ABSTRACT

The FIM represented one of the most important public credit instruments set up for helping the engineering industry in Italy after the Second World War. Engineering was the most advanced sector in the Italian economy and the government saw economic growth as depending heavily upon its rapid recovery. Despite the best of intentions, the FIM was difficult to handle: many firms were already on the verge of collapse when the FIM stepped in, while others employed such an enormous number of workers that the state felt compelled to intervene. Between 1947 and 1950 only 23 bil out of 66 bil lire were reimbursed to the FIM from the firms which had been given aid. Defaults concerned mainly three large industrial groups and resulted in closures or nationalization. This article holds that nationalization was a good choice in the long term: it avoided increasing the mass of jobless workers in a very critical historical moment. Moreover, it was an opportunity to bet on the future competitiveness of sensitive production areas in the defence, electronics, high technology and aerospace sectors, which would have been irretrievably lost if it were not for a big state company – Finmeccanica – which over time gained an international reputation in these fields. Finally, not only did nationalization prove a wise entrepreneurial move, but it was also the only way not to lose Italy’s technical capabilities which had been built up in the past.

The Fondo Industria Meccanica (FIM) was set up by the Italian government in 1947 in order to finance engineering firms needing to invest in reconstruction and modernization, with the aim of increasing exports and employment. It was managed by a highly professional technical committee. Yet, its results were meagre: between 1947 and 1950 the FIM gave loans to 37 companies for a total of 66 bil lire but only 23 bil lire had been reimbursed by the recipients by the end of 1950. All public firms and some private ones – like Piaggio (motorcycle producer) and Fiat – were able to pay their loans back to the FIM. In these cases, financial aid was a transitory but necessary intervention which allowed beneficiaries to cope with a difficult moment of crisis. On the other hand, Breda (a big company producing a great variety of products, from metal engineering to railroad materials and armaments), Ducati (electrical appliances and motorcycles) and Gruppo Caproni (aeronautics, light engineering products) were unable to pay back their loans. The FIM decided not to help a few firms of the Caproni group (which went bankrupt), but stood by the rest, effectively controlling the majority of their shares by the end of 1950. One of the main reasons underlying this decision was that the default of those big engineering companies would have meant provoking discontent among a very large number of workers, which at the time was not politically feasible.

The FIM has been accused of bad management by contemporary observers and economic historians, yet the very fact that political and not only economic aims came into play meant that it was compelled to accept possible future losses for social reasons too. The inability to pay would have condemned the weaker companies to close down in the short run.
The FIM technical committee was attacked by the press of the time, and its president soon resigned. In those years, managers behaved like entrepreneurs and therefore tended to select companies worthy of support from among those which were productive and properly run. Yet, social motives pushed the government to finance badly managed companies with little hope of repayment. The first FIM president clearly did not share the government’s view and was afraid to take the responsibility of unpopular and loss-making decisions.

Undoubtedly, any analysis of FIM must consider timing. At the end of World War II, when the Italian economic and political situation was fragile and still unsettled, the new institution was burdened with excessive expectations and challenges. Its lean and basically technical structure ended up taking care of problems which the state at the time did not want to address. Instead of facing the need for a more efficacious social policy through direct intervention, the Italian government preferred to step in on an ad hoc basis in order to avoid social disruption.

The end of the story was that the weakest engineering companies financed by the FIM were nationalized. They first became property of the FIM and later of the big state holding company Finmeccanica (only recently in part privatized, producing highly technical engineering products with an important foothold in the international market). Thus, the FIM inaugurated the post-war policy of intervention by the state. Public investments and subsidies to private and public firms will become common features in the years to come. The FIM was the first democratic expression of the «entrepreneurial» state in Italy (which had come into being during fascism with the foundation of the public holding IRI – Istituto per la Ricostruzione Industriale). As a matter of fact, the majority of European countries nationalized public services and railroads after the war. In France, for instance, mines, air and sea transport, tobacco, matches, printing, military appliances and car companies like Renault, were property of the state, which also owned 50 per cent of electricity production companies. Yet, Italy’s unique position stemmed from the extension of state presence governing up to one fourth of Italy’s joint stock companies.

My line of argumentation will address a few major issues. I will hold that the establishment of the FIM, though still controversial, cannot be wholly condemned nor can its managers. The decision to invest in the recovery and expansion of the engineering industry was deemed necessary on the basis its utmost importance: it was (and still is) the most modern and advanced sector of the Italian economy. One of the few which allowed Italy not to be considered a backward country. Yet, my hypothesis goes further and holds that when a few companies ended up being nationalized due to increased public financial contribution, the state’s intervention not only guaranteed thousands of jobs (and social peace), but also proved a wise entrepreneurial move in the long run. Nationalization of the weakest companies, often engaged in very expensive R&D-based sectors, prevented the country from losing important industrial capabilities built up over the previous decades. The only option to nationalization would have been to let such industries go bankrupt and close down, since private entrepreneurs were unwilling to step in: in the words of the president of Italy’s industrialists’ association,
Angelo Costa. «No one today in Italy could afford to buy a big public firm, times are not ripe».³

Finally, I will argue that the FIM’s financial assistance to healthy firms provided a much needed support in a difficult time, and allowed them to get through hardship and distress until the Marshall Plan (MP) began to operate. Thanks to MP loans, US machinery was made available for the well-managed companies which had been assisted by the FIM. These technological transfers, rather than being passively accepted, were selectively chosen by Italian companies and often integrated into their old production lines. Italian entrepreneurs were able to make the most of these new opportunities (i.e. the Americanization process), and what is equally relevant is that their successful exploitation of the technology already employed by the United States, the technological leader also reflects the fact that Italy had developed the necessary social capabilities.⁴ This has also to be taken into consideration: the FIM allowed many companies to retain their human capital endowment. Immediately afterwards, Italy’s well-developed and trained labour force showed amazing adaptability and willingness to comply with foreign methods and the capacity to make foreign technologies congruent with the local context produced spectacular results. The input of new technology increased productivity (the amount of output per unit of labour), while labour demand increased thanks to expansion in demand both at home and abroad.⁵ But unfortunately this is too long a story to be told here.

