

Bramucci, Alessandro

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# In search of a growth model for Italy: the failed attempt of an export-led recovery strategy?

Alessandro Bramucci

Institute for International Political Economy, Berlin School of Economics and Law (HWR Berlin), Germany  
alessandro.bramucci@hwr-berlin.de

*We analyse Italy's growth pattern from 2001 to 2019 using the demand and growth regime categories proposed in the post-Keynesian tradition and recently adopted in the comparative political economy (CPE) literature. We argue that after the Global Financial and Economic Crisis (GFEC), Italy followed an export-led recovery strategy. In this respect, Germany's growth model emerged as the successful model to follow. In the dominant view, Germany's economic success since the mid-2000s was attributed to a series of painful but necessary economic reforms. The success of Germany's export-led mercantilist regime became particularly attractive to Italy given the similar export-oriented manufacturing industry. However, Italy has followed the 'wrong' German model based on wage compression and restrictive budget policies while the 'true' German model is based on non-price competitiveness factors.*

**Keywords:** demand and growth regimes, export-led growth, competitiveness, internal devaluation, Germany, Italy

**JEL codes:** E10, E69, F14

## 1 INTRODUCTION

When trying to analyse the stagnation that has characterised the Italian economy over the past three decades, two main lines of interpretation emerge. The first set of arguments, which are of orthodox inspiration, focus on the problems of the Italian economy from the aggregate supply side. The discussion focuses on labour market institutions and the degree of centralisation of the collective bargaining system, on the role of competition in the domestic market for goods and services, and on the functioning and quality of public institutions.<sup>1</sup> The second group of arguments, of heterodox inspiration, look instead at the role (and lack) of aggregate demand and how this has shaped the growth performance of the country.<sup>2</sup>

This approach is reflected, not surprisingly, in the comparative political economy (CPE) literature. In the CPE literature the dominant paradigm until recently has followed the so-called Varieties of Capitalism (VoC) approach. Based on the institutional and supply-side characteristics of advanced capitalist economies, the VoC approach proposed the well-known distinction between liberal market economies (LMEs) and coordinated market

1. Here the usual call for structural reforms prevails, that is, more flexibility in the labour market, more competition in the market for goods and services and the decentralisation of wage bargaining (see, for example, European Commission 2019).

2. In support of this view, see Storm (2019) and Cesaratto/Zezza (2018).

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economies (CMEs) (Hall/Soskice 2001). In their well-received article, Baccaro/Pontusson (2016) suggested to move away from the categories of the VoC tradition, illustrating a new approach to CPE that places at the centre of the analysis the core elements of post-Keynesian/Kaleckian economic thinking, namely aggregate demand and income distribution.<sup>3</sup> The authors suggest the concept of ‘growth models’, where the two opposing but, at the same time, complementary models are the so-called export-led growth model and the consumption-led growth model. In the former, growth is driven by net exports and thus by foreign demand whereas, in the latter, growth is driven by household consumption and thus by domestic demand. The fall in household income witnessed since the late 1970s in advanced capitalist economies implied that consumption was increasingly sustained by debt rather than income so that the consumption-led growth model can be labelled the debt-led growth model. The two models are complementary since the current account deficits of the debt-led growth model allow the export-led growth model to run trade surpluses.

Post-Keynesian scholars have also investigated the emergence of different growth regimes and the shift of the regimes after the Global Financial and Economic Crisis (GFEC) of 2007–2009.<sup>4</sup> The regimes are the debt-led private demand boom regime, the domestic demand-led regime, and the export-led regime both in its mercantilist and weak constellation (Dodig et al. 2016; Dünhaupt/Hein 2019; Hein 2019; Hein/Martschin 2021). Academics of post-Keynesian inspiration have thus welcomed the new approach to CPE by Baccaro and Pontusson, highlighting some shortcomings with regard to the distinction between the wage-led and the profit-led regime (that is, how aggregate demand reacts to a change in income distribution), and the source of aggregate demand, that is, for example, debt-led growth or export-led growth (Hein/Martschin 2021; Stockhammer 2022). As highlighted in Amable (2023), the notion of growth models can be also traced back to the work of the French *Régulation* theory and in particular to the contribution of the French economists Robert Boyer and Michel Freyssenet appeared in the 1990s/2000.

According to the VoC approach, the Italian model is seen as ambiguous, showing incoherence and lack of complementarities among institutions and is thus relegated to the case of a ‘mixed market economy’ (Molina/Rhodes 2007). As argued by Della Sala (2004), in the post-war period Italy tried to mimic elements of a CME and in more recent times, under the impetus of the European integration process, the country tried to adopt elements of an LME without becoming either one. The VoC approach predicts that countries that best fit one of these two fundamental types of capitalism will register better economic outcomes while countries somewhere in between the two – and this is the case of Italy – will not perform as well.

In the growth models perspective, Baccaro/Pontusson (2016) argue that Italy has failed to find a substitute to the Fordist ‘wage driver’ of growth and that ‘persistent stagnation is always an option’.<sup>5</sup> In Hein et al. (2021), Italy’s growth regime shifts from a domestic demand-led regime in the period 2000–2008 to an export-led regime in the period 2009–2016. Kohler/Stockhammer (2022) suggest that the classification of growth models according to the dichotomy export-led/consumption-led may have lost its explanatory power for the period after the GFEC. The authors show how in the sample of 30 high-income OECD countries used in Hein et al. (2021), 24 countries (including Italy) out of 30 can be classified as export-led in the post-crisis experience. The authors question

3. In defence of the VoC approach, see Hope/Soskice (2016).

4. In this literature the term ‘growth regime’ is preferred to ‘growth model’, but the two concepts are similar. We use the two terms as synonyms.

