

Italy's Second Industrial Revolution

The destruction caused by the Second World War in Italy amounted to between 14% and 17% of the country's pre-war fixed capital, or, according to Saraceno, between 1/5 and 1/6 of her entire national wealth.¹ The most conspicuous destruction affected the transport sector. Shipping appeared to have sustained the heaviest damage, both as a result of the almost total loss of the merchant fleet, whose total tonnage had dropped from 3.5 million to 429,000 tons, and the large-scale devastation inflicted on harbour facilities. Hardly less grave was the situation of the railway system. According to a reliable estimate, approximately 38% of its fixed installations (bridges, track, signalling and other equipment) had been destroyed, while 50% of its rolling stock had been damaged.

Perhaps, as has been pointed out by several authorities, it was agriculture and industry which had sustained the least damage. If we except the destruction of buildings, equipment, livestock and supplies – which had, of course, been on a more considerable scale in the actual battle zones – the damage inflicted on agriculture consisted essentially of the lack of husbandry which the land had suffered from and derived more particularly from the reduced fertility of the soil, the deficiency of chemical and organic fertilizers, the depredations of plant parasites, the breakdown of irrigation systems and water pumps, the abandonment of the defences of rivers and drainage canals, and so on.² Damage, in other words, which the restoration of peace was able, in large part, to rectify.

The recovery of industry was less easy. Although the destruction of plant was estimated at only around 8%,³ much of the surviving plant was either technically obsolete or seriously impaired by the lack of maintenance. Moreover, the entire industrial system needed to be converted from war-time to peace-time production.⁴ Italy, on emerging exhausted from the war, did not possess the necessary resources to redress the destruction or the obsolescence and deterioration of plant. She was also faced with the need to purchase essential raw materials abroad and transport them home, without having the necessary fleet to do so.

¹ P. Saraceno, *Intervista sulla ricostruzione 1943-1953* (ed. a cura di L. Villari) (Bari: Laterza, 1977), p. 2; P. Barucci, "La cultura economica nel periodo della ricostruzione", in G. Mori (ed.), *La cultura economica nel periodo della ricostruzione*, (Bologna: Il Mulino, 1980), p. 26; G. Rasi, "La politica economica e i conti della nazione", in *Annali dell'economia italiana 1946-1952* (Turin: Istituto IPSOA, 1982), pp. 90-95.

² E. Corbino, *L'economia*, in *Dieci anni dopo 1945-1955*, (Bari: Laterza, 1955), pp. 313-315.

³ F. Rasi, *La politica economica e i conti della nazione*, p. 92.

⁴ L. Lenti, *Inventario dell'economia italiana*, (Milan: Garzanti, 1969), p. 21.

For some time writers have attributed the difficulties of industrial reconstruction more to the errors of economic policy and to the inadequate preparation of personnel than to the shortage of plant. In fact, rapid and total demobilization had flooded the labour market with people whom the war had removed from factory work, whose skills they had by now forgotten, or with new recruits who had no vocational training at all; even those who had remained at their work benches during the war were not always capable of being transferred from war-time to peace-time production.

The rapid mobilization of the Italian industrial system was further hampered by the political situation which had been consequential to the cessation of hostilities. In the first place, Italy was subject until 1946 to an occupation regime which exercised control both over imported goods and over currency. Furthermore, Italy suffered from a chronic shortage of hard currency. Secondly, Italy emerged from some two years of bitter and ferocious civil war which had claimed – on both sides – some 110,000 lives and left a legacy of hatred and violence not easy to overcome, especially in the industrial North. In the third place, the economic policy directives adopted by the new political class installed in the government of the country after the downfall of the Fascist regime were more inspired by the residues of old political ideologies than by Italy's effective socio-economic reality. Nonetheless, this series of economic policy directives – often contradictory – did not prevent the rapid and substantial dismantling, not only of the corporate superstructure installed by Fascist policy, but also that imposed by the war, with the result that a free-market economy ideology in the end prevailed. On the other hand, the confusion that reigned in the bureaucracy and in the offices responsible for political change was hardly calculated to increase the efficiency of the state machine, or to encourage assigning it tasks for the economic direction of the country.

