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**Relocation from industrial countries to Asia:
Belgian case studies**

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1. Introduction

The recent economic literature on globalisation and social development has stressed the importance of intra-sectoral shifts in the location of specific activities (see e.g. Feenstra & Hanson, 1996 for the United States, and Anderton & Brenton, 1998 for the UK). The relative importance of this phenomenon of “relocation” and “outsourcing” can hardly be underestimated. Whereas a vast literature exists on the relationship (or absence of such relationship) between sectoral differences in international trade patterns and employment, the empirical investigation into such relationships within sectors is still in its infancy. Reliable comparable quantitative data are badly needed. Alternatively, and as a first qualitative assessment, case studies of actual relocation practices and their causes and consequences, can offer valuable insights.

The present paper reports on five case studies of relocation of industrial activities from Belgium. Of these five case studies, four are on relocation to developing Asian countries, one to Lithuania. The latter is added as it is related to the relocation of activities that are analysed in another case study. The case studies are respectively :

- Van de Velde Bros., a manufacturer of ladies’ luxury underwear, which is subcontracting to Chinese manufacturers of which the company might become co-owner,
- Pauwels International, a producer of power transformers, which started with a production joint venture in Indonesia that is now wholly-owned,
- Sioen Industries, a manufacturer of coating and protective clothing, which took over two clothing factories in Indonesia,
- San Martino, a manufacturer of high-quality fashion wear, which shifted subcontracting from Belgian companies to manufacturers in Thailand,
- Inbelco International, a manufacturer of ladies’ wear and former subcontractor of San Martino, which is now subcontracting activities to companies in Lithuania.

We are most grateful to the chief executive officers interviewed for the time they made available for us as well as for the most useful insights provided into the activities of their companies.

The companies were selected using a shortlist of relocating companies. After a first contact by telephone asking for their cooperation, the chief executive officer was interviewed. Since we started from such a shortlist it will come as no surprise to find that the five case studies are related to sectors which, according to a study of OECD (1994) and Bernard et al. (1997) show a significant negative impact of import penetration from non-OECD non-OPEC countries on relative employment in the OECD (textiles, clothing, footwear, computers, radios and TVs).

Each case study provides an outline of the company with information on its history and the present situation. We will endeavour to clearly indicate the respective type of relocation at issue, which is not an easy task. In assessing the relocation type, we will use the definitions developed in the pioneering study by the Belgian Federal Planning Office (Bernard et al., 1997) :

- Localisation, as distinct from relocation, is the situation where affiliates, joint ventures or strategic alliances are established abroad for reasons of “necessary market presence” and in the same range of activities as in the home country,
- Relocation with expansion (positive relocation) is the situation where affiliates, joint ventures or strategic alliances are established abroad but not for reasons of “necessary market presence”, which lead either to expansion of the traditional activities of the relocating company, or to a diversification of activities,
- Relocation *stricto sensu* is the situation where affiliates, joint ventures or strategic alliances are established abroad, irrespective from the necessity or not of market presence, which lead to a reduction of activities in the home country.

Apart from this, each case study describes the concrete form of the relocation, followed by the relocation motives, as could be ascertained on the basis of the information gathered from the interview. Some expectations for the future are finally added.

2. Case study relocation: Van de Velde Bros Ltd.

Schellebelle, a small town in the east of Flanders, has become famous for his production of highly priced underwear. A long time ago more than 50 manufacturers of underwear were established in Schellebelle. At the moment there is only one producer of underwear left and it is not the least. It concerns Van de Velde Bros Ltd. who is the largest producer of underwear in Belgium and is widely known all over Europe.

2.1 Historical background

Van de Velde Bros Ltd. was founded in 1919. That year grandfather Van de Velde convinced his wife Margareth to become a self-employed producer of corsets. In those days she was working as a stitcher at Déwé, a manufacturer of underwear in Schellebelle. From the start, business was going very well for Van de Velde. Only during World War II was the development of the company delayed. The sixties and seventies witnessed uninterrupted growth. It were the haydays for the second generation of the Van de Velde family, which focused on functional, markless corsets.

In the early seventies things changed. The oil crises, the depression in the textile industry and the women liberation movement slowed down the growth. At that time the number of employees diminished from 300 to 190, turnover stagnated and no new investments took place. Nevertheless the company remained paying. During the crisis in the underwear market, many competitors of Van de Velde Bros Ltd. decided to economise and to produce cheaper underwear. Van de Velde took the other way. Mr. William Van de Velde, the driving force of the second generation, fought back with creativity and quality. This policy fructified and the company kept growing. Van de Velde Bros Ltd. became benchmark for product quality, not only in Belgium but also abroad. By adding creativity of world class to this, Van de Velde Bros Ltd. started offering luxury products since the beginning of the eighties.