5. This consideration is, however, based on the theoretical shortcoming in the paper to which we referred earlier.

the validity of this interpretation, highlighting how in most cases the growth contribution made by net exports is primarily due to the fall in imports rather than by the growth of exports. Hein/Martschin (2021) keep the regime distinctions also for the post-crisis period, arguing how it is the macroeconomic policy regime – that is, the combination of fiscal, monetary and wage policies as well as open economy conditions – that influences the country's growth regime and its change. In the case of Italy, a highly restrictive macroeconomic policy regime after the global crisis has forced the country to shift from a stagnating domestic demand regime to a stagnating export-led regime (Hein/Martschin 2021).

Against this background, we attempt to explain the country's post-crisis regime with the (failed) attempt to adopt an export-led recovery strategy. This does not mean that the stagnation of the Italian economy begins with the GFEC of 2007–2009. The stagnation of the Italian economy has been ongoing for almost three decades. In this contribution, however, we focus on period from 2001 to 2019 to try to explain the paradigm shift in the Italian growth model after the global crisis in the context of the European Economic and Monetary Union (EMU) and the relative economic policy constraints. We argue how, after the crisis, Germany's export-driven growth model emerged as the successful model to follow for Italy and for the eurozone as a whole. In the dominant view, Germany's economic success since the mid-2000s was attributed to a series of painful but necessary economic reforms that were able to kickstart growth and employment. The success of Germany's mercantilist export-led growth model has been especially attractive to Italy, given the similarly export-oriented manufacturing industry and the strong similarity in the array of exported products. However, borrowing terminology from Storm/Naastepad (2015), we argue that Italy has applied the 'wrong' German model (the model portrayed in the mainstream interpretation) based on wage compression and restrictive budget policies. In contrast to this simplified mainstream characterisation of the German model, Germany's export success, or the 'true' German model, is based on non-price factors, such as the technological improvement of the exported products and the reorganisation of outlet markets (Simonazzi et al. 2013; Storm/Naastepad 2015). Not least, even if Italy had been able to emulate the success of Germany's mercantilist export-led growth model, export-led growth suffers from intrinsic contradictions as it depends on the capability and willingness of the exporter's trading partners to run permanent current account deficits. Once the deficit country is no longer able to finance its current account deficits, it will be forced to consolidate, affecting also the surplus countries.

Our paper is organized as follows. In Section 2, we identify the demand and growth regime of Italy, looking at the GDP growth contributions and the sectoral financial balances. We show how the export-led growth model is the only viable option for a country where both the private and the public sectors aim at running budget surpluses. In Section 3, we show how Germany emerged as the successful model to follow. In the dominant interpretation, the recovery of the German economy since the second half of the 2000s has been attributed to the success of deflationary policies based on the combination of austerity and flexibilisation. In Section 4, we argue how Italy followed the 'wrong' German model based on wage compression and price competitiveness while the success of German exports can be attributed to non-price competitiveness factors. Here, our comparative analysis will focus on two aspects: the reorganisation of export markets and the improvement in technological competitiveness of exports. In Section 5, we draw the conclusions.

## 2 WHICH GROWTH MODEL AFTER THE GFEC?

For our assessment of Italy's growth model, we look at GDP growth contributions and sectoral financial balances. Following Hein/Martschin (2021), we distinguish between

two periods so to capture the changing macroeconomic and macroeconomic policy conditions. The first period ranges from 2001 to 2009 and it includes the GFEC, while the second period ranges from 2010 to 2019 and includes the eurozone crisis and the following period of austerity policies. Table 1 shows the contributions to real GDP growth of the components of aggregate demand (private consumption, gross (fixed) capital formation, government demand, and net exports) together with the sectoral financial balances of the main macroeconomic sectors, the household sector, the corporate sector (forming together the private sector), the government sectors and the foreign sector. In the period 2001–2009, the main source of growth is represented by public and private consumption demand, with 0.22 and 0.23 percentage points, respectively (average values over the period as for the rest of Table 1). Private investment did not contribute to aggregate demand, and the contribution of gross fixed capital formation is zero while trade balance contributed negatively to real GDP growth. Growth contributions sum up to real GDP growth, which in the period 2001–2009 was equal to 0.18 per cent. Looking at the sectoral financial balances, we can see that the balance of the household sector was positive (private demand was not deficit-financed). Even if the corporate sector registered a small deficit (equal to 0.23 per cent of GDP), the private sector taken together was still in surplus. Throughout the 2001–2009 period, the government sector ran a deficit of 3.28 per cent and the foreign sector recorded a surplus of 1.11 per cent, which is equivalent to a deficit in Italy's current account. The sectoral financial balances sum up to zero, as the surplus in one sector must, by definition, be equal to the collective deficits of the other sectors. Italy's growth regime in the period 2001–2009 can be identified as domestic-led.

In the second period (2010–2019), the source of private demand disappears, with gross fixed capital formation and public demand contributing negatively to GDP growth (−0.14 and −0.10 percentage points, respectively). The contribution of private consumption is minimal (0.06 percentage points), and the only significant contribution to GDP growth in the post-GFEC period comes from net exports and thus foreign demand (0.37 percentage points). In this period real GDP growth was equal to 0.27 per cent. The stance of the sectoral balances confirms the slowdown in private consumption and investment. The household and business sectors are both in surplus, and the balance of

*Table 1 Contributions to real GDP growth (percentage points) and sectoral financial balances (percent of GDP), average values, Italy*

