Foreign Capitals in the Italian Industry (1913-1972).

Early findings and conjectures.

by

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1. *Issues and research questions*

This paper deals with the history of foreign direct investments (FDIs) in the Italian manufacturing industry during the first three-quarters of the Twentieth century. The period from the eve of WWI to the early Seventies coincides with the transformation of the economic structure of a country which, despite starting from a peripheral position, became one of the most advanced in the world. In this framework, a comprehensive reconstruction of the historical evolution of the presence of foreign capital should contribute to answering some questions concerning the "external" contribution to the catching-up process.

This chapter is organized as follows. The next paragraph will provide the background of the research, briefly introducing the dataset on which the study has been built. In the following paragraph the emerging evidence will be discussed in light of the available literature and research. In the final paragraph some – even if far from definitive – conclusions are drawn.

2. *Background*

In an international comparison among her EU partners, Italy today ranks far behind in terms of foreign capital penetration, even though the overall trend seems to be beyond any doubt one of steady growth. Traditionally, many (more or less) "structural" explanations have been put forward to account for the scarce presence of foreign capital in Italy, among which a pervasive State intervention, the peculiar structure of the Italian manufacturing sector – mainly based upon labour intensive industries - and the high degree of fragmentation of local consumption markets. Furthermore, the public opinion showed an explicit hostility towards foreign firms during the whole century resulting in an increase in what Dunning termed "cost of foreigness”, given also the a relatively inefficient legislation about foreign investments up to the second half of the 1950s.

Unfortunately, for the first half of the 20th century, official statistics do not provide reliable data on stocks and flows of foreign investments. The Ufficio Italiano Cambi (Bureau of Currency Exchanges, Bank of Italy) started to collect data about the inflows and outflows of foreign capitals only in 1947. However, up to the Sixties, this data is scarcely reliable and practically useless. There is no distinction between direct and portfolio investments, debts and loans, making it virtually impossible to detect an even approximate trend in FDIs, at least up to the Seventies. In this paper, flows and stocks are only partially taken into consideration as relevant, given the difficulties in their measurement in an historical perspective.

This paper is based on a different approach, i.e. on the reconstruction of the general trends through the collection of detailed information at the level of the single company. For this purpose, a new database of FDIs in Italy has been built in the course of a research project jointly funded by the Italian Ministry of the University and Scientific Research and by Bocconi University, which provided an additional grant to complete the research[i]. The database originated (up to now) seven datasets, each one coinciding with a benchmark year. The structure of the database and the methodology of data collection is explained in higher detail in the Appendix. The main source of data is the database IMITA.db, the digital version of a serial source made up of a collection of published volumes edited from 1908 to 1926 by the Credito Italiano and from 1928 onwards by the "Associazione fra le società italiane per azioni" (Asipa), the Association of Italian Joint Stock Companies. This source includes all the joint stock companies based in Italy that had company capital in their last balance sheet higher than a given threshold fixed at different levels in different years.

The datasets provide information on an increasing number of companies with a significant presence of foreign capital, as shown in the following table. It is interesting to note that, notwithstanding the increase in the number of companies present in the IMITA database (and with the exception of 1913, for which the data are partially biased), the percentage of foreign-controlled companies remains more or less constant – around 5-6% of the IMITA’s population until the Sixties when the ratio of foreign-controlled companies to the total started to rise again.

Table 1. Foreign Controlled Companies as % of the IMITA Universe

Benchmark	N of foreign controlled companies considered (a)	Companies in IMITA (b)	(a)/(b)	Share Capital foreign-owned/Total Share Capital of the universe
1913	164	1242	13.20	19.1
1921	184	3080	5.97	8.7
1927	248	4476	5.54	12.6
1936	233	4243	5.49	8.0
1952	328	6180	5.31	9.2
1960	522	6271	8.19	9.6
1972	687	11783	5.87	12.9

As far as the share capital is considered, after 1913 the average settles around one-tenth, also during the period of steady growth of the Sixties. At the beginning of the Seventies, the incidence of foreign-controlled capital in the total rises again.

3. *Before WWI*

Background

On the eve of WWI, Francesco Saverio Nitti wrote an important pamphlet titled *Il capitale straniero in Italia* (Naples 1915) in which he pointed out the strategic role played by foreign investments in the process of Italian industrialization. According to the influential statesman, these investments (under the form of credits, loans, direct and portfolio investments) had fuelled the process of economic growth of the country both in capital intensive industries and labour intensive industries (e.g. in textiles). The influence of foreign capital was so preponderant that one had reason to worry about the dependence of the Italian industrial apparatus on foreigners.

Nitti aggressively pointed out the pervasive presence of foreign controlled firms in all the most relevant (strategic) industries, from utilities to transports, from energy to siderurgy and specialised mechanics. Nitti's perception is confirmed by available historical research (Gille 1968; Dumoulin 1989)

In her seminal book on the Italian industrialization process prior to the First World War (Zamagni 1978), Vera Zamagni stresses the pervasiveness of the foreign (particularly German and Swiss) presence among the capital and technology intensive industries, such as electricity and electro-mechanics. Peter Hertner (Hertner 1984) focuses on German investments on the eve of the war in finance, services, transportation and manufacturing, concluding that up to the outbreak of the conflict the German presence in the Italian economy was pervasive.

At present, much less information is available about other countries and industries. However, some evidence is available from U.S. sources about several industries (see for instance US. Senate 1946; Bova 1995). In the first volume of her comprehensive account of the internationalisation of U.S. business (Wilkins 1970), Mira Wilkins provides precious information about the subsidiaries of U.S. firms in Italy before the First World War. Yet Mira Wilkins' extensive research collects data on U.S. investments in Italy in a non-systematic manner relying basically on internal and secondary sources and does not produce a database or list of the investments. Our knowledge of British investments in Italy at the eve of WWI is episodic as well, with the noticeable exception of a few single case studies (Bova 1987), while the same can be said for another major investor in the Peninsula, i.e. France.

<u>Evidence from the database</u>

1913 is the only benchmark provided by the database for the period preceding WWI, and concludes a period of a relatively high degree of openness of the international economic system, as well as the Italian economy, to foreign capital.

Upon closer examination of the sample, a number of interesting features emerge. First of all, one can note the high number of industries affected by the presence of foreign capital. According to the data available, the macro-sectors most represented in terms of absolute frequency of companies are D (manufacturing, 34% of the companies in the sample), followed by E (utilities, basically electricity, 27%) and I (transportation, 24%). Among the 57 manufacturing companies, the most represented industries were DG (chemicals, 22% of the manufacturing total), DB (textiles, 18%) and DL (mechanics, 12%).

In summation, just before the war, foreign capital tended to flow to energy and transportation and, within manufacturing, to chemicals, textiles and mechanics (in general, electro- and heavy mechanics). In these industries the presence of foreign capital was quite significant regarding the total of companies and capital invested in 1913, at least in the sample constituted by the largest stock-companies listed in IMITA. In at least one case, and namely that of E (energy), the capital of the foreign-controlled companies was nearly 50% of the total capital of the firms of the same sector and an outstanding 60% of the total assets. As far as manufacturing is concerned, in 1913 the foreign-controlled companies in textiles accounted for 13% and 11% of the share capital and total assets, respectively, of textile companies, a sector traditionally considered as truly “Italian”. In the case of electrical equipment (DL) the same percentages are 43% and nearly 50% respectively. In chemicals the weight of foreign controlled joint-stock companies was about one-third in terms of capital and total assets.

The evidence from the database seems to confirm the general findings provided by the existing literature, although with some interesting, new information. First of all, the concentration of foreign capital tended to privilege the capital intensive and technology intensive industries – for instance energy and electric machinery, chemicals and pharmaceuticals in which Italian backwardness was more relevant, and those in which the amount of capital needed made it necessary to tap resources not immediately available on the internal financial market.

Besides the distribution of foreign capital across industries (which is to some extent relatively well known), the sources of the capital invested in Italian industry are interesting as well.

Table 2 shows the distribution by home country of the foreign-controlled companies in the selected benchmark. French-speaking countries – Belgium and France – account for nearly 44% of the total, Switzerland another 20% and Germany less than 17%. This is an interesting observation, at least in absolute terms, that shows that German capital was less frequently present than Belgian, French and Swiss capital. Roughly the same conclusion can be drawn by looking at the weight of the capital and of the total assets of the foreign-controlled companies in the IMITA database (last two columns of table 2).

