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OF ECONOMICS AND  
POLITICAL SCIENCE ■



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# Institutional Roots of Economic Decline: Lessons from Italy

Marco Simoni

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# Institutional Roots of Economic Decline: Lessons from Italy

Marco Simoni \*

## Abstract

The economic decline of Italy since the mid 1990s is a critical case in contemporary political economy because its model of capitalism was deeply reformed at the time when its decline commenced. This paper argues that economic stagnation cannot be attributed to special interest politics, nor to the lack of market-friendly reforms in a globalized economic context, as previous literature argues. Instead, Italian economic decline is a consequence of institutional change which on the one hand has destroyed previous institutional complementarities, and on the other hand has led to an incoherent, or “hybrid,” setting. In the institutional spheres of corporate governance and labor, economic reforms established new institutions alternatively apt to support both strategic coordination and market coordination, resulting in institutional incoherence.

In addition, building on the case of Italy and based on patent data relative to 19 OECD countries, this paper unpacks the link between institutional coherence and economic performance. It articulates a novel hypothesis according to which higher specialization in innovation patterns, derived from institutional coherence, also leads to higher overall innovation volumes. Hence, reforms that undermine a prevalent mode of coordination across the economy also undermine innovation capacity, leading to economic decline.

**Keywords:** Varieties of Capitalism, Economic Growth, Italy

**JEL Codes:** P16

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# Institutional Roots of Economic Decline: Lessons from Italy

## 1. Introduction

This paper argues that the economic decline of Italy from the mid-1990s to present is a consequence of institutional change leading to the hybridization of its model of capitalism. This conclusion has empirical and theoretical implications that reach beyond the southern European country and are of broad interest to scholars concerned with the causes behind the economic decline of nations. Indeed, a number of factors make Italy's decline a critical case in the study of comparative capitalism.

Italy was a successful economy in the post-war decades; until the late 1980s, it outperformed average growth of Western Europe. Instead, it has underperformed since the mid-1990s, and increasingly so over time. In 2010, i.e. after the financial and economic crisis, Italy was the only EU country with a GDP per capita lower than 2000.

This performance is even more puzzling if one observes the numerous economic reforms approved in Italy in the 1990s. Deep changes affected virtually all the institutional spheres of Italian capitalism, including the labor market, industrial relations, corporate governance, finance, education and competition, among others (see Barca 2006 for a full list). Reforms were carried out by governments of different partisan orientations, yet there is no record of major policy reversal. In sum, Italy is a case of economic decline that followed institutional change with no clear partisan bias.

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This paper tests the following hypothesis: that the economic decline is the result of an increased hybridization of the Italian model of capitalism.

Hybridization is understood as a process whereby neither market-based (LME-type) coordination nor strategic (CME-type) coordination prevails across the economy and across institutional spheres, as a consequence of incoherent institutional change. By addressing this hypothesis, this paper provides a new test to the core contention of the Varieties of Capitalism (VoC) theory: that institutional coherence systematically underpinning market coordination or strategic coordination among economic actors is linked to stronger economic performance than other, more hybrid, institutional settings (Hall and Soskice 2001). This paper does so by examining the counterfactual, that is, whether economic decline can be thought to derive from increased institutional incoherence. Italy is the ideal choice for such a test because economic decline followed large-scale institutional restructuring.

Previous literature has questioned the suitability of VoC dichotomy between Liberal Market Economy (LME) and Coordinated Market Economy (CME) to correctly encompass different capitalisms. Amable (2003) suggests that five, rather than two, typologies are necessary to understand dynamics of economic performance and the interplay between institutional configurations and their socio-political underpinnings. In turn, Colin Crouch (2005) suggested that a more nuanced and detailed mapping of capitalism is necessary in order to “accommodate and account for change taking place within empirical cases” (pp. 440) while avoiding functionalism and determinism. Additionally, some literature has argued that at times incoherent institutions might be conducive to good economic performance (see Hoepner 2012).

These critiques to the VoC approach could only be partially countervailed by the main empirical assessments of the VoC contention (Hall and Soskice 2001; Kenworthy 2006; Hall and Gingerich 2009) or by works on the “origins” of the VoC (Cusack et al. 2007; Iversen and Stephens, 2008). In fact, because institutions typically move slow, all these

works predominantly focus on the cross-country dimension and comparative statics, with limited scope for within-country variation.

Instead, by focusing on developments over time within a single country, while taking seriously the VoC core claim, this paper aims at bridging these two literatures. The purpose of this paper is such that, by construction, it cannot assess the extent to which the VoC paradigm can account for the direction of change (as done, for example, by Jackson and Degg, 2012 and literature cited therein). In short: the aim of this paper is not to explain change, but to assess its consequences.

The first section of the paper shows that the most common explanations of Italy's dismal economic performance – the *mischief of faction*, and lack of market-conforming reforms – not even resist *prima facie* scrutiny. After this, the paper reconciles previous interpretation of the Italian political economy. A number of works have considered Italy as a “mixed” market economy, others have tended to consider it as part of the CME group. Hence, in order to understand the status quo ex-ante the 1990s reforms, the second section of the paper reviews institutional complementarities at work during postwar decades.

The paper then focuses on reforms carried out in the 1990s in the key spheres of labor and corporate governance. Their observation shows incoherence: newly established institutions were alternatively apt to support both strategic coordination and market coordination: increased wage coordination was combined with increased labor flexibility; new corporate governance norms close to the Anglo-American model were juxtaposed with new financial regulations that allowed banks to own non-financial firms, as is the norm in coordinated regimes.

The paper then focuses on the effect of incoherent reforming. While previous institutional complementarities were wiped out, new ones could not emerge because of contradictory sets of incentives that pushed simultaneously towards both market coordination and strategic coordination. Consistently with expectations drawn from



the VoC approach, an increasingly incoherent institutional framework delivered weaker economic performance.

The final contribution of this paper is to unpack the causal link between institutional incoherence and weak economic performance. Despite its importance to the claims of the VoC approach, this causal link remained a black box in previous literature. From the case of Italy, and based on international datasets on patents, this paper articulates a new hypothesis that will require further empirical testing. An incoherent institutional setting will deter specialization in innovation patterns which, in turn, will result in lower overall innovation rates: in hybrid cases such as Italy since the 1990s, innovation decline will then lead to economic decline.

## 2. Interpretations of the Italian Economic Decline

### *2.1 Is the decline caused by the 'mischief of faction'?*

The economic decline of Italy has been documented extensively (see for example: Ciocca 2003; Boeri, Faini et al. 2005; Daveri and Jona-Lasinio 2005). In the postwar, Italy's economic performance was stronger than the EU15 average up until the late 1980s. Instead, since the early 1990s, this picture changed. TFP growth slowed down at first, and then started decreasing, dragging down output per head. In the seven years that preceded the 2007 financial crisis, average yearly growth was negligible. In 2010, after the economic downturn following the financial crisis, Italians were poorer than they were in 2000 (see Table 1 and Table 2).

The natural candidate for explaining this course of events is the classic hypothesis from Olson's *The Rise and Decline of Nations* (1982). Applied to the life of nations, the Logic of Collective Action predicts declining economic performance as a result of entrenched special interests imposing deadweight costs on societies (Lohmann 2003). The slow and progressive decline of Italian economy over a period of twenty years seems to conform to Olson's expectations.