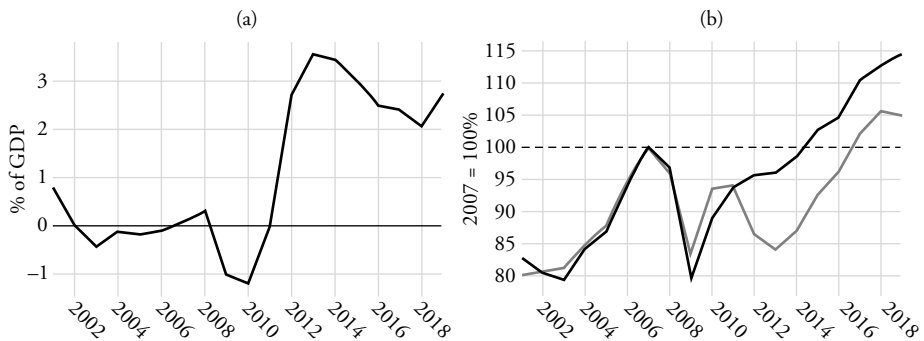
	2001–2009	2010–2019
	<i>GDP growth &amp; growth contributions</i>	
Real GDP growth (percent)	0.18	0.27
Private consumption	0.23	0.06
Gross capital formation	−0.09	−0.06
– Gross fixed capital formation	0.00	−0.14
Government demand	0.22	−0.10
Net exports	−0.19	0.37
	<i>Sectoral financial balances</i>	
Household sector	2.46	1.27
Corporate sector	−0.23	2.45
Government sector	−3.28	−2.77
Foreign sector	1.11	−0.89

Source: AMECO (2022). Own calculations.

the private sector as a whole is even larger than in the previous period (3.42 per cent). At the same time, the deficit of the government sector decreases to 2.77 per cent.<sup>6</sup> The external sector is in deficit, which is equivalent to Italy's current account surplus. It follows that in the period 2010–2019, Italy can be classified among the export-led economies (Hein et al. 2021; Hein/Martschin 2021). Net exports, with the additional (albeit minimal) contribution of private consumption, appear to be the sole source of growth in the post-GFEC period.

Figure 1a shows the evolution of net exports as share of GDP. Starting in 2010, we observe a rapid improvement in net exports followed by a slight decline until 2018 when net exports stopped around 2 per cent to then rise again in 2019. If we analyse imports and exports trends separately, we observe how the improvement in the trade balance in the period 2010–2019 has been driven primarily by a reduction in imports demand rather by a genuine increase in exports. Figure 1b shows exports and imports as an index, where the base year is 2007. After 2009, Italian exports enters a growth path that continues until 2019 while import declines both as a consequence of the global crisis and of the eurozone crisis and the resulting drop in government and consumer spending. Imports recovered only from 2014 and managed to surpass the pre-global crisis values only in 2017. In this light, the classification of Italy's growth regime in the post-crisis experience as export-led does not appear to be dictated by a genuine shift in the growth paradigm of the country from one driven by domestic demand to one driven by foreign demand (Kohler/Stockhammer 2022).

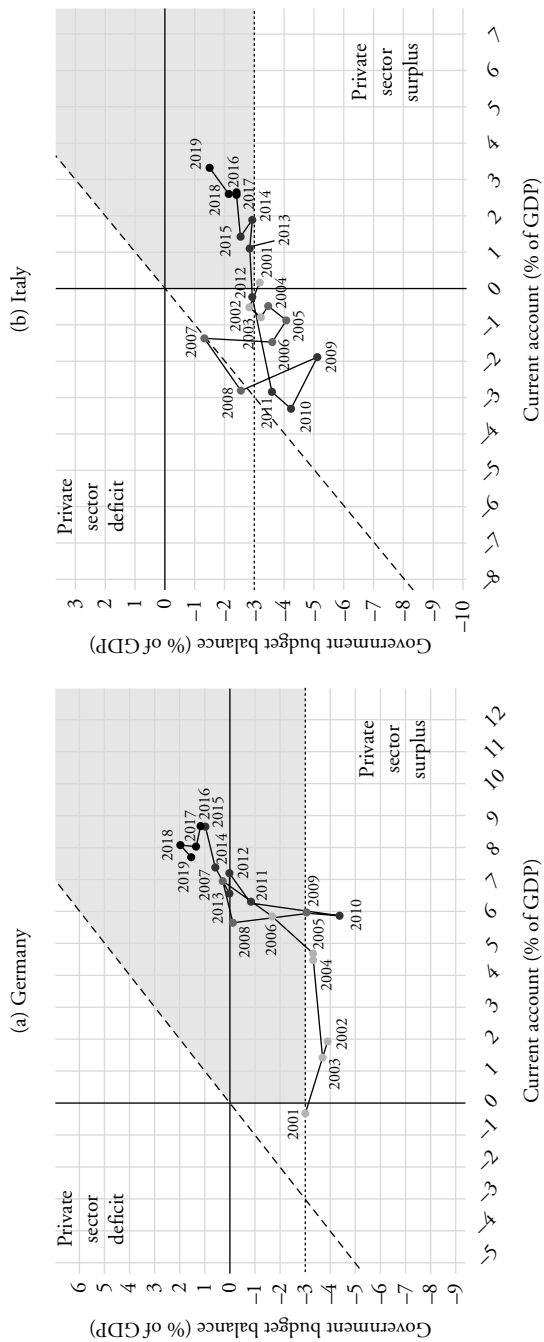
From the arithmetic of the sectoral financial balances, we know that if the public sector and the private sector would like to achieve simultaneous financial surpluses, it is necessary that the foreign sector runs an offsetting current account deficit (from the domestic perspective, a current account surplus). This means that if the private sector accumulates savings and the public sector is constrained by a balanced budget rule, as in the European context, an offsetting current account surplus is required. In Figure 2, we show the



Source: AMECO (2022). Own elaborations.