Table 2 Most relevant investments in 1913, by home country (selected**)**

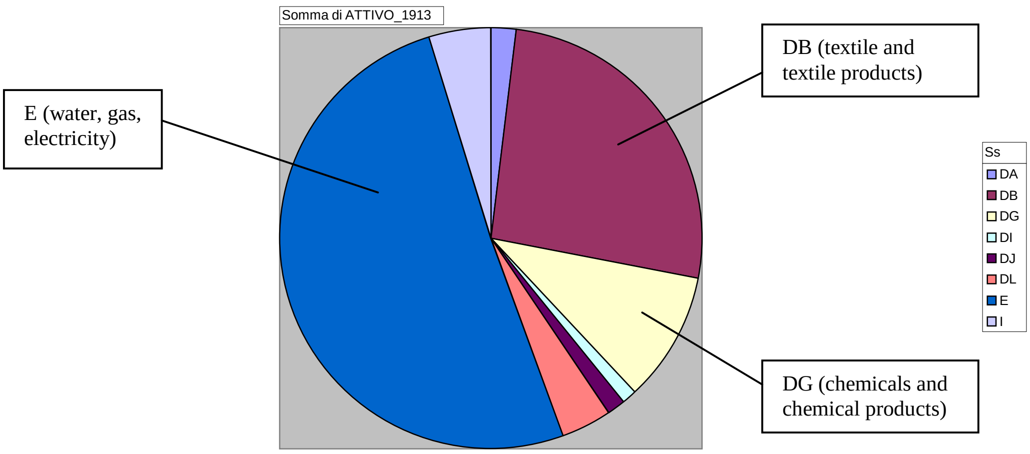
Country	N (1913)	n/164	% foreign capital in IMITA 1913	% foreign total assets in IMITA 1913
B	41	25,0%	28%	31%
CH	33	20,1%	19%	16%
F	31	18,9%	16%	19%
D	27	16,5%	21%	18%
USA	14	8,5%	7%	7%
UK	7	4,2%	4,6%	6,2%

As far as national specificities are concerned, Belgium and France share a very similar model based on utilities and public transportation exhibiting a pattern confirmed in the available literature (Dumoulin 1989). The “French-speaking” investments in utilities display another relevant feature, the relative under-representation of electricity compared to gas and water supply. Belgium tended to replicate the internationalization pattern of its capitals all over the European periphery. The Italian situation at the eve of WWI replicates more or less in the same way the Spanish, both in tramways and in narrow-gauge railways (Martinez Lopez 2003; Ciullo 2007).

Swiss capital seems to privilege utilities as well, but primarily electricity (an industry characterised by a high degree of technological intensity in which Switzerland, as well as Germany, had a consistent competitive advantage (Graph 1)). Nonetheless, Switzerland is also considerably represented in the textile industry (the DB code), in which 67% of the capital under foreign control and 74.6% of the total assets are Swiss. One explanation of this situation is that, in the case of Switzerland, there was a strong continuity in the investment model based on textiles (mainly, cotton spinning and weaving) which took place during the second half of the XIX century. The relevance of Swiss FDIs in textiles, however, introduces some methodological problems. Given the specificity of the history of Swiss investments in Italy - entire families of Swiss entrepreneurs not only invested, but also immigrated to Italy preserving very few formal links with their home country at times - it is not very clear if all the Swiss capital can really be considered truly Swiss.

Looking at the database, the German investment pattern proves to not be too different from what is described in the available literature. Electricity is by and large the most significant industry to which German capital is directed, followed by chemicals, transportation and electro-mechanics.

Graph 1. Total assets of Swiss-controlled firms (by industry, 1913)



CA: Oil drilling; CB: Mining; DA: Food and Tobacco; DB: Textiles and textile products; DC: Leather and leather products; DD: Wood and wood products; DE: Paper products, publishing and printing; DF: Coke and petroleum products; DG: Chemicals and chemical products; DH: Rubber and plastic products; DI: Other non-metallic products; DJ: Basic metals and metal products; DK: Machinery and equipment; DL: Electrical and optical equipment; DM: Transport equipment; DN: Other manufacturing; E: Water, Gas, Electricity; F: Building; G: Commerce; I: Transports

The relatively small amount of U.S. investments before the First World War is clear (only 14 companies in the sample, less than 10% were American) and confirmed by the literature (Wilkins 1970). It is interesting, however, to analyse the industries where the U.S. capital was clustered. Commercial activity (G) is the most important, followed by electric machinery and other machinery. Furthermore, the data verify the unquestionable role of oil-related activities (one third of the U.S.–controlled firms) confirmed by the existing research (Wilkins 1970).

Taken as a whole, the presence of foreign-controlled companies just before the war was non-negligible both in absolute terms and in terms of total assets and share capital in their respective industries. As may be expected, the technology and capital intensive sectors prevailed among the destinations of foreign capital with transportation, water works, gas, and other utilities which were absolutely critical during the years of the "first Italian economic miracle".

4. *Between the two wars.*

Background

After the war, the "Italianization" of firms and industries in which German and Austrian capital prevailed meant that some important companies in energy, utilities, mechanics and metallurgy now became fully under Italian control. In any case, there was no doubt about the enduring presence of foreign capital in many branches of manufacturing, utilities and services; Swiss, French, Belgian, British and U.S. capital continued to be active in Italy during the Twenties.

Nonetheless, it is difficult to find evidence in the contemporary literature of even minimal debate about the relevance and role of FDIs during the interwar period. From the historical point of view, the (scarce) available research (Bova 1989 and 1995; US Dept of Commerce 1930) shows beyond any doubt a persistent, although declining, inflow of direct investments over the whole period. The most reliable information is provided by the (roughly impressionistic) documents produced by the Constituent Assembly immediately after WWII (Del Buttero 1948), according to which a general slowdown in the FDIs inflows took place between the two wars. In 1931 all the foreign shareholdings amounted to more than one and a half billion dollars (p. 96), one quarter of which was represented by U.S. capital invested in transportation, utilities, oil and manufacturing. According to the Census, foreign share ownership as a whole on the eve of WWII privileged manufacturing over utilities and transports, and within manufacturing, mechanics, chemicals, pharmaceuticals, oil refining and distribution, glass, textiles, food and drink and, last but not least, mining where a non-negligible amount of capital was concentrated. Other research completed in the same period by the Trade Unions (CGIL 1948) established that 255 of the companies with more than one million lire of share capital were controlled by foreign capital at the end of 1945, and among these, the companies active in chemicals, synthetic fibres and mechanics stand out. According to the source, British investments dominated followed by the U.S. and the Swiss.

The lack of reliable information and the long time series, however, do not allow these data to be considered particularly solid.

Evidence from the database

Three benchmarks are available in the database as far as the interwar period is concerned, i.e. 1921, 1927 and 1936. Two of them are in the Twenties, before the Great Depression, and the third gives a snapshot of the situation immediately before World War II.

Right after the war the number of foreign-controlled companies listed in the IMITA database rises modestly from 164 to 186. The data are quite interesting, especially if one keeps in mind that immediately after the First World War a large number of German and Austrian investments were "Italianized" as mentioned above. In this way, growth in the absolute number of foreign-controlled firms gains greater significance and legitimizes the hypothesis that, in the period of the war or immediately after, a number of new investments took place in terms of acquisition or enlargement of existing activities.

In terms of industries and sectors, investments in utilities and transportation were still the most relevant after the war. Utilities, transportation and energy represented around 45% of the foreign-controlled companies, as opposed to 51% during the pre-war years, and still counted for 29% of the capital and 30% of the total assets of foreign-controlled firms. A "true" increase can be detected in manufacturing; from now on, foreign-controlled companies in section "D" account for more than 50% of those in the sample. In 1921 they were 56% of the total, as opposed to 35% in 1913.

The variety of the industries in which foreign capital is present seems to be much wider with respect to the previous benchmarks. In order of relevance, textiles were still the most represented, followed by chemicals and electric equipment, while "new" industries started to be targeted by foreign investments, such as non-metallic products, metallurgy, machine tools and machinery. Textiles absorbed nearly one-fifth of total foreign capital and assets . In the case of chemicals, which are characterised by higher capital intensity, the same percentages are nearly 21%

(capital) and 17% (assets), while in the case of electrical equipment, both capital and total assets accounted for around 6% of the total foreign-controlled capital.

