Multinational Strategies and Outward-Processing Trade between Italy and the CEECs: The Case of Textile-Clothing

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Abstract

The paper is focused on the internationalisation process of the Italian firms within the textile-clothing industry.

According to the economic literature on this topics, the Italian industry, as well as the textile-clothing sector, seem to be a follower, as far as the internationalisation process is concerned. Only since the Nineties, the international pattern of growth of the textile-clothing sector is strictly linked to the delocalisation of production and the creation of foreign affiliates.

Within this contest, the Outward-Processing Trade (OTP) played a major role: the increase of the OTP data from 1991 to 1998 is very strong, especially if the consider the geographical area of the Central and Eastern European Countries (CEECs). Among the CEECs, the Italian firms are mainly linked to Rumania. Our paper confirms the complementary existing among the different types of internationalisation tools.

Key words: Textile-Clothing industry, internationalisation, OTP, CEEC

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1. Introduction. A multinational follower

From an historical point of view, Italy is a late international investor and a multinational follower. The remarkable export competitiveness of Italian industrial firms in the post-war period has contrasted with their poor performance in terms of multinational growth.

A long-term catching up process ended in 1991, when the number of employees in Italian affiliates abroad balanced that one in foreign affiliates in Italy (see table 1).

Table 1 - Employment and Turnover of Multinational Affiliates, 1985-1997

		Foreign affiliates of Italian firms (A)	Foreign affiliates in Italy (B)	A/B %
Employment	1985	243,868	467,121	52.2
	1991	550,917	515,815	106.8
	1993	586,288	499,588	117.4
	1995	595,111	529,337	112.4
	1997	602,205	562,349	107.1

Source: database Reprint

The pattern of multinational growth of the Italian industry changed deeply in the first half of the '90s, with respect to the sectors involved in Foreign Direct Investment (FDI) flows, their geographical direction, and the features of the investing companies. This change may be explained by the international expansion of a new generation of medium-sized fast growing firms and groups, by the impact of the unified European internal market, and by the opening of Central and Eastern European Countries (CEECs), which created new investment opportunities (Balcet, 1997). In 1986, this area accounted only for 0.9% of total employment of Italian affiliates abroad. In 1998, its share grew to 16.9% of total employment abroad.

These simultaneous transformations induced also a change in the main motivations and strategies.

Traditionally, international operations by Italian firms had been overwhelmingly market-oriented, with high complementarity between productive and commercial affiliates, consistent with the product life cycle model, a special case being that of FDIs as a reaction to protectionism.

In the new scenario of the '90s, international strategies tended to diversify and the weight of cost-saving operations has been growing, as in the case of re-locations in low wage areas.

If we focus on the evolution of the internationalization processes in the last two decades, we can distinguish three stages (table 2).

Areas of Sectors Main Exchange Main Actors Forms Destination Involved Motivations Rate Greenfield FDIs Big Groups Latin America Market-oriented Stage I Joint-ventures, Minor Scale-intensive Devaluating (until the '70s) (tariff-jumping) Cooperative Multinationals Spain agreements Acquisitions Market-oriented Stage II Joint-ventures, Big Groups EC Scale-intensive Stable (1980-89)Economies of Scale Cooperative Agreements Strong until Sept., Acquisitions FU Market-oriented 1992 Scale-intensive Stage III Joint-ventures, **New Multinationals** Eastern Europe Cost-saving Devaluating since (1990-99)Traditional Cooperative Global Far East Sept, 1992 till April,

Agreements

1995

Table 2 - Stages of Multinational Growth of Italian Firms

1.1. The traditional pattern: the Seventies

The fast industrial growth in post-war Italy was mainly export-led. However, the international position of the country showed an asymmetry between remarkable export performance and FDI outflows. In the 1970-1980 period, Italian share of OECD manufacturing exports was 7.3% on average, while its share of estimated FDI flows was 1.3%.

A deep divergence existed between the pattern of specialisation in foreign trade on the one hand, and the pattern of productive internationalisation on the other.

If we refer to the taxonomy of industrial sectors proposed by Pavitt (1984), we observe in the Italian case a strong export specialisation and a positive trade balance in "traditional industries" (textile, clothing, footwear, ceramics, leather, furniture, etc.) and in "specialised

supplier industries" (mechanical engineering, specialised equipment and machinery). In both groups of industries the average size of firms is small, labour skills are an important factor of competitiveness, and innovation often takes the form of imitation and adaptation of imported process technologies, or the form of differentiation and new product design (Onida, *et al.*, 1988). The same sectors are characterised by the presence of typical industrial districts: i.e. specialised areas in Central and Northern Italy, where strong concentrations of small and medium-sized firms, competing and co-operating with each other simultaneously, create crucial synergies and externalities.

Instead, areas of competitive disadvantage are concentrated in "scale intensive" sectors (with some exception, such as household appliances) and in "science intensive" sectors, including electronics, information and telecommunication equipment, precision engineering and pharmaceuticals. In each of these sectors large firms and groups predominate. This structural weakness is due to the problems and deficiencies of the big firms, as well as the backwardness of the technological base and infrastructure and to the government policy.