**Table 1.**  
Average Year-on-Year TFP Growth and GDP per capita Growth

	1961-1970	1971-1980	1981-1990	1991-2000	2001-2007	1998-2007	2001-2010	GDP p.c. in 2010 (2000=100)
Italy	<b>4.99</b>	<b>3.34</b>	<b>2.36</b>	<b>1.55</b>	<b>0.54</b>	<b>1.02</b>	<b>-0.34</b>	<b>96.4</b>
Average DE-FR-UK	3.46	2.57	2.17	1.71	1.49	1.92	0.81	
Germany	3.52	2.76	2.06	1.33	1.27	1.60	0.96	109.7
France	4.64	3.09	1.86	1.55	1.13	1.71	0.56	105.6
UK	2.21	1.86	2.60	2.26	2.05	2.44	0.91	109.2
EU15	3.98	2.65	2.17	1.65	1.46	1.92	0.67	106.7

Note: Growth for Germany in 1990 set to zero.

Source: Author's calculation from the AMECO database

**Table 2.**  
Average Year-on-Year TFP Growth

	1961-1970	1971-1980	1981-1990	1991-2000	2001-2007	1998-2007	2001-2010
Italy	<b>4.32</b>	<b>1.78</b>	<b>1.05</b>	<b>0.87</b>	<b>-0.16</b>	<b>0.13</b>	<b>-0.46</b>
Average DE-FR-UK	3.14	1.62	1.23	1.02	0.57	0.77	0.10
Germany	2.61	1.43	1.31	1.11	0.72	0.91	0.18
France	3.64	1.71	1.26	0.82	0.41	0.72	0.01
UK	2.51	1.48	0.96	0.83	0.67	0.66	0.22
EU15	1.68	1.09	1.71	1.68	1.09	1.36	0.30

Note: Growth for Germany in 1990 set to zero.

Source: Author's calculation from the AMECO database

The problem with this explanation is that a number of different metrics suggest that interest groups in Italy grew weaker, rather than stronger if the period of economic decline is compared to the previous period characterized by economic growth. I first examine labor.

Union density levels derived from trade union administrative sources (collected in Visser 2013) have steadily declined since 1976, when they peaked at 50.5%, reaching 40% in 1987 and 33.4% in 2008 (29.2 if only the private sector is considered). Figures not self-reported by unions but estimated from survey data suggest a lower overall figure of 29% and a mere 19% in the private sector, while data for the public sector are

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in line with administrative sources, at around 45% (Baccaro and Pulignano 2009). Sharp decline in unionization rates in the private sector is confirmed by trends in company-level wage bargaining. According to a survey conducted by the Bank of Italy on a sample of 2901 manufacturing firms, during the 2000s, 30.6% of firms with more than 20 employees reached a company agreement, down from 43.4% in the 1990s (Banca d'Italia 2009). For our concerns, during the period of economic decline one cannot detect any increase in the monopolistic power of unions that could help explain such decline.

Similar conclusions can be reached observing the capital side of the equation. The OECD (2011) collects a range of indicators on market regulation which, as a result of both European laws and domestic reform, have markedly decreased in Italy between the early 1990s and the late 2000s. The "Integrated Product Market Indicator" (PMR) encompasses 18 lower-level indicators on the manufacturing sector and the service sector related to (a) state control, (b) barriers to entrepreneurship and (c) barriers to trade and investment. Italy has decreased the level of regulation in all the 18 sub-indicators so that the integrated PMR indicator decreased from 2.53 in 1998 (OECD average 2.12) to 1.32 in 2008 (OECD average 1.35). The PMR index referring to the Energy, Transport and Communications sectors decreased from 5.7 in 1992 (OECD average 4.3), to 2 in 2007 (OECD average 1.9). The "Regulation Impact" (RI) indicator measures the cost that anti-competitive regulation in non-manufacturing sectors impose on other sectors that use inputs from them. These costs are uniformly decreasing in Italy between 1990 and 2007, while being constant between 1975 and 1990. In other words, reduced market regulation had a direct effect on competition as well as a measurable effect on production costs (OECD, 2011).

In sum, market regulation in Italy went from strongly above to in line with OECD average, which does not suggests increased capacity for business to choke off competition (and productivity).

Third, political competition strongly increased between the early 1990s and the late 2000s. During the so-called “First Republic” (1945-1993) the party of the Christian Democracy held governmental positions without interruption, and the Prime Minister came from a party other than the Christian Democrats only four years out of those 48. Instead, the government changed political leaning after each of the five rounds of election held between 1994 and 2008 (Newell 2000; Fabbrini 2001). While this change is not related to the ability of the political system to pass reforms, it is unlikely to have increased rent-seeking capacity of political elites (Olson 1982; Acemoglu and Robinson 2012).

In sum, available data do not suggest that the “mischief of faction” (Hamilton, Madison et al. 2005) can be a persuading explanation for economic decline because there is no evidence of interest groups becoming stronger in the period under observation. In fact, preliminary evidence points to their weakening.

## *2.2 Is the decline caused by the lack of market-friendly reforms?*

A second common explanation suggests that, in the context of an increased globalized economy (Scharpf 1991; Fukuyama 1992), Italy has not adopted a sufficient number of market-conforming reforms to allow its economy to resist (and possibly benefit from) increasingly competitive international markets (Ciocca 2003).

There are two main problems with this explanation. The first is related to the traditional divide between a richer North and a poorer South of the country, which characterized Italy since the 19<sup>th</sup> century (Putnam 1993). Between 1995 and 2007, that is, during the period characterized by overall economic decline, average yearly growth of GDP per capita in the South reached 1.4%, whereas in the North it lagged at 0.7% (Barca 2006). Accordingly, between 1996 and 2007, income of southern families constantly grew above the national average.<sup>1</sup> Growth in the South in this period seems to be driven by exports and fixed investment, at a time in which transfers from the

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<sup>1</sup> Source: Eurostat: “Income of households at NUTS level 2”.

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central government were being reduced (Signorini and Visco 2002; Barca 2006: 4). However, markets in the South are less efficient than markets in the North from any metric (including the quality and quantity of infrastructure, human capital, rule of law, etc.). Hence, if the main cause of Italian decline was to be found in the lack of liberalization and market-conforming reforms in the context of increased international competition, decline should have been more pronounced in the South than in the North.

The second problem with an explanation focused on the lack of reforming is that, indeed, many reforms carried out in the 1990s were market-enhancing. I have already quoted the PMR indexes that show a radical increase in competition across markets. Between 1996 and 2008, even the professional services – which in Italy are known to be characterized by a strict closed-shop regime – show a clear liberalization trend (OECD 2011). In addition, labor market flexibility increased significantly thanks to the liberalization of temporary work. The employment protection legislation score collected by the OECD was 1.89 in 2007: only Denmark, Ireland, and the UK have a lower score among EU countries. Furthermore: a) between 1993 and 2003 Italy carried out the largest privatization plan in the OECD, selling assets equivalent to roughly 12% of GDP (Goldstein 2003); b) the 1995 pension reform was assessed by international scholars as one of the most far-reaching in Europe in terms of expected savings (Baccaro 2002b); c) new independent authorities were established over competition and telecommunication, among others (Barca 2006). In short, many of the reforms approved since the 1990s had a clear pro-market direction, hence the hypothesis that causally links their insufficiency to the economic decline begs the question of identifying a benchmark that, according to this view, was not reached; and I am not sure this benchmark can be identified.

