

## Lost in Deflation: Why Italy's Woes Are a Warning to the Whole Eurozone

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# Lost in Deflation: Why Italy's Woes Are a Warning to the Whole Eurozone

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**Abstract:** Using macroeconomic data for 1960–2018, this article analyzes the origins of the crisis of the “post-Maastricht Treaty order of Italian capitalism.” After 1992, Italy did more than most other Eurozone members to satisfy EMU conditions in terms of self-imposed fiscal consolidation, structural reform, and real wage restraint—and the country was undeniably successful in bringing down inflation, moderating wages, running primary fiscal surpluses, reducing unemployment, and raising the profit share. But its adherence to the EMU rulebook asphyxiated Italy's domestic demand and exports—and resulted not just in economic stagnation and a generalized productivity slowdown but in relative and absolute decline in many major dimensions of economic activity. Italy's chronic shortage of demand has clear sources: (1) perpetual fiscal austerity; (2) permanent real wage restraint; and (3) a lack of technological competitiveness, which in combination with an overvalued euro weakens the ability of Italian firms to maintain their global market shares in the face of increasing competition of low-wage countries. These three causes lower capacity utilization; reduce firm profitability; and hurt investment, innovation, and diversification. The EMU rulebook thus locks the Italian economy into economic decline and impoverishment. The analysis points to the need to end austerity and devise public investment and industrial policies to improve Italy's “technological competitiveness” and stop the structural divergence between the Italian economy and that of France/Germany. The issue is not just to revive demand in the short run (which is easy) but to create a self-reinforcing process of investment-led and innovation-driven process of long-run growth (which is difficult).

**Keywords** Italian macroeconomic performance; Eurozone; secular stagnation; demand; real wage restraint; fiscal austerity; export growth

**JEL Classifications** E20; E60; F60; O10; O40

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The crisis consists precisely in the fact that the old is dying and the new cannot be born; in this interregnum a great variety of morbid symptoms appear. (Gramsci [1931] 2011, *Prison Notebooks*).

## THE GRAPES OF WRATH

We live in an age of anger and “Angst” (Mishra 2017)—after three decades of a market-driven political and economic system culminated in crisis, toxic inequalities, real wage stagnation, and heightened job insecurity. The anger and Angst have led to what Hannah Arendt described as “negative solidarity” between individuals with often very different pasts who all find themselves disempowered politically and left behind economically. In some ways, the present social mood is similar to that the Great Depression, captured powerfully by American novelist John Steinbeck (1939/2000: 365): “... in the eyes of the people there is the failure; and in the eyes of the hungry there is a growing wrath. In the souls of the people the grapes of wrath are filling and growing heavy, growing heavy for the vintage.” Lacking political voice, about the only thing the “left behinds” can do is to “send in a wrecking ball to disrupt the system”<sup>1</sup>—which means voting against the establishment and “having more of the same,” even if it is less clear what exactly one is voting *for*. Brexit and Trump are clear manifestations of such antiestablishment anger, and similar sentiments are building up elsewhere as well.

In Italy, the third-largest economy of the Eurozone, the “wrecking ball” came in the form of the anti-establishment, anti-euro and anti-austerity “government of change,” as the League–Five Star Movement coalition prefers to call itself. The two coalition parties surfed a wave of discontent<sup>2</sup> with roots deep in Italy’s economic crisis, the origins of which go back almost three decades and the symptoms of which are manifold: a secular stagnation of productivity growth; stagnant real wages, high (youth) unemployment, and stalling incomes; a sustained loss of international competitiveness; a crumbling infrastructure suffering from chronic underinvestment; a manufacturing industry, made up of mostly small- and medium-scale enterprises, prone to offshoring; and a government and banking system crippled by debts. Promising drastic changes away from austerity and a fundamental break with discredited establishment politics, the Five Star Movement (M5S) and the League (Lega) garnered the votes of more than 16 million of mostly working-class and middle-class people—an increase of six million voters compared to Italy’s 2013 general elections and about 50% of all votes in 2018.<sup>3</sup> The European elections of May 2019 brought another upset (this time, within the coalition itself): While the M5S saw its support fall (from 32% in the general election of 2018 to 17% now), support for Lega increased considerably (from 17% in the general election of 2018 to 34% now).

The populist earthquake in Italy has been denounced by some as reflecting mostly a xenophobic, nationalist reaction against immigrants, multiculturalism, and the supranational technocratic Euro regime. But this is a mistake. It misses the fact that the upsurge is a response to a failure, of truly historic proportions, of Italy’s political system and macroeconomic policy making post 1992 (see Amable, Guillaud, and Palombarini 2011). It is vital to understand the true *origins* of this failure if only because Italy’s political and economic crisis poses systemic risks to the Eurozone: Yes, Italy is too big to fail. France, in particular, cannot afford an Italian exit (Zingales 2018).

Exploiting this leverage, Italy's euroskeptic government is now trying to "reclaim" fiscal policy space by openly flouting the budgetary rules of the EMU (somewhat akin to what Germany and France did in 2005), knowing that this will revive fears in financial markets and lead to higher interest rates, which could at some point bankrupt Italy's underwater financial system and, through contagion to French and German banks, jeopardize the entire currency union. The result is a catch-22: If Italy gets disciplined by the European Commission with sanctions like fines or the suspension of EU subsidies, this may reduce financial markets' fears (and prevent a new crisis), but it will only further feed the populist, antiestablishment and anti-euro forces in Italy—and solidify the political power of the League, in particular. On the other hand, if Brussels gives in and allows the Italian government more fiscal policy space, the European Commission and ECB will fritter away their credibility as the guardians of EMU's Stability and Growth Pact—other member states may decide to follow Italy's precedent and allow their public deficits to rise as well and/or loosen the reins on their efforts at structural reforms. This stalemate is not going away as long as Italy's economy remains paralyzed.

It is against this background that this article makes two arguments. Firstly, Italy's economic and political crisis is systemic and permanent: It is a crisis of the post-Maastricht Treaty order of Italian capitalism, as Thomas Fazi (2018) calls it. I will argue, contrary to common perceptions (outside Italy), that the Italian economy is the one economy that committed itself most strongly to the fiscal consolidation and the structural reforms that form the heart of the EMU order. Italy kept closer to the EMU macroeconomic rulebook<sup>4</sup> than France and Germany and paid heavily for this: The permanent state of fiscal austerity, the drastic deregulation of labor markets, and the overvalued exchange rate killed Italian aggregate demand—and the demand shortage asphyxiated growth of Italian output, incomes, jobs, and productivity. In particular, fiscal austerity and the lack of adequate industrial policies have had a negative impact on Italian manufacturing. Italy's decline is an object lesson for all Eurozone economies but—paraphrasing George Bernard Shaw—as a warning and not as an example.

Secondly, it is wrong, however, to blame Italy's structural crisis on the EMU, Brussels, or external constraints. Italy's permanent crisis is a self-inflicted wound, a story of ruin from within. For one, Italy has too many delusional economists favoring stringent fiscal austerity, thinking that this would somehow prove "expansionary" (e.g., Alesina et al. 2015; Cottarelli 2018a, 2018b; Terzi 2018; Alesina, Favero, and Giavazzi 2019) or favoring even more drastic labor market deregulation in the belief that this would miraculously help to revive employment, investment, and the economy (Hijzen, Mondauto, and Scarpetta 2017; Boeri et al. 2019). Italy's structural crisis is an instance of iatrogenesis—a disease caused by the doctors themselves, as Ivan Illich famously argued.

Likewise, powerful business and political groups in Italy itself have consistently used the EMU as a scapegoat, blaming Brussels for policy reforms at home, which they desired but which were deeply unpopular with the majority of voters. I am not arguing therefore that Italian stagnation is caused by the euro, even if the EMU policy framework is clearly not helping but adding to the difficulties by locking the Italian economy into a low-level equilibrium. The real causes of Italy's underperformance and stasis run deeper and lie in its domestic political economy, which the recent populist turn is unlikely to fundamentally change (Costantini 2018; Fazi 2018; Halevi 2019).

## THE OLD ORDER IS DYING . . .

In the summer of 2017, more than 80,000 mostly young Italians applied for just 30 deputy-assistant jobs in the central bank (Banca d'Italia), a junior position with a decent but not exceptional salary. The nearly 3,000 candidates for each post were described in an editorial of a national newspaper as “shipwrecked castaways” desperately in search of a “life raft” (see Squires 2017). The high turnout of (mostly young) job seekers was not a freak event but a symptom of deep structural crisis—a crisis of the post-Maastricht Treaty order of Italian capitalism (Fazi 2018). This order began life in the early 1990s but went into terminal decline 20 years later in the aftermath of the Eurozone crisis that destroyed nearly one-third of all jobs held by young Italians (OECD 2017).

Young workers were hit hardest because they were more likely to hold temporary jobs or were new to the labor market at a time when firms were forced to downsize. As a result, Italy's youth unemployment rate (defined as a percentage of the 15–24 years labor force) rose from around 25% during 2008–2010 to 43% in 2014 (and to 60% in some southern regions). The youth unemployment rate is more than three times as high as the official adult unemployment rate, which increased from around 7% of the labor force during 2008–2010 to almost 12% in 2014. Italian youth unemployment is twice as high as youth unemployment in the EU. (see Table 1). On top of this, nearly one in four young people in Italy is not even counted as being unemployed because s/he is neither in employment, education, or training (NEETs)—the highest share of NEETs in the EU. If one considers not just the officially unemployed but also the underemployed (i.e., the involuntary part-time workers) and the discouraged (i.e., people who have given up looking for a job and do not therefore figure in the unemployment statistics), Italy's effective unemployment rate exceeded 30% each year during 2013–2017 (more than twice the effective unemployment rate in Belgium, France, Germany, and the Netherlands). Poverty in Italy rose significantly—the headcount poverty ratio<sup>5</sup> increased from 14% of the population during 2004–2006 to 19% during 2012–2014; in eight years, the number of poor people increased by 3.4 million to 11.5 million persons (or about one in five Italians). Importantly, the poverty growth was part of a *general impoverishment* of the entire Italian population post 2008 (Brandolini, Gambacorta, and Rosolia 2018). It is in this context of a sinking economy that the 80,000 job seekers were called “shipwrecked castaways.”

However terrible these numbers are, they still fail to capture the full extent of Italy's economic crisis. This is perhaps best summarized by the fact that net incomes of Italian households (at constant 2010 prices and excluding incomes from financial assets) *declined* by thousands of euros during the period 1991–2016 (see Table 1). Annual net income of the *median* Italian household, which was €27,499 (at constant 2010 prices) in 1991, declined to €23,277 in 2016—a drop in median living standards of 15%. *Mean* net household income fell by €3,108 between 1991 and 2016 or by about 10%. Italy is the only major Eurozone country that, in the past 27 years, suffered not stagnation but *decline* (Brandolini, Gambacorta, and Rosolia 2018). All income classes—poor and rich—suffered, but not in equal measure (Table 1). The 10% richest households experienced an average real income loss of 6% during 1991 and 2016, whereas the poorest 25% households suffered a real income decline of more than 15% over the same period. Income inequality, measured by the

TABLE 1  
Italy's "Morbidity" Social Condition

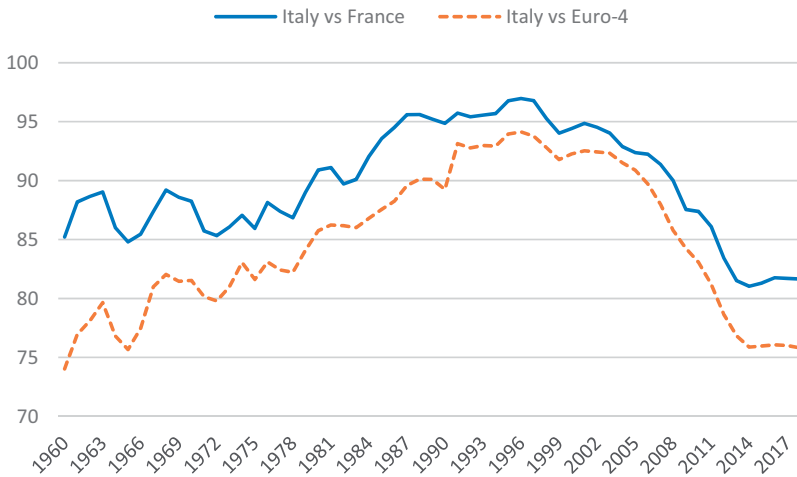
<i>Average annual growth rates (%) of:</i>	1980-1992	1992-1999	1999-2008	2008-2016	1999-2016
Median net real household income in Italy	1.89	-0.39	0.30	-1.59	-0.54
Mean net real household income in Italy	1.60	-0.13	0.43	-1.43	-0.36
Mean real income of poorest 25% of Italian households	1.63	-0.87	0.74	-1.42	-0.28
Mean real income of richest 10% of Italian households	1.52	-0.06	0.36	-1.24	-0.39
Employment (% of labor force)	1980-1992	1992-1999	1999-2008	2008-2017	1999-2017
Part-time workers (% of labor force)	91.9 (93.3)	89.9 (91.5)	92.4 (92.2)	90.6 (93.3)	91.4 (92.7)
Involuntary part-time workers (% of labor force)	7.9 (12.3)	9.6 (14.6)	12.4 (17.7)	15.9 (19.4)	14.1 (18.6)
Workers marginally attached to labor force (% of labor force)	1.7 ( 0.7)	2.2 ( 2.7)	3.7 ( 3.5)	8.6 ( 4.4)	
Unemployment (% of labor force)	8.1 ( 6.7)	10.1 ( 8.5)	(2.9)	10.7 ( 3.7)	
Long-term unemployment (% of labor force)	5.5 ( 3.2)	6.2 ( 3.8)	7.6 ( 7.8)	9.4 ( 6.7)	8.6 ( 7.3)
Youth unemployment (% of labor force)	4.5 ( 2.0)	3.8 ( 2.4)	4.2 ( 3.7)	5.1 ( 2.9)	4.8 ( 3.3)
Underemployment (% of labor force)			2.1 ( 1.8)	2.0 ( 1.4)	2.1 ( 1.6)
Old-age dependency ratio (% of labor force)			(14.3)	28.6 (14.8)	
Gini coefficient (of disposable income after taxes and transfers)	20.5 (21.0)	24.3 (22.7)	28.6 (25.2)	32.5 (28.6)	30.5 (26.9)
Italy	1984/85	1990/91	2000	2008	c. 2012/16
Belgium	0.291	0.279	0.323	0.317	0.328
France				0.262	0.266
Germany	0.251	0.256	0.287	0.293	0.291
The Netherlands	0.272	0.292	0.264	0.287	0.293
Population share / equivalent income share of:			0.292	0.286	0.285
Low-income class (<60% of median income)	1989-91	1993-95	2004-06	2012-14	
Lower middle class (60-120 % of median income)	16.1 / 6.4	20.7 / 7.2	20.1 / 7.4	21.4 / 7.4	
Upper middle class (120-300% of median income)	47.1 / 36.2	41.6 / 31.7	43.6 / 33.6	41.2 / 32.1	
Italy's rich (>300% of median income)	35.1 / 51.1	34.7 / 50.6	33.8 / 48.8	35.1 / 51.6	
	1.8 / 6.4	2.9 / 10.5	2.5 / 10.3	2.4 / 8.9	

Source: Author's calculations based on Eurostat data. Figures in red (between parentheses) are average values for the Euro-4 countries.