The main industries targeted are not radically different from those before the war. However, it is important to note the decline in the number of companies controlled by foreign capital in utilities and energy (the E and I branches), where foreign (German) capital was more relevant – and hence subject to more "Italianization". A simple number gives a clear idea of what happened in this industry. After the war, in the sample there were 9 foreign-controlled companies in branch E 40.10, i.e. electricity, mostly of Swiss origin. Before the war, they were not less than 30. In 1913 the total assets of foreign-controlled electricity producers were 22% of the total amount of foreign-controlled total assets. In 1921 the same percentage dropped to 12%.

The transformation in the relative weight of certain industries also meant a general transition in the relative importance of the home countries.

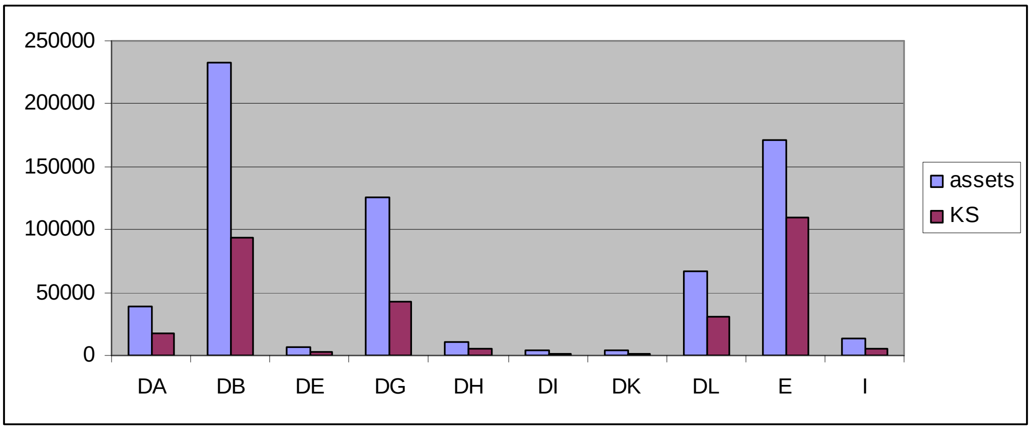
Tab. 3. Most relevant investments in 1921, by home country (selected)

Country	N (1921)	n/184	% foreign capital in IMITA (1921)	% foreign total assets in IMITA (1921)
F	43	23,4%	15.1	14.5
CH	39	21,2%	19,2	16.5
B	33	17,9%	15.5	16.9
USA	19	10,3%	7.1	8.9
UK	17	9,2%	6.2	7.0
D	7	3,8%	8.2	6.7

The apparent decline of the Belgian presence did not change the specialization of Belgian investments, mainly concentrated in utilities and transports, while the French pattern of investment appears to be much more diversified with a non-negligible concentration in utilities and significant levels in basic metals (DJ – for instance, aluminium), non-metallic products (for instance glass) (DI) and chemicals (DG) as well.

A detailed analysis of the next relevant country, Switzerland is also interesting. Swiss capital is represented in almost all industries, with considerable relevance in textiles, utilities, chemicals, electrical equipment and also in food and beverages.

Graph. 2 Capital and Total assets of Swiss controlled firms, 1921 by industry (D, E and I) (k lire).



CA: Oil drilling; CB: Mining; DA: Food and Tobacco; DB: Textiles and textile products; DC: Leather and leather products; DD: Wood and wood products; DE: Paper products, publishing and printing; DF: Coke and petroleum products; DG: Chemicals and chemical products; DH: Rubber and plastic products; DI: Other non-metallic products; DJ: Basic metals and metal products; DK: Machinery and equipment; DL: Electrical and optical equipment; DM: Transport equipment; DN: Other manufacturing; E: Water, Gas, Electricity; F: Building; G: Commerce; I: Transports

In 1927, six years later (after a period characterised by much greater political and economic stability) there are 248 foreign-controlled companies in the IMITA universe, between 5% and 6% of the total, while the share capital of these companies is no less than 12% of the total.

Now, the dynamic in the distribution of industries targeted by foreign capital is much more significant. In 1927 it is evident that utilities and transports are no longer the most relevant industries in terms of foreign investment attractiveness; they are surpassed by other sectors, namely textiles, chemicals, and electro-mechanics. The decline in the importance of utilities and transports is mirrored by the distribution of foreign investments, in terms of share capital and total assets. The case of chemicals gives an idea of the relevance of foreign capital in these “new” industries: in 1927 the foreign controlled total assets were nearly one quarter of the total of the whole Italian chemical industry. The main sources of investments in the chemical industry were Switzerland, France and the United Kingdom.

One interesting issue is the link between the trend in foreign investments and the internal conditions of the country. Given the present status of our knowledge, it is not easy to establish how much, and in which direction, the political and monetary policies of Fascism impacted FDIs. In this respect, sorting the existing companies on the basis of their foundation year is hardly helpful. 86 out of 248 (nearly 35%) were founded as joint stock companies in the years 1922 to 1927. However, this wave of “start ups” can only be partially explained by the favourable conditions of the market or by the legislative and financial interpretations. For instance, a “start-up” can be a misleading moniker since a simple transformation in the legal status of a pre-existing company makes it a joint-stock company that very year. On the other hand, since – as stated above – the acquisition model was quite often based more on brownfield than greenfield investments, a company founded before the Twenties may have come under foreign control during the Twenties. Unfortunately, the information in IMITA does not offer homogeneous evidence on this issue.

Tab 4. Most relevant industries in terms of share capital and total assets of foreign-controlled firms in 1927, in % of the total of foreign-controlled firms

Industry	% of foreign controlled total Share K_1927	% of foreign controlled Total Assets_1927
DB	6.42	7.46
DG	34.9	26.3
E	26.6	24.51
I	3.8	5.2

CA: Oil drilling; CB: Mining; DA: Food and Tobacco; DB: Textiles and textile products; DC: Leather and leather products; DD: Wood and wood products; DE: Paper products, publishing and printing; DF: Coke and petroleum products; DG: Chemicals and chemical products; DH: Rubber and plastic products; DI: Other non-metallic products; DJ: Basic metals and metal products; DK: Machinery and equipment; DL: Electrical and optical equipment; DM: Transport equipment; DN: Other manufacturing; E: Water, Gas, Electricity; F: Building; G: Commerce; I: Transports

The trend described above continued during the Thirties. The following benchmark (1936) shows that nine years (and one world crisis) later, the evolution of the pattern of FDIs had considerably changed again. The overall number of companies fell to 233, an effect which can be easily connected to the global economic crisis. The distribution of their assets reflects a change in the sectoral specialization of FDIs which was taking place in these years.

From Table 5 it is easy to note the definitive of energy and utilities (E and I) during the interwar years, while, on the contrary, manufacturing increased in relevance in almost all its subsectors. In particular, on the eve of the Second World War the most relevant industries had become non-metallic products (DI), metal products (DJ), electrical equipment (DL) and chemicals (DG), which also showed the highest rate of growth.

In conclusion, the paradigm of foreign investments seems to have changed considerably over 15 years, shifting from utilities, transportation and public services in general to prevalence in manufacturing, technology and capital intensive industries.

Tab 5. Most relevant industries in terms of share capital and total assets of foreign-controlled firms in 1927, in % of the total of the industry's share capital and total assets

	1921		1927		1936	
	% share capital	% total Assets	% share capital	% total assets	% share capital	% total assets
DG	22.6	23.4	49.9	41.7	33.6	33.3
DI	6.5	7.6	14.6	15.3	22.0	22.5
DJ	2.4	1.2	11.0	9.2	13.9	12.5
DL	13.8	15.4	41.3	44.7	35.9	35.0
E	3.9	4.9	7.0	6.0	1.1	1.2
I	7.3	7.7	5.1	6.3	4.7	5.4

CA: Oil drilling; CB: Mining; DA: Food and Tobacco; DB: Textiles and textile products; DC: Leather and leather products; DD: Wood and wood products; DE: Paper products, publishing and printing; DF: Coke and petroleum products; DG: Chemicals and chemical products; DH: Rubber and plastic products; DI: Other non-metallic products; DJ: Basic metals and metal products; DK: Machinery and equipment; DL: Electrical and optical equipment; DM: Transport equipment; DN: Other manufacturing; E: Water, Gas, Electricity; F: Building; G: Commerce; I: Transports

The overwhelming presence of foreign capital in the technology and capital intensive industries appears to be even more significant if one looks at its weight in the whole capital invested and total assets in the single industries.