Indeed, the question is rather why, despite all these market-conforming reforms, economic performance became dismal. If the most common explanations for the

Italian economic decline seem to be relatively weak,<sup>2</sup> what data can help us constructing an alternative story?

### 3. The Status Quo Ex-Ante

Before discussing economic reforms in the 1990s, I must address a tension that characterizes previous VoC-based analysis of Italy. Hall and Soskice (2001) grouped Italy along with other countries (France, Portugal, Spain, Greece and Turkey) that deserve neither the label of LME, nor that of CME. Later studies labelled Italy as a Mixed Market Economy, that is, not endowed with institutions that can systematically support non-market forms of strategic coordination, but provided with tight labor regulations, and a coordinating role of the State in the provision of credit, both of which did not allow the unfettered deployment of market mechanisms either (Hancké, Rhodes et al. 2007; Molina and Rhodes 2007). Finally, the coordination indexes introduced by Hall and Gingerich (2009, henceforth H/G) contradicted earlier interpretations by placing Italy on the CME side of the spectrum.

The H/G labor coordination score for Italy is 0.77 (on a scale from 0 to 1), which ranks the country in fifth position after Austria, Japan, Germany and Norway. The score on corporate governance coordination is 0.99, that is the second highest after Austria (1) and before Germany (0.95).<sup>3</sup> The high level of coherence that transpires from these data matches the good average economic performance of the Italian economy in the period observed by H/G (1971-1997), which was for the largest part characterised by strong economic growth.

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<sup>2</sup> Faini and Sapir (2005) confuted the argument that economic decline was caused by the advent of the Euro.

<sup>3</sup> While the H/G analysis refers to a period that largely precedes economic decline (1971-97), one out of the six variables used by H/G to compute their principal component index for Italy, the degree of wage coordination, is affected by the 1993 reform of wage bargaining institutions (see infra in the text). H/G underline that their regressions hold even if Italy is excluded by the sample (see notes 16-21 p.138 and Table 6 p. 474).

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Who is correct? Was Italy a hybrid model or a coordinated model? This tension can be solved by observing that, until the early 1990s, strategic coordination was prevalent in the Italian economy but not supported by a national coherent institutional framework. Rather, the State and local institutions provided supplementary underpinnings to an imperfect institutional design.

According to most interpretations, the driver of economic growth in post-war Italy was to be found in large manufacturing industries until the early 1970s, and in small firms organized in industrial districts between then and the late 1980s (Salvati 2000; De Cecco 2007). Short after WWII, an incoherent institutional design was this was mitigated by the intervention of public powers.

“Just like in the US, banks and non-financial firms were clearly separated by law. This was done so to prevent that the stability of the financial sector could be jeopardized by excessive exposure and control on non-financial activities. However, just like in Germany, banks were the main channel through which firms would access funding, while a marginal role was left to the stock market. [...] Compared to the US, both the market and investment banks were absent. Minority shareholders could not have their interests defended through hostile takeovers. Compared to Germany, banks could not monitor investments from the inside. The public economic agent, IRI, was therefore supplying to the lacking of these institutions. It was given shares in companies formally private, both among industrial firms and among financial firms.” (Barca 1999: 10-11, my translation)

This institutional setting was created in the 1930s and kept unchanged since the 1990s. It included both LME-type and CME-type of institutions; however, strategic coordination was underpinned by the State’s economic agency IRI, and the publicly owned banking system.<sup>4</sup>

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<sup>4</sup> I must underline that in this paper I am using the expression “strategic coordination” to identify practices of problem-solving opposed to “market coordination” based on relative prices and formal contracting. “Strategic coordination”, as in the original phrasing by Hall and Soskice (2001), includes “extensive relational or incomplete contracting, network monitoring based on the exchange of private information, inside networks, and more reliance on collaborative, as opposed to competitive, relationships”. This use of the expression “strategic

On the side of labor, high unemployment – rather than social pacts – ensured moderate wage dynamics until the late 1960s (Barca 2010; Magnani 2010). Later on, the labor code approved in 1970 was similar to those found in CME countries with a notable difference: the absence of co-decision practices (Barca 2010; Salvati 2000). This imperfect design, together with the fading coordinating capacity of IRI, contributed the decline of Italian large firms, which started already in the early 1970s (Salvati 2000; Rinaldi and Vasta 2012).

While large manufacturing was on the decline, the main driver of Italian economic growth since the late 1960s shifted to small firms, organized in industrial districts. In the early 1970s, firms with less than 50 employees made up 42% of total manufacturing workforce. In the early 1990s this number increased to 57.8%, in stark contrast to economies such as in Germany (21.7%), the UK (22.8%) or the United States (36.5%). In the same period, employment in large firms (with more than 499 workers) dropped from 24% to 13% (Brusco and Paba 2010). The reasons behind this shift go beyond the scope of this paper, however, it is noteworthy to emphasise that the industrial organization in the districts was quintessentially strategically coordinated.

Industrial districts are clusters of small firms operating in a given territory and producing a single class of goods. The emergence and growth of such clusters was observed as a spontaneous consequence of widespread support of different class of institutions including local authorities, chambers of commerce, trade unions, cooperative and rural banks, and so on (Pyke, Becattini et al. 1990; Sengenberger and Pyke 1992). Quantitative studies have shown that labor cost in small firms operating within industrial districts were consistently higher than in comparable small firms operating outside a “district” framework (Signorini 1994). However, labor

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coordination” is common in the VoC literature and as such relates to a mode of solving coordination problems, not to actual strategies. For example, with regards to the development of Italian capitalism discussed in this section, I do not not imply with it that the IRI, public banks or (later) institutions in the industrial districts have engineered and planned a strategy for economic growth. “Strategic coordination” describes the forms of coordination among economic actors in those milieus, not an actual plan.



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productivity and return on investment were higher as well, allowing for a dramatic increase in exports since the 1960s (Paniccia 1998; Becattini and Ottati 2006).

The financing of firms was based on informational logic: local banks would possess privileged information on both the investment plans and the firms, and allocated credit accordingly. Labor relations were also extremely cooperative. Previous literature argued that, at the firm level, in the districts or more generally at the territorial level, unions were often able to develop micro-type of concertation thanks to the distance from the national political struggle, which worked as a dividing force for organized labor (Regalia 2010: pp. 4-5). In other words, lacking a coherent set of national institutions, local-level arrangements were put in place to support systematic strategic coordination.

To sum up this short review, previous literature identified two phases of Italian economic development in the period characterized by sustained growth. The first was driven by large firms, the second by small firms organized in districts. However, strategic coordination similar to that characterizing fully-fledged CMEs was prevalent across the Italian economy in both large and small firms. Coordination was not underpinned by a coherent set of national institutions, but stemmed from the post-war settlement based on State agency at the national level, and from local-level arrangements in the districts.

