

Abstract: By making the most of a newly-available large set of historical statistics, the paper outlines the main features of Italy's modern economic growth from unification (1861) until the present day (2011). Alongside national GDP estimates, regional inequality, living standards and inequality of personal income distribution are also discussed. Over the long run, Italy successfully caught up with the most advanced economies, and did so in a virtuous manner: while the regional imbalance persisted, at the national level economic growth was accompanied by a secular decline in income inequality. This pattern has come to a halt: during the last two decades, stagnation in GDP per capita has been mirrored by an unprecedented decline in productivity; southern regions have further lagged behind the rest of the country, and income inequality is on the rise. Italy has entered a phase of rapid relative economic decline.

JEL classification: D31, N13, N14, N33, N34, O11, O52.

Keywords: GDP, productivity, modern economic growth, living standards, inequality, poverty.

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1. Introduction

Summarising the features of Italy's economic growth over the last one century and a half in just a few pages is no easy task, but this is what we have aimed to do in this paper. Recent celebrations marking the 150th anniversary of the unification of Italy have given the scientific community a great deal of statistical reconstructions that justify the work carried out in the following pages. We are now able to discuss new national series of the main macro-economic indicators (GDP, productivity, labour force), and also consider long-run estimates of regional GDP, changes in living standards and in the personal distribution of income inequality. In the light of new evidence, an analysis of Italy's "modern economic growth" allows us not only to identify new "facts" characterising the country's history, but also to assess the strength of the main interpretational hypotheses regarding the path which led the Italians "from the periphery to the centre".¹

The Kingdom of Italy was officially born on 17 March 1861 and was the result of a unification process that was not a foregone conclusion, even if relatively quick: the process started barely two years earlier and formally ended with the annexation of Rome in 1870.² With over 26 million people, it was a country rich in labour – with the fifth largest population in Europe after France, Germany, Austria-Hungary and the United Kingdom – but poor income-wise, and even poorer with regard to human and physical capital, especially in southern Italy: the *Mezzogiorno*³. The word which, perhaps more than any other, summarises the economic conditions of mid-nineteenth century Italy is the one at the heart of the reflection by Alexander Gerschenkron, "backwardness".⁴ The poverty of the newborn Kingdom of Italy was of many forms. It was seen not only in the traditional monetary indicators (GDP, household consumption

¹ The expression is by Vera Zamagni, *The Economic History of Italy, 1860-1990* (Oxford, 1993).

² The origins of the Italian unification process (the *Risorgimento*) date back to the Napoleonic period. See Derek Beales and Eugenio F. Biagini, *The Risorgimento and the Unification of Italy, second edition* (London, 2002).

³ Luigi Cannari and Salvatore Chiri, "Le infrastrutture economiche dall'Unità," in Pierluigi Ciocca and Gianni Toniolo (eds.), *Storia economica d'Italia, vol. III, t. 1* (Roma-Bari, 2003): 225-97. Andrea Giuntini, "Nascita, sviluppo e tracollo della rete infrastrutturale," in Franco Amatori, Duccio Bigazzi, Renato Giannetti and Luciano Segreto (eds.), *Storia d'Italia. Annali, vol. XV, L'industria* (Turin, 1999): 551-616. Michelangelo Vasta, *Innovazione tecnologica e capitale umano in Italia (1880-1914). Le traiettorie della seconda rivoluzione industriale* (Bologna, 1999). Brian A'Hearn, Claudio Auria and Giovanni Vecchi, "Istruzione," in Giovanni Vecchi (ed.), *In ricchezza e in povertà. Il benessere degli italiani dall'Unità a oggi* (Bologna, 2011): 159-206.

⁴ Alexander Gerschenkron, *Economic Backwardness in Historical Perspective* (Cambridge, Mass., 1962).

and wealth), but also in every other sphere that goes to define the wellbeing of a population. The Italians led a short life (life expectancy at birth was 29-30 years), were extraordinarily ignorant (the illiteracy rate was almost 80 percent: adults spent less than one year in school), and lived in a harsh epidemiological environment, as borne out by health outcome indicators and anthropometric data⁵.

One hundred and fifty years on, Italy is a completely different place: the country has defeated poverty and has completed its race towards prosperity. Non only this, but recent studies show that, throughout most of its history, Italy managed to link economic growth with greater and growing equality in the personal distribution of income. Unlike what is found in studies on the United States and United Kingdom,⁶ the absence of a trade-off between efficiency and equity in the early stages of development makes Italy a case study for the international scientific community. What has enabled the Italians to distribute the benefits of growth and to successfully contrast the tendency towards increasing economic inequality? On the negative side, the new estimates confirm the dualistic nature of Italian economic growth: if the *Questione meridionale* (North-South gap) is such a well known issue from time immemorial,⁷ the data we are presenting in this paper reveal how the origin of the country's territorial differences dates back to over a century ago (the initial conditions were significantly better in the central and northern regions compared to the southern ones as far back as the unification period) and show a process of stubborn lack of territorial integration. Secondly, without exception, all the indicators examined in the paper suggest that in the last two decades the Italians' virtuous race has come to a halt. Italy is unmistakably declining, at least in relative terms.

This paper is organised as follows. Section 2 analyses the main macroeconomic indicators at national level. Section 3 summarises the most important historiographic interpretations. Section 4 documents the territorial differences with respect to Italy's

⁵ Vecchi, *In ricchezza e in povertà*.

⁶ Jeffrey G. Williamson and Peter H. Lindert, *American Inequality: A Macroeconomic History* (New York, 1980); Jeffrey G. Williamson, *Did British Capitalism Breed Inequality?* (Winchester, 1985).

⁷ The beginning of the literature on the southern Italy question dates back to the 1870s and to the writings of Leopoldo Franchetti and Pasquale Villari: Leopoldo Franchetti, *Condizioni economiche ed amministrative delle province napoletane: Abruzzi e Molise - Calabrie e Basilicata / appunti di viaggio* (Florence, 1875); Pasquale Villari, *Le lettere meridionali ed altri scritti sulla questione sociale in Italia* (Florence, 1878). An overall review of the debate is provided by Emanuele Felice in *Divari regionali e intervento pubblico. Per una rilettura dello sviluppo in Italia* (Bologna, 2007), 18-64.

GDP. Section 5 takes a step “beyond GDP” and focuses on income inequality and poverty. Section 6 provides a conclusion.

2. Italy’s long-run economic growth

2.1. The new GDP series

Italy was among the first countries in the world to boast its own historical series of national accounts: in 1957, the Italian National Statistics Institute (Istat) published, for the first time, a complete system of national accounts with yearly time series starting from 1861 (Italy’s unification) and ending in 1955.⁸ It is now widely recognized that Istat’s pioneering work had serious inconsistencies, which were not fully remedied by subsequent revisions. The main criticism with regard to these “official” reconstructions of Italy’s national accounts is that the statistical series were never accompanied by an adequate description of the methods and sources used: without these elements it is difficult – if not impossible – to evaluate the quality of the data. Therefore, the scientific community soon regarded the “first generation” time series on Italy not up to international standards.⁹

Scholars did not take long, since the late 1960s, to start up new sets of historical estimates of GDP and its components. The results have made a significant contribution to improving our knowledge of the long-term trends as well as the cyclical fluctuations of the Italian economy. However, the lack of coordination between researchers has prevented the country from achieving a long-term reconstruction of the Italian national accounts. It was only on occasion of the 150th anniversary of Italy’s unification, celebrated in 2011, that a project coordinated by the Bank of Italy in cooperation with Istat and Rome’s “Tor Vergata” University published a reconstruction of the national accounts, complete in both the production and expenditure sides, for the whole century and a half since unification.¹⁰ Figure 1 summarises the new series relative to GDP per

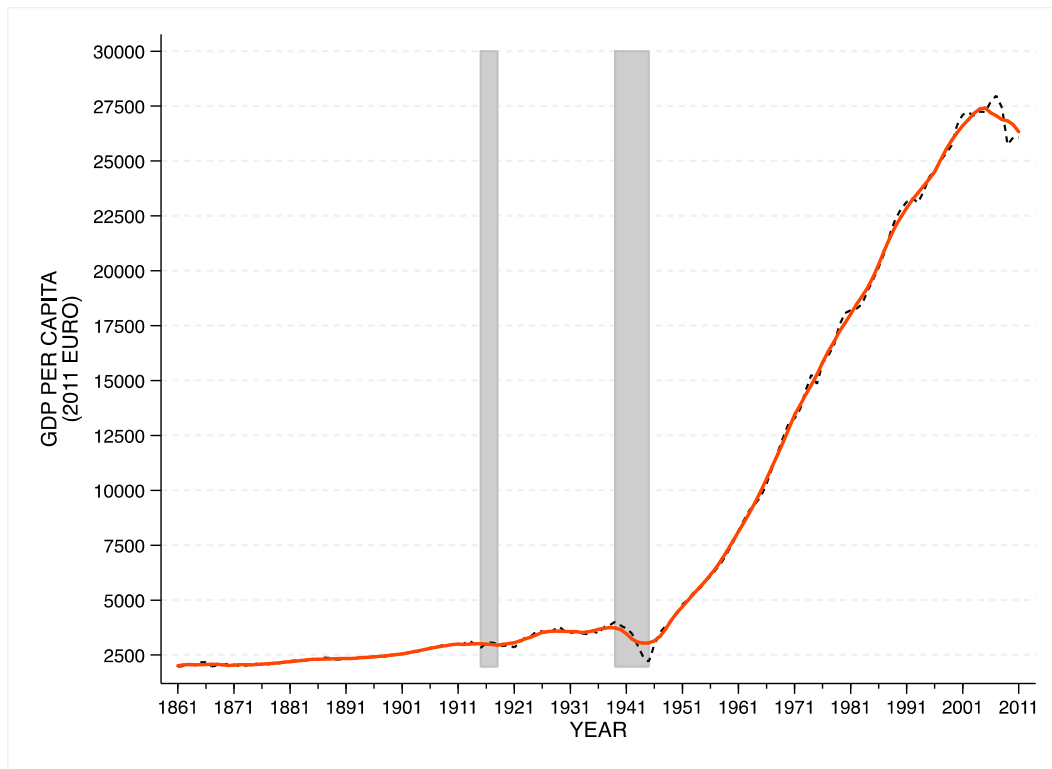
⁸ Istat, “Indagine statistica sullo sviluppo del reddito nazionale dell’Italia dal 1861 al 1956,” *Annali di Statistica*, s. VIII 9 (Rome, 1957). The material was then updated in three subsequent publications: Istat, *Sommario di statistiche storiche dell’Italia, 1861-1965* (Rome, 1968); Istat, *Sommario di statistiche storiche italiane, 1861-1975* (Rome, 1976); Istat, *Sommario di statistiche storiche italiane, 1926-1985* (Rome, 1986).

⁹ Jon S. Cohen and Giovanni Federico, *Lo sviluppo economico italiano. 1820-1960* (Bologna, 2001).

¹⁰ Alberto Baffigi, “Italian National Accounts, 1861-2011,” *Bank of Italy, Economic History Working Papers* (no. 18, 2011). Alessandro Brunetti, Emanuele Felice and Giovanni Vecchi, “Reddito,” in Vecchi, *In ricchezza e in povertà*: 209–34 and 427–9.

head, updated in the light of recent contributions,¹¹ showing the long-term trend of Italy's "modern economic growth".¹²

Figure 1. GDP per capita, Italy 1861-2011



Notes: 2011 euros, present borders. Sources: Brunetti, Felice and Vecchi, "Income."

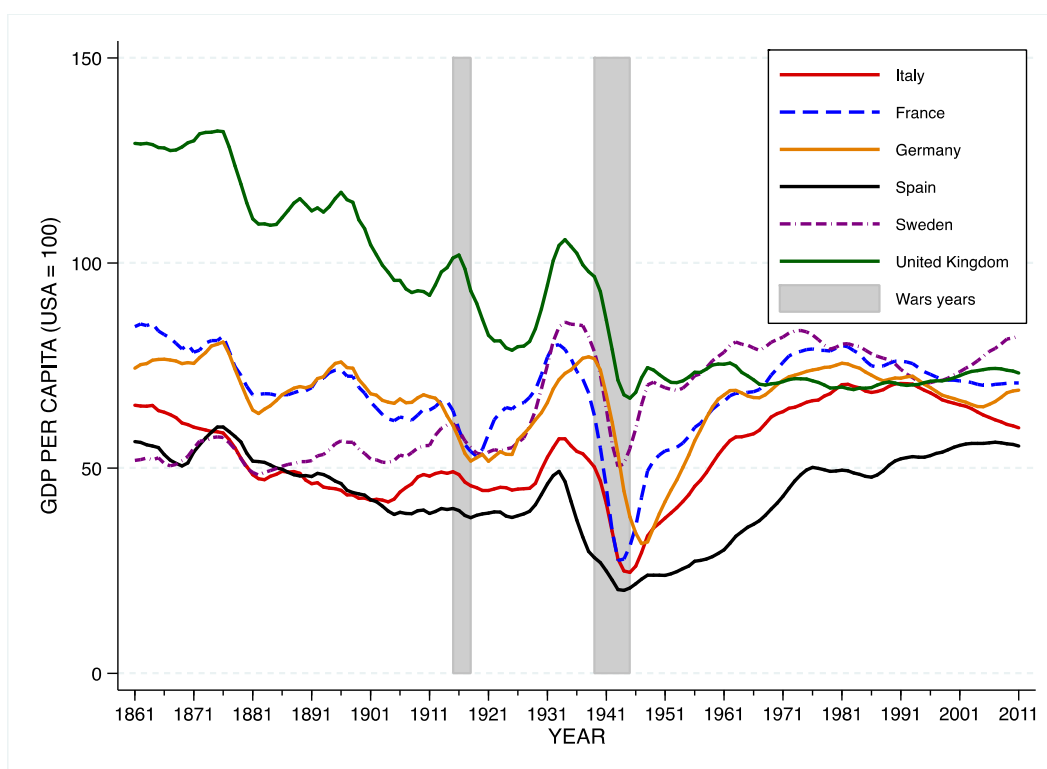
Since Italy's unification, Italian GDP per head has increased about thirteen fold, recording an average annual growth rate of just under 2%. The figure shows a clearly non-linear trend: since the end of World War II, per capita GDP has multiplied over 7 times, while in the previous ninety years (1861-1951) it had just about doubled. If the overall result is remarkable in absolute terms, it appears to be in line with what is found in other countries. In particular, and in contrast to some clichés that have been handed down for decades in historiography, international comparisons provide little support to any Italian-specific "economic miracle": with reference to the series elaborated by

¹¹ Namely the inclusion of the industrial estimates for the years 1938 to 1951, from Emanuele Felice and Albert Carreras, "The roots of success: industrial growth in Italy reconsidered, 1911-1951," *Explorations in Economic History* 49 (no. 4, 2012): 443-460.

¹² Simon Kuznets, *Modern economic growth: rate, structure, and spread* (Oxford, 1966).

Maddison,¹³ the features of Italy’s growth over the hundred-year period are qualitatively similar to those of other advanced countries (Figure 2). Indeed, Italy has lagged behind the top performers: in 2011 Italian GDP per head was 59% of the US figure, just above the figure for Spain (55%), but still below those of other OECD countries, like Germany (70%), France (71%), the United Kingdom (72%) or Sweden (84%).