Figure 1 (a) Net exports of goods and services in percent of GDP and (b) exports (black) and imports (grey) at constant 2015 prices (2007 = 100 per cent), 2001–2019, Italy

6. More specifically, the primary surplus goes from an average value of 1.62 per cent in the period 2001–2009 to an average value of 1.47 per cent in the period 2010–2019. Interest payments on debt in relation to GDP went from an average value of 4.89 per cent in the first period to 4.23 per cent in the second period.



Source: AMECO (2022). Own elaboration.

Figure 2 Evolution of the sectoral financial balances, 2001–2019

evolution of the sectoral financial balances from 2001 to 2019 for Germany and Italy. We report the government budget on the vertical axis and the current account on the horizontal axis, both expressed in percent of GDP.<sup>7</sup> The diagonal 45-degree line represents all combinations of government budget and current account where the financial balance of the private sector is in equilibrium (that is, where saving is equal to investment). Above the equilibrium line, the private sector records a deficit while below the equilibrium line, the private sector registers a surplus. We can observe how over time both Germany and Italy moved towards the area that we have highlighted in grey. In the grey area, three conditions are simultaneously met: a current account surplus, the compliance with the European deficit rules (the grey area is limited below by a dotted line cutting the vertical axis at the 3 per cent mark) and the surplus of the private sector.

In the case of Germany (Figure 2a), we observe how starting from the beginning of the 2000s, the country took a clear mercantilist stance, running high and persistent current account surpluses (Zezza 2020). At the same time, the private sector registered large surpluses, thus becoming a net lender to the country's trading partners. The government sector drastically reduced deficit spending so that in 2012 it reached a balanced budget, and from 2013 it started to record continuous budget surpluses until 2019 (Germany's path enters the grey area above the horizontal axis in 2012–2013). As of the early 2000s, Italy's current account is negative and the government deficit is negative. The private sector is in surplus (except for 2008). After the GFEC of 2007–2009, we can see how the country's trajectory rotates counter-clockwise and it starts heading toward the grey shaded area. In fact, an even more restrictive European fiscal policy framework pushed the country to run current account surpluses. Similar to Italy, the eurozone as a whole followed a counter-clockwise trajectory. After the crisis, the eurozone needed to achieve persistent current account surpluses in order to offset shrinking government deficits imposed by the restrictive fiscal rules (Zezza 2020).<sup>8</sup> As highlighted by Hein (2019), before the crisis, the eurozone showed the features of a domestic demand-led regime while, after the crisis, the eurozone turned towards the export-led regime. A recovery strategy driven by foreign demand is therefore the only available option when fiscal policy is hindered to stimulate domestic aggregate demand and the private sector wishes to save (Kregel 2018). As we will see in the following sections, in the case of Italy, the policies adopted to boost exports depressed domestic demand without stimulating export demand, turning the growth pattern of the country into a failed export-led regime.

### 3 GERMANY AS A ROLE MODEL AFTER THE CRISIS

#### 3.1 The crisis

The economic and financial crisis exposed the fragilities that had been building up within the EMU since the inception of the single currency. For the peripheral countries of the eurozone, including Italy, the first years after the introduction of the single currency

7. Such graphical representation of the sectoral financial balances is based on Zezza (2020) and Kregel (2018), which in turn draws on the framework proposed in Parenteau (2010). This graph has also found its way into some heterodox macroeconomics textbooks (Mitchell et al. 2019; Lavoie 2022).

8. The graph for the eurozone can be found in Zezza (2020). A dynamic graph showing the evolution of sectoral balances for individual eurozone countries can be found at the following link: [www.alessandrobramucci.com/graphs/dynamic\\_graph.html](http://www.alessandrobramucci.com/graphs/dynamic_graph.html).



correspond to a period of (light) expansion. The convergence of interest rates due to the disappearance of exchange rate risk favoured the inflow of capital from the core countries of the currency area, predominantly Germany. Capital inflows boosted domestic (debt-financed) demand, supporting growth and employment. Current accounts between the core and the periphery of the eurozone started to deteriorate as the exchange rate between eurozone countries was now fixed. At the same time, higher growth rates in peripheral countries led to higher prices and nominal wages, which in turn contributed to further loss of competitiveness of the peripheral countries vis-à-vis core EMU countries.<sup>9</sup> Italy suffered from the introduction of the euro as the country lost the exchange rate instrument that it used to resort to in the past in order to improve its foreign trade balance. The single currency, together with historically higher inflation rates compared to the core EMU countries, contributed to the erosion of Italy's external competitiveness. In Europe, the international crisis soon turned in what in the mainstream interpretation became known as the 'sovereign debt crisis' involving, in particular, Greece and Italy as well as other peripheral countries of the EMU. The debt crisis was interpreted as a problem of excessive public spending, and to stop the speculative spiral that had formed in the financial markets around the public debt of peripheral EMU countries, severe austerity policies were imposed.<sup>10</sup>

For Germany, the early 2000s were instead years of economic crisis as the country was still bearing the burden of reunification. With the introduction of the euro, Germany experienced the opposite situation compared to Italy. Thanks to the euro, a weaker currency with respect to the older *Deutsche Mark*, Germany improved its international competitiveness outside the eurozone. In addition, thanks to lower inflation rates compared to the rest of the eurozone, the country was able to gain a strong competitive edge vis-à-vis peripheral EMU members. Structural reforms and, in particular, labour market reforms (the well-known Agenda 2010 and the Hartz IV reforms of the red-green political coalition) pushed wage growth below productivity growth boosting the competitiveness of German exports.