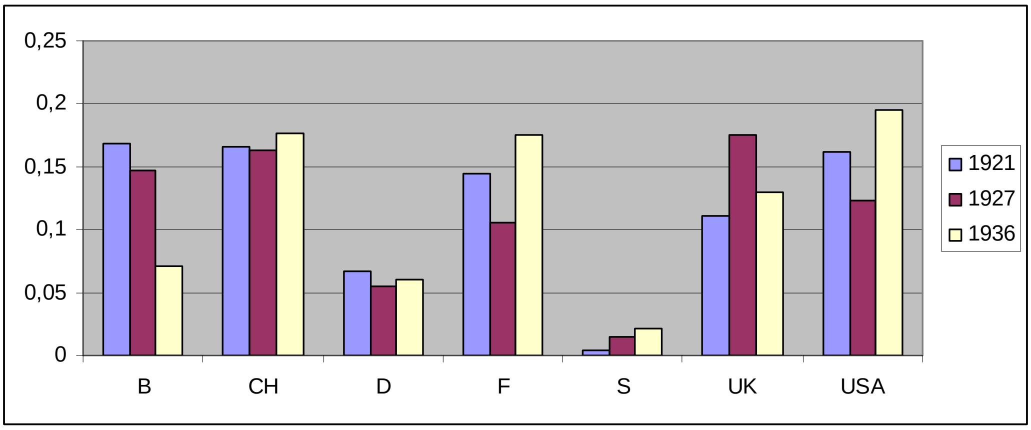
The trend in the main industries is clear and homogenous and characterised by a heavy presence of foreign capital. In all cases, there is an increase in the weight of foreign capital and total assets during the Twenties in almost all the industries considered. In many cases, the trend is linear, with the exception of transportation which manifests a structural decline that started before the First World War. In some cases, the spurt is outstanding, for example, in non-metallic products, basic metals, and electrical equipment. According to the data, certain industries were heavily dependent on foreign capital and to an impressive extent in some cases (chemicals and electrical equipment) immediately before the Great Depression. After the crisis, as one can expect and find in the literature, foreign capital flew from the country. The trend is confirmed in the case of chemicals and electrical equipment.

To fully appreciate the general trend, it is worth examining a further disaggregation of these “leading” industries in terms of subsectors of activity. In the case of chemicals, for instance, the foreign investments seem to privilege raw chemicals and pharmaceuticals for the entire interwar period, while in the case of electrical equipment, the production of electric machines absorbed the majority of foreign capital and assets.

The distribution by home countries changed as well during the interwar years (Graph 3).

A sharp and persistent decline in representation affects only Belgium. Not surprisingly for a neutral country, Switzerland remains constant. France, too, remains constant, though to a lesser degree than Switzerland, and is the largest investor (in pure numerical terms) in the Peninsula for almost the whole interwar period, at least as far as our universe is concerned. Not surprisingly, U.S. investments declined after the crisis but restarted in the following decade before the Second World War. The role of America as a net investor in Italy, however, was secondary at least for the Twenties.

Graph 3. Distribution of total assets of foreign-controlled firms in 1921, 1927 and 1936, by country.



A closer look at the destination of U.S., Swiss and French capital, gives an idea of the persistent difference in investment patterns as well as the differences among continental countries. The absolute majority of US direct investments were directed to sector DF (coke and petroleum) followed by DL (Electrical and optical equipment), then by DK (machinery and equipment). In the Swiss case, textiles and textile products still dominated, followed by chemicals and basic metals and metal products. As far as France is concerned, chemicals and basic metals absorbed the majority of the investments, followed by DI, i.e. “other non metallic products” – namely cement.

Sources of capital apart, during the interwar period the technological paradigm shifted definitively from one characterised by utilities, gas, energy, water, transportation (i.e. in general “infrastructures”) towards a new focus that privileged the industries of the second industrial revolution: chemicals (and pharmaceuticals), metallurgy, specialised mechanics and non-ferrous metals (among which aluminium had a central position). In conclusion, the pattern of foreign investments followed what the literature on Italian economic growth stresses as a “general” trend, i.e. the transition towards more modern industries characterised by capital and technology intensity.

5. *From the Economic Miracle to the early Seventies*

<u>Background</u>

The documents of the Constituent Assembly emphasize the potential role of foreign investments and capital in contributing to the country’s economic reconstruction (Del Buttero 1946; Ministero per la Costituente 1946: 112 ss.). The interviewed entrepreneurs were generally clear about the necessity of foreign capital for the needs of national enterprises, especially in capital intensive industries. Many of them also made clear the advantage of direct investments over loans and bonds, given the necessity of Italian firms to fill the gaps in technologies and managerial practices. Nobody could imagine, however, the importance they were going to gain in a few years in the country’s economic landscape. Beginning in the mid-Fifties and for the whole Sixties, the number of foreign owned or controlled firms grew steadily at each dimensional level and in almost every industry.

Obviously, it is not easy to identify the determinants of this growth. Common interpretations refer to the “American Challenge”, i.e. the investment activity of U.S.-based multinationals in Europe. According to the report published by the U.S. Department of Commerce (1976), “in the years from 1950 to 1957, investments to Europe began to rise steeply, reflecting and also contributing to the resurgent economic strength of the area" (p. 13).

Alongside the U.S. contribution during the Fifties and the Sixties, increasing activity was also seen from large, European corporations in the late Fifties and the Sixties (Franko 1976).

This activity grew at a considerable rate during the period considered, thus partially confirming the view that American companies' investments in Europe represented a strategic move taken in response to the threat of adoption of protectionist policies by the European Common Market after the Rome agreements of 1960 (U.S. Dept. of Commerce 1976: 13). At the same time, the enlargement of the consumption market also made it attractive for foreign companies, which started to invest by directly buying existing facilities or by building new ones. The existing literature is not unanimous about the entity and the destination of foreign investments. In terms of industries, it appears somewhat clear that foreign firms tended to exploit their competitive advantages in terms of superior technology and hence clustered in those industries where the Italian competition was traditionally weak, e.g. specialized chemicals, machine tools, electric machinery, chemicals and pharmaceuticals, and obviously, oil refining and distribution.

The favourable situation created by the natural evolution of the internal market was reinforced in these years by the explicit idea that foreign capital could be a powerful tool to sustain the growth rate of investments in the manufacturing industry. This resulted in a more friendly governmental attitude towards foreign investments (Acocella 1983: 78). FDIs were to be attracted in order to help balance the gap between the Northern and the Southern regions of the Peninsula.

This generally favourable climate towards FDIs was reinforced by the many initiatives aimed at facilitating the inflow of foreign capital. Our knowledge about these initiatives is still imprecise as is our understanding of the impact that the monetary policies undertaken by the national governments may have had on the decision of foreign firms to choose Italy as the basis for their activity inside the European market. What is quite clear, though, is that there was a combination of explicit legislative efforts at a general level aimed at easing the inflow of foreign capital. For instance, a major act was passed by the Parliament in 1956 that radically reformed the legislation on FDIs by relaxing it and making it easier both to invest and disinvest. Combined with the political stability given by the Christian

Democrat governments, this acted as a powerful stimulus to foreign investments. The institutional framework and incentives are clearly a major issue, despite the fact that the degree of "conscious" coordination of the policies undertaken during this period still needs to be analysed in depth. Just to give an example, IMI (Istituto Mobiliare Italiano), a State-controlled, financial institution which was previously in charge of managing the Marshall Plan aid, set up a special branch in the late Fifties, called International Investment Office, which was in charge of providing any type of help and information to international investors who wanted to set up a business in Italy; the impact of this remains to be evaluated.

Finally, one cannot forget culture. Americanization represented a movement which encountered far fewer obstacles and opposition in Italy than in other European countries like France and Germany. Mental models and stereotypes surely contributed to the assertion of U.S. companies in many industries, especially in those where the consumption habits tended to imitate the American models. In any event, a measure of the direct and indirect impact of cultural models on final consumption and the resulting incentives for foreign firms to set up their facilities in the country is difficult to obtain outside of a prosopographic approach.