This interpretation reconciles previous interpretations of the Italian political economy, apparently diverging between those who emphasised the imperfect institutional design of Italy, and the H/G scores or other works (e.g. Thelen 2001, see also Crouch 2005 on this) that treat Italy almost unambiguously as a Coordinated Market Economy. The H/G scores recalled earlier are derived from factor analysis of both institutional indicators (e.g. the level of wage coordination and minority shareholders rights) and output indicators (e.g. labor turnover and the size of the stock market). Hence, the H/G indicators captures the “underlying” prevalence of market versus strategic coordination in each political economy, and thus it detect the high level of strategic

coordination in the Italian economy until the 1990s, despite its formally hybrid national institutional setting.

From a more theoretical viewpoint, this interpretation also partially reconciles those who distinguish between coherence and complementarities (Crouch 2005, Hoepner 2012). The case of Italy shows that, until the 1990s, an imperfect institutional design can deliver strong economic growth. However, as the following paragraphs will show, this is because such design was nonetheless consistently supporting strategic (as opposed to market) coordination across the economy.

Indeed, since 1990, economic performance deteriorated. How did institutional change influence this trajectory?

## 4. Institutional Change and Its Effects

The list of economic reforms approved in Italy since the early 1990s is extensive. For the purpose of identifying the effect that these reforms had on the model of capitalism, that is, on the prevalent mode of coordination among economic actors, I will focus separately on the spheres of corporate governance (including finance) and labor, and then discuss their effects.

### *4.1 Capital and Corporations, Running to Stand Still*

The financial system and corporate governance laws are strictly intertwined in the VoC framework. A bank-based system of finance finds its optimal complement in laws that do not favour hostile takeovers and therefore underpin stable, concentrated ownership. In CMEs, banks have the task of monitoring investment, often by sitting in companies' boards. The resulting "patient" capital is provided on the basis of direct knowledge of industrial strategies. As a consequence, the stock market is typically underdeveloped in CMEs because even listed firms seek funds from banks, not from equities. The reverse logic applies to LMEs. Banks are prevented by law to own shares of non-financial firms, and minority shareholders rights are strongly protected. As a

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consequence, ownership is diffused through highly developed stock markets. In this setting, managers have to maximize share values, or otherwise brace themselves for a hostile takeover (Goyer 2011).

I have reviewed earlier the features of Italian regulations in this domain: a bank-based State-owned system impaired by the inability of banks to own shares in non-financial firms. Large-scale allocation of credit was authoritative and driven by political logic. At the local level, credit for small and medium enterprises was based on information and reputation. Corporate laws were somehow consistent with a closed and highly coordinated system of finance. Minority shareholders were nearly non-existent, ownership was therefore extremely concentrated and the stock market underdeveloped (Deeg 2005).

Reforms in this sector started in 1990 and 1993 when two banking laws were passed that changed regulations and paved the way for a large wave of privatization, mergers and acquisitions that finished in 2002. In roughly 10 years, public ownership of banks was reduced from 70% to 10%; if only listed banks are considered, the share of public ownership was down to zero. Additionally, the number of banks nearly halved, from 44 to 27 (Szego, De Vincenzo et al. 2008).

While these reforms can be understood as pushing the banking system towards a more liberal model, other reforms were going in the opposite direction. In fact, the 1993 law also allowed banks to acquire shares of non-financial firms, which is a core feature of coordinated models. Indeed, in liberal systems banks are mediators between capital holders and borrowers, and keep at arms-length with the latter. In LMEs banking risk is hedged not by relying on privileged information, but through diversification and publicly available information on performance (Deeg 2005; Goyer 2011).

In sum, while before the 1990s the system was strategically coordinated, after the reforms “the Italian banks seem to be trying to follow both the logic of voice [prevalent in CMEs] and logic of exit [prevalent in LMEs] simultaneously. But these logics are opposed.” (Deeg 2005: 191, text in parentheses added).

Hybridization is even more apparent if reforms of the banking sector are observed together with the two reforms of corporate governance approved in 1998 and 2003: the first applied to listed firms, the second to all companies. While the “German” model of banking was adopted, allowing banks to own non-financial firms, the code for listed firms followed the Anglo-Saxon model; the reform of governance structures, instead, explicitly refused to follow a model.

The broad aim of the 1998 reform was to increase competition in Italian capitalism (Bortolotti and Siniscalco 2001). In fact, Italian firms are often organized in pyramidal structures, whereby owning 50.1 per cent of a single firm can grant controlling rights to a constellation of companies that exceed widely the values of the shares actually owned. The resulting high concentration of ownership was considered to be detrimental to economic efficiency, therefore increasing minority shareholder rights seemed a good idea, except it was being combined with banking regulations pushing the opposite way (Bianchi, Bianco et al. 2003). LaPorta and co-authors have measured an index of minority shareholder power based on six dimensions (La Porta, Lopez-de-Silanes et al. 1999). Until the 1998 reform, Italy scored 1 in a scale from 1 to 6, similarly to Germany and other civil code countries. After 1998, Italy’s score raised to 4, that is as high as the US or the UK (Bortolotti and Siniscalco 2001).

In 2003, the icing on the cake of incoherent reforms was added through another reform giving each company the possibility to choose its preferred organizational statute, which could either follow the traditional Italian model, the Anglo-Saxon model, or the German model (Ghezzi and Malberti 2008). This reform epitomizes how Italian policymakers have chosen not to choose among different institutional setups, as if this would have no interactive consequence with the financial system on the one hand, and on the rest of the political economic institutions on the other hand.

#### *4.2 The Fragmentation of Italian Labor Market*

Labor market institutions are the second main leg of production systems. Symmetrically to what I have discussed already, institutions that support incomplete

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contracting, implicit exchanges, and other long-term arrangements underpin strategic coordination. Liberal institutions underpin instead an arms-length, hierarchical, market logic based on demand, supply and relative prices. Hence, CMEs are characterized by long job tenure, favoured by high(er) employment protection legislation. The latter insures employers against the risks of losing their investments in training, and insures employees against the risk of losing their jobs while endowed with hardly transferrable specific skills. Wages are strongly coordinated, with a prevalence of the higher bargaining levels (national or sectoral) to the local level. This prevents the emergence of high wage differentials, and reinforces incentives to long job tenures and to acquire productivity-enhancing specific skills.

The logic of complementarities is the opposite in LMEs, where workers have a low level of employment protection (and a higher level of unemployment protection) hence invest in transferrable general skills. Labor can be reallocated swiftly depending on companies' short-term profitability. Wages are bargained either individually by the single worker, or locally at the firm level. Wage differentials depend on the marginal productivity of each worker, or reflect cyclical performances of firms. As a consequence, in LMEs, average job tenure is shorter (Estevez-Abe, Iversen et al. 2001).

Large-scale institutional change in the labor market in Italy started in the early 1990s through a number of social pacts between governments, unions and employers (Salvati 2000). Social pacts were a complete novelty in Italian polity. They aimed at imposing a new discipline on wage negotiation in order to turn the just-approved currency devaluation into a real devaluation (Baccaro 2002).