Italy’s engineering industry at the end of the Second World War

War damages which affected the Italian engineering industry’s physical stock amounted to twelve per cent of the pre-war asset value according to different estimates of the time.⁶ According to more recent estimates, however, the damage to buildings, machinery and industrial furnishings was even smaller and did not exceed ten per cent of the asset value.⁷ Confindustria, the industrialists association, wrote in 1945: «Almost all industrial plants are perfectly effective, what we lack is coal instead. Giovanni Falck (the biggest private iron and steel producer) clarified Italy’s needs in these three words: coal, coal, coal».⁸

Since the great part of real estate and equipment were intact, Italian industrialists realized perfectly well the important and lucrative part they could play in the process of

⁴ In the words of Abramovitz: «Countries that are technologically backward have a potentiality for generating growth more rapid than that of more advanced countries, provided their social capabilities are sufficiently developed». Moses Abramovitz, Thinking about growth, Cambridge 1989, 225.
⁶ Attilio Jacoboni, L’industria meccanica italiana, Rome 1947, 50 and also Banca d’Italia, Adunanza generale ordinaria dei partecipanti, Rome 1948.
⁷ Vera Zamagni, Come prendere la guerra e vincere la pace, Bologna 1997, 36.
Italian reconstruction. Nonetheless, Italy had neither raw materials nor fuel, and industry was thus unable to function: before the war Italy imported one million tons of coal from Germany and Great Britain, but in 1945 imports had gone down to 300,000 tons and Italian industry relied on an American aid program (FEA up to February 1946). After that, UNRRA (United Nations Relief and Rehabilitation Program) supplied 5.5 million tons of coal for essential use (industrial use mainly excluding heating for instance) and supplied two million tons of oil enabling road transport to get going. Still in 1947 US coal aid supplies represented 72 per cent of the total imports.

Lack of fuel and raw materials was the main reason for Italian industry’s slow recovery after the war, as shown in Table 1. In 1946 industrial production was still at 75 per cent of the pre-war level, while six OEEC countries had reached or exceeded their pre-war levels.

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<th>Table 1: Industrial production in some OEEC countries.</th>
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<td><strong>Industrial production 1938 = 100</strong></td>
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*Source: ECA Recovery Guides, A Record of Progress in the ERP Countries, Paris 1951, 134-144.*

Italy’s industrial production was able to return to the pre-war output level only in 1948, and by 1950 all countries, except for Germany, had exceeded the 1938 threshold. The importance of engineering in the Italian economic fabric was not distorted by the conflict, but there were important changes dictated by the necessity to reconvert war-time industries into peace-time industries. After 1938, engineering production growth was stimulated by public war demand: war orders increased from 30 to 50 per cent of total output.

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10 Jacoboni, *L’industria meccanica* (cf. n. 6).

11 In 1950 industrial production sharply outgrew the pre-war level, the average index being 110 (1938 = 100), against 105 in 1949 and 99 in 1948. Banca d’Italia, *Adunanza generale ordinaria dei partecipanti 1950*, Rome 1951, 86.
output between 1938 and 1943.\textsuperscript{12} Therefore, at the end of the conflict, the reconversion process in the engineering industry affected 350,000 workers.

In the first two years after the war, engineering firms faced a slow and difficult process of restructuring and change that involved putting some specialized equipment and a few plants into storage. Yet, engaging in civil production was not too difficult a change, and most firms were able to use existing machinery. Furthermore, due to limited damage, activity could be resumed as soon as raw materials and fuel were made available. The engineering sector was thus characterized by a considerable degree of continuity: in both 1939 and 1951 it employed one fourth of total industrial workers and featured as the leading sector of Italy’s economic miracle: «no line of production was un-attempted, automobiles, tractors, vespas and lambrettas, sewing machines, machinery for paper mills, calculators and electric material, refrigerators, washing machines, typewriters, packaging machines: Italian entrepreneurs in the engineering field tried to produce them all with smaller or greater degree of success, but with great timings».\textsuperscript{13} The aircraft industry was the most heavily affected engineering sector after the Second World War. It produced 200 to 300 planes a month during the conflict, but after 1943 all firms engaged in this business were either closed down or had to start manufacturing something else – Piaggio for instance started to build the famous Vespa in 1946.\textsuperscript{14}

The birth of the FIM

Prime minister De Gaperi shared with his fellow party members in the Cabinet the same view on the importance of promoting an engineering export-led growth, which could also help Italy gain a new international standing.\textsuperscript{15} The engineering industry was thus helped by numerous law decrees after the war providing specific financial aid, which represented «a much needed shot in the arm for the enterprises».\textsuperscript{16} Out of these \textit{ad hoc} provisions totalling approximately 50 bil lire, 20 bil were granted by an Export Import Bank loan which was actually given to Italy only when De Gasperi went to Washington on an official visit in January 1947.\textsuperscript{17} The loan allowed Italian enterprises to buy raw materials, fuel, machinery and technical equipment for reconstruction and export development, with low interest rates, a three year grace period of and reasonably long amortization schedule.\textsuperscript{18}

Yet, in the summer of 1947 Italy’s economic situation was still difficult and unsettled. Meanwhile, industry started complaining about the new restrictive policy measures passed to halt inflation. On 4 August 1947, Minister of the Budget Einaudi had in fact implemented draconian measures to halt the continuous rise in prices which threatened

\begin{thebibliography}{9}
\bibitem{12} Prima Relazione sul FIM, in: IMI Archives, box FIM.
\bibitem{13} Zamagni, \textit{Dalla periferia al centro} (cf. n. 2), \textit{414}.
\bibitem{14} Jacoboni, \textit{L’industria meccanica} (cf. n. 6), \textit{58}.
\bibitem{17} Paolo Craveri, \textit{De Gasperi}, Bologna 2006, \textit{290f.}
\end{thebibliography}
to transform a growing inflation into hyper-inflation. A higher rate of obligatory reserves was introduced, the discount rate was raised from four to 5.5 per cent and the lira was devalued. The main objective of this latter monetary measure was to make the official dollar quotation coincide with the free market one. In accordance with American authorities initially the dollar exchange rate was set at 225 lire, but this was soon raised to 350 lire, while free dollars were on the market at 900 lire each. Through subsequent adjustments Einaudi successfully stabilized the official (and unofficial) exchange rate at 625 lire per US dollar during 1948: this rate survived for 23 years (until 1971). In the words of Gianni Toniolo (a renowned Italian economic historian): «Monetary stability was the principal aim of the monetary authorities of the time and was impeccably met by Einaudi». 19 The monetary measures employed by the government attained further benefits: they led the basis for a recovery of personal savings, for a reduction in the amount of capital going abroad (especially on the part of textile producers benefiting from soaring exports since the end of the war), for a restoration of confidence in the foreign-exchange stability of the lira and for an improvement of exports. 20 Exports were lagging behind: international aid still covered 76 per cent of imports in 1946, but exports were not able to cover the remaining 24 per cent and the government was forced to cut «vital imports» as a result. 21

