds and their debts are now included in the debt brake further reduces the scope of circumvention. Future German bank bailouts must be fully funded by other spending cuts, for example, and private financial liabilities taken over by the government are generally consolidated into government debt.<sup>45</sup>

The debt brake is thus comprehensive, reasonably simple, transparent, and enforceable,<sup>46</sup> and it allows for adjustments required by the economic cycle. It therefore has the main ingredients of a successful fiscal consolidation rule outlined in Guichard et al. (2007) and OECD (2007b). But its effectiveness prevents actions to reduce the structural external surplus. The requirement to finance domestic investments with new revenues would by definition not achieve that goal.<sup>47</sup> As a result, Germany's debt brake must be made more flexible to facilitate higher debt-financed public investments.

Another problem with the debt brake is that it produces inefficient allocation of spending toward items that are politically difficult to cut. Basic infrastructure or new public educational institutions do not have the political claim on the political leadership that German businesses do in demanding energy subsidies, or that older German workers do in wanting to retire at an earlier age. Such German government spending on the wrong things occurred when the Grand Coalition recently authorized unpaid expansions of future government pension liabilities.<sup>48</sup>

44. The government has discretion over which offsetting consolidation measures to take. The debt brake further has an explicit 1.5 percent of GDP limit on "budget overruns," requiring the government to maintain a control account recording any difference between actual government borrowing during the year and the constitutional limit. Once the control account hits 1.5 percent of GDP, automatic offsetting measures must be taken.

45. The cost of rescues of several German financial institutions after 2008 was fully consolidated into federal debt, increasing it by about 10 percent of GDP in 2010.

46. Another element of the new German rules is that they are relatively simple to enforce by the constitutional court, meaning that individual Germans could bring a suit against the German government for violating the new debt clause.

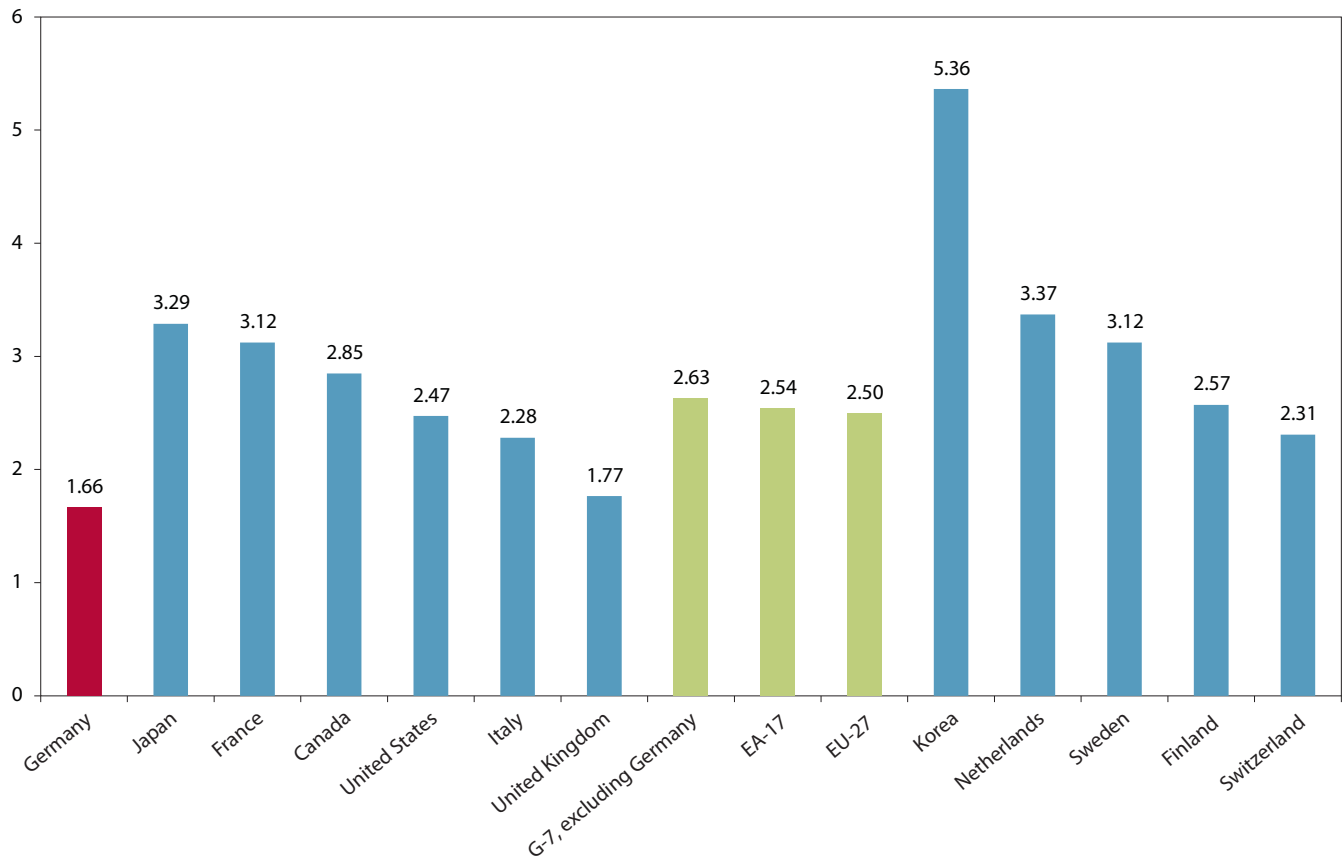
47. With new revenue German government savings would increase proportionally, and only possible fiscal multiplier effects from new public investments might generate additional economic activity in Germany to reduce the external deficit.