Gini coefficient, which came down during the 1980s, increased in the 1990s—rising from 0.279 in 1990–91 to 0.323 in 2000 (Table 1).

What happened is that the “low-income” class (defined in Table 1) became much bigger (Brandolini, Gambacorta, and Rosolia 2018): Its share in the population increased from 16.1% in 1989–1991 to 21.4% in 2012–2014, while its share in income rose only by 1 percentage point—from 6.4% in 1989–1991 to 7.4% in 2012–2014. This increase in the “low-income” class reflects considerable downward social mobility, as most newcomers into this class came from the “lower-middle” class (Table 1). And while the population share and income share of the “upper-middle” class did not change much, the income share of Italy’s rich increased from 6.4% in 1989–1991 to 10.3% in 2004–2006; it then declined to 8.9% in 2012–2014 (Table 1). Inequality also increased between generations, as a growing number of pensioners<sup>6</sup> managed to protect their real incomes, but a growing number of young wage earners experienced a drastic cut in earnings at first employment, which was not compensated by higher earnings later in their careers. Italy is, in other words, no longer a country for young people—as Simonazzi and Barbieri (2016, 380) observe: “... middle-class discontent is certainly related to the increased inequality and loss of absolute income ... , but it has equally to do with the perceived reduced opportunities for younger generations and a decreasing intergenerational social mobility.” The class discontent is reflected in the strengthening of populist electoral preferences.

The economic decline and the impoverishment of about the entire Italian population after 1992 represent a clear break with what happened before 1992. Up until the early 1990s, Italy enjoyed decades of relatively robust economic growth, during which it managed to catch up in income with the other Eurozone nations (Figure 1). In 1960, Italy’s per capita GDP (at constant 2010 prices) was 85% of French per capita GDP and 74% of (weighted average) per capita GDP in Belgium, France, Germany, and the Netherlands (the Euro-4). By the mid-1990s, Italy had almost caught up with France (Italian GDP per person equaled 97% of French per capita income) and also with the Euro-4 (Italian GDP per capita was 94% of per capita GDP in the Euro-4). But then a very steady decline began (see Figure 1)—erasing decades of (income) convergence. The income gap between Italy and France is now (in 2018) 18 percentage points, which is more than what it was in 1960; Italian GDP per capita is 76% of per capita GDP in the Euro-4 economies. Beginning in the early to mid-1990s, the Italian economy began to stumble and then fall behind, as all main indicators—income per person, labor productivity, investment, export market shares, etc.—began a very steady decline. It is not a coincidence that the sudden reversal of Italy’s economic fortunes occurred after Italy’s adoption of the “legal and policy superstructure” imposed by the Maastricht Treaty of 1992, which cleared the road for the establishment of the European Economic and Monetary Union (EMU) in 1999 and the introduction of the single currency in 2002 (Bagnai 2016; Fazi 2018). This is confirmed by a recent econometric counterfactual analysis, which concludes that of all member states (except Greece), Italy benefited the least from joining the EMU in terms of real GDP growth, both during the precrisis years 1997–2007 and the crisis period 2008–2014 (Verstegen, van Groezen, and Meijdam 2017).<sup>7</sup>



**FIGURE 1** Three decades of “catching up,” 25 years of “falling behind”: real GDP per person in Italy relative to France/Euro-4, 1960–2018. *Source:* author’s calculation based on AMECO data.

### ITALY: THE EUROZONE’S POSTER CHILD

The historic currency crisis of September 1992, which forced the Italian lira out of the European Exchange Rate Mechanism (ERM), is the symbolic watershed between the immediate postwar decades of economic progress and the post-1992 period, which was marked, at least initially, by strong fears that Italy could not and would not meet the conditions for membership of the EMU, specified in the Maastricht Treaty. Everyone could see that Italy’s public finances were in a mess: Net government borrowing in 1992 was in excess of 10% of GDP and the public debt-to-GDP ratio began to exceed the 100% mark. To allay those fears, especially of financial markets, the Italian government put through an unprecedented program of fiscal consolidation, involving expenditure cuts and (tax) revenue increases amounting to nearly 6% of GDP, as well as far-reaching—albeit partial—reforms of Italy’s labor markets, which were intended to curb nominal wage and price increases and improve the country’s international cost competitiveness by weakening the collective wage bargaining power of unions, ending the automatic indexation of nominal wages to inflation, and ultimately restraining wage growth (Brandolini, Gambacorta, and Rosolia 2018; Fazi 2018).

No other Eurozone economy managed to bring about a transformation of its mixed economy as radically as Italy, which in major ways acted more Catholic than the (Brussels) Pope. Successive Italian governments of different political colors implemented deregulatory policy and institutional reforms, often with limited parliamentary support and lacking popular consensus, while trying to shift the blame and responsibility on “binding commitments” or “external constraints” imposed by far-off Brussels (Fazi 2018).

This blame-shifting *vincolo esterno* strategy at the national level dovetailed with the logic of the Maastricht Treaty, which is that financial markets do a better job imposing the



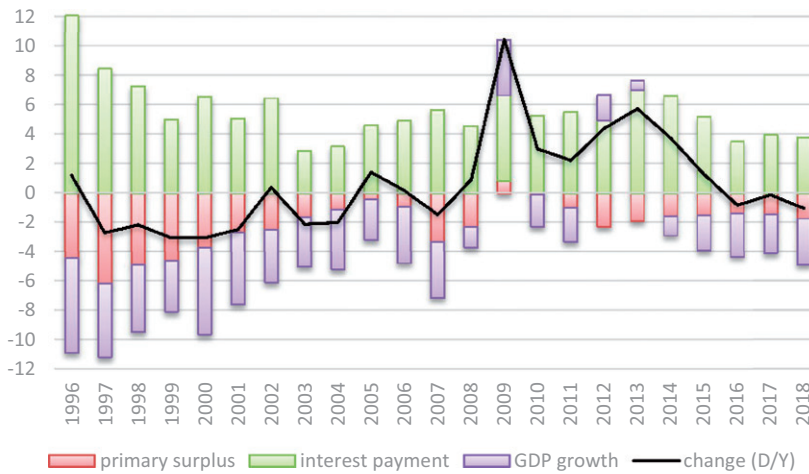
necessary fiscal discipline on potentially fiscally irresponsible governments than intergovernmental treaties or promises by politicians (Costantini 2018). By joining the EMU, the fiscal authorities of member states are effectively limited to issuing debt in a foreign currency they do not control—which means that they agreed to subject themselves to the discipline (or if one wants, whims) of global bond markets. Public debt, as O'Connor (1973) wrote, increases capital's power over the state: A government that is not pursuing market-friendly policies will find it hard to get a loan. This way, Eurozone member states have given up fiscal policy sovereignty in a much more radical manner than is suggested by the deficit and debt conditionalities of the Maastricht Treaty (Halevi 2019).

Fearing that it might be excluded from the “modernist” euro project, Italy did more than most other Eurozone members in terms of self-imposed structural and policy reform in order to comply with the conditionalities of the EMU. The country may rightly be called the star pupil in the Eurozone class, as it radically transformed its political economy—abandoning its mixed economy, scaling down its health-care and social security systems, liberalizing its financial and industrial systems, and limiting democratic and parliamentary control over its macroeconomic policies. To see this, I compare the degree of Italy's structural adjustment to that in the Euro-4, which are all founding members of the European Coal and Steel Community (ECSC) and the European Economic Community (EEC), together with Italy. Let us first consider fiscal policy consolidation and then labor market reforms.

## Fiscal Consolidation

When Italy signed the Maastricht Treaty, its public debt-to-GDP ratio was already more than 100%, and it increased to 117% in 1994.<sup>8</sup> Then a permanent process of fiscal consolidation, reflecting a remarkable political commitment to “sufficiently diminish” public indebtedness “at a satisfactory pace,” brought down the public debt ratio to 102% in 2002 and less than 100% in 2007. From 1995 to 2008, various Italian governments shared this commitment to debt sustainability (Costantini 2017, 2018) and ran substantial primary budget surpluses (defined as public expenditure excluding interest payments on public debt, minus public revenue), averaging 3% of GDP per year during *a period of 14 years*. Figure 2 presents a decomposition of the change in Italy's public-debt-to-GDP ratio during 1996–2018. The impacts of Italy's primary surpluses, which are indicated in red, and nominal GDP growth show up as reductions in the debt-to-GDP ratio, while nominal interest payments raise public indebtedness. Figures A1 and A2 (in the Appendix) present similar decompositions of the change in the public-debt-to-GDP ratio in France and the Euro-4 countries.

The permanent primary surpluses by themselves would have reduced Italy's public debt-to-GDP ratio by almost 40 percentage points—from 117% in 1994 to 77% in 2008 (keeping other factors constant). Within the Eurozone, the degree of fiscal consolidation by Italy was extraordinary<sup>9</sup>: France ran a primary *deficit* of 0.1% of GDP each year on average during 1995–2008, which modestly raised its public debt-to-GDP ratio. The German government, upholding the commonsensical budgetary philosophy of the proverbial “Swabian housewife,” did run a primary surplus, but of only 0.7% of GDP per year; this reduced Germany's public



**FIGURE 2** Italy: a decomposition of the change in the public debt-to-GDP ratio, 1996–2018. *Source:* author's calculation based on AMECO data. *Note:* The decomposition is based on the debt dynamics equation:  $\Delta d = f + (i - g) \times d$ .  $d$  is the debt-to-GDP ratio,  $f$  is the ratio of the primary deficit (defined as the public expenditure excluding interest payments on public debt, minus public revenue) to GDP,  $i$  is the nominal interest rate on public debt, and  $g$  is the growth rate of nominal GDP.

debt-to-GDP ratio by 8.7 percentage points (or one-fifth of Italy's effort) during 1995–2008 (keeping other factors constant).

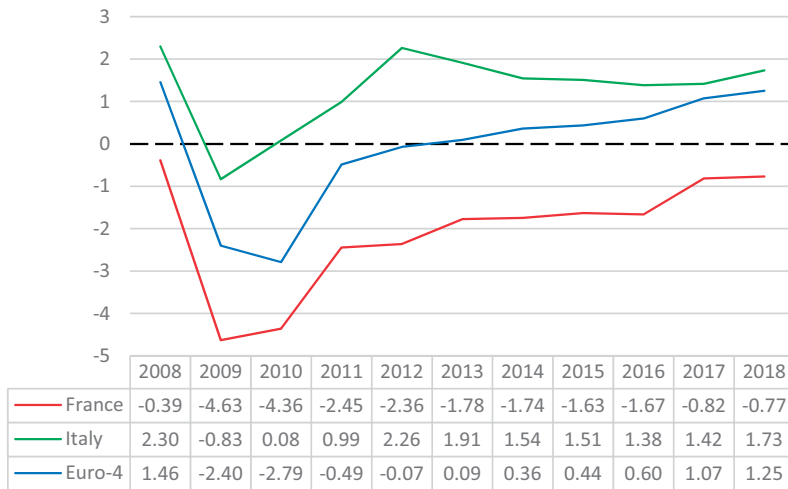
However, despite massive austerity, Italy's debt-to-GDP ratio did not decline by 40 percentage points. Slow (nominal) GDP growth ( $g$ ) relative to the high (nominal) interest rate ( $i$ ), or  $(i - g) > 0$ , pushed up Italy's public debt-to-GDP ratio by 23 percentage points.<sup>10</sup> It appears that Italy's permanent fiscal soberness, meant to lower the debt ratio by running substantial primary surpluses, backfired, because it slowed down growth—which in turn annihilated more than half of the debt-to-GDP reduction of 40 percentage points achieved by austerity.<sup>11</sup>

In the period 1992–2008, Italy's fiscal consolidation was based more on cutting public (social) expenditure than on raising taxes. Tax revenues as a share of Italy's GDP declined from 40.9% on average during 1992–1999 to 40.1% during 1999–2008 (Table 2)—staying well below the tax shares (in GDP) in Belgium and France. Public spending (excluding interest payments) as a percentage of GDP was lower in Italy than in Belgium, France, and Germany (Table 2). However, interest paid on public debt (as a percentage of GDP) was three times higher in Italy than in France and Germany in the 1990s and almost twice as high during the years 1999–2008 (Table 2). The nominal interest rate paid by the Italian state was 8% per year (on average) during 1992–1999, whereas the French and German governments were charged nominal interest rates of 6.2% per year. The higher interest rates on Italian debt reflect a risk premium (due to the bigger size of Italy's debt and poorer credit ratings related to Italy's greater political instability) and the higher inflation rate in Italy compared to France and Germany.

TABLE 2  
Growth and Distribution: the Italian Economy, 1960–2018

<i>Italy</i>	1960–1992	1992–1999	1999–2008	2008–2018	<i>Euro-period</i> 1992–2018
Real GDP (average annual growth rate %)	3.79	1.49	1.20	–0.31	0.69
Real GDP per person (average annual growth rate %)	3.39	1.46	0.75	–0.53	0.44
Real consumption per person (average annual growth rate %)	3.76	1.40	0.39	–0.32	0.39
Inflation rate (% increase in GDP deflator)	9.61	3.37	2.52	1.11	2.20
Public debt (% of GDP)	55	112	103	123	107
Real interest rate (implicit) paid on public debt (%)		4.64	2.55	2.50	2.79
Primary surplus of government (% of GDP)		5.18	2.24	1.31	2.17
Tax revenue (% of GDP)		40.9	40.1	42.3	41.2
Public interest payments as % of tax revenue		22.4	13.0	10.4	13.7
Real wage growth per employee	3.23	0.10	0.57	–0.02	0.21
Labor productivity growth per employee	3.49	1.72	–0.10	–0.31	0.31
Aggregate labor income share (% of GDP at factor cost)	66.63	60.76	59.33	60.94	60.37
Aggregate profit share (% of GDP at factor cost)	33.37	39.24	40.67	39.06	39.63
<i>Euro-4: Belgium-France-Germany-The Netherlands</i>					
Real GDP (average annual growth rate %)	3.61	1.91	1.80	1.09	1.56
Real GDP per person (average annual growth rate %)	2.70	1.59	1.50	0.71	1.24
Real consumption per person (average annual growth rate %)	2.84	1.54	1.01	0.63	1.01
Inflation rate (% increase in GDP deflator)	4.67	1.30	1.53	1.19	1.34
Public debt (% of GDP)	40	59	64	79	62
Real interest rate (implicit) paid on public debt (%)		4.58	3.14	1.45	2.65
Primary surplus of government (% of GDP)		0.23	0.90	0.03	0.28
Tax revenue (% of GDP)		42.1	41.1	42.0	41.7
Public interest payments as % of tax revenue		8.8	7.2	5.0	6.5
Real wage growth per employee	2.88	0.83	0.55	0.82	0.73
Labor productivity growth per employee	2.67	1.25	1.04	0.42	0.86
Aggregate labor income share (% of GDP at factor cost)	69.48	65.49	63.67	64.26	64.46
Aggregate profit share (% of GDP at factor cost)	30.52	34.51	36.33	35.74	35.54

*Source:* author's estimations based on AMECO data base.

