7 Germany did not pursue fiscal devaluation

Fabio Ghironi and **Benjamin Weigert**[1]
University of Washington and CEPR; Deutsche Bundesbank

The consensus interpretation of Germany's economic success in the last 15 years traces the roots of this success to a combination of labour market reforms (the 'Hartz reforms'), changes in tax policy, and the grand bargain between key stakeholders that was completed with the changes in taxation introduced in 2008. The relative importance of each ingredient of this recipe in ensuring Germany's strong performance - of which Germany's external balance has been both driver and manifestation – is debated, but there is widespread agreement that the policies and social cohesion implemented and achieved between the late 1990s and 2008 laid the foundations for the ongoing success.[2]

Recent academic literature on the policy options available to members of a monetary union has flashed a bright light on the concept of fiscal devaluation. As shown in an influential *Review of Economic Studies* article by Farhi, Gopinath, and Itskhoki (Farhi et al. 2014), members of a monetary union can still achieve the same outcome in terms of real variables as in the aftermath of an exchange rate devaluation by appropriately adjusting a menu of tax instruments (and, in some scenarios, by defaulting on external

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2 Odendahl (2017) challenges the key role attributed to the Hartz reforms of the German labor market implemented between 2003 and 2005. He points out that wage restraint began as early as 1995 and that the timing of the reforms – i.e. their implementation in a period of global expansion – may have played a crucial role in their success. On the timing of market reforms and their interaction with cyclical conditions and macroeconomic policy, see also Cacciatore et al. (2016, 2017). Dustmann et al. (2014) highlight the governance structure and flexibility of Germany's labour market institutions as more important than legislative changes for the dynamics of German labour costs.

obligations).[3] The concept has origins in a series of newspaper articles on the possible role of import tariffs and export subsidies that Keynes wrote in 1931. Participation in the Single Market obviously rules out the tariff-and-subsidy option for members of the euro area, but the broader idea of fiscal devaluation gained traction again as the euro area crisis erupted in 2010 (see Cavallo and Cottani 2010, IMF 2011). Farhi et al. (2014) mention the experience of Germany in the mid-2000s and France in more recent years as examples of the real-world policy relevance of the fiscal devaluation idea. Absent the ability to devalue the currency, fiscal devaluation became a complement and alternative to internal devaluation (accomplished by lowering domestic production costs, most often unit labour costs) to boost external competitiveness and improve economic performance.

But was what German policymakers implemented in the 2000s really a fiscal devaluation? In answering this question, we will take seriously the definition of fiscal devaluation in Farhi et al. (2014) as a policy package explicitly intended to affect international relative prices in a way that boosts external competitiveness and shifts expenditure away from imports, and a policy package that is designed and implemented in non-cooperative fashion across countries. Before delving into the question, however, we will devote a few thoughts to placing the notion of fiscal devaluation as part of the policy arsenal of euro area countries in the context of euro area history and design.

Fiscal devaluation and the roots of EMU

Eichengreen and Ghironi (1996) argue that the 1992-93 crisis of the European Monetary System (EMS) was a catalyst for the eventual adoption of the euro, as the crisis highlighted the threat to stability of the Single Market posed by countries retaining the ability to devalue their currencies. For instance, the devaluation and continued depreciation of the lira gave Italian producers a competitive advantage in French and

3 Specifically, equivalence of outcomes requires either a uniform increase in import tariffs and export subsidies, or a uniform increase in value-added tax (VAT) with border adjustment and decrease in payroll tax. If the devaluation is anticipated, other instruments must be manipulated to ensure full equivalence of allocations, and a partial default is necessary if external debt is denominated in domestic currency.

German markets, which resulted in pressure for the imposition of retaliatory tariffs. This would have run counter the logic of the recently implemented Single Market, potentially derailing the project while still in its infancy.