Evidence from the database

Two benchmarks fall in the "Economic Miracle" period, 1952 and 1960, while a third (here examined separately) gives a snapshot of the early Seventies. The universe of foreign-controlled companies is now non-negligible in numerical terms. In 1952, there are 328 companies in the list (by capital around 10% of the whole IMITA universe), while eight years later they number 522 (more than 12%). In 1972, the dimension of the universe reaches 685 companies.

On the eve of the big spurt of the Fifties, the situation depicted immediately before World War II was not markedly different. In terms of industries targeted by foreign investments, beyond chemicals it comes oil refining, textiles and textile products immediately followed by electrical equipment. Machinery, metals, and non-metallic products have a non-negligible presence, while I and E (utilities and infrastructures) had now become almost non-relevant.

A few years later the situation has partially changed. In the case of food and beverages and non metallic-products, the importance of foreign capital remains substantially the same (even in two numerically different universes). In other cases, the presence of foreign capital seems to grow dramatically during the decade. In chemicals, for instance, the weight of foreign capital reached and surpassed 40% of the universe as far as the aggregate value of share capital and total assets is concerned. A similar situation can be observed in the case of machine tools and equipment, as well as electric machinery, with the aggregate value of foreign capital and assets nearly doubling from 1952 to 1960. In summation, the data seem to confirm that, during the "Economic Miracle", a sizable wave of foreign capital was directed to Italy under the form of new investments and share capital increases in capital intensive and technology intensive industries.

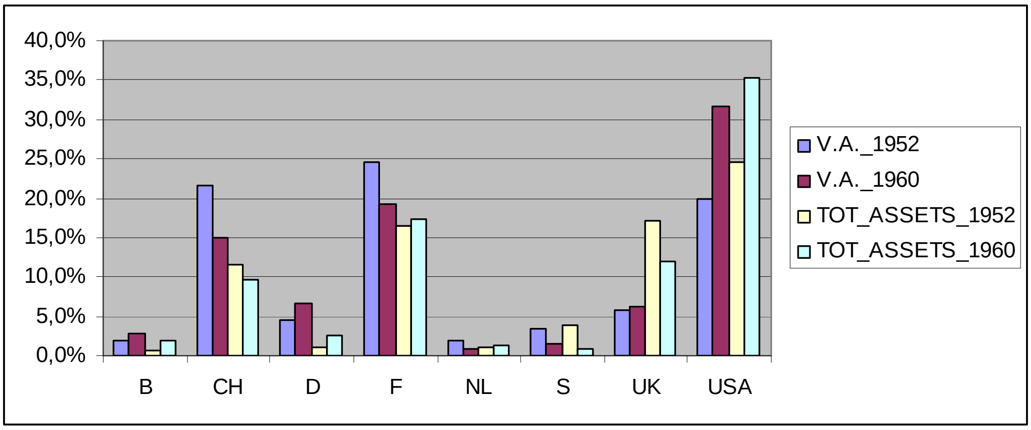
Tab. 6. Relevance of foreign-controlled companies in the Italian manufacturing industry. Some branches, (1952 and 1960).

	1952 (N=328)			1960 (N=522)		
	% of total companies in industry (IMITA)	% share capital	% total assets	% of total companies in industry (IMITA)	% share capital	% total assets
DA	3.1	8.2	3.8	5.9	8.2	5.3
DB	7.6	4.7	5.0	8.0	14.1	18.7
DG	18.3	25.1	34.5	30.6	40.7	41.4
DI	11.7	18.7	12.4	11.4	14.7	15.9
DJ	5.4	1.9	1.0	9.3	5.2	4.6
DK	9.9	16.8	17.1	13.3	30.2	28.1
DL	19.6	22.4	23.8	24.9	38.4	39.6

CA: Oil drilling; CB: Mining; DA: Food and Tobacco; DB: Textiles and textile products; DC: Leather and leather products; DD: Wood and wood products; DE: Paper products, publishing and printing; DF: Coke and petroleum products; DG: Chemicals and chemical products; DH: Rubber and plastic products; DI: Other non-metallic products; DJ: Basic metals and metal products; DK: Machinery and equipment; DL: Electrical and optical equipment; DM: Transport equipment; DN: Other manufacturing; E: Water, Gas, Electricity; F: Building; G: Commerce; I: Transports

As far as the "sources" of the foreign capital are concerned, the situation does not change radically during the economic miracle. The U.S. definitively establishes itself as the most important investor, both in numerical terms and in terms of total assets controlled, while both Switzerland and France (which dominated the interwar period, as said above) slightly reduced their share.

Graph 9. Main investors in Italy (1952 and 1960). Absolute value and aggregate total assets, in %



Another important point concerns the distribution of the capital of the main investors (Switzerland, France, UK and U.S.). In the Swiss case, the main areas of investment are not radically different from the interwar period, with textiles in first place – with regards to total assets – followed by chemicals and pharmaceuticals. In the case of France, chemicals and pharmaceuticals are followed by petroleum, non-metallic products and basic metals. UK is mostly represented in textiles (a significant distortion is the presence of British capital – Courtaulds – in a strong position in SNIA, which is considered a chemical company, de facto producing fibres). The U.S. manufacturing investments in 1960 are basically found in petroleum, chemicals and electric machinery.

One point worth stressing here is the "transversality" of the investments in the chemical industry, although closer examination would be necessary to establish if there is national specialization inside the different branches of the chemical industry. At first glance, Switzerland seems to be more specialized in fibres and pharmaceuticals, while the U.S. and France show a more "general" approach to the sector (American investments are, for instance, equally divided among raw chemicals, pharmaceuticals and home products) and UK exhibits a tendency to invest in raw chemicals.

Another interesting piece of information comes from the analysis of the dataset in 1960 ordered by year of foundation. Nearly one fifth of the companies were founded after 1956, which confirms, together with other indicators, the effectiveness of the institutional changes introduced by the above-mentioned legislation relaxing the barriers to foreign investments. However, the information provided by the database does not provide an exact account of the FDI inflow, since it is not possible to distinguish with enough precision between greenfield and brownfield investments.

The last benchmark considered in this paper is 1972, a date which coincides with a marked slowdown in the impressive growth experienced by the Italian economy during the Economic Miracle. During the second half of the Sixties, well before the oil shocks of the Seventies, the country's economic environment began to deteriorate. Tensions started under the perspective of the cost of labour. More generally, the whole political and social climate deteriorated, with immediate consequences for the shape of foreign – basically U.S. – investments in Italy.

On the other hand, however, a number of conditions enhanced the investment opportunities for foreign firms. The Italian market remained, thus, an attractive one, given the persistent high rate of growth in private consumption. Besides this, many entrepreneurial and family firms, which grew up quickly during the Fifties and the Sixties, were unable to cope with the necessary changes in financial, organizational and managerial terms imposed by the dynamism of the market. In food and beverages and in the mechanical industry, as well as the practically "new" industry of household appliances, the result was a high rate of acquisitions by foreign capital during the Sixties.

The number of foreign-controlled joint-stock companies in 1972 is quite considerable (about 700). As far as manufacturing and utilities are concerned, the picture at the beginning of the Seventies shows some changes. Looking at the total assets destination, the relevance of chemicals and pharmaceuticals and petroleum (much more than in the past) is confirmed, followed by electrical equipment, machines and basic metals, while food and beverages are also represented. The food and beverages industry became quite relevant in terms of foreign investments. This is consistent with the literature which stresses the wave of foreign acquisitions in this sector between the end of the Sixties and the beginning of the following decade mainly due to a series of entrepreneurial failures. As stated above, the attractiveness of the domestic market which was steadily growing in terms of consumption rates played an important role as well.

Table 7 Relevance of foreign-controlled companies in the Italian manufacturing industry (some branches, 1960 and 1972).