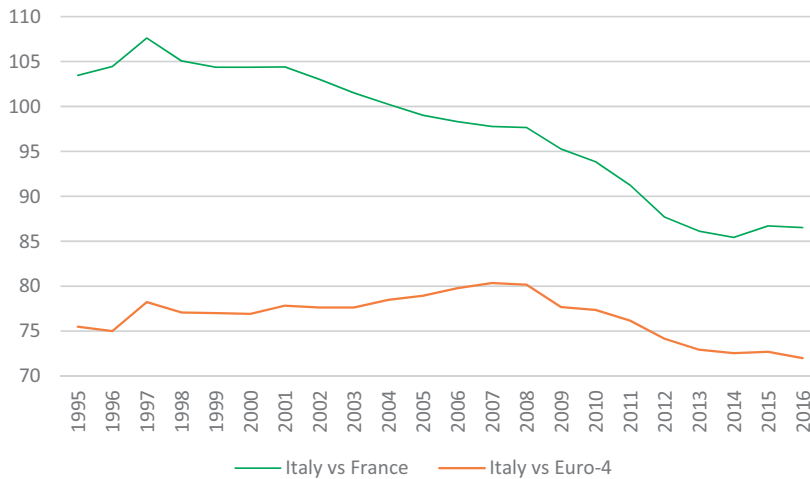


**FIGURE 3** Postcrisis fiscal austerity: The primary budget surplus in Italy, France, and the Euro-4, 2008–2018 (per cent of GDP). *Note:* primary budget surpluses (defined as public expenditure excluding interest payments on public debt, minus public revenue). *Source:* author’s calculation based on AMECO data.

Following the introduction of the euro, the gap in interest rates came down. The Italian state paid a nominal interest rate of 5.1% (on average) per year during 1999–2008, compared to 4.5% for the French and German states (Table 2). The lowered interest rate meant some relief on the service of Italy’s large public debt (Figure 2). The interest payments of the Italian state came down from more than 9% of GDP per year during the 1990s to 5.2% of GDP per year during 1999–2008—which was still 2.2 percentage points of GDP more than what the Euro-4 governments were paying. The lower interest rates during 1999–2008 were a “windfall gain” for Italy—a gain that Italy, in the eyes of some observers, squandered by going slow on structural reforms (including labor market reforms), which many deemed necessary to improve its international cost competitiveness and productivity (e.g., Sacchi 2018).

Italy maintained a significant primary budget surplus of more than 1.3% of GDP throughout the entire postcrisis period 2008–2018 (with the exception of only the year 2009), and contrary to common sense the “technocratic” government of Mario Monti ran primary surpluses of around 2% of GDP during 2012–2013. For Monti, as he admitted in an interview with CNN, fiscal discipline was top priority, even if this meant that his government was “actually destroying domestic demand through fiscal consolidation” (Monti 2012).<sup>12</sup> The same austerity was continued by successive Italian governments, including the left-of-center PD government led by Matteo Renzi (2014–2016).

Italy’s Ministry of Finance estimated the damage done: The austerity policies during 2012–2015 reduced Italian GDP by almost 5% and investment by 10% (as reported by Fazi 2018). One must note that fiscal consolidation in Italy during the recessionary years of 2008–2018 has been exceptional when compared to France and the Euro-4 (see Figures 3 and 4). The French government ran primary *deficits* (no surpluses!) during all years of the



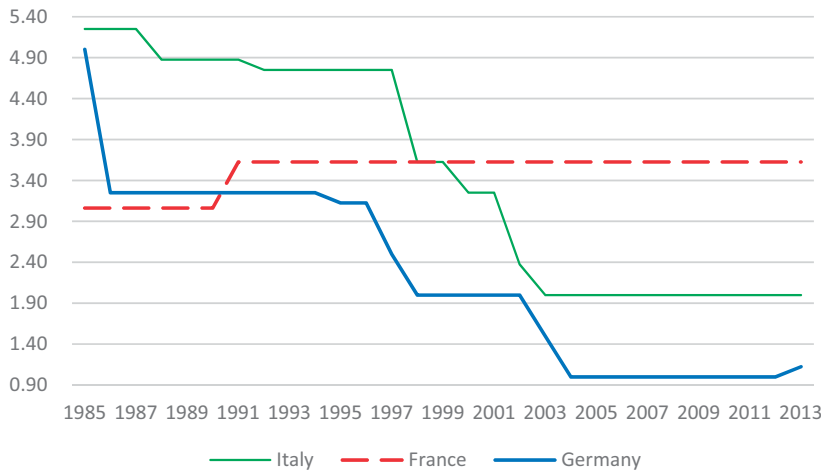
**FIGURE 4** Postcrisis fiscal austerity: Expenditure on social protection per person in Italy relative to France/Euro-4, 1995–2018. *Note:* Social protection represents the largest item of general government expenditure in EU member states; it includes “old age” pensions, social insurance for sickness and disability, transfers to families and children, unemployment benefits, and social housing payments. *Source:* author’s calculation based on Eurostat data.

decade 2008–2018, at an average of 2% of GDP. The Euro-4 (dominated by Germany), after running substantial primary deficits during 2009–2011, had rather small primary surpluses during 2013–2018; in effect, the cumulative primary deficit of the Euro-4 during 2008–2018 was about zero. The cumulative fiscal stimulus provided by the French state amounted to €461 billion (in constant 2010 prices) during the post-2008 decade, which stands in some contrast to the cumulative fiscal drain on domestic demand of €227 billion in Italy over the same period; note that the difference in stimulus of €668 billion is more than the real GDP of the Netherlands (in 2010).

The Italian budget cuts show up in a nontrivial erosion of its welfare state, as is signaled in rather drastic cuts in Italy’s public expenditure on social protection (see [Figure 4](#)). Italy’s per capita expenditure on social protection was at the same level as, or slightly higher than, that of France in the years 1999–2008, but it then declined steadily to 86.5% of per capita social spending in France in 2018. The picture is similar when one compares Italy to the Euro-4 ([Figure 4](#)). Around 2008, Italy’s public expenditure on social protection had risen to 80% of such spending in the Euro-4, but austerity policies reduced it to just 72% in 2018. This is another instance of a growing divergence between Italy and the rest of the Eurozone.

## Structural Reforms

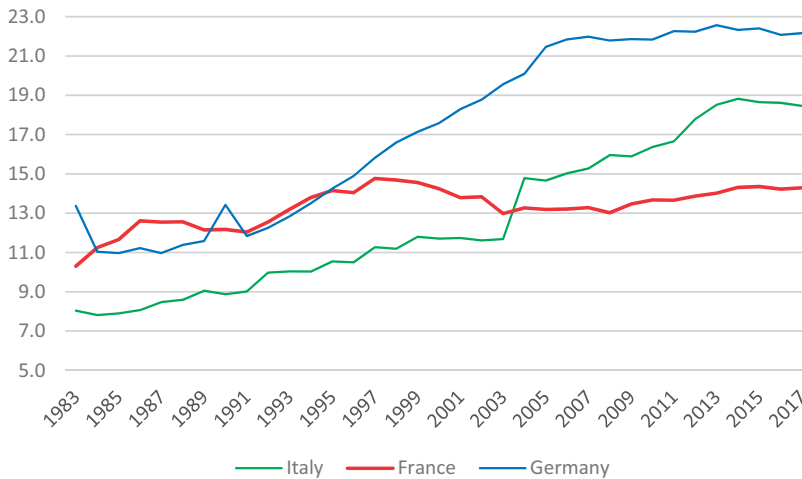
When Italy signed the Maastricht Treaty, its high rates of inflation and unemployment were regarded major problems. Inflation was blamed on the “excessive” power of labor unions and an “excessively” centralized wage bargaining system, which resulted in strong wage-push inflation and a profit squeeze—as wage growth tended to exceed labor productivity



**FIGURE 5** Labor market reform: strictness of employment protection legislation for temporary workers in Italy, France, and Germany, 1985–2013. *Source:* OECD Statistics.

growth, which lowered the profit share (Daveri and Tabellini 2000). Seen this way, the blame for Italy’s high unemployment could be shifted to its “rigid” labor markets and too strongly protected “worker aristocracy.”

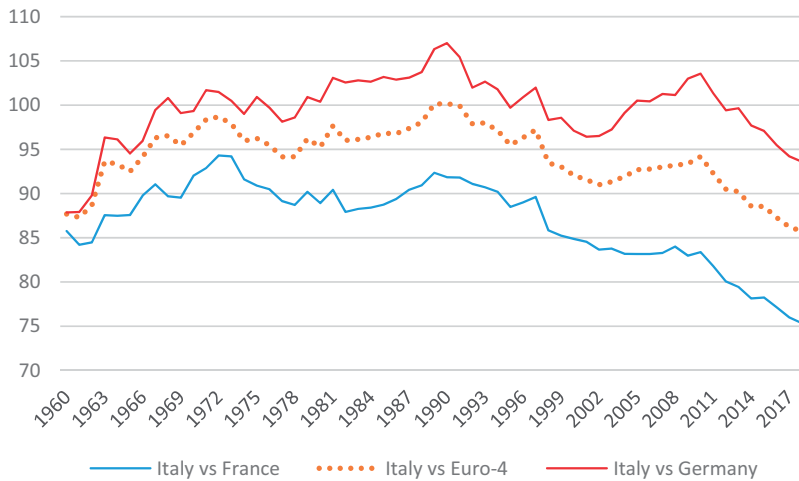
Bringing down inflation and restoring profitability required wage moderation, which in turn could only be achieved by a combination of wage moderation and labor market flexibility achieved by decentralized wage bargaining (instituted in 1993, within the so-called July Agreement).<sup>13</sup> For a start, Italy does not have a statutory minimum wage (unlike the Euro-4 countries) and also did not and does not have a generous unemployment benefit system (in terms of unemployment insurance replacement rates and duration and entitlements conditions) compared with the EU average (see Stovicek and Turrini 2012). However, Italy’s workers, on regular contracts, did and continue to enjoy roughly the same legal employment protection as regular workers in France and Germany; the OECD index of the strictness of employment protection legislation (EPL) for regular workers in Italy remained unchanged during 1985–2012, taking a value of 2.76, which was quite similar to the average EPL-values for regular workers in France (2.39) and Germany (2.65) during the same years. However, radical changes in employment protection concerning temporary workers and in the unemployment benefit system were introduced from 1997 onwards (Tridico 2015; Sacchi 2018).<sup>14</sup> Figure 5 plots the EPL index for temporary workers in Italy, France, and Germany during 1985–2013. During the 1980s, temporary workers in Germany and Italy enjoyed much stricter job protection than their colleagues in France, but while legal employment protection for temporary workers in France was kept unchanged, it was drastically reduced in Germany and Italy after 1992. Germany’s Hartz reforms lowered the EPL index to a value of around 1, while the flexibilization of Italy’s laws for temporary workers show up in an EPL index of 2 (in 2013); this is considerably below the EPL-index for temporary workers in France (which equals 3.6) and Belgium (where the EPL is 2.4 in 2013).



**FIGURE 6** Temporary workers, 1983–2017 (percentage of total employment). *Source:* OECD Statistics.

As a result, the share of temporary workers in total Italian employment increased from 10% during 1991–1993 to 18.5% in 2017 (see [Figure 6](#)). It is important to understand what this means. Between 1992 and 2008, total (net) employment in Italy increased by 2.4 million new jobs, of which almost three-quarters (73%) were fixed-term jobs. In France, in comparison, (net) employment grew by 3.6 million jobs during 1992–2008, of which 84% were regular (permanent) jobs and only 16% were temporary positions. In line with this, the proportion of temporary workers in total employment in France increased much less: from 12.6% in 1992 to 14.3% in 2017. However, Italy’s labor market “flexibilization” was outdone by that of Germany ([Figure 6](#)), where the share of temporary workers in total employment rose from 12.3% in 1992 to 22.2% in 2008. German firms replaced regular jobs by temporary jobs on a massive scale—on balance, the Germany economy created 4.2 million temporary jobs and destroyed 6.8 million regular jobs during 1992–2008!

Coming back to Italy, Italy’s labor-market reforms did the job of increasing employment growth, reducing unemployment, while keeping wage growth in check and bringing overall inflation down. The bargaining position of unions was weakened by antiunion practices of large corporations (including Fiat) and a gradual deunionization (partly correlated with a process of deindustrialization), while more restrictive (anti-inflation) central bank policy and the fixed (lira) exchange rate imposed even tighter discipline on wage bargaining ([Simonazzi and Vianello 1998](#); [Cesaratto and Zezza 2018](#); [Halevi 2019](#)). And fiscal policy makers abandoned the target of full employment in favor of public debt reduction by means of permanent primary surpluses ([Costantini 2017](#)). As a result, real wage growth per employee, which averaged 3.2% per year during 1960–1992, was lowered to a mere 0.1% per year during the period 1992–1999 and to 0.6% per annum during 1999–2008. Within the EU, Italy’s turnaround was remarkable: During 1992–2008, the growth of Italian real wages per worker (0.35% per year) was only half the real wage growth in the Euro-4 (0.7% per annum), and it



**FIGURE 7** Three decades of “catching up,” 25 years of “falling behind”: real wage per employee in Italy relative to France/Germany/Euro-4, 1960–2018. *Source:* author’s calculation based on AMECO data.

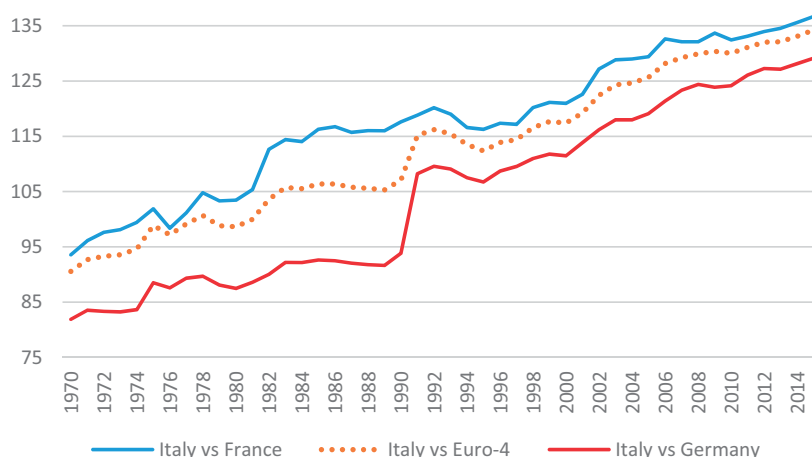
was even lower compared to real wage growth in France (0.9% per year). Interestingly, during 1992–2008, Italian real wage growth per employee was slightly lower than (already stingy) German real wage growth (0.4% per year).

To see the long-run picture, [Figure 7](#) plots the ratio of the real wage of an Italian worker to the real wage of the average French, German, and Euro-4 worker during 1960–2018. In the early 1960s, the average wage of Italian workers was about 85% of the French wage, and this ratio increased to 92% in 1990–1991. Starting in 1992, the Italian real wage begins a steady decline in terms of the average French wage—and in 2018, the average Italian employee earns only 75% of the wage earned by her/his French comrade. The wage gap between Italy and France is bigger today than it was in the 1960s.

