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MAX PLANCK INSTITUTE FOR THE STUDY OF SOCIETIES



MPIfG Discussion Paper 20/9

**Has the “External Constraint” Contributed to  
Italy’s Stagnation?**

A Critical Event Analysis

Lucio Baccaro and Massimo D’Antoni



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MPIfG Discussion Paper 20/9  
Max-Planck-Institut für Gesellschaftsforschung, Köln  
Max Planck Institute for the Study of Societies, Cologne  
July 2020

MPIfG Discussion Paper  
ISSN 0944-2073 (Print)  
ISSN 1864-4325 (Internet)

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## Abstract

Has the strategy of the "external constraint" (voluntarily limiting the country's policy-making discretion by tying it to the European mast) contributed to Italy's stagnation over the past twenty-five years? The existing literature is divided on this question. The dominant interpretation is that Italy's stagnation is due to insufficient liberalization, and that the external constraint has had no negative and even a positive influence. An alternative interpretation emphasizes the demand compression and supply-side effects of the external constraint. Based on three case studies of public debt management, privatization, and labor market policy, this paper reconstructs the process by which the external constraint has affected outcomes. It argues that it has had a negative impact, but more as a necessary condition than as a sufficient one. In other words, it would probably have been possible to manage the external constraint differently to produce better outcomes, but without the external constraint, the stagnation would likely have been less deep.

**Keywords:** economic decline, euro, Italy, political economy

## Zusammenfassung

Hat die Strategie des „äußeren Zwangs“ (die freiwillige Einschränkung der politischen Gestaltungsmacht eines Landes durch seine Unterwerfung unter europäische Vorgaben) zu Italiens Stagnation in den letzten 25 Jahren beigetragen? Die vorliegende Literatur ist in dieser Frage zwiagespalten. Die vorherrschende Deutung besagt, dass Italiens Stagnation einer unzureichenden Liberalisierung geschuldet ist und der äußere Zwang keinen negativen, sondern im Gegenteil einen positiven Einfluss gehabt hat. Eine alternative Interpretation verweist jedoch auf die einbrechende Nachfrage und die Angebotseffekte, die der äußere Zwang verursacht. Auf der Grundlage dreier Fallstudien zum öffentlichen Schuldenwesen, zur Privatisierung und zur Arbeitsmarktpolitik rekonstruiert dieser Beitrag den Prozess, durch den der äußere Zwang Resultate beeinflusst hat. Er vertritt die These, dass dieser Zwang zwar einen negativen Einfluss ausgeübt hat, dies jedoch eher als notwendige denn als hinreichende Bedingung. Es wäre, anders ausgedrückt, also wahrscheinlich möglich gewesen, anders mit dem äußeren Zwang umzugehen, und zwar so, dass bessere Resultate erzielt worden wären; ohne diesen Zwang wäre die Stagnation allerdings wohl weniger einschneidend verlaufen.

**Schlagwörter:** Euro, Italien, politische Ökonomie, wirtschaftlicher Niedergang

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# Has the "External Constraint" Contributed to Italy's Stagnation? A Critical Event Analysis

## 1 Introduction

Once a success story in comparative perspective, the Italian economy has been stagnating for the past twenty-five years. In this paper, we deal with the causes of Italy's stagnation. Specifically, we ask whether the strategy of "external constraint" (Dyson and Featherstone 1999) – that is, of deliberately limiting the country's decision-making discretion, first by signing the Maastricht Treaty and then by joining the euro – has contributed to it.

The question is highly controversial. On the one hand, the dominant explanation of Italy's decline downplays the loss of monetary and exchange rate discretion, as well as the other strictures of eurozone membership, and highlights instead the insufficient liberalization of the Italian economy. On the other hand, another explanation sees the external constraint as the primary cause of the decline.

Drawing on Montoya and Mahoney's (2020) approach to assessing the causal properties of unique historical events, in this paper we analyze the impact of Italy's decision to "tie its own hands" on various manifestations of Italy's economic decline. We focus empirically on three policy areas: the management of public debt, privatization, and labor market policy.

To assess the sufficiency and necessity of the critical event, we examine counterfactually what modifications of the actual world would have to be introduced for the critical event to produce a different outcome (sufficiency properties of the event), and what would be the consequences of the absence of the critical event under conditions of a "minimal counterfactual rewrite" of contextual conditions (necessity properties).

Our main conclusion is that the external constraint strategy contributed to the Italian stagnation, but mostly as a necessary rather than a sufficient cause. While we are able to reconstruct a causal path leading from the external constraint to various dimensions of Italy's decline, some relatively parsimonious editing of the context could have produced a more positive outcome. Thus, the sufficiency properties of the critical event seem limited. However, an Italy that does not embrace the strategy of external constraint and still experiences the same decline requires a more extensive counterfactual rewrite. To put it differently, the strategy of the external constraint could have produced better results for Italy if other things had gone or had been done differently, but without it, the decline would probably not have been as deep.

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Many thanks to Roberto Artoni, Fabio Bulfone, Sergio Cesaratto, Sinisa Hadziabdic, Martin Höpner, Renate Mayntz, Ugo Pagano, Michele Salvati, and Fritz Scharpf for comments on a previous version.

The paper begins by providing evidence of Italy's decline and reviewing existing explanations, followed by a discussion of our methodological approach. A reconstruction of the main steps in the adoption of the external constraint strategy is then provided. The empirical part includes three case studies on public debt, privatization, and labor market policy. We conclude with a compact discussion of the evidence.

## 2 Explanations of the Italian decline

In the 1960s and 1970s, Italy's average annual growth rate was higher than those of France, Germany, the United Kingdom, the United States, and the EU15 countries, while it was the second highest after Germany and the United Kingdom in the 1950s and 1980s (Table 1). Figure 1 shows that until the late 1980s–early 1990s, Italy's per capita GDP grew faster than both the US's and Germany's but declined thereafter, especially after the Great Recession. If the decline vis-à-vis the United States started in the early 1990s, the decline vis-à-vis Germany (a country in deep crisis in the 1990s) started in the mid-2000s.

An important component of the Italian decline is the stagnation of labor productivity. As discussed later in the paper, manufacturing labor productivity grew faster in Italy than in Germany, France, and other European countries until the mid-1990s and then stagnated. Thus, Italy's decline is a relatively recent phenomenon. What caused it?

Table 1 Growth rates in various countries

years	Italy	France	Germany	UK	USA	UE14*
1950–1959	4.65	3.44	7.55	1.96	1.98	2.76
1960–1969	5.29	4.80	4.04	2.37	3.17	4.42
1970–1979	4.18	3.41	3.21	2.42	2.28	2.96
1980–1989	2.40	1.81	1.93	2.55	2.16	2.15
1990–1999	1.48	1.54	1.78	1.82	2.10	2.35
2000–2009	0.12	0.81	1.00	1.25	0.87	1.32
2010–2014	–0.65	0.53	1.98	1.28	1.26	0.44

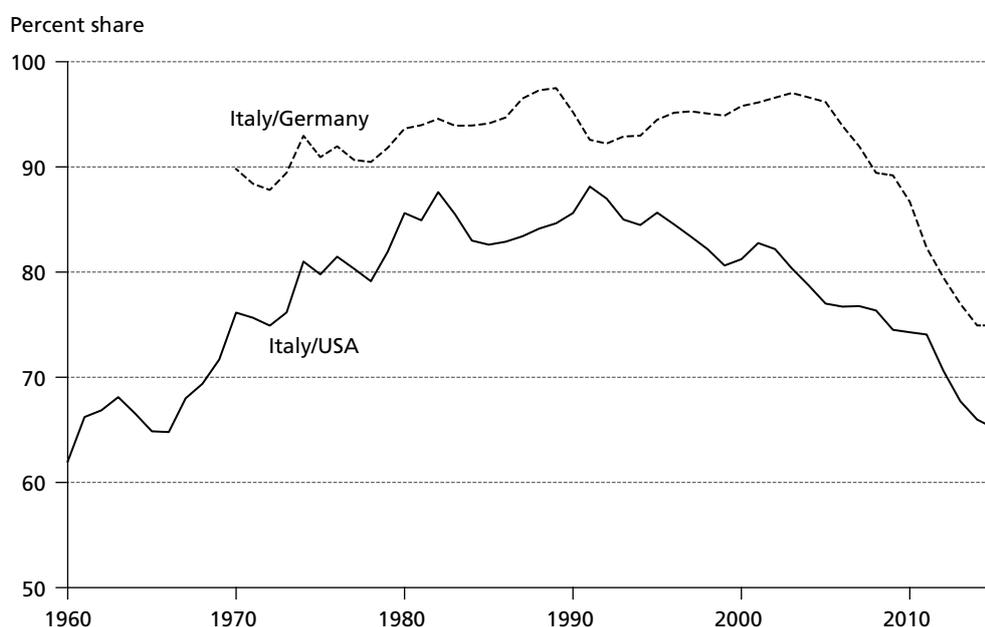
\* EU15 excluding Italy.

Source: Penn World Table, version 9.0, variable: rgdpna.

Most of the relevant literature underscores a series of deeply rooted “plagues” affecting the Italian economy and society. In particular, the prevalence of small or very small firms is often emphasized, as small firms are known to be less productive and innovative than large ones, as well as less likely to engage in risky investment and to adopt information technology and modern management practices (Amatori, Bugamelli, and Colli 2013; Bugamelli et al. 2012).

Other dimensions of Italian “backwardness” that have been highlighted by the literature are the insufficient levels of human capital, a bank-centered financial system based on personalized relations, a centralized industrial relations system preventing adjust-

Figure 1 Italy's relative GDP per capita



Source: World Bank, GDP per capita (constant 2010 USD).

ment of wages to local productivity levels, a society prone to “amoral familism” (Banfield 1956), as well as clientelism and corruption, a cumbersome bureaucracy with complex and non-transparent rules, and an inefficient court system (on all these elements, see the chapters in Toniolo 2013a). Given the long list of deficiencies, some economic historians have come to the paradoxical conclusion that what is in need of explanation is not the period of decline, but the previous period of growth (Di Martino and Vasta 2015, 221).

The main problem with this type of argument is that the negative features it concentrates on (cronyism, familism, and so on) have been present for a long time, including when the Italian economy was growing faster than those of other countries, and there is no evidence that they worsened after the 1990s. Logically, a time-invariant factor should not be invoked as a cause of a time-variant effect.

More convincing are arguments that emphasize the interaction between pre-existing “curses” and time-varying conditions. This type of explanation usually concludes that, faced with new challenges, policy-makers should have more thoroughly liberalized the Italian economy, and that the insufficiency of the liberalization effort is ultimately responsible for the stagnating trend.

Candidates for time-varying factors are the intensification of trade competition from emerging economies and the IT revolution. For example, Faini and Sapir (2005) argue that the Italian slowdown is due to the country’s continued specialization in traditional sectors (characterized by low human capital and low technology) at a time of increased

international competition from emerging countries, especially China, and its inability to upgrade its sectoral specialization. This argument has been challenged by Pellegrino and Zingales (2017), however, who estimate the impact on country- and sectoral-level productivity of exposure to China's trade and conclude that between 1995 and 2006 productivity grew faster, rather than more slowly, in countries and sectors with greater exposure to Chinese competition.