To this purpose, in 1992-93 coordinated wage setting was established. Wage increases negotiated at the sectoral level would be based on a nationally-negotiated planned inflation rate, while still allowing for firm-level additional bargaining. As a result of this reform, the index for the level of wage bargaining increased from 2 to 3 (in a scale from 1 to 4), mirroring the increased importance of the national and sectoral-level (Visser 20013). Data already quoted from a survey run by the Bank of Italy on 2901

firms in the manufacturing sector say that during the 2000s, 30.6% of firms with more than 20 employees reached a company agreement, down from 43.4% in the 1990s (Banca d'Italia, 2009). Also the wage coordination index collected by Visser (2013) (that is, the extent to which wages move similarly across sectors and firms) increased from 2 to 4 (in a scale from 1 to 5) indicating that central organizations of labor and business negotiate national guidelines that are then observed across sectors through the institutionalization of sector and firm bargaining respectively. In summary, with regards to wage determination, these reforms moved Italy much closer to the CME side of the spectrum, establishing institutions that should promote long-term strategies for firms, and the acquisition of specific rather than general skills.

The 1996 reform of the labor code (approved by the centre-left with the agreement of trade unions) went in the opposite direction. Flexibility was increased by deregulating short-term appointments, agency work, and other types of so called "atypical" working arrangements. Compared to the traditional open-ended jobs, such "atypical" working arrangement included more lax regulation on hiring and firing, and also entailed severely reduced welfare entitlements and unemployment protection. A subsequent reform in 2001, approved by a centre-right coalition, deepened the cleavage between insider workers and "atypical" workers, further deregulating flexi-contracts. As a consequence of this reform, which increased flexibility at the margins while keeping intact the core regulations for insider workers, the EPL indicator collected by the OECD declined from 3.57 in 1992 to 1.89 in 2007. Italy moved from having a stricter EPL than Germany, France, Austria or Belgium, to having a weaker EPL than any of these countries and (among EU15 countries) only higher than Denmark, Ireland, and the UK. As a consequence, labor turnover increased: between 1992 and 2007 the share of employees that have been in the same job for less than one year nearly doubled, from 6.3% to 12.3% of the Italian total employment.

In sum, similarly to what I have observed in the corporate governance/finance realm, reforms of the labor market have also been contradictory. New wage setting

institutions increased coordination of Italian the labor market, while changes in labor laws pushed towards a more flexible system.

### 4.3 The Effect of Incoherent Reforms

Table 3 summarizes the main changes reviewed in the previous sections: no clear direction of change is detectable.

**Table 3.**  
Mapping institutional change in Italy circa 1990-2007

<b>Indicators of increased strategic coordination</b>	<b>Indicators of increased market coordination</b>
<b>Corporate Governance</b>	
Banks can own non-financial firms	Wholesale privatization of banking assets
The size of the stock market decreased in comparative terms	The power of minority shareholders sharply increased
<b>Labor Market and Industrial relations</b>	
The level of wage coordination increased	EPL sharply decreased
The degree of wage coordination increased	Job tenure decreased

In corporate governance, liberalizing reforms such as privatizations and increasing rights for shareholders were matched with a move towards more coordinated capital by allowing banks to own non-financial assets.

The reforms of the financial system hit two dimensions of the Italian strategic coordination capacity. First, the coordinating role of the State dissolved as a consequence of the nearly complete privatization of the system and increased international competition (Deeg 2005; Fiorentino, De Vincenzo et al. 2009). Second, mergers and acquisitions reduced fund availability for small and medium enterprises. Based on micro data from 1995 and 2003, Alessandrini and co-authors (2003) demonstrate that the supply of loans for innovation purposes in Italy was greatly reduced as a consequence of the increased distance of banks headquarters from the territory in which SMEs operated. In turn, the increased distance was caused by the

wave of mergers and acquisition that consolidated the Italian banking system in the same period. Arguably, this occurred exactly at a moment in which global processes of market internationalization increased the need of innovation for SMEs (see also Sapienza 2003).

The reduced availability of credit from banks was not offset by an increased recourse to the stock exchange. In 2007, capitalization of the Italian stock market was the lowest in western Europe, equivalent to circa 50% of GDP, markedly inferior to bank-based countries such as Germany (64%) or Austria (60%)<sup>5</sup> (see Jackson and Sorge (2012: 1148) on how Germany's financialization remained modest despite deregulatory reforms).

The 1993 reform allowed banks to acquire shares of non-financial firms. Unsurprisingly, they increasingly did so, playing an important role as owners of newly privatized, formerly State-owned, enterprises (e.g. telecoms, highways, and airlines). This contradicted the efforts to push towards a liberal system pursued by reforms of the corporate governance code. In LMEs in fact banks are mediators between capital holders and borrowers, and keep at arms-length with the latter (Goyer 2011). In fact, banks did not limit themselves to enter in privatized firms. Unfortunately I could not find time-series data, but data from 2013 show that banks own shares from at least 10% of non-financial companies listed in the stock exchange.<sup>6</sup> However, the incoherent institutional setting did not allow to the emergence of a coordinated-type of corporate governance. This is shown by Barucci and Mattsini (2008) that use a dataset including 190 large companies (listed and not listed) between 1994 and 2000. They investigate the reasons why banks have acquired shares of non-financial companies through multivariate regression analysis. Their conclusions are revealing of the consequences of a system with mixed incentives "Italian banks tend

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<sup>5</sup> Series: "Market Capitalization of Listed Companies", The World Bank (2012).

<sup>6</sup> Data kindly provided by Consob (available from the author upon request), the Italian regulator of the security market. Only banks that own at least 2% of shares of any given company must give notice to Consob, hence the figure probably underestimate actual bank ownership of non-financial firms.



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to invest in firms that have a credit relationship with them (...). There is little support, in the data, for the existence of a virtuous bank-non-financial company shareholding relation associated with governance/monitoring arguments. (...) We have not observed a significant move of the Italian banking system toward a more active involvement in the management of firms, to improve their governance or to overcome informational asymmetries, i.e., the factors that were considered, especially in the literature of the early 1990s, as the major advantage of the main bank systems of Germany” (2008: p. 2247).

The resulting output of this incoherent reforming is an increasingly closed capitalism.

Culpepper (2007) summarizes aptly: “Italy was in 1995, and remains in 2007, a system in which a small number of shareholders continues to exercise control over most of the companies listed on the stock exchange” (see also: Giacomelli and Trento 2005).

In other words, lacking a coherent framework the Anglo-Saxon-like reform of corporate governance had no consequences on distribution of ownership. In fact, pyramidal structures and cross-shareholding are also more pronounced than before. As argued by Giacomelli and Trento (2005) the layering of different reforms, as opposed to a coherent comprehensive strategy, has pushed owners to defend control against takeovers through all available means, while not increasing incentives to develop a market for firm ownership.

In the labor market, reforming schizophrenia had similar dysfunctional effects. On the one hand, industrial relations became more coordinated: comparative datasets detect that wage bargaining in Italy at the end of the first decade of the 2000s was both more coordinated and negotiated at a higher (national) level than it was in the late 1980s. However, these coordination practices relate to a decreasing portion of the labor force because, due to reforms of the labor codes, the majority of new hires since the late 1990s are employed in flexible regimes with reduced income and job protection, that is, without the features that combine well with other institutions of a coordinated market economy.