The trade pattern we have shortly described showed a surprising stability over the last decades (Balcet, 1997).

The distribution of foreign affiliates of Italian firms did not follow this pattern during the '70s. They were mainly concentrated in scale intensive sectors, i.e. mainly in areas of competitive disadvantage where the big firms are concentrated, while international operations in sectors of strong competitiveness were episodic and often took the form of joint ventures or non-equity operations.

From a geographical point of view, Italian FDIs were distributed in three main areas of destination, the EC, Latin America (mainly Argentina and Brazil), and Mediterranean countries.

Market oriented motivations dominated the FDI decisions, while redeployment to low wage countries in labour intensive activities was rare¹. Therefore, FDIs and the other international operations were mainly complements of commercial export strategies, in order to achieve better access to foreign markets.

The main explanation given in the literature for the low propensity of Italian firms to develop low-cost international operations, especially in traditional sectors, was the persistent dualism between Northern and Southern regions and the massive financial

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A relevant exception is given by the Miroglio textile group, which in the '70s invested in Mediterranean countries such as Greece, Turkey and Tunisia. In the same period SGS (STET-IRI group, State-owned) created export-oriented affiliates in Singapore and Malaysia for the production of electronic components.

incentives given to invest in the latter. Such cost differentials stimulated relocations within the country rather than foreign investments. (Onida, *et al.*,1988).

At the beginning of this period of early multinational development, we can observe another kind of dualism: between a few large multinational groups, on the one hand (Fiat-IFI, Pirelli, Olivetti-CIR, Montedison, and State-owned ENI and IRI groups), which accounted for the bulk of foreign affiliates' sales, and on the other hand a number of "minor multinationals", family-controlled, medium-sized firms that expanded abroad for the first time thanks to niche advantages in specific products and technologies.

Another specific feature of the Italian experience was the high propensity to engage in co-operative strategies of international growth, through joint ventures and various non equity agreements (Balcet, 1988).

Public policies and the exchange rate were unfavourable to FDIs during the '70s, due to administrative regulations on capital flows and international payments, and the continuing devaluation of the lira.

1.2. The expansion of the "oligopolistic heart" in the Eighties

In a second stage, during the '80s, the restricted "oligopolistic heart" of Italian industry expanded abroad through acquisitions, mainly in Europe, in order to enlarge its market share and to exploit economies of scale.

Large firms and groups overcame most of the difficulties they had faced during the '70s, due to oil shocks, recession and social conflict. They benefited by a process of financial recovery, industrial restructuring and technological innovation, which deeply affected the internationalisation processes (Balcet, 1995).

Multinational growth was highly concentrated in this period: in 1987, the first ten MNFs accounted for 86.6% of total employment abroad, and for 88.4% of foreign affiliates' sales (Cominotti, *et al.*, 1997).

This narrow club of investors was deeply involved in the wave of international mergers, acquisitions and alliances of this period, mainly in Europe. Industrial strategies aiming at diversification (Fiat, Montedison), scale economies (Pirelli, Olivetti) and technological upgrading (Olivetti) coexisted with portfolio diversification strategies (IFI, CIR, Ferruzzi Finanziaria).

As a consequence, the weight of minor, family-controlled multinationals decreased in relative terms, but their role continued to be an interesting aspect of the overall picture.

Geographic destinations changed markedly. Important divestments took place in Latin American countries, affected by the debt crisis (e.g. Argentina), with the exception of Brazil. New operations were developed in the EC.

Market-oriented strategies continued as in the previous period to prevail over costsaving or export-oriented strategies. However, many acquisitions or alliances, especially in Europe, were also motivated by the need to reach better scale economies, comparable to those of the main competitors.

In general terms, FDIs and other international operations continued to be complementary rather than alternative to commercial strategies. Therefore a positive impact on growth and employment at home was observed.

Moreover, the propensity to operate through joint ventures and minority interests, although still relevant, was declining. The nature of joint ventures and co-operative agreements changed, as they were more frequently employed in OECD countries and in scale or technology-intensive activities (Balcet, 1990).

Finally, the multinational expansion of the restricted "oligopolistic heart" of Italian industry was favoured by a stable exchange rate of the lira during the '80s, after Italy joined the EMS, and by the deregulation of capital flows.

1.3. New patterns and new actors in the Nineties

In more recent years, a third stage has been characterised by the emergence of a new wave of medium-sized investing firms, whose motivations are more diversified. New geographical areas emerged as the destination of foreign operations, such as Central and Eastern Europe and the Far East, as well as new sectors, especially among traditional industries, where most comparative advantages of Italian firms are concentrated.

One of the most interesting features of this period is a significant enlargement of the number of international direct investors. The emergence of new actors, the medium-sized multinational groups, compensated for the slowing down of international growth of big oligopolistic groups at the end of '80s and the early '90s. The "new Italian multinationals" are primarily the result of growth of highly specialised and flexible firms, which have strong capacities to adapt imported technology and to develop design, brand and marketing policies.