In their analysis of the Italian decline, Pellegrino and Zingales (2017) focus on another time-changing factor: the role of information technology. After ruling out several competing explanations (for example, labor rigidity, quality of institutions), they conclude that the most important factor explaining Italy's productivity slowdown is the continued reliance on family management within Italian enterprises as opposed to professional management (see also Bugamelli and Pagano 2004). This factor prevents the Italian economy from taking advantage of the IT revolution, because IT and "modern" managerial practices complement one another. Increasing liberalization would encourage more meritocratic management and thus alleviate this problem. Because the adoption of new technology is a process that takes time to unfold, this explanation is difficult to reconcile with the sudden shift in Italian labor productivity data.

Also focusing on total factor productivity,<sup>1</sup> Calligaris et al. (2018) document that firm-level productivity declined in all sectors from 1995 on, both those exposed to trade and those not exposed, and its dispersion increased. They argue that this was due to an increase in the share of low productivity firms within sectors. The authors interpret this phenomenon as the consequence of the insufficient liberalization of the Italian economy, which interferes with optimal resource allocation.<sup>2</sup>

Other economists see Italy as having a sclerotic system characterized by weak competition in product markets, overregulated labor markets, and a pervasive state which shackles the economy and stifles individual initiative (for example, Alesina and Giavazzi 2006). The result is not just an inefficient economic system but also a deeply unjust social system, which rewards those who are well connected (thanks to birth or social networks) and penalizes those who work hard and play by the rules (Zingales 2012).

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1 The focus on total factor productivity (TFP), that is, the "Solow residual," is common to most of this literature (see Calligaris et al. 2018; Pellegrino and Zingales 2017). TFP is interpreted as a measure of how efficiently production inputs (labor and capital) are used. Yet, as shown analytically by Storm (2017, 9–14), the growth of TFP depends on aggregate demand factors, specifically on the rate of capacity utilization (which also influences the investment rate). This implies that when aggregate demand is depressed, TFP growth will stagnate, too. For this reason, in this paper we prefer to focus on labor productivity as opposed to TFP. Appendix Figure 1 plots the trajectory of TFP.

2 We note that resource misallocation may have been encouraged by two other changes taking place at the end of the 1990s, namely the possibility of reducing labor costs by relying on temporary workers and the reduction in the cost of credit which followed accession to the euro.

Consistent with these premises, the liberalization of Italian society would not just enhance efficiency, but also equity.<sup>3</sup>

In brief, the main explanation for Italy's stagnation proceeds as follows: The Italian economy and society are blighted by several "scourges" (small firms, familistic management, and so on). When the economy was still relatively protected and technical change less tumultuous, economic performance was still acceptable. When the economy became fully exposed to competition from low-cost countries, however, and when information technology became a more important competitive factor, the "scourges" became more penalizing (Capussela 2018; Toniolo 2013b). Adaptation to the changed environmental conditions would have required a more aggressive liberalization effort by policy-makers and a more sustained reduction of the role of the state in the economy. In this scenario, the adoption of external constraints either has had nothing to do with the Italian stagnation because the decline began previously (for example, Salvati 2012), or has had a positive, rather than a negative, impact.<sup>4</sup> The main problem with this explanation is that it underplays the large number of liberalizing reforms introduced in Italy since the early 1990s, ranging from corporate governance reforms aimed at making corporate control more contestable, to privatization of the main state-owned banks and enterprises, as well as reforms enhancing labor market flexibility and increasing product-market competition. Table 2, which relies on a comparative database on liberalization reforms (Armingeon et al. 2019),<sup>5</sup> shows that Italy introduced liberalizing reforms more intensely than most other countries, especially from 1992 on, more than Germany and, especially, France.

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3 It is also argued that the excessive fragmentation of the political system, which is replete with veto points, makes it very difficult to liberalize the Italian economy. This leads some authors to advocate political reforms – for example, constitutional and electoral law reforms aimed at reducing the number of parties, increasing the ability of governments to implement executive decisions, and reducing the prerogatives of parliament – as a precondition for effective liberalization (Tabellini 2008). These arguments inspired the failed constitutional reform of the Renzi government in 2016.

4 The argument that without the euro things would have been worse for Italy has often been made by Italian policy-makers. For example, see Mario Draghi (former governor of the Bank of Italy and former president of the European Central Bank): [https://www.repubblica.it/economia/2014/06/22/news/mario\\_draghi\\_senza\\_la\\_moneta\\_unica\\_staremmo\\_tutti\\_molto\\_peggio\\_al\\_nord\\_come\\_a\\_sud-89837047/](https://www.repubblica.it/economia/2014/06/22/news/mario_draghi_senza_la_moneta_unica_staremmo_tutti_molto_peggio_al_nord_come_a_sud-89837047/), and Fabrizio Saccomanni (former finance minister): [https://www.corriere.it/notizie-ultima-ora/Economia/CRISI-Saccomanni-sarebbe-stata-molto-peggio-Bce/07-02-2014/1-A\\_010715562.shtml](https://www.corriere.it/notizie-ultima-ora/Economia/CRISI-Saccomanni-sarebbe-stata-molto-peggio-Bce/07-02-2014/1-A_010715562.shtml), both accessed on April 29, 2020.

5 We rely on the version of the database covering fourteen countries – Austria, Denmark, France, Germany, Greece, Hungary, Ireland, Italy, Netherlands, Poland, Spain, Sweden, Switzerland, and the United Kingdom – and ten policy areas – active labor market policies, competition, employment protection, finance, industrial relations, non-employment benefits, pensions, privatization, social security benefits and transfers, and tax policy – between 1973 and 2013. Each policy reform is coded as liberalizing or deliberalizing: liberalization implies the loosening of restrictions on free markets, and deliberalization implies a move in the opposite direction. Reforms are weighted by their relative importance. For more information, see <https://liberalization.org/images/Codebook.pdf>.

Table 2 Liberalizing reforms in 14 countries (1980–2013)

Country	1980–2007			1992–2007			1996–2007			2008–2013		
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
Austria	277	0.56	0.67	213	0.57	0.65	154	0.6	0.69	55	0.33	0.31
Denmark	230	0.55	0.71	151	0.58	0.75	122	0.61	0.74	34	0.59	0.71
France	364	0.45	0.54	254	0.44	0.52	213	0.44	0.51	100	0.51	0.63
Germany	260	0.63	0.69	196	0.64	0.71	147	0.68	0.72	62	0.50	0.56
Greece	410	0.63	0.70	260	0.66	0.69	200	0.66	0.70	126	0.69	0.84
Hungary*	207	0.67	0.71	161	0.67	0.72	112	0.71	0.73	71	0.72	0.78
Ireland	257	0.44	0.52	168	0.45	0.53	135	0.43	0.51	77	0.43	0.49
Italy	403	0.66	0.71	309	0.69	0.73	238	0.68	0.68	53	0.70	0.78
Netherlands	262	0.60	0.70	177	0.59	0.67	140	0.59	0.69	44	0.73	0.81
Poland**	310	0.60	0.73	248	0.6	0.74	198	0.61	0.76	63	0.41	0.46
Spain	317	0.61	0.63	240	0.65	0.67	184	0.62	0.63	50	0.68	0.82
Sweden	265	0.59	0.69	206	0.63	0.67	154	0.6	0.64	67	0.58	0.75
Switzerland	92	0.54	0.66	80	0.55	0.72	45	0.67	0.79	31	0.65	0.76
UK	391	0.52	0.58	223	0.43	0.46	173	0.38	0.38	83	0.58	0.61

Notes: (1) total number of reforms; (2) percent liberalizing reforms; (3) percent liberalizing reforms weighted by reform importance. Policy fields included: active labor market policies, competition, employment protection, finance, industrial relations, non-employment benefits, pensions, privatization, social security benefits and transfers, tax policy.

\* Data begin in 1987; \*\* data begin in 1989.

Source: Klaus Armingeon et al., *Liberalization Database, 14 countries, 1973–2013* (2019).

It may be argued that liberalization reforms need to cross an unspecified critical threshold before they produce positive results. However, this makes the link between liberalizing reforms and growth very difficult to evaluate empirically, because it is always possible to argue that reforms were insufficient and “more is needed.”<sup>6</sup>

An alternative explanation of the Italian decline places it much closer in time and links it tightly to the external constraint strategy, that is, to a set of policy decisions aimed at voluntarily reducing the country’s policy-making discretion. This strategy was supposed to facilitate the modernization of the country, forcing elites to adopt policies they may otherwise have been unwilling to adopt (Dyson and Featherstone 1999; Ferrera and Gualmini 1999; Talani 2017). In line with the economic thinking of the 1980s (for example, Giavazzi and Pagano 1990), “tying the country’s hands” was intended as a “beneficial constraint” (Streeck 1997), which would force Italian firms to become more efficient, trade unions to behave more responsibly, and politicians to pursue structural reforms (Salvati 2000).

Historically, state intervention played a key role in the Italian variant of capitalism (Hancké, Rhodes, and Thatcher 2007; Schmidt 2002). For that reason, Italian capitalism may have been especially penalized by the European regulatory framework, which has

6 Drawing on the varieties of capitalism framework (Hall and Soskice 2001), Simoni (2012) attributes Italy’s problems not to the lack of reforms, but to their inconsistency. While some reforms pulled the system towards a liberal market economy (LME), others brought it closer to a coordinated market economy (CME). This argument rests on the dubious claim that “pure” capitalist types (CMEs or LMEs) have higher growth rates than “hybrid” types (Hall and Gingerich 2009). Kenworthy (2005) was unable to support this claim.

made it more difficult for the state to intervene in the economy (Scharpf 1999). Furthermore, a number of (mostly post-Keynesian) economists have emphasized the negative macroeconomic consequences of euro membership for Italy's aggregate demand. Some have underscored the impact on the appreciation of the real exchange rate, which has reduced net foreign demand (Bagnai 2016; Cesaratto and Zezza 2018). Others have argued that the eurozone's conservative fiscal rules have led to multiple years of primary budget surpluses in Italy (Storm 2019). Still others have emphasized the role of wage restraint and labor market liberalization in hindering wage-led growth (for example, Canelli and Realfonzo 2018).

In brief, the consequences of the external constraint are controversial. Some authors argue that it has nothing to do with Italy's decline, others that it has everything to do with it. In the remainder of the paper, we will try to assess these competing claims. In the next section, we discuss our methodological approach.

### 3 External constraint as a critical event

In a recent methodological contribution, Montoya and Mahoney (2020) have enriched the palette of qualitative research by proposing a new method for evaluating "token causality," that is, the causal effects of a "critical" historical event, an historical occurrence with seemingly momentous consequences.

Analysis of the causal effects of the event involves examining its properties of sufficiency and necessity and assessing the extent of any "counterfactual rewrite of history" that would be required for the event to produce "inconsistent outcomes," i.e. the opposite outcome in the case of the evaluation of its sufficiency properties, or for the absence of the event to produce the same outcome in the case of the evaluation of properties of necessity. Hence, the approach seems especially well suited to historical causes that generate dichotomous outcomes (success/failure, on/off, and so on).

In our case, the methodology is applied to the hypothesis that adopting the strategy of external constraint (X) contributed to Italian decline (Y):  $X \rightarrow Y$ .<sup>7</sup> X could be a sufficient condition for Y (if X, then Y with no need to search further); a necessary condition for Y (without X, no Y); both a necessary and a sufficient condition, or neither a necessary nor a sufficient condition. "Contributed to" indicates that X may operate jointly with other causes. As such, it may be an INUS condition, that is, a necessary component of a sufficient combination of conditions (Mackie 1965).