According to the Italian statistical office, since the late 1990s the majority of newly employed was hired through an “atypical” contractual arrangement. In 2011, 78% of newly hired was “atypical”. In 2008, these workers made up 27% of total employees (ISTAT 2002:178, 2009). In other words, the timing of entering in the labor market became the main predictor of the occupational status with younger cohorts being overwhelmingly employed through “atypical” jobs. As a consequence, in Italy the cleavage between insiders and flexible workers overlapped with a generational cleavage. Hence, the Italian type of labor market dualization cuts across occupations, sectors and firms: labor laws therefore do not support a clear set of incentives, and the expected premium from either general or specific skill became uncertain.<sup>7</sup> The distortion of incentives is reinforced by trends in wages and income. In fact, the occupational status (standard vs. “atypical”) is also a strong predictor of economic gains.

“Atypical” workers, between 1998 and 2004, enjoyed salaries 20% lower than regular employees, even controlling for a host of socio-economic variables including education and job type (Leomburni and Taddei 2012). The generational dimension of this rift appears from income studies: between 1991 and 2007 (that is, before the financial crisis – but the difference grew stronger after it) real income of those aged between 19 and 34 (35 and 44) remained constant (increased by less than 5%) while it increased by over 25% for those aged between 55 and 64 (Banca d'Italia 2010).

Given the presence of a negative wage premium based on the occupational status rather than performance, or education, the Italian type of labor flexibility while undermining incentives towards the acquisition (and within-firm development) of specific skills for the newly hired workers, also failed to incentivize towards the acquisition of general skills. Data on university enrolment support this interpretation. Starting with 2003, that is six years since the main labor reform was approved and ten

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<sup>7</sup> Not everywhere dualization occurred between age groups, for example in Germany flexibility seems confined to the service sector (including services to manufacturing industry: see Hassel, 2011).

years since the first reform of the wage bargaining institutions, university enrolment started to decrease. Between 2003 and 2010, the number of first-year university students was down by 24%. In the same period the number of high-school graduate (that is, those who are entitled by Italian law to enrol in university) constantly increased.<sup>8</sup>

Failure of diffusing incentives which are typical of LMEs pair with the fact that incentives that may derive from coordination are also undercut by flexibilization at the margins. Saltari and Travaglini (2006, S/T) show that if firms employ flexible workforce in order to pursue a cost-cutting strategy, this could theoretically explain productivity slowdown in Italy. Indeed, S/T's argument is even more plausible if flexibilization is considered in a context of dualization, that is, when other strategies become unfeasible for the contradictory set of incentives that operate simultaneously.

In sum, the examination of institutional change in Italy confirms that economic decline since the mid-1990s has followed the hybridization of its capitalism. The latter moved from a model in which the State and local-level institutions provided support to strategic coordination, to a hybrid model in which opposite logics operate at the same time, and therefore economic agents are provided with contradictory incentives.

My analysis has underlined several mechanisms through which previous complementarities were undermined while new ones could not emerge. In the next section I will show that the case of Italy allows a further step in the analysis in order to unpack the causal relationship between incoherence and economic decline.

## 5. Institutional Roots of Innovation Decline

### *5.1 The Algebra of Economic Decline*

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<sup>8</sup> Own calculation from Istat, "Il sistema dell'Istruzione", in <http://www.istat.it/it/archivio/17290>. Data available upon request from the author.

In the VoC scheme, institutional coherence is supposed to deliver stronger economic performance as an effect of efficiency gains from the consistency of market or non-market coordination modes. However, it remains unexplored how would these efficiency gains materialize, and why agents working in contradictory settings would not be equally able to adapt and find efficient mechanisms to coordinate. The Italian case offers cues on such exploration. Starting from the analysis of the “algebra” of Italian economic decline, I will now develop a hypothesis relating to all industrial economies in order to explain why the lack of coherence leads to economic decline.

Based on GDP decomposition and quantitative analysis, Daveri and Jona-Lasinio (2005, henceforth D/J) draw two main conclusions. First, economic decline in Italy depended on labor productivity decrease in the manufacturing sector since 1995. Second, labor productivity decline is a consequence of declining TFP in the manufacturing sector, while capital deepening remained roughly constant over time. Labor productivity decline, in turn, caused the collapse of Italian competitiveness. Between the 1970s and the 2000s, Italy lost comparative advantage in sectors characterized by high expenditure in R&D (and by incremental, rather than radical, innovation patterns) such as the automotive industry, office equipment and electrical machines, and retained comparative advantage in low R&D sectors such as textiles, furniture and clothing. However, the latter are also characterized by declining global demand (Faini and Sapir 2005). Italy’s share of world export decreased from 5.1% in 1990 to 3.2% in 2009.<sup>9</sup>

In sum, D/J and other empirical studies (Castellani and Zanifei 2004; Hall, Lotti et al. 2007) argue that the Italian economic decline is a direct consequence of a declining innovation capacity, which shows up as declining total factor productivity in the manufacturing sector, leading to export decline. The argument on the hybridization of

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<sup>9</sup> Series: “Exports and imports of merchandise and services, annual, 1980-2009”, Unctad (2011).

the model capitalism that I presented in this paper can now suggest a theoretical explanation for it, that is, extendable to other cases of economic decline.

## *5.2 Comparative Innovation Advantage*

Since their first formulation, Hall and Soskice contended that neither the CME model nor the LME model could be considered as a “superior” form of capitalist organization. They both produced satisfactory levels of growth and employment over the medium term. However, they promote different innovation patterns, leading to different international comparative advantages. Hall and Soskice advanced the distinction between radical innovation prevalent in LMEs and characterized by the introduction of “substantial shifts” in products or modes of production; and incremental innovation, prevalent in CMEs and instead characterized by a continuous process of small-scale improvement.

“efficiency in the production of some kinds of goods requires a capacity for radical innovation, while, in other kinds of goods, it requires a capacity for incremental innovation.

Radical innovation is especially important in fast-moving technology sectors, which call for innovative design and rapid product development based on research, as in biotechnology, semiconductors, and software development. It is also important to success in the provision of complex system-based products, such as telecommunications or defense systems, and their service-sector analogs: airlines, advertising, corporate finance, and entertainment. (...)

Incremental innovation tends to be more important for maintaining competitiveness in the production of capital goods, such as machine tools and factory equipment, consumer durables, engines, and specialized transport equipment.” (Hall and Soskice 2001: 39).

Institutional complementarities in each model of capitalism support innovation patterns which, through competitive push from international markets, lead to trade specialization patterns: this is why Hall and Soskice talk about a “*institutional comparative advantage*,” as an explanation for such patterns.

Data from Italy are suggesting, in addition, that the lack of institutional coherence yields both reduced specialization, and reduced overall innovation capacity. The hybridization of the Italian production regime, stuck in-between strategic and market coordination, fails to push the system towards specialization in either class of sector characterized by incremental or radical innovation. The lack of specialization drive pushes rates of innovation downward, which then feeds lower productivity, lower exports and lower growth. In order to gauge the generalizability of such argument, I now examine international statistics on patents.<sup>10</sup>

Previous attempts to verify the correspondence between the model of capitalism and innovation patterns gave mixed results. Mark Taylor (2004) uses a dataset from 1975 to 1999 and finds no support to the VoC claim. Akkermans and co-authors (2009) based on a more nuanced correspondence between technological sector and innovation patterns (i.e. radical vs. incremental) find some confirmation to the VoC claim at high levels of “radicality”.