	1960 N=522			1972 N=688		
	% of total companies in industry (IMITA)	% share capital	% total assets	% of total companies in industry (IMITA)	% share capital	% total assets
DA	5.9	8.2	5.3	8.9	16,0	15,6
DB	8.0	14.1	18.7	5.0	8,8	11,0
DF	27.9	66.7	59.4	23.6	63,8	50,2
DG	30.6	40.7	41.4	25.8	23,8	25,7
DI	11.4	14.7	15.9	4.3	15,5	14,7
DJ	9.3	5.2	4.6	7.8	11,9	10,3
DK	13.3	30.2	28.1	12.5	26,0	25,7
DL	24.9	38.4	39.6	22.9	45,7	41,7

CA: Oil drilling; CB: Mining; DA: Food and Tobacco; DB: Textiles and textile products; DC: Leather and leather products; DD: Wood and wood products; DE: Paper products, publishing and printing; DF: Coke and petroleum products; DG: Chemicals and chemical products; DH: Rubber and plastic products; DI: Other non-metallic products; DJ: Basic metals and metal products; DK: Machinery and equipment; DL: Electrical and optical equipment; DM: Transport equipment; DN: Other manufacturing; E: Water, Gas, Electricity; F: Building; G: Commerce; I: Transports

In chemicals and pharmaceuticals, the presence of foreign capital remained relevant, although apparently less so than at the beginning of the Sixties and settled at roughly the levels of the early Fifties. The presence of foreign capital in the chemical industry is confirmed both at the top level of the dimensional ranking as well as in the medium and small dimension, especially as far as pharmaceuticals and para-pharmaceuticals are concerned.

Machinery is another example of where there was a heavy presence of foreign capital, basically in machine tools, machines for special purposes (elevators, machines for agriculture, some household appliances). It is in electric machinery, however, that the foreign presence confirms its standing. Foreign firms literally dominate in household appliances, light bulbs, computing and electro-mechanics.

The geographical distribution validates the hierarchy of foreign investors that took shape after WWII. In manufacturing, by now the most important area of investment, the U.S. confirmed its nature as the most important investor, followed by France and Switzerland. Britain, as well as Belgium, lost almost all their relevance.

Last but not least, the presence of foreign-controlled capital is quite notable among the largest firms. In 1972, 51 out of the top-200 Italian companies (25.5%)

ranked by assets were foreign-controlled; this percentage is slightly higher than in 1913. The presence of large, foreign firms among the top Italian corporations is also confirmed by the available secondary literature. According to the Harvard researcher Robert Pavan, there were 31 foreign-controlled firms among the Italian top-100 in 1970 (Pavan 1973: 62).

8. Conclusions

This research shows that foreign capital has been constantly present in the country's industrialization process. The waves in FDIs quite closely followed the shifts in the dominant technological paradigms as well as the tendency of indigenous capital to privilege more "traditional" industries.

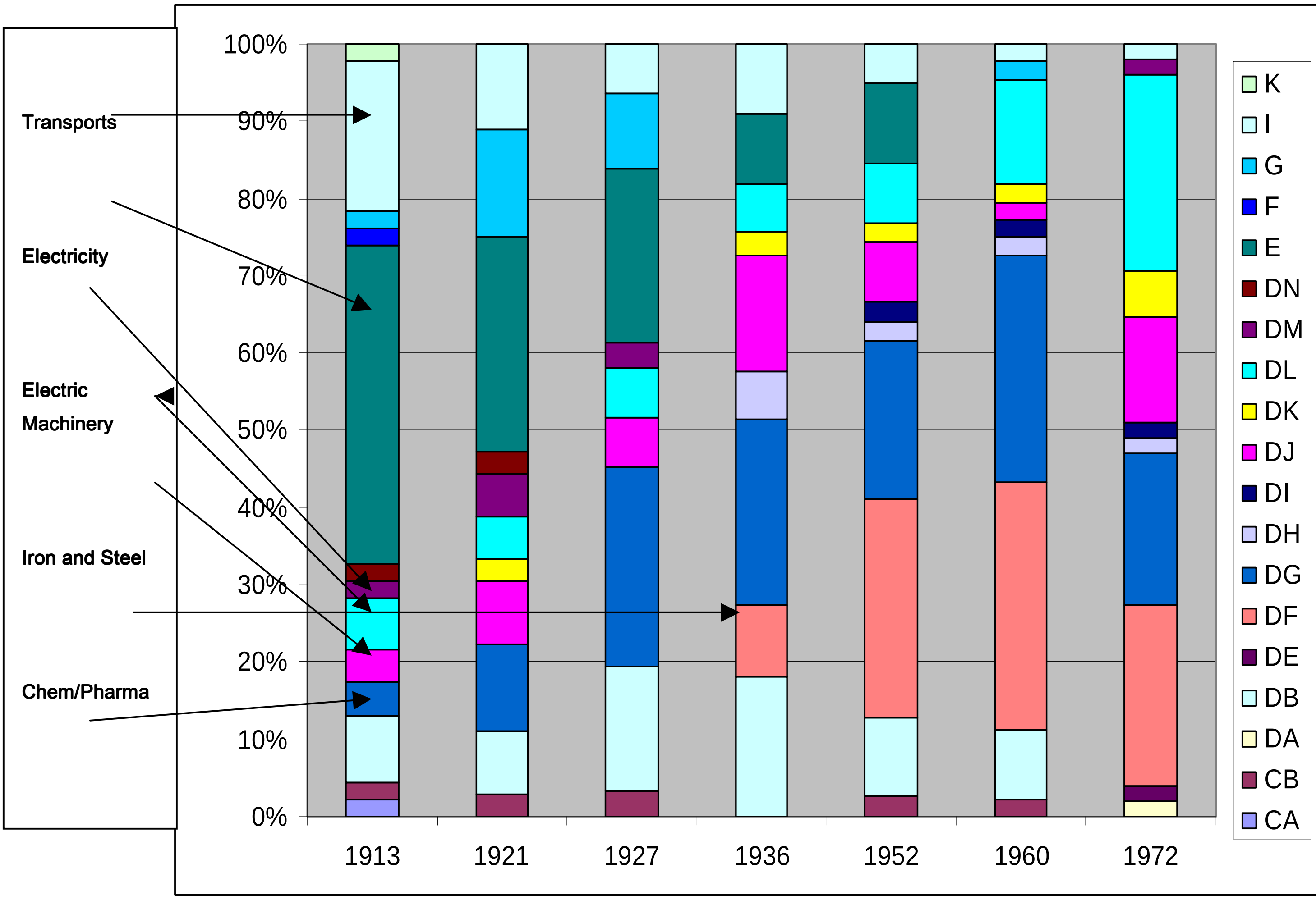
The lack of capital, but also technological knowledge, explains quite clearly the pervasive presence of foreign capital in certain branches of manufacturing more than in others. What is interesting to note is the persistent backwardness of Italian firms in certain branches, notwithstanding the incentive for imitation that the presence of foreign capital could have provided. One significant example is the chemical (and pharmaceutical) industry where there is a constant and significant foreign presence for more or less the whole period considered. Similarly can be said for energy, except where things went differently thanks to "external" factors. After WWI the German presence in energy (electricity production) almost disappeared, and Italian firms took over the foreign presence in the industry. Interestingly, this did not happen in other cases, such as local transportation, gas and water supply, where the foreign (Belgian and French) presence remained dominant. After WWII, the energy industry was dominated by U.S. capital, in concurrence with the technological shift from electricity to petroleum. ENI, the State-owned company, was the way for Italy to contrast foreign superiority in the oil industry. It is revealing, however, that in petrochemicals and fibres, both ENI and its Italian competitor, Montecatini (then Montedison), started several joint ventures with their foreign competitors in order to acquire relevant technologies.

Obviously, the technological shifts did not only coincide with a transformation in the sectoral distribution of the investments (for instance, from utilities and transportation to electricity and electro mechanics, to chemicals and pharmaceuticals, to petroleum and machinery). The changes in the technological paradigms also coincided with a shift in the nationality of the major investors, according to their overall competitive advantage in a certain period. Thus, in the years of the first industrial revolution, the “dominant investors” were Germany in electricity and Belgium and France in utilities and transportation (leadership was due both to technical and managerial ability, as well as considerable competence in collecting and managing capital). Switzerland and France grew more significant in the interwar period when the technological paradigm shifted to chemicals, pharmaceuticals, but also basic metals and non-ferrous metals (e.g. aluminium). Then, after the Second World War, U.S. capital and firms reached almost complete dominance in all the branches of manufacturing, and especially in petroleum, chemicals and pharmaceuticals, as well as electric and other machinery.