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<sup>7</sup> In reality, X (adoption of the external constraint strategy) is an historical process involving several steps, as the next section will clarify.

To evaluate the plausibility of  $X \rightarrow Y$ , Montoya and Mahoney (2020) suggest evaluating the “path of minimal counterfactual rewrite” necessary to produce an outcome inconsistent with the hypothesis. If  $X$  is a sufficient condition, an inconsistent outcome is  $X \rightarrow -Y$  ( $X$  leads to non- $Y$ ). If  $X$  is a necessary condition, an inconsistent outcome is  $-X \rightarrow Y$  (non- $X$  leads to  $Y$ ).

Applying Montoya and Mahoney’s (2020) approach to our *explanandum* implies using counterfactual analysis to assess the extent to which the context (that is, other factors in the causal configuration not directly modified by the critical event) would have to be “edited” to produce either an Italy that embraces the external constraint strategy but does not experience economic decline (evaluation of the sufficiency properties), or an Italy that does not adopt the external constraint strategy and still experiences the same extent of economic decline or worse (evaluation of the necessity properties). The greater the extent of counterfactual rewrite needed to produce an inconsistent outcome, the stronger the sufficiency or necessity properties of the cause. Vice versa, the easier it is to conceive of a plausible world with inconsistent outcomes, the smaller the causal relevance of the event.

In what follows, we will focus on three specific manifestations of Italy’s economic decline, asking the following questions: Did the adoption of the external constraint make it more difficult to reduce Italy’s public debt? Did it lead to a poorly conceived and executed sale of state-owned firms, which reduced the Italian presence in key sectors? Did it encourage the adoption of labor market policies that reduced labor productivity?

The cases were chosen to cover different policy areas affecting both the demand side and the supply side of the economy. There is already a literature establishing a relationship between Italy’s adoption of the euro and its loss of external competitiveness (increase in relative unit labor costs), which in turn led to real exchange rate appreciation and a decline in net exports (Bagnai 2016; Cesaratto and Zezza 2018; Johnston, Hancké, and Pant 2014; Scharpf 2011). Thus, this aspect, although relevant to a thorough assessment of the impact of the external constraint, will not be examined in this paper.

Whenever possible, we will use counterfactual analysis, and, in some cases, evidence from other countries as counterfactual. This strategy requires caution, however. The ideal counterfactual country is as similar as possible to Italy but has chosen not to sign the Maastricht Treaty and to stay out of the Economic and Monetary Union (EMU). Yet, the countries which are plausibly similar to Italy – that is, the Mediterranean countries and France – all joined the euro, while the ones that did not join (Denmark, Sweden, and the United Kingdom) or did not sign the Maastricht Treaty (Switzerland and Norway) all differ from Italy in important respects. For the public debt and labor market cases, we will use Italy in 1993–96 as counterfactual. This was a period in which, despite its best intentions, Italy was forced to leave the European Exchange Rate Mechanism

(ERM) and let its exchange rate fluctuate. Arguably, this case comes closest to examining the consequences of the absence of the cause under conditions of minimal counterfactual rewrite of context. It is worth emphasizing that Italy in 1993–96 is not a perfect counterfactual for Italy in the euro years. In particular, Chinese competition was much less intense in the early 1990s. However, as argued above, the literature has excluded that Chinese competition was the decisive factor in bringing about economic stagnation in Italy (Calligaris et al. 2018; Pellegrino and Zingales 2017).

Before proceeding further, we need to discuss a methodological alternative to our approach: the method of "synthetic controls" (Abadie, Diamond, and Hainmueller 2015). This is a quantitative approach to assessing the causal effects of single historical causes. The intuition is that if a linear combination of "non-treated" cases can approximate the path of the "treated" unit before the treatment is applied, it is likely that the same linear combination would also approximate the counterfactual path of the treated unit if it had not been treated. Estimates of the "treatment effect," however, depend crucially on the composition of the "donor pool" from which the synthetic counterfactual is drawn.<sup>8</sup> Importantly, this approach makes it impossible to identify the mechanisms by which the treatment effect is produced.

Available studies based on the synthetic control methodology suggest that the euro has had negative consequences for the Italian economy: it has reduced GDP per capita by an estimated 16 percent (by 2007), according to Puzzello and Gomis-Porqueras (2018); led to an overvaluation of the real exchange rate of 4.5 percent (by 2008), according to El-Shagi, Lindner, and von Schweinitz (2016); and increased current account deficits by 4.5 percent (by 2010), according to Hope (2016). Overall, the results of synthetic control studies are in line with our main finding, as we will see.

#### 4 Adoption of the external constraint

The choice of the external constraint was made in steps. In this section we focus on the decision to join the European Monetary System (EMS) in 1979, the signing of the Maastricht Treaty in 1992, and the choice to reenter the EMS in 1996.

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8 Compare the different assessments of the impact of euro membership in two exercises, both based on synthetic controls: Manasse, Nannicini, and Saia (2014) conclude that the euro has had no impact on Italian GDP growth, while Puzzello and Gomis-Porqueras (2018) find a large effect on GDP per capita. However, Manasse, Nannicini, and Saia (2014) also report a large negative effect of the euro on Italy's labor productivity, which conflicts with the reported absence of an effect on GDP growth.

## The 1970s

In the 1970s, Italy grew faster than other large European countries. With an unemployment rate below 5 percent, the country was practically at full employment, even taking into account the large structural unemployment prevailing in the South (Table 3). Unit labor costs grew rapidly (16.8 percent on average between 1975 and 1979), however, and inflation increased to double digits. The increase in unit labor costs was partly due to the two oil shocks (Armstrong, Glyn, and Harrison 1991). However, it was also caused by the militancy of Italian unions (Pizzorno et al. 1978; Salvati 1984). In these years, Italy's rates of industrial conflict were the highest in advanced countries (Bordogna and Provasi 1989).

Table 3 The 1960s and 1970s: selected economic indicators

Period	1960–1964	1965–1969	1970–1974	1975–1979
GDP growth	5.70	5.82	4.44	3.20
Unemployment	3.33	3.97	4.11	4.91
Inflation	5.11	3.03	9.06	15.65
Real long-term interest rates	0.12	2.55	–1.49	–2.96
Primary balance (% of GDP)	–0.25	–2.13	–4.21	–5.18
Interest expenditures (% of GDP)	0.61	0.67	1.11	2.96
ULC growth (total economy)	8.67	2.65	12.73	16.80
Labor productivity (total economy)	6.48	6.19	3.88	2.61

Source: OECD.

Convincing the Italian unions to moderate their bargaining demands became the overarching problem of Italian political economy in the 1970s and 1980s. Two strategies were adopted, one more visible, the other less. The visible strategy was a corporatist approach involving tripartite pacts (Lange and Vannicelli 1982). It started in the late 1970s and continued in the early 1980s. There were two important reforms of the wage indexation mechanism (the *scala mobile*) in 1983 and 1984, both at least partially negotiated with trade unions (Treu 1984). It is fair to say that this strategy was only moderately successful: while inflation declined in Italy, it declined everywhere else as well, and therefore it is difficult to attribute this outcome to negotiated wage restraint. In addition, Italian inflation remained slightly higher than in other countries, particularly Germany.

The less visible strategy was the adoption of an exchange rate anchor. In 1979, the Andreotti government decided to join the EMS, although with a larger oscillation band than other countries (+/–6 percent). The decision was controversial among both Italian economists and politicians (Masini 2004). The largest opposition party, the Communist Party, voted against it.

In 1981 the government decided that the Bank of Italy would no longer be forced to buy any residual treasury bonds that the market refused to absorb. This meant that monetary financing of fiscal policy would now no longer be an obligation, but at best a voluntary choice of the central bank (Della Bona 2014). The measure was aimed at forc-

ing public deficit reduction. It was also intended as an anti-inflationary move because the "divorce" would give the Bank of Italy better control over the money supply. Interestingly, the divorce was never debated in parliament, but was implemented through an exchange of letters between the Governor of the Bank of Italy, Ciampi, and the Minister of the Treasury, Andreatta.

## The Maastricht Treaty

In the 1980s, while unit labor cost growth and inflation were progressively reduced, and growth remained on a par with other large economies (especially in the late 1980s), the government's fiscal position deteriorated. This was due to a dramatic shift from negative real interest rates in the 1970s to highly positive rates in the 1980s (5.65 percent on average between 1985 and 1989), along with a large primary budget deficit (close to -4 percent in the 1980s). The 1980s were the years in which Italy built the public debt problem that would come to haunt it in the euro years.

Against this background, the Maastricht Treaty was signed in February 1992, entering into force in November 1993. The treaty imposed much tighter constraints than anything introduced before. The central bank would be explicitly prevented from lending to governments, as a matter of treaty obligation. The fixed but adjustable parities of the EMS would be replaced by the most inflexible of exchange rate arrangements: a common currency. Furthermore, the economic governance model embedded in the treaty was *de facto* (although not *de jure*) incompatible with the *modus operandi* of state-owned enterprises, especially with regard to finance, as discussed below.

The negotiation of the Maastricht Treaty was the triumph of quiet politics (Culpepper 2010). The key negotiators were a small number of top-level bureaucrats, with Mario Draghi from the Treasury, Tommaso Padoa Schioppa from the Bank of Italy, and Guido Carli, Minister of the Treasury, at the forefront (Dyson and Featherstone 1999).

As he later explained in his memoirs, Guido Carli saw the Maastricht Treaty as a golden opportunity to liberalize the Italian economy by stealth, that is, without entering into open conflict with Italy's largest mass parties, the Christian Democrats (DC) and the Communist Party (PCI), both inclined to mute market forces through regulations and protective institutions (see, for example, Carli 1993, 7-8). Despite its importance, the parliamentary debate on the Maastricht Treaty was brief and superficial. Given the strong degree of support for European integration among the Italian public, the treaty was politically uncontroversial, and all major political forces supported it.

## Entry into EMU

The signing of the Maastricht Treaty had been preceded by a further stiffening of the exchange rate regime: the entry into the narrow band of the ERM (+/- 2.25 percent) at the beginning of 1990. This led to a loss of competitiveness, current account deficits, and declining confidence in the lira (Modigliani, Baldassari, and Castiglionesi 1996). In September 1992, Italy was forced to abandon the ERM and until late November 1996, its exchange rate fluctuated. In these years, interest payments on public debt became very high (12 percent of GDP in 1993), but growth soon restarted and the recession was V-shaped. In fact, in 1995 the Italian economy grew at a rate close to 3 percent, which was to become a rarity in the following years.

Italy decided to reenter the EMS at the end of 1996 as a precondition for joining EMU in 1999. In 1996, the public deficit was 6.6 percent, very far from the 3 percent requirement. Admission thus required a significant fiscal correction.<sup>9</sup> The fiscal effort was facilitated by the introduction of a special “tax for Europe.” The government’s commitment to join the single currency was perceived as credible by financial markets, and this led to a reduction of interest expenditure. It has been argued that the head of government, Romano Prodi, considered delaying EMU entry, but changed his mind after he was informed that Spain was unwilling to wait (Chiorazzo and Spaventa 1999). There seem to be two reasons why Italy wanted to join so adamantly: first, it was widely believed that EMU would be a huge economic success.<sup>10</sup> Second, the Minister of Finance Ciampi feared that without immediate entry, the Northern League would pursue its project of secession in order to gain entry for the Northern regions only, and Italy would split (Peluffo 2019).