The entire situation was complicated by the rampant inflation that spread between 1945 and 1946, due more to the scarcity of goods on the market than to an excess of money in circulation. This scarcity was further aggravated by the hoarding of goods, prompted by the threat of exchange-rate adjustment urged by the left, but feared by some for its fiscal consequences. All this was aggravated, in turn, by the flight of capital, both through the undervaluing of exports and the overvaluing of imports. The result of speculative manoeuvres, this flight of capital was also motivated, by the uncertainty of the government's economic policy and by political extremism, which drew strength for its revolutionary designs both from the precariousness of the socio-economic situation and from the discontent engendered by widespread unemployment, the shortage of consumer goods, and inflation.

It has been said that the delayed reconstruction of the country after the war was, in part, the result of errors in monetary policy. After 1945, the rate of inflation intensified, and the lira's purchasing power at home gradually and continuously declined, while the official exchange rate against the dollar was

maintained at its July 1943 level: i.e. the 100 lire exchange rate which had been fixed on the landing of the Americans in Sicily. As a consequence, the lira became increasingly overvalued. Some scholars, especially those on the left, believe that a mistake was made in January 1946, in aligning the lira's domestic with its international value by raising the exchange rate against the dollar from 100 to 225 lire. The liberal Ministers took this step in the belief that the readjustment of the exchange rate would encourage exports and discourage imports. In view of the scarcity of existing goods in the country and in Europe what Italy actually needed at the time was raw materials. But the problem was not just that of procuring raw materials: it was also that of paying for them, and this required that Italian exports should not be penalized by the domestic revaluation of the lira.

The new exchange rate against the dollar proved insufficient, however, to ensure the price system gave stability and balance. The partial liberalization of the foreign currency market allowed at the beginning of 1946, when exporters were authorized to freely dispose of half of the currency earnings received for their exports, showed that the official exchange rate against the dollar fixed at 225 lire in no way corresponded to its real exchange value. Since the country could most conveniently resupply itself with the foodstuffs, raw materials, equipment, products, etc. it lacked from the United States, the demand for dollars was very high, while their supply was limited. The dollar quotation was increasing from day to day on the free market. It is almost superfluous to add that its continuing rise was also stimulated by the growing inflation caused by the Bank of Italy's steady issue of paper money throughout 1946 and 1947. The growth of the amount of money in circulation was decided by the state. In fact, in the period from May to December 1946, the state absorbed, through advances from the Bank of Italy, no less than 35% of the growth in the money supply, while in 1947 this percentage rose to 56%; in spite of the fact that the money supply had been further increased in the meantime. In this way, as has been underlined, "the state-induced character of the inflation became even more accentuated in 1947 than in the past."⁵ The greater recourse of the state to paper money was not motivated by the desire to provide greater incentives to business activity. It stemmed, instead, from excessive current expenditure, and more particularly from the pensions and benefits it had been forced to grant. The result of this policy, combined with the revolutionary threats raised by more than one political faction in the country, fueled the growing inflation. It may be recalled that on 27 November 1947, after continuous episodes of violence in the towns and in the countryside, the armed organization of the PCI (Italian Communist Party) occupied the Prefecture in Milan, and it was only because the Minister of the Interior

⁵ Cf. The final conclusions of *Relazione del Governatore della Banca d'Italia all'Assemblea generale ordinaria dei partecipanti per il 1947*, (Rome, 31 March 1948), pp. 215-216.

threatened to order the army's intervention that the situation was calmed and a crisis averted. Undoubtedly, the economic measures adopted, such as the changed regulations of the Stock Exchanges, or proposed, such as the decree of a special wealth tax, increased, rather than reduced, speculation on the lira and the flight of capital. In addition, the tension over the question of Trieste, with the rumours then circulating about Tito's interest in fomenting unrest in Northern Italy with a view to resolving it to his own satisfaction, and the changes then taking place in agricultural production, especially in the South, where the cultivation of wheat was gradually being ousted by sheepfarming, combined to worsen the general economic situation. In fact, Italy's industrial output continued to decline in the second half of 1947.