Meanwhile the third Van de Velde generation became established in the early eighties. They added a well-balanced marketing and gave birth to a new period of growth. In ten years time they succeeded to raise the turnover from 164 million to 570 million BEF and to double profits. In 1990 Van de Velde Bros Ltd. even took over the German company Prima Donna.

In 1997 Van de Velde Bros Ltd. launched a new brand named Marie Jo L'Aventure. It was a tremendous success. In twelve months time this austere, avant-gardist lingerie succeeded to conquer 13 per cent of the turnover of Van de Velde Bros Ltd. without damaging the other brands of the company. Marie Jo, Prima Donna and Marie Jo L'Aventure became luxury lingerie brands with a clearly defined position and Van de Velde Bros Ltd. became the second European producer of luxury lingerie.

In 1997 Van de Velde Bros Ltd. built a new distribution centre in an industrial zone in Wichelen, in the neighbourhood of Schellebelle. This distribution centre has a total area of 6.500 square meters and included an investment of 110 million BEF. It became operational at the end of 1997. Thanks to this new distribution centre the storage capacity increased with 50 per cent. At the same time new picking systems were introduced in order to improve the efficiency.

2.2 Present situation

2.2.1 Core activities

Van de Velde Bros Ltd. designs, manufactures and commercialises fashionable luxury lingerie. Designing, production and sales are the three cornerstones of the company are managed entirely centrally, and they only commercialise products under their own brand. The three brands are Marie Jo, Prima Donna and Marie Jo L'Aventure. With these brands Van de Velde Bros Ltd. aims at playing a prominent role on the European market of luxury lingerie and to be a reference for creativity and product quality. From this a significant presence on the non-European developed markets must follow.

The company centralises all activities in its headquarters in Schellebelle with the exception of assembling. In 1997 only 18 per cent of the assembling took place in Schellebelle, while the remaining 82 per cent had all been relocated. The highest value added jobs were kept in Belgium, i.e. designing, purchasing and quality control of the raw materials, and cutting textiles. After being cut, almost all the parts of textiles are transported to the production plants abroad. And after being stitched all the garments are transported to the new distribution centre of Van de Velde Bros Ltd. in Wichelen, Belgium. There final quality control is done, the garments are being packaged, stored and finally dispatched.

As mentioned above, the assembling presently partly takes place in own companies in Belgium, Tunisia and Hungary, and partly with subcontractors in France and China. During the last years Chinese production has become more important because it offers excellent results with regard to quality at interesting conditions. At the same time the share of French production continues to diminish. In November 1998 this share was already reduced to 5 per cent. Also the Belgian production is slowly being reduced.

Table 1: Share of various countries in output of Van de velde Bros, 1995-1997

Evolution production division	1995	1996	1997
Belgium	26 %	24 %	18 %
France	36 %	24 %	17 %
Hungary	12 %	13 %	14 %
Tunisia	1 %	8 %	12 %
China	25 %	31 %	39 %
Total	100 %	100 %	100 %

2.2.2 Employment

Workforce at the Belgian plant increases steadily. In 1997 Van de Velde Bros Ltd. employed approximately 800 people, 11 per cent up compared with 1996. In Belgium 450 people are employed, of which 150 are still in assembling. The plants abroad are only production plants. In Hungary some 300 workers are employed and in Tunisia 140. At Topform, their Chinese subcontractor, between 500 and 600 people are working exclusively for Van de Velde Bros Ltd. As Mr. Herman Van de Velde points out looking at the shares of the different plants in total production is misleading as productivity and output differs. In Hungary for instance bodies are assembled which take half an hour to produce while in China a lot of panties are manufactured which only takes 10 minutes. Employment abroad equals nearly 1000 people.

In the assembling divisions of Van de Velde Bros Ltd. 95 per cent of the personnel are women.