Entry in the common currency implied giving up monetary autonomy and exchange rate flexibility, which Italy had previously resorted to extensively to counterbalance competitiveness losses. This did not appear a big sacrifice at the time. In fact, economists of both right-wing and left-wing orientation had come to believe that devaluation was counterproductive as it increased the price of Italian imports without reducing their quantity, leading to further devaluation down the road (Masini 2004). Furthermore, because devaluations allowed firms to protect their profit margins, they reduced incentives for firms to upgrade their products and processes (Graziani and Meloni 1980).

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9 Data from the OECD Employment Outlook Database (accessed on April 30, 2020).

10 In May 1998, after access was finally gained, Prodi declared that the single currency would be such a success that even the United Kingdom would want to join it a few years down the road. See Prodi’s declaration in Vittorio Monti, “Cari italiani, adesso siamo piu’ forti,” *Corriere della Sera*, May 3, 1998.

## 5 Consequences of the external constraint

In this section, we examine the effects of the external constraint on public debt, privatization, and labor market policy. For each case study, we examine the process linking some aspect of the external constraint to outcomes and assess properties of sufficiency and necessity. For reasons of space, the case analysis is synthetic and only the main events are discussed.

### Management of public debt

At first sight, the hypothesis that the external constraint (in this case, entry into the EMU and then the euro) may have had negative consequences for the management of Italy's large public debt seems difficult to maintain. How can one credibly make this argument when the interest rate on Italian bonds declined from 12.2 percent in 1995 to 6.8 percent in 1997, and then continued to decline until it troughed at 3.5 percent in 2005, thus reducing interest expenditures on Italy's large public debt from 11 percent of GDP in 1996 to 4.5 percent in 2005? But other elements need to be taken into account before passing judgment.

It is worth recalling the identity that describes the dynamics of public debt/GDP:

$$b_t - b_{t-1} = \frac{i_t - n_t}{1 + n_t} b_{t-1} - s_t$$

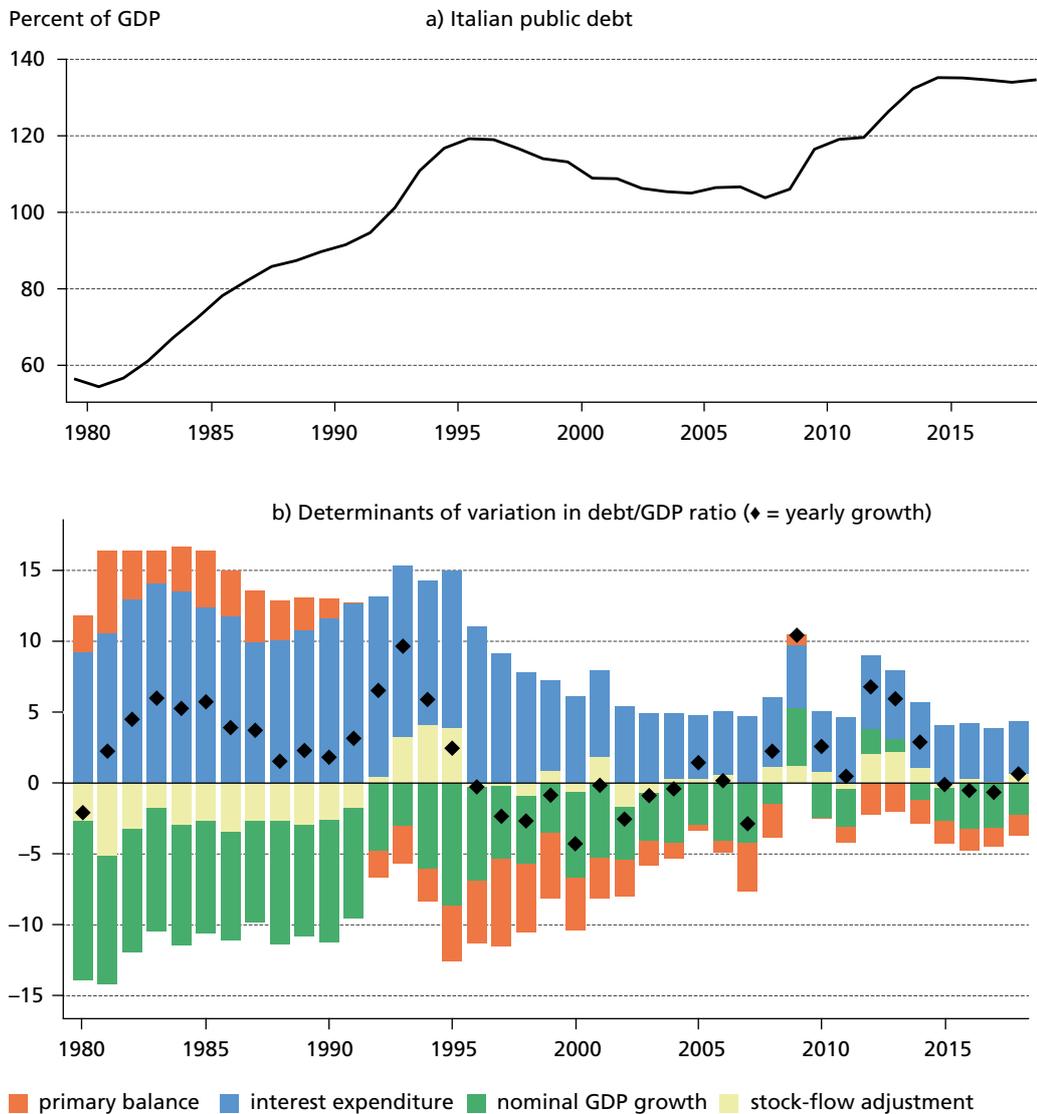
where  $b_t$  is the debt-to-GDP ratio at the end of period  $t$ ,  $s_t$  is the primary balance in  $t$ ,  $i_t$  and  $n_t$  are, respectively, the nominal interest and the nominal growth rate in the same period. As the formula shows, it is not interest per se but interest corrected for growth that determines debt dynamics. If  $n_t$  is larger than  $i_t$ , there will be a tendency for the debt ratio to shrink, even in the absence of primary surpluses. If vice versa, a primary surplus will be necessary just to prevent the debt from increasing automatically.

Italy's public debt problem began to emerge in the 1970s.<sup>11</sup> These were years in which the Italian welfare state was being built – for example, with the introduction of a national health service and more generous pension benefits. Increased expenditures were not matched by an increase in tax revenues. It took a while before this began to translate into a growing debt-to-GDP ratio, however. High inflation and debt monetization, with the Bank of Italy absorbing a large part of the public debt onto its balance sheet – in 1976 the share of the debt stock monetized through the central bank was close to half (Spaventa 1984) – implied negative real interest rates. Thus, the debt only increased from 40 percent of GDP in 1969 to 60 percent at the end of 1981, despite persistent public deficits.

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11 The data used for this section come from various sources: IMF WEO database, OECD.Stat, AMECO database, Eurostat, Istat, and Bank of Italy for data on public finance and debt before 1995.

Figure 2 Debt-to-GDP ratio and its decomposition (1980–2017)

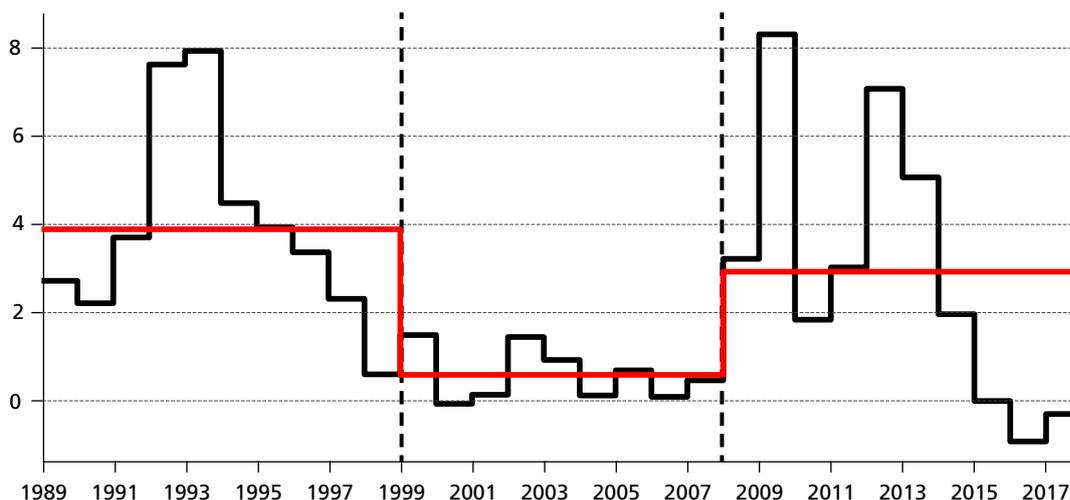


Source: Authors' elaboration of Bank of Italy, Ameco, and Istat/Eurostat (see Appendix for details).

In the 1980s, the global increase in interest rates (initiated by the Federal Reserve under Paul Volcker), the combined effect of higher interest payments and declining inflation, the slowing down of GDP growth, and the absence of an adequate correction of the primary balance (tax revenue remained below primary government expenditure throughout the 1980s) led to a perverse debt dynamic. The relative weight of the various factors that contributed to the increase in debt in this period is shown by the decomposition presented in Figure 2 and explained in Appendix B. The debt-to-GDP ratio grew from 60 percent in 1981 to 91 percent in 1987, at an annual average rate of 5 percent. As the decomposition graph shows, the greatest contribution to the increase in public debt came from interest expenditures, not from the primary deficit.

Figure 3 Interest rates on government bonds adjusted for nominal growth (1989–2017)

$(i-n)/(1+n)$  = interest adjusted for nominal growth



Source: Authors' elaboration of Eurostat data. The interest rate is the long-term bond yield used as a convergence criterion for Economic and Monetary Union, based on the Maastricht Treaty.

After 1995, Italy benefited from falling interest rates, later reinforced by the effect of joining the single currency. The period between 1997 and 2003 was marked by a progressive reduction of the debt ratio, which was slightly below 104 percent of GDP at the outbreak of the financial crisis in 2008.

The crisis led to a new upturn in debt (132 percent in 2013). A sharp increase (+13 percent) occurred in 2011–13, when tough austerity policies were pursued in response to the sovereign debt crisis. Figure 3 shows that the difference between interest rate and growth rate has almost always been positive, including in the years between 1999 and 2007. Thus, there has been a tendency for the Italian public debt to grow automatically.

The period of low interest rates did not last long. When the sovereign debt crisis hit, interest rates rose and  $i-n$  returned to the very high levels of the 1990s (Figure 3). As argued by De Grauwe (2012), Italy and other peripheral countries found themselves in a situation of vulnerability similar to that of developing countries that issue debt in a foreign currency. Could things have gone better? The literature has emphasized two elements: the size of the fiscal correction and its composition. The years between 2001 and 2005 were characterized by a progressive decrease of primary surpluses (to 0.4 percent in 2005). Barta (2018, chap. 3) argues that, after entry into EMU was secured, a coalition of actors opposed to taxes and dependent on state transfers reemerged under the aegis of the Berlusconi government, weakening the effort for fiscal adjustment.