### 3.2 The post-crisis European policy agenda

Thanks to its newfound economic and thus political strength, Germany, together with European and international institutions (the 'Troika'), dictated the policies of the European post-crisis recovery agenda. In the dominant view, Germany's economic success since the mid-2000s was attributed to a series of painful but at the same time necessary economic reforms. Thanks to labour market flexibilisation measures and restrictive budgetary policies (*Schuldenbremse*) Germany was able to quickly turn from the 'sick man of Europe' to the leading European economic power showing positive GDP growth rates, low unemployment rates, large current account surpluses and a declining debt-to-GDP ratio. Due to its rapid economic success, Germany and the 'German model' soon became a role model for the entire EMU and in particular for the crisis-ridden countries of the periphery (Piattoni/Notermans 2021; Notermans/Piattoni 2021). The dominant interpretation of Germany's economic success was criticised in several respects. Hein/Truger (2005) questioned the mainstream assumption of institutional sclerosis, that is, rigid labour market regulations and a generous welfare state, being at the root of

9. Real wages in Italy have been stagnant since the 1990s. See the chart in Buchholz (2023).

10. We know well how in peripheral EMU countries the debt-to-GDP ratio was stable or even decreasing as in the case of Spain and increased dramatically as a result of the global crisis.

the German economic malaise of the 1990s/early 2000s, pointing instead to the restrictive policy mix both at the domestic and European level. Cesaratto/Stirati (2010) argued how Germany implemented restrictive wage and fiscal policies to deliberately pursue a clear mercantilist strategy to the detriment of its European partners. Truger/Rietzler (2019) questioned that the ‘debt brake’ (*Schuldenbremse*) was the reason behind the successful budget consolidation beginning in 2010 in Germany, arguing instead how the positive macroeconomic conditions enjoyed by the country were responsible for the realisation of budget surpluses and the reduction of the debt-to-GDP ratio. Nevertheless, the image of Germany’s export-led economic success based on wage moderation and fiscal discipline remained deeply ingrained in the European policy discourse, so that the post-crisis European policy agenda was shaped around the two pillars of fiscal austerity, to reduce public debts and to restore confidence of financial markets, and labour market structural reforms, to improve external competitiveness and relaunch exports (Notermans/Piattoni 2021).

Italy undertook several reforms following the European policy agenda. However, the policy mix adopted soon proved to be self-defeating (see Storm 2019). Fiscal consolidation efforts did not help to reduce the debt-to-GDP ratio that jumped from approximately 120 per cent in 2011 to 135 per cent in 2014. The Italian labour market was also subject to a series of reforms aimed at increasing flexibility and boosting employment. Labour market structural reforms instead pushed the adoption of temporary and part-time contracts over permanent contracts, favouring the creation of new jobs in low-tech sectors (Cirillo et al. 2017). Perez/Matsaganis (2019) showed how labour market structural reforms in Italy and in southern Europe were effective in achieving internal devaluation but did not help to boost exports and employment. In addition, numerous empirical studies have found the existence of negative relationship between labour flexibility and labour productivity.<sup>11</sup> The existence of such negative link is also confirmed in the case of Italy. Lucidi/Kleinknecht (2010) found that, in a sample of 3,000 Italian firms over the period 2001–2003, firms with a high share of flexible workers registered significantly lower rates of labour productivity growth. Similarly, Calcagnini et al. (2021) found that, in the period 1995–2012, the share of temporary workers was negatively related to productivity (total factor productivity) growth, in particular in the industrial centre-north regions. Cirillo/Ricci (2022) perform quantile regression analysis to an original longitudinal sample of Italian firms for the years 2007, 2010 and 2015 to find that the intensive use of short-term work weakened labour productivity, especially in low-productive firms, thus reinforcing the dualism of the Italian production system made of a large group of low-productive and low-wage firms and a small group of high-productive firms.

The adoption of structural reforms in Italy has been pushed by international institutions. The most prominent case of urgent call for structural reforms is certainly the letter received in August 2011 by the Italian government led at the time by Silvio Berlusconi co-signed by the president of the Bank of Italy, Mario Draghi, and by president of the ECB, Jean-Claude Trichet. However, as argued by Amable/Palombarini (2014), neoliberal structural reforms in Italy found support in the dominant social bloc of the country, which the authors refer to as the *bloc bourgeois*. The *bloc bourgeois* is an elitist social alliance that brought together parts of the right and of the left and that was deeply committed to the neoliberal principles of the European integration project.

11. See the review of the literature in Pariboni/Tridico (2020). Several studies have also confirmed the existence of a negative relationship between labour flexibility and innovation (see, for example, Kleinknecht et al. 2014).

### 3.3 Italy as an export-led economy?

Historical evidence seems to support the thesis that exports played a key role for growth in Italy. In his work on the development of the Italian economy, Graziani (2000) argued how after the Second World War (WWII), a country as poor in raw materials as Italy was pushed to develop an export-oriented industry in order to avoid persistent current account imbalances. However, instead of specialising in labour-intensive sectors in which the country had a comparative advantage, the Italian industry was able to specialise in sectors where world demand at the time was booming, such as consumer durable goods and luxury goods (Graziani 2000). Econometric analysis provided mixed evidence on the export-led growth hypothesis for the Italian economy after WWII. Federici/Marconi (2002) provided evidence in support of export-led growth for the period 1960–1998 while Pistoresi/Rinaldi (2012) found weak evidence arguing how exports growth was only one of the factors driving growth after WWII.