Figure 2. GDP per head in selected countries, 1861-2011 (USA = 100)



Source: Andrea Brandolini and Giovanni Vecchi, “Standards of Living,” in Gianni Toniolo (ed.), *The Oxford Handbook of the Italian Economy Since Unification* (Oxford, 227-248), p. 229. The series have been smoothed with a 5-period moving average.

The literature on the varieties of capitalism traditionally divides national experiences between liberal market economies and co-ordinated market economies.¹⁴ Among the former are United Kingdom and United States, among the latter Germany and Sweden. Italy is considered to be in an “ambiguous position”, together with France and Spain;¹⁵

¹³ Angus Maddison, *The World Economy: A Millennial Perspective* (Paris, 2001); Angus Maddison, *Historical Statistics of the World Economy: 1-2008 AD* (Paris, 2010), www.ggd.net/maddison/content/shtml.

¹⁴ Peter A. Hall and David Soskice, “An introduction to the varieties of capitalism,” in Peter A. Hall and David Soskice (eds.), *Varieties of Capitalism* (Oxford, 2001): 1-68.

¹⁵ *Ibid.*, p. 21.

some have argued that these countries belong to a third type of capitalism, the “Mediterranean” one (also including Greece, Portugal, and Turkey), characterized by extensive State intervention and a larger agrarian sector.¹⁶ State intervention, in a broader sense, has been emphasized also by Franco Amatori who defined the Italian model as a “political capitalism”,¹⁷ while Della Sala described it as a “dysfunctional state capitalism”.¹⁸ According to figure 2 there is no clear superiority of any specific type of capitalism, at least over the long-run.¹⁹ When looking at growth rates, the Italian model appears to be more similar to the co-ordinated market economies, than to the liberal ones; if there is some exceptionality of the Italian capitalism, this becomes manifest only in the very last stretch, when the Italian falling back is unparalleled by any other European country.

2.2. Structural change

The trend in per capita GDP was accompanied by a deep transformation in the country’s production structure. The historical reconstruction carried out by Broadberry, Giordano and Zollino²⁰ allows us to comment on some of the most important aspects of this change. The first comment concerns the trend of the economically active segment of the population. According to census data, in 1861 almost 50% of the total population was classified as “workers” (figure, 3, the headcount curve): this percentage of workers remained stable for nearly a hundred years and then decreased from the end of World War II, to around 40% in 2011. In this regard, Italy’s pattern does not closely resemble that of other European countries, where the percentage of the employed tended to increase with industrialisation, even exceeding 50% (as in France and Germany in the first half of the twentieth century), to then decrease in the latter half of the 20th century.

¹⁶ Martin Rhodes, “Globalisation, Labour Markets and Welfare States: A Future of ‘Competitive Corporatism’?”, in Martin Rhodes and Yves Meny (eds.), *The Future of European Welfare: A New Social Contract?* (London, 1998): 178-203.

¹⁷ Franco Amatori, “Italy: The Tormented Rise of Organizational Capabilities between Government and Families,” in Alfred D. Chandler, Franco Amatori, and Takashi Hikino (eds.), *Big Business and the Wealth of Nations* (Cambridge, 1997): 246-276. See also Franco Amatori, “Entrepreneurial Typologies in the History of Industrial Italy: Reconsiderations,” *Business History Review* 85 (Spring 2011): 151-180 (p. 154).

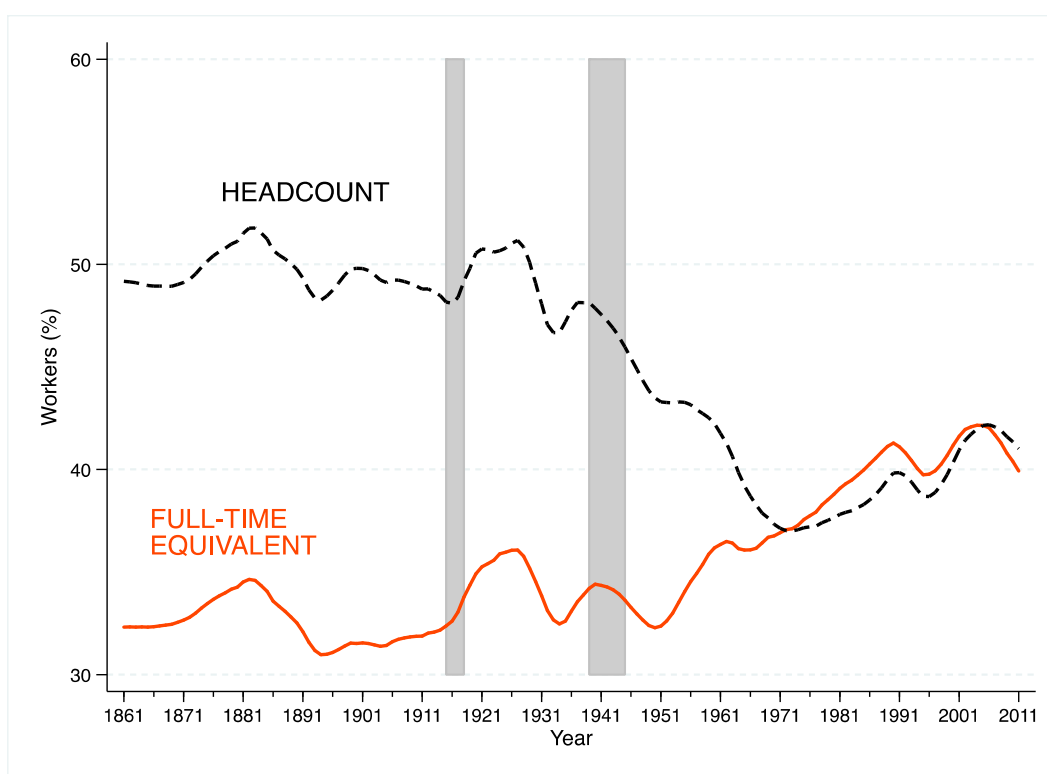
¹⁸ Vincent Della Sala, “The Italian model of capitalism: on the road between globalization and Europeanization?”, *Journal of European Public Policy* 11 (no. 6, 2004): 1041-1057.

¹⁹ See also Hall and Soskice, “An introduction,” p. 20.

²⁰ Stephen Broadberry, Claire Giordano and Francesco Zollino, “A Sectoral Analysis of Italy’s Development, 1861-2011,” *Bank of Italy, Economic History Working Papers* (no. 20, 2011).

Italy's trend is more similar to the one seen in Japan, even if the percentage of Japanese workers was higher (from over 60% to 45%).²¹ The second curve in figure 3, called "full-time", has been obtained from the previous one by transforming the number of workers into full-time equivalent workers following the procedure illustrated in O'Brien and Toniolo.²² The distance between the two curves is an approximate measure of involuntary under-employment, a feature of the traditional economy that disappeared only in more recent decades.²³

Figure 3. Workers, 1861-2011 (% of total population)



Sources: Authors' elaboration on Broadberry, Giordano and Zollino, "A Sectoral Analysis". Figures are 5-period moving averages, at present boundaries.

²¹ Pierangelo Toninelli (ed.), *Lo sviluppo economico moderno: dalla rivoluzione industriale alla crisi energetica* (Venezia, 2006), 599.

²² Patrick K. O'Brien and Gianni Toniolo, "The poverty of Italy and the backwardness of its agriculture before 1914," in Bruce M.S. Campbell and Mark Overton (eds.), *Land, Labour and Livestock. Historical studies in European agricultural productivity* (Manchester, 1991): 385-409 (p. 399).

²³ From 1973 the two series show a reverse trend, above all, due to an intensification of working hours in the tertiary sector. Since 2006 the full-time equivalent curve has returned below the headcount curve as a result of the spreading of part-time and temporary work.

The distribution of the active population per sector of economic activity has changed a great deal over the century and a half since Italy's unification. In discussing this change, Kuznets stressed the rapidity of the workforce reallocation process between agriculture, industry and the services sector: "the distinctive feature of modern economic growth is not the shifts in the long-term proportions of industries in product and resources (...), but rather the rapidity of these shifts and their striking magnitude when cumulated over the decades."²⁴ Figure 4 shows the growth in the percentage of (full-time equivalent) workers employed in the three sectors and highlights the two broad development lines of the period under study, that is *a*) the "emptying" of the agricultural sector (from over 60% in the first decade of post-unification Italy to 5% in 2011) and *b*) the "crowding" of the services sector (from 20% in 1861 to almost 70% in 2011). This is obviously a far-reaching change – much greater than the above statistics would suggest. To again quote from Kuznets:

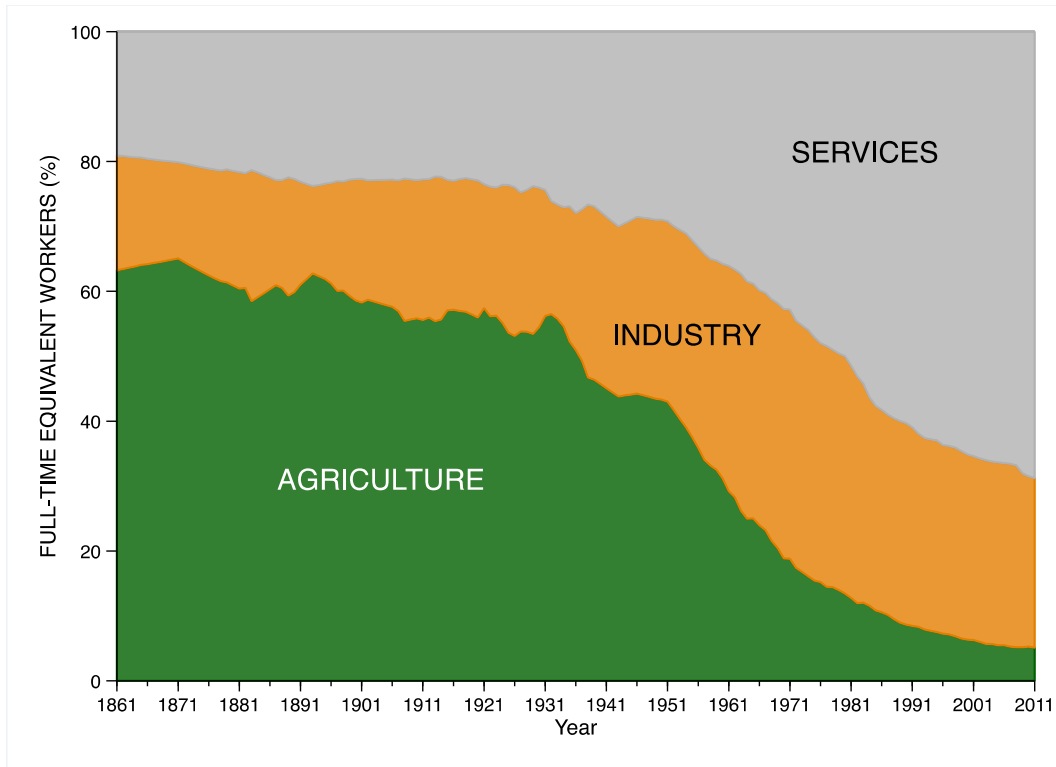
The shift from agriculture to other sectors means urbanization and the numerous corollaries which this change in mode of life implies; it means a shift from small, individually managed enterprises, to large-scale productive units, often organized in even larger economic management units--with all the implications that follow for economic status of human beings and the division of society into economic and social classes; it means far-reaching changes in the structure of final use of national product, with its division between consumption and investment, and various categories within each; and it means a more complex economic structure which inevitably brings in its wake widening economic activities of the state.²⁵

In value-added terms, the trend in the percentages in the three sectors – agriculture, industry and the services – is similar to the employment one, but it also shows some differences in intersectoral productivity. Because of lower productivity in agriculture, the percentage of product is always lower than that of the workers, while the decrease is earlier and more marked: while agriculture accounted for 49% in the unification period, this percentage decreased to 38% on the eve of World War I and then to 26% at the start of the Italian "economic miracle" (the boom years of the 1950s and 1960s); it is currently around 2%. The percentage for industry is greater and almost reached 40% during the economic miracle years; services exceeded 50% of the total already in the 1960s, and currently account for about 75% of the total (table A.1, Statistical appendix).

²⁴ Kuznets, *Modern economic growth*, 86.

²⁵ Simon Kuznets, "Industrial Distribution of National Product and Labor Force," *Economic Development and Cultural Change* 5 (no. 4-Supplement, 1957): 2-111 (pp. 56-57).

Figure 4. Labour force distribution by economic sectors, Italy 1861-2010.



Sources: Authors' elaboration on Broadberry, Giordano and Zollino, "A Sectoral Analysis".

The availability of new statistical series concerning the workforce and capital stock²⁶ enables us to also identify the forces responsible for the long-term GDP movements. The more interesting results have been summarised in Table 1. GDP (column *a*) reflects the overall growth of the Italian economy, that is, of the goods and services produced for the market every year; per capita GDP (column *b*), which includes population growth at the denominator and thus approximates average income, may in turn be broken down into the product of GDP per worker (column *c*), an approximation of work productivity, and number of workers per inhabitant (column *d*), an approximation of the employment rate. The right-hand side of Table 1 shows the results of a growth-accounting exercise enabling us to separate and measure the contributions of the quantity of labour (L_t), of capital (K_t) and of total factor productivity (A_t), assuming a Cobb-Douglas production function $Y_t = A_t \times (K_t)^\alpha \times (L_t)^{1-\alpha}$ where $\alpha = 0.35$. A_t is a factor measuring the efficiency with which capital and labour are

²⁶ Broadberry, Giordano and Zollino, "A Sectoral Analysis".

employed in production: it captures both the technological change not incorporated in capital and the gains of efficiency in production processes due to the reallocation of activities from one sector to another.²⁷

Table 1. GDP and sources of growth in Italy 1861-2011

	GDP	GDP per capita	GDP per worker	workers per pop	GDP (col. a) growth accounting			Contribution (%)		
	(% changes, yearly average in periods)				Labour	Capital	TFP	Labour	Capital	TFP
Years	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
1861-1881	1.22	0.61	0.26	0.35	0.61	1.14	-0.41	46	85	-31
1881-1911	1.73	0.99	1.30	-0.30	0.32	0.82	0.68	17	45	37
1911-1938	1.55	0.95	0.60	0.34	0.63	-0.93	1.95	38	-56	118
1938-1951	2.43	1.73	2.39	-0.65	0.28	0.76	2.05	9	25	66
1951-1973	5.85	5.16	4.44	0.69	1.11	1.70	3.49	18	27	55
1973-1993	2.54	2.33	1.95	0.38	0.45	0.89	1.40	16	32	51
1993-2011	1.04	0.67	0.72	-0.03	0.24	0.55	0.26	23	52	25
1861-2011	2.31	1.74	1.60	0.14	0.50	0.81	1.16	20	33	47

Sources: Columns (a)-(d) are Authors' elaboration based on Brunetti, Felice and Vecchi, "Income" (GDP at 2011 prices) and Baffigi, "Italian National Accounts" (resident population at the beginning of the year); columns (e)-(j) are from Broadberry, Giordano and Zollino, "A Sectoral Analysis", table 10, p. 36. Notes: Labour-force data are expressed as full-time equivalent (FTE) workers; all estimates are at present boundaries.