It is common to compare Italy to Belgium (for example, Sapir 2018). In 1995, Belgium had an even higher debt level than Italy, but was able to reduce it to 87 percent by

2007 thanks to higher primary surpluses between 1998 and 2007, especially in the early 2000s. We note, however, that if Italy had had the same growth rate as Belgium, this alone would have reduced its debt to 90 percent by 2007, with no need for primary surpluses. This is to say that slow growth mattered at least as much as, if not more than, fiscal discipline. Unlike Italy, Belgium had at least one viable demand driver of growth: net exports, which were slightly negative in Italy on average between 1998 and 2007, and strongly positive (3.6 percent) in Belgium. A more restrictive fiscal policy could have further reduced the Italian growth rate, which was already very low. As argued by post-Keynesian economists, protracted fiscal austerity, along with an overvalued exchange rate, is likely to have depressed demand and, through various channels, negatively affected the growth rate.

It has also been argued that Italy's fiscal adjustment relied too much on tax increases, and that an expenditure-based adjustment would have been more effective (Alesina, Favero, and Giavazzi 2019). The argument that fiscal corrections have a limited negative impact on growth and may even be expansionary (Giavazzi and Pagano 1990) is highly controversial (for example, Guajardo, Leigh, and Pescatori 2011). In any case, IMF data (reported in Figure 4) suggest that Italy's fiscal adjustment was not only the largest in comparative perspective but also more reliant on expenditure cuts than in almost any other country, and certainly more than in Belgium.<sup>12</sup>

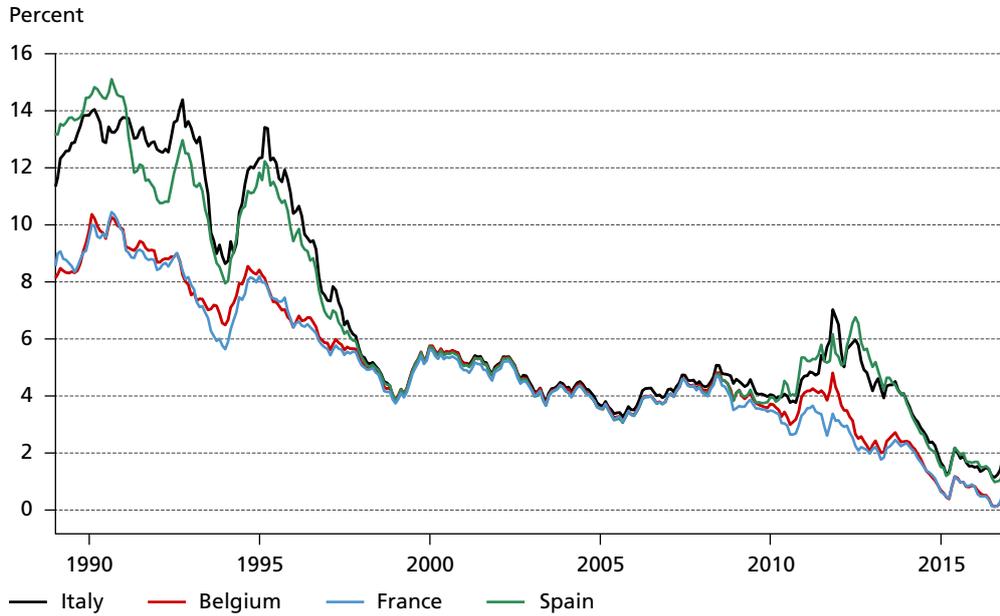
What would have happened if Italy had not joined the euro? Arguably, the best counterfactual is Italy between 1993 and 1996, prior to the decision to reenter the ERM in late November 1996. In these four years, Italy had a flexible exchange rate and was hit by a serious external shock, the peso crisis, which led to a large depreciation of the exchange rate (21 percent vis-à-vis the Deutsche Mark between the end of 1992 and the end of 1995). This is exactly the kind of shock that advocates of the euro would warn against. Nevertheless, during this period Italy was able to stabilize the growth of debt rather quickly: from an increase of almost 10 percent in 1993, the debt/GDP ratio was brought onto a downward trend by 1996, even though interest expenditure remained above 10 percent in these years (Figure 3). The current account moved from a deficit in 1993 to a surplus of almost 3 percent in 1995, thanks to a large real exchange devaluation.

Furthermore, it can be argued that there would have been interest rate decline, at least in part, even if Italy had not joined the euro, as the fall in interest rates was a general trend, common to all advanced economies, including Sweden, Denmark, and the United Kingdom, and not a specific trend of eurozone members (Figure 5).

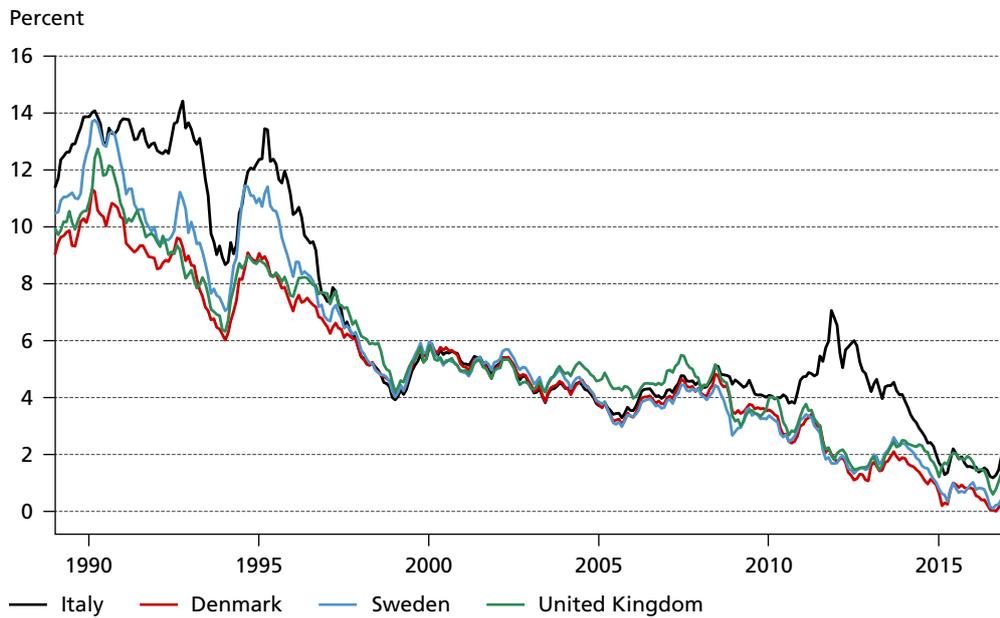
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12 Figure 4 is based on the IMF database on fiscal consolidation, which records episodes of fiscal adjustment on the basis of the "narrative method," aimed to minimize the problem of endogeneity of fiscal adjustment measures (Guajardo, Leigh, and Pescatori 2011).

Figure 4 Interest rates on long-term treasury bonds within and outside the euro (1989–2017)



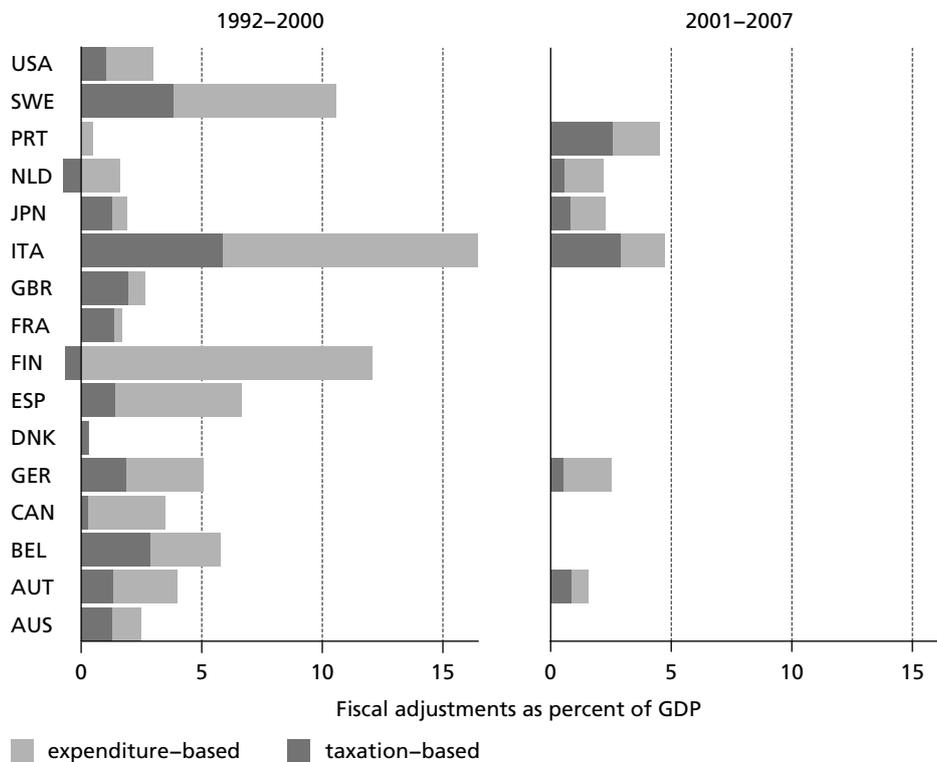
Source: Eurostat.



Source: Eurostat.

To summarize, the external constraint provided short-term benefits by helping to reduce interest rates (at least until the crisis), but it arguably also determined a reduction of growth rates by curbing internal (public) and external demand. The evidence from 1993–96 does not suggest that Italy would have found it more difficult to manage its

Figure 5 Size of fiscal adjustments



Source: IMF Dataset of Fiscal Consolidation 2011.

public debt if it had decided not to enter the euro. In fact, it would probably have found it easier thanks to higher (export-led) growth. In retrospect, considering that the interest rate advantage disappeared when the sovereign debt crisis hit, a strategy of choosing to remain in the ERM (as Denmark did) would probably have been wiser.

## Privatization

It is important to examine not just the macroeconomic effects of the external constraint strategy but also the impact on the supply side. One manifestation of the Italian decline is the disappearance of large firms with a significant presence in advanced sectors. As discussed earlier in the paper, the scarcity of large firms has been identified as one of the blights affecting the Italian economy. Did the privatization of state-owned enterprises play a role? Was the process influenced by the external constraint? These are the questions addressed in this section.

Italian capitalism inherited from fascism a pervasive role of the state in industry and banking (Hancké, Rhodes, and Thatcher 2007; Schmidt 2002; Shonfield 1965). In particular, the Istituto per la Ricostruzione Industriale (IRI), Italy's largest state-owned

conglomerate, played a key role in the "economic miracle" years, with a substantial presence in almost all production sectors, including the most technologically advanced ones, such as telecommunications and electronics (Rossi and Toniolo 1996).

In 1982, the year of its maximum size, IRI operated in 40 percent of sectors and directly produced 3.6 percent of Italy's GDP (5 percent including indirect linkages). Furthermore, it exported more than 20 percent of its production, double the figure of private enterprises in the same sectors (Pellegrini 2015). IRI companies were more capital-intensive than private companies, more likely to be present in high-tech sectors – such as telecommunications, electronics, informatics, robotics, aeronautics, and electronics – invested more in R&D, and had higher labor productivity levels and productivity growth (Antonelli, Amidei, and Fassio 2015; Doria and Tolaini 2013). The common image of state-owned enterprises as economic basket cases is misplaced.