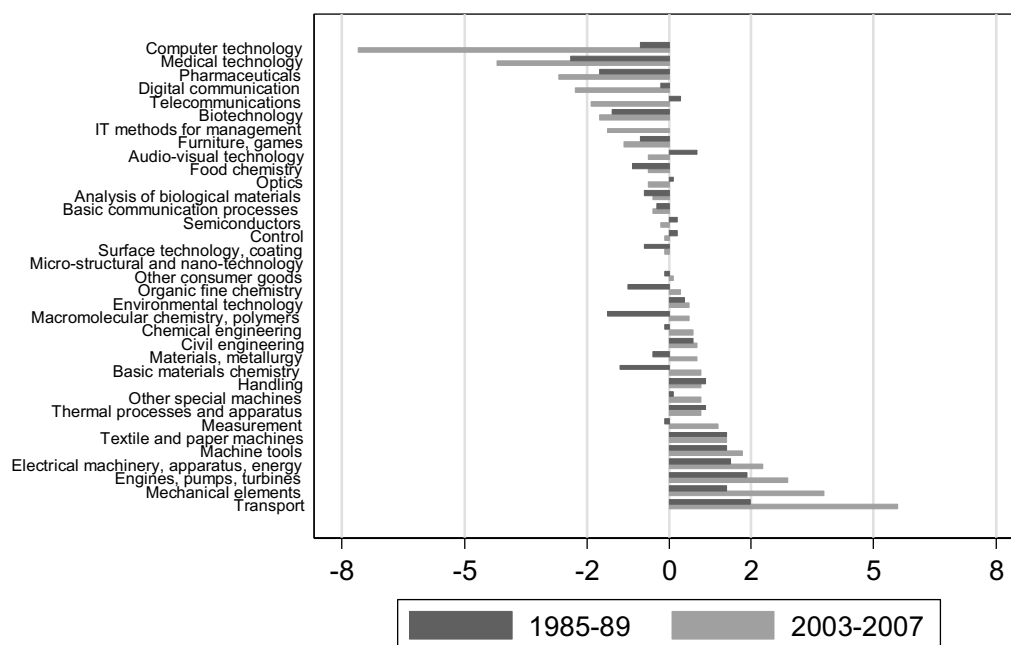
The argument I am advancing here suggests a link between the degree of specialization in innovation patterns (as a consequence of the institutional setting) and innovation volumes. To verify *prima facie* its plausibility, I start by observing the two traditional benchmark countries: the US and Germany. Figure 1 shows an index on comparative *innovation* advantage for the two countries. The Figure is loosely based on a similar graph in Hall and Soskice (2001, pp. 42-43). However, while the latter compared Germany and the US with the rest of the world, showing opposite patterns of specialization of the two countries, my graph compares directly the two economies. In fact, bars show the share of specialization of each country relative to the other, in 35 technology fields in two periods: 1985-1989 and 2003-2007. This index does not give

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<sup>10</sup> Recent literature aiming at testing VoC propositions with regards to innovation patterns focused on the effect of institutions on revealed comparative advantage (Schneider, Schulze-Bentrop et al. 2010; Schneider and Paunescu 2012). This literature is therefore assuming that patterns of innovation will show up in patterns of trade. Instead, I drop this assumption and focus on innovation only.

an indication on the volume of patents, but on the importance of each technological field, compared with the other fields, relative to another country.<sup>11</sup>

**Figure 1.**  
Comparative Innovation Advantage of the US (Left) and Germany (Right)



Note: Per each  $i$  technological sector, being  $p$  the number of patents, US indicating United States and G indicating Germany, the bars correspond to:  $(p_{G,i}/p_{G,tot}) - (p_{US,i}/p_{US,tot})$ . The sectors are then ranked in ascending order relating to the second period.

Source: WIPO

The figure is surprising insofar it shows that using updated figures on patent to those available in original Hall and Soskice formulation, the VoC expectation is strongly confirmed. In fact, differences in patent specialization in Germany and the US increased dramatically in less than 20 years – characterized by booming international trade – and they increased in the expected direction. Germany increased its relative

<sup>11</sup> This index, which is similar to the Balassa index of revealed comparative advantage, is formally equal to:

$$innadv_{ug,i,t} = (p_{g,i,t}/p_{g,tot,t}) - (p_{u,i,t}/p_{u,tot,t})$$

Where  $p$  is the total number of patents,  $i$  the technology field,  $u$  stands for the US,  $g$  for Germany, and  $t$  for the time period.

volume of patents in sectors characterised by incremental innovation patterns, such as Transports; Mechanical Elements; Engines, Pumps, Turbines; and Electrical machinery and apparatus. Conversely, the US increased relative innovation in sectors characterized by radical patterns, such as for example Computer Technology, Medical Technology, Pharmaceuticals, and Digital communication. In the same period, patent application filing increased in Germany by 46% and by 164% in the US. Despite a trend favourable to the US, in 2007 patents per capita in Germany were still more than in the US (0.64 vs. 0.48 per 1000 person).

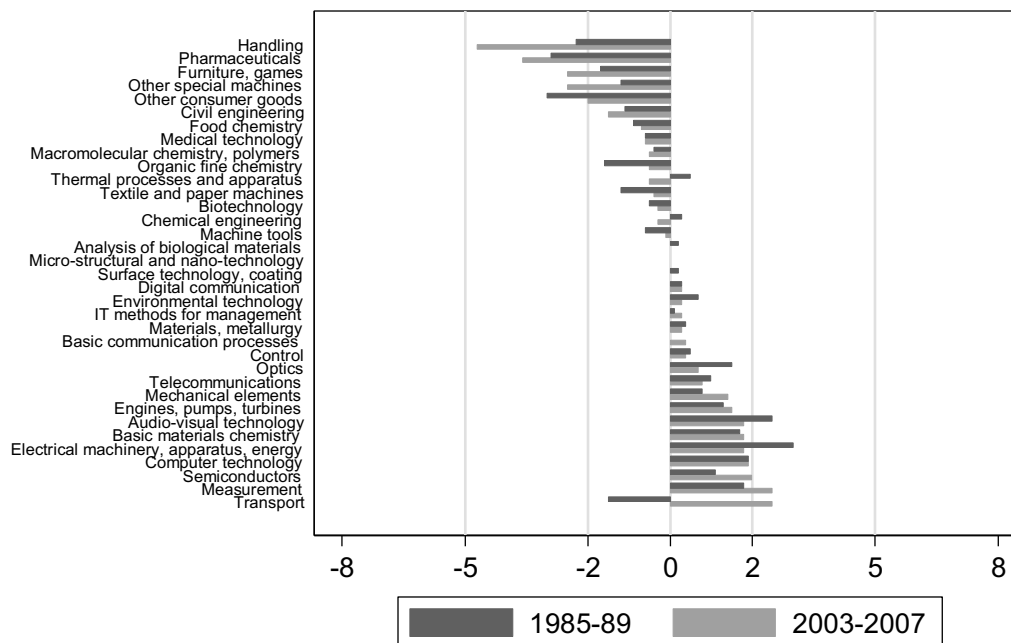
In contrast to Figure 1, a similar index on comparative innovation advantage computed on Germany and Italy does not yield many insights. Figure 2 shows that differences between Germany and Italy were in the late 1980s, and still are in the mid-2000s, narrower than those between Germany and the US. Second, no pattern of change clearly emerges. Vis à vis Germany, Italy increased relative innovation advantages in sectors very diverse as to patterns of innovation that they warrant, such as Handling, Pharmaceuticals, and Furniture. Between 1985 and 2007 Italian patent application files decreased by 10%, which contrasts not only with data on Germany and the US reported above, but with the average change for a group of 19 OECD countries (+94%).