To cope with this difficult situation the government, and in particular the Minister for the Budget and Economic Planning, Einaudi, implemented a stabilization policy. By its provisions, the liquidity of the banks was reduced, and a series of restraints placed on their operations. Secondly, the cost of money was raised, through a readjustment of the official bank rate. Thirdly, the state was prohibited from having recourse to the Bank of Italy without a special law stipulating the amounts in question. And finally, the principle of "free currency," according to which everyone should be able freely to procure the currency required for their imports, was vigorously reaffirmed in foreign trade. Thanks to this monetary and credit policy, a domestic exchange rate against the dollar, not dissimilar from its international exchange rate, was finally achieved. The new exchange rate was fixed at 575 lire in December 1947; and it was one that remained unchanged for at least fifteen years, thus ensuring stability and correspondence between national and international prices.

By the end of 1947 the most important part of the policy of monetary stabilization could be said to have been completed, even though a series of further adjustments followed in 1948. The consequences of this policy continued, however, to make themselves felt at the productive level until at least February 1948, when industrial production slumped to its lowest point. Thereafter, industrial recovery began, albeit slowly; and by September 1948 industrial output had once again been restored to the levels it enjoyed in July 1947. It should be recalled, however, that the democratic parties had soundly defeated the left-wing forces of the popular democratic front on 18 April 1948, and thus effectively removed any threat of revolutionary subversion. The political stability that ensued had a beneficial effect on the recovery of output. The year 1948 thus marked a turning-point. But it was also the year in which the Marshall Plan entered into operation.⁶

Leaving to one side the recently developed thesis, according to which the Marshall Plan was nothing but an expedient to give economic aid to Germany

⁶ I. Gimbel, *The origins of the Marshall Plan*, (Stanford: Stanford University Press, 1976), pp. 4-6.

and to make her economic reconstruction politically acceptable in Europe and the United States, it is indisputable that it also represented a valuable source of aid and assistance for the shaky Italian economy, starved of raw materials, plant, know-how and dollars. The aid in question was subject to the formulation by each country of a reconstruction programme placed in the context of the plans of the other European countries, and took the form of grants (non-refundable) and loans of goods and services. The individual states were then supposed to sell the aid they received to their own economic operators, and by the fund established for this purpose could proceed to the economic and financial reconstruction of the country.

Within each country, the success of the whole operation, that is the best utilization of the aid received, depended on the effectiveness of the programme drawn up, in other words, the capacity to define valid economic and financial priorities and to supervise their implementation. Unfortunately, Italy proved unable to formulate an effective and coherent programme; she limited herself instead – in the words of Paul Hoffman – to a somewhat approximate enunciation of objectives. Many believe that Italy's subsequent structural imbalances – between agriculture and industry, or between various sectors of industry, or between North and South – are directly attributable to this original error in planning. In its 1948-1952 development plan, drawn up for the duration of the Marshall Plan, the Italian government, which planned total investments amounting to 2273 billion lire, determined that 665 billion (of which 555 funded by the state) should be allocated to agriculture; 920 billion to industry; 630 billion (of which 450 funded by the state) to transport and communications; and 8 billion to training courses. In the financing of industry the biggest share of the investments (40%) was reserved for the electrical sector, while 20% was allocated to the steel industry and 20% to mechanical engineering. The expectation was that these investments would generate 1,200,000 new jobs in the industrial and service sector. But this figure was never reached. As a result of the failure to meet this objective, the government was accused of having in large part used the ERP life-Fund, equivalent to the total in lire of Marshall Plan aid, for new industrial investments instead of for reducing the state deficit and increasing currency reserves. On the other hand, not a few scholars have argued that the choice made by the government was the best possible one. The former Governor of the Bank of Italy, Baffi, for instance, has written that it freed "the trade and development policy ... of the (following) decade from excessive balance of payment anxieties."⁷

Marshall Plan aid was not the only foreign capital which began to flow into Italy after the end of the war, and to contribute to the improvement of her balance of payments and the consolidation of her currency. In fact, to the

⁷ P. Baffi, "La lira dell'ultimo venticinquennio", in A. Fanfani (ed.), *L'economia italiana dal 1861 al 1961*, (Milan: Giuffrè, 1962), p. 476 ff.