At the end of the 1980s, however, IRI companies faced serious problems. Profitability was negatively impacted by excess capacity (especially in the South), which was linked to the strategy of territorial rebalancing between North and South. Debt and interest payments weighed more heavily on IRI's balance sheet than on private companies, also due to the reduced size of public recapitalizations in the 1980s and 1990s (Ciocca 2015, 60–86). Financial problems were concentrated in three sectors: steel (Finsider), shipbuilding (Fincantieri), and cars (Alfa Romeo). The need to support employment led to excessive manpower levels. Ravazzi (2015) has estimated that the net operational profitability of public companies was 5 percent lower than that of private companies, arguing that this can either be interpreted as a sign of inefficiency or as a fair price to pay for faster accumulation and employment creation in depressed areas such as the South.

One possible response could have been restructuring through targeted privatizations and equity injections into the endowment fund. This strategy had been followed in the 1980s under Prodi's presidency of the Institute and had produced a return to (small) profits in 1988 (Ciocca 2015). The political climate of the early 1990s was very different from that of the 1980s, however. Public opinion was ill disposed towards state ownership, also as a result of the "clean hands" scandal (*Tangentopoli*), which led to the arrest of IRI's president Franco Nobili in May 1993 (later cleared of all charges). Moreover, a cultural shift was taking place in Italy and elsewhere in favor of private firms. Furthermore, with Italy in a macroeconomic emergency, public recapitalization was not an option.

In this context, an important role was played by the European Commission. In the late 1980s the Commission took a more rigid stance with regard to state aid. A survey conducted by the Commission in 1989 found that Italy alone was responsible for 55 percent of all state aid in the European Community (Curli 2013, 206). The survey counted all the public contributions to the operating funds of the state-owned enterprises not as equity injections but as state aid.

An “Italian case” emerged in Brussels, leading to several infringement procedures. At the core of the dispute was the incompatibility between European competition rules and Article 2362 of the Italian Civil Code, which established the unlimited liability of the shareholder in the event of the insolvency of a fully owned controlled company. The European Commission ruled that the provision of such unlimited liability gave state-owned companies a competitive advantage over their private competitors in terms of access to finance, allowing them to maintain higher levels of debt than their competitors.

The confrontation was resolved by an agreement between Andreatta (foreign minister) and the European Commissioner for Competition Van Miert in July 1993. The agreement compelled IRI to reduce its debt levels to acceptable limits (around 60 percent) without injections of public funds, that is, through sales of assets. It contained a detailed list of firms to be privatized by 1997, including telecommunications and railways (Curli 2013, 256).

The decision to take Italy into the single currency from the beginning also had an impact on privatization. Italy did not meet the debt criterion, but as a compromise it was decided to consider a declining debt-to-GDP ratio as sufficient evidence of debt reduction. Thus, a commitment to speedy privatizations became essential to prove Italy’s commitment to debt reduction, and the proceeds of privatizations were earmarked for that purpose. The existence of a link between EMU entry and privatization has been noted by several scholars (Artoni 2013; Barucci and Pierobon 2010; Ciocca 2015), and there is an explicit trace of it in official government documents (for example, Ministero del Tesoro della Programmazione Economica 1998, 71), as well as in accounts of the protagonists. Recently, Romano Prodi described the privatization process as a European “obligation.”<sup>13</sup> Italy ran the second largest privatization process after the United Kingdom (whose privatizations were concentrated in the 1980s; Table 4). Privatized companies improved profitability and increased the distribution of dividends to shareholders (Tori 2012). The size of the investments made were well below planned levels (Barucci and Pierobon 2010), however, suggesting that a short-term profitability orientation prevailed. According to De Cecco (2007, 775–76; see also Cavazzuti 2013, 65), privatization provided Italian private capitalists with an easy way out: rather than facing competition in their own markets, they could purchase utility companies (for example, motorways, telecommunications) and pay for them with loans provided by the privatized banks.

An example is the privatization of Telecom Italia. During the 1980s, telecommunications had been at the forefront of Prodi’s attempt to reorient IRI towards high-tech sectors and had absorbed 60 percent of IRI’s total investments (Doria and Tolaini 2013). The privatization of Telecom took place in 1997 without a clear direction and the Treasury never used its golden share. The attempt at creating a stable core of Italian private owners failed, and the company changed ownership four times in a few years, with two leveraged buy-outs that left a legacy of a high indebtedness, which negatively affected

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13 In an interview to the TV program “Mezz’Ora in più” on October 27, 2019.

Table 4 Revenue from privatization

		Current USD (mil)	USD 2010* (mil)	% GDP**
Italy	1977–1989	2,904	5,359	0.41
	1990–1999	91,697	126,093	7.47
	2000–2012	83,871	96,468	5.34
	1977–2012	178,472	227,920	13.21
France	1977–1989	4,615	8,829	0.50
	1990–1999	52,104	73,403	3.58
	2000–2012	161,045	173,181	6.77
	1977–2012	217,763	255,413	10.85
Germany	1977–1989	2,843	5,115	0.23
	1990–1999	47,723	66,183	2.11
	2000–2012	89,473	100,285	3.29
	1977–2012	140,039	171,583	5.62
UK	1977–1989	49,983	99,599	6.62
	1990–1999	64,001	96,752	4.94
	2000–2012	43,358	45,535	1.76
	1977–2012	157,343	241,886	13.33

Notes: \* The figure in current USD has been converted to constant 2010 USD. \*\* The figure in current USD has been divided by GDP in current USD (World Bank data).

Source: Privatization Barometer (authors' elaboration).

the company's future development. In fact, the high level of debt led the company to reduce industrial investments in the 2000s and to drop projects with more uncertain profitability prospects, which, in retrospect, could have guaranteed Telecom a stronger role in the development of innovative technologies and infrastructures. This led to a loss of positive externalities for the country in a crucial sector.<sup>14</sup>As a result, already a few years after the peak of privatization, all triumphalism had vanished with regard to its ability to modernize Italian capitalism. Serious doubts can also be raised as to the success of privatization in terms of public debt reduction. The total proceeds of 9.5 percent of GDP between 1992 and 2001 (Devillanova 2013, 52) were non-negligible, but insufficient to address the debt problem.

Could the outcome of privatization have been more positive? Certainly, a clearer regulatory framework could have been introduced. Due to the need to "cash out" quickly, privatizations were carried out without a comprehensive strategy (Cavazzuti 2013). In the case of regulated sectors, they took place before a proper regulatory framework had been set up, leaving room for substantial private economic rent and poorly designed incentives. The privatization of Autostrade per l'Italia (motorways), which was sold to Benetton in 1999, is a clear illustration. The private profits made after privatization far exceeded the interest savings made possible by the sale of the company (D'Antoni 2013).

14 An example of a wrong strategic decision was the discontinuation of Socrates (based on optical fiber), to which the more profitable but more limited DSL technology was preferred (Mariotti 2013).

Importantly, the state could have maintained a controlling share in strategically important companies in key sectors such as telecommunications. An indirect confirmation of this claim is provided by the fact that after it became clear that the strategy of full privatization was a failure, the state opted for partial privatization in the case of the other state-owned conglomerates ENI, ENEL, and Finmeccanica, maintaining a controlling share (Bulfone 2017). ENI, ENEL, Fincantieri, and Leonardo (formerly Finmeccanica) have been able to upgrade and consolidate their international standing (Pagano 2019).

It is difficult to say what would have happened had the pressure coming from European institutions been absent. Key actors such as Carli, Andreatta, Ciampi, Barucci, and Prodi fully agreed with the need for privatization. In 1993, the Italian voters approved a referendum on the abolition of the Ministry of State-owned enterprises by a majority of 90 percent. Hence, there was ample domestic support for privatization. With the Andreatta–Van Miert agreement, however, the Sword of Damocles of an infringement procedure was placed over the government’s head. This helped to overcome domestic resistance, especially from the management of the state-owned companies themselves (Curli 2013, 255). Furthermore, had the need to maximize short-term revenue been absent, perhaps the government would have chosen more advantageous ownership and regulatory structures.

### Industrial relations and labor market policy

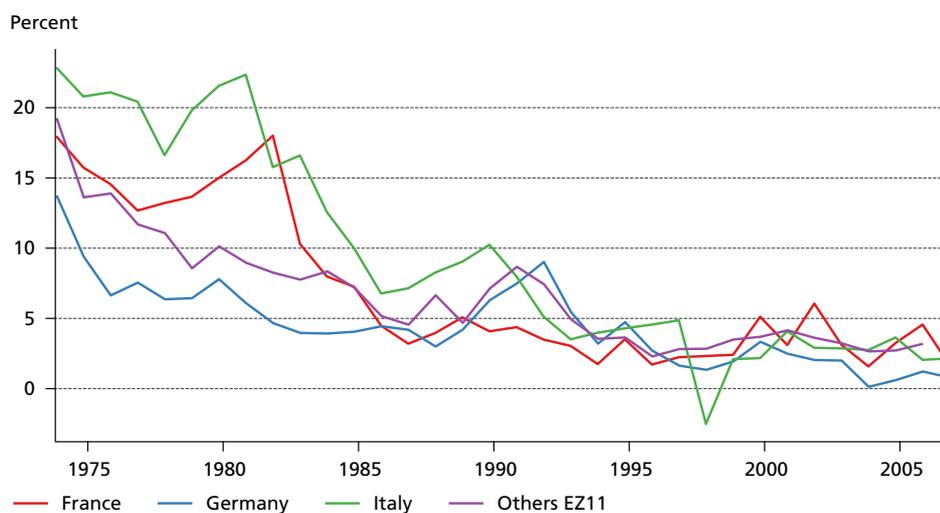
When Italy took the decision to reenter the EMS in late 1996, it still had an inflation problem. Between 1993 and 1996, the average inflation rate was 4.5 percent in Italy and 2.6 percent in Germany and in the other countries about to join EMU.<sup>15</sup> The implication of fixing the exchange rate and then entering the common currency was that, unless the inflation differential was eliminated or Italian productivity grew faster than in eurozone partners, Italy would experience a loss of competitiveness (captured by the appreciation of the real exchange rate), and this would lead to a deterioration of the current account. In particular, Italy’s exports, which are estimated to be highly sensitive to movements of the real exchange rate (with an elasticity of about –1.5 percent), particularly in the manufacturing sector (Paternesi Meloni 2018), would suffer. In retrospect, loss of competitiveness is exactly what ultimately happened. In this section, we examine how this came about.

Until approximately the late 1990s, Italy relied on wage restraint to compensate for the loss of exchange rate flexibility. Institutionalized union cooperation had been very important to help Italy gain access to EMU (Modigliani, Baldassari, and Castiglionesi 1996). Just before the financial crisis of 1992, a tripartite pact between government, unions,

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15 This section relies on data from the KLEMS database, as well as AMECO data on wage share, nominal, and real effective exchange rates.

Figure 6 Yearly increase in nominal hourly wages (1974–2007)



Source: Our elaboration on KLEMS data.

and employers abolished the wage indexation mechanism (*scala mobile*), thus facilitating disinflation. In 1993, a tripartite agreement confirmed the abolition of the *scala mobile* and introduced a new collective bargaining architecture, which linked wage increases to the government's inflation target. A corporatist pact reforming the pension system was signed in 1995. In 1996, another tripartite pact began the liberalization of flexible employment contracts, while maintaining a series of limits on its use. For example, it introduced a requirement for collective bargaining to set a ceiling on the use of agency work.