As to the introduction of the higher reserve requirement, it finally solved a heavy speculative situation characterized by the incessant expansion of commercial credit, fed by bank withdrawals from the Central Bank. This system had allowed large speculative stock accumulations which «raised prices to an excessive level compared to the level of incomes». 22 Einaudi’s measures lowered wholesale prices by 11.8 per cent between September and December 1947 and the cost of living index by eight per cent.

Confindustria and its president Angelo Costa supported this policy, even though many businessmen did not endorse the credit freeze which led many firms to the verge of a financial crisis. 23 Therefore, the government decided to set up the FIM or Fondo per il finanziamento dell’industria meccanica, a fund for the financing of the engineering industry, in order to guarantee the necessary liquid assets. The FIM aimed at giving incentives for a company’s conversion to a new line of production and for the dismantlement of companies producing goods no longer requested by the market or whose production had been forbidden by the peace treaty (Law decree 8 September 1947, no. 889).

Why help the engineering sector in particular? Although Italy after the war still had a very important agricultural sector, and fruit and vegetables were the most important export category, things were changing rapidly. Since the First World War, the mechanical industry had gained a unique position on the Italian productive scene. As a 1945 government document stated: «as far as number of employees and plants, consider-

22 Baffi, Studi sulla moneta (cf. n. 19), 184-188.
23 Fondo Giunta Esecutiva, Report of the meeting held on 12.11.1947, Verbali files, in: CHA.
ing the variety of productions and the experience built up in the previous decades, Italy’s engineering industry is the most important sector of our economy.\textsuperscript{24} At the end of the war, the engineering sector accounted for 25 per cent of the labour force and 19 per cent of exports. Furthermore, Italy’s governmental economic commission in evaluating the productive situation and future investment priorities used data which proved that in 1939 the engineering industry ranked first in importance since it absorbed the largest share of capital invested in plants and stocks. Last but not least, right after the war the government decided to support a new paradigm of state steel production, along the lines of the so-called Sinigaglia Plan (Oscar Sinigaglia was President of the public holding Finsider), characterized by the future construction of large-scale integrated plants fed by iron ore and coke ovens supplying blast furnaces, open hearth furnaces and a huge rolling and finishing complexes. This Plan was expensive, but its justification, in the words of Sinigaglia himself, lay in the fact that cheap homemade steel products were in the interest of the engineering industry, which «represents the only big business capable of bringing a radical change in production and export volumes and change our whole economic situation. This development is possible only if steel products are offered in Italy at the same price as our foreign competitors set in their countries».\textsuperscript{25} His words proved convincing and his Plan was approved.\textsuperscript{26}

In the 50s, engineering products exports grew from 19 to 32 per cent of total exports (textiles and food products went down to 17 and 15 per cent respectively); they increased by 530 per cent (from 135 to 729 bil lire), and by 836 per cent in case of automobiles. They thus certainly represented the leading sector of Italian exports. Competitive prices and quality had conquered the international market. With the benefit of hindsight, then, we may say that helping the engineering industry was a farsighted decision, but such a decision was taken on basis of the presence of an already viable and competitive sector, of the comparative value-added content of such industries with deep-rooted basis and tradition in Italy’s economic context. It was a safe bet.

A seven member committee was set up in order to give practical application to the FIM purposes and in order to avoid clientelism and similar practices. Three members were chosen outside the public administration among renowned personalities of the time: Roberto Tremelloni, as President of the FIM, Ernesto Rossi and Mario Ferrari Aggradi.\textsuperscript{27} The IMI (Istituto Mobiliare Italiano), a public long term banking institution established in 1931 to help firms on the verge of collapse, was assigned the task of assess-

\begin{itemize}
  \item \textsuperscript{24} Ministero dell’industria e commercio (a cura di), \textit{Piano di massima per le importazioni industriali dell’anno 1946}, Milan 1945, 49.
  \item \textsuperscript{25} Ministero per la Costituente, \textit{Rapporto della Commissione Economica} (cf. n. 3), 28-31.
  \item \textsuperscript{26} Mathias Kipping et al., \textit{The Emergence of New Competitor Nations in the European Steel Industry: Italy and the Netherlands, 1945-1965}, in: Business History 1 (2001), 69-96, here 73.
  \item \textsuperscript{27} Ernesto Rossi was elected to Parliament in June 1945, the first democratic government after the war (21.6. to 8.12.1945). In October 1945 President Ferruccio Parri asked Rossi to direct ARAR (\textit{Azienda Rilievo Alienazione Residui}) for the selling of war surplus. Parallely Rossi began his career as a journalist at II Mondo (1949-1962) where he conducted important inquiries which are still remembered in the history of Italian journalism. Mario Ferrari Aggradi was a key member of the Christian Democrats, he held quite a few ministries in different post-war governments and was engaged in important editorial work. See: Antonia Carparelli, \textit{Ernesto Rossi (1927-1967)} in: Antonio Mortara (ed.), \textit{I protagonisti dell’intervento pubblico in Italia}, Milan 1984, 618-646.
\end{itemize}
Practically the funds were conveyed through a few banks (Banco di Napoli, Banco di Sicilia, Banca Nazionale del Lavoro, Monte Paschi Siena, Istituto S. Paolo Torino, IMI, Istituto Credito Imprese Pubblica Utilità, Consorzio Crediti Opere Pubbliche) while the state helped through the paying of the interest rate and acting as surety.

Yet, the FIM’s governance structure remained thoroughly public, and it was indeed “intended to be that way”, even more so when banking criteria proved inadequate and other considerations came into play.