In the first two decades of post-unification Italy the increase in per capita GDP was rather modest (an average annual rate of 0.6%; it took almost a hundred and twenty years for GDP to double); labour productivity was even more modest. Growth became more marked starting in the 1880s, driven by labour productivity. The growth accounting exercise shows that it was capital investment, in particular, that drove growth, more than job creation; the total factor productivity (TFP) trend was negative in the first two decades and improved only as of the 1880s. The period between the two world wars recorded a slight acceleration in growth, despite the context difficulties, and thanks – above all – to improvements in TFP. From the end of World War II and up to the 1990s, over 50% of economic growth was still largely due to TFP improvements. During the so-called Second Republic (1993-2010), GDP growth rates returned to the levels of early post-unification Italy and, just like then, were largely attributable to increases in capital; total factor productivity slowed down considerably. The parallels

²⁷ Robert Solow, "Technical change and the aggregate production function", *Review of Economics and Statistics* 39 (No. 3, Aug., 1957): 312-20.

observed between the liberal period (1861-1911) and the two most recent decades (1991-2011), in terms of TFP below the post-unification historical average, is a worrying feature of Italy's modern economic growth – as witnessed by the debate that has been going on in the country over the last few years with regard to the sustainability of future growth.

2.3. Italy in the world economy

Nations do not live in isolation. An important aspect in assessing the long-term growth of the Italian economy concerns its place and participation in the international context. As Kuznets noted, the importance of international links is due to the fact that an open economy can benefit from a great many factors favourable to economic growth: “first, the worldwide stock of useful knowledge, to which the given nation may have contributed but only in part; second, the various international flows of economic resources or goods, either in exchange as in the case of foreign trade, in borrowing and lending as in the case of capital flows, or in unilateral receipts or payments as in the case of grants or, more important, immigration and emigration”.²⁸ The evolution of the degree of international interdependence is, indeed, a particularly significant aspect in Italy's case – a country that is by no means small, but almost totally devoid of natural resources.

The task of tracking Italy's participation in the international economy is facilitated by the availability of new long-term statistical series. The evolution of the degree of openness to international trade is shown in Figure 5, using the ratio of the sum of imports and exports to GDP.²⁹ The increase in the degree of openness is particularly marked in the early stages of industrialisation, particularly in the so-called “Giolitti age” (1892-1914), despite the country's propensity for protectionism.³⁰ After an interruption owing to World War I, the increase in the degree of openness resumed in the 1920s to then decline following the autarchic policies of the Fascist regime. Economic recovery during the boom years of the economic miracle coincided with Italy's inclusion in the

²⁸ Kuznets, *Modern economic growth*, 285.

²⁹ Giovanni Federico, Sandra Natoli, Giuseppe Tattara and Michelangelo Vasta, *Il commercio estero italiano, 1862-1950* (Rome-Bari, 2011). Michelangelo Vasta, “Italian export capacity in the long-run perspective (1861-2009): a tortuous path to stay in place,” *Journal of Modern Italian Studies* 15 (no. 1, 2010): 133-56. Baffigi, “Italian National Accounts.”

³⁰ Giovanni Federico and Antonio Tena-Junguito, “Was Italy a protectionist country?,” *European Review of Economic History* 2 (no. 1, 1998): 73-97.

new international order and her joining the European Common Market that, amongst other things, involved a gradual abatement of international tariffs: the great fluctuations in the 1970s and 1980s were due to sharp changes in oil prices. On the whole, the correlation between GDP and long-term trade openness is positive: causality goes from GDP to exports in the liberal age, from exports to GDP in the period following World War II.³¹

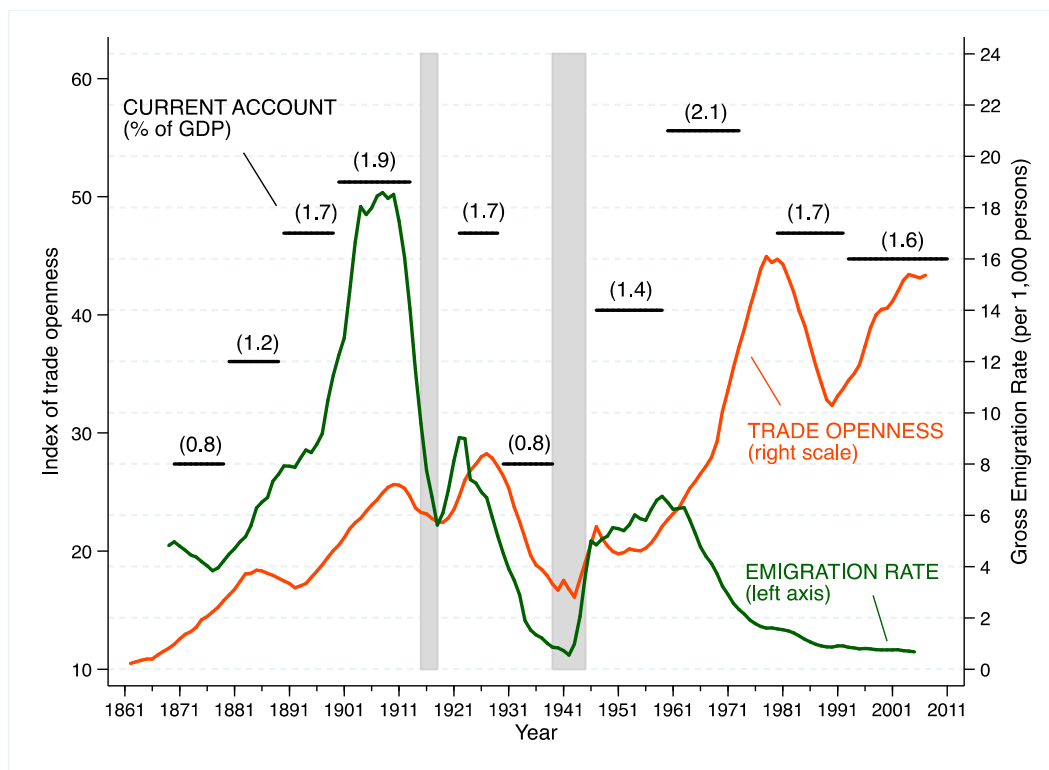
A second aspect concerns migration flows. Between 1869 – the first year for which reliable estimates are available – and 2005, over 28 million Italians emigrated: over half of them to places beyond Europe (such as the United States, Canada, Argentina and Brazil).³² Figure 5 shows the gross emigration rate (emigrants per 1000 inhabitants): from the initial values of less than 5 per thousand of the late 1860s, we find almost 25 per thousand in the years leading up to World War I. The war brusquely interrupted and almost completely stopped migration flows. After a brief resumption, Italian emigration found a new obstacle in the US restrictive quotas of 1924, in the Fascist laws of 1927 and the world crisis of 1930. The combined effects of lower supply and demand with regard to migrants led to a real drop in the emigration rate. When emigration picked up again after World War II, the Italians mainly went to western European countries. Although the emigration rate was always below 10 per thousand, one should consider that the actual number of people emigrating was significant: 2.5 to 3 million Italians emigrated in each of the two decades of the 1950s and 1960s. In what is probably the most accurate analysis carried out so far on the underlying causes of migratory flows, Gomellini and Ó Gráda concluded that “relative wages, relative per capita incomes and network effects (proxied by previous migrants) are the variables that explain most”.³³ In particular, the role of emigrant networks seems to be the single most important factor driving Italian emigration flows.

³¹ According to Alberto Rinaldi and Barbara Pistori, “Exports, imports and growth: New evidence on Italy: 1863-2004,” *Explorations in Economic History* 49 (no. 2, 2012): 241-54.

³² The data reported here refer to gross emigration rates. See Matteo Gomellini and Cormac Ó Gráda, “Outward and Inward Migrations in Italy: A Historical Perspective,” *Bank of Italy, Economic History Working Papers* (no. 8, 2011). For an analysis of regional flows, see Felice, *Divari regionali*, pp. 42-54.

³³ Gomellini and Ó Gráda, “Outward and Inward Migrations,” 15. For the post-World War II period, see Alessandra Venturini, *Postwar Migration in Southern Europe, 1950-2000. An Economic Analysis* (Cambridge, Mass., 2004).

Figure 5. International factor mobility, Italy 1861-2011



Sources: Current account as a percentage of GDP, 1870-1939: Brian Mitchell, *International Historical Statistics: Europe 1750-2005* (New York, 2007); 1946-1979: Obstfeld and Taylor, “The Great Depression as a Watershed”; 1980-2011: International Monetary Fund (2012), <http://www.imf.org/external/pubs/ft/weo/2012/02/weodata/index.aspx> (accessed on October 2012). The emigration rate is our own calculation on Istat data; trade openness was kindly provided to the authors by Michelangelo Vasta.

The third aspect concerns capital movements, which have significant implications for economic growth – from both a theoretical and empirical standpoint. The mobility of international capital enables breaking the bond constraining domestic investments to a country’s saving capacity, and is one of the most important factors promoting economic growth in the more backward economies. Obstfeld and Taylor’s estimates of the mean absolute value of current account for Italy show high values – indicating high capital mobility – as far back as the first globalisation³⁴; capital flows reach a low in the 1930s, in line with what we know about the Italian Fascist period, and starts rising again during the years of the economic miracle. In the final decades of the twentieth century, capital movements show a slightly upward trend. On the whole, the pattern concerning

³⁴ Maurice Obstfeld and Alan M. Taylor, “The Great Depression as a Watershed: International Capital Mobility over the Long Run”, in Michael D. Bordo, Claudia Goldin and Eugene N. White (eds.), *The Defining Moment: The Great Depression and the American Economy in the Twentieth Century* (Chicago, 1998): 353-402.

Italy fits quite well within the more general trend characterising the international financial system over the last one hundred and fifty years³⁵.

3. Interpretations and reinterpretations

Since World War II, Italian historiography has put forward various, and often competing, hypotheses to explain the country's modernisation process. The result is a large and detailed body of literature that we shall briefly summarise in this section in view of the new quantitative evidence outlined in the previous section.

It is worth starting from the estimates of the Italian national accounts. On the whole, the new series describe the GDP dynamics in the immediate post-unification years in more gradual terms compared to what was implied in previous estimates: the early post-unification decades previously considered to be stagnant are now viewed as a phase of slight but significant growth, and the take-off in the Giolitti years has now been somewhat toned down. Nonetheless, the annualized growth rate during the years 1899-1913 turns out to be triple (1.75%) the one observed in the previous forty years (0.57%). This increase looks more marked with the old estimates – so much so that in the past some scholars had regarded the Giolitti age as the ‘true Italian miracle’.³⁶ With the new estimates, the acceleration at the turn of the twentieth century has been toned down but is still visible. Which factors are responsible?

The literature dating back to Gerschenkron has linked it to the creation of universal banks, German style, in the early 1890s (following the 1893 banking law): these acted as a substitutive factor of Italy's industrialization, by channelling financial resources from retail savers (short-term debt) to industrial enterprises (long-term credit).³⁷ In a

³⁵ A different pattern is obtained by Taylor (1996), where the Feldstein-Horioka coefficient – a measure of the correlations between saving and investment – is used to estimate the degree of a country's openness to capital flows. Martin Feldstein and Charles Horioka, “Domestic Saving and International Capital Flows,” *Economic Journal* 90 (June, 1980): 314-29. Alan M. Taylor, “International Capital Mobility in History: The Saving-Investment Relationship,” *NBER Working Paper Series, Working Paper n. 5743* (September 1996).

³⁶ Giorgio Mori, “L'economia italiana dagli anni Ottanta alla prima guerra mondiale”, in Giorgio Mori (ed.), *Storia dell'industria elettrica in Italia, vol. 1, Le origini. 1882-1914* (Rome-Bari, 1992): 1-106 (p. 51).

³⁷ Alexander Gerschenkron, “Notes on the Rate of Industrial Growth in Italy, 1881–1913,” in Gerschenkron, *Economic Backwardness in Historical Perspective: 72-89* [originally in *Journal of Economic History* 15 (no. 4, 1955): 360-75]. On Gerschenkron's hypothesis, see Giovanni Federico and Gianni Toniolo, “Italy”, in Richard Sylla and Gianni Toniolo (eds.), *Patterns of European Industrialization. The Nineteenth Century* (London, 1991): 197-217.

famous book published in 1960, Walt Rostow hypothesised that modern economic growth comes about in typical stages: an initial stage of creating the preconditions for economic take-off, followed by the take-off stage itself (a break in the centuries-old GDP trend), leading to economic expansion and finally to maturity – and mass consumption.³⁸ Gerschenkron hypothesised some variations with respect to Rostow's stages, but the model essentially fits the same progressive “linear” view of modern economic growth.

Stefano Fenoaltea put forward a different interpretation that departs from the Rostowian paradigm in favour of a cyclical model. By considering Italy as an open economy, Fenoaltea related GDP growth to external factors – in many respects beyond the control of domestic economic policies – that is, to the international business cycle and particularly the one of British investments. Fenoaltea noted that the production of non-durable materials moved along quite a steady growth path, at a secularly increasing but not impressive rate, from 1861 to 1913; what caused the fluctuations of the industrial index was the production of durables and related materials, which was dominated by the Kuznets cycle of the construction industry and thus of other investment-related industries.³⁹ Fenoaltea put forward the idea that Italian history had been largely determined by the moods of foreign savers (British “widows and orphans”) rather than by Italian political leaders.⁴⁰ Others have observed that “There is another side of policy-making, equally important to a mid-sized open economy, which is surprisingly neglected by Fenoaltea: macroeconomic management. (...) Not every country, particularly on the periphery, shared in the long pre-1914 international expansion. (...) In order to profit from the international boom, Italy had to abandon expensive colonial adventures and put order to its public finances, rebuild almost from zero a banking system that laid in tatters, create a central bank, and overcome the credibility shock generated by the suspension of gold convertibility. All this lies behind

³⁸ Walt W. Rostow, *The Stages of Economic Growth: A Non-Communist Manifesto* (Cambridge, Mass., 1960).

³⁹ Stefano Fenoaltea, “International Resource Flows and Construction Movements in the Atlantic Economy: The Kuznets Cycle in Italy, 1861–1913,” *Journal of Economic History* 48 (no. 3, 1988): 605–38. Fenoaltea, *L'economia italiana dall'Unità alla grande Guerra* (Rome, 2006), 37–8, completed the picture by according a role to the expectations of industrialists, who would invest more when they had confidence in certain governments (Depretis, 1876–87; Giolitti, 1901–14).

⁴⁰ Fenoaltea, *L'economia italiana*, 121.

Italy's ability to surf the long wave of international growth. It did not need to be so: even sailing with the tide requires expert skippers.”⁴¹

Certainly, the Italian economy not only needed to import natural resources and to export manufactured goods, but also required foreign capital of both the financial and physical kind: machinery to climb up the technological ladder. Italy could benefit from the general increase in trade – including trade in knowledge – capital flows and migration, which contributed to the so-called “first globalization”;⁴² this, in turn, was favoured by technological improvements in transportation and communication and by the establishment of an international monetary system based on fixed exchange rates, the gold standard (1870-1914), which reduced uncertainty in international transactions. Imports grew at a remarkable rate, even more than exports, and so did the Italian degree of openness, whose share on GDP increased by around ten points in the Giolitti age. Manufacturing sectors which were characteristic of both the first and second industrial revolution were developed in those years: first textiles and metal-making, and then more advanced activities such as electricity, chemicals, rubber and new mechanics, including automobiles. On the whole, though, there was little innovation: technology was mostly imitative and imported from abroad.⁴³

World War I was a break in this path.⁴⁴ The abrupt end of the first globalization provoked by the war, and the following three decades of protectionism, instability and conflicts, forced Italy to a (temporary) rethinking of its development pattern based on importing natural resources and capital, and on exporting manufactured goods: Italy, as most of the world, indeed, turned to increasing closure and then to autarchy. Previous GDP estimates had depicted World War I as a period of exceptional boom for the Italian economy, which found no parallels in the experience of other belligerent countries.⁴⁵

⁴¹ Gianni Toniolo, “Stefano Fenoaltea, L'economia italiana dall'Unità alla Grande Guerra (Rome and Bari, Laterza, 2006)”, *Journal of Modern Italian Studies* 12 (no. 1, 2007): 130-2 (p. 132).