In general, Italy is often presented as an export-led economy, and there are numerous studies comparing the Italian and the German export-led models in various respects (Foresti/Trenti 2012; Guerrieri/Esposito 2012; Jones 2021). The success of Germany's export-led growth turned out to be particularly attractive to Italy.<sup>12</sup> The two countries are among the largest industrial platforms in the European Union (EU). The German industry (excluding construction) produces 30.5 per cent of the entire value added of the EU followed by Italy (13.9), France (13.2), Spain (7.8), Poland (4.8) and Netherlands (3.8).<sup>13</sup> Similar to Germany, Italy exports mostly goods. Between 2001 and 2009, the share of goods in total exports was equal to 79.9 per cent in Italy and to 84.7 per cent in Germany. In the period 2010–2019, it increased to 81.4 per cent in Italy and it dropped to 82.7 per cent in Germany. France and Spain exhibit considerably lower shares, equal to 74.3 and 67 per cent in the period 2001–2009 and to 70.8 and 69.2 per cent in the period 2010–2019, respectively. Germany and Italy show also a strong similarity in the relative composition of exported goods (Foresti/Trenti 2011; Heimberger/Krowall 2020). At the top of the list in Table 2 we find industrial machinery, vehicles, electrical machinery and equipment, and pharmaceutical products in both Italy and Germany. There are also important differences. As we can observe from the last column of Table 2, the export share of vehicles, electrical machinery and equipment, optical and medical equipment, and aircrafts is higher in Germany, while the export share of beverages, precious metals and stones, footwear, apparel and leather products (luxury and fashion goods) are higher in Italy.<sup>14</sup>

In recent years, the performance of the Italian exports has not kept pace with Germany and the other large eurozone economies like France and Spain. Bugamelli et al. (2018) argued that due to its specialisation in low-skill sectors, Italian production was exposed to international competition from low-wage countries. This was the case during the period 1999–2007 when Italy suffered a proper 'China shock'. This phase seems to have ended in 2010 with the Italian exports reducing the negative growth differential with respect to Germany thanks to an improvement in price competitiveness (Bugamelli et al. 2018). Positive exports dynamics were registered in some sectors like

12. An explicit recommendation to imitate the German export-led growth model can be found in Carlo Cottarelli's popular book titled *The Seven Deadly Sins of the Italian Economy* (Cottarelli 2018).

13. Average values over the period 2001–2019 (Eurostat 2022).

14. We have computed an export similarity index by product (Finger/Kreinin 1979) between Italy and the largest industrial countries of the EU (Germany, France, Spain, Poland and Netherlands). The highest value over the period 2001–2019 turns out to be between Germany and Italy.

*Table 2. Top ten exported products for Germany and Italy and top five differences and bottom five differences in exported products between Italy and Germany, share of total export, 2-digits products (HS 1992), year 2019*

	<b>Germany</b>		<b>Italy</b>		<b>Difference</b>	
Industrial machinery	17.57	18.95	Industrial machinery	18.95	Vehicles	-8.65
Vehicles	16.45	7.8	Vehicles	7.8	Electrical machinery and equipment	-4.68
Electrical machinery and equipment	10.66	6.26	Pharmaceutical products	6.26	Apparatuses (optical, medical, etc.)	-2.87
Pharmaceutical products	6.07	5.98	Electrical machinery and equipment	5.98	Aircrafts	-2.02
Apparatuses (optical, medical, etc.)	5.34	4	Plastics	4	Other commodities	-1
Plastics	4.23	3.46	Articles of iron or steel	3.46	Beverages	1.57
Aircrafts	2.91	2.93	Mineral fuels and oils	2.93	Precious metals and stones	1.68
Other commodities	2.37	2.87	Precious metals and stones	2.87	Footwear	1.72
Mineral fuels and oils	2.29	2.6	Furniture	2.6	Apparel, not knit	1.75
Articles of iron or steel	2.1	2.59	Apparel, not knit	2.59	Leather	2.12

Source: ITC (2022). Own elaboration.

machinery, motor vehicles, pharmaceutical products, food and beverages, possibly indicating also that the specialisation of the Italian industry shifted away from sectors exposed to competition from China towards production with higher value-added content (Bugamelli et al. 2018). Empirical studies find mixed evidence on the determinants of Italian exports. Algieri (2015) found that the decline in the country's international competitiveness since the mid-1990s had to be explained with a combination of price and non-price competitiveness factors, where the latter had a larger effect. Paternesi Meloni (2018) found that export price competitiveness primarily explained Italy's export performance in the period 1994–2014. In the following section, using a set of purely descriptive stylized indicators, we argue that Italy has failed to emulate those non-price competitiveness factors that have contributed to shape the success of Germany's export-led model.

#### 4 ITALY LEARNED THE 'WRONG LESSON' FROM GERMANY

One progressive interpretation of the euro crisis concluded that trade imbalances between Germany and the peripheral eurozone countries were to be explained with the competitive edge that Germany achieved through restrictive wage policies. An expansionary wage policy in Germany was therefore necessary to rebalance the current account of Germany vis-à-vis the eurozone deficit countries (Stockhammer/Onaran 2012). Hein/Truger (2017) questioned this interpretation, arguing that an expansionary wage policy in Germany would not have the effect of deteriorating price competitiveness of exports (unless the wage expansion was very large), but only the effect of increasing domestic demand and so closing the current account balance. Tober's (2021) findings support the view that price factors do play a role in the competitiveness of German exports. Using survey data collected among German businesses prior to the official introduction of the single currency in 1999, the study argues that the attitude of large exporting companies (the dominant group in the German industrial association) towards the nascent EMU became very positive after that the German reunification and the crisis of the European Monetary System (EMS) caused a large real appreciation of the *Deutsche Mark*. This meant that German exporters strategically anticipated the competitive advantage that the single currency would have brought to national exports (Tober 2021).

Econometric work on the determinants of German exports point to a different direction. The econometric exercise proposed by Storm/Naastepad (2015) found statistically significant estimates for the effects of world income on exports and not statistically significant results for the effects of real unit labour cost. Similarly, Neumann (2020) found that German exports were mainly determined by foreign demand, both within and outside the EMU, concluding that German exporters benefited from their specialisation in technologically advanced and high-quality products for which international demand grew fast. Market research data show that German production seems to enjoy an excellent reputation in international markets. In a survey conducted in 23 countries in 2019, the made-in-Germany brand turned out to be the most popular among international consumers. Interestingly, in second place follows the made-in-Italy brand, which, unlike the case of the made-in-Germany brand, turns out to be appreciated mainly by Italians (Smith 2019). Beyond this, there are strategic and organizational factors that have contributed to shape the success of German manufacturing and exports, including the reorientation of exports towards emerging markets and the reorganisation of the German production network factors that Italy was only partially able to emulate.