A similar pattern can be observed when comparing the Italian real wage and the average real wage earned in the Euro-4 countries: The ratio was around 90% in the early 1960s and increased 100% during 1989–1991, when Italy’s workers had finally caught up with their colleagues in Belgium, France, Germany, and the Netherlands. But this convergence lasted only a little while. Once Italy introduced its structural labor market reforms, Italian wages began a durable decline in terms of Euro-4 wages—to 86% in 2018.

What must be noted here is that this happened notwithstanding the considerable wage moderation practiced by Germany (especially following the Hartz reforms). The Italian real wage per worker was higher than the German real wage during 1979–1997 but then during 1998–2004 declined (relative to Germany’s) in response to Italy’s labor market reforms. In what unmistakably is a race to the bottom, German real wage restraint during 2005–2010 outdid already very low wage growth in Italy, and the Italian real wage rose again to more than 100% of the German wage. But after 2010, following further labor market reforms (Fana, Guarascio, and Cirillo 2016), the Italian wage dropped down to 94% of the German one (see [Figure 7](#)).



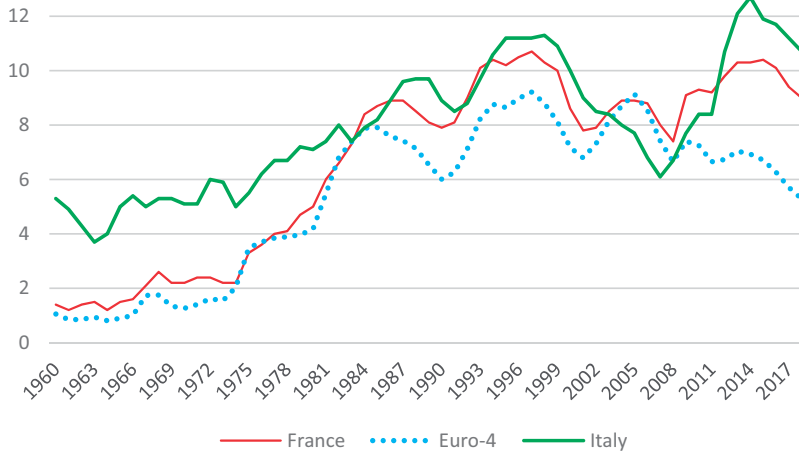


**FIGURE 8** Labor intensity of real GDP in Italy relative to France/Germany/Euro-4, 1960–2018 (in %). *Source:* author's calculation based on AMECO data and EU-KLEMS data (Jäger 2017).

Italy's wage moderation proved an effective strategy to kill three (not just two) birds with only one stone. First, wage restraint helped to bring down inflation—to 3.4% on average per year during 1992–1999 (from 9.6% on average per annum during 1960–1992) and further down to 2.5% per year during 1999–2008 and 1.1% during 2008–2018 (Table 2). Italy is no longer prone, in a structural sense, to high and accelerating inflation. Second, wage restraint increased the labor intensity of Italy's GDP growth—and thus reduced unemployment. Let us first consider the labor intensity of GDP. In the Euro-4 countries, labor intensity of GDP declined by 1.6% on average per year during 1992–2008, compared to an average annual decline of 0.9% in Italy's labor intensity. Stronger wage restraint in Italy slowed capital deepening and labor-saving technological progress in general (Storm and Naastepad 2015), while allowing a greater number of otherwise insufficiently productive firms to maintain their market shares at the expense of more productive ones (as compared to France and the Euro-4).

Relative to France and Germany, Italian production became increasingly more labor-intensive. This is shown in Figure 8, which plots Italian labor intensity (which I define as number of hours of work needed to generate €1,000 of value added) as a percentage of labor intensities in France, Germany, and the Euro-4 during 1970–2015. In 1992, it took 31.5 hours of work to generate €1,000 of income in Italy—more than the 26 hours needed to do so in France and the 29 hours needed in Germany. In 1992, Italy's labor intensity of GDP was therefore already 20% higher than in France and 10% higher than Germany's. But it continued to rise until 2018, when Italy needs 37% more working hours than France to produce €1,000 of value added and 30% more working hours than Germany. The flipside of this increase in relative labor intensity is a crisis of productivity growth that ails the Italian economy.

However, all this contributed to a decline in Italy's rate of unemployment, which peaked in the mid-1990s at more than 11% of the labor force (Table 1 and Figure 9). Labor market

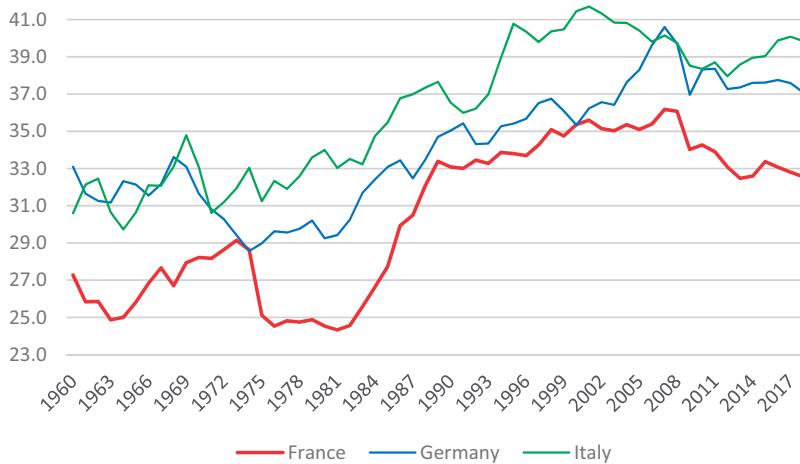


**FIGURE 9** Unemployment: Italy, France, and Euro-4, 1960–2018 (percent of the labor force). *Source:* author’s calculation based on AMECO data.

deregulation and wage restraint helped bring down Italian unemployment to 6.1% in 2007 and 6.7% in 2008—lower than the unemployment rates of France (which equaled 8% in 2007 and 7.4% in 2008) as well as Germany (where unemployment was 8.5% in 2007 and 7.4% in 2008). It is true that the reduction in Italy’s unemployment is partly due to a wave of pension reforms in the 1990s, which allowed millions of employees to retire early (Brandolini, Gambacorta, and Rosolia 2018). But the other factor was job and hours growth, in which Italy outperformed France and Germany, despite the fact that its economy was growing more slowly than the economies of the Euro-4.

This becomes evidence when one compares the elasticity of working hours with respect to GDP, which tells us how much working hours will grow when real GDP increases by one percentage point. For the period 1992–2008, the hours-GDP elasticity was 0.32 in Italy, 0.23 in France, and –0.11 in Germany. Unlike the Germans, who managed to grow their economy while reducing aggregate working hours, it appears as if Italian workers decided to follow the slogan of Boxer, the foolish cart horse in George Orwell’s *Animal Farm*, whose answer to every setback, was: “I will work harder.” However, Italy’s superior unemployment performance did not last, as it was brought to an end by the Eurozone crisis: Its (official) unemployment rate shot up to more than 12% of the labor force during 2013–2015 (Figure 9), exactly the years in which the country overdosed on fiscal austerity on the prescription of Professor Monti. As noted before, “broad” or effective unemployment in Italy is higher than 30% of the labor force. Italy’s narrow unemployment rate in 2018 is 10.7%, double the size of unemployment in the Euro-4 (see Table 1).

Finally, as intended, wage moderation led to a substantial increase in the profit share in Italy’s GDP—the profit share rose by more than 5.5 percentage points, from 36% in 1991 to about 41.5% during 2000–2002, after which it stabilized around 40% up to 2008 (see Figure 10 and Table 2). There was a profit share recovery in all EU economies (as is clear

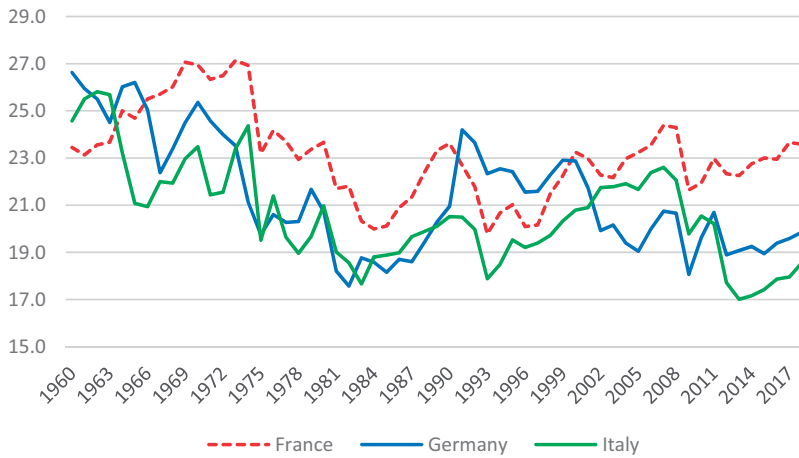


**FIGURE 10** The profit share (total economy): Italy, France, and Germany, 1960–2018 (percent of GDP at factor cost).  
*Source:* author's calculation based on AMECO data.

from Table 2)—because most countries went for wage growth restraint, arguably to increase profits and hence investments and growth; labor unions, weakened by “structural reforms,” boxed in by time-consistent, rule-following “independent” central banks and pressed by governments, almost universally accepted wage stagnation today in exchange for higher employment-generating investments in future.

However, during the 1990s, the recovery of the profit share was considerably stronger in Italy than in France and comparable to what happened in Germany, notwithstanding the fact that Italy's profit share was already relatively high to begin with (Figure 10). In the early 1990s, Italy's profit share was about 3 percentage points higher than that of France; this gap then doubled to more than 6 percentage points during 2000–2002 but later declined to 4 percentage points around 2008. However, in the crisis years post-2010, France's profit share declined relative to Italy's, and the Italian profit share now exceeds the French one by 7 percentage points (Figure 10). Compared to Germany, Italy's profit share was around 2 percentage points higher in the early 1990s; the gap increased to more than 5 percentage points during 2000–2002 and then declined to zero in 2008; during the crisis years after 2010, Italy's profit share rose again relative to that of Germany, increasing to 39.8% (compared to 37.1% in Germany) in 2018. Italy's structural reforms of the 1990s paid off handsomely in terms of a higher profit share, in other words, and Italy's profit share remained substantially higher than that of France and Germany.

The profit share recovery in Italy is associated with an increase in its investment-GDP ratio—from 17.9% in 1993 to more than 22% in 2007–2008—but, as Figure 11 shows, investment as a proportion of GDP is considerably higher in France than in Italy, notwithstanding France's lower profit share. During the 1990s, Germany was investing a much higher share of its GDP than Italy, but German investment came down during 2002–2008



**FIGURE 11** Gross capital formation: Italy, France, and Germany, 1960–2018 (percent of GDP). *Source:* author's calculation based on AMECO data.

relative to Italian investment (Figure 11). During the post-2010 crisis years, Italian accumulation declined to 17% of GDP in 2013 compared to 22.3% in France and 18.9% in Germany; Italy is now (in 2018) investing 18.6% of its GDP,<sup>15</sup> while France and Germany are investing 23.6% and 18.6% of their GDP respectively. With lowered inflation, effective wage restraint, declining unemployment, public indebtedness on the decline, and the profit share considerably raised, Italy appeared all set for a long period of strong growth.

It did not happen. The operation was carried out successfully, but the patient died. According to the coroner's postmortem, the cause of death was a structural lack of aggregate demand.

## THE SUFFOCATION OF ITALIAN AGGREGATE DEMAND POST 1992

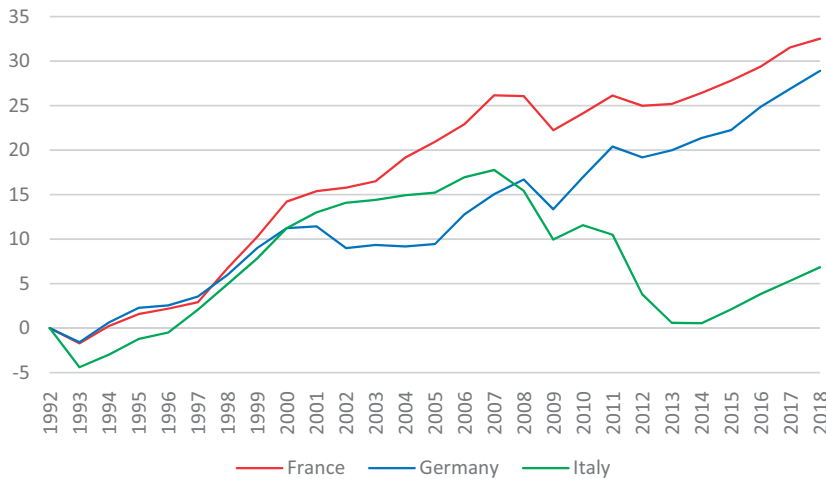
The defining feature of Italy's post-1992 macroeconomic performance is without doubt the secular slowdown of the growth of domestic demand and export demand (see Table 3; Cesaratto and Zezza 2018; Paternesi Meloni and Stirati 2018). The slowdown represents a break with Italy's experience during the three decades 1960–1992, when its domestic demand (per person) increased at a rate of 3.3% per year. In this period, Italian domestic demand grew faster than domestic demand (per capita) in the Euro-4 economies (which increased at 2.7% per annum). Italy's per person domestic demand growth dropped to 0.9% per year during the period 1992–2008 and to a pitiful 0.25% per year during 1992–2018. The post-1992 decline in domestic demand growth was much more pronounced in Italy than in the Euro-4 economies, where per capita domestic demand increased by 1.3% per year during 1992–2008 and by 1.1% during 1992–2018 (Table 3).

To illustrate Italy's comparative decline, Figure 12 plots the *cumulative* expansion of domestic demand (in constant 2010 prices) in Italy, France, and Germany during 1992–2018.