As a consequence, new sectors were involved in multinational growth. Among traditional industries, the most interesting case is the textile-clothing, followed by the food

industry. Capital-intensive activities (cement), scale-intensive ones (transportation equipment and household appliances), and mechanical engineering were also involved in relevant international operations, as well as the steel industry, where some of the typical Italian minimills became multinational.

The predominant feature of the geographical distribution of international operations is the sharp increase of the share of Central and Eastern European Countries as destinations of new ventures. Before 1992, this area accounted for less than 2% of total employment abroad, while its share was about 18% in 1997 (Cominotti, *et al.*, 1999).

One of the most interesting consequences of these trends is the increased diversification of motivations of Italian investors abroad, including cost-saving and export-oriented relocations towards low-wage areas affected sectors such as clothing, footwear, household appliances.

Alliances, joint ventures and co-operative agreements continued to play a significant complementary role to acquisitions.

From a macro-economic perspective the devaluation of the lira weakened the multinational expansion in the 1993-1995 period, but it did not stop the trend, that accelerated since 1995 when the exchange rate stabilised.

2. The internationalization of the textile-clothing industry in Italy

We can now apply this general framework to the evolution of the textile-clothing (TC) industry, usually considered a "traditional" sector, which is one of the most interesting examples, given its importance in the Italian production pattern (about 15% of manufacturing employment) and the strong contribution to Italian exports and trade surplus.

The case of the T-C industry, in which the issue of redeployment is highly sensitive, also allows us to better appraise the new patterns of internationalisation and their implications.

2.1. The traditional export-oriented pattern

Until the late 80s, the Italian TC industry was only marginally multinationalized, although it was able to keep a large international market share thanks to highly competitive

exports². This situation, consistent with the traditional pattern we have described, was a kind of Italian paradox: how could an excellent trade performance be maintained in a mature sector, notwithstanding the growing competitive pressure from Asian and other low-wage countries? Why were international relocations so rare, in comparison with other industrial countries?

The explanations proposed for this paradox partly coincide with the factors of strength of Italian firms in traditional sectors in general:

- a) intensity of labour skills;
- b) product differentiation (fashion), design and marketing intensity;
- c) process innovation and automation;
- d) externalities and domestic subcontracting within industrial districts.

Moreover, the low firm's size and the very large number of small and very small firms in this sector (beside the few big groups) was a main obstacle to multinational expansion.

Italian industry was characterised by a flexible organisation, based on decentralisation and subcontracting within national boundaries, and on agglomeration and synergy effects in industrial districts. Its competitiveness was mainly concentrated in medium and upper segments of the market. The continuous upgrading of production, in order to target less price-elastic market segments, is another of the most frequently proposed explanations for such export performances.

The non-price competitiveness of Italian firms, essentially due to design, product quality, flexibility and marketing, was built on a dual strategy, based on process innovations and technological modernization on the one hand, and on domestic subcontracting on the other (Mytelka, 1991).

Moreover, protectionism, through MFA, mainly against Asian producers, was another condition for the effectiveness of this pattern³.

We must note that the organization of industrial districts and domestic subcontracting networks created competitive advantages highly dependent on the local economic environment and its synergies.

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² Italy is the second world exporter both in textile and in clothing.

The Benetton case became the successful model within the clothing industry, showing the competitiveness gains deriving from organisational innovations (domestic subcontracting, flexible production, franchising network), market-oriented FDI in Europe, and the massive introduction of information technologies in production, logistics and distribution.

2.2. The new multinational growth pattern

In the late '80s, this picture changed rapidly. FDIs from Italian T-C firms boomed, reaching a peak in 1991. The trend is confirmed by data on acquisitions, joint ventures and non-equity agreements provided by Osservatorio Acquisizioni e Alleanze. This acceleration of the international growth of firms was due to a large extent to the clothing industry, where most relocation took place: 60% of the firms operating abroad in 1992 belong to this sector.

How can we explain this important change? Several factors created the favourable conditions for the new trend.

- a) In the second half of the '80s a process of concentration took place, with the growth of medium-sized and large firms and groups, also within industrial districts (Onida, *et al.*, 1992; Balconi, 1997). This process allowed firms to overcome, in the following years, previous financial and organizational constraints to multinational growth.
- b) The real exchange rate appreciated from 1987 to 1992, reducing price competitiveness and weakening Italian firms export strategies; their market shares in the largest European countries consequently decreased in the second half of the '80s⁴.
- c) Competition increased from both developing countries (mainly Asian) and from OECD competitors that produced in low-wage areas, through affiliates and subcontracting networks (e.g., German firms).
- d) The prospects and the expectations of the gradual dismantling of the MFA, that took place with the GATT 1994 agreement, and the establishment of WTO emphasized this competitive threat.
- e) New opportunities were offered by the unification of the European market (for market-oriented, scale-oriented or global operations) and by the opening of Central and Eastern European Countries (for cost-saving and for market-oriented operations).