Ultimately, tariffs on Italian exports were not introduced because it could not be argued that the competitive advantage of Italian producers was the result of policy designed to accomplish that goal. In fact, the Bank of Italy had defended the lira all the way to running out of reserves, and the Bundesbank's use of the Emminger Letter for the first time in the history of the EMS played an important role in the collapse of the lira.[4] However, the crisis and the pressures that followed heightened the perception of policymakers that the Single Market would be at risk as long as countries retained the mere possibility of acting on their currencies in a pro-competitive fashion. The final push for introduction of the euro followed.

Now consider the logic of fiscal devaluation in the light of this argument. According to its definition, fiscal devaluation is designed to accomplish exactly the type of non-cooperative, competitive boost that the 'founding fathers' of the euro intended the single currency to remove from the arsenal of euro area members. Farhi et al. (2014) analyse fiscal devaluation in a no-retaliation context, in which actions by the domestic economy do not trigger retaliation by its trade partners. The aftermath of the 1992-93 crisis suggests that this is a strong assumption. If we admit, even encourage, countries to pursue fiscal devaluation to boost domestic performance, shouldn't we worry about retaliation? In a potential environment of competitive fiscal devaluations across countries, shouldn't we worry about destabilising consequences for the Single Market exactly as we did when the discussion focused on currency devaluation in the 1990s? Or could it be that we should de-emphasise the notion of 'devaluation' associated with certain policy changes and re-focus their interpretation away from non-cooperative, competitive actions? We will argue below that this is what we should be doing.

4 The Emminger Letter gave the Bundesbank the option of withdrawing from its short-term credit line obligations toward EMS partner central banks if it feared that the use of such credit lines could jeopardise price stability in Germany. Heightened concern for price stability is exactly what the Bundesbank was experiencing in the aftermath of Germany's reunification, given the expansionary fiscal policies implemented by the German government and the one-to-one conversion of Ostmarks (the currency of the former East Germany) into Deutsch Marks that the government forced the Bundesbank to accept.

Was it really a fiscal devaluation?

Between the end of the 1990s and the mid-to-late 2000s, Germany made a series of tax policy adjustments that are broadly viewed as consistent with the fiscal devaluation menu:

- The top personal income tax rate including solidarity surcharge was brought to 47.5% in 2008 after peaking at 57% in 1996 and reaching an all-time low of 44.30% in 2005.
- The corporate tax rate including municipal trade tax and solidarity surcharge was at its peak of 56.80% in 1995, it reached its lowest at 29.40% in 2009 (with the largest reductions in 2001 and 2008), and it stabilised at 29.72% in 2010.
- The value-added tax (VAT) rate was at 16% in 2001, and it was increased to 19% in 2008.
- These changes were broadly consistent with the shift toward indirect taxation that is a key part of the fiscal devaluation recipe.[5] But did Germany's tax policy actions really constitute a fiscal devaluation?

Taking its definition seriously, we would expect that the changes were intended to boost the German economy by bolstering its external competitiveness, exactly as a currency devaluation would have done. As Homburg (2008) notes, the reduction in corporate taxation was also intended to attract inflow of foreign investment. But a capital inflow would be the mirror of a current account deficit rather than of the surplus the alleged fiscal devaluation should have generated.[6] Based on Homburg's account of Germany's tax policy changes, the effort to reduce the distortionary impact of taxation on Germany's labour market and on domestic investment, the effort not to lose revenue

5 See Homburg (2000, 2008) for detailed accounts of the changes in German tax policy between 1999 and 2008, or chapter eight of German Council of Economic Experts (2015) discussing German tax policy from 2000 until 2015. de Mooij and Keen (2012) study the role of VAT changes in striking a balance between a "fiscal devaluation goal" and the necessity to meet fiscal consolidation needs in time of difficulty.

6 Germany was both recipient and source of foreign direct investment flows in the relevant period, which of course makes the argument less clear-cut, as we discuss in more detail below.

by broadening tax bases, and political compromise appear to be much more plausible drivers of the German government's decisions with respect to its tax instruments than the goal of changing international relative prices to boost the trade balance.