Data on sectoral wages from the KLEMS database reveal that, by the 1990s, Italy had managed to dramatically reduce wage inflation and had brought wage growth into convergence with both Germany and the other ten countries about to join the eurozone. In fact, Italy's wage growth was even lower than in both Germany and the other EZ11 countries in the last few years of the 1990s (Figure 6). Furthermore, Italy's real wages grew more slowly than productivity increases in the 1990s, causing a decline of the wage share from 64 to 59 percent between 1991 and 1996. It should be noted that the new bargaining structure introduced in 1993 had the potential to determine such a decline in the wage share, because it established that labor productivity gains would no longer be distributed at the industry level of bargaining, but only at the enterprise or territorial level (Baccaro 2000; Regalia and Regini 1998).

The impetus for institutionalized union cooperation declined in the 2000s. The re-emergence of strategic differences between the main union confederations played a role, but even more important was the government's shift away from "concertation" towards labor market liberalization (Baccaro and Howell 2017, chap. 6). In 2003, the Berlusconi government thoroughly liberalized the use of flexible work contracts.

This shift was fully supported by Confindustria (the main employer confederation), which already in 1998 had made the case that greater labor market flexibility was needed to weather the challenge of the euro.<sup>16</sup> Looking back, one of Confindustria's key negotiators argued that the goal of labor market flexibilization was to increase the employment intensity of growth. For this, a reduction of labor productivity was to be expected, but it was an acceptable price to pay to achieve the political goal of reducing unemployment.<sup>17</sup>

In 2001–06, Italy's nominal wages grew considerably faster than in Germany (1.4 percent), although slightly slower than in the other EZ11 countries (3 percent versus 3.2 percent per year). The greatest difference was made by the public sector (public administration, education, and health and social work sector), where Italy's hourly wages increased by 4.8 percent per year, in contrast to 1 percent in Germany and 3.2 percent in the other EZ11 countries. The wage share bottomed at 58 percent in 2001 and then started growing again, reaching 60 percent in 2006. The real effective exchange rate, which had declined by 42 percent between 1991 and 1995 and remained stable between 1996 and 2000, increased by 11 percent between 2001 and 2007.

Italy's loss of competitiveness was only marginally due to nominal wage growth, and much more to the stagnation of labor productivity. As Figure 7 shows, between 1974 and 1995 manufacturing sector productivity grew faster in Italy than in Germany and France (3.8 percent per year, 3.1 percent, 3.4 percent average yearly growth rate respectively), in line with the other EZ11 countries. Between 1996 and 2006, however, Italy's productivity growth was only 0.5 percent per year in contrast to 3.3 percent for Germany, 3.7 percent for France, and 3.9 percent for the remaining EZ11 countries.

As discussed in the literature section above, the stagnation of Italian productivity is puzzling and there is no consensus explanation, but two factors may help to account for it: demand compression and the unintended effects of labor market liberalization. Both channels were at work in the Italian case.

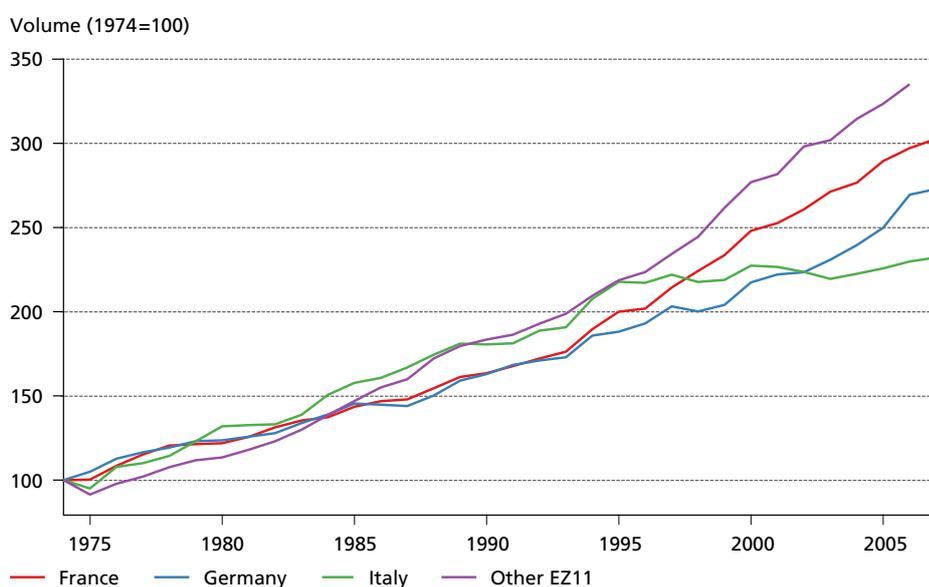
First, as emphasized by the post-Keynesian literature, demand is positively related to labor productivity through economies of scale. This is known as the “Kaldor-Verdoorn” effect. Additionally, the prospect of expanding demand nudges firms to expand their capacity, and the resulting new investments, in turn, incorporate the latest generation of technical progress (Storm and Naastepad 2012).

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16 See the report on Confindustria: “Europa fattore di competitività e sviluppo,” cited in <https://www.eurofound.europa.eu/publications/article/1998/employers-call-for-italian-structural-reform-under-emu> (accessed on May 12, 2020).

17 Innocenzo Cipolletta (Director General of Confindustria between 1990 and 2000), personal communication (March 24, 2018).

Figure 7 Labor productivity in the manufacturing sector (1974–2007) by value added per hour



Source: KLEMS.

Second, labor rigidities (such as high and inflexible wages, protective labor institutions) stimulate labor productivity in two ways: by encouraging labor/capital substitution, thus leading to greater capital intensity per unit of labor, and by creating incentives for managers to boost efficiency through reorganization (Streeck 1997).

After Italy joined the euro, all components of aggregate demand slowed down (Deleidi and Paternesi Meloni 2019). As discussed above, public expenditure growth was contained in an ill-fated attempt to reduce public debt. Exports became more difficult due to the appreciation of the real exchange rate (from the early 2000s on). Other, more endogenous components of aggregate demand also suffered. Household consumption was constrained by limited real wage growth and insufficient increase of debt-financed expenditures; investment was hurt by depressed demand. The extent to which all potential drivers of growth stagnated makes Italy a unique case in comparison with other advanced countries (Baccaro and Pontusson 2016).

With regard to the second channel, several studies have concluded that labor market flexibility has had a negative impact on Italian labor productivity (Daveri and Parisi 2015; Jona-Lasinio and Vallanti 2013; Lucidi and Kleinknecht 2011; Saltari and Travaglini 2006; Tronti 2009). Studies based on panel data for several countries come to similar conclusions (Hein and Tarassow 2010; Pariboni and Tridico 2019; Vergeer and Kleinknecht 2011, 2014). Daveri (2012) argues that the Italian liberalization of flexible contracts was intended as a substitute for exchange rate devaluation but failed because it reduced labor productivity.

To summarize, the decision to give up exchange rate flexibility forced the Italian authorities to introduce measures aimed at preventing the loss of external competitiveness. After relying on institutionalized wage moderation until the 1990s, the focus shifted to labor market liberalization, but the result was the stagnation of productivity *and* the loss of external competitiveness.

Could it have gone differently? Italy could perhaps have prevented an appreciation of the real exchange rate by continuing institutionalized nominal wage containment beyond the 1990s, while keeping the efficiency-enhancing labor rigidities in place. This task would have been easier to accomplish if Germany had not engaged in “internal devaluation” at the same time, containing its own wage and price growth (Flassbeck and Lapavitsas 2015).

What would have happened if Italy had not decided to irrevocably fix its exchange rate at the end of 1996? The best counterfactual is again represented by Italy in the four years between late 1992 and late 1996. Both the nominal and the real effective exchange rate declined by 16 percent between 1992 and 1996 – in other words, Italy gained external competitiveness. This was despite a nominal exchange rate appreciation of 10 percent in 1996 relative to 1995, which was due to Italy preparing to rejoin the EMS at a parity acceptable to other members of the monetary union (990 lira against the DM). Importantly, the nominal devaluation did not trigger an import prices–wages–domestic price spiral. In fact, the inflation rate declined from 5 percent in 1992 to 4 percent in 1996, thanks to institutionalized wage restraint.

Table 5 Labor productivity growth at the sectoral level (1993–96 vs. 1997–2007)

	Annual labor productivity growth
Period 1997–2007	–1.586** (0.621)
Part of manufacturing sector	0.0178 (0.631)
Constant	2.491*** (0.510)
Observations	68
R-squared	0.091

Notes: Standard errors in parentheses.

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Source: KLEMS.

Labor productivity grew significantly faster in 1993–96 than in 1997–2007. This is brought out by a regression using KLEMS data for thirty-four sectors, where average yearly labor productivity growth in the two periods is regressed against a period dummy (1 for 1997–2007, 0 for 1993–96), and a dummy proxying for trade exposure (1 if the sector belongs to the manufacturing industry, 0 otherwise) (see Table 5). The coefficient of the period dummy indicates that annual productivity declined significantly by 1.6 percent on average in 1997–2007 relative to 1993–96, while trade exposure has zero effect.

This latter result casts doubt on a direct effect of real exchange rate appreciation on labor productivity at the sectoral level (see also Pellegrino and Zingales 2017). It is possible that the reduction of foreign demand for exposed sectors was compensated by a compositional effect whereby less inefficient companies exited and more efficient ones remained.

## 6 Concluding remarks

In this paper, we have assessed the effects of the external constraint on Italy's economic performance in the past twenty-five years, focusing on three policy areas: public debt, privatization, and labor market policy. For each policy area, we have reconstructed the process linking the external constraint to outcomes, and assessed the sufficiency and necessity properties of the critical event. Table 6 provides a synthesis of the analysis.

The decision to enter the ERM in late 1996 and then joining the euro had two contrasting effects on public debt: on the one hand, it reduced interest payments on the large stock of debt; on the other, it probably lowered the growth rate, thus triggering a vicious circle of consolidation, leading to lower growth, requiring further consolidation. With the sovereign debt crisis, the interest advantage evaporated and the spread between Italian and German nominal bond yields returned to the high levels of the early 1990s.

The European Commission's opposition to state aid made it almost inevitable for Italy to privatize state-owned enterprises. The Andreatta-van Miert agreement formalized Italy's commitment to privatization and helped to overcome internal resistance. The need to cash in quickly to improve Italy's debt figures on the eve of EMU admission, however, led to hasty privatization decisions that did not significantly reduce the debt stock, but caused a deterioration of Italy's position in key sectors, such as telecommunications, electronics, informatics, robotics, aeronautics, and consumer electronics (Gallino 2003).

The choice to give up the option of currency devaluation made it necessary to increase wage flexibility. Until the 1990s, institutionalized nominal and real wage moderation provided a safety valve. From 2001 on, however, the impetus for wage moderation waned, to be replaced by the liberalization of flexible contracts. The combination of demand compression and the weakening of efficiency-enhancing rigidities led to a generalized stagnation of labor productivity, both in exposed and non-exposed sectors.