The different impact of process innovation and automation on total costs in the textile and in the clothing industry helps to explain why cost-saving multinational operations have been much less important in the former than in the latter. The higher complexity of technologies, the process innovations and the intensity of know-how incorporated in textile manufacturing explain the tendency to keep production at home in this industry, while redeployment and relocation are increasingly adopted by clothing firms

The strategic answer to these new conditions has developed along two main axes:

Between 1985 and 1988, the Italian share on total imports decreased from 32 to 21 per cent in France, from 21 to 17 in Germany and from 11 to 9 in the UK (Viesti, 1993).

- acquisitions in OECD countries, especially in Europe, aiming to better penetrate local markets through access to successful brands and distribution networks;
- industrial relocations and international subcontracting in low-wage areas (CEECs, East Asia and China, North Africa).

The development of international subcontracting networks complemented domestic suppliers in a selective way.

One consequence of this relocation process is the simoultaneous increase of firm's international competitiveness and the decrease of the employment within the Italian TC industry. Such a divergence, however, does not necessarily imply a globally negative balance of relocations. If we take into account their indirect effects on the exports of textile machinery, technology and services, and more generally the flows generated by the growth of host country markets, the overall evaluation can be reversed.

2.3. How the industrial structure of the Italian Textile-Clothing industry affects its international growth

The textile-clothing industry shows some structural characteristics that affect the company growth at international level.

- First of all, the apparel industry is a labour-intensity industry, as many production phases cannot be automated. This is why the LDCs has a competitive advantage in terms of low labour costs.
- Second, there is an increasing importance of the non-price competitive factors, such as
 advertisement, trade mark, fashion, after-sale service, etc. These tools of product
 differentiation increase the added value of the OECD production, especially when they
 are used at international level (see, for example, the United Colors of Benetton
 advertisement).
- Third, TC companies try to exploit economies of scale at firm level, mainly by an international distribution organisation that overcome the limits of the national markets.
- Lastly, the global economy affects the company's behaviour in terms of new subcontractors, as well as the consumer's market power, in terms of taste and habits. The dismantling of the MFA, the WTO focus on free trade, the commercial agreements between EU and CEECs are going to increase the internationalisation process of the TC production.

Moreover, we can remember some of the structural characteristics of the Italian TC, that differentiate it from the European competitors:

- the firm's size of the Italian TC is divided between a small number of large industrial groups (Miroglio, Marzotto, Benetton, etc.) and a great deal of SMEs: the latter do not have the managerial and financial resources to invest in the internationalisation process;
- there is a strong geographical concentration of the TC industry: the specialisation is both at regional level (in Lombardy, Veneto and Tuscany, in the order) and at infraregional one (the industrial districts of Prato, Como, Biella, etc.);
- the relationship between firms are traditionally focused on the outsourcing, mainly at local (district or region) level. The new internationalisation process try to reply the national pattern of growth at international level (using outsourcing contracts and agreements, including Outward Processing Trade-OPT).

3. The internationalisation process of Italian textile-clothing industry in the Central and Eastern European Countries: the role of outward-processing trade

3.1. An overview

CEECs are deeply involved within the internationalisation process of the Italian TC firms. We can consider the internationalisation process at trade or production level.

First of all, CEECs are deeply involved in trade of TC products with EU and Italy. Table 3 shows the importance of CEECs for EU: imports of TC products from Candidate countries (mainly represented by CEECs) increased since 1995 (11.01 billion of Euro) to 1998 (15.63 billion of Euro). At the same time the exports from EU increased too, from 6.55 billion of Euro (1995) to 9.89 billion of Euro (1998). CEECs account for more than one quarter of total imports (27% in 1998) and of total exports (28% in 1998). The EU negative trade balance is made by the CEEC flows in term of 25%.

Table 3 - EU Import, Export and Trade Balance of TC (billion of Euro)

	1995	1996	1997	1998
EU IMPORT OF TC (billion of Euro)				
World	45	47	55	58
Candidate Countries	11	12	14	16
% Candidate Countries / World	24	25	25	27
EU EXPORT OF TC (billion of Euro)				
World	29	32	35	35
Candidate Countries	7	8	9	10
% Candidate Countries / World	22	24	26	28
EU TRADE BALANCE (EXPORT-IMPORT) OF TO	(billion of	Euro)		
World	-16	-16	-21	-23
Candidate Countries	-4	-4	-5	-6
% Candidate Countries / World	28	27	23	25

Source: Eurostat

If we can compare the international trade between EU and CEECs with that one between Italy and CEECs, we find the effects of the Italian specific factors. In 1998, CEECs accounted for only 13% of total Italian import and 6% of total export. The difference with the EU case reflects the international labour division (the specialisation of the Italian industry within the TC sector) and the high quality level of Italian TC products (the markets of the Italian production are mainly OECD countries).

Within the international industrial specialisation, CEECs are a sub-contracting area for Italian TC product.

It is worth to notice the dynamics of the international trade: the Italian import of TC from CEECs increased since 1995 (2.3 billion of Euro) to 1998 (3.7 billion of Euro), as well as the Italian exports to CEECs. The latter increased from 2.3 billion of Euro (1995) to 4.2 billion of Euro (1998).