The professionals sent to evaluate the technical and economic characteristics of the applicant enterprise were required to draft two detailed reports which were then submitted to the Committee for the final duly completed assessment. If the decision was positive, the two contracting parties were to sign a loan contract. The FIM’s funding were initially set at 40 bil lire, but this amount increased rapidly.

The aims of the Fund had been clearly stated in article 1: “Provide financial liquidity to the engineering firms in order to support the orderly development of production, exports and manpower employment”. This was a twofold aim, the promotion of exports and employment, which did not prove easy to attain in practice. Safeguarding employment often meant helping the weak and badly managed enterprises which were about to go out of business: the FIM decided to help them in the end in order not to leave many people jobless. Social welfare purposes thus overrode all other considerations, in the hope that aid could contribute to a swift recovery. In the clash between two principles, exports promotion and job defence, the latter prevailed, but many problems arose as a consequence.

In its First Report in 1947 the Committee underlined how out of 67 financial assistance applications for a total of 49 bil lire, half of this sum had been requested by public firms (IRI firms). It was also decided to grant precedence: “to those firms that were in urgent need of money even disregarding the rigid selection criteria which would have irremediably condemned a few firms in bad financial conditions, but with hope for recovery”. It was thus decided to prefer intervention in favour of those industries in danger because of lack of capital, “but which are not irremediably sick, since we cannot bring back to life organs which are atrophic”.

The FIM’s conflicting objectives

Ernesto Rossi resigned from the committee in December 1947, after only three months of work, leaving a few bitter and critical Notes about FIM behind for Prime Minister De Gasperi. Rossi, while acknowledging the honesty and good will on the part of the...
members of the committee, did not believe that the FIM could stand to the entrusted task. The people in the committee were not working full time and their meetings twice a week did not give them enough time to read all the documents which piled up for each single application and at the same time to try to sort out all the complex juridical, technical and bank problems involved. «The Committee is often forced to distribute billions in order to pay workers’ salaries at the end of the month and postpone the failure of bankrupt engineering firms. Moreover the Committee is often under all kind of pressure by Ministers and Prefects and tends to transform those firms which cannot recover into public firms.»

Rossi continued: «If the Committee would seriously want to examine the economic, financial and management situation of the firms asking for a loan, check the information released and the recovery plans, subject the concession of the loan upon the closing down of some departments and the firing of a certain number of workers, ask for the necessary warranties. […] Well, the Committee should have an impressive organization, with appropriate and larger means and power and with first rank top managers.»

Therefore, according to Rossi, the FIM was good only for wasting tax payers money, transforming badly managed firms into state firms, in the process thoroughly destroying the mechanism through which firms could resort to private savings. Moreover, in this way the FIM was reinforcing hot-headed union leaders’ control over the labour force, offering them the possibility of demonstrating that the government would give in to blackmail and that workers could earn a salary without working. Ferrari Aggradi, embittered by these assertions, said that the critique had no foundation and that: «it is very easy to speak sententiously from the Olympic but to face battles and take the ensuing responsibilities is more human and patriotic».

As a matter of fact, Ernesto Rossi was not the only member of the Committee to perceive the structure’s deficiencies and the difficulties of the given task, and his resignation was immediately followed by the one of Roberto Tremelloni. FIM’s management, with its ambivalent aims and inner contradictions, worried all members, whose first report made the point that it was difficult it was to decide on the concession of loans because the decision had to be based on the firm’s long term recovery plan. Since such plan could be hardly checked, it was almost impossible to forecast and dependent upon the future sector trend. The problem was facing not just the financial reconstruction of a single firm, but of a whole sector, with coordinated intervention aimed at improving and upgrading obsolete machinery, work organization and per capita labour productivity on an output per men hour (still only 22 per cent of an American worker in the engineering industry). «Unless a serious effort is performed, Italian engineering industry will fall into decay, and even 10 successive FIM won’t be enough to start it off again».18

The fund’s administrators in order to avoid being charged with the accusation of giving away loans without a serious screening, underlined in the First Report that

35 Ibid.
37 Prima relazione sul FIM, in: IMI Archives, box FIM.
38 Ibid.
FIM’s aid disbursements were not the result of political pressures (even though existing), but neither were they allocated blindly. On the other hand, it was not easy to decide in favour or against an allocation in case of firms unable to stand competition, but which, if left alone, would have cut a large percentage of existing jobs. The FIM indeed asked for government support in this case indicating that welfare interventions were needed on the part of the government and that the fund should have been left outside this social issue, concentrating exclusively on the function of recovery and firm’s reorganization. The FIM was not able to restructure very badly managed firms which were on the verge of bankruptcy, yet its intervention allowed some of them to survive. It was the welfare problem which discredited FIM’s credibility in the end. The fund was forced to intervene as lender of last resort in order to guarantee social peace and avoid inflating the already enormous unemployment problem.

As time went by, the members of the FIM committee felt deeply uncomfortable about the decision to approve a few applications that did not meet established standards, but for which perfect objectivity was not feasible. It would have clashed with a moral imperative to help workers, while there was a need to drive away “the spectre of large crowds of workers pestered with hunger and with worries for tomorrow”. IMI itself admitted to be lavish with curable and incurable firms, the latter having been chosen since their compromised financial situation involved social problems, which, even though they should not have come into play in evaluating the loan request, could not in the end be ignored.