For all three policy areas, it is conceivable that some plausible "editing" of the context would have produced better outcomes. If the effort to reduce (and not simply stabilize) the level of debt had continued in the early 2000s, perhaps Italy would have been less vulnerable to speculative attacks in the early 2010s. The way privatizations allowed Italian family capitalism to escape competition in their own market niches and to acquire control of protected public utilities (sometimes through leveraged buyouts) was

Table 6 Summary of causal sequences, and sufficiency and necessity properties

	Causal sequence	Sufficiency	Necessity
		Plausibility of faster growth with the external constraint, given different policies and conditions.	Consequences of lack of external constraint (for example, remaining outside the euro), keeping contextual conditions as similar as possible.
Public debt	<p>Decision to join EMU lowers interest rates, facilitating fiscal adjustment. Interest expenditure declines, but growth rate also declines. <math>r-g</math> always positive, thus tendency of debt to snowball, and primary surplus required just to stabilize the debt.</p> <p>After the sovereign debt crisis, very high interest rate, and austerity further reduces growth rate. <math>r-i</math> balloons.</p>	<p>More fiscal consolidation in 2001–06 could have lowered debt vulnerability after 2008, hence less austerity would have been needed in the early 2010s.</p> <p>However, more consolidation would have likely produced less growth via demand effects.</p>	<p>In 1993–96, when exchange rates were flexible, Italy was able to stabilize public debt rapidly despite being hit by the fallout of the Mexican crisis.</p> <p>In 1995–99, the decline in interest rates took place also outside the eurozone.</p> <p>Not clear that high debt is more sustainable under the euro, quite the contrary is possible.</p>
Privatizations	<p>State aid doctrine incompatible with <i>modus operandi</i> of state-owned enterprises. Several infringement procedures force Italian government into agreement to sell state assets.</p> <p>Need to cash in quickly to reduce debt level leads to hasty privatizations, which allow private family capitalists to take control of former monopolies (often with borrowed money).</p>	<p>A clearer regulatory framework, a partial privatization strategy that keeps a controlling share while boosting market incentives, could have improved the outcome. In principle, the government could have resisted privatization of some strategic industries.</p> <p>However, this seems implausible given the pressure to enter the EMU on time.</p>	<p>No clear counterfactual. However, the trajectory of firms in which the state retained control shows that public ownership was compatible with efficient management and with maintaining a presence in cutting-edge sectors.</p>
Industrial relations and labor market policy	<p>Inability to adjust the exchange rate creates need for greater wage flexibility. Reliance of nominal and real wage moderation until late 1990s prevents competitiveness losses.</p> <p>From early 2000s, wage moderation wanes, and policy focus shifts to labor market flexibilization. This, combined with reduced demand, causes stagnation of labor productivity.</p>	<p>Italy could have prevented an appreciation of the real exchange rate by relying on institutionalized nominal wage containment beyond the 1990s, instead of engaging in labor market deregulation.</p> <p>However, the political pressure to increase the employment intensity of growth at a time of low growth made flexibilization of labor contracts difficult to resist.</p>	<p>In 1993–96, labor productivity growth was higher than in the subsequent external constraint period, competitiveness improved, and there was no inflationary spiral.</p>

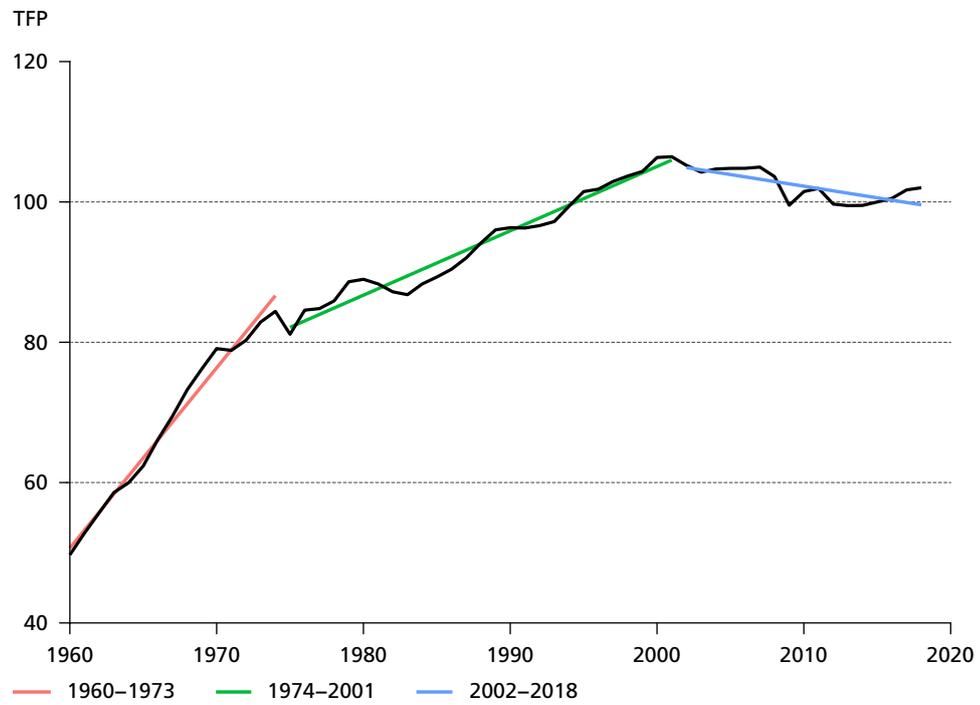
certainly not dictated by the European Commission, but a domestic choice. Finally, if institutionalized nominal wage restraint had continued in the 2000s as well, and the proliferation of flexible contracts had been discouraged, perhaps the slowdown of productivity could have been avoided or reduced. In brief, the external constraint could have been better managed.

Overall, the necessity properties of the external constraint seem more important than the sufficiency properties: it seems implausible that Italy would have experienced the same degree of economic decline in the absence of the external constraint. If the country had decided not to enter EMU – for example, remaining in the ERM, as Denmark did – the management of public debt would probably have been easier, at least in the long run, if not in the short. In particular, the deleterious effects of the sovereign debt crisis could have been avoided. If only minority shares in state companies had been sold, as was done for ENI, ENEL, and Finmeccanica, the state would have retained control but the profitability constraint would have been strengthened. In these conditions, perhaps a company such as Telecom would have followed the path of ENI, ENEL, and Finmeccanica (now Leonardo), which were able to restructure and are today among the few remaining global players Italy has. If Italy had maintained the possibility to correct for nominal divergences by adjusting the exchange rate, at least the depressing effect of aggregate demand compression on productivity could have been avoided. The comparison with the turbulent 1993–96 period suggests that Italy had better economic outcomes when it was forced to give up the external constraint and operate with a flexible exchange rate regime than in the years that followed.

In retrospect, the choice to tie the country's hands to the European mast seems an ill-conceived bet that went bad, producing none of the anticipated benefits and several unintended negative consequences. This does not mean that it would be easy or desirable to reverse the choice, but Italy's policy-makers should learn from the mistakes that were made to avoid repeating them.

## Appendix A

Figure A1 Trajectory of total factor productivity in Italy (1960–2018)



Source: AMECO (ZVGDF).

## Appendix B

### Decomposition of public debt growth

The formula describing the evolution of debt/GDP ratio reported on page 16 can be re-expressed as follows:

$$\Delta b_t = \underbrace{\frac{i_t b_{t-1}}{1 + n_t}}_{\text{interests}} - \underbrace{\frac{n_t b_{t-1}}{1 + n_t}}_{\text{effect of growth}} - s_t + SF_t$$

where, on the right-hand side, the first addendum is interest expenditures as a percentage of GDP in year  $t$ , the second is the impact of nominal GDP growth.

SF $_t$  is the stock-flow adjustment, that is, the difference between the change in the stock of debt and government deficit. It includes: 1) net acquisitions of financial assets (among them the effects of privatization); 2) adjustments required to account for transactions excluded from the Maastricht definition of debt (for example, derivatives), for issuance and redemption of debt above/below the nominal value, for appreciation/depreciation of debt in foreign currency, and for the effects of changes in classification of units inside/outside government; 3) statistical discrepancies.

Using the above formula, we can isolate the different determinants of debt/GDP growth, of which primary balance is just one component, and not always the most relevant.

In order to create Figure 2, we used Eurostat ESA2010 data for the years 1995–2018. For the period before 1995 such data are not available, so we had to rely on the old ESA95 time series; in order to avoid a break in 1995, we used the linked series of GDP provided by AMECO (the European Commission), where ESA95 are adjusted to match the new series. No adjustment has been made for ESA95 data on interest and deficit (provided by Istat).

Year	$b_t$	$\Delta b_t$	$n_t$	Effect of growth	Interest	$s_t$	Stock-flow
1980	54.39	-2.07	24.90	-11.25	9.28	-2.54	-2.64
1981	56.66	2.27	19.87	-9.01	10.63	-5.78	-5.13
1982	61.17	4.51	18.07	-8.67	12.99	-3.44	-3.24
1983	67.18	6.01	16.55	-8.68	14.12	-2.30	-1.73
1984	72.46	5.28	14.4	-8.45	13.56	-3.10	-2.93
1985	78.21	5.75	12.31	-7.94	12.41	-3.96	-2.68
1986	82.14	3.93	10.76	-7.60	11.78	-3.18	-3.43
1987	85.88	3.74	9.54	-7.15	9.95	-3.61	-2.67
1988	87.44	1.56	11.25	-8.69	10.12	-2.75	-2.63
1989	89.75	2.31	9.88	-7.86	10.82	-2.27	-2.91
1990	91.59	1.84	10.62	-8.62	11.66	-1.36	-2.57
1991	94.76	3.17	9.27	-7.77	12.68	-0.03	-1.78
1992	101.30	6.55	5.29	-4.76	12.72	1.85	0.45
1993	110.97	9.67	3.08	-3.03	12.06	2.62	3.25
1994	116.89	5.91	5.79	-6.08	10.14	2.27	4.12
1995	119.36	2.48	8.01	-8.67	11.10	3.89	3.94
1996	119.11	-0.25	5.83	-6.58	11.05	4.43	-0.29
1997	116.78	-2.33	4.44	-5.07	9.14	6.16	-0.24
1998	114.13	-2.66	4.26	-4.77	7.84	4.85	-0.88
1999	113.29	-0.84	3.19	-3.52	6.37	4.60	0.91
2000	109.03	-4.26	5.65	-6.06	6.11	3.69	-0.63
2001	108.89	-0.14	5.04	-5.24	6.06	2.87	1.91
2002	106.36	-2.53	3.54	-3.72	5.43	2.56	-1.68
2003	105.49	-0.87	3.29	-3.39	4.95	1.74	-0.69
2004	105.10	-0.39	4.13	-4.19	4.60	1.12	0.31
2005	106.56	1.46	2.84	-2.91	4.50	0.42	0.28
2006	106.74	0.19	3.95	-4.05	4.44	0.82	0.62
2007	103.89	-2.85	4.00	-4.11	4.75	3.41	-0.08
2008	106.16	2.26	1.42	-1.45	4.91	2.35	1.15
2009	116.60	10.45	-3.69	4.07	4.41	-0.71	1.26
2010	119.20	2.60	2.16	-2.46	4.28	0.04	0.82
2011	119.70	0.49	2.33	-2.71	4.65	1.06	-0.39
2012	126.50	6.80	-1.48	1.80	5.16	2.22	2.06
2013	132.46	5.96	-0.71	0.91	4.83	1.98	2.20
2014	135.37	2.91	0.91	-1.19	4.58	1.63	1.15
2015	135.28	-0.09	1.72	-2.29	4.11	1.56	-0.35
2016	134.78	-0.50	2.44	-3.23	3.91	1.51	0.32
2017	134.15	-0.64	2.41	-3.17	3.77	1.32	0.08
2018	134.81	0.66	1.70	-2.25	3.66	1.46	0.71

Note: All values represent percentages of GDP.

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