As far as the international production is concerned, CEECs have a main role: they represent the 17% of all the Italian foreign affiliates, but 38% of the Italian TC foreign

affiliates (Cominotti, *et al.*, 1999). This represents a strong geographical specialisation of the TC internationalisation process.

The following variables affected the choice of Italian TC firms to re-locate production towards CEECs:

- the high technological level of the Italian TC production, that permits a technology transfer to CEECs;
- the expectations of high demand increase within CEECs, that characterise the TC Italian FDIs as market-seeking FDIs, and not only as resource-seeking ones (Vitali and Monti, 1996);
- the characteristics of local industrial system, more involved in traditional sector than in the high-tech ones. Therefore CEECs collect 35% of the Italian foreign affiliates in traditional industries (such as TC, wood, furniture, shoes, etc.), against 7% of the Italian foreign affiliates in high-tech industries.
- the historical industrial development of the CEECs in the TC industry positively affects the local labour market and labour skills. This is in favour of the relocalisation of production towards CEECs.

Finally, the third tool of the internationalisation process we consider is the OPT. Our statistical data about OPT are based on the so called "temporary exports", i.e. production that is usually exported towards low-wage countries in order to be processed there. That temporary exports will be re-imported and commercialised by the EU company⁵. In general, OPT is the effect of some subcontracting agreements made by TC companies in order to exploit the international division of labour.

The flows between CEECs and EU - or Italy - during the Eighties and the Nineties show that OPT was a successful story for CEECs: through the OPT flows the European firms could avoid to pay the high commercial duties that EU had on the TC products (Graziani, 1998).

We have to remember that the EU trade policy for TC products was based on the MFA, that limited the international trade in terms of quality and quantity of the production. All the non-free-trade policies favoured the OPT tool.

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Until January 1997, EU companies had some advantages concerning low duties on the OPT. Now, because of the liberalization trade agreement between CEECs and EU, the OPT advantages are very reduced, and they consists of small administrative gains.

During the last decades, the use of the OPT has grown in all the European countries, especially if we consider the relationships between EU and CEECs. The OPT was 28% of the total exports in 1988, and 41% in 1993. And the level of OTP was 5 times the level of exports in 1988, and 8 times in 1993 (Zucchetti, 1995).

If we consider the Italian case, a great dynamics is recorded: while Italian OPT was 6% of European OPT in 1988, that percentage reached 15% in 1993.

Table 4 shows the rapid growth of Italian OTP in the period 1991-1998, when the OPT increased from 51 mln of Euro to 640 mln of Euro.

Table 4 - Italian OPT

	1991	1992	1993	1994	1995	1996	1997	1998
OPT FLOWS (Mln Euro)	51	102	197	306	444	540	616	640

Source: Istat

The increase is not only in absolute terms, but in relative terms too. Table 5 shows the share of the Italian TC OPT on the total TC export and the total OTP of the Italian industry as a whole: OPT was 0.4% of total export in 1991, and 2.6% in 1998; TC industry OPT accounted for 4% of total Italian OPT in 1991, and 24% in 1998. This evolution is not linked to a higher importance of the Italian TC exports, as they represent 11-12% of the total Italian exports along the period 1991-1998. Therefore, the weight of TC industry in total OPT flows has been sharply increasing in the 1991-1996 period.

Table 5 - Indicators of Italian TC trade and OPT

	1991	1992	1993	1994	1995	1996	1997	1998
% TC Opt / TC Exports	0.39	0.74	1.21	1.60	1.99	2.37	2.56	2.64
%TC Exports / Manufacturing Exports	12	12	12	12	11	11	11	11
% TC Opt / Manufacturing Opt	4	6	10	14	17	20	28	24

Source: Istat

3.2. Country analysis

If we consider the distribution of international trade, FDIs and OPT by country, we can analyse the importance of the country specific factors within the CEECs.

As far as international trade is concerned, we can consider the evolution of the Italian imports and the exports towards CEECs.

The imports from Rumania are the most important ones, and reflect the importance of Rumanian FDI and OPT, and the new role of Rumania within the international division of labour. Table 6 shows that since 1992 imports from Rumania increased their weight within the CEECs from 27% (1992) up to 55% (1998), whereas the other countries reduced their weight (in particular Hungary and Poland).

Table 6 - Italian TC Import from CEECs

Country	1992	1993	1994	1995	1996	1997	1998
Bulgaria	15	12	11	10	10	11	10
Czech Republic	10	12	10	9	7	7	6
Slovack Republic	11	7	10	10	10	7	7
Rumania	27	37	42	45	48	52	55
Hungary	25	22	18	17	17	16	16
Poland	12	9	9	8	7	6	6
Total	100	100	100	100	100	100	100
Total (Mln Euro)	414	576	886	1193	1327	1654	1894

Source: Istat

As far as the exports are concerned (see table 7), it is worth to notice that the Rumanian data are again the most important ones, but they have a lower weight (42% of the total exports) with respect to the import share (55% of the total imports). This is due to the relative higher importance of Italian exports towards Poland, that represent about one fifth of the total exports (whereas the imports from Poland represent only the 6% of total imports). This difference could be justified by the different per-capita income of Poland (where there is a local demand for Italian high-quality products) and Rumania (a low-income country). This last country tends to be considered by Italian investors as a low-cost export platform. In fact, it is also highly involved in OPT flows with Italy, as we'll see

below. 27% of Italian TC exports to Rumania are represented by OPT flows, versus 9% in the case of Poland.