TABLE 3  
A Decomposition of Real GDP Growth of Italy and the Euro-4, 1960–2018

<i>Italy</i>	<i>1960–1992</i>	<i>1992–1999</i>	<i>1999–2008</i>	<i>2008–2018</i>	<i>1992–2018</i>	<i>cumulative % increase 1992–2018</i>
GDP growth (%) per person (p.p.), due to:						
Private consumption growth (p.p.)	3.35	1.47	0.74	–0.53	0.44	12.1
Public consumption growth (p.p.)	2.16	0.83	0.23	–0.19	0.23	10.6
Gross capital formation growth (p.p.)	0.65	–0.08	0.18	–0.12	0.00	–0.4
Export growth (p. p.)	0.56	0.31	0.36	–0.42	0.02	3.2
Minus import growth (p. p.)	0.78	1.13	0.70	0.38	0.74	115.8
Domestic demand growth (p.p.)	0.79	0.73	0.73	0.18	0.55	80.9
Population (million persons)	3.34	1.08	0.76	–0.77	0.25	6.8
R&D expenditure (% of GDP)	54.7	56.9	57.8	60.3	59.1	
<i>Euro-4: Belgium-France-Germany-The Netherlands</i>						
GDP growth (%) per person (p.p.), due to:						
Private consumption growth (p.p.)	2.70	1.59	1.50	0.71	1.24	37.8
Public consumption growth (p.p.)	1.55	0.85	0.55	0.34	0.55	29.8
Gross capital formation growth (p.p.)	0.62	0.27	0.27	0.24	0.26	36.5
Export growth (p.p.)	0.54	0.34	0.30	0.09	0.23	31.6
Minus import growth (p.p.)	0.87	1.51	1.96	1.19	1.64	208.9
Domestic demand growth (p.p.)	0.88	1.38	1.58	1.14	1.44	189.9
Population (million persons)	2.75	1.48	1.16	0.69	1.06	31.6
R&D expenditure (% of GDP)	138.6	166.5	170.4	175.1	172.9	
		2.1	2.2	2.4	2.3	

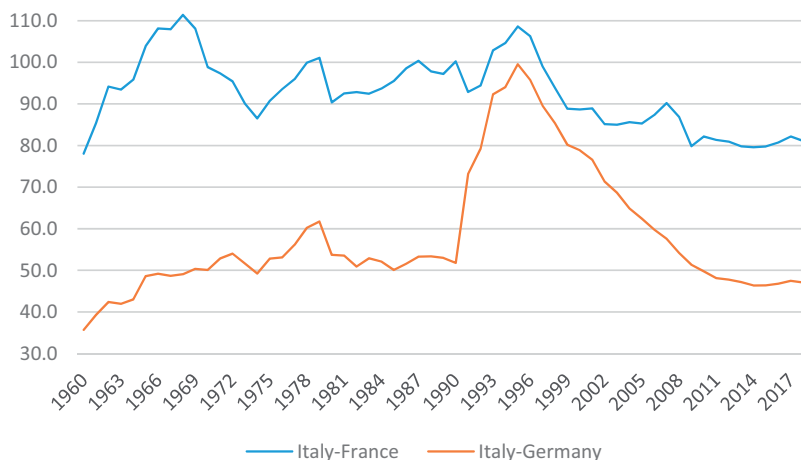
Source: Author's calculations based on AMECO data.



**FIGURE 12** Cumulative domestic demand growth in Italy, France, and Germany relative to the base-year 1992 (percentage). *Source:* author's calculation based on AMECO data.

What it shows is that after Italy experienced negative domestic demand growth during 1993–1996 (when austerity was harsh), its domestic demand increased and peaked in 2007 at a level that was 18 percentage points higher than in 1992. But this was significantly lower than domestic demand in France, which was 26 percentage points higher in 2007–2008 compared to 1992. [Figure 11](#) brings out the domestic demand squeeze in Germany during 2001–2006 (which is due to real wage restraint and austerity). Still, Germany's domestic demand increased about 17 percentage points during 1992–2008, similar to domestic demand expansion in Italy. After 2008, Italy's domestic demand went into freefall, regressing to what it was in 1992; the cumulative growth of Italian domestic demand during 1992–2018 is less than 7%, whereas French domestic demand grew by 33% and German domestic demand by 29% during these 26 years ([Figure 12](#)).

[Table 3](#) decomposes the growth rate of real per capita GDP in Italy and the Euro-4 countries during 1960–2018 into the *contributions* of private consumption growth, public consumption growth, investment growth, and net export growth. During 1960–1992, Italy's growth was fueled by increasing domestic demand: Per capita real GDP and domestic demand per person were growing in tandem at 3.35% on average per year, as the contribution to GDP growth of *net* export growth was about zero (Cesaratto and Zezza 2018). Two things changed after 1992, however. First, domestic demand growth slowed down (to 1.07% per year during 1992–1999, 0.76% per annum during 1999–2008, and to –0.76% during 2008–2018), and this pulled down real GDP growth (which averaged 0.44% per year during 1992–2018, see [Table 3](#)). Compared with the Euro-4 countries, Italy suffered a relatively severe decline in domestic demand ([Figure 12](#)). Second, as domestic demand growth began to drop off, Italian growth became more dependent on net export growth. While the same is true for the Euro-4 countries, net export growth is even more critical to the growth of the

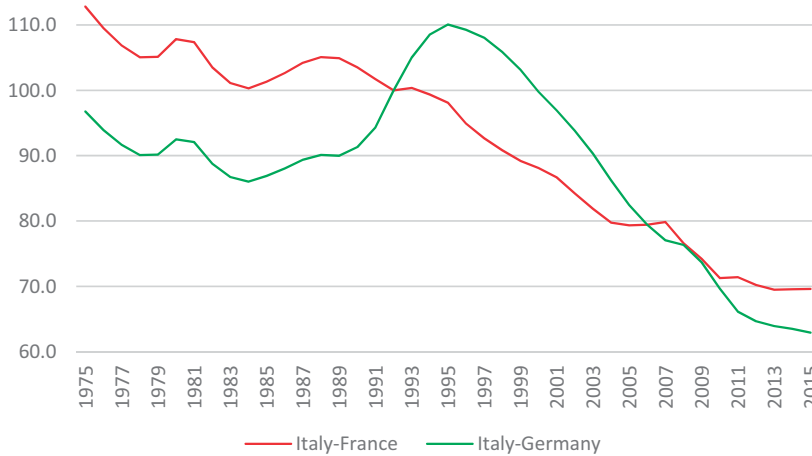


**FIGURE 13** Real exports per person: Italy relative to France and Germany, 1960–2018 (percentage). *Source:* author's calculation based on AMECO data.

Italian economy than it is to growth of the Euro-4 economies because Italy's domestic demand growth turned negative after 2008 and is actually pulling down the economy (Table 3).

Italy's economy suffers not just from a shortage of *domestic* demand, however. Exactly at the time when domestic demand growth was curtailed and the economy was made more dependent on net exports, Italy experienced a worrying deterioration in its export performance. Real export growth per capita declined from 6.6% per year during the catch-up years 1960–1992 to 4.1% per year during 1992–2008 and to 3% per annum during 1992–2018 (Table 3). Italy's experience in this regard was singular, as the Euro-4 economies, in contrast, succeeded in stepping up (per capita) export growth: from 4.8% per year during 1960–1992 to 5.6% per year during 1992–2008; annual export growth in these four countries averaged 4.4% per year during 1992–2018 (Table 3). As a result, the cumulative increase in Italian exports (per person) amounted to 116% during 1992–2008, compared to a cumulative (per capita) export expansion of 151% in France and of 263% in (export-*Weltmeister*) Germany in the same period. Italy recorded by far the smallest expansion of exports among the main euro-area countries, which is a sign of the growing inability of Italian firms to compete in international markets (Bugamelli et al. 2018)<sup>16</sup>—and of the reshuffling of European production networks in a direction unfavorable to Italy (Cesaratto and Stirati 2010). The growing backward (and forward) production linkages between German manufacturing and that of Eastern European countries has weakened existing networks between German and (Northern) Italian firms, as documented by Celi et al. (2018) and Bellofiore, Garibaldi, and Mortàgua (2019).

Figure 13 illustrates the evolution of Italian real exports (per person) relative to those of France and Germany during 1960–2018. Italian exports (per person) increased more or less in line with French exports during 1960–1992 but began a steady decline from 109% of



**FIGURE 14** Capacity utilization in manufacturing: Italy relative to France and Germany, 1975–2015 (percentage).

*Source:* author's calculation based on EU-KLEMS data (Jäger 2017).

French exports in 1995 to 87% in 2008 and further down to 81% in 2018. The same pattern holds for Italian export performance during the years 1960–1992 relative to that of Germany, when Italian exports per person fluctuated around 50% of German exports per capita. German unification in 1991 considerably reduced Germany's exports per person—which made Italy look better because Germany looked worse. However, Italy's exports per person as a ratio of German exports per person increased to around 100% in 1995 but then fell off the cliff—declining to 54% in 2008 and 47% in 2018.

Figure 14 presents a final indicator of demand deficiency in Italy relative to France and Germany. Using EU-KLEMS data, I estimated the rates of capacity utilization in (aggregate) manufacturing in Italy, France, and Germany during 1975–2015, as three-year moving averages normalized at 100% for the period 1991–1993. The results appear in Figure 14. Before the early 1990s, capacity utilization in the manufacturing industries was higher in faster-growing Italy than in France—but after Italy signed the Maastricht Treaty and both domestic and export demand growth began their decline, capacity utilization in Italian manufacturing has been steadily falling relative to that in French industry. From a (normalized) ratio of 100% in 1992, relative capacity utilization in Italian manufacturing declined by a staggering 30 percentage points to less than 70% of capacity utilization in French “manufactures” in 2015. The utilization rate of Italian manufacturing relative to German manufacturing increased from 100% in 1992 to 110% in 1995, not because utilization increased in Italy but because capacity utilization went down in Germany following unification (which increased capacity more than demand). Much more relevant than this “unification blip” is the inexorable decline in capacity utilization in Italian manufacturing relative to that in Germany's after 1995—from 110% to 76% in 2008 and further down to 63% in 2015—a decline by a stunning 47 percentage points (Figure 14).



Lower capacity utilization depresses the profit rate of firms (defined as the return on invested capital)—which in turn hurts firm investment. To see this, let me define the manufacturing rate of profit ( $\rho$ ) as the real return on invested capital, as follows:

$$\rho = \frac{\Pi}{K} = \frac{\Pi}{X} \times \frac{X}{\bar{X}} \times \frac{\bar{X}}{K} = \pi \times u \times \kappa \quad (1)$$

where  $\pi = (\Pi/X)$  = the share of real profits ( $\Pi$ ) in real manufacturing income ( $X$ ),  $u = (X/\bar{X})$  = capacity utilization, and  $\kappa = (\bar{X}/K)$  = the “normal” output-capital ratio in manufacturing.  $K$  is the capital stock (at constant prices) and  $\bar{X}$  is “normal” (trend) output. I assume that  $\kappa$  is a long-run constant. Equation (1) can be extended using this definition of the profit share  $\pi$  (see Storm and Naastepad 2012):

$$\pi = 1 - \theta = 1 - w \times \lambda^{-1} \quad (2)$$

where  $\theta$  = the wage share,  $w$  = the real wage (per hour of work), and  $\lambda$  = labor productivity per hour worked. Substituting (2) into (1) gives the following decomposition of  $\rho$ :

$$\rho = (1 - w \times \lambda^{-1}) \times u \times \kappa \quad (3)$$

The (manufacturing) profit rate has three key determinants: the real wage  $w$ , labor productivity  $\lambda$ , and capacity utilization  $u$  (or demand). A higher real wage raises the wage share, reduces the profit share, and therefore decreases the profit rate. Higher productivity, on the other hand, reduces the wage share, increases the profit share, and therefore raises the profit rate. And if the rate of capacity utilization goes down, this must depress the profit rate (keeping other factors constant). It follows from Equation (3) that the manufacturing profit rate must decline, even if the profit share increases, if the decline in capacity utilization is big enough. That is, the negative impact on the profit rate of demand deficiency can more than offset the positive impact of a higher profit share. This is exactly what happened to Italian manufacturing.

The *profit share* of Italian manufacturing during the years 1999–2008 was 3.1 percentage points higher than during the period 1970–1992 (Table 2)—the reason being that average annual labor productivity in manufacturing was 17.2 percentage points higher in the later period (as compared to 1970–1992), while the average annual real wage had increased by only 14.1 percentage points. The increase in the profit share did not, however, translate into a higher *profit rate*. Quite the opposite happened in fact, as the average annual manufacturing profit rate was 1 percentage point lower during 1999–2008 than during 1970–1992.

What caused this divergence between the (higher) profit share and the (lower) profit rate? The reason was that average annual capacity utilization in Italian manufacturing during 1999–2008 was 4.1 percentage points below average utilization in the 1970s and 1980s. What this means is that Italy’s strategy of real wage restraint and labor market deregulation has been entirely self-defeating: Yes, it did raise the profit share, but it at the same time reduced demand and capacity utilization—and consequently *lowered the profit rate*, which is a more relevant determinant of investment than the profit share.

It should be clear, based on Figure 14, that the stunning decline in manufacturing capacity utilization in Italy compared to France and Germany did depress relative manufacturing profitability in Italy. Using Equation (3), I decomposed the difference between the average

Italian manufacturing profit rate and the average profit rate in French, German, and Euro-4 manufacturing in four time periods: 1970–1992, 1992–1999, 1999–2008, and 1999–2015. The results of this decomposition appear in [Table 4](#)—and they are powerful.

Let me discuss the decomposition results by comparing Italian and French manufacturing. During the catch-up period 1970–1992, the average annual profit rate in Italian manufacturing exceeded that of French manufacturing firms by 0.96 percentage points. On average, Italian firms were more productive than French firms in this period, but because they were paying higher wages than the French, the profit share in Italian manufacturing was lower than in France. The lower profit share reduced the relative profit rate of Italian manufacturing by 2.19 percentage points. Italian firms made up for this profit-share disadvantage, however, because they were working at much higher rates of capacity utilization than the French: Higher relative utilization raised the Italian profit rate by as much as 3.15 percentage points, leading to the observed profit-rate advantage of 0.96 percentage points.

Moving fast forward to the period 1999–2008, we see that the situation had worsened for Italian manufacturers: Their average annual profit rate was 5.33 percentage points *below* that of French competitors. This was the result of two factors. First, the manufacturing profit share in Italy was 2.27 percentage points lower than the French profit share during 1999–2008. This is extraordinary, because (as I just noted) Italy’s wage moderation and labor market reforms had brought about an increase in the manufacturing profit share by 3.1 percentage points during 1999–2008 (compared to 1970–1992). What it implies is that French manufacturing experienced an even stronger increase in its profit share than Italian manufacturing. The improvement in the French manufacturing profit share compared to Italian industry is even more remarkable in view of the fact that real wage growth in Italy was much lower than in France, with the result that the average Italian real wage during 1999–2008 was considerably below the French real wage.

What is of key importance, however, is that the (relatively strong) real wage restraint in Italy went hand in hand with an even stronger slowdown in labor productivity growth—this is another reason why Italy’s strategy of real wage restraint backfired. French firms pay higher wages but have higher productivity than Italian ones, and hence their profit share is higher than that of Italian manufacturers. The second factor behind the decline in the relative profit rate of Italian manufacturing was the relatively strong decline in capacity utilization in Italy (see [Figure 14](#)). On its own, the deficiency of demand, leading to a lower utilization of productive capacity, reduced the relative profit rate of Italian manufacturing by 3.05 percentage points. Similar post-1999 deteriorations in Italy’s relative profit rate can be observed when comparing Italian to German manufacturing and to average Euro-4 manufacturing performance ([Table 4](#)).