In fact, the history of Germany's fiscal reforms suggests that fiscal devaluation was not the original intention of policymakers. The main objectives were to reduce unemployment, to overcome the ratchet effect of cyclical fluctuations on structural unemployment (after each business cycle, unemployment ended up at a higher structural level), and to raise potential growth by removing distortions in the tax system and in the social security system. Restoring sustainability of explicit and implicit public debt was another key goal. The financial difficulties of the pension system (besides the mounting deficits in unemployment insurance, health care, and the government budget) were the reason for the 1% increase of the VAT in 1998: the tax revenue was used to keep the pensions contribution rate at 20.3%, forestalling an automatic increase to well above 21% to cover pension payments. Also, in 2003, right after a pension reform in 2001, the increase in the contribution rate was stopped simply by broadening the contribution base to increase revenue. Of course, as any contribution translates into higher claims to the pension system, this was only a temporary stabilisation of the overall balance of the pension system.

With respect to foreign direct investment (FDI) flows, changes in the corporate and income tax code in 2001 removed distortions that made it highly unprofitable for Germans (and in some cases German companies) to invest abroad compared to investing domestically and serving global markets by exporting. In the case of companies, the *pre-reform* system made it preferable to export instead of engaging in FDI: the reason was that when dividends were paid out, to avoid double taxation of corporate profits at the level of the shareholders in Germany, the German personal income tax code allowed shareholders to deduct German corporate taxes (but not corporate taxes paid in other countries on profits of foreign subsidiaries) from the personal income tax to be paid on these dividends.

To understand how the pre-2001 system distorted the choice between FDI and exports in internationally active owner-led companies ('*Mittelstand*'), consider the following example: An owner-led company seeks to expand its international business. It has the choice between investing in Germany and exporting, or investing the same amount

in producing abroad and selling on the local market. Assume that pre-tax profits are exactly the same in both options. While profits from exports are taxed in Germany at the prevailing corporate tax rate, FDI profits are taxed abroad. Abstracting from the many complications of international taxation and assuming the same corporate tax rate at home and abroad, the after-tax profits from FDI are distributed to the German parent company, which does not have to pay additional corporate taxes on the dividends received. Regarding the personal income tax burden of the shareholder, if we compare the taxation of (the additional) dividends paid out to the owner in both cases, it is evident that profits generated from exports are taxed at her/his marginal personal income tax rate (due to full deduction of German corporate taxes), while profits originating from FDI are exposed to double taxation, as the foreign corporate tax is not deductible (Jacobs and Spengel 1992).

As double taxation of corporate profits in Germany was only avoided when the shareholder was German while a deduction of corporate taxes paid abroad (and in particular in EU countries) was not allowed, this was perceived and later considered a violation of the non-discrimination rule, thereby violating the principle of free movement of capital in the European Single Market.[7] The tax code was changed accordingly in 2001, aligning the personal income tax burden of dividends received from German and foreign companies. The reform in 2001 (which included a reduction in statutory rates but also a broadening of the tax base) likely benefited both the FDI of foreign companies in Germany (due to lower rates) and Germans abroad (due to changes of the personal income tax code). Therefore, gross FDI flows were influenced by the reform, with hard-to-predict effects on net flows (German Council of Economic Experts (2015: Chapter 8).

Historical and institutional details thus make it hard to think that German policymakers were manipulating multiple fiscal instruments with the goal of reproducing an exchange rate devaluation.

7 In fact, this view was later confirmed by the European Court of Justice (ECJ): In 2004 the ECJ ruled in a similar case from Finland (Manninen Case Link: http://curia.europa.eu/juris/document/document.jsf?docid=49454&doclang=en) that tax credits have to be granted also for corporate taxes paid in other EU countries.

Enlarging a pie versus splitting a pie

The analysis in Gadatsch et al. (2016) suggests another reason to be cautious in interpreting German tax policy in the 2000s through the lens of fiscal devaluation. Gadatsch et al. develop a dynamic, general equilibrium model of a two-country monetary union characterized by labour market frictions and distortionary taxation. They treat the home country in the model as Germany, and the foreign country as the rest of the euro area. They then calibrate the model to match characteristics of Germany and the rest the euro area prior to the Hartz reforms and the changes in German fiscal policy, and they then simulate the consequences of Germany's policy actions domestically and abroad.