Table 7 - Italian TC Export to CEECs

Country	1992	1993	1994	1995	1996	1997	1998
Bulgaria	7	9	8	8	7	8	7
Czech Republic	6	10	10	11	10	8	7
Slovack Republic	5	7	7	7	8	7	6
Rumania	16	27	30	33	34	37	42
Hungary	50	25	23	21	20	18	18
Poland	15	21	21	21	22	21	19
Total	100	100	100	100	100	100	100
Total (Mln Euro)	536	1193	842	1212	1440	1701	2176

Source: Istat

Tables 8 and 9 show the evolution of Italian TC imports and exports with CEECs through index numbers: the Rumanian case has a very different dynamic than the rest of the CEECs.

Table 8 - Italian TC Export to CEECs (index 1992=100)

Country	1992	1993	1994	1995	1996	1997	1998
Bulgaria	100	145	188	247	254	360	423
Czech Republic	100	171	242	372	428	406	471
Slovack Republic	100	150	225	335	416	436	528
Rumania	100	187	293	462	566	741	1067
Hungary	100	56	73	95	105	115	144
Poland	100	150	218	304	385	442	499
Total	100	110	157	226	269	318	406

Source: Istat

Table 9 - Italian TC Imports from Ceecs (Index 1992=100)

Country	1992	1993	1994	1995	1996	1997	1998
Bulgaria	100	116	161	202	217	300	315
Czech Republic	100	168	213	262	225	270	267
Slovack Republic	100	87	197	271	287	271	291
Rumania	100	195	334	486	583	782	940
Hungary	100	121	157	196	219	263	291
Poland	100	107	151	191	195	196	234
Total	100	139	214	288	321	400	458

Source: Istat

As far as the FDIs are concerned, table 10 shows the distribution of the stock number of Italian foreign affiliates in the CEECs during the period 1987-1997. It is worth to underline the evolution of the Rumanian case since 1995 and the main role played by Hungary.

Table 10 - Number of foreign affiliates of the Italian TC industry in CEECs

Country	1985	1987	1989	1991	1993	1995	1997
Bulgaria	0	0	0	0	1	2	3
Rumania	1	1	1	1	8	13	20
Poland	0	0	0	4	6	8	13
Hungary	0	0	1	12	18	22	23
Czech Republic	0	0	0	0	2	4	5
Slovack Republic	0	0	0	0	3	6	7
Total	1	1	2	17	38	55	35

Source: Cominotti e Mariotti database

If we consider the number of employees of the Italian foreign affiliates in CEECs some other differences emerge from table 11. First of all, we notice the higher importance of Rumanian FDIs, that represent more about 50% of total FDIs. Secondly, it is worth to

underline the different rate of growth of recent years: the 1995-1997 evolution shows the increase of Rumania, and the decrease of Hungary, whereas the other countries are more or less stable.

Table 11 - Employees of Italian foreign TC affiliates in CEECs

Country	1985	1987	1989	1991	1993	1995	1997
Bulgaria	0	0	0	0	210	751	751
Rumania	500	500	500	500	6097	4820	7900
Poland	0	0	0	595	1053	1321	1873
Hungary	0	0	130	1734	3021	4097	2129
Czech	0	0	0	0	879	1672	1547
Slovack Republic	0	0	0	0	808	1813	1956
Total	500	500	630	2829	12068	14474	16156

Source: Cominotti e Mariotti database

If we consider the firm's size of the Italian FDIs in CEECs some other differences emerge from table 12. We can underline the bigger size of the Rumanian firms, that are four times larger than the Hungarian ones. Such a difference may derive from the recent model of development of each country, in the transition from the planned economy towards the market economy: the less the development is close to the market economy, the higher is the firm's size of the Italian FDIs. For example, while in Poland (144 employees per-firm in 1998) and, above all, in Hungary (93) the large old plants were splitted and privatised, in Rumania (395) the privatisation process is not completed yet, on the one hand, and the old large plants were not divided before selling them to private capital, on the other hand.

Table 12 - Size (number of employees) of the Italian foreign TC affiliates in CEECs

Country	1985	1987	1989	1991	1993	1995	1997
Bulgaria	0	0	0	0	210	376	250
Rumania	500	500	500	500	762	371	395
Poland	0	0	0	149	176	165	144
Hungary	0	0	130	145	168	186	93
Czech	0	0	0	0	440	418	309
Slovack Republic	0	0	0	0	269	302	279
Total	500	500	315	166	318	263	462

Source: Cominotti e Mariotti database

These differences are evident even if we consider the labour productivity of the foreign affiliates. Table 13 shows the amount of sales per employee: where capitalism is more evolved, such as in Poland, the labour productivity is 3 times higher than in Rumania or Bulgaria, where the state-owned industry is still more relevant.