2.2.3 Profits and turnover

Profits and turnover have risen steadily since 1982. Creativity and quality are the cornerstones of this success story. In 1997 Van de Velde Bros Ltd. showed satisfactory results : turnover increased with 20 per cent, profits with 38 per cent and all the financial ratios have evolved favourably. In 1997 consolidated turnover rose with 20.5 per cent and amounted to 2.2 billion BEF¹. A considerable part of this growth can be explained by the success of the new brand Marie Jo L'Aventure, which reached a share of 13 per cent in overall turnover after one year. Furthermore, the sales of the brand Marie Jo increased with 4 per cent and that of Prima Donna with 10 per cent. This implies that the three brands are not directly in competition with each other, and all have their own specific segment of the luxury lingerie market.

95 per cent of the customers are located in Europe. The management of Van de Velde Bros Ltd. has always made a clear distinction between sales and production. Regarding sales Van de Velde Bros Ltd. concentrates on a restricted number of countries. Together Germany, Belgium, Netherlands, France, Denmark, Switzerland and United Kingdom represent 90 per cent of the turnover. Benelux and Germany show the largest turnover and market share. However, during the last years growth of sales in these four countries became smaller than the growth of sales in other markets, were the potential is much stronger. The countries showing highest growth were the Netherlands, the United Kingdom and France. Moreover, the growth of Van de Velde Bros Ltd. in France can hardly be over-

¹ This is equivalent to approximately 60 million USD.

estimated, as competition in the French luxury lingerie market segment is very severe, France being the home base of most competitors.

With regard to product range, the share of bras and matching panties continues its growth to the detriment of corsets and bathing wear.

2.3 Relocation

According to the managing director, Mr Herman Van de Velde, the firm has never proceeded to relocation *sensu stricto*. In other words Van de Velde Bros Ltd. has never diminished production in Belgium. Only additional production has been committed to foreign plants. Thanks to the relocation policy they have been able to become competitive on the world market and even to raise employment in Belgium. During the last 15 years the number of personnel has continued to grow.

2.3.1 Foreign production

Since 1986 Van de Velde Bros Ltd. has partly been relocating production. First, part of the production was moved to France. In 1990 they also started doing business with Chinese subcontractors and in 1992 they started producing in their own plant in Hungary. Since 1995 the company also manufactures underwear in a rented building in Tunisia.

At present Van de Velde Bros Ltd. has five subsidiaries : Prima Donna Wilhelm Meyer Jlschen Gmbh & C (Germany), Van de Velde Verwaltungs Gmbh (Germany), Soc. de Confection de Kondar SARL (Tunisia), Van de Velde France SARL (France) and Van de Velde Termelo es Kereskedelmi Kft (Hungary). The Hungarian and Tunisian subsidiaries are assembly workshops, the German and French ones are sales offices.

Apart from its foreign subsidiaries, Van de Velde Bros Ltd. is engaged in outsourcing with French and Chinese subcontractors. At present (November 1997) the management of Van de Velde Bros Ltd. is interested in participating in their Chinese subcontractor Topform in Schenzen.

The headquarters of Van de Velde Bros Ltd. in Schellebelle are responsible for quality control of raw materials, management of materials, creation, production, final inspection and shipping. Besides this, they also keep the know-how on the entire production process. Finally all commercial and marketing activities are managed in Belgium.

Chinese production

At the beginning of 1998 Van de Velde Bros Ltd. has subscribed to a non-subordinated convertible bond loan of 1 million USD issued by its Chinese contractor Topform International Ltd. to the amount of 15.5 million USD. The aim of this financial operation is to make this company again financially healthy. Topform International Ltd. got into trouble because it had invested a lot in sales and distribu-

tion activities which did not achieve the expected result. These activities has been disposed of so that they will not stand in the way of the reconstruction.

The convertible bond loan has been contracted for a period of 5 years. Each year bonds can be converted into shares at a conversion price of 0.0401 USD per share.

After the entire conversion Van de Velde Bros Ltd. can take a participation of 1.5 per cent of the shares of Topform International Ltd.

During the first three years interest amounts to 6 per cent and afterwards 5.75 per cent. If no conversion is demanded, Topform International Ltd. will pay back the borrowed amount at the end of the five years' period.

Thanks to the support that Van de Velde Bros Ltd. lend to one of its most important suppliers, it can considerably strengthen its negotiating position, by which it must become possible to reduce its production costs.

Social climate in China

From time to time Mr. Herman Van de Velde visits the factory of its Chinese subcontractor Topform. Judged by appearances he believes that Topform is respecting the social legislation. Although free trade unions are not allowed in China the management of Topform has signed a statement in which it declared to observe the rights of the employers. Mr. Van de Velde is convinced that abuses only occur if there is no direct relation between personnel and principal. He is convinced that workers at Topform are much better off than other Chinese workers not only because they are not working for the local market, but also because they are operating in a luxury segment of the market. The factory of Topform that is responsible for manufacturing Van de Velde products is the most expensive factory of all the companies of Topform.