The liquidation of the FIM

FIM’s financing up to 1949 amounted to 66.6 bil lire to engineering firms employing 320,000 workers. But many serious reconversion problems still remained. Not able to withstand the distrust and critics of its own administrators, two of them resigned within the first three months. Even government ministers like Einaudi engaged in writing critical articles about the FIM: “running to save this or that tottering firm can be and sometimes is a political necessity, but it is also morally condemnable, socially unfair and economically dangerous". Others accused the FIM of diverting long-time financing toward big business, which was thus receiving unwarranted support from the whole community. After only a couple of years of operation, most government officials, a large share of public opinion and private institutions (like the Institute for Economic Studies), welcomed a Cabinet proposal to close down the FIM, which would be: «a very

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39 Note sul FIM, in: IMI Archives, box FIM.
40 Mariuccia Salvati, Stato e industria nella ricostruzione, Milan 1982, 357.
41 Relazione sul FIM dell’ing. Gino Martinoli, 27.11.1947, in: IMI Archives, box FIM.
42 Relazione Consiglio di Amministrazione, May 1949, in: IMI Archives, Verbali FIM.
appropriate and well-timed decision», since in the end, the FIM «cost a lot but changed nothing».\footnote{Even the trade unions were critical on FIM’s policy, see L’inchiiesta dei lavoratori sul FIM in: Notizie Economiche 7 (1950) 3-7, here 3. And also Istituto di Studi per l’Economia, Annuario della congiuntura economica italiana, vol. III, Rome 1949; Gino Martinoli, Proposte concrete per la ripresa dell’industria in: Me, 25.2.1948.}

It was generally hoped that the Marshall Plan could soon step in and solve Italy’s problems of industrial modernization. The European Recovery Program Act had in fact been signed on 3 April 1948, and between 1948 and 1951 the value of the industrial equipment sent to Italy amounted to 171 bil lire, which was distributed among 358 firms. Interested industrialists had to send IMI their applications for the purchase of machinery and equipment on the US market and, besides demonstrating the financial solidity of the firm, they had to specify carefully the supplier firms and the unit prices in dollars of the selected equipment.\footnote{Lettera da Confindustria (Segré) al Ministero Industria e Commercio, 16.9.1948, in: CHA, Fondo ERP 47 1.6.} While the process was slow to start, mainly for bureaucratic reasons, within four years imports of machinery increased from 0.8 to 29 per cent of total ERP goods imported. Big private firms received 70 per cent of the loans and seized the opportunity to renew their production apparatus thanks to US machinery and plants. But there were a few, though not many, cases in which small and medium-sized Italian entrepreneurs considered it profitable and not too risky to incur debts to adopt new US technology. The first three beneficiaries – Fiat (cars), Edison (electricity) and Acciaierie di Cornigliano (steel) -radically renewed their production apparatus, with subsequent documented gains in productivity and reductions in production costs. The role of the state-owned steel industry was considerable: the Cornigliano steelworks received 17 bil US dollars in new plant and equipment and, thanks to US technology, the works were equipped with integrated cycle plants with semi-continuous and continuous mills for wide sheets, particularly suitable for the motor car industry, with a commitment from Fiat for buying the output of the steel plant. It had developed a «strategic alliance between a big public iron and steel producer and Fiat, two of the major Marshall Plan beneficiaries».\footnote{Ralph Petri, Dalla ricostruzione al miracolo economico, in: G.Sabbatucci/V.Viadotto (eds.), Storia d’Italia 5. La Repubblica 1943-1963, Bari 1997, 357; Kipping et al., The Emergence of New Competitor Nations (cf. n. 25).} This productive strategy ensued from Sinigaglia’s early post war suggestions and aimed at increasing homemade low cost iron and steel products in order to help Italy’s engineering industry to be competitive on the international market. Big business was thus able to get adequate aid which helped modernize the productive apparatus thanks to American equipment and plants.

This strategy was very different from FIM’s aims and policy, whose ultimate goal was often to prevent or at least delay a company’s bankrupt and save thousands of jobs. As shown in Table 2, trustworthy private and public engineering companies got help both from the Marshall Plan and the FIM, although some of the firms financed by the FIM were not able to get access to ERP aid, since their very bad financial condition prevented them from asking for support – e.g. Breda and Caproni. These two latter cases brought FIM to its knees: Breda and Caproni were given 36.9 bil lire (more than a half of the FIM’s budget) but were not able to return the money. Therefore the Fund ac-
quired a big portion of their share capital and basically controlled the two companies. As far as Breda is concerned, it meant going back to being a public company after a short experiment in privatization. It also showed its inability to «look for new markets outside the usual and long standing state orders» which had traditionally characterized the interwar years.

In the case of Caproni Group, the private engineering company specialized in the building of fighter and small planes, and FIM’s loan amounted to 15.4 bil lire. Repayments, though feeble, had been higher than Breda’s (ten per cent against 0.5 per cent). The FIM decided to close down a few company’s plants: Officine Meccaniche Reggiane, Caproni Aeronautica and Isotta Fraschini. The government policy towards the aircraft industry was clear: shut it down. In the case of Aereo Caproni Trento the two owners, Mr. and Mrs. Caproni, had reverted the whole share capital into the hands of the FIM, as a guarantee for the company’s very high debts (182 mil lire). Yet, the FIM’s committee confronted with three possibilities, i.e. to nationalize the company, to allocate a newly requested loan amounting to 130 mil lire or to close the firm down, decided for the latter one. As already said, Italy’s aircraft industry, which had probably developed beyond its capabilities in the 30s and which was producing up to 300 planes a month during the war, was not a priority anymore in the new era. Other aeronautical firms, such as Piaggio and Cantieri Aeronautici Bergamaschi (part of the Caproni Group) were instead helped reconvert into motor vehicles, engines and spare parts producers. Piaggio successfully started building Vespas already in 1946, the first model being designed by Piaggio’s aeronautical engineers. Thanks to FIM’s money, which helped the company get through the first difficult years, and a big ERP loan with which to import American machinery and plants needed for mass production, Piaggio found the way to success. Both production and productivity raised abruptly: if in 1946 Piaggio produced barely 50 Vespas a month, in 1952 monthly production increased to 4,000 units and in 1955, after all American machinery and plants had been installed and were working full time, to 8,500 units. The number of hours of direct labour per unit of output decreased from 128 in 1948 to 72 in 1954. What the consumer earned from these productivity increases was a progressive reduction of the basic model price. Vespa became the symbol and the leading manufacture of Piaggio. Its great entrepreneurial success allowed the first Italian mass motorization phenomenon to impose itself in the country. Both industrial production and productivity growth in the 50s demonstrate the degree to which Italian industry was able to exploit the opportunities for modernisation offered by international aid. In the case of Piaggio, but also of Fiat and other companies, we may thus speak of the creative accumulation of technological capabilities during these years, thanks to the presence of internal capabilities to absorb and