The technological shifts and the changes in the sources and destinations of foreign capital are reflected in the dynamics of the foreign presence at the top of the ranking of large, Italian firms. The distribution by industry, in absolute values and percentages, of the foreign firms among the top 200 efficaciously describes the changes discussed above. From graph 10 the decline of transportation and utilities, the expansion of petroleum and electrical equipment, especially after WWII, and the persistent relevance of chemicals and pharmaceuticals appear quite evident.

The research on which this paper is based has still many weaknesses worth of future analysis, among which a possible overestimation of the presence of foreign capitals (due the methodology of data collection, which is anyway consistent with the one recently adopted in the Reprint Database at the Milan Polytechnic School), a lack of comparative dimension (due to the scarcity of similar studies for other countries), the absence of a comparative analysis of performance of foreign-controlled firms in front of the Italian ones, for instance in terms of return on assets, and no information about the way in which the investment was carried on (greenfield, brownfield, joint-venture).

Graph 10. Distribution by industry of foreign-controlled firms among the top 200 ranked by assets, in percent (1913-1972)



CA: Oil drilling; CB: Mining; DA: Food and Tobacco; DB: Textiles and textile products; DC: Leather and leather products; DD: Wood and wood products; DE: Paper products, publishing and printing; DF: Coke and petroleum products; DG: Chemicals and chemical products; DH: Rubber and plastic products; DI: Other non-metallic products; DJ: Basic metals and metal products; DK: Machinery and equipment; DL: Electrical and optical equipment; DM: Transport equipment; DN: Other manufacturing; E: Water, Gas, Electricity; F: Building; G: Commerce; I: Transports

Notwithstanding these problems, the database on which this paper is built provides, for the first time, a comprehensive vision of FDIs in Italy during a large part of the Twentieth century. However, it is also evident that a more detailed and reliable outcome will be reached only by adding a prosopographic and qualitative approach, which would assess other relevant dimensions of the topic through the analysis of case study, e.g. the governance and ownership structure of foreign firms, their strategic behaviour, the resulting organizational structures and, last but not least, their potential influence over their national competitors.

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Appendix.

The Database.

The database on which this paper is based has been built through a complex and largely inductive methodology. The information has been gathered and systematized in a way that influences the reliability and accuracy of the data, thus necessitating a detailed description of its structure together with a preliminary critique of the (main) source.

The database has been built on three general conditions. First, to give a reasonable idea of the distribution of foreign investment typologies in concurrence with defined benchmark years through a longitudinal analysis. Second, to allow a dynamic comparison across the whole period considered, at least among the largest companies. Third, to allow a comparison between foreign-controlled companies and their Italian counterparts in the same sectors and periods. The last of these conditions is not assessed in this paper.

The main source of data is the database IMITA.db, the digital version of a serial source made up of a collection of published volumes edited from 1908 to 1926 by the Credito Italiano and from 1928 onwards by the "Associazione fra le società italiane per azioni" (Asipa), the Association of Italian Joint Stock Companies. This source includes all the joint stock companies based in Italy that had company capital in their last balance sheet higher than a given threshold fixed at different levels in different years. The main database, which is freely available on the Web at the address http://imitadb.unisi.it/, provides data on single companies (identifying information and balance sheet figures) and on board members.ii

The first limitation of the database is thus that it considers only joint stock companies and only those with a share capital over a certain threshold changing over time and set as follows:

1908-1940: (except 1914):	1,000,000 Lire
1914:	500,000 Lire
1949-1952:	10,000,000 Lire
1956:	25,000,000 Lire
1958-1961:	50,000,000 Lire
1964-1973:	100,000,000 Lire

The IMITA does not, however, provide information about the nationality of the shareholders and the capital invested in a company. Only up to 1928 a section of the volumes provides data on “foreign-based companies operating in Italy”, but the information in this section gives only very superficial coverage of foreign capital invested (even with controlling stakes) in Italian companies. All this makes it problematic to identify foreign-controlled companies among those listed in this database.

Thus, it was necessary to combine the IMITA.db with other sources and databases that provided reliable qualitative and quantitative information on the presence of foreign capital, both in minority and controlling positions, in order to build a database of foreign-controlled firms.

Following the methodology provided by Giannetti and Vasta (2006), the data have been collected for benchmark years, i.e. 1913, 1921, 1927, 1936, 1952, 1960 and 1972 (the subsequent benchmark, 1983, is currently under construction).

Although heterogeneous and different in terms of nature, structure and reliability, the following databases, available from research or built ex novo, served as a starting point:

i. The list of “foreign-based companies operating in Italy” registered in the Asipa volumes until 1928. As stated above, this list provides (meagre) information about a very particular kind of foreign company, in general very similar to a free-standing company, and does not cover the universe of foreign-controlled firms among the Italian joint-stock companies.

ii. A list of foreign-controlled companies active in Italy compiled for fiscal reasons by the Ministry of Agriculture, Industry and Commerce (MAIC), available only for the 1890s and published in the Annali del credito e della previdenza. Elenco generali delle società industriali nazionali ed estere costituite legalmente, ed autorizzate ad operare nel Regno al 31 dicembre 1897 (Roma, G. Bertero, 1899). Combined with other volumes (Notizie sulle condizioni industriali della provincia di …, i.e. Statistical information on the province of…) it provides heterogeneous information about foreign companies active in the country. It must be stressed here that there are no systematic official lists or statistics – apart from a few at a very aggregate level – providing detailed information about foreign capital invested in Italian industry in the period preceding WWI.

iii. The first attempt to provide a complete list of foreign-controlled companies in Italy was made relatively late in a book published in 1960 (Scott 1960) but built on data referring to joint stock companies with at least 50 million lire of share capital existing in Italy at the beginning of 1958. The database lists nearly five hundred firms partially or totally controlled by foreign capital. Even with some limitations (for instance, companies with a foreign name or with a foreign, or apparently foreign director are all – and sometimes wrongly - included), the list provides some useful information, though limited to a single year.

iv. Some useful lists, even if far from complete, were completed during the Sixties by the International Investment Office, a branch of the Istituto Mobiliare Italiano set up to facilitate foreign firms willing to invest in Italy. These lists, available in the IMI archive in Rome, are far from exhaustive yet contain information upon foreign (mainly US) companies present in Italy during the Sixties.

v. The sole reliable and comprehensive database for this period is the one published in a report undertaken by the government along with a research group (SORIS) working with the institutional support of the Bank of Italy. Similar to Scott's publication, this database is limited to a single benchmark year (1968). However, it differs from Scott, in the fact that it is much more comprehensive and provides information about joint-stock as well as limited liability companies. With nearly 1,300 companies included, the coverage of the research is considerable.

vi. Between the end of the Sixties and the beginning of the Seventies a large group of researchers was formed in Harvard under the supervision of Ray Vernon and named the "Multinational Enterprise Project". In two separate databases, FOREMY and USEMY, the group gathered a large amount of information about the foreign investments of the largest US and European corporations from the beginning of the century to the early Seventiesiii. The research gave origin to printed volumes (Vaupel and Curhan 1969 and 1974, Curhan et. al. 1977) which provide information at an extremely aggregate level. Thanks to the former members of the groups who were contacted in the summer of 2005, it has been possible to obtain an electronic version of the database with a list of the companies. Given the characteristics of the database (which is incomplete in many parts, and does not provide the name of the subsidiaries), it has been used as a control variable. In many cases, the information on a FDI in a certain year has led, however, to the individuation of the Italian subsidiary.

vii. The last database (in chronological terms) coincides with the first benchmark (1984) of the list published by a research group supervised by Sergio Mariotti and Marco Mutinelli at the Milan Polytechnic. This database, named Reprint, provides information about nearly 1,300 foreign-controlled limited liability and joint stock companies, and is the basis for a publication, Italia Multinazionale, issued from 1984 (Ricerche e Progetti, various years)iv. It is important to note that in this case, as with the previously mentioned SORIS database, some of the joint stock companies in the list may not be found in the IMITA database since the latter only considers the corporations beyond a given threshold.

Each of these different databases provides a list of companies which were (more or less) surely foreign-controlled at a given date. This information, combined with the IMITA database, allows the lists in every benchmark year to be reconstructed. The first step is to check if a company existed in the IMITA database in the benchmark years before and after that time. Obviously, if a company is foreign owned, say in 1957, and also existed in the IMITA list in the 1936 benchmark, it is necessary to check the effective presence of foreign capital in its assets. This methodology, which had to be iterated company by company, made the entire research enormously time-consuming.