The most important result in Gadatsch et al. (2016) is that, all else given, the spillover effects of German economic policy decisions in the 2000s on output, investment, and consumption in the rest of the euro area are positive. Moreover, the simulated impact of the reforms on Germany's external balance is minor. Gadatsch et al. conclude from this that the Hartz reforms and the changes in German tax policy "cannot be held responsible for the observed macroeconomic imbalances in the euro area" and "did not cause harmful 'beggar-thy-neighbour' effects". It is hard to square these findings (and the empirical evidence in Bettendorf and León-Ledesma 2015) with what we would expect from a devaluation (fiscal or not).

This brings us to another important observation: even when it happens, a movement in international relative prices triggered by domestic policy changes that ends up having a beneficial effect on domestic competitiveness should not necessarily be associated with the notion of a beggar-thy-neighbour devaluation. Eichengreen and Sachs (1985) make this point about the experience of devaluations associated with the collapse of the interwar Gold Standard. Their key empirical result is that as long as devaluations were accompanied by domestic policy expansion, the result was an expansion of the overall 'economic pie' with beneficial effects domestically and abroad, not just a redistribution of a given-size 'pie' in favour of the devaluing country.[8] Taken together, these results and arguments suggest that, in evaluating Germany's economic policies in the 2000s,

8 This argument is akin to Obstfeld and Rogoff's (1995) result that a monetary policy expansion that depreciates the domestic currency can be beneficial at home and abroad.

the emphasis should be at least as much on the actual, stated objectives of those policies and on their potential to increase the overall size of the euro area 'economic pie' as on an alleged competitive, beggar-thy-neighbour motive.[9]

Was it Germany's doing or was it someone else's not doing?

Germany was the 'sick man' of Europe between the end of the 1990s and the early 2000s. To address its problems, it took policy actions in the form of the Hartz reforms, changes in tax policy, and a social bargain that led to wage restraint. Reduction of distortions in the economy, the need to preserve tax revenue, and political compromise seem to us much more compelling explanations of the Hartz reforms and the tax policy adjustments than an explicit pursuit of external competitiveness. It seems unlikely that external competitiveness – as opposed to domestic considerations – was the most important driver in the pursuit of wage restraint.

Be that as it may, we did observe a relative price shift in favour of Germany and a persistent improvement of its external balance. But it always takes (at least) two to dance the relative-price and external-balance tango. Germany addressed domestic problems through policies that, based on Gadatsch et al.'s (2016) results, had the potential to be beneficial also for its partners (to expand the overall euro area 'economic pie'). What devaluation and expansion of Germany's external balance happened in response to these policy actions, it happened also because Germany's partners failed to address their own combinations of highly distortionary tax systems, sclerotic labour markets, and similarly rigid product markets. In other words, we must consider the partners' actions (or inactions) before blaming Germany of having acted in the 2000s in the non-cooperative fashion associated with the notion of trade-balance-boosting devaluation. Moreover, we should also consider that German policymakers have been arguing for years that weakly performing euro area partners should implement similar policy actions. When a country devalues its exchange rate to boost its competitiveness, it

9 Put differently, the discussion can also be cast in terms of ex ante intent of policy actions versus ex post outcomes. Gadatsch et al.'s (2016) exercise raises doubts on the extent to which outcomes were the result of a beggar-thy-neighbour motive.

usually does not encourage the partners against which it is seeking that competitiveness to do the same – precisely because devaluation by the partners would wipe out any competitiveness gain generated by the first move.

Too much emphasis on a theoretical result?