Sales in Asia

Presence on the local market was in case of relocation to China of no importance. The entire Chinese production is transported to the new distribution centre in Belgium. So far Van de Velde Bros Ltd. has only minor sales activities in Asia, and are only selling underwear to Japanese retail trade. It was decided to concentrate on the Japanese market because it is the only Asian country where an important part of the population has sufficient buying power to purchase Van de Velde underwear. But so far Van de Velde Bros Ltd. attains only a minor part of its turnover in Japan.

There are three main reasons why Van de Velde Bros Ltd. presently does not focus on the Asian market with regard to sales. The first reason is that the purchasing power for luxury products such as Van de Velde lingerie in Asia is too restricted, with the exception of Japan. Besides this, the management of Van de Velde does not concentrate on the Asian market, as its market potentials in Europe are still

sufficient. A final reason for not focusing on the Asian market is the need for product adaptation because the physiognomy of the Asian women is different from the European women.

2.3.2 Relocation motives

In 1986 Van de Velde Bros Ltd. started relocating to France for reasons of capacity. In Schellebelle there was not enough infrastructure and a shortage of personnel. In fact they were forced to relocate because they could not find enough appropriate personnel in Belgium. At that time there were many specialised companies in France and Van de Velde Bros Ltd. started doing business with French sub-contractors. So the main goal of this action was not merely to reduce the labour costs, although Herman Van de Velde can not deny that this also played an important role. Labour cost in Hungary are one eighth of that in Belgium but productivity in Belgium is much higher. In turn labour cost in Tunisia are a much lower than in Hungary. Of all the production plants of Van de Velde Bros Ltd. labour cost are lowest in China but the company does not take all the advantage of this because they are convinced that the management of Topform levies huge profit margins.

Mr. Herman Van de Velde states that the company was not forced to relocate because of pressure on prices, but to be able to attain higher growth. They relocated for offensive rather than of defensive reasons.

2.3.3 Why China?

Advantages of Chinese manufacturing

According to Mr. Herman Van de Velde the company started producing in China rather by accident. In the 1980s Van de Velde Bros Ltd. manufactured underwear under licence for Bestform, an American company. Approximately 50 per cent of the production of Bestform took place in Asia at the factories of their subcontractor Topform. Bestform made Mr. Van de Velde a proposal to sell Marie Jo in America under the name of Christian Dior. The only condition was that the production would take place in Asia, otherwise it would become too expensive. Mr. Van de Velde agreed and sent a few of his people to China to control the quality.

Van de Velde Bros Ltd. has decided to relocate to different continents, such as Asia, because they would not depend on the political stability in one particular country. The most important motive for relocation to China was the labour cost. A lot of other motives were of minor importance such as local advantages, transport costs, education and availability of personnel.

Disadvantages of Chinese manufacturing

At the time of the decision to start producing lingerie in China Herman Van de Velde was aware of the fact that it would not be very easy to transfer the necessary know-how. Chinese workers were not trained to assemble lingerie. Afterwards it turned out, however, that they easily could find adequate personnel who learnt very quick how to stitch lingerie.

A second disadvantage is that import duties in China amount to 13 per cent.

2.3.4 Appraisal of relocation

According to Mr. Van de Velde the producing place has become irrelevant for the company. "Made in Belgium" has lost its relevance and has been replaced by "Made by Marie Jo". He is very satisfied with the Chinese production, as the quality of the Chinese lingerie is often much better than in Belgium.

2.4 Expectations about the future

In the future Van de Velde Bros Ltd. will make a great effort to increase its turnover, market share and finally also its profits by optimising its sales organisations and by intensifying its marketing activities. Simultaneously they will become more demanding with regard to creativity and quality. They will strive to enlarge the gap between originality and quality on the one hand, and between banality and doubtful imitation on the other hand.

The next years Van de Velde Bros Ltd. wants to reach in France and Germany, which are the two largest European markets, a market share of more than 15 per cent. Next to this the management aims a healthy presence in the other countries of the European Community, in the United States and in Southeast Asia. For 2002 the turnover is rated at 3 billion BEF. According to the management it is possible that Van de Velde Bros Ltd. will appeal to foreign opportunities in order to reach the above targets.