1470 million dollars Italy received on the basis of the Marshall Plan one should add the 1612 million dollars contributed by the United States to Italy in the form of donations between 1944 and 1948, and the 431 million dollars obtained – notwithstanding the armistice conditions – for credits relating to troop payment and other outstanding debts: a total of no less than 3166 million dollars flowed into Italy between 1944 and 1952, and this made a substantial contribution to the improvement of the balance of payments and the reinforcement of the lire. But this was not all. During the same period Italy contracted loans and foreign capital was invested in Italy, amounting (net of repayments) to 465 million dollars. In short, by 1952, when the Marshall Plan came to an end, Italy had obtained, by various entitlements, a total of 3631 million dollars.⁸

Concurrently with its policy aimed at the stabilization of the lira, the reduction of the state deficit and the reinforcement of the Bank of Italy's reserves, the Italian government implemented a vigorous trade policy. It has been pointed out that 115 trade agreements were signed in the three-year period from 1947 to 1949, at first on the basis of reciprocity and private compensation, and subsequently by payment in general compensation.⁹ But Italian trade policy, also as a result of participation in the Marshall Plan, went even further than this. Italy became a partner in the Italo-French Customs Union, the Schumann Plan, the European Union of Payments, and joint European programme for the production of essential resources, such as coal and steel, the programme which constituted the point of departure for the creation of the European Common Market. The liberalization of trade represented a precise objective of Italian policy. It was, indeed, an obligatory one, in view of Italy's condition, a country notoriously poor in raw materials and with an agricultural system inadequate – at least in some sectors – to meet its requirements. It was only by increasing its exports that Italy could pay for its imports.

A consequence of this policy was the considerable growth in exports. After covering 78% of imports in the period from 1931 to 1938, these had dropped to 36% in 1947, but by 1950 had surged to cover 81.3% of imports,¹⁰ a clear sign of the progress made. At the same time, the range of destinations had significantly increased. Other markets, apart from the United States, had been opened up to Italian products. And what is even more significant, the percentage of agricultural and food products imported had decreased, testifying to Italy's agricultural recovery and concurrent industrial growth. Undoubtedly, all this was a consequence of the growing fixed investments made in the various individual sectors. Between 1948 and 1952, annual fixed investments in agriculture grew from 160 to 270 billion lire (at current values); those in industry from 460 to 780

⁸ E. Corbino, *L'economia*, p. 341.

⁹ G. Rasi, *La politica economica e i conti della nazione*, p. 199.

¹⁰ *Ibid.*

billion; those in transport and communications from 280 to 310 billion; and those in public works and buildings from 260 to 640 billion. Not only did these investments grow, but they did so at an even faster rate than the gross national product: the latter grew, in current values, by approximately 30% from 1948 to 1952, but the share in it of the investments in question rose from 16.7% (1948) to 21% (1952). Nonetheless, in 1951, as shown by the general census conducted that year, Italy, in spite of the investments made, still remained a predominantly agricultural country: in contrast to the 29% of workers employed in industry and the 27% in the services sector, agriculture continued to absorb no less than 44% of the total workforce.¹¹

From 1951 onwards, however, the situation continued to register a rapid improvement. The rate of growth of gross domestic product increased rapidly, and within the period 1951-1958, which constitutes one of the three major cyclical fluctuations in Italy over the last thirty years, registered, on average, annual increases of 5.1%; this is higher than those of many other Western countries, including the United States and Great Britain. This average annual growth rate was even higher in the subsequent cyclical fluctuation, the one between 1958 and 1964,¹² even though gross fixed investment dropped during this period, in comparison with the previous one. In fact, during the overall period 1951-1964 total exports and imports grew more in Italy than in all the other countries of the European Community and even more than the rate of world exports as a whole. But whereas in the first period (1951-1958) both the gross national product and overall employment grew, in the following phase (1958-1964) only the former continued to do so.¹³ In fact, overall employment grew by 738,000 jobs from 1951 to 1958, remained constant until 1961, but began to drop slowly thereafter.