Finally, it is worth observing that the notion of fiscal devaluation is intriguing, but it places very strong requirements on what a policymaker should be able to accomplish. In essence, fiscal devaluation requires the policymaker to have access to a sufficiently large menu of independent instruments such that policy can act on all the relevant margins of adjustment to cause them to move exactly as they would after an exchange rate devaluation. This is reminiscent of Jan Tinbergen's insights on the importance of the relation between number of instruments (in this case, mostly tax rates) and objectives (in this case, adjustment margins to be acted upon) in order to accomplish the desired goals. The question, however, is when do we cross the line into assuming that policymakers can have access to so many instruments and they can act on so many margins that they can get the economy to do whatever they want to do? Reality is about costly trade-offs and frictions in taking decisions and deploying policy instruments (Dixit 1997). It is about acting on tax policies to preserve sustainability of government finances. In principle, in the euro area, it is also about fulfilling the constraints imposed by the Stability and Growth Pact (more recently, the Fiscal Compact) – even if Germany itself deviated from it at various points, including 2002-05. Given all these real-world constraints on the making of fiscal policy in the euro area, the notion that German policymakers acted on a wide array of instruments to deliver the same outcome as under an exchange rate devaluation strikes us as a stretch.[10]

10 In today's world of value chains in which German firms are highly integrated, it is hard to predict how the trade balance will be affected by exchange rate movements, let alone movements in a wide array of fiscal instruments.

Conclusion

The literature on fiscal devaluation has argued that appropriate fiscal policy actions under a fixed exchange rate can reproduce the response of the economy to asymmetric shocks that would be observed under a flexible exchange rate. But the intentional devaluation of an otherwise fixed exchange rate is a different policy concept from an equal-size, equal-direction response of a flexible exchange rate to shocks (or to other policy actions). The non-cooperative nature of a devaluation and the implications of this nature must be taken into account. This leads us to conclude that the case for fiscal devaluation risks being overstated. Doing so can lead to inaccurate interpretation of historical events. It can lead policymakers across the euro area to be tempted to pursue non-cooperative actions that may end up having destabilising effects. Rather than thinking in terms of (fiscal) devaluation, it seems to us more productive to focus on the removal of distortions that German economic policies accomplished and on the lack of similar distortion-reducing actions abroad as the key drivers of Germany's success and its external balance. The pursuit of productive efficiency and the failure of partners to do the same – not beggar-thy-neighbour competitive action – was at the heart of Germany's success. The difference may appear subtle, but it can have very substantial consequences for policy debates in the euro area.

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About the authors

Fabio Ghironi is Paul F. Glaser Endowed Professor in Economics at the University of Washington, a Research Fellow in the International Macroeconomics and Finance Programme of CEPR, a Research Associate in the International Finance and Macroeconomics Program of the NBER, and a Fellow in the Euro Area Business Cycle Network. He is an Officer of the Central Bank Research Association and the Director of its Research Program in International Trade and Macroeconomics. Professor Ghironi is the U.S. Associate Editor of *International Finance*, a Co-Editor of *economics*, an Associate Editor of the *Journal of International Economics*, and an Editorial Board Member of the *Review of International Economics*. He obtained a Laurea in Economic and Social Sciences from Bocconi University in 1993, a Master in Economics from the same institution in 1994, and a Ph.D. in Economics from the University of California, Berkeley in 1999. Prior to joining the faculty at the University of Washington, he was a faculty member at Boston College and an Economist at the Federal Reserve Bank of New York. His main areas of research are international macroeconomics, macroeconomics, and monetary economics.

Benjamin Weigert studied economics at the Technical University of Dresden with a focus on International Economics, Managerial Economics and Econometrics. He received his diploma degree in 2002. In 2007, he received his PhD from the University of Konstanz in International Economics and completed the doctoral program "Quantitative Economics and Finance". He worked as a research assistant at the Chair of Economic

Theory in Konstanz from 2002 until 2004 and at the Chair of International Eco-nomics in Giessen from 2004 to 2007. After graduation, he joined Deloitte & Touche. From July 2009 to June 2015, he worked at the German Council of Economic Experts, since August 2011 as Secretary General of the Council. In July 2015 he joined DG Financial Stability of the Deutsche Bundesbank. Since August 2016 he is Director General.