An important fact is that Van de Velde Bros Ltd. has been introduced to the Stock Exchange in Brussels in 1997. The capital that is thus tapped can be used for acquisitions in the production of underwear, or in starting up some joint venture distribution activities. In addition, the introduction to the Stock Exchange has increased the reputation of Van de Velde Bros Ltd. which will positively influence the marketing of its products and the recruitment of professionally skilled personnel.

In 1997 Van de Velde Bros Ltd. has further extended machinery in Tunisia in order to meet the increased demand. At present Van de Velde Bros Ltd. is negotiating with the local authorities about the acquisition of premises in a new industrial zone which will be laid out by the government. The present buildings of Van de Velde Bros Ltd. in Tunisia are being rented and are becoming too small. The investments that probably will go together with the building of a new building are estimated at 60 million BEF. This investment must make it possible to increase productive capacity considerably. In August 1999 Mr. Van de Velde hopes that they can move into the new building in Tunisia. This expansion will include a rise of personnel from 140 workers to 300.

At the end of 1998 Herman Van de Velde was looking for new subcontractors in Asia. In the future they will probably do business with subcontractors in Sri Lanka and/or Thailand. The main reason for this is that the share in total production of their Chinese subcontractor Topform has become too large. The financial problems of Topform made clear that it is quite dangerous to be so dependant on one subcontractor. Nevertheless, the search for new Asian subcontractors depends on the growth that Van de Velde attains. If sales keep on rising, they will start business with new Asian subcontractors. At present the production at Topform still grows from 10 to 15 per cent and it is this growth that will be transferred to new subcontractors.

In 1998 the French production had already severely been reduced. In the near future this policy will consciously be continued. For Herman Van de Velde the French production has no strategic value and has become too expensive. It will be reduced in favour of the Hungarian production.

In the future workforce of Van de Velde Bros Ltd. In Belgium will probably continue to grow. Only in the assembly division in Schellebelle a growth of personnel is not longer possible. Each year the share of Belgian assembling diminishes because of problems to find appropriate personnel. Skilled stitchers are hard to find in Belgium, the training to become stitcher takes long and few people are interested in it. Nevertheless the Belgian plant preserves an important strategic value because of flexibility, fast reaction time and its existing know-how. It is very important that the Belgian personnel maintain contact with assembling.

3. Case study relocation : Pauwels International

3.1 Historical background

In 1947 Emmanuel Pauwels started building transformers in a small workshop in Mechelen. He named his company "Electrische Constructie Pauwels". From the beginning Pauwels has exported, which laid the foundation of his international strategy. Thanks to this international strategy Pauwels has been able to become a world-wide renowned company .

In the second half of the fifties, the number of orders increased considerably. In order to dispose of necessary productive capacity, a new factory was built on the skirts of town in 1958. Today this factory is still the biggest plant of the Pauwels Group, where also the offices of Pauwels International are located. In 1970 Pauwels took over a company in Machelen in order to build transformers tubs. From 1978 till now Pauwels has continuously been starting up foreign plants and taking over selectively several companies in a number of countries.

3.2 Present situation

Pauwels International Plc. is the co-ordinating holding company that is responsible for the corporate planning and the commercialisation of the product range. The Pauwels Group is an explicit full-line supplier. The production of Pauwels is characterised by an extreme vertical integration, which is rather exceptional compared with other transformer constructors. At present the Pauwels Group consists of seven productive plants : three in Belgium and one in Ireland, the United States, Canada and Indonesia. In Saudi-Arabia distribution transformers and compact substations are built under licence of Pauwels.

The sales organisation of the Pauwels Group is a network that tries to keep the communication lines between customer and company as short as possible. Pauwels has consciously chosen for small, efficient selling agencies or co-operation with specialised agents, which have a good knowledge of

local customers' needs. Pauwels has selling agencies in France, Saudi-Arabia, United Arab Emirates, Zimbabwe, Curaçoa, Zimbabwe, Indonesia, United States and Canada.

3.2.1 Core activities

Pauwels is a constructor of a full range of distribution and power transformers. Transformers are a vital link in the transport and distribution of electrical energy. The whole range of transformers consists of power transformers to transport electrical energy, distribution transformers to distribute electricity to the end users, and cast-resin transformers which have the same function as the distribution transformers but pay special attention to environmentally friendliness and fire safety. All transformers are being optimised in function of the clients' specifications with regard to losses of energy, noise nuisance, measurements and weight. The products of Pauwels are energy-saving, noiseless, compact and light.