A large part of the surplus manpower that Italy registered in agriculture and in the cities of the South was, in the meantime, spontaneously seeking new labour opportunities abroad, thus resuming the flow of emigration that the war years had interrupted. On average, the number of those that emigrated from Italy each year, predominantly – once again – from the Southern regions, was as follows: over 225,000 in the years 1946-1950, over 293,000 in the years 1951-1960; and over 264,000 in the years 1961-1970. This extraordinary diaspora was mainly directed to North America (both the United States and Canada) and South America (both Argentina and Brazil). But emigration to Australia was also conspicuous; and even more considerable was that to various countries of Western Europe: at first, during the immediate post-war period, the preferred countries were England, Belgium and Sweden, but subsequently, during the late

¹¹ V. Valli, *L'economia e la politica economica italiana dal 1945 ad oggi*, 3rd ed. (Milan: Etas libri, 1982), p. 11.

¹² *Ibid.*, p. 21.

¹³ *Ibid.*, p. 43.

fifties and sixties, Italian immigration was mainly directed to France, Switzerland and West Germany.

Thanks in part to this emigration of surplus manpower, which ensured, on the one hand, a growing volume of remittances from abroad, a valuable contribution to the balance of payments, and, on the other, a better skilled professional preparation of the Italian workforce, the country's resources conformed more closely to the needs they were required to satisfy. After 1948 the growth of industrial production was continuous. At the end of 1949, the official ISTAT (Central Institute of Statistics) index had almost reached the maximum pre-war index, while in the following year it had already outstripped it, rising to 123. But the growth became rapid and astonishing in the years that followed. The index in question rose to 140 (1951), 145 (1952), 159 (1953), 176 (1954), 191 (1955), and so on, soaring to 358 in 1962, 459 in 1966, 529 in 1968 and 546 in 1969. In short, Italian industrial production had increased more than five-fold between 1949, the year generally assumed as that marking the completion of Italy's post-war reconstruction, and 1969. So much so that Italy's economic structure appeared wholly transformed in the returns to the general census of 1971. Agriculture was no longer the sector with the greatest number of employees. Workers in agriculture had, in fact, dropped from 44% to 18% of the total workforce. By contrast, the number of employees in both the industrial and services sectors had increased since 1951. Workers in industry had risen, in the space of twenty years, from 29% to 42%, and those in services from 27% to 39%.¹⁴

Industrial growth had involved a vast range of production processes. For example, the gross production of electricity rose, in millions of KWH, from 20,782 in 1949 to 124,880 in 1971; and most of this output was absorbed by industrial needs. The steel industry had also grown considerably. Indeed, its progress seemed almost incredible. After emerging crippled from the war, with much of its plant destroyed or seriously damaged, it succeeded in the space of a few years in achieving a complete alteration of its position. It radically overhauled its organization, and replaced a steel-manufacturing process fed largely on scrap by an integral cycle process, to one utilizing mainly iron ore. In 1970 the production of steel had risen to over 17 million tons, whereas in 1948, it had not exceeded 3 million.

Even more remarkable was the progress made in the mechanical engineering industries, especially in some sectors, such as those of the construction of means of transport (ships, trains, motor vehicles, etc.). In fact, the annual tonnage of ships built by Italian yards soared from 96,793 in 1949 to 875,470 in 1971, while the number of motor vehicles manufactured rose from 63,808 in 1949 to 1,701,064 in 1971. The production of tractors, which did not rise above 6,000

¹⁴ *Ibid.*, p. 11.

in 1949, had increased to over 80,000 in 1970, while the production of typewriters had more than quintupled (rising from some 91,000 in 1949 to over 576,000 in 1972). In 1949 Italy manufactured some 31,000 calculators, while in 1971 these had topped 877,000. Similarly, the production of sewing machines rose from some 245,000 in 1949 to almost 900,000 in 1971.

The chemical industry also made considerable progress. Production of the main basic products (hydrochloric, nitric and sulphuric acid, calcium carbide, ammonium sulphate, etc.) increased several times. In some processes, such as those of synthetic resins and artificial textile fibres, production had increased more than ten-fold in the space of a few years. Considerable progress had also been made by the processing – extraction included – of liquid and gas fuels. And by no means insignificant were the increases registered in the cement and building-materials industries, including glass, both as a result of the boom in the building of houses and industrial plant, and in response to the growing requirements of public works (road and motorway construction, etc.). The building boom registered from the end of the war to the end of the sixties in towns great and small throughout Italy, but especially in the cities of Central and Northern Italy, in which the industrial development had particularly been concentrated, should, moreover, be related not only to improved living standards, but to the urbanization of huge masses of peasants from the South and from the mountainous and overpopulated regions of the interior, who had been led to emigrate by the better and more constant pay offered by the manufacturing and service industries developed in the cities in question.