48 CISIM (Commissione indagini e studi sull’industria meccanica), Rilievi e proposte sulla industria meccanica italiana, Tivoli 1952, 361.
49 In March 1949 Isotta Fraschini’s outstanding debt with FIM reached 6.4 bil lire and in November the firm faced compulsory winding-up. IMI Archives, Relazione al 31.12.1951, Comitato FIM in liquidazione.
50 Estratto verbali Comitato FIM, in: IMI Archives.
52 IMI Archives, box Piaggio.
exploit them.\textsuperscript{54} Therefore, it was also the knowledge base built up in the previous decades that allowed Italian industry to seize the opportunity to catch up with its competitors on the technological frontier.\textsuperscript{55}

In the case of CAB, the FIM decided to remit its loan (£850 mil lire) and allow the firm «to start a new life» having already spare parts orders amounting to £900 mil lire.\textsuperscript{56} Finally, the Breda Group lost its aeronautical section (the famous «section n.5») as well, notwithstanding a strenuous opposition on the part of the labour force. The aeronautical section, which had produced both civilian and military planes (450 between 1938 and 1942), was definitively closed down in 1952.\textsuperscript{57}

At the end of 1949, FIM’s financing amounted to 66.6 bil lire, while repayments only to 23 bil lire (cf. Table 2).

\begin{table}[h]
\centering
\caption{FIM’s outlays and repayments (up to 31 December 1949) in mil lire}
\begin{tabular}{|l|l|l|l|}
\hline
Companies & Outlays & Repayment/outlay & Marshall Plan aid \\
\hline
Gruppo Breda & 21,534 & 0.5 per cent & 0 \\
Gruppo Caproni & 15,401 & 10.3 per cent & 0 \\
FIAT & 12,115 & 100.0 per cent & 21,820 \\
Ducati & 4,150 & 0.5 per cent & 0 \\
Gruppo Tosi & 2,422 & 37.8 per cent & 838 \\
Gruppo Piaggio & 1,040 & 57.9 per cent & 402 \\
TOTALE big business & 56,662 & 27.1 per cent & \\
IRI – Finmeccanica firms & 5,000 & 100 per cent & 7,195 \\
Medium firms & 4,102 & 51.5 per cent & \\
Small firms & 854 & 7.1 per cent & \\
TOTAL & 66,618 & 34.6 per cent & \\
\hline
\end{tabular}
\end{table}

In the case of the public company Finmeccanica, 13 firms received FIM’s financing and were able to repay their debts within the agreed terms. This should not be surprising since they were all state firms. Finmeccanica was set up in 1947 and was a holding of the big public company IRI (Istituto per la ricostruzione industriale), entrusted with the difficult task of managing 50 engineering firms in bad financial condition and getting them back to making profit, all of this while at the same time saving as many jobs as possible. Social demands were thus high, and restructuring poorly organized firms without being able to reduce and renew the labour force meant a very slow pace of recovery for Finmeccanica’s


\textsuperscript{55} Francesca Fauri, \textit{Big business and Italian industrial policies after World War II}, in: Andrea Colli/Michelangelo Vasta (eds), Forms of Enterprise in 20th Century Italy: Boundaries, Structures and Strategies, Cheltenham 2010.

\textsuperscript{56} Relazione al 31.12.1951, Comitato FIM in liquidazione, in: IMI Archives.

\textsuperscript{57} ISEC, Sezione V – Sesto San Giovanni, in: Breda Historical Archives.
industries. Actual profits thus remained low or nonexistent. Finmeccanica soon became IRI’s weakest holding: total losses amounted to 75 bil lire in the first six years of operation – IRI’s total losses over the same period totalled 76 bil lire.\(^{58}\)

Yet, the state believed in its engineering firms’ potential and kept investing on them (the worst financial conditions were to be found in Ansaldo, S. Giorgio and also Alfa Romeo) and such effort eventually bore rewards in the future.

Among private firms, as shown in Table 2, only Fiat was able to reimbursed FIM within a short time, while Tosi and Piaggio took longer. Still, they were considered financially solid companies, and they did not worry the FIM, as most small and medium firms which all met their obligations in due time. The only exceptions were two medium-sized firms that went bankrupt in 1949 (Safar and Cisitalia), dragging the repayment/outlay ratio down to 51 per cent. In spite of that, the real problem inside the FIM was its leaning towards private big business.

New state funding were allocated to FIM in 1950 (14 bil lire), but in October a law was passed (17 October 1950) which put an end to the Fund’s experiment. In 1950 the liquidation process officially began, but it took eight more years and many more billion of lire to close it down.\(^{59}\) A new liquidating committee was nominated, entrusted with the task of completing the renovation and modernization program of the assisted firms. The new Committee could also nominate a provisional administrator to manage the defaulting firm and eventually ask for a mandate trusteeship or even a compulsory winding-up if necessary.

Tremelloni, in his new role as CIR (Interministerial reconstruction committee) vice-president, said: «well the government should soon tell the new FIM administrators what aims are they to attain and pursue in this ending period, otherwise they’ll have to stick to generic improvisation and have confidence in its provisional nature […] If the new FIM must operate like a bank, well then there’s no need for it, we should just pass its tasks on to a bank, but if the new Fund must follow non bank criteria, a threshold on expenses should be established.\(^{60}\) FIM’s liquidating Committee was assigned ten bil lire with which to intervene in favour of firms already helped in the past or under state control. Such companies were: Breda (based in Milan, but which included a naval plant in Venice), Reggiane (based in Reggio Emilia), Ducati (Bologna), Industrie meccaniche meridionali (Naples), Industrie Stabiensi Meccaniche e Navali (Castellamare di Stabia), Cantieri Aeronautici Bergamaschi (Bergamo) and Fabbrica Nazionale d’Armi (Brescia).\(^{61}\)

Some other firms which had received FIM’s loans in the past had already gone bankrupt and were not considered (Isotta Fraschini, Aeroplani Caproni and Cems).

In its December 1951 Report the Committee wrote: «We have decided to pursue the thorny path aimed at re-establishing on a sound footing those firms showing well-founded recovery possibilities. What emerges from our analysis is that these firms have common weaknesses such as an insufficient preparation to develop markets outside state orders, quantitative exuberance of staff and line workers; plants and equipment physical

\(^{58}\) Ministero dell’industria e del commercio, L’Istituto per la Ricostruzione Industriale (cf. n. 3), 70-132.