Table 13 - Labour Productivity (Sales per employee) of the Italian foreign TC affiliates in CEECs (000 Euro)

Country	1985	1987	1989	1991	1993	1995	1997
Bulgaria	0	0	0	0	2	10	11
Rumania	28	29	31	31	9	14	11
Poland	0	0	0	15	35	39	35
Hungary	0	0	0	8	10	10	13
Czech	0	0	0	0	6	17	25
Slovack Republic	0	0	0	0	17	13	11
Total	28	29	25	14	12	15	15

Source: Cominotti e Mariotti database

Evidence on the OPT confirms the main role of Rumania (see table 14). In 1998 this country OPT accounted for more than half of the OPT from CEECs, whereas Hungary is

one fifth of total OTP, and Bulgaria, Czech Republic and Poland represent about 8-9% of total OTP.

These levels of OTP derive from a different pattern of growth of each CEEC: in 1992 Hungary was the country most involved in the OPT with Italy, and during this period it lost this importance in favour to Rumania. This decline of OPT could represent an effect of the industrial evolution of Hungary, that is substituting traditional industrial products with more technology-intensive ones (and so it is not anymore a major subcontracting area for the European TC production).

Table 14 – Italian TC Opt to CEECs (million of Euro)

Country	1991	1992	1993	1994	1995	1996	1997	1998
Hungary	15	25	46	46	62	71	93	90
Rumania	1	12	38	77	138	173	258	243
Czech and Slovack Republics	3	9	12	29	39	42	58	48
Poland	2	5	9	19	25	29	37	36
Bulgaria	0	3	6	7	17	24	37	37
Total	21	52	111	179	280	338	483	455

Source: Istat and Federtessile (Textile Industry Association)

4. Trade, FDI and Outward-Processing Trade: which relation?

In the previous sections we have analysed data about the evolution of trade, FDI and OPT. We considered both the CEECs as a whole and the country specific factors, in order to analyse the internationalisation process of the Italian TC industry.

Now, it is worth to notice some empirical evidence about the relationships between trade, FDI and OPT.

Theory does not suggest a clear causal relation between the different ways of internationalisation: trade, FDI and OPT could be substitute or complement each other. Their relationship depends on the prevailing multinational strategies followed by the Italian firms in the different host countries. FDIs may be substitute of exports if the firm's strategy is mainly domestic market-oriented, as it was in the traditional product-life-cycle model.

On the contrary, if FDIs are export-oriented we can expect a positive correlation with home-country imports (and OPT) made by MNEs.

A first indication is coming from the analysis of the dynamics of the three instruments of internationalisation: FDI, trade and OTP.

As far as the number of Italian affiliates, their employees and their turnover, table 15 shows a strong increase of that variables. Anyway, it is worth to notice that the OPT growth is stronger than that one trade and FDI. The OPT grew up by 232% in the 1991-1997 period, whereas the commercial mode of internationalisation (imports and export) grew by 20-30%. By the fact that all the modes of internationalisation shows a positive change, we can confirm in general terms the hypothesis of complementary among the different type of internationalisation tools.

Table 15 – Entry mode of the process of internationalisation of the Italian textileclothing industry (% 1991-1998 annual change)

Foreign Affiliates			- OTP	Italian Importa	Italian Evnaria	
Number of firms	Employees	Turnover	OIP	nanan imports	Italian Exports	
220	177	120	232	33	24	

Source: our calculations on Istat and Politecnico di Milano data

5. Concluding remarks

A diversified pattern of internationalisation is under way in Italy, characterised by the internationalisation of new sectors, where Italian firms traditionally have competitive advantages but limited their internationalisation to exports. As a consequence, a greater convergence may be observed, in the '90s, between the pattern of international trade and the pattern of international production.

This evolution is very well illustrated by the case of the textile and clothing industry in the CEECs. Our analysis stressed the high increase of the trade, FDIs and OPT, and their complementary pattern of growth. In the early '90s, the opening of CEECs offered to numerous emerging Italian medium-sized groups the opportunity for cost-saving relocations, as in the case of the TC industry. The evolution of trade, OPT and FDI shows

the main role played by Rumania, as Poland and Hungary are upgrading their trade pattern towards more technology-intensive sectors (see tables 8-14).

The TC industry evolution does not necessarily imply a sharp reduction of the specific locational advantages of Italy, or a crisis of the model of industrial districts. Rather, relocation and OPT are the consequence of a set of changes in the macro-economic context, in light of expectation for the reduced protectionism and of competitive threats and opportunities created by the growing integration of the world economy. They are also due to a process of concentration from which new enterprises and groups have emerged, as well as new organizational patterns and corporate strategies.

Different types of foreign involvement of firms have different impacts on the home economy. The fact that multinational strategies of Italian firms have been primarily market-oriented implies that they have been complementary to, rather than substitutes for, exports.