⁴² Guillaume Daudin, Matthias Morrys and Kevin H. O'Rourke, “Globalization, 1870-1914,” in Stephen Broadberry and Kevin O'Rourke (eds.), *The Cambridge Economic History of Modern Europe Volume 2. 1870 to Present* (Cambridge, 2010): 5-29.

⁴³ Renato Giannetti, *Tecnologia e sviluppo economico italiano* (Bologna, 2001).

⁴⁴ Vera Zamagni, “La grande Guerra come elemento di rottura della crescita equilibrata dell'economia italiana”, in Fernando García Sanz (ed.), *España e Italia en la Europa contemporánea: desde finales del siglo XIX a las dictaduras* (Madrid, 2002): 323-34.

⁴⁵ Stephen N. Broadberry, “Appendix: Italy's GDP in World War I,” in Stephen N. Broadberry and Mark Harrison (eds.), *The Economics of World War I* (Cambridge, Mass., 2005): 305-7.

This over-optimistic view is challenged by the new estimates for both the services sector and industry.⁴⁶

After the interval of the war years, when imports of crucial materials were favoured by Italy's alliances, from the mid-1920s Italy re-oriented itself towards a more inward-looking industrialization, which culminated in the autarchy of the 1930s. National institutions changed too, since World War I marked the beginning of state intervention in the economy, which continued with the bailouts of the post-war years and increased to a higher level in the 1930s, with the creation of the largest state-owned conglomerate, the *Istituto per la Ricostruzione Industriale* (IRI). The credit sector was reorganized accordingly: the universal banks, after having been rescued by the State partly after World War I and mostly after the 1929 crisis, were limited by the 1936 banking law to commercial activities; separation between short- and long-term credit, and more generally between banking and industry, was established and lasted until 1993. According to Rolf Petri,⁴⁷ state intervention was decisive in supporting strategic sectors – metal-making, engineering and chemicals – during an extremely difficult phase, the interwar years, and thus paved the way for the following economic boom. As argued by James and O'Rourke, amongst others, “financial restructuring was used as an opportunity to reshape the structure of industry”.⁴⁸ It is now widely acknowledged that the basic economic institutions at the time of the Italian economic miracle had been created in the 1930s,⁴⁹ and the new value-added series support this view also with regard to the development of the industrial sectors and structure.

The golden age of industrial capitalism, and the Italian economic miracle, came with the end of World War II and the country's reintegration into a revived international system under the leadership of the United States. It would be hard to underestimate the importance of these conditions in the way Italy managed to catch up with the other industrialised nations. The Marshall Plan was used in Italy, more than in other European

⁴⁶ Patrizia Battilani, Emanuele Felice and Vera Zamagni. “Il valore aggiunto dei servizi a prezzi correnti (1861-1951),” Rome, Bank of Italy, 2011; Albert Carreras and Emanuele Felice, “L'industria italiana dal 1911 al 1938,” *Rivista di storia economica* 26 (no. 3, 2010): 285-334.

⁴⁷ Rolf Petri, *Storia economica d'Italia. Dalla Grande guerra al miracolo economico (1918-1963)* (Bologna, 2002).

⁴⁸ Harold James and Kevin O'Rourke, “Italy and the first age of globalization,” *Bank of Italy, Economic History Working Papers* (no. 16, 2011), 1.

⁴⁹ Nicola Rossi and Gianni Toniolo, “Italy,” in Nicholas Crafts and Gianni Toniolo (eds.), *Economic Growth in Europe since 1945* (Cambridge, Mass., 1996): 427-53 (p. 438).

countries, to introduce mass-production technologies from the US.⁵⁰ By guaranteeing fixed exchange rates, Bretton Woods made long-run growth of Italian exports possible without an appreciation in the national currency, which would have harmed competitiveness. Bretton Woods also imposed controls on short-term capital movements, which allowed Keynesian expansive policies to be implemented without, once again, an appreciation of the Italian lira. At the same time, long-term capital movements were not limited and their inflows favoured foreign direct investment in Italy, often from the United States.⁵¹ This in turn stimulated technology transfer and enabled Italy's industrial productivity to catch up with the others. Not least, during the golden age the prices of natural resources – most notably oil – were exceptionally low, which made possible the reallocation of Italian manufacturing towards energy-intensive productions. Under these conditions, the institutional framework mostly designed during the 1930s – from state-owned enterprises to separation between industry and banking, with the former partly raised to an activity of public interest – was implemented and could work at its best. By growing at more than 5% per annum, Italy's GDP per head reached the levels of the most advanced countries.⁵² Metal-making, engineering and chemicals, i.e. the heavy and more advanced industries, were the best-performing industrial sectors: here, the role of state-owned enterprises was particularly decisive⁵³ (although private groups, such as FIAT in automobiles, were also important and successful), as well as the assistance of generous public or semi-public financing.

The internal adjustments from the 1970s onwards were triggered by two dramatic processes, at the international and technological level. With regard to the international context, the end of the Bretton Woods system in 1971 heralded a period of floating

⁵⁰ Francesca Fauri, *Il piano Marshall e l'Italia* (Bologna, 2010).

⁵¹ From 1952 to 1973, the share capital of enterprises controlled by foreign investors rose from 9.2% to 12.9% (on the total of the *Imita.db* databank). Andrea Colli, "Foreign enterprises (1913-72)," in Andrea Colli and Michelangelo Vasta (eds.), *Forms of Enterprise in 20th Century Italy. Boundaries, Structures and Strategies* (Cheltenham, 2010): 87-110 (pp. 88 and 105-7).

⁵² According to Crafts and Toniolo, even after normalizing for initial income, in comparison with other European countries, Italy's GDP growth was 0.65 percentage points per year higher than expected: Nicholas Crafts and Gianni Toniolo, "Aggregate growth, 1950-2005," in Stephen Broadberry and Kevin O'Rourke (eds.), *The Cambridge Economic History of Modern Europe Volume 2. 1870 to Present* (Cambridge, 2010): 269-332. For a recent re-appreciation of Italy's catching-up under the new post-war settlement, see also Nicholas Crafts and Marco Magnani, "The golden age and the second globalization in Italy," *Bank of Italy, Economic History Working Papers* (no. 17, 2011).

⁵³ See for instance the mechanical holding Finmeccanica, an IRI's branch particularly successful in high-advanced productions: Emanuele Felice, "State Ownership and International Competitiveness: The Italian Finmeccanica from Alfa Romeo to Aerospace and Defense (1947-2007)," *Enterprise & Society* 11 (no. 3, 2010): 594-635.

exchange rates which, until the introduction of the Euro in 1999, saw the Italian Lira lose value in comparison with the German Mark, the currency of its main manufacturing competitor. The new international settlement evolved into a second globalization which, amongst other things, was characterized by increasing industrial competition from developing countries, and then, from 1999 onwards, by a common European currency which – following the German Mark and unlike the Italian Lira – showed a tendency to appreciate in international markets. As regards technology, a major development was the decline of Fordism and the advent of information and communication technology (ICT). First came the 1973 oil shocks which, with suddenly rising oil prices, mostly hit energy-intensive sectors, while favouring light (or labour intensive) manufacturing industries and the services; the ICT revolution began soon after.

The first part of this period (1973-1992) coincided with the declining phase of the so-called first Republic, with increasing political corruption and widespread illegality. Italy's GDP per head continued to converge, although its average growth rate fell to around 2.5%, while the economy diversified in services and strongly export-oriented light manufacturing. However, major supply-side reforms were delayed and macroeconomic disequilibria expanded, starting with public finance. These are the years in which a pension system reform (from a contribution-based system to an earnings-based one) and an increasingly more generous public spending policy laid the foundations for a surge in the country's public debt, the heavy burden of which the country is still trying to cope with today. In actual fact, it has also been observed how the problems that emerged in the late 1960s were also, if not especially, of a non-economic nature: "Most of them can ultimately be traced back to a less than satisfactory adjustment of Italian society to the economic reality created by largely unanticipated rapid growth. Institutions, politics, public administration, unions of employers and employees, and ideologies remained to some extent those of an underdeveloped economy".⁵⁴

This interpretation is in line with the evidence of more recent decades. The economic growth of the 1980s was, in fact, a "drugged" growth. The ratio of public debt

⁵⁴ Rossi and Toniolo, "Italy," p. 444.

to GDP doubled in just ten years: from 51% in 1982 to 102% in 1990.⁵⁵ The country side-tracked its own problems, choosing to pass them on to future generations. In the 1980s, growth was achieved through implicit laissez-faire policies in terms of fiscal rules and labour policy, which *de facto* helped reduce companies' costs,⁵⁶ and by decreasing the value of the Italian lira in foreign exchange markets (a so-called competitive devaluation), thereby increasing the competitiveness of Italian goods in international markets in an artificial way: that is, not based on productivity gains.⁵⁷ At the same time, state-owned enterprises were characterized by losses and misconduct, while the crisis of some major enterprises was so deep that it led to the abandonment of entire industrial sectors (most notably ICT).⁵⁸ Investment in research and development lagged behind compared to the OECD average, as did industrial productivity when compared to GDP per head.

At the beginning of the 1990s, the macroeconomic context changed again, as did policymaking, in both cases mostly as a consequence of the end of the Cold War and the creation of the Europe Union. Because of the Maastricht rules for joining the Euro, expansive Keynesian policies were no longer possible and, indeed, corrective measures for reducing the country's huge public debt became no longer postponable. The political system of the first Republic collapsed and, under the new one, during the 1990s, some supply-side reforms and liberalization measures were finally implemented. However, the advocates of these measures generally considered them to be inadequate, and they came to a halt with the new millennium. The introduction of the Euro meant it became no longer possible to have national currency devaluations, and this has had harmful effects on Italian exports, in the very years when the competitiveness of a resurgent Asia has been dramatically rising. At the same time, internal demand has not grown as necessary in view of increasing imports from other European countries and the rising inequality which has depressed consumption. Italy has thus begun to fall behind in terms of per capita GDP, in comparison with the European average and not to mention Asia or the United States (and, more recently, even Latin America). In recent years,

⁵⁵ Fabrizio Balassone, Maura Francese and Angelo Pace, "Public Debt and Economic Growth in Italy," *Bank of Italy, Economic History Working Papers* (no. 11, 2011).

⁵⁶ Marcello De Cecco, *L'economia di Lucignolo. Opportunità e vincoli dello sviluppo italiano* (Rome, 2000).

⁵⁷ Marcello De Cecco, "L'Italia grande potenza: la realtà del mito," in Pierluigi Ciocca and Gianni Toniolo (eds.), *Storia economica d'Italia, vol. III, t. 2* (Rome-Bari, 2004): 3-36 (p. 33).

⁵⁸ Luciano Gallino, *La scomparsa dell'Italia industriale* (Turin, 2003).

Italy's economic decline has become a subject of great speculation and some good arguments.⁵⁹

4. Italy's regional development

Economic growth is, typically, a selective process: it does not involve the various areas of a territory in a homogeneous manner, nor does it proceed in a uniform way over time. Kuznets devoted the concluding section of his monograph to this aspect. Entitling the section "The spread of modern economic growth", he reflected at a global level – especially on the lag with which "underdeveloped countries" managed to modernise and on the factors hindering the spreading of economic growth. "If we set the 1780s as the date of the Industrial Revolution, which ushered in modern economic growth, one and three quarter centuries have elapsed; and in that period an epochal innovation [modern economic development] has spread to only a quarter of the world population. Is this spread low, and if so, why?"⁶⁰ *Variatis variandis*, the same question can be applied to a single country⁶¹: how did the various regions of Italy manage to modernise? Was the duration of the transition period – that is, the shift from a traditional type of economy to a modern one – significantly different among the various regions of the country? The answer that we provide in this section can be summarised as follows: modern economic growth within Italy's borders has been a selective and sequential process involving the various regions each at its own pace and intensity. Some quantitative elements supporting this view are provided below.

For many decades, the measure of regional differences in GDP was a poorly studied research field. The first attempt at making a reconstruction dates back to 1978 with the work of Vera Zamagni, who estimated the income of the Italian regions for the year 1911.⁶² It was a successful attempt, but it had few followers.⁶³ Under the aegis of the bank of Italy, starting from the early 1990s some accurate reconstructions of the

⁵⁹ Gianni Toniolo and Vincenzo Visco (eds.), *Il declino economico dell'Italia. Cause e rimedi* (Milan, 2004).

⁶⁰ Kuznets, *Modern economic growth*: 462.

⁶¹ Pollard had already noted this when analysing the spreading of industrialisation in Europe. Sidney Pollard, *Peaceful conquest: the industrialization of Europe 1760-1970* (Oxford, 1981), 462.

⁶² Vera Zamagni, *Industrializzazione e squilibri regionali. Bilancio dell'età giolittiana* (Bologna, 1978).

⁶³ Among the exceptions, Alfredo G. Esposto, "Estimating Regional per Capita Income: Italy, 1861-1914," *Journal of European Economic History* 26 (no. 3, 1997): 585-604.

national accounts were published for some benchmark years (1891, 1911, 1938 and 1951);⁶⁴ a few years later, from these national figures new estimates of regional GDP were produced, with respect to the same benchmark years.⁶⁵ This section presents a brief overview based on the contributions made by the most recent literature⁶⁶ and enriched by new estimates for the years 1871 and 1931.

According to the new estimates, the north-south divide was already present at the time of unification, and it was estimated at around 16-17%: by setting the value of national GDP in 1871 at 100, the northern regions showed a value of 106.4 as against an estimated value of 89.9 for the southern regions.⁶⁷ The differences were obviously more marked when analysing individual regions: Lazio (146) and Liguria (139) headed the list, while Calabria (69) and Basilicata (67) were at the bottom. During the early stages of industrialization, the evolution of Italian regional differences is not very different from what is observed in other large European countries. The data for Spain indicate a slight difference in favour of those regions that already had an industrial base or services sector (Catalonia, Madrid) before embarking on modern economic growth, but which grew with the industrialisation process.⁶⁸ A similar pattern can also be found for the United Kingdom.⁶⁹ The situation was more diversified within the Austro-Hungarian Empire, where the most recent estimates stress the primacy of the region of its capital, Vienna, around 1870.⁷⁰

⁶⁴ Guido M. Rey (ed.), *I conti economici dell'Italia, 2. Una stima del valore aggiunto per il 1911* (Rome-Bari, 1992); Guido M. Rey (ed.), *I conti economici dell'Italia, 3. Il valore aggiunto per gli anni 1891, 1938, 1951* (Rome-Bari, 2000).