\(^{59}\) Law 17.10.1950, Messa in liquidazione del Fondo per l’industria meccanica.

\(^{60}\) Questione FIM (appunti Tremelloni), in: INSMLI Archives, file 155416.

and technical obsolescence; a feeble reaction on the part of managers against the latter unsustainable conditions.\textsuperscript{62}

In the end, the thorny path of aid meant new expenses which, due to the very difficult economic situation of the firms which were assisted, soon led to increases in expenditure up to 31.6 bil lire. If we add this sum up to the first period of operation expenses – 81.3 bil lire between 1947 and 1950 – we reach a total expenditure of 102.9 bil lire.\textsuperscript{63} During the eleven years of FIM’s operation, out of a total of 85 assisted engineering companies, many were able to repay their debts, some were closed down and others were nationalized. Among the latter, the Industrie meccaniche meridionali and Industrie Stabiensi Meccaniche e Navali became property of IRI in 1951, while the rest fell into FIM’s hands, as shown in Table 3.

\begin{table}
\centering
\caption{FIM’s capital shares of assisted companies (1951)}
\begin{tabular}{lccc}
\hline
 & Total capital & FIM’s shares & In per cent \\
 & (in lire) & (in lire) & \\
\hline
Società italiana Ernesto Breda or Breda finanziaria & 11,250,000,000 & 11,240,241,033 & 99.91 per cent \\
Ducati & 2,000,000,000 & 1,967,100,000 & 100 per cent \\
Franco Tosi & 1,319,913,000 & 10,000,000 & 0.76 per cent \\
Nuove Reggiane & 1,075,000,000 & 1,075,000,000 & 98.35 per cent \\
Cantieri Aeronautici Bergamaschi & 350,000,000 & 350,000,000 & 100 per cent \\
Cantiere Navale Breda & 250,000,000 & 250,000,000 & 100 per cent \\
Basili – F.E.M.E. & 95,000,000 & 20,000,000 & 21 per cent \\
\hline
TOTAL & 14,912,341,033 & & \\
\hline
\end{tabular}
\end{table}


If in the first years the FIM operated mainly as a financial institution, after 1950 the Fund operated as a holding company, sending out directives on the economic and operation plans to be met and trying to find a way out of the worst financial situations. In the case of Reggiane, with debts running towards four bil lire, the FIM asked and obtained a compulsory winding-up (22 May 1951). With the intent to save and re-launch what was still vital in the enterprise, the FIM used its new duties and faculties in order to set up \textit{Nuove Reggiane}, a new company which took over the plants in good conditions, re-hired part of the labour force and started off again.\textsuperscript{64}

In addition, the long term crisis of Ducati had cost FIM five bil lire, but the Committee was not put out by the steepness of the climb which would be needed back to profitability. If thus decided it was worthwhile to try save the company. A new provisional administrator was nominated (an engineer, Mario Masobello), who shut down the plant in Milan, chose Bologna as the sole production site, replaced most part of the

\textsuperscript{62} Ibid.

\textsuperscript{63} Rendiconto del FIM in liquidazione, in: IMI Archives, FIM files.

\textsuperscript{64} Ibid, 29.
managers, fired the hot-headed and undisciplined workers (369 out of 2,633) and organized the plant along two main production lines: motor vehicles and electro-technical apparatus. Good results appeared already in 1951, as sales went up by 25 per cent and production by 18 per cent, yet the long and troubled life of the firm had just began. To make a long story short, we need only recall that after many difficult years spent under state management, the company was split up into the branches and recently sold to a group of industrialists from Bologna and to the Bonomi/Benetton group.65

FIM also decided to keep Breda alive after investing half of its available funding in the company, after which the outstanding debts of the group mounted to 23 bil lire. The group had to be reconstructed on new basis. Its main deficiencies consisted of a huge number of workers who could not be properly employed (still 14 thousands even after the FIM had fired 5,000 people) and bad management practices involving frequent reliance exclusively on orders from the state and inadequate appreciation of the implications of the technical backwardness of physical plant.66 Therefore in 1951 the FIM Committee nominated Pietro Sette as provisional administrator with the task of managing the restructuring of the industrial complex. He decided to attempt saving Breda through a detailed industrial renewal plan accompanied by a reorganization of the group inside a new company: the Finanziaria Breda. The latter was to become a holding company inside the Società Italiana Ernesto Breda and coordinate the industrial and financial plans of all the controlled companies’ plants. An additional five bil lire had to be put in the new company, while the FIM decided to write off some of its outstanding credits and transform the rest into registered stocks. Still, new and more difficult tasks awaited the provisional administrator, such as the necessity to modernize machinery and plants and to settle Breda’s outstanding debts with other institutions. In the words of FIM’s Committee: «We have tried our best to save the presumably still vital industrial nucleus of the company. We were able to avert the total winding up of plants, which would have been disastrous for thousands of workers and economically unwise for the State budget, after so many sacrifices made and so much money invested in assisting this big industrial group.»67

The Finanziaria Breda soon became a very big holding company, absorbing the majority of the share capital of Nuove Reggiane and CAB in June 1958. Finally, in 1962, all FIM’s industrial properties were passed onto EFIM or Ente partecipazioni e finanziamenti industrie manifatturiere. EFIM was specifically established to manage FIM’s nationalized engineering companies, and it has represented, together with IRI and ENI, the most important public holding in the industrial sector for thirty years.68 EFIM was eventually shut down in 1992, when the crucial so-called Amato Act was passed (18 July 1992). The 1992 Act transformed all public companies into joint stock companies and enabled the government to sell their shares to the general public; Italy’s privatization process between 1992 and 1999 allowed the government to sell assets for 101.9 bil US dollars, while in the same years the UK privatization turned in 47.8 bil US dollars, France 59.8 bil US dollars and Germany 61.1 bil US dollars.69

65 Battilani/Fauri, Mezzo secolo (cf. n. 19), 269ff.
67 Ibid.
69 Battilani/Fauri, Mezzo secolo (cf. n. 19), 244f.
By the time EFIM was closed down it had become a huge holding company encompassing production plants in very different sectors: defence, aerospace, glass, plant engineering, aluminium and railways. Between 1962, when it was established, and 1992 EFIM had carried out investments amounting to 7,000 bil lire and employed 30,000 workers. It could feature presence not only in the northern regions (Lombardy was the region where most of the labour forced was employed), but also in the central and southern part of the country. Nonetheless, when it was about time to privatize it, EFIM’s economic and budgetary situation was disastrous. Total losses in 1992 amounted to five bil lire, while EFIM’s financial resources only added up to four bil lire. Net joint and several debt totalled 11,000 bil lire. It was no easy job to try to privatize EFIM’s industrial patrimony and some very specialised production and plants had to remain in public hands.