The combined examination of the US/Germany comparison and the Italy/Germany comparison, as well as data on total patent application files, seems consistent with the logic I am suggesting: the lack of institutional advantage leads to the lack of specialization with a detrimental effect on innovation volumes. Figure 3 plots data on patents for the 19 OECD countries, and it further corroborates this hypothesis.



Figure 2.

Comparative Innovation Advantage of Italy (Left) and Germany (Right)



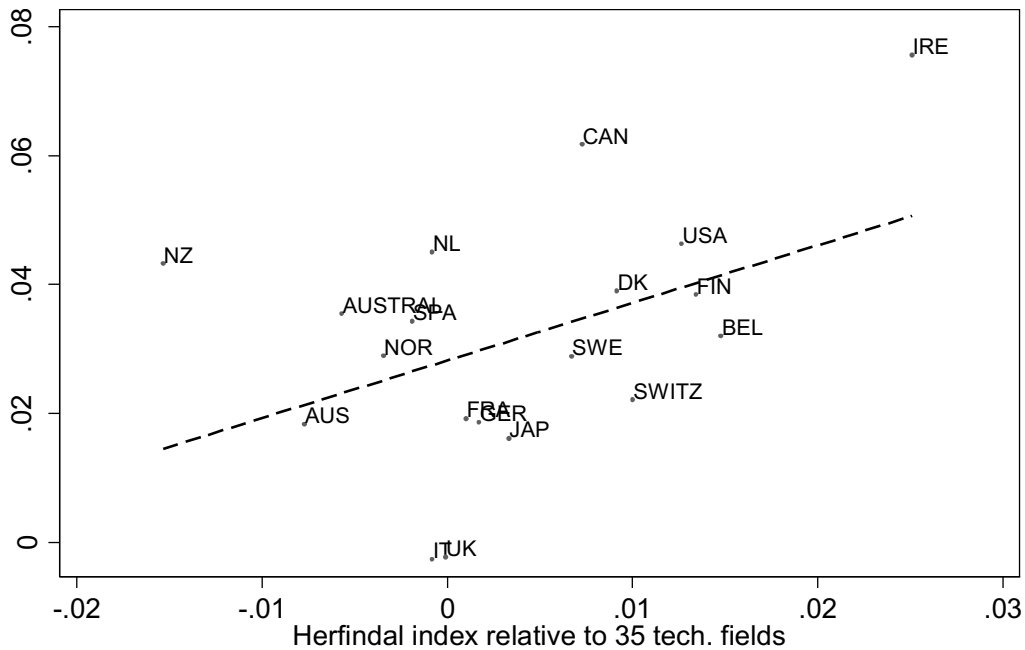
Note: See Figure 1 notes for details.

Source: WIPO

The plot shows a strong correlation between average percentage growth of patent concentration and total patent applications. This approach has one advantage compared to previous tests of the VoC hypothesis on innovation: it does not require assumptions on the type of innovation that is prevalent in each technological field. As persuasively argued by Mark Taylor (2004), innovations can be “radical” or “incremental” in the same technology field depending on a variety of factors, including the age of the technology or the kind of production that, within each field, takes place. For example, innovations in the car industry were radical at the turn of the 20<sup>th</sup> century, while incremental in more recent decades. Additionally, innovation might differ in kind across countries within the same field of technology. Instead, by focusing on a simple metric of patent concentration, Figure 3 shows that high(er) level of specialisation is correlated to high(er) volumes. Of course, at this stage of the analysis, this correlation (the coefficient for 19 observed country averages reported in

the plot is 0.43) does not demonstrate causation. As a preliminary test I have excluded the existence of reversed causation, because the correlation holds even with a three-year lag.<sup>12</sup>

**Figure 3.**  
Correlation between patent concentration and patent growth  
(average y-o-y change 1985–2007)



Source: Author's calculation from WIPO dataset

A complete test of this hypothesis, systematically linking patterns of innovation with volumes of innovation across country and over time will require an empirical study on its own taking into consideration a broader number of causal factors, as well as competing theoretical explanations. However, if confirmed, this hypothesis drawn from the case of Italy could connect two important dots in the literature on models of capitalism.

<sup>12</sup> Data not included for reasons of space but available from the author upon request.

## 6. Conclusions

This paper offered a novel test to one of the key expectations of the Varieties of Capitalism literature: the purer the model of capitalism, that is the more coherent the institutional setup towards supporting a strategic or market-based mode of coordination, the stronger the economic performance. It did so with reference to within country variation over time, and with reference to the critical case of an advanced industrialized country that underwent a clear trend of economic decline since the early 1990s: Italy. In this period, Italy was the worst economic performer among developed countries. Beside the empirical interest for the enquiry, Italy is a critical case to test the VoC hypothesis because its model of capitalism was deeply reformed at the time when its economic decline commenced. Additionally, through the test of the VoC hypothesis this paper also addressed the following empirical puzzle: why many economic reforms, which were positively regarded by international observers, delivered such a dismal economic effect?

The paper found that the institutional reforms have hybridised the Italian model of capitalism. On the one hand reforms have destroyed previous patterns of strategic coordination supported by State actors and local institutions. On the other hand, reforms have pushed towards increased strategic and market coordination at the same time, within each of the key institutional spheres of labor and corporate governance (including finance). This hybridization resulted in a decreased innovation capacity, which followed the lack of a specialization push in a context of increased trade. Reduced innovation capacity, in turn, negatively affected (labour and total factor) productivity growth, export volumes, and overall economic performance.

This paper contributes previous literature on the change of southern European capitalism. During the same period of scrutiny, France experienced profound changes in its model of capitalism, which exhibits increasingly hybrid characteristics. Existing literature is primarily concerned with the causes of institutional change, and the reason behind policy choices leading to those changes (Amable, Guillaud and

Palombarini 2012). The combined observation of Italy and France seems to suggest that in the absence of strongly coherent institutional settings institutional change is more erratic, happens in a less systematic ways, while complementarities across spheres of the political economy are less easily preserved.

Finally, international data on patents presented in this paper allow articulating a novel hypothesis that extends this explanation to other cases of economic decline by unpacking the relationship between institutional coherence, comparative innovation advantage, and economic performance. Descriptive statistics suggest that the relationship between the degree of specialization and innovation volumes seems to hold across OECD countries, which looks as a promising research avenue ahead.

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