⁶⁵ Emanuele Felice, "Il reddito delle regioni italiane nel 1938 e nel 1951. Una stima basata sul costo del lavoro," *Rivista di Storia Economica* 21 (vol. 1, 2005): 3-30; Emanuele Felice, "Il valore aggiunto regionale. Una stima per il 1891 e per il 1911 e alcune elaborazioni di lungo periodo (1891-1971)," *Rivista di Storia Economica* 21 (vol. 3, 2005): 273-314.

⁶⁶ Emanuele Felice, "Regional value-added in Italy, 1891-2011, and the foundation of a long-term picture," *Economic History Review* 64 (no. 3, 2011): 929-50.

⁶⁷ According to Daniele and Malanima, in 1871 average GDP per capita in Southern Italy was 99% of the Centre-North (2007, p. 294), against 84% from our estimates. Vittorio Daniele and Paolo Malanima, "Il prodotto delle regioni e il divario Nord-Sud in Italia (1861-2004)," *Rivista di Politica Economica* 97 (no. 2, 2007): 267-315. Regional differences were great also in the *Mezzogiorno* itself and in the centre-north of the country: see Table A.2 in the Statistical appendix.

⁶⁸ Joan Ramón Rosés, Julio Martínez-Galarraga and Daniel A. Tirado, "The upswing of regional income inequality in Spain (1860-1930)," *Explorations in Economic History* 47 (no. 2, 2010): 244-57.

⁶⁹ Nicholas Crafts, "Regional GDP in Britain, 1871-1911: some estimates," *Scottish Journal of Political Economy* 52 (no. 1, 2005): 1-24.

⁷⁰ Max-Stephan Schulze, "Regional Income Dispersion and Market Potential in the Late Nineteenth Century Hapsburg Empire," *London School of Economics, Working Papers No. 106/07* (November 2007).

At the time of its unification, Italy was still a poor country practically lacking in modern industry. This largely explains the relatively small difference in GDP between north and south. However, over the first fifty years of the new Kingdom of Italy, the industrialisation process started up concentrating in the north-western regions, where the industrial triangle (Milan-Turin-Genoa) was taking shape; from there, modern industry gradually spread to neighbouring regions, from Veneto to Emilia, Tuscany, and Umbria, sometimes evolving from pre-existent artisan enterprises. Conversely, the Italian *Mezzogiorno*, which – thanks to high tariffs – could boast some important (but not advanced) industrial enterprises before unification, especially in Campania,⁷¹ lagged behind in this period.⁷² On the whole, despite the north-west's take-off, in this period the divergence was not as spectacular as it would become in later decades: massive emigration, which heavily concerned Veneto and the poorest regions of the south, had positive effects on the incomes of the Italians who stayed at home, thus preventing a more dramatic increase in inter-regional inequality.⁷³

Massive emigration was no longer possible in the interwar years owing to domestic constraints (Fascist closure) and international ones (stricter immigration laws in the US and elsewhere). More in general, the demographic and economic policies of the Fascist regime have been criticized for having harmed southern Italy by raising demographic pressure, disfavoured productivity growth in agriculture (wheat was preferred to more productive Mediterranean cultivations; the *latifondo* was not reformed),⁷⁴ while at the same time enhancing industrialization in the most advanced regions. Not only did the industrial bailouts following World War I and the 1929s crisis inevitably channel financial public resources towards the north-west of the country,⁷⁵ but also autarchy and the system of state controls – because of the very way they were designed and implemented – *de facto* favoured the plants already in existence, usually in the north-west.⁷⁶ As a result, industrialization in the interwar years further advanced in the north-

⁷¹ Luigi De Rosa, *Iniziativa e capitale straniero nell'industria metalmeccanica del Mezzogiorno 1840-1904* (Naples, 1968), 69-71.

⁷² Stefano Fenoaltea, "Peeking backward: regional aspects of industrial growth in post-unification Italy," *Journal of Economic History* 63 (no. 4, 2003): 1059-102. Felice, "Il valore aggiunto regionale."

⁷³ Felice, "Regional value-added in Italy", 943-4.

⁷⁴ Piero Bevilacqua, *Le campagne del Mezzogiorno tra fascismo e dopoguerra: il caso della Calabria* (Turin, 1980): 172-9.

⁷⁵ Zamagni, "La grande Guerra."

⁷⁶ Ferdinando Giugliano, "Industrial Policy and Productivity Growth in Fascist Italy," *Pembroke College, University of Oxford, D.Phil Thesis in Economics* (September 2011).

west, while in southern Italy the percentage of the industrial labour force actually decreased (remaining around 60% for agriculture). Similarly to what had happened in World War I, World War II also increased regional differences, since available estimates suggest that it affected the southern regions more heavily.⁷⁷ Then came the Marshall Plan, benefiting northern enterprises which, in some cases, used that aid to implement mass production.⁷⁸

Industrialization spread to southern Italy during the years of the economic miracle, mostly thanks to massive top-down intervention financed by the state-owned *Cassa per il Mezzogiorno*: created in 1950, it first focused on basic infrastructure and then, from 1957 onwards, on heavy industries with high capital/labour ratios.⁷⁹ Southern Italy's catching-up was not only due to convergence in the share of the industrial workforce (between-sector component), but also – and even more – to convergence in industrial per-worker productivity (within-sector component). Interregional (south to north) migration, which for the first time became substantial in those years, was also important for convergence. This was a remarkable achievement nonetheless, clearly unprecedented in the long-run history of post-unification Italy.

Top-down schemes did not help home-grown enterprises. When the 1970s crisis hit capital-intensive activities more heavily, the southern state-subsidised plants in chemicals, metal-making and engineering were the most affected. As the strategy to develop southern Italy failed, public aid – still substantial as a share of GDP⁸⁰ – turned to unproductive uses, which even ended up with favouring organized crime and illegal activities.⁸¹ In the meantime, the reorientation from capital- to labour-intensive activities favoured light manufacturing in the centre and north-east, which in the last

⁷⁷ Augusto De Benedetti, “Il sistema industriale (1880-1940),” in Paolo Macry and Pasquale Villani (eds.), *Storia d'Italia. Le regioni. La Campania* (Turin, 1990): 445-605 (604-5); John A. Davis, “Mutamenti di prospettiva sul cammino dell'Italia verso il XX secolo,” in Pierluigi Ciocca and Gianni Toniolo (eds.), *Storia economica d'Italia, vol. I. Interpretazioni* (Rome-Bari, 1999): 197-259 (p. 250).

⁷⁸ Franco Amatori and Andrea Colli, *Impresa e industria in Italia dall'Unità a oggi* (Venice, 1999), 229. Francesca Fauri, “Big business and industrial policies after World War II,” in Andrea Colli and Michelangelo Vasta (eds.), *Forms of Enterprise in 20th Century Italy. Boundaries, Structures and Strategies* (Cheltenham, 2010): 112-31.

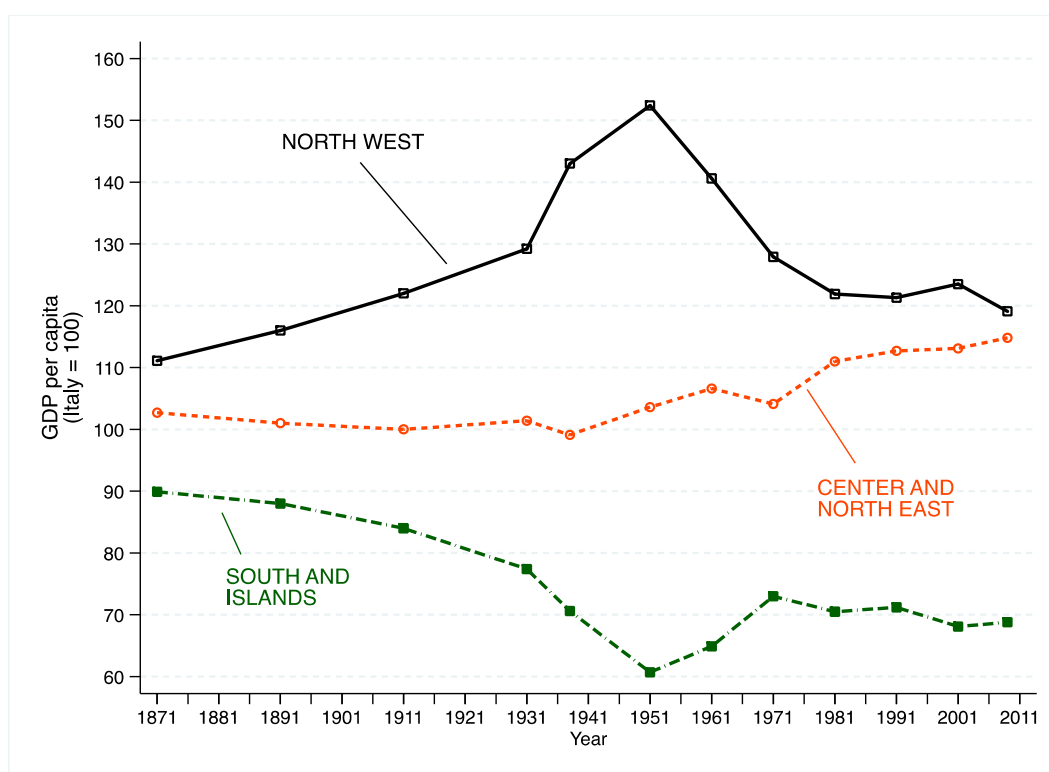
⁷⁹ Antonio La Spina, *La politica per il Mezzogiorno* (Bologna, 2003); Amedeo Lepore, “Cassa per il Mezzogiorno e politiche per lo sviluppo,” in Andrea Leonardi (ed.), *Istituzioni ed Economia* (Bari, 2011): 107-65.

⁸⁰ Emanuele Felice, “Le politiche economiche regionali in Italia e nel Regno Unito (1950-1989),” *Rivista economica del Mezzogiorno* 16 (voll. 1-2, 2002): 175-243. Amedeo Lepore, “La valutazione dell'operato della Cassa per il Mezzogiorno e il suo ruolo strategico per lo sviluppo del Paese,” *Rivista giuridica del Mezzogiorno* 25 (voll. 1-2, 2011): 281-317.

⁸¹ E.g. Piero Bevilacqua, *Breve storia dell'Italia meridionale dall'Ottocento a oggi* (Rome, 1993), 132.

decades accelerated convergence towards the north-west. The “third Italy”, as the central and north-eastern regions began to be called,⁸² came to the forefront of economic analysis with a peculiar industrial organization, the industrial districts: a strong civicness – efficient institutions, informal knowledge, shared ethics and cooperative informal rules – was necessary to lower transaction costs among a high number of small and small-medium firms, geographically concentrated and homogenous in production.⁸³ Industrial districts flourished in the 1980s and 1990s: in those years, the “small-is-beautiful” idea posed a serious challenge to the Chandlerian paradigm that focused on big business.⁸⁴

Figure 6. GDP per capita in Italy’s macro-regions, 1871-2009 (Italy = 100)



Source: Authors’ elaboration on Brunetti, Felice and Vecchi, “Reddito”. The North-West comprises Piedmont, Liguria, Lombardia, and Aosta Valley. The Centre and North-East consists of Veneto, Emilia-Romagna, Tuscany, the Marches, Umbria, Latium, and, from 1931, Trentino-Alto Adige and Friuli-Venezia Giulia. All the rest is South and Islands (Sicilia and Sardinia).

⁸² Arnaldo Bagnasco, *Tre Italie. La problematica territoriale dello sviluppo italiano* (Bologna, 1977).

⁸³ Giacomo Becattini, “Dal ‘settore’ industriale al ‘distretto’ industriale. Alcune considerazioni sull’unità di indagine dell’economia industriale,” *Rivista di economia e politica industriale* 5 (no. 1, 1979): 7-21.

⁸⁴ Vera Zamagni, “Evolution of Business History Models from Chandler to the Present, with an Application to the Italian Context,” in Giovanna Dossena (ed.), *Entrepreneur and Enterprise. Lights and Shadows from the Italian Experience* (Milan, 2009): 307-17.

The long-run evolution of Italy's regional imbalances in per capita GDP is summarized in figure 6. The North-South divide increased from 1871 to 1951: divergence was slow in the liberal age, much stronger in the interwar years and in particular after the 1929 crisis, reaching its peak around 1951. At the same time, regional inequalities increased also within the Centre-North, between the industrial triangle (the North-West) and the Central and North-Eastern regions, which include the third Italy. By 1951, in terms of per capita GDP Italy is clearly divided in three macro-areas. From this point on, we observe a remarkable convergence of the "third Italy", which goes on throughout the second half of the twentieth century up to our days; conversely, Southern Italy converged only in the years of the economic miracle, but since then it has fallen back again. As a result, in our days Italy looks divided in two halves: the Centre-North, now much more internally homogeneous than before, and the *Mezzogiorno*. By this regard, the *questione meridionale* is at least as relevant today as it was when the *Cassa per il Mezzogiorno* was created.

On the basis of this summary, it is possible to venture into some long-term explanations for the pattern of regional inequality in Italy. Starting with the writings of Francesco Saverio Nitti,⁸⁵ a rich body of literature – with developments as much in the liberal view⁸⁶ as in the Marxist one⁸⁷ – has explained the north's development with the south's underdevelopment (and vice-versa). An alternative school of thought, whose antecedents can be found in the writings of Giustino Fortunato⁸⁸ and Corrado Gini,⁸⁹ has instead put the accent on the better starting conditions of the north. In the latter half of the twentieth century, this school found an authoritative exponent in Luciano Cafagna, who argued that – at least in the liberal period – the North's growth was essentially independent of the underdevelopment of the south: the latter did not provide labour to the North's industries (southern Italian emigrants went abroad), nor did it constitute a market for the North's manufactured goods (still too expensive to beat the competition of those coming from northern Europe), and it was not even a source of raw

⁸⁵ Francesco S. Nitti, *Scritti sulla questione meridionale, vol. II. Il bilancio dello stato dal 1862 al 1896–97 / Nord e Sud*, ed. by Armando Saitta (Bari, 1958 [1900]).

⁸⁶ Rosario Romeo, *Risorgimento e capitalismo* (Bari, 1963).

⁸⁷ Antonio Gramsci, *La questione meridionale* (Rome, 1951).

⁸⁸ Giustino Fortunato, *Il Mezzogiorno e lo stato italiano*, edited by Manlio Rossi-Doria, 2 vols. (Florence, 1973 [1904]).