## THE STRUCTURAL FORCES DRIVING ITALY’S DEMAND SHORTAGE

Italy is suffering from a chronic shortage of demand—a condition created by (1) perpetual fiscal austerity, (2) permanent real wage restraint, and (3) a lack of technological competitiveness (Lucarelli and Romano 2016), which, in combination with an unfavorable (euro) exchange rate, reduces the ability of Italian firms to maintain their export market shares in

TABLE 4.  
Manufacturing Profitability: Italy versus the Euro-4, Germany, and France

	1970-1992	1992-1999	1999-2008	1999-2015
<b>Italy vs. the Euro-4:</b> difference in manufacturing profit rate (percentage points)	1.78	1.89	-2.71	-5.05
Due to difference in profit share (percentage points)	0.16	-0.04	-1.06	-1.49
Caused by difference in real wage per hour (percentage points)	9.75	10.28	17.69	18.02
Caused by difference in labor productivity per hour (percentage points)	-9.59	-10.32	-18.75	-19.52
Due to difference in capacity utilization (percentage points)	1.61	1.93	-1.65	-3.55
<b>Italy vs. Germany:</b> difference in manufacturing profit rate (percentage points)	-0.17	3.30	-2.34	-5.86
Due to difference in profit share (percentage points)	1.78	2.57	0.65	-0.52
Caused by difference in real wage per hour (percentage points)	18.40	15.96	21.01	19.67
Caused by difference in labor productivity per hour (percentage points)	-16.68	-13.39	-20.36	-20.20
Due to difference in capacity utilization (percentage points)	-1.95	0.73	-2.99	-5.32
<b>Italy vs. France:</b> difference in manufacturing profit rate (percentage points)	0.96	-3.05	-5.33	-5.86
Due to difference in profit share (percentage points)	-2.19	-3.31	-2.27	-1.69
Caused by difference in real wage per hour (percentage points)	-5.27	-0.33	11.23	14.15
Caused by difference in labor productivity per hour (percentage points)	3.08	-2.99	-13.51	-15.84
Due to difference in capacity utilization (percentage points)	3.15	0.27	-3.05	-4.15

Source: Author's calculations based on EU-KLEMS data (Jäger 2017).

the face of increasing competition of low-wage countries (China, in particular). These three factors are depressing demand, reducing capacity utilization and lowering firm profitability, hurting investment and innovation, and hence lock the country into a state of permanent decline, characterized by the impoverishment of the productive matrix of the Italian economy and the quality composition of its trade flows (Simonazzi, Ginzburg, and Nocella 2013).

### Perpetual Austerity

Italy's primary surpluses during 1992–2018 added up to a drain on demand of more than €1 trillion (at constant 2010 prices)—which is roughly equal to two-thirds of Italy's GDP in 2018. Italian austerity stands in sharp relief to the cumulative fiscal deficit (or stimulus) of €475 billion provided by successive French governments during the same period 1992–2018. Like Italy, the governments of Belgium, the Netherlands, and Germany did run primary surpluses on average, but the cumulative drain on demand of the Euro-4 (which also includes France) was €510 billion, or about half of Italy's cumulative surpluses during the post-1992 period.

Let us suppose, in a back-of-the-envelope counterfactual, that France would have run cumulative surpluses of €500 billion during 1992–2018 (which is only half of what Italy actually did), and if I assume, rather conservatively, that the fiscal multiplier for France, for unchanged interest rates, is around 0.45,<sup>17</sup> then the assumed austerity would have reduced France's GDP in 2018 by €430 billion (compared to actual GDP in that year); in this scenario, French real GDP growth during 1992–2018 would have come down from 1.6% year to 0.75% per year—which is Italy's actual growth rate in this period. One can only speculate what the *Gilets Jaunes* protests would have looked like in this case—with French fiscal consolidation still being only half of that of Italy. While the counterfactual provides only a very crude estimate, it does (I think) suggest the degree to which fiscal austerity is holding back the Italian economy (Costantini 2018).

Perhaps a more straightforward way to assess the impact of perpetual austerity on Italy's economic growth is to look at the contribution to real GDP growth of public spending. Let us first consider public consumption expenditure. Italy's real public consumption expenditure (per person) increased by 3% per year during 1960–1992 and contributed 0.65 percentage points to Italy's average annual real GDP growth rate of 3.35% (per person) during those decades. In contrast, the average annual growth rate of real public spending per person was zero during the period 1992–2018—contributing absolutely nothing to Italy's real GDP growth. Let us next look at (gross) public investment by the Italian state, which was growing at 2.5% per year during 1960–1992 and contributed 0.15 percentage points to Italy's growth during those years. However, during the period 1992–2018, Italy's public investment *declined* by 0.5% on average each year in real terms—which is showing up, on the supply side, in a decaying stock of public infrastructure (including bridges, roads, railroads, and tunnels). On the demand side, it lowered Italy's average annual real GDP growth rate by 0.05 percentage points after 1992. As part of the post-1992 fiscal consolidation, Italy's governments kept public spending constant in real terms—and this policy decision depressed Italy's

per capita real GDP growth during 1992–2018 by 0.85 percentage points (compared to growth in the period 1960–1992).

### Permanent Real Wage Restraint

Structural reforms managed to bring down real wage growth to almost nothing—from 3.2% on average per annum during 1970–1992 to 0.2% per year during 1992–2018. Accordingly, the real wage of the average Italian employee was 177% higher in 1992 than what it was 32 years earlier; in contrast, in 2018, the real wage per worker was about 6% higher than what it was 26 years before (i.e., in 1992). As noted previously, real net household incomes even *declined* after 1992. Since private consumption depends on income and since wages are the main source of income, consumption growth was hurt by the drastic reduction in real wage growth. If I assume that the elasticity of real private consumption with respect to the real wage takes a value of 0.55 (which is in line with econometric findings of Storm and Naastepad 2012 and Onaran and Galanis 2014), then the reduction of real wage growth by 3 percentage points after 1992 (compared to 1960–1992) must have reduced consumption growth by 1.65 percentage points. Real wage restraint on its own thus “explains” about half of the decline in per capita real consumption growth—from 3.76% per year during 1960–1992 to 0.39% per year during 1992–2018. This drop in consumption growth, in turn, depressed Italy’s per capita real GDP growth during 1992–2018 by around one percentage point (compared to growth in the period 1960–1992). Structural labor market reforms carry a significant opportunity cost in terms of lower growth.

Real GDP growth per Italian declined from 3.35% on average per year during the period 1960–1992 to 0.44% per year during 1992–2018—which is a decline of 2.91 percentage points. About one-quarter of this growth decline (i.e., 0.85 percentage points) can be attributed to Italy’s post-1992 fiscal consolidation (which meant drastic cuts in public expenditure growth). Another 35% of the growth decline (or 1 percentage point) is due to real wage restraint and consumption decline. About 60% of the deterioration in Italy’s growth performance can hence be directly attributed to Italy’s self-imposed commitment to the EMU norms. The decline in private and public consumption growth must in addition have negatively affected investment, if only because it reduced capacity utilization and hence hurt the profit rate (as per Equation 3).

### Pitiful Export Performance

Perpetual fiscal austerity and permanent real wage restraint since 1992 made the performance of the Italian economy almost completely dependent on foreign demand—higher (net) export growth was to replace domestic demand growth as the driver of Italian growth, as real wage restraint was expected to improve the (unit-labor) cost and price competitiveness of Italian firms and boost their exports. It was not to happen. The growth rate of Italian real exports per person dropped from 6.6% per year during 1960–1992 to 4.1% per year during

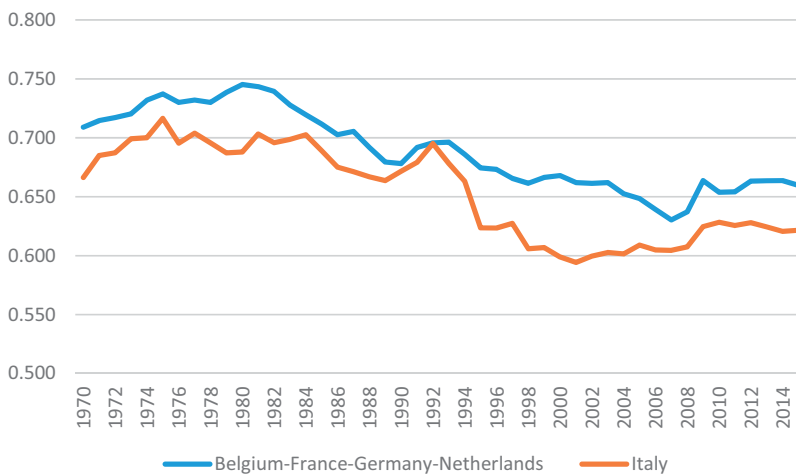
1992–2018. It is true that Italy’s economy did become more dependent on (net) export growth, but this happened not because of an improvement in export performance but rather because domestic demand stopped growing.

Part of the decline in Italy’s export growth must be attributed to a decline in external demand growth—but not all of it. What is remarkable is that Italy’s exports have significantly underperformed vis-à-vis those of the Euro-4 countries throughout the 1992–2018 period (Bugamelli et al. 2018). During the catching-up years, the growth rate of Italian real exports per person (at 6.6% per year) did exceed the average annual growth rate of per capita exports of the Euro-4 countries (which was 4.8%); French export growth averaged 6% per year, and German exports rose by 4% per annum. But as noted already in Figure 13, Italy’s export growth of 4.1% per year during 1992–2018 compares unfavorably with per person export growth rates of 5.6% per year for the Euro-4 countries, 4.6% per year for France, and 6.6% per annum for Germany over the same period. Italy’s relative underperformance is due to the interplay of three factors: A lack of technological competitiveness (the first factor), in combination with an overvalued exchange rate (the second factor), reduces the ability of Italy’s mostly small firms (the third) to maintain their export market shares in the face of increasing competition of low-wage countries.

Let me consider these three structural factors in greater detail.

### ITALY’S EXPORT WOES AFTER 1992<sup>18</sup>

The first point to note is that Italy’s relatively poor export performance cannot be attributed to a lack of relative (unit-labor) cost competitiveness of Italian exporters (see Algieri 2016). Figure 15 presents the evolution of real unit labor costs (defined as the ratio of real wages



**FIGURE 15** Unit labor cost in manufacturing: Italy versus the Euro-4 countries, 1970–2015. *Source:* author’s calculation based on EU-KLEMS (Jäger 2017).

and real value added) in manufacturing in Italy and the Euro-4 group during 1970–2015. It can be seen that unit labor cost in Italian manufacturing closely tracks the average unit labor cost in the manufacturing sectors of the Euro-4 countries during most years of the period 1992–2018; it is only during 2003–2005, when German wage moderation began in earnest, that Italian unit labor cost diverged from unit labor cost in the Euro-4, and during the crisis years 2010–2015. In 2015, manufacturing unit labor cost is 8% higher in Italy than in the Euro-4 countries—but one has to keep in mind that this translates into a price disadvantage for Italian exporters of just 2.4% because the share of value added in the manufacturing (gross output) price is only 30% (see Storm and Naastepad 2015). Italy's unit-labor cost and price disadvantage is therefore too small to constitute a plausible explanation of its export underperformance (Algieri 2016).

It is useful nevertheless to decompose the changes in Italy's (manufacturing) unit labor cost over time into changes in the real wage per hour of work and changes in hourly labor productivity and compare these to real wage and productivity growth in the Euro-4 countries (see Table 5). Let us focus on *manufacturing*, which is, after all, the country's primary exporting industry. Italy's manufacturing unit labor cost increased at roughly the same rate during 1970–1992 as unit labor cost in the Euro-4 countries. Productivity growth in Italian manufacturing was already inferior to that of Euro-4 manufacturing during 1970–1992. But the gap between the average annual growth rates of Italian and Euro-4 manufacturing productivity widened after 1992—from 0.65 percentage points during 1970–1992 to 1.08 percentage points during the 1990s and further to 2.24 percentage points during 1999–2008. In effect, Italian manufacturing could only maintain its cost competitiveness by *rücksichtslos* suppression of wage growth relative to that in Euro-4 manufacturing.

Figures 16 and 17 illustrate this point: The cost competitiveness of Italian manufacturers vis-à-vis the Euro-4 countries depends on low wages and not on superior productivity performance. The result is that whereas industrial workers in France and Germany were earning €35 per hour (in constant 2010 prices) in 2015, and their colleagues in Belgium and the Netherlands earned even more, Italian workers in manufacturing were bringing home only €23 per hour (in constant 2010 prices)—or one-third less (see Figure 16). But at the same time, industrial labor productivity per hour of work is considerably higher (€53 per hour in constant 2010 prices) in France and Germany than in Italy, where it is around €33 per hour (Figure 17).

Italian manufacturers are thus taking the “low road,” while firms in the Euro-4 countries are traveling on the “high road.” Or in other words, compared with German and French manufacturers, Italian firms suffer from a lack of “technological” strength (Algieri 2016), which in Germany is based on high productivity, innovative efforts, and high product quality. True, Italian firms do stand out for their high relative quality in more “traditional” lower-tech export products such as footwear, textiles, and other nonmetallic mineral products, but they have been steadily losing ground in export markets of more dynamic products characterized by higher levels of R&D and technology intensity, such as chemicals and pharmaceuticals and communication equipment (Bugamelli et al. 2018, Table 10).

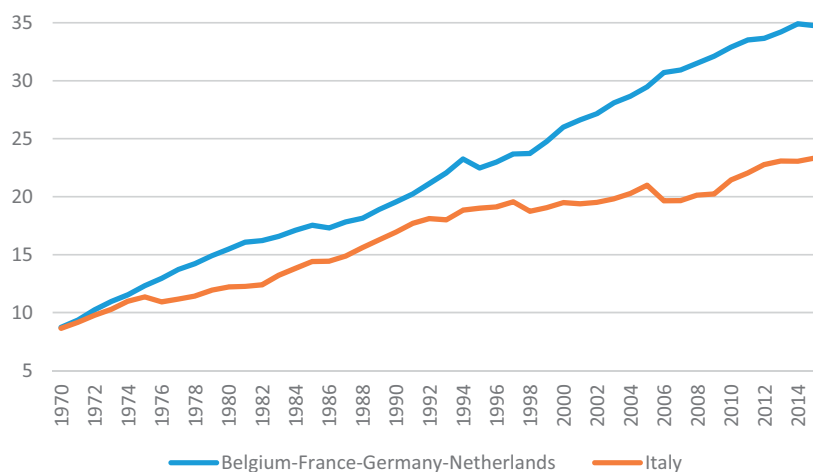
Italy's abysmal productivity performance after 1992 must count as one of the “morbid symptoms” of its collapsing economic order (Figure 17). It is hard to imagine, but hourly labor productivity in Italy has not grown since the early 1990s. The productivity of the

TABLE 5  
Real Wages, Productivity, and Unit Labor Cost: Italy versus the Rest (1970–2015)

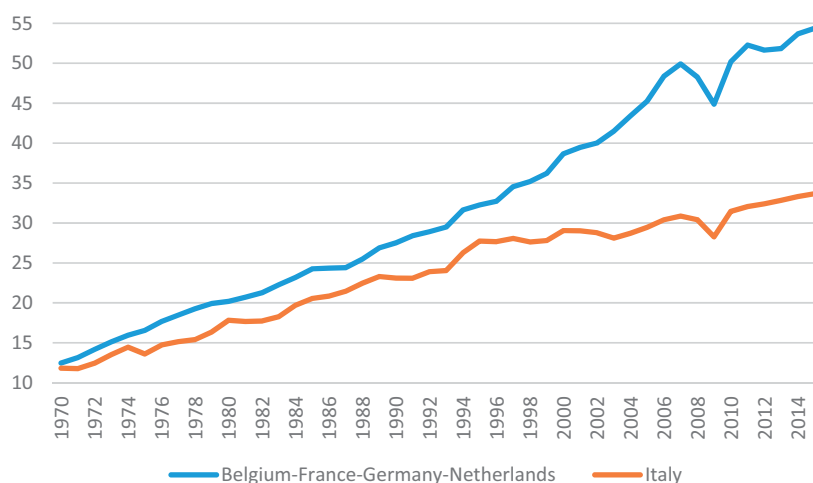
Italy	1970–1992	1992–1999	1999–2008	2008–2015	Euro-period 1992–2015	% change 1992–2015
<i>Total economy</i>						
Hourly real wage growth ( $w$ )	2.23	-0.58	0.34	0.50	0.11	2.6
Hourly labor productivity growth ( $p$ )	2.03	1.37	0.33	0.17	0.60	14.7
Growth of unit labor cost ( $w$ ) – ( $p$ )	0.20	-1.95	0.01	0.33	-0.49	-12.1
Growth of relative unit labor cost	0.29	-1.33	-0.52	-0.17	-0.25	-5.2
<i>Manufacturing</i>						
Hourly real wage growth ( $w$ )	3.42	0.73	0.61	2.13	1.10	28.7
Hourly labor productivity growth ( $p$ )	3.25	2.18	1.01	1.45	1.50	40.8
Growth of unit labor cost ( $w$ ) – ( $p$ )	0.17	-1.45	-0.40	0.67	-0.40	-12.1
growth of relative unit labor cost	-0.03	-0.48	0.14	0.98	0.18	11.6
<i>Euro-4: Belgium-France-Germany-The Netherlands</i>						
<i>Total economy</i>						
Hourly real wage growth ( $w$ )	3.44	1.15	0.97	1.06	1.05	27.3
Hourly labor productivity growth ( $p$ )	3.53	1.78	1.48	0.56	1.29	34.2
Growth of unit labor cost ( $w$ ) – ( $p$ )	-0.09	-0.63	-0.51	0.50	-0.24	-6.9
<i>Manufacturing</i>						
Hourly real wage growth ( $w$ )	4.10	2.28	2.72	1.41	2.18	64.4
Hourly labor productivity growth ( $p$ )	3.90	3.26	3.25	1.72	2.78	88.1
Growth of unit labor cost ( $w$ ) – ( $p$ )	0.20	-0.98	-0.53	-0.31	-0.58	-23.7

Source: Author's calculations based on EU-KLEMS data (Jäger 2017).