#### 4.1 Reorganisation of export markets and production networks

One of the main factors contributing to the success of German exports has been the ability of German companies to take advantage of new high-growth markets. German firms were able to reorient their export destinations from the traditional partners (eurozone countries, UK, US) to the new emerging markets, especially China and East European Countries (EECs) (Celi et al. 2018; Simonazzi et al. 2013). As we can observe from Table 3, from 2000 to 2019, the share of German exports to China rose by 5.68 percentage points, to Poland by 2.5 percentage points and to Czech Republic by 1.17 percentage points. In 2019, China became the third largest export market for Germany (7.25 per cent export share) after the United States (8.94 per cent) and France (7.99 per cent). The share of Italian exports to China and EECs also increased, but to a lower extent. The share of exports to China increased by 1.8 percentage points, to Poland by 1.35 percentage points and to Czech Republic by 0.73 percentage points. Switzerland turned out to be the largest growing share in Italian exports, with an increase of 2.13 percentage points. At the same time, the share of exports to major eurozone countries and the other major developed countries (UK, US) declined, albeit to a lower extent than in Germany. Italy's top export destination in 2019 remained Germany, followed by France and the US while China appeared only in the ninth position.<sup>15</sup> Foresti/Trenti (2012) argued how German and Italian companies follow different approaches to access foreign markets. German companies display a strategic and organised approach that aims at building long-term relationships in the export region. Italian companies, on the other hand, tend to act individually with a more flexible approach, managing to intercept even the smallest sources of demand but failing to establish long-term links with the foreign market, and so creating only few positive externalities for the entire Italian production system (Foresti/Trenti 2012). In addition, Germany has been able to seize the opportunities of globalisation not only on the demand side by increasing export flows to the fastest growing markets but also on the supply side by fragmenting and reorganising its production activities on an international scale (Guerrieri/Esposito 2012). Germany managed to integrate EECs in its production network through selected relocation strategies, outsourcing only the low-skill-intensive segments of the production chain while keeping the high-skill-intensive activities at home. This strategy was able to stimulate domestic productivity and job creation in the high value-added segments of the production chain. The Italian industry was also able to take advantage of the eastward enlargement of the EU. Italian companies, however, have tended to relocate their entire production lines abroad, particularly in low- and medium-quality sectors, with clear negative consequences in terms of employment for the Italian economy (Simonazzi et al. 2013).

#### 4.2 Improvement of international non-price competitiveness

In order to capture the degree and dynamics of non-price competitiveness of exports, we have looked at three proxy indicators. First, we have looked at public spending on secondary and tertiary education. This indicator captures, to a rough extent, the degree to which a country invests in its human capital and therefore in the ability of the younger

15. The fact that mercantilist Germany is the main market for Italian goods raise further doubts on the effective functioning of an export-led recovery strategy for Italy. In this sense, it would be interesting to investigate to which extent Italian firms may have become an integral part of the German production chain looking for example at Trade in Value Added (TiVA) database of the OECD.

Table 3 Export shares by destination country for Germany and Italy (in per cent)

	Germany			Italy			
	Export share in 2000	Export share in 2019	Difference	Export share in 2000	Export share in 2019	Difference	
France	11.43	7.99	-3.44	Germany	15.09	12.18	-2.91
Italy	7.59	5.08	-2.51	France	12.64	10.53	-2.11
United Kingdom	8.33	5.92	-2.41	United Kingdom	6.88	5.25	-1.63
Belgium	5.08	3.46	-1.62	Spain	6.21	5.1	-1.11
United States	10.26	8.94	-1.32	Greece	2.06	0.97	-1.09
Spain	4.55	3.31	-1.24	United States	10.21	9.48	-0.73
Japan	2.21	1.56	-0.65	Portugal	1.38	0.92	-0.46
Austria	5.32	4.75	-0.57	Denmark	0.78	0.61	-0.17
Sweden	2.28	1.87	-0.41	Netherlands	2.65	2.5	-0.15
Finland	1.16	0.83	-0.33	Brazil	0.94	0.83	-0.11
Mexico	0.83	1.03	0.2	Belgium	2.72	2.97	0.25
Hungary	1.72	2.02	0.3	Korea, Rep.	0.69	1.01	0.32
Slovak Republic	0.56	1.05	0.49	Slovak Republic	0.27	0.66	0.39
Korea, Rep.	0.76	1.3	0.54	India	0.38	0.83	0.45
India	0.35	0.9	0.55	Romania	1.02	1.63	0.61
Romania	0.42	1.26	0.84	Russian Federation	0.97	1.64	0.67
Russian Federation	1.11	2.04	0.93	Czech Republic	0.64	1.37	0.73
Czech Republic	2.14	3.31	1.17	Poland	1.47	2.82	1.35
Poland	2.43	4.93	2.5	China	0.9	2.7	1.8
China	1.57	7.25	5.68	Switzerland	3.29	5.42	2.13

Source: ITC (2022). Own elaboration.

Table 4 Government education spending, R&D spending and economic complexity index, selected years

	2001	2007	2019
<i>Government education spending* (% of GDP)</i>			
France	3.2	2.9	2.8
Germany	2.7	2.5	2.4
Italy	2.5	2.4	2.1
Spain	2.2	2.1	2.1
<i>R&amp;D spending** (% of GDP)</i>			
France	2.1	2.0	2.2
Germany	2.4	2.4	3.1
Italy	1.0	1.1	1.4
Spain	0.9	1.2	1.2
<i>Economic complexity index (rank)</i>			
France	10	13	15
Germany	2	2	4
Italy	13	18	17
Spain	19	26	34

Notes: \*Secondary and tertiary education. \*\*Public and private; last value 2018.