⁸⁹ Corrado Gini, *L'ammontare e la composizione della ricchezza delle nazioni* (Turin, 1914), 268-77.

materials (the few available went mainly abroad).⁹⁰ In emphasising endogenous factors for the north-west's take-off, Luciano Cafagna stressed a triad of elements: natural resources, human capital and social capital.⁹¹ Within his cyclical model, Fenoaltea specified that these can be the fixed resources – relatively immobile even if not unchangeable – capable of catalysing movable resources (technical and financial capital) on them, thereby triggering development in the upward phases of the cycle.⁹²

Recently, the interpretative scheme of fixed/mobile resources has been enriched by a more long-term diachronic view which considers the peculiarities of the various historical periods: in the one-hundred-and-fifty-year history of post-unification Italy, the fixed resources that are determinant from one moment to the next are not given over time, but change with the transformations of technological systems. A more favourable natural endowment in the north – higher land productivity in the Po Plains, an environment rich in water and where transportation was easier – served as a catalyst of the first industrial revolution (c. 1830-1880); later on, in the second industrial revolution (c. 1880-1970), it was human capital (meant as technical instruction, but also as a mastery of the best techniques) that made the difference, and this too was higher in the north-west; in the post-Fordist age, when industrial districts and local institutions grew in importance, the catalyst resource was, broadly speaking, social capital.⁹³ This dynamic hypothesis has found support in econometric tests, at least as regards the shift in importance from human to social capital.⁹⁴ The convergence observed during the Golden Age was the exception: in that period, financial resources were channelled to

⁹⁰ Luciano Cafagna, "Intorno alle origini del dualismo economico in Italia," in Alberto Caracciolo (ed.), *Problemi storici dell'industrializzazione e dello sviluppo* (Urbino, 1965): 103-50; Luciano Cafagna, *Dualismo e sviluppo nella storia d'Italia* (Venice, 1989). Cafagna's interpretation was later taken up and further developed by Franco Bonelli, "Il capitalismo italiano. Linee generali di interpretazione," in Ruggiero Romano and Corrado Vivanti, *Storia d'Italia. Annali. 1. Dal feudalesimo al capitalismo* (Turin, 1193-255). Instead, following Romeo, a dualism was again put forward by Guido Pescosolido, *Unità nazionale e sviluppo economico* (Rome-Bari, 1998). For a critical analysis of Cafagna's views, see Giuseppe Galasso, *Il Mezzogiorno da «questione» a «problema aperto»* (Manduria, Ta., 2005): 461-70.

⁹¹ Luciano Cafagna, "Contro tre pregiudizi sulla storia dello sviluppo economico italiano," in Pierluigi Ciocca and Gianni Toniolo (eds.), *Storia economica d'Italia, vol. 1. Interpretazioni* (Rome-Bari, 1999): 297-325.

⁹² Fenoaltea, *L'economia italiana*, 264-6.

⁹³ Emanuele Felice, "Regional development: reviewing the Italian mosaic," *Journal of Modern Italian Studies* 15 (no. 1, 2010): 64-80.

⁹⁴ Emanuele Felice, "Regional convergence in Italy (1891-2001): testing human and social capital," *Cliometrica* 6 (no. 3, 2012): DOI 10.1007/s11698-011-0076-1.

southern Italy through a massive state intervention, but they were not enough to activate local fixed resources.⁹⁵

This interpretative hypothesis is not the only one around. A model belonging to the new economic geography has recently underlined the importance *a)* of the initial endowment of natural resources (this would explain the initial advantage of the centre-north regions) and *b)* of the ease of access to markets (to the domestic market from 1880 to 1945, and to the international, and especially European, one after 1945).⁹⁶ This interpretation attributes a certain importance to “chance” (“misfortune” in the authors’ words) and to factors that are hardly modifiable in the middle run: according to this view, economic policy manages to influence fixed resources, but only very slowly.⁹⁷

5. Beyond GDP

The dynamics of GDP does not subsume that of wellbeing. On the one hand, GDP rules out a great many non-monetary dimensions that go to define wellbeing, firstly those that have no market price: health indicators, access to education, the enjoyment of political and civil liberties, the availability of leisure time and the absence of environmental pollution are just some examples. On the other, GDP includes factors that do not go to define wellbeing: amortisation, net income going to foreigners, the so-called “regrettables” (such as military spending), the production of goods which contaminate the environment, and more besides. More generally, Amartya Sen maintained that GDP provides an incomplete picture of wellbeing not only, and not so much, because of what GDP includes or does not include, but for reasons linked to distribution: “perhaps the most serious difficulty is with the treatment of income distribution”.⁹⁸ According to Sen, personal income distribution is “an integral part of real income evaluation” (p. 20), and thus suggests considering both GDP and income

⁹⁵ On the long-term interpretation of regional differences in Italy, see also Giovanni Iuzzolino, Guido Pellegrini and Gianfranco Viesti, “Convergence among Italian Regions, 1861-2011,” *Bank of Italy, Economic History Working Papers* (no. 22, 2011).

⁹⁶ Brian A’Hearn and Anthony J. Venables, “Internal Geography and External Trade: regional disparities in Italy, 1861-2011,” *Bank of Italy, Economic History Working Papers* (no. 12, 2011).

⁹⁷ This also appears to be the line followed by Vittorio Daniele and Paolo Malanima, *Il divario Nord-Sud in Italia 1861-2011* (Soveria Mannelli, Cz, 2011), 162-82. For example, page 182 reads: “The Industrial Revolution and industrialisation came about in Britain and then in western Europe. If they had occurred in Africa, things would certainly have been different for our *Mezzogiorno* (and not just for the *Mezzogiorno!*)” [our own translation].

⁹⁸ Amartya K. Sen, “Real National Income,” *Review of Economic Studies* 43 (no. 1, 1976): 19-39.

distribution together. Other scholars have reached similar conclusions, but from different angles. At an empirical level, for example, by observing the sharp rise in inequality in the United Kingdom and United States in the Thatcher and Reagan years, respectively, Atkinson noted how “changes in personal distribution are large enough to affect our view of aggregate economic performance”⁹⁹ (p. 300). The recent trend of income inequality in most OECD countries reinforces Atkinson’s argument and extends it to the two decades of more recent history, stressing the appropriateness of putting income distribution at the heart of the analysis.¹⁰⁰

In order to assess the equity of modern economic growth, in Italy as in any other country, we need to overcome the obstacle of the lack of adequate data. Estimating income inequality for the period leading up to World War II requires disaggregated information on household incomes that becomes available, typically, only with the advent of modern sample-based studies.¹⁰¹ By narrowing the attention to just monetary indicators of life conditions, the approaches adopted in the literature have resorted to three main types of sources: *a*) tax records concerning incomes, wages, properties or estates;¹⁰² *b*) indirect indicators of living conditions¹⁰³; and *c*) the so-called “social tables”¹⁰⁴. In Italy’s case, the reconstruction of income distribution inequality has followed an innovative approach, both with regard to sources and methods. This has been possible thanks to the Italian Household Budget Dataset (IHBD), a collection of about 20,000 household budgets distributed throughout the country and observed for the period 1861-1931.¹⁰⁵ The IHBD gathers the incomes and expenditures, as well as the main socio-demographic characteristics of households, within a standard framework designed such that it can be linked to modern sample-based studies on household incomes carried out since 1948 – first at irregular intervals and then systematically as of

⁹⁹ Anthony B. Atkinson, “Bringing income distribution in from the cold,” *Economic Journal* 107 (no. 141, 1997): 297-321.

¹⁰⁰ Oecd, *Divided We Stand. Why Inequality Keeps Rising* (Paris, 2011).

¹⁰¹ George J. Stigler, “The Early History of Empirical Studies of Consumer Behavior,” *The Journal of Political Economy* 62 (no. 2, Apr., 1954): 95-113.

¹⁰² See Thomas Piketty, “Income Inequality in France, 1901-1998,” *Journal of Political Economy* 111 (no. 5, 2003): 1004-42 and Anthony B. Atkinson, Thomas Piketty and Emmanuel Saez, “Top Incomes in the Long Run of History,” *Journal of Economic Literature* 49 (no. 1, 2011): 3-71.

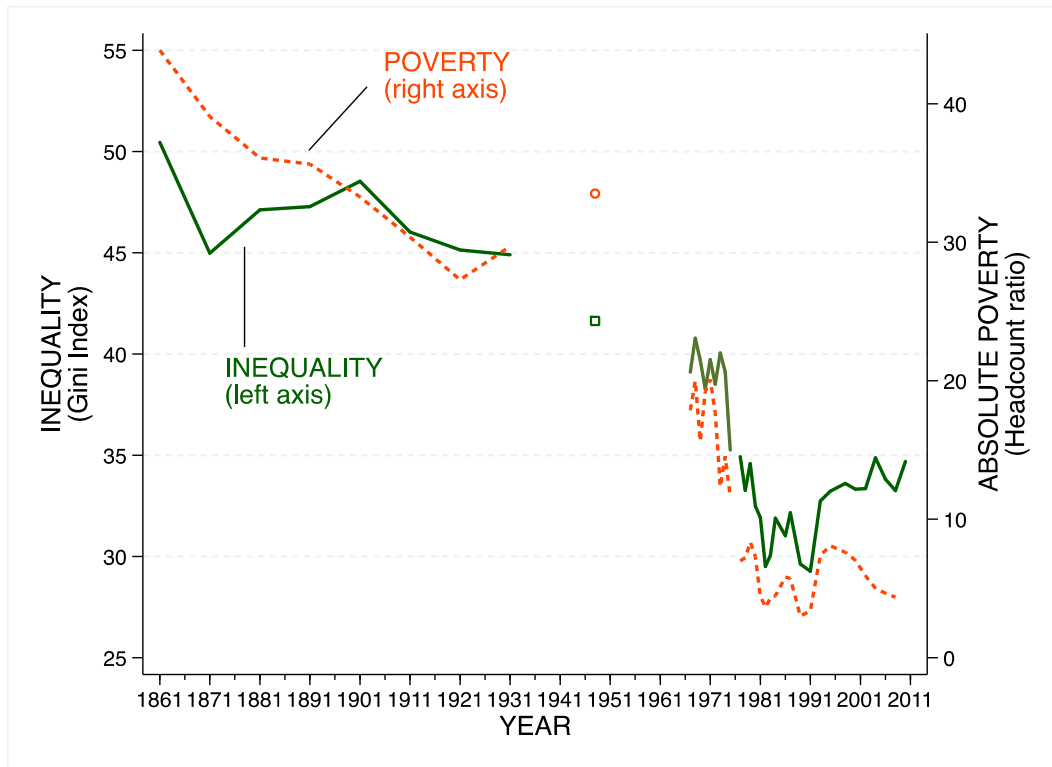
¹⁰³ See Williamson and Lindert, *American Inequality*; Williamson, *Did British Capitalism*.

¹⁰⁴ Branko Milanovic, Peter H. Lindert and Jeffrey G. Williamson, “Pre-Industrial Inequality,” *Economic Journal* 121 (no. 551, 2011): 255-72.

¹⁰⁵ Stefano Chianese and Giovanni Vecchi, “Bilanci di famiglia,” in Giovanni Vecchi, *In ricchezza e in povertà. Il benessere degli italiani dall’Unità a oggi* (Bologna, 2011): 355-89.

the latter half of the 1960s. This statistical basis enabled reconstructing the trend of the Gini index and of the extent of absolute poverty since 1861 (figure 7).

Figure 7. Income inequality and absolute poverty in Italy, 1861-2011



Source: the inequality series is from Amendola, Brandolini and Vecchi, “Disuguaglianza,” in Vecchi, *In ricchezza e in povertà*: 235-69 while the absolute poverty one is from Amendola, Salsano and Vecchi, “Povertà,” in *ibid.*: 271-317.

The most interesting results for our purposes concern the trends of the indicators since 1861, considered in figure 7. The inter-temporal profile of the Gini index does not show an upward trend in the initial stage of modern economic growth, contrary to what was hypothesised by Kuznets, and contrary to what is found in other countries: in the long run, Italy managed to combine economic growth with greater equity in income distribution. This is a virtuous process which was maintained for a hundred and thirty years – the length of time in which we observe *a*) an increase in GDP per head (fig. 1), and *b*) a decrease in inequality and in the incidence of absolute poverty (fig. 7). From a historiographic standpoint, the evidence in figure 7 lends support to the hypothesis of a

benign industrialization, put forward by Toniolo¹⁰⁶ and Vecchi:¹⁰⁷ starting up at the turn of the twentieth century, Italian industrialisation did not require the population to make sacrifices in terms of equity in income distribution, nor did it involve a worsening of living conditions, not even temporarily, for the population.¹⁰⁸ Reaching its lowest levels in the 1980s, inequality has started to grow again: starting from the early 1990s, the increase in the Gini index in Italy has been accompanied by a conspicuous slowdown in economic growth and an increase in poverty – even in its most extreme forms.¹⁰⁹ The vicious circle has lasted for two decades now and has become structural: the issue the country is debating in the aftermath of the 150th anniversary celebrations concerns the population’s economic vulnerability, that is, the sustainability of the levels of wellbeing achieved by the Italians.¹¹⁰

The long-term trend in the incidence of absolute poverty closely follows that of inequality. The indicator used in figure 7 – the percentage of the population in poverty conditions – does not grasp the consequences of the demographic dynamics, however. In 1911, when Italy celebrated its first jubilee, the country recorded a decrease in the poverty incidence rate from 44% to 33%. However, owing to an increase in population (between 1861 and 1911 the number of Italians increased from 26 million to almost 37 million), the number of poor people largely remained unchanged: there were 11 million poor in 1861 and 11 million in 1911. What should we conclude, then, if the percentage of the poor population decreased, but the actual number of poor people remained unchanged? Can we claim that poverty decreased? These questions are not easy to answer, as the literature on the subject shows. In Italy’s case, we can date the “defeat” of poverty – regardless of the indicator used to measure it – to the 1970s: a period in

¹⁰⁶ Gianni Toniolo, “La storia economica dell’Italia liberale: una rivoluzione in atto,” *Rivista di storia economica* 19 (no. 3, 2003): 247-64.

¹⁰⁷ Giovanni Vecchi, “Il benessere dell’Italia liberale (1861-1913),” in Pierluigi Ciocca and Gianni Toniolo (eds.), *Storia economica d’Italia, 3. Industrie, mercati, istituzioni. 1: Le strutture dell’economia* (Roma-Bari, 2002): 71-98.

¹⁰⁸ The result is supported by the dynamics found in many other indicators of wellbeing, from anthropometric measures [Brian A’Hearn and Giovanni Vecchi, “Statura,” in Vecchi, *In ricchezza e in povertà*: 37-72] to health outcome indicators [Vincenzo Atella, Silvia Francisci and Giovanni Vecchi, “Salute,” in *ibid.*: 73-129], and from schooling rates (always on the rise, albeit slowly) [Brian A’Hearn, Claudio Auria and Giovanni Vecchi, “Istruzione,” in *ibid.*: 159-206] to the spreading of child labour (always decreasing in the hundred years after 1861, except for a brief resurgence during the Fascist period) [Francesco Cinnirella, Gianni Toniolo and Giovanni Vecchi, “Lavoro minorile,” in *ibid.*: 131-58].

¹⁰⁹ The incidence of undernutrition in Italy is on the rise. Cf. Marina Sorrentino and Giovanni Vecchi, “Nutrizione,” in *ibid.*: 3-36.

¹¹⁰ Leandro Conte, Mariacristina Rossi and Giovanni Vecchi, “Vulnerabilità,” in *ibid.*: 319-51.

which the percentage incidence decreased along with the absolute number of poor people: from 20% (10 million poor people) in 1970 to 5% (4 million poor) in 1980. The rate at which poverty decreased in the 1970s was about three times that recorded during the 1950s and 1960s: for the wellbeing analyst, the “miracle” years in Italy did not coincide with the miracle years of the business cycle analyst.