48. The Grand Coalition introduced a new lower retirement age for certain workers and raised the pension for older stay-at-home parents (overwhelmingly an estimated 9.5 million mothers and 150,000 fathers). Unfunded government pension liabilities are not tallied under the government System of National Accounts (SNA) accounting rules and hence not part of the debt brake calculations; in addition they do not require offsetting expenditure cuts, and hence possess disproportionate political appeal.



**Figure 12 General government gross fixed capital formation, average, 1999–2011**

percent of GDP



Source: OECD Main Economic Indicators.

Germany's debt brake must consequently be reformed in a manner shifting it back toward the earlier more standard investment excluding golden rule. In line for instance with the new debt brake's general principle of explicit repayment provisions for expenditure in excess of the 0.35 percent cyclically adjusted deficit, any public investment designed to generate toll revenue or user fees should consequently be immediately excluded from the debt brake. The debt brake should similarly facilitate dedicated future revenues to pay off such investments, and as such move toward requiring a rising percentage of total German public expenditure be for investment purposes. In addition, public investment with evident long-term economic benefits, whether in the form of new physical infrastructure or education expenditures (which amount to investing in human capital), should be exempted from the debt brake.

The determination of which investment projects possess "evident long-term economic benefits for the country" should be given to an independent group of economic experts. This entity should also observe that the share of public spending

adequate for Germany's long-term economic growth prospects be channeled toward investments.

A newly created German Stability Council monitors the budgetary developments under the debt brake, but it cannot do the job because it consists of federal and state government ministers, who are part of the problem.<sup>49</sup> Rather, an independent entity could be housed at the Bundesbank, the German council of economic experts (Der Sachverständigenrat), or in an entirely new public body.

## CONCLUSION

Germany has no reason to apologize for its ability to produce high-quality goods that people around the world want to buy, while paying its workers among the highest wages in the world. At the same time, frequently evoked ULC data are flawed.

49. The finance and economics ministers are members, as are affected state finance ministers.

German wage trends are not the sole or even principal driver of standard competitiveness indicator differentials in the euro era. It makes little sense to expect Germany's decentralized and flexible wage-setting institutions to accommodate the needs and desires of the euro area or indeed those outside it. Inflating Germany's domestic cost base is not a credible path to reduced German surpluses.

**[The debt brake] must be reformed to reduce Germany's external imbalance and limit its foreign financial exposure.**

But apart from the criticism directed at Germany, its large and increasingly structural external surpluses carry rising financial risks for Germany itself.

Euro membership shields Germany from currency appreciation that would normally result from persistent external surpluses and instead allows it to accumulate a record positive net international investment position. In addition, euro membership rules prevent Germany from adopting official sector foreign exchange reserves or similar measures, as other surplus economies have done.

Because Germany's manufacturing prowess has been left to be intermediated by the German private financial system, German savers and taxpayers have suffered huge investment losses and costly bank and bondholder bailouts. There is a widening gap between the value of cumulative German external surpluses and the country's net investment position. Just as China's currency policies have trapped that country into holding large amounts of low-yielding American treasury bonds, unchanged German economic policies will doom

German investors (and/or taxpayers) to financial losses because of the declining value of accumulating national savings invested unproductively.

German public policy faces obstacles in trying to influence savings and investment decisions in German household and corporate sectors. Germany should therefore liberalize its services sectors to boost growth and jobs. The nation would also benefit from expanding its private pension fund industry to channel its surpluses toward profitable investments globally.

In the shorter run, the German government should adopt new investment policies to reduce financial risks by limiting the external surplus. Germany should reform its constitutional debt brake to ensure that adequate public investments preserve its productive capacity and reduce its external surplus. The debt brake should be altered to exempt public investments generating toll revenue or user fees. A new independent entity of economic experts should evaluate whether other public investments possess evident long-term economic benefits. If independent experts find they do, such public investments should also be exempt from debt brake calculations. The debt brake has helped reduce budget deficits. Now it must be reformed to reduce Germany's external imbalance and limit its foreign financial exposure.

Higher German government fixed capita formation enabled by a reformed debt brake and overseen by independent experts is a responsible process to ensure debt sustainability, long-term economic benefits, and lower external surpluses. One percent of GDP, or €25 billion to €30 billion, would seem the minimum requirement. An increase in public investments of two percent of GDP, or €50 billion to €60 billion a year, would be appropriate to make up for previous neglect.

For a country with external surpluses the size of Germany's, it really is a matter of "use it, or lose it!"

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