To this respect, new relocation strategies in CEECs could differently affect income, employment and trade flows vis-à-vis market-oriented strategies. The internationalisation process of TC industry has a different impact on the trade balance and employment in Italy according to the characteristics of the host country. However it should be noted that: (i) mixed forms and motivations are frequent; and (ii) that they can evolve, for instance from cost-saving to increasingly market-oriented or global strategies. This has been the case of many affiliates in the Far East, which were initially oriented to re-export to the home country, and subsequently they have been increasingly oriented to the expanding local markets.

The same evolution can be expected in the future in Central and Eastern European Countries, according to their respective rates of economic and industrial growth. Hungary and Poland seem to be the first countries of this area involved in this evolution.

References

- G. Balcet, Industrializzazione, multinazionali e dipendenza tecnologica, Loescher, Torino, 1981.
- G. Balcet, Italian Non-equity Ventures Abroad, in: F. Onida, G. Viesti, editors (1988).
- G. Balcet, Joint venture multinazionali. Alleanze tra imprese, competizione e potere di mercato nell'economia mondiale, Etas Libri, Milano, 1990.
- G.Balcet, L'économie de l'Italie, La Découverte, Paris, 1995.
- G. Balcet, International Relocation Strategies of Italian Firms, in: P. J. Buckley, J. L. Mucchielli, editors, *Multinational Firms and International Relocation*, Edward Elgar, Cheltenham, 1997.
- M. Balconi, A.Moisello e M.Mutinelli, La fine della polarizzazione: le caratteristiche e la crescita dei gruppi medi italiani, *Economia e Politica Industriale*, n° 97, March, 1998.
- R. Cominotti, S. Mariotti, *Italia multinazionale 1996*, Milano, Franco Angeli, 1997.
- R. Cominotti, S. Mariotti, M. Mutinelli (editors), Italia multinazionale 1998, Roma, CNEL, 1999.
- A. Forti, Il traffico di perfezionamento passivo, i paesi dell'Est e la riorganizzazione dell'industria tessile e dell'abbigliamento, in *Europa/Europe*, n. 3, Roma 1994.
- A. Forti, F. Silva, Deindustrializzazione e delocalizzazione produttiva, in: CER-IRS, *La ricostruzione industriale. Settimo rapporto sull'industria e la politica industriale italiana*, Il Mulino, Bologna, 1995.
- A. Forti, G. Viesti, Il settore tessile-abbigliamento, in: Centro Studi Confindustria, *L'impresa motore dello sviluppo*, SIPI, Roma, 1994 (vol. II: La dimensione internazionale dello sviluppo).
- G. Graziani, Globalization of Production in the Textile and Clothing Industry: the Case of the Italian FDI and Outward processing Traffic with eastern Europe, in: J. Zysman and A. Schwarts eds, *Enlarging Europe: the Industrial Foundations of a new political reality*, Berkeley, International Area Studies, 1998.
- IRS, Struttura produttiva e distributiva nell'internazionalizzazione dei settori maturi, Report to CNR, Progetto Finalizzato "Servizi e strutture per l'internazionalizzazione delle imprese", Milano, 1993.
- S. Mariotti, Internazionalizzazione e fattori tecnologici nell'industria italiana, *Economia e politica industriale*, 79, 1993.
- M. Mutinelli, Italian industrial foreign direct investments in Central and Eastern Europe, 20th Eiba Conference, 11-13 Dec 1994, Warsaw.
- M. Mutinelli, L. Piscitello, Differences in the Strategic Orientation of the Italian Multinational Enterprises in Central and Eastern Europe. The Influence of Firm-specific Factors, *International Business Review*, 2, 1997.

- L. Mytelka, Technological Change and the Global Relocation of Production in Textile and Clothing, *Studies in Political Economy*, 36, 1991.
- F. Onida, La crescita multinazionale dei gruppi italiani di medio-grande dimensione, in: Centro Studi Confindustria, *L'impresa motore dello sviluppo*, vol II: La dimensione internazionale dello sviluppo, SIPI, Roma, 1944.
- F. Onida, G. Viesti, editors, *The Italian Multinationals*, Croom Helm, London, 1988.
- F. Onida, G. Viesti, A.M. Falzoni, I distretti industriali: crisi o evoluzione?, EGEA, Milano, 1992.
- Osservatorio Acquisizioni e Alleanze, Acquisizioni, accordi e joint venture nell'industria tessile / abbigliamento, 1985-93, Modena, 1994.
- K. Pavitt, Sectoral Patterns of Technical Change: Towards a Taxonomy and a Theory, *Research Policy*, 13, 1984.
- G. Viesti, Multinational Strategies in a mature business: the International Expansion of the Italian Textile-Clothing Industry, EIBA Conference, Lisbon, December 1993.
- G. Vitali, Le joint venture italiane nei paesi dell'Est europeo, *Rassegna Economica*, n.1, gen-mar 1991, Napoli.
- G. Vitali, Accordi, joint venture e investimenti diretti dell'industria italiana nella Csi: un'analisi qualitativa, *Working Paper Ceris*, n.7, 1996.

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