It is possible to go “beyond GDP”, not only by incorporating distribution aspects, but also by assessing other indicators that can grasp the changes which modern economic growth has meant for the population’s conditions of life. The most revealing statistics probably refer to the greater life expectancy at birth of the Italians – who are among the longest-living people in the world, ranking behind Japan but before other “wealthier” nations. The data of interest are naturally too many to be discussed in the space of this paper, but they are easily available today to the interested reader. We shall instead conclude with some remarks on the progress made by the Italian population in consideration of the development of a “good” that escapes GDP accounting, but which is particularly important in the Italian case: leisure time.¹¹¹

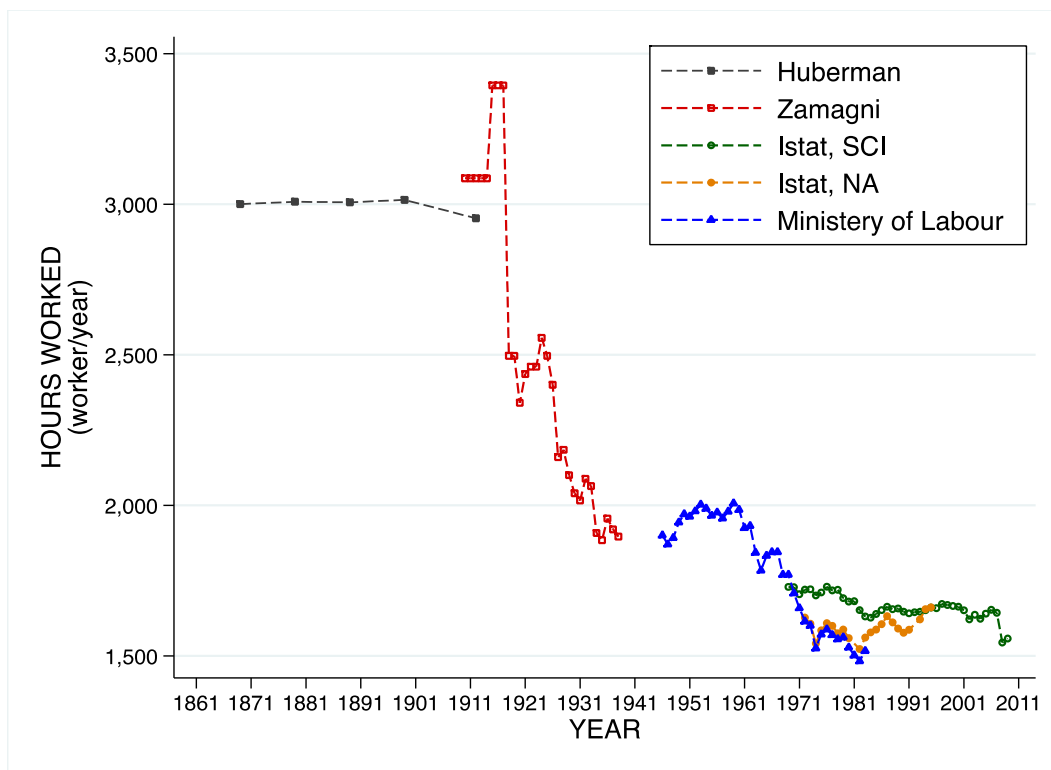
As far back as 1952, Kuznets made a sort of appeal to the community of economists in order to have economics include the study of the consumption of leisure time that is observed during the modernisation of society. According to Kuznets’ calculations, from the end of the 1860s and up to the eve of World War II, American workers had managed to triple the number of hours devoted to leisure (from 11 to 30 hours per week): the omission of the greater consumption of leisure time from GDP calculations implies that using the latter indicator produces a – systematic and non-linear – underestimation of the gains in wellbeing actually achieved by the population.¹¹² The secular process of the reduction of time dedicated to working activities in favour of leisure time experienced by Italian workers is shown in Figure 8: the Italian historical pattern is approximately in line with the historical evidence available for other European countries.¹¹³

¹¹¹ See Alberto Alesina and Andrea Ichino, *L’Italia fatta i casa. Indagine sulla vera ricchezza degli italiani* (Milano, 2009).

¹¹² Simon Kuznets, “Long-Term Changes in the National Income of the United States of America since 1870,” *Review of Income and Wealth* 2 (no. 1, 1952): 29-241.

¹¹³ Jesse H. Ausubel and Arnulf Grübler, “Working Less and Living Longer: Long-Term Trends in Working Time and Time Budgets,” *Technological Forecasting and Social Change* 50 (no. 3, 1995): 195-213.

Figure 8. Hours worked (per worker per year) in Italy, 1861-2011



Source: Andrea Brandolini and Giovanni Vecchi, “The Well-Being of Italians: A Comparative Historical Approach,” *Bank of Italy, Economic History Working Papers* (no. 19, 2011): p. 38.

It goes without saying that the reduction in hours worked is only one of the ways to measure the effort made by the population to pursue economic prosperity, as proxied by GDP. The other variables which must be taken into account are: being part of the workforce, the age of entering and exiting employment on the part of the economically active section of the population, all factors linked to the dynamics of life expectancy at birth, as well as institutional factors (the existence of a pension system, the duration of compulsory schooling) and cultural ones (agents’ preferences).

One way to grasp these aspects consists of calculating the hours worked per person instead of per worker. Kuznets compared the ten-year reduction rates of hours worked per person (instead of per worker) for a set of countries and obtained an overall picture of reduction – from a minimum of 1.1% for the United Kingdom (1870-1952) to a maximum of 4.5% for the Netherlands (1900-1952). Kuznets considered Italy’s case as “exceptional” because it showed a 7.5% reduction between 1901 and 1953.¹¹⁴ The latest

¹¹⁴ *Modern economic growth*, 73.

data show that the hours worked per person continued to fall throughout the 1970s to then rise, albeit slightly, as of the mid-1990s.¹¹⁵

6. Concluding remarks

Over the century and a half since its unification, Italy has been the protagonist of a successful process of modernisation and economic growth. Today, however, at the start of the twenty-first century, the country has lost its drive for growth and finds it difficult to revive it. Italy appears to be embarking on a path of economic decline. Not everyone agrees with this, but those who do not are ever fewer and their arguments seem to be increasingly less convincing. Scholars of Italian history know that this economic decline has occurred many times in the course of the centuries – in the ancient period as much as in the Middle Ages and in modern times. It is also for this reason that they have learned to perceive its symptoms and to recognise its devious nature: “the decline is slow, hardly perceptible: it becomes a political and social problem when its effects are widespread and the cost of ignoring them become unsustainable for the governing elite, sometimes owing to shocks like wars, revolutions and great financial crises.”¹¹⁶ If we bear these things in mind, it is worth briefly reflecting on the possibility that Italy has indeed embarked on a path of economic decline.

A useful starting point is provided by the speech Kuznets made in Stockholm when he received the Nobel prize for economics: “A country’s economic growth may be defined as a long-term rise in capacity to supply increasingly diverse economic goods to its population, this growing capacity based on advancing technology and the institutional and ideological adjustments that it demands”.¹¹⁷ As we can see, Kuznets stressed the crucial importance of two factors: technology and the institutions, in the broadest sense. In his speech, he also explained how technology is a necessary, but not sufficient, condition for a country to continue its path towards prosperity: what is

¹¹⁵ To quote from Brandolini and Vecchi, “The well-being of Italians” (p. 10): “It is a popular view that Europeans work less than Americans. (...) Yet, this view does not appear to fit well the Italian data. Taking the United States as the benchmark, it is true that since 1960 hours of work dropped more rapidly in Italy than in the United States, but their average level remains above the US level when expressed per worker, and is only slightly below when expressed per capita.”

¹¹⁶ Gianni Toniolo, “Introduzione,” in Gianni Toniolo and Vincenzo Visco (eds.), *Il declino economico dell’Italia: cause e rimedi* (Milan, 2004), p. 10.

¹¹⁷ Simon Kuznets, “Modern Economic Growth: Findings and Reflections”, *American Economic Review* 63 (vol. 3, 1973): 247-258 (p. 247).

needed is that the turnover in technological paradigms be accompanied and accommodated by the necessary changes in the institutions and in the society's ideology. This is the point – also taken up in different ways by Abramowitz,¹¹⁸ Baumol, Litan and Schramm,¹¹⁹ and more recently by Acemoglu and Robinson¹²⁰ – that goes straight to the heart of the issue of economic decline. In the course of their post-unification history, the Italians have repeatedly shown their ability to change: it happened with the so-called first globalisation, and again after World War II. Nothing was slavishly repeated, but the new technological paradigms – exogenous factors from the Italian economy perspective – found fertile ground in the country thanks to the combination of institutions and ideologies favouring their adoption. On both occasions, Italy proved it had sufficient “social capability” and/or “inclusive” type institutions – to use the latest terminology introduced by Acemoglu and co-authors. What seems to characterise the last twenty years is, instead, an unprecedented inability to adapt to the context – once again, exogenously given – that Italy finds itself in.¹²¹ Not only is Italy not managing to change in order to stay at the forefront, but it also appears to have lost the capability of making the most of the advantages of backwardness (which still partly remain: just think of the Mezzogiorno).

Among the most convincing interpretations of this immobility is the one attributing the economic decline to Italian productivity, and thus to the loss of competitiveness, and to Italy's specialisation in low capital-intensive sectors – a vocation in line with the peculiar small size of Italy's industrial enterprises.¹²² A change in specialisation requires innovation – not historically very great in Italy, but it has become even more difficult over the last few decades because the weight of large enterprises (which would have the resources for doing so) has progressively decreased, and also because, with public debt reduction policies, even public funding allocated to education and research has had to be curtailed. More generally, Italy has levels of schooling and of human

¹¹⁸ Moses Abramowitz, *Thinking about growth and other essays on economic growth & welfare* (Cambridge, 1989).

¹¹⁹ William J. Baumol, Robert E. Litan and Carl J. Schramm, *Good capitalism, bad capitalism, and the economics of growth and prosperity* (New Haven, 2007).

¹²⁰ Daron Acemoglu and James A. Robinson, *Why nations fail: the origins of power, prosperity, and poverty* (New York, 2012).

¹²¹ Luca Paolazzi e Mauro Sylos Labini, “L'Italia alla sfida del cambiamento: le lezioni per le riforme e i benefici di un cammino appena iniziato,” in Centro Studi di Confindustria (ed.), *Cambia Italia. Come fare le riforme e tornare a crescere* (Milan, 2012): 5-20.

¹²² Paolo Di Martino and Michelangelo Vasta, “Companies' insolvency and the 'nature of the firm' in Italy, 1920s-1970s,” *Economic History Review* 63 (no. 1, 2010): 137-64.

capital below the average of the most developed countries (OECD, EU) and of the standards demanded today by the knowledge economy.¹²³ To this must be added the fact that even importing technology from abroad is now less straightforward, after the new international agreement on intellectual property.¹²⁴

Concerns about the country's stagnation appear all the more legitimate if we include such things as the moral consequences afflicting society when the lack of economic growth is protracted over time. The value of economic growth lies not only in its capacity to improve people's standard of living, but also in the fact that it tends to be associated with a "greater opportunity, tolerance of diversity, social mobility, commitment to fairness, and dedication to democracy. (...) when living standards stagnate or decline, most societies make little if any progress toward any of these goals, and in all too many instances they plainly retrogress."¹²⁵ The deterioration of a society's founding values and institutions is a qualitative aspect that escapes growth accounting practices, but can change the course of history. The great turning points seen in the Italian economy since 1861 show – at least at first glance – that there is a strong relation with changes in meta-economic aspects linked to the institutions and ideology of Italian society. The complexity of the theme of economic decline may perhaps be understood through an overall analysis that refrains from going into minute details in order to focus on grasping the underlying determinant factors: technology and the institutions would appear to be the strongest factors to consider for a proper understanding of Italy's modern economic growth.

¹²³ Ignazio Visco, *Investire in conoscenza. Per la crescita economica* (Bologna, 2009).

¹²⁴ Ugo Pagano, "Cultural globalization, institutional diversity and the unequal accumulation of intellectual capital," *Cambridge Journal of Economics* 31 (no. 5, 2007): 649-67.

¹²⁵ Benjamin M. Friedman, *The moral consequences of economic growth* (New York, 2005), p. 4.

Statistical Appendix

Table A.1. GDP and productivity by sector (1861-2011)

years	GDP per capita				GDP per worker			
	Total (2011 euros)	%Ag r.	% Ind.	% Serv.	Total (2011 euros)	Agr./Tot.	Ind./Tot.	Ser./Tot.
1861	1,971	48.70	23.32	27.98	6,103	0.77	1.32	1.47
1862	1,996	48.42	22.70	28.88	6,178	0.76	1.31	1.51
1863	2,044	47.55	22.55	29.89	6,321	0.75	1.32	1.55
1864	2,047	46.19	23.14	30.67	6,333	0.72	1.38	1.58
1865	2,171	48.07	21.71	30.22	6,720	0.75	1.31	1.56
1866	2,167	46.44	22.29	31.26	6,704	0.72	1.38	1.59
1867	1,979	47.93	23.00	29.07	6,132	0.74	1.44	1.47
1868	2,019	48.87	21.87	29.26	6,222	0.76	1.40	1.47
1869	2,045	47.51	22.79	29.70	6,284	0.73	1.48	1.49
1870	2,095	48.33	22.07	29.60	6,448	0.75	1.46	1.48
1871	2,049	47.31	23.03	29.65	6,302	0.73	1.55	1.47
1872	2,003	46.76	23.67	29.57	6,119	0.72	1.56	1.46
1873	1,993	48.83	22.96	28.21	6,043	0.76	1.48	1.38
1874	2,096	50.52	21.00	28.48	6,311	0.80	1.33	1.37
1875	2,107	46.17	23.08	30.76	6,283	0.73	1.43	1.47
1876	2,055	44.77	23.43	31.80	6,089	0.72	1.42	1.51
1877	2,068	47.33	23.14	29.53	6,110	0.76	1.38	1.39
1878	2,120	48.09	22.02	29.89	6,235	0.78	1.29	1.40
1879	2,126	47.34	21.01	31.66	6,242	0.77	1.21	1.49
1880	2,159	48.51	20.63	30.86	6,300	0.80	1.17	1.44
1881	2,225	46.84	21.46	31.70	6,423	0.78	1.19	1.47
1882	2,252	46.71	22.10	31.20	6,562	0.77	1.25	1.43
1883	2,272	44.81	22.32	32.87	6,442	0.77	1.11	1.54
1884	2,238	42.69	22.68	34.62	6,452	0.72	1.18	1.60
1885	2,271	43.12	23.08	33.80	6,675	0.72	1.27	1.53
1886	2,321	43.65	22.99	33.36	6,949	0.72	1.33	1.49
1887	2,379	41.66	22.31	36.02	7,234	0.68	1.38	1.58
1888	2,367	40.98	22.19	36.84	7,193	0.68	1.33	1.61
1889	2,295	41.84	22.13	36.02	6,871	0.71	1.21	1.60
1890	2,296	43.95	21.34	34.71	6,996	0.73	1.22	1.53
1891	2,327	44.53	20.93	34.54	7,266	0.73	1.32	1.49
1892	2,330	42.11	21.33	36.56	7,419	0.68	1.45	1.56
1893	2,366	41.60	21.63	36.77	7,686	0.66	1.61	1.55
1894	2,379	41.31	21.11	37.58	7,724	0.66	1.50	1.59
1895	2,399	42.97	20.45	36.58	7,781	0.69	1.40	1.56
1896	2,435	42.11	20.67	37.23	7,841	0.69	1.33	1.60
1897	2,439	42.11	20.38	37.50	7,749	0.70	1.21	1.63
1898	2,429	41.81	20.78	37.41	7,775	0.70	1.24	1.62
1899	2,456	41.40	21.91	36.69	7,790	0.70	1.23	1.61
1900	2,521	41.72	20.85	37.44	7,956	0.71	1.12	1.65
1901	2,562	41.60	21.34	37.06	8,068	0.71	1.12	1.63
1902	2,603	40.75	21.63	37.62	8,294	0.69	1.18	1.64
1903	2,626	41.15	21.20	37.65	8,376	0.70	1.13	1.65
1904	2,672	40.73	21.02	38.25	8,512	0.70	1.11	1.67
1905	2,727	39.84	21.98	38.18	8,695	0.69	1.14	1.67
1906	2,820	40.06	22.36	37.57	8,987	0.70	1.14	1.65
1907	2,870	39.85	23.74	36.40	9,087	0.70	1.18	1.59
1908	2,930	37.68	23.90	38.42	9,076	0.68	1.09	1.70
1909	2,954	37.06	24.67	38.27	9,231	0.67	1.14	1.68
1910	2,957	36.41	25.02	38.56	9,322	0.65	1.18	1.69
1911	2,989	38.47	23.78	37.75	9,455	0.69	1.10	1.66
1912	3,004	37.21	25.32	37.48	9,480	0.67	1.19	1.65