Sources: Eurostat (2022), World Bank (2022) and OEC (2022).

generations to advance the country's future technological frontier. As we can see from Table 4, in 2019 (as in 2001 and 2007) government education spending in Italy lagged behind France (2.8 per cent) and Germany (2.4 per cent). Recent empirical analysis showed how the underfunding of public universities in Italy contributed to the migration of young university researchers with the consequent loss of skills and human capital (Nascia et al. 2021). In addition, Truger (2016) showed how public spending on education was subject to heavy budget cuts during the crisis years, particularly in the peripheral eurozone countries, with obvious negative consequences on long-term growth potential.

Second, we look at R&D spending (public and private). Again, Italy lags constantly behind Germany and France. We can see that in 2019, Germany's R&D spending (3.1 per cent) was more than double the figure for Italy (1.4 per cent). Indeed, there is a positive relationship between R&D, innovation and export performance. The empirical study by Guarascio et al. (2016) highlighted the existence of a 'virtuous circle' between R&D spending, new product development and increased export market share. In their econometric study, the virtuous circle breaks down when the sample is narrowed down to Central/Mediterranean countries (France, Italy, Spain), confirming how Italy's low values in R&D spending had a significant negative effect on export performance. Third, following Kohler/Stockhammer (2022) and Hein/Martschin (2021), we look at the Economic Complexity Index (ECI). This indicator provides an excellent measure of the degree of competitiveness of exports goods.<sup>16</sup> Here the gap between Italy and Germany is evident. While in 2019 Germany reached the fourth position in the ECI ranking, losing two positions compared to 2001 and 2007, Italy reached the seventeenth position, losing four positions compared to 2001. We can therefore conclude that despite the similarity in the range of exported products, Italy did not manage to properly emulate

16. For a detailed account about the construction of the ECI, see Hidalgo/Hausmann (2009).



the factors that make German exports competitive. This explains the decline of Italian exports in increasingly competitive international markets.

## 5 CONCLUSIONS

We have attempted to explain the disappointing performance of the Italian economy after the GFEC of 2007–2009 as the failure of an export-led recovery strategy. This does not mean that the poor growth performance of the Italian economy starts after the GFEC. The stagnation of the Italian economy has persisted for almost 30 years. In this contribution, we have decided to focus on the period 2001–2019, investigating Italy's growth model and, in particular, the shift of the growth model after the crisis in the context of the EMU and the relative economic policy constraints. First, we have looked at growth contributions and sectoral financial balances. We have shown how Italy transformed from a stagnant domestic demand-led economy in the period 2001–2009 to a stagnant export-led economy in the period 2010–2019 (Hein/Martschin 2021). We have also observed how net export growth was the result of the deceleration of imports rather than of genuine exports growth, raising doubts on the interpretation of the Italian growth model in the post-crisis period as being truly export-led (Kohler/Stockhammer 2022). Based on the arithmetic of the sectoral financial balances, we have argued that current account surpluses are required when the private sector aims at running financial surpluses and the government sector is constrained by a balance budget policy. A growth strategy based on foreign demand was therefore the only viable option, for Italy and for the eurozone as a whole. In an attempt to pursue export-led growth, however, deflationary policies were adopted that instead of stimulating foreign demand have reduced domestic demand (Kregel 2018; Zezza 2020).

Second, we have argued that after the GFEC of 2007–2009, Germany and the 'German model' became a role model for the entire EMU and, in particular, for the crisis-ridden countries of the periphery. In the dominant view, Germany's economic success since the mid-2000s was attributed to a series of painful economic reforms. Thanks to structural reforms, in particular labour market flexibilisation policies coupled with restrictive budgetary policies, Germany was able to quickly turn from the 'sick man of Europe' to the leading European economic power, showing a series of positive macroeconomic indicators. The German model became attractive to Italy, another large export-oriented manufacturing economy with close similarity to Germany in the array of exported products. Borrowing terminology from Storm/Naastepad (2015), we have argued that Italy attempted to restore export competitiveness following the 'wrong' German model, that is, the model adopted in the European reform agenda, while the success of German exports, or the 'true' German model, was based upon not only non-price competitiveness factors such as strong investment in R&D and education, but also the international reorganisation of outlet markets and the restructuring of the production network. In Italy, an export-led recovery strategy based on wage compression has failed to substantially boost exports. Instead, it has depressed domestic demand, trapping the country in permanent stagnation. The enduring stagnation in the country is therefore the result of misguided policy. This reminds us of Steindl's notion of 'stagnation as policy' inspired by Kalecki's work 'Political Aspects of Full Employment' (Hein 2016: 33).

This study suffers from two major limitations. First, it remained purely descriptive and the arguments presented were based on the existing literature. Therefore, econometric work on the determinants of exports for Italy and Germany is required. In addition, we decided to focus exclusively on goods exports. Future research should also look at services exports. Second, while northern regions may enjoy a successful export-led growth

model, southern regions may be cut off from the growth process. Therefore, the Italian growth model deserves closer attention also from the regional perspective. To conclude, even if Italy had successfully implemented an export-led recovery strategy, export-led growth is not a sustainable growth model in the long run as it contributes to the accumulation of international macroeconomic imbalances (Simonazzi et al. 2013; Hein 2019). For this reason, we argue in favour of a growth revival based on domestic demand, both public and private, in Italy and in the entire eurozone. Whether this will be possible, it remains to be seen.

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