**FIGURE 16** Real wage per hour of work in manufacturing: Italy versus the Euro-4 countries, 1970–2015 (euro's, constant 2010 prices). *Source:* author's calculation based on EU-KLEMS (Jäger 2017).



**FIGURE 17** Manufacturing labor productivity per hour of work: Italy versus the Euro-4 countries, 1970–2015 (euro's, constant 2010 prices). *Source:* author's calculation based on EU-KLEMS (Jäger 2017).

average Italian worker in 1992 was 62% higher than in 1970; in contrast, aggregate labor productivity increased by a negligible 2.5% during 1992–2015. Table 6 presents a shift-share decomposition analysis, which decomposes the decline in Italy's aggregate rate of productivity growth from 2.03% on average per year during 1970–1992 to 0.26% per annum during 1999–2015 into (1) intraindustry productivity growth changes, and (2) a “structural change” component, which captures the productivity impacts of changes in the industry-wise employment structure—from (say) more dynamic industries with above-average productivity growth to industries with below-average productivity growth.

TABLE 6  
Shift-Share Decomposition of the Change in Aggregate Labor Productivity Growth: Italy: 1970–1992 versus 1999–2015

	Average annual labor productivity growth (%)		Share in employment (defined as total hours worked)		Contribution to labor productivity change of:		
	1970–1992	1999–2015	Change	1970–1992	1999–2015	Change	Total
<b>Total economy</b>	<b>2.031</b>	<b>0.264</b>	<b>-1.767</b>	<b>1.000</b>	<b>1.000</b>	<b>—</b>	<b>-1.767 (100.0%)</b>
Primary Activities	5.339	1.302	-4.037	0.154	0.061	-0.093	-0.479 (-0.718 (40.6%))
Manufacturing	3.250	1.203	-2.048	0.252	0.180	-0.072	-0.583 (33.0%)
Low-Tech	3.403	1.083	-2.320	0.124	0.081	-0.043	-0.325 (18.4%)
Medium-Low Tech	3.028	0.832	-2.196	0.060	0.049	-0.011	-0.137 (7.8%)
Medium-High Tech	3.220	1.368	-1.852	0.067	0.050	-0.017	-0.054 (-0.144 (8.1%))
Information & Comm.	0.060	1.459	1.399	0.013	0.025	0.012	0.034 (0.001 (0.035 (-2.0%))
EG&W	0.550	-1.300	-1.851	0.010	0.011	0.001	-0.020 (1.1%)
Construction	1.423	-1.030	-2.543	0.076	0.075	0.000	-0.179 (10.2%)
Wholesale & Retail	1.479	0.402	-1.077	0.167	0.165	-0.002	-0.175 (9.9%)
Transportation	2.191	0.447	-1.745	0.050	0.051	0.001	-0.087 (-0.084 (4.8%))
FIRE	-1.063	0.868	1.931	0.022	0.036	0.014	0.067 (0.015 (0.052 (-3.0%))
PBS	-2.790	-1.959	0.831	0.033	0.102	0.068	-0.185 (-0.103 (5.8%))
Public Services	0.514	0.591	0.077	0.133	0.151	0.018	0.020 (-0.1%)
Private Services	-1.763	-1.050	0.714	0.092	0.143	0.051	0.011 (-0.6%)

Source: Author's estimates based on EU-KLEMS data (2017 release, see Jäger 2017).

Note. Primary industries = agriculture & mining; FIRE = finance, insurance, and real estate; PBS = professional and business services; Public Services include education & health; Private Services = art, entertainment, recreation, and food services & other services. The shift-share analysis is based on the following decomposition of total-economy labor productivity growth:  $\Delta\hat{\lambda}_{total} = \sum_{i=1}^N \xi_{it} \Delta\hat{\lambda}_i + \sum_{i=1}^N \hat{\lambda}_{0i} \Delta\hat{\xi}_i$ , where  $\Delta\hat{\lambda}_i$  = the change in average labor productivity growth in industry  $i$  between 1970–92 and 1999–2015;  $\Delta\hat{\xi}_i$  = the change in the employment share of industry  $i$  between 1970–92 and 1999–2015;  $\hat{\lambda}_{0i}$  = average labor productivity growth in industry  $i$  during 1970–92; and  $\xi_{it}$  = the employment share of industry  $i$  during 1999–2015.

About 45% of Italy's aggregate productivity growth declines must be attributed to declining productivity growth *within* industries—and mostly within (low-tech and medium-tech) manufacturing; manufacturing productivity growth declined from 3.25% per year during 1970–1992 to 1.20% per year during 1999–2015 (Table 6). Other industries suffering from a productivity growth slowdown include the primary sector (agriculture and mining), wholesale and retail, and transportation. Productivity growth did increase in Italy's information and communication industry, but this does not have much of an impact at the aggregate level because the sector has a share in total hours worked of just 2.5%. The remaining 55% of Italy's aggregate productivity growth decline is due to a shift in its employment structure toward “nondynamic” industries that feature below-average productivity growth.

The biggest changes occur in the primary sector, the employment share of which declined from 15.4% on average during 1970–1992 to 6.1% on average during 1999–2015, and manufacturing. The share of manufacturing in total hours worked in Italy declined from 25.2% on average during the 1970s and 1980s to 18% during 1999–2015. These structural changes lower aggregate productivity growth because primary activities and manufacturing are industries featuring above-average productivity growth. It must be noted that Italy's manufacturing sector has been shedding jobs and hours of work ever since the 1970s; specifically, total hours worked in Italian manufacturing came down from around 10 billion hours in the 1970s to 6.6 billion hours in 2015.

Hours worked increased in professional and business services (from 0.6 billion hours of work in the early 1970s to 5 billion hours of work in 2015) and in private services, where hours worked increased from 2.6 billion in the early 1970s to 6.8 billion in 2015. Both sectors feature below-average (even negative) labor productivity growth, and hence the structural employment change in their favor has lowered Italy's productivity growth in the aggregate. The picture that emerges from Table 6 suggests that Italy is suffering from (premature) deindustrialization, a productivity growth problem in its manufacturing sector, and a dualization of its employment structure—with a rising share of hours worked of stagnant (services) industries. Table 6 finally highlights the fact that Italy's manufacturing sector is not “technology intensive.” Hours worked in low-tech manufacturing make up around half of hours worked in all manufacturing, and the share of medium-high tech manufacturing in hours worked in all manufacturing is less than 30%. All manufacturing subsectors experience sharp declines in their productivity growth.

For two reasons, this specialization in low- and low-medium technology activities locks the country into a quasi-permanent position of structural weakness. The first is that the exchange-rate elasticity of export demand is larger for “traditional” exports than for medium- and high-tech exports. As a result, the appreciation of the euro (after 2001) did hurt Italian exporters of “traditional products” harder than German and French firms exporting more “dynamic” goods and services. Thus, the overvalued euro penalizes Italian export growth more than it damages export growth in the Euro-4 economies.

The second factor is that Italian firms are operating in global markets that are more strongly exposed to the growing competition of low-wage countries and China, in particular. In 1999, 67% of Italy's exports consisted of (“traditional”) products exposed to medium to

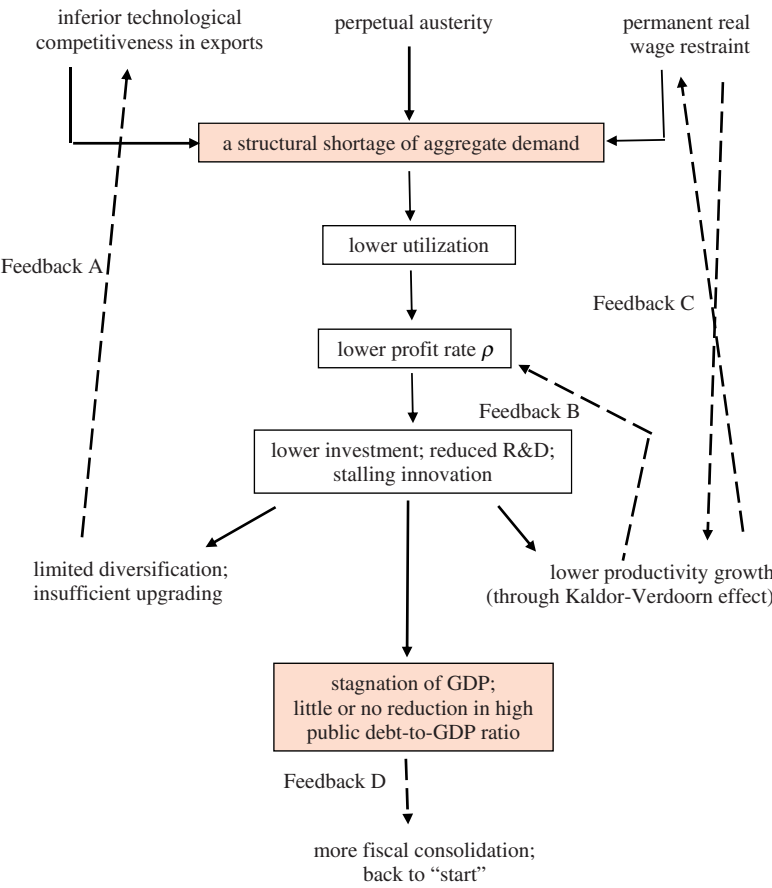


FIGURE 18 Cumulative causation in Italy’s post-1992 economy: a mnemonic.

high competition from Chinese firms—compared to a similar exposure to Chinese competition of 45% of exports in France and 50% of exports in Germany (Bugamelli et al. 2018, Figure 18). The share of Italy’s exports in world imports declined from 4.5% in 1999 to 2.9% in 2016—and the market share loss was heavily concentrated in more “traditional” market segments characterized by high exposure to Chinese competition (Bugamelli et al. 2018, Table 1).<sup>19</sup> As Chinese and other developing economy firms continue to expand their production capabilities and to upscale, competitive pressures will mount in medium- and medium-high tech segments as well. Italian firms have difficulties facing the competition from low-wage countries because they are generally too small to wield any pricing power, too often single-product producers unable to diversify market risks, and too dependent on foreign markets because their “home market” is in the doldrums.

## ITALY'S INTERREGNUM: WHEN IT RAINS, IT POURS

Recent evidence suggests that Italian exporters are beginning to upgrade the quality of their products (Bugamelli et al. 2018), but it is clear that the challenges involved are daunting—a structural transformation of Italy's export and productive structure appears unlikely, given the overvalued currency, the inexorable increase in competition from emerging low-wage economies, and lack of domestic demand growth due to the perpetual austerity and permanent wage restraint. Hence, if there is one takeaway from the preceding pathology, it is that Italy's crisis is not an ordinary economic crisis but an existential crisis that encompasses the totality of its post-Maastricht model of capitalism (Costantini 2018; Fazi 2018; Halevi 2019). Powerful negative feedback mechanisms lock the Italian economy into endless stasis. Figure 18 presents a mnemonic of the pathophysiology of Italy's economic dysfunction, highlighting four such feedback loops—which together ensure that “a new order cannot yet be born.” Let me quickly go through the scheme, which bears semblance to the Kaldorian framework proposed by Forges Davanzati, Patalano, and Traficante (2017).

Perpetual fiscal consolidation, permanent wage restraint, and inadequate technological competitiveness in exporting keep down aggregate demand and lower capacity utilization and profitability. The consequence is lower investment, lower R&D spending, and stalling innovation—with all this contributing to the stagnation of GDP growth. Four negative feedback mechanisms reinforce this causal scheme. A first feedback loop (labeled A) highlights the (straightforward) fact that Italy's technological competitiveness is weakened further by insufficient investment and a lack of R&D, which limit product diversification, innovation, and quality upgrading. Italian exporting firms remain trapped in the competitive battle with low-wage countries—which can only be won by upgrading and diversification in higher-tech niche markets.

A second feedback (B) runs from depressed investment to lower labor productivity growth and a lower profit rate (as per Equation 3). Stagnating investment implies a slowing down of productivity growth because it reduces not just the pace of technical progress embodied in newly installed capital goods but also because it limits what Adam Smith called “the division of labor” by limiting the “extent of the market” (or demand). This relationship between productivity growth and (investment) demand growth is known as the Kaldor-Verdoorn relation (Storm and Naastepad 2012, 2015). A rough-and-ready numerical example illustrates that it constitutes a crucial feedback. Real investment growth in Italy averaged 3% per year during 1960–1992 and 0.4% per annum during 1992–2018—a decline of 2.6 percentage points. Assuming that the Kaldor-Verdoorn elasticity takes a value of 0.35 (see Storm and Naastepad 2012 for empirical evidence), the 2.6 percentage-point decline in investment growth lowered labor productivity growth by 0.9 percentage points. From Table 6, we know that the combined intraindustry declines in productivity growth reduced aggregate productivity growth by about 0.8 percentage, which matches with my Kaldor-Verdoorn based guestimate. Clearly, the decline in productivity growth did have a negative impact on the profit share and the profit rate (via B, see Equations 2 and 3), which in turn reduced investment growth.