It was decided to gather Breda’s plants (ex EFIM) under Finmeccanica, which by that time had became the Italian defence industry’s aggregative core. As mentioned earlier, Finmeccanica in the 50s went through very harsh financial times, with continuous losses pushing managers to reorganize the group, get rid of the building sector (through the establishment of a new public company, Fincantieri) and focus production in three industrial sectors: thermo-engineering (Ansaldo group), motor vehicles (Alfa Romeo) and aerospace (Aeritalia). The latter incorporated what was left of the aircraft industry.

At the end of the 80s, Finmeccanica sold Alfa Romeo to Fiat and bought Stet (an electronic company engaged in spatial technologies, robots and semiconductors) and in the 90s it incorporated a mobile communication company (OTE) and reinforced its electronic and defence production units through the acquisition of Elmer and Breda. By the end of the 90s, Finmeccanica was a completely renewed company. Its annual budget improved steadily, and it was well managed and featured a number of compelling future projects. International agreements were signed which were to become crucial for its future development, the first one with the British company Marconi (telecommunications), the second one with GKN, inaugurating a fortunate joint-venture with AgustaWestland for the production of helicopters. This made Finmeccanica one of the most important and successful producers in the world. In more recent years, Finmeccanica has taken full control of AgustaWestland and its various plants in the United Kingdom and has bought Aermacchi (based in Varese) producing military training aircrafts. Today, Finmeccanica’s turnover places it among the top three industrial companies worldwide in the defence sector.

Finmeccanica was privatized in 2000, but due to its sensitive and specialised production in the defence and aerospace sectors, the Ministry of Finance retained a golden share (33.74 per cent) and has not allowed any single private investor to buy more than three per cent of the share capital. Nevertheless, in 2007 the group was able to return increasing dividends to its shareholders (plus 17 per cent compared to 2006) while capital gains went up by eight per cent.

Conclusion

The FIM has represented one of the most important public credit instruments set up for helping the engineering industry in Italy after the Second World War. Engineering was the most advanced sector in the Italian economy, and the government saw economic growth strictly depending upon its rapid recovery. *Ad hoc* state financial incentives and special supportive laws and institutions were created, while one-quarter of Eximbank and Marshall Plan assistance was directed towards engineering firms.

Despite the best of intentions, the FIM was difficult to handle and attracted criticism because of its internal contradictions. Many contemporary observers considered FIM’s interventions deeply unsuccessful and have severely criticized the selection process for successful applications. Many firms were already on the verge of collapse when the FIM stepped in, while others employed such an enormous number of workers that the state felt compelled to intervene. As we have seen between 1947 and 1950 only 23 out of 66 bil lire were reimbursed. Fiat and IRI were the first to pay off their debts. Defaults concerned mainly three large groups: Breda, Ducati and Caproni, and resulted in closures or state control.72 The government’s industrial policy of company rescue had begun.

FIM’s main problem, which inevitably influences today’s judgment too, adds up to its multifarious and contradictory aims, which hindered its effective functioning. Social welfare purposes, such as the protection of jobs in an era of mass unemployment, had to be accommodated within an extensive restructuring process in order to re-launch the sector and make it competitive on the international market. Undoubtedly, difficult economic circumstances in the second half of 1947 burdened the new institution with unexpected tasks, going beyond the real possibilities its relatively lean financial structure. The state itself should have shouldered the responsibility of a more clear-cut welfare policy, but it chose a tactic of non-intervention.

As to the research questions raised at the beginning of the article: the FIM and its administrators did not deserve the bitter criticism levelled at them. The managers did their best on the basis of the available means and within political guidelines. In the words of the historian Gianni La Bella, public managers of the time felt and behaved like private entrepreneurs who wanted their companies to make good use of state funds in order to increase productivity and competitiveness. Nevertheless, «social and political reasons encouraged the government to take on bankrupt companies and invest large capital funds with very little if any expectations of getting the money back».73

As to nationalization, it was a good choice for two reasons. Firstly, it avoided increasing the mass of jobless workers and the ensuing demonstrations at a very critical historical moment. Secondly, it was an opportunity to bet on the future competitiveness of sensitive production areas such as defence, electronic, high technology and aerospace, for which Finmeccanica has progressively gained an international reputation. Not only did nationalization prove a wise entrepreneurial move; it was also the only way not to lose technical capabilities built up in the past.

Besides, thanks to FIM’s financial aid, profitable companies were able to overcome a

72 CISIM, *Rilievi e proposte* (cf. n. 46).
short-term crisis and engage in a rapid «catching-up». Technological borrowing from the United States (via Marshall Plan aid) allowed a one-way stream of benefits from the leader to the follower. The successful transplantation of US machinery and plants into Italian firms was made possible by the presence of very experienced technicians and engineers who altered, modified and adapted such technology in thousands of different ways to their specific context and local conditions. Italian engineering companies learned fast and despite the fact that scientific knowledge was exogenous and complex, it was rapidly and successfully absorbed thanks to their «endogenous appropriability conditions».

The FIM helped them to hold on, the Marshall Plan offered them an opportunity to modernize, their own capabilities allowed them to make the best of foreign technology inputs.

To conclude, internal provisions and American-financed technological upgrading, together with capabilities built up in the past, allowed national engineering companies to gain important positions on all Western markets and to lead Italy’s export growth in the 50s and 60s. Today’s engineering trade balance is not only positive, but provides the Italian budget with the largest sector income from foreign sales, showing a long-standing continuity in competitiveness. Thanks to the technology incorporated in cutting edge manufactures, this old productive sector has been leading Italy’s export earnings for more than 50 years.

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