1913	3,149	37.96	24.64	37.40	9,729	0.69	1.11	1.67
1914	2,987	36.89	24.76	38.35	9,126	0.66	1.12	1.72
1915	2,825	37.16	22.27	40.57	8,837	0.65	1.11	1.78
1916	3,054	38.31	21.98	39.71	9,518	0.67	1.11	1.73
1917	3,071	37.29	23.36	39.35	9,386	0.65	1.15	1.73
1918	3,005	39.43	23.31	37.27	8,961	0.69	1.13	1.65
1919	2,906	40.06	21.96	37.98	8,326	0.71	1.05	1.67
1920	2,960	42.54	21.58	35.89	8,314	0.76	1.02	1.57
1921	2,843	41.65	21.47	36.88	8,120	0.73	1.12	1.57
1922	3,055	38.78	24.30	36.92	8,601	0.69	1.22	1.55
1923	3,300	37.10	25.44	37.46	9,373	0.66	1.29	1.56
1924	3,357	33.56	27.40	39.04	9,406	0.61	1.29	1.66
1925	3,577	35.58	27.46	36.96	9,813	0.66	1.21	1.57
1926	3,579	36.32	26.44	37.24	9,787	0.68	1.15	1.55
1927	3,461	33.07	27.33	39.60	9,637	0.61	1.27	1.60
1928	3,635	33.96	27.14	38.89	10,182	0.63	1.24	1.59
1929	3,788	32.48	28.54	38.98	10,598	0.61	1.25	1.64
1930	3,585	28.18	30.47	41.34	10,260	0.52	1.42	1.72
1931	3,506	28.25	28.21	43.54	10,425	0.50	1.45	1.79
1932	3,548	31.36	25.03	43.61	10,862	0.56	1.43	1.67
1933	3,484	27.66	28.64	43.69	10,802	0.50	1.63	1.64
1934	3,452	27.45	28.89	43.66	10,750	0.50	1.57	1.62
1935	3,621	29.93	27.98	42.09	11,085	0.57	1.34	1.56
1936	3,466	27.89	28.77	43.34	10,611	0.55	1.36	1.55
1937	3,779	28.99	29.53	41.48	11,341	0.59	1.26	1.52
1938	3,853	28.55	30.36	41.09	11,111	0.61	1.14	1.54
1939	4,011	28.42	30.26	41.31	11,651	0.61	1.13	1.54
1940	3,837	27.89	29.79	42.32	11,183	0.61	1.12	1.53
1941	3,709	32.14	25.53	42.33	10,821	0.71	0.97	1.49
1942	3,479	39.12	20.20	40.68	10,132	0.88	0.77	1.39
1943	2,940	43.42	18.45	38.14	8,541	0.99	0.70	1.27
1944	2,423	52.01	14.83	33.16	7,122	1.18	0.56	1.12
1945	2,196	48.40	16.79	34.81	6,530	1.10	0.62	1.20
1946	2,989	42.18	27.85	29.97	9,009	0.95	1.02	1.05
1947	3,527	36.86	32.22	30.92	10,722	0.84	1.18	1.08
1948	3,809	34.01	32.70	33.29	11,660	0.78	1.19	1.16
1949	4,071	30.24	33.43	36.33	12,557	0.70	1.21	1.25
1950	4,407	29.24	33.38	37.38	13,725	0.68	1.20	1.29
1951	4,813	25.85	35.65	38.50	15,106	0.60	1.28	1.32
1952	5,006	24.13	35.11	40.76	15,457	0.58	1.24	1.36
1953	5,338	24.86	34.50	40.64	16,169	0.62	1.18	1.33
1954	5,500	22.73	35.42	41.84	16,306	0.58	1.19	1.35
1955	5,838	21.99	35.35	42.66	17,181	0.59	1.16	1.33
1956	6,087	20.66	35.07	44.27	17,653	0.57	1.13	1.34
1957	6,397	19.07	35.65	45.27	18,274	0.56	1.12	1.32
1958	6,720	19.47	35.16	45.36	18,958	0.59	1.10	1.30
1959	7,151	17.51	35.87	46.61	20,008	0.54	1.11	1.32
1960	7,605	15.22	37.21	47.58	21,010	0.49	1.13	1.33
1961	8,158	15.62	37.37	47.01	22,094	0.54	1.08	1.30
1962	8,650	15.05	37.65	47.29	23,638	0.53	1.07	1.29
1963	9,110	13.77	37.88	48.34	25,136	0.53	1.04	1.30
1964	9,386	13.17	37.37	49.46	25,733	0.53	1.02	1.29
1965	9,724	12.81	36.34	50.85	27,131	0.51	1.00	1.31
1966	10,292	12.07	36.22	51.70	28,952	0.50	1.00	1.30
1967	11,004	11.87	36.47	51.66	30,376	0.51	1.00	1.28
1968	11,726	10.22	36.98	52.80	32,278	0.47	0.99	1.28
1969	12,421	10.12	37.56	52.32	33,730	0.50	1.00	1.25
1970	13,096	8.99	38.62	52.39	35,243	0.48	1.00	1.23
1971	13,268	8.47	37.66	53.87	35,925	0.45	0.98	1.26
1972	13,695	7.68	36.87	55.46	37,451	0.44	0.97	1.25
1973	14,560	8.18	38.09	53.74	39,253	0.49	1.00	1.19
1974	15,260	7.33	39.68	52.99	40,598	0.46	1.05	1.15
1975	14,847	7.58	38.08	54.34	39,719	0.49	1.02	1.15
1976	15,810	7.10	39.07	53.83	41,873	0.47	1.06	1.12

1977	16,138	6.90	38.37	54.73	42,509	0.48	1.03	1.13
1978	16,596	6.74	37.45	55.81	43,650	0.47	1.02	1.14
1979	17,522	6.52	37.26	56.21	45,543	0.47	1.02	1.13
1980	18,074	6.15	37.51	56.34	46,198	0.46	1.03	1.13
1981	18,202	5.76	36.54	57.70	46,604	0.45	1.02	1.12
1982	18,266	5.52	35.68	58.80	46,545	0.46	1.02	1.11
1983	18,468	5.63	34.55	59.82	46,787	0.47	1.02	1.10
1984	19,063	5.11	34.29	60.60	48,107	0.44	1.07	1.08
1985	19,588	4.81	33.75	61.44	49,013	0.44	1.07	1.07
1986	20,145	4.62	32.81	62.57	49,984	0.44	1.05	1.07
1987	20,788	4.48	32.56	62.96	51,311	0.44	1.06	1.07
1988	21,650	4.03	32.23	63.74	52,895	0.42	1.04	1.07
1989	22,367	3.94	32.55	63.51	54,502	0.44	1.05	1.06
1990	22,809	3.65	31.58	64.77	55,080	0.42	1.02	1.07
1991	23,141	3.73	30.65	65.62	55,486	0.44	1.00	1.08
1992	23,318	3.61	30.15	66.25	56,389	0.43	1.01	1.07
1993	23,100	3.50	29.77	66.73	57,729	0.44	1.01	1.07
1994	23,588	3.47	29.76	66.77	59,603	0.45	1.01	1.06
1995	24,268	3.47	29.89	66.64	61,344	0.46	1.01	1.06
1996	24,543	3.45	29.31	67.23	61,832	0.47	1.01	1.06
1997	24,987	3.34	29.08	67.58	62,715	0.47	1.00	1.06
1998	25,337	3.29	28.80	67.91	63,041	0.48	0.99	1.06
1999	25,702	3.24	28.18	68.58	63,610	0.50	0.98	1.06
2000	26,634	3.03	27.72	69.25	64,759	0.48	0.97	1.06
2001	27,113	2.93	27.29	69.77	64,813	0.47	0.96	1.07
2002	27,219	2.84	27.01	70.15	64,285	0.47	0.96	1.07
2003	27,051	2.76	26.39	70.86	63,856	0.48	0.93	1.07
2004	27,250	2.71	26.42	70.86	64,721	0.48	0.94	1.07
2005	27,234	2.46	26.26	71.28	65,221	0.45	0.93	1.07
2006	27,695	2.45	26.63	70.93	65,641	0.45	0.95	1.07
2007	27,981	2.35	26.99	70.66	66,112	0.45	0.96	1.06
2008	27,431	2.32	26.55	71.13	65,578	0.45	0.95	1.06
2009	25,740	2.36	24.75	72.89	63,793	0.45	0.92	1.07
2010	26,076	2.23	24.93	72.84	65,525	0.42	0.95	1.06
2011	26,065	2.32	24.44	73.24	65,743	0.45	0.94	1.06

Sources: Authors' elaboration based on Brunetti, Felice and Vecchi, "Income" (GDP at 2011 euros), Baffigi, "Italian National Accounts" and full-time equivalent (FTE) workers from Broadberry, Giordano and Zollino, "A Sectoral Analysis"; sectoral figures are from data at current prices. All estimates are at present boundaries.

Table A2. Regional GDP per capita, 1871-2009 (Italy=1)

	1871	1891	1911	1931	1938	1951	1961	1971	1981	1991	2001	2009
Piedmont	1.03	1.08	1.15	1.24	1.39	1.47	1.32	1.21	1.17	1.14	1.15	1.09
Aosta Valley	-	-	-	-	-	1.58	1.77	1.35	1.25	1.21	1.24	1.30
Liguria	1.39	1.44	1.54	1.64	1.68	1.62	1.31	1.16	1.09	1.16	1.09	1.07
Lombardy	1.11	1.15	1.19	1.23	1.39	1.53	1.47	1.34	1.30	1.26	1.30	1.26
<i>North-West</i>	<i>1.11</i>	<i>1.16</i>	<i>1.22</i>	<i>1.29</i>	<i>1.43</i>	<i>1.52</i>	<i>1.41</i>	<i>1.28</i>	<i>1.22</i>	<i>1.21</i>	<i>1.24</i>	<i>1.19</i>
Trentino-Alto Adige	-	-	-	0.92	0.95	1.06	1.16	1.01	1.12	1.20	1.29	1.29
Veneto	1.01	0.80	0.86	0.75	0.84	0.98	1.05	0.99	1.08	1.13	1.13	1.14
Friuli	-	-	-	1.26	1.19	1.11	0.92	1.00	1.09	1.16	1.12	1.12
Emilia-Romagna	0.95	1.06	1.08	1.09	1.04	1.12	1.13	1.14	1.29	1.20	1.23	1.21
<i>North-East</i>	<i>0.98</i>	<i>0.91</i>	<i>0.96</i>	<i>0.94</i>	<i>0.96</i>	<i>1.06</i>	<i>1.08</i>	<i>1.05</i>	<i>1.17</i>	<i>1.17</i>	<i>1.18</i>	<i>1.18</i>
Tuscany	1.05	1.02	0.97	1.06	1.01	1.05	1.06	1.05	1.10	1.06	1.09	1.11
The Marches	0.82	0.88	0.81	0.71	0.79	0.86	0.87	0.91	1.05	1.02	0.99	1.02
Umbria	0.99	1.02	0.92	1.00	0.96	0.90	0.85	0.93	0.98	0.94	0.96	0.93
Latium	1.46	1.57	1.49	1.40	1.19	1.07	1.15	1.07	1.04	1.16	1.13	1.18
<i>Center</i>	<i>1.07</i>	<i>1.11</i>	<i>1.05</i>	<i>1.11</i>	<i>1.03</i>	<i>1.02</i>	<i>1.06</i>	<i>1.03</i>	<i>1.07</i>	<i>1.09</i>	<i>1.09</i>	<i>1.12</i>
Abruzzi	0.80	0.68	0.68	0.63	0.58	0.58	0.67	0.83	0.87	0.89	0.85	0.82
Molise	-	-	-	-	-	-	0.61	0.70	0.74	0.73	0.83	0.80
Campania	1.07	0.97	0.94	0.81	0.82	0.69	0.71	0.71	0.67	0.70	0.65	0.65
Apulia	0.89	1.02	0.85	0.85	0.72	0.65	0.68	0.75	0.72	0.74	0.67	0.66
Lucania	0.67	0.74	0.73	0.70	0.57	0.47	0.59	0.75	0.68	0.60	0.73	0.74
Calabria	0.69	0.67	0.70	0.56	0.49	0.47	0.55	0.67	0.64	0.60	0.64	0.67
<i>South</i>	<i>0.90</i>	<i>0.86</i>	<i>0.83</i>	<i>0.75</i>	<i>0.69</i>	<i>0.62</i>	<i>0.67</i>	<i>0.73</i>	<i>0.70</i>	<i>0.71</i>	<i>0.68</i>	<i>0.68</i>
Sicily	0.94	0.93	0.85	0.82	0.72	0.58	0.59	0.70	0.68	0.70	0.66	0.68
Sardinia	0.78	0.94	0.92	0.86	0.83	0.63	0.72	0.85	0.71	0.77	0.76	0.79
<i>Islands</i>	<i>0.91</i>	<i>0.93</i>	<i>0.86</i>	<i>0.83</i>	<i>0.74</i>	<i>0.59</i>	<i>0.62</i>	<i>0.74</i>	<i>0.71</i>	<i>0.71</i>	<i>0.69</i>	<i>0.71</i>
<i>Mezzogiorno</i>	<i>0.90</i>	<i>0.89</i>	<i>0.84</i>	<i>0.77</i>	<i>0.71</i>	<i>0.61</i>	<i>0.65</i>	<i>0.73</i>	<i>0.71</i>	<i>0.71</i>	<i>0.68</i>	<i>0.69</i>
<i>Center-North</i>	<i>1.06</i>	<i>1.08</i>	<i>1.10</i>	<i>1.12</i>	<i>1.16</i>	<i>1.23</i>	<i>1.20</i>	<i>1.14</i>	<i>1.16</i>	<i>1.16</i>	<i>1.17</i>	<i>1.17</i>
Italy (2011 euros)	2,049	2,327	2,989	3,506	3,853	4,813	8,158	13,268	18,202	23,141	27,113	25,740

Sources: Felice, "Regional value-added;" for 1871 and 1931, Brunetti, Felice and Vecchi, "Reddito." All estimates are at historical boundaries and based on present population; Aosta Valley is included in Piedmont until 1938, Molise in Abruzzi until 1951; Mezzogiorno is South and the islands.

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