This brings me to bidirectional feedback mechanism C. The upward-pointing arrow is meant to reflect the fact that the need for further real wage growth restraint increases, once

labor productivity growth comes down to protect the profit share of firms. The downward-pointing arrow captures the productivity-growth retarding impact of real wage growth restraint, as it enables less efficient firms to remain in the market (Storm and Naastepad 2012). This feedback is sometimes called “Marx-biased technical progress” (Foley and Michl 1999)—but can as well be interpreted in terms of “directed technical change,” as it is based on higher wages “forcing” profit-seeking firms to raise productivity. The bidirectional feedback mechanism reinforces the “lock-in,” as nondynamic firms press for low wages and no wage increases, which in turn removes pressure on them to raise productivity.

The fourth and final feedback (D) is more straightforward: Stagnating (nominal) GDP does not help in bringing down the debt-to-GDP ratio and reinforces the need to keep generating primary fiscal surpluses and maintain austerity into eternity. But more austerity does reduce GDP (the denominator) more than public debt (the nominator), and hence it raises the debt-to-GDP ratio—which is exactly what happened in Italy during 2011–2015 (Paternesi Meloni and Stirati 2018). Taken together, the four feedback mechanisms lock the Italian economy into a low-level equilibrium, in which stagnant demand lowers profitability and reduces investment and spending on R&D, thus further impoverishing the productive matrix of the Italian economy—which in turn depresses demand even more (Simonazzi et al. 2013).

The same mechanisms are at work in the other economies of the Eurozone (see Storm and Naastepad 2015, 2016), depressing growth, innovation, and employment there as well. Real GDP growth per person in the Euro-4 countries was a meager 1.24% per year during 1992–2018 (Table 3), which is by no means spectacular, as it is inferior to the growth performance of non-Eurozone countries, including Canada, Norway, Sweden, the UK, and the USA during the same period. The deflationary bias of the EMU rulebook is even stronger than similar biases in macro policies elsewhere (Cesaratto and Zezza 2018). Italy’s is underperforming in a big way relative to the Euro-4 countries—but we must keep in mind that the Euro-4 themselves are doing considerably worse than economies outside the zone. Within the Euro-4, the French economy is increasingly looking like the Italian: The French public debt has risen from around 63% of GDP in the mid-1990s to 100% in 2018, public interest payments make up 3% of GDP, and the French unemployment rate is almost 10%. France is being dragged down as well.

Baron von Münchhausen managed to pull himself and his horse out of a swamp by his pigtail—the one-million-euro question is how Italy could pull off a similar feat.

## ITALY’S PERMANENT CRISIS AS THE FUTURE OF THE ENTIRE EUROZONE?

Baron von Münchhausen’s troubles were bigger than those of Italy, however. There exist rational ways to get the Italian economy out of the current paralysis—none of them easy and all of them founded on a long-term strategy of “walking on two legs”: meaning (1) reviving domestic (and export) demand, and (2) diversifying and upgrading the productive structure and innovative capabilities and strengthening the technological competitiveness of Italy’s exports (to get away from direct wage-cost competition with China). This means that both austerity and real wage growth suppression must stop<sup>20</sup>—instead, the Italian government should gear up for providing unambiguous directional thrust to the economy by means of

higher public investment (in public infrastructure and “greening” and decarbonizing energy and transportation systems) and novel industrial policies to promote innovation, entrepreneurship, and stronger technological competitiveness.

It is only this way that the negative feedback mechanisms (listed in [Figure 18](#)) can be transformed into a positive, virtuous, cycle. There is no dearth of constructive proposals by Italian economists to help their economy out of the current mess—including Guarascio and Simonazzi (2016); Lucchese, Nascia, and Pianta (2016); Pianta, Lucchese, and Nascia (2016); Mazzucato (2013); Dosi (2016); and Celi et al. (2018). These proposals all center on creating a self-reinforcing process of investment-led and innovation-driven growth, orchestrated by an “entrepreneurial state” and founded on relatively regulated and coordinated firm-worker relationships, rather than on deregulated labor markets and hyperflexible employment relations. These proposals might work well.

The same cannot be said, however, of the “one-leg” fiscal stimulus proposed by the M5S-Lega coalition government, the aim of which is a short-run revival of just domestic demand by means of higher public (consumption) spending. None of the proposed spending will help solving Italy’s structural problems. What is completely lacking is any longer-term directional thrust, or the second leg of a viable strategy—which the neoliberal Lega will be unwilling to provide and the “progressive-in-name-only” M5S seems incapable of devising (Fazi 2018). *Plus ça change, plus c’est la même chose.*

More importantly, any rational “two-leg” developmental strategy will be incompatible with sticking to the EMU macroeconomic rulebook and keeping financial markets calm, which are supposed to act as the disciplinarian of Eurozone sovereigns (Costantini 2018; Halevi 2019). This is clear from what happened when the M5S-Lega government came up with an expansionary Draft Budgetary Plan (DBP) for 2019. The total impact of the one-leg fiscal stimulus initially proposed in the 2019 DBP amounted to an estimated 1.2% of GDP in 2019, 1.4% in 2020, and 1.3% in 2021—and even this minute budgetary expansion triggered strong negative responses from the European Commission and increases in Italian bond yields.

Blanchard et al. (2018: 2) formalize this status quo in a mechanical debt-dynamics model and conclude that the 2019 DBP risks triggering “unmanageable spreads and serious crisis, including involuntary exit from the Eurozone.” Blanchard et al. (2018: 16) argue for a fiscally neutral budget, which they think would lead to lower interest rates and “probably” (in their words) to higher growth and employment. Equations, graphs, and technocratic econospeak are competently used to turn what in fact constitutes a very modest transgression of the EMU rulebook into a low-probability-catastrophic event—which everyone would want to avoid (see Costantini 2018). What is tragic is that the 2019 DBP does not come close to what would be needed for a rational strategy. All the sound and fury is for nothing.

Worse still is the fact that maintaining Italy’s status quo, which is what a fiscally neutral budget would mean, carries a real but unrecognized low-probability, high-impact risk—namely, a breakdown of political and social stability in the country. Continued stagnation will feed the resentment and antiestablishment, antieuro forces in Italy. This must destabilize not just Italy but the entire Eurozone. Italy’s crisis thus constitutes a warning to the Eurozone as a whole: Continued austerity and real wage restraint, in combination with the

dedemocratization of macroeconomic policy making, make for a “dangerous game” (Costantini 2018)—a game that risks further empowering “antiestablishment” forces elsewhere in the Eurozone as well.

This is like opening Pandora’s box. No one can tell where this will end. Economists (including Italians) carry an enormous responsibility in all this, both because they are much to blame for the chaos and because they fail to continue to unite behind rational strategic solutions to resolve the Italian crisis.<sup>21</sup> “Perhaps,” Keynes (1919: 238) wrote, “it is historically true that no order of society ever perishes save by its own hand.” Rational economists have to prove Keynes’s verdict wrong, starting in Italy.

## NOTES

1. When U.S. historian Rick Perlstein (2017) asked one of his students why people around him voted for Trump, the answer was that “for those people who have no political voice and come from states that do not matter, the best thing they can do is try to send in a wrecking ball to disrupt the system.”
2. Immigration also played a significant role in the popular discontent, if only because many Italians, regardless whether they are pro- or against migration, think that Brussels abandoned Italy to deal with the migrant crisis on its own. More than 550,000 illegal migrants and asylum seekers entered Italy illegally since 2014—putting considerable extra stress on an already collapsing economy and an overindebted state. However, I agree with Paternesi Meloni and Stirati (2018) that concerns over immigration are not the main reason for Italy’s political upset. Rather, as they argue, austerity policies, labor reform, and the increasing inequality in Italy are simply not compatible with a civilized and orderly management and integration of immigration flows.
3. The M5S proposed a “citizenship income and pension” (*Reddito di Cittadinanza*, RdC) for low income and unemployed people and more public investment in Italy’s south, while the League spearheaded a reduction in income taxation by means of a “flat tax.” Both promised to revise Italy’s regressive 2011 pension reform law. See Blanchard et al. (2018).
4. See Costantini (2017, 2018) for a very useful discussion of the EMU rulebook, which highlights that in 2005 both Germany and France violated the budget rules of the Stability and Growth Pact and in fact were pushing for a relaxation of the Pact.
5. Brandolini et al. (2018: 16) fix the poverty line at 9,000 euros (at 2014 prices), or approximately half of the mean equivalent income of Italian households in 1989–1991. The poverty rate was 13% in 1989–1991.
6. Italy’s population is aging faster than that of the Euro-4 countries (see Table 1). Italy has a far higher old-age dependency ratio (at around 31%) than the Euro-4 countries (where this ratio is 27%).
7. The impact of EMU membership on growth is estimated by comparing the actual income growth of a member state to a counterfactual, built using the synthetic control method in which an EMU country’s growth is matched as closely as is possible to the growth path of a control group of non-EMU countries (Versteegen et al. 2017).
8. Italy’s debt-to-GDP ratio doubled during the 1980s as a result of the decision of its central bank to raise interest rates, intended to attract capital inflows from abroad, needed to keep the lira within the EMU band (Graziani 2002; Paternesi Meloni and Stirati 2018; Cesaratto and Zezza 2018; Halevi 2019). It is somewhat of a historical irony that Italy’s high public debt, incurred in an attempt to join the EMU, is now making it difficult for the country to remain in the currency union.
9. Only Belgium outperformed Italy, running an average primary surplus of 4.9% of GDP during 1996–2008, which (*ceteris paribus*) lowered its public debt-to-GDP ratio by 59 percentage points (Sapir 2018). But Belgium could pull this off because it had higher real GDP growth, mostly due to higher export growth, compared to Italy.
10. According to the debt dynamics equation, the change in the ratio of public debt to GDP,  $\Delta d$ , is equal to:  $\Delta d = f + (i - g) \times d$ .  $d$  is the debt-to-GDP ratio,  $f$  is the ratio of the primary deficit (defined as the public expenditure excluding interest payments on public debt, minus public revenue) to GDP,  $i$  is the nominal interest rate on public



- debt, and  $g$  is the growth rate of nominal GDP. The debt-to-GDP ratio declines if the government runs a primary surplus (as in Italy) but increases if  $i > g$  (as is true for Italy as well). See Pasinetti (2000).
11. Italy's debt-to-GDP rose strongly during 2010–2015 (see Figure 2), mostly due to the fact that its government had to pay much higher interest rates, before the ECB eventually intervened after a long delay. According to Zingales (2018), the delay was intended to impose “financial market discipline”—putting pressure on the Italian government to reform. “It was a form of economic waterboarding that has left the Italian economy devastated and Italian voters legitimately angry at the European institutions” is Zingales's conclusion.
  12. Monti hoped that the EU would come to the rescue of Italy by means of a coordinated Eurozone-wide demand expansion. His was a vain hope.
  13. The weakening of the bargaining power of workers had already started in the 1980s, after Italy decided to join the European Monetary System (EMS) in 1979, and its monetary policy became very restrictive in 1980–1981 (Halevi 2019). But the process of labor market deregulation began in earnest with the 1993 July Agreement, which was a pact between government, unions, and employers officially intended to change Italy's industrial relations from “conflictual” to “participatory.”
  14. The 1997 reform is known as “Pacchetto True,” the 2003 reform as “Legge Biagi,” and the 2004 reform as the Jobs Act. See Brandolini et al. (2018) and Tridico (2015).
  15. But as Lucarelli and Romano (2016) emphasize, Italy's problem involves more than inadequate aggregate investment—namely, an inability to develop, within the national productive system, those technological innovations that are necessary in maintaining a relevant position in international markets and in global commodity chains.
  16. This inability follows from characteristics of Italy's productive structure, made up of small firms, with a low propensity to innovate and a low propensity to export, mainly operating in “mature” industries such as agribusinesses, tourism, and luxury goods.
  17. This is a conservative estimate, see Blanchard et al. (2018) for a discussion.
  18. This section draws on the analysis of Italy's poor export performance since 1999 by *Banca d'Italia* economists Bugamelli et al. (2018).
  19. The world market share of Germany increased from 8.4% of world imports in 1999 to 8.8% in 2016 (Bugamelli et al. 2018).
  20. See Guarascio and Simonazzi (2016), who highlight the contradiction between industrial policy directed at upgrading and diversifying the industrial structure and labor market policies promoting flexibility and decentralized bargaining.
  21. It must be noted here that Italian heterodox economists did come up with a clear diagnosis of Italy's crisis and sensible policy recommendations: see <http://www.letteradeglieconomisti.it/english.htm>.

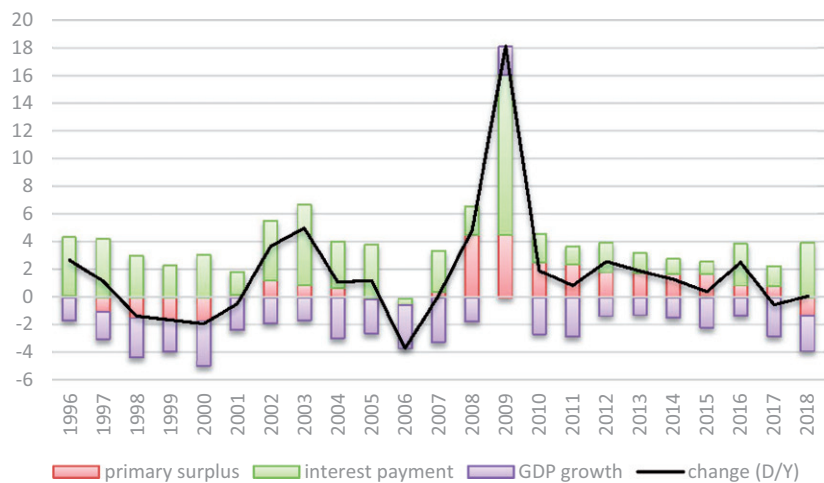
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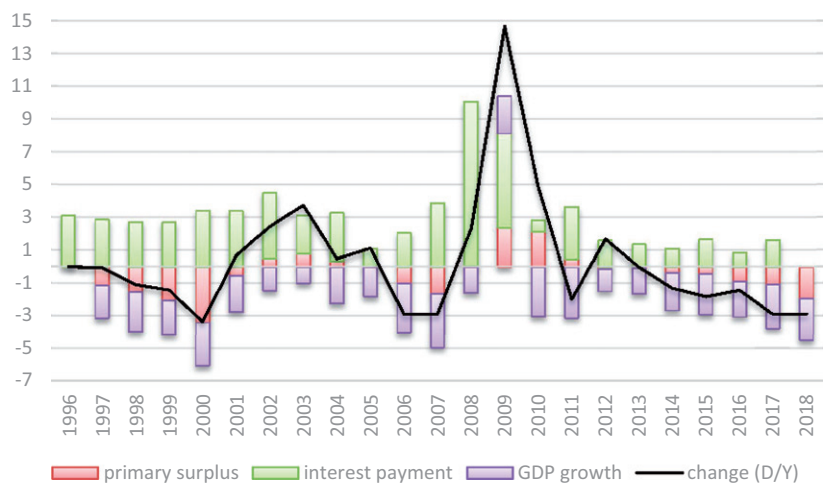
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APPENDIX



**FIGURE A1** France: a decomposition of the change in the public debt-to-GDP ratio, 1996–2018. *Source:* author’s calculation based on AMECO data. *Note:* for explanation, see Figure 2.



**FIGURE A2** Euro-4: a decomposition of the change in the public debt-to-GDP ratio, 1996–2018. *Source:* author’s calculation based on AMECO data. *Note:* for explanation, see Figure 2