The industrial progress made during this period, which in scale and intensity of development may justifiably be defined as the second industrial revolution in Italy, is also shown by the technological progress achieved in some industrial sectors especially steel, cement, mechanical engineering, chemical industries and electronics. It is also revealed in the development of new business organization systems and management techniques, including the adoption of computers, which have made a decisive contribution to the growth of business productivity by reducing costs and increasing competitiveness.

This exceptional development was not achieved, however, without negative repercussions. The imbalances, disparities, bottlenecks and contradictions that have marked the entire history of Italy's economic development – became dramatically accentuated in the post-war years. In the thirty years that followed the ending of the Second World War – and which registered the real industrialization of the country – three major phases may be distinguished, once the period of immediate post-war reconstruction had been completed. The first is that of “easy” expansion, characterized by rapid development under conditions of stability, and roughly covered the years from 1953 to 1962. The second is that of “difficult” expansion, marked by a slower and more unstable development, and may be said to have ended in 1971-72, thus initiating the

current phase. This third phase has been characterized first by the oil crisis, and then by the economic crisis and by soaring inflation. All three phases are, it goes without saying, linked by processes of cause and effect and other interacting phenomena.

The first phase laid the foundations of Italy's industrial growth. In spite of the fact that Italy had lost the war, she was able in these years to gain access to rich, extensive and rapidly expanding markets: a dream that Italian entrepreneurs had entertained for years, even having recourse to colonial adventures and foreign wars in the bid to turn it into a reality. Through her membership in the EEC and her agreements with the United States, Italy's economy was opened up to international competition. This contributed to her rapid development, but it also exacerbated existing imbalances and accentuated the dualism that had accompanied the process of Italy's economic development ever since her unification: the dualism between North and South.

While North Italian industry, whose foundations had already been laid prior to unification, was opened up to international competition after having been able to grow and consolidate itself in the shade of protectionism, that of the South, of far more recent origins and in the majority of cases still at an embryonic phase, was unprepared for the change in Italian economic foreign policy, at a very delicate moment when it was still in need of support and protection. The blow it received could not have been more dramatic and discouraging. The impetus of Italian economic life in the first fifteen post-war years, determined especially by the industrial sector linked to the structure of demand and the technology of the more advanced industrial countries, inevitably advanced the interests of the Northern regions in which this sector was mainly located, and stimulated an extraordinary process of industrialization, concentration and urbanization within them. And since the flight to the industrial cities of Central and Northern Italy was the effect, not of labour enlisted from their immediate environs, but of those emigrating to them from distant regions, and especially from the South, the problems that this urbanization posed, in terms of social services and infrastructures (homes, schools, hospitals, transport, etc.), lay at the basis of the recession of the years 1962-1963 which constituted the watershed between the "easy" and "difficult" phase of the second Italian industrial revolution. At the same time, however, the extraordinary industrial development of Central and Northern Italy – notwithstanding the problems that accompanied it – further aggravated the North-South disparity. This disparity widened, in spite of the operations of the *Cassa per il Mezzogiorno* (the Development Fund for Southern Italy). Established in 1950, this government fund has, nonetheless, played a decisive role in modernizing the infrastructure of the South (roads, motorways, waterworks, irrigation systems, land reclamation schemes, etc.), and in providing, through its funding agencies, incentives to the industry that had in some measure been developed.

It should be added, lastly, that, in spite of the great migration from agriculture and the abandonment of unremunerative land, the population still pressed hard upon agricultural resources. This was one of several disquieting factors.

Social unrest in the big industrial cities, the regional imbalance between North and South, and the disparity between industrial and agricultural earnings: all this has been the inevitable price that has had to be paid for the extraordinary transformation that has turned a predominantly agricultural country into one of the ten leading industrial nations in the world. Italy's task is to preserve her industrial achievement while rectifying the problems it created.