Working on such a huge number of companies meant that to validate the presence of foreign capital, it was necessary to identify different criteria which were quicker and more practical than prosopographic or archival research or the examination of the (sometimes irretrievable) internal records of the company. While the archival research has been used to solve, where possible, cases which were impossible to assess otherwise, the research criteria were the following:

a) At least one – or more – directors with a foreign name and surname in the IMITA database. This is a criterion which has also been used in previous research, often with questionable results. It is quite dangerous, since in some cases it is possible to find directors with foreign surnames that are, in fact, truly Italian. That is why this cannot be the only discriminating information, and why it must be used jointly with others.

b) Another relevant criterion is based, again, upon the directors, but in this case relies on the interlocking directorates technique (which may be used with the information provided by IMITA, but limited to the roles of President, General Manager or member of the Board) to reconstruct the ramification of foreign groups. Foreign groups investing in Italy in two or more facilities often employed the same person as director. Following these persons – who sometimes truly are "big linkers" – it is possible to follow the investment policies of foreign companies.

c) It was necessary to extensively use other sources of information to solve ambiguous cases. First of all, the existing secondary literature (company histories included) was particularly useful for the period up to World War II. Second, the Internet has provided very useful information that would otherwise have been impossible to find with years of archival research. The websites of the mother companies, if checked properly, sometimes revealed the existence of a direct investment in Italy, or at least the date in which the activity started. Third, archival research was useful for some companies, even though it is true that quite often archives do not provide the most essential information – the presence of foreign-controlled share capital.

The result is a database of foreign-controlled companies among those listed in the IMITA, and thus named FOR_IMITA.db, divided into the seven benchmarks mentioned above. The database's degree of accuracy increases from the first benchmark in 1913 to the last in 1972 with an estimated average reliability of nearly 70-80% for the entire database.

The methodology through which the sample was assembled is a peculiar one, and the database is not to be considered definitive and "closed". Instead, it is a largely open list where new information can be absorbed once it is obtained from secondary sources and new research.

Another relevant fact to keep in mind is that for the information gathered and verified regarding the benchmarks prior to the First World War, but also immediately after, there is probably a bias due to the existing secondary literature. In other words, for this period it is easier to gather and verify information about certain well-studied industries (for instance, the chemical, electric, or electro-mechanic industries), and much less so for others such as the food and beverages industry.

<u>Ownership and control. Definitions</u>

In this database, and throughout the research, the unit of analysis does not correspond to the definition of the multinational enterprise provided by the classic literature on international business. The definition used in this paper is more general and flexible enough to capture the wide variety of investment typologies in use in the long run. As in other (and more recent) databases, the variety of ways in which foreign capital is present in the Italian companies suggests the use of flexible and extensive definitions of "foreign control". In other words, stakes probably lower than the 50% necessary to establish absolute control are also reported in this database because, at least for the first benchmarks, an exact measurement of the foreign stakes is impossible even through archival and/or prosopographic research. On the other side, however, what is relevant in the perspective of this research is not the absolute control but the presence and the influence of foreign capital that could also be exerted through the ownership of limited, even if substantial, stakes of capital. It is obviously impossible to establish to what extent the foreign capital was able to directly influence the management of the company or to what extent it simply had a sleeper role.

An additional, relevant point is that the typology of the foreign investment was not always the same over time. Especially during the period preceding WWII the evidence suggests that the fully controlled, greenfield subsidiary was the exception rather than the norm due to both political and cultural reasons. Foreign investments took the form of technological transfers and often that of the joint venture or the minority partnership. In this respect, a strong assumption is that the presence of one or more foreign directors on the board implies an active role at the least in strategic decisions if not in the day-by-day management of the company. Hence, in the following paragraphs the meaning of definitions like "foreign capital", "foreign controlled firms" or "foreign direct investments" must be understood as being part of the broader definition of "companies with a presence of foreign capital significant enough to influence strategic decisions". This inclusive criterium is moreover adopted by much more recent research based upon reliable data. For instance, an accurate research done by the Senate Research Office defines as foreign-controlled those firms in which foreign presence exceeds the 10% of the whole share capital (Senato 1978: 90). Similarly, in the above mentioned Reprint database.

The Datasets

Seven benchmarks have been identified, each one originating a single dataset.

For every benchmark, the information provided in the fields of the dataset is the following:

Origin code: a code identifying the company regardless of transformations of its name. Provided by IMITA.

Name of the company

Nationality: identifies the country (or countries) to which the FDI refers.

S, Ss, D, G are statistic codes of activity, up to three digits

Date of foundation: the year in which the activity started. This may not coincide with the year in which an existing company came under foreign control (brownfield investment).

K_date: the share capital in the benchmark year

Tot_asset_Date: provides the amount of Total Assets

In addition to this information, the whole database from which the dataset is extracted contains other data (for instance the name of the parent company, when available), or information about the activity of the company, when reported in the sources.

A relevant point has to be stressed here. Even if the database contains information up to the three-digits level of the Ateco-Istat classification, i.e. at group level, the analysis carried on here will be limited at sub-section level. This is due basically to the made comparable the first benchmarks, with a relatively low number of companies with the last ones.

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i Project n……

ii The project, realized by the University of Siena in collaboration with the Bocconi University in Milano, the University of Bologna and the University of Firenze, has benefited from funding from the Italian Ministry of Education, University and Research (MIUR) and from the Consiglio Nazionale delle Ricerche (CNR).

iii The "Multinational Enterprise Project" created two databases (now in excel format) named USEMY e FOREMY as its main outcome. The data were assembled by more than one hundred researchers at Harvard Business School. The main sources were annual reports, articles and books related to the corporations included in the sample. The data were verified through a number of interviews, and the sample was built ex post. In the US case, the companies were selected among the largest multinationals in the Fortune rankings of the "500 Largest US Industrial Corporations" for 1964 with subsidiaries located in at least six countries and with a controlling stake of more than 25%. The USEMY database contains nearly 20,000 observations on 187 multinationals from 1900 to 1976 grouped into 78 fields. The sample of non-US multinationals was selected by sorting them in the Fortune list of the "200 Largest Non-US Industrial Corporations" for 1970, plus 12 other companies selected on the basis of their relevance and not included in the Fortune ranking. The FOREMY database contains nearly 17,000 observations on more than 200 non-US MNC from 1900 to 1971 grouped into 40 fields.

iv Hereby I warmly thank Sergio Mariotti and Marco Mutinelli for having delivered an electronic version of the 1984 database.

Half of the countryâ€™s capital stock was in foreign hands in 1913, further exposing it to external shocks. Low levels of domestic savings can in part be explained by demography: large numbers of immigrants with dependent children spent money rather than saving it. Traders of the lost past. Argentina had become rich by making a triple bet on agriculture, open markets and Britain, then the worldâ€™s pre-eminent power and its biggest trading partner. If that bet turned sour, it would require a severe adjustment. External shocks duly materialised, which leads to the second theory for Argentine declin Industrial projects and incentives were often proposed in Russia â€“ but they were rarely embraced, often because they threatened the financial interests of conservative landowners. Russia did have some heavy industry â€“ mining, steel production and oil drilling â€“ but its industrial sector was small compared to its rivals, Britain, France and Germany. Russiaâ€™s defeat in the Crimean War (1853-56) exposed the empireâ€™s underdevelopment and the urgent need for industrialisation.Â The reforms embraced by Tsar Alexander II in the early 1860s were designed, in part, to stimulate changes in the Russian economy. Emancipating the serfs (1861) was not just a social reform â€“ it was also intended to release them from the land and the control of conservative land-owners. On this day in 1913 President Woodrow Wilson signed the Federal Reserve Act into law, thus creating, for the third time in the nationâ€™s history (but the first time in The Nationâ€™s history), a national central bank. According to a Nation editorial that ran on the first day of 1914, a primary motive for getting the bill out of Congress and onto the presidentâ€™s desk was the senatorsâ€™ desire to get home for Christmas. History, we have been reminded again and again by the past yearâ€™s Almanac entries, is often the consequence of incalculable contingency and chance.