Besides designing and building transformers, Pauwels also develops and realises projects related to the transmission and distribution of electrical energy. Since 1977 Pauwels Contracting Plc takes care of turnkey projects within the fast growing market of efficient transmission and distribution of electrical energy. Together with the transformer division, Pauwels Contracting offers solutions for urban and rural electrification. Pauwels Contracting is specialised in designing and constructing conventional and mobile substations. Also projects with regard to power lines are part of the core activities of Pauwels Contracting.

The Pauwels Group has productive plants and sales offices on three continents, has control of a world-wide network of commercial agents and has customers in more than 130 countries. The customers can be divided in three groups. First of all there are the electricity companies, which are often state enterprises. The second group consists of contractors of large projects, that appeal to different companies to realise their project, among which Pauwels. Finally, there are large electricity using private companies. Customers are located in more than 140 countries. Most of them can be found in Europe, North-America, Middle East, South-America and Asia. Only the Australian market has not yet been explored by Pauwels but recently some demands to do business with Pauwels have come from Australia. In the near future this market will definitely be conquered by Pauwels.

3.2.2 Employment

The Pauwels Group presently employs approximately 2,200 people, which are responsible for producing 26,000 transformers per year. One third of these people are clerical staff and two thirds are workers. Many workers are low-skilled. Most, however, have received an electricity training. Most of the highly-skilled employees have received a technical training. In Belgium labour costs for workers at Pauwels amounts to 1,000 BEF per hour.

During the years, workforce of the Pauwels Group has remained stable, although it has been reduced a little in Belgium.

3.2.3 Present economic situation

The consolidated annual turnover of Pauwels International amounts to 9 billion BEF. Half of this is attained thanks to exportation outside Europe. According to Trends Top 30.000 Pauwels is number four in Belgium with regard to sales of electrical and electronic devices. Competitors of Pauwels are Schneider, Alstom, ABB and Siemens. Since 1993 Pauwels is producing in Indonesia.

3.3 Relocation

As the relocation of Pauwels to Indonesia is not to the detriment of the activities and personnel at Pauwels' plants in Belgium, production in Indonesia by Pauwels International can be regarded as relocation with expansion.

3.3.1 Foreign production

Since the 1970s Pauwels has been a supplier of transformers and a contractor of important electrification projects in Indonesia. In November 1990 Pauwels and Arya Sada Percasa agreed on building Pasti PT, representing an investment of 20 million dollar. In 1993 the factory had been put into use. Pauwels and Arya Sada Percasa owned fifty per cent of Pasti PT each.

There was no other possibility than building a brand-new factory because the transformers were not yet being built in Indonesia, and it was therefore not possible to take over an existing company.

Pauwels chose to co-operate with a local partner because of the advantages this implies. The local partner can lobby and knows the country. Co-operating with a local partner seems also to be necessary to supply to public enterprises, although this is denied by the government².

Arya Sada Percasa did not succeed to bring in sufficient orders, of which the management of Pauwels was long unaware. In January 1996 the management of Arya Sada Percasa admitted that they were in trouble. In spite of this setback the management of Pauwels decided to carry on the Indonesian production. In July 1996 Pauwels took over the shares of Arya Sada Percasa and the name of the company was changed from Pasti PT into Pauwels Trafo Asia PT. Pauwels possessed the freehold of Pasti PT for almost a year although from the start, they searched for another partner, which in January 1997 was found in the Indonesian group Medco. In April 1997 Medco took a participation of 40 per cent in Pauwels Trafo Asia PT via its daughter company Meta Epsi Engineering PT. The arrival of this strong industrial group, which is among others specialised in offshore drilling, contracting and engineering, has strengthened the market position of the Pauwels Group in the ASEAN countries.

Just before the Indonesian plant became operational, several Indonesian future employees of Pauwels, received a training in Belgium from 6 months to two years. These people have been the driving force behind the Indonesian plant. At present Pauwels Trafo Asia PT employs 215 people. Most of them are men because no women are employed in the production plant. In the offices in Indonesia

² Through the years this policy has been liberalised.

approximately 20 women are employed. Qualifications of the Indonesian personnel are comparable to these of the Belgian personnel. Pauwels uses very rigid selection criteria and admittedly it is not very easy to find good workers in Indonesia. Pauwels has invested a lot in recruitment so that only the best Indonesian workers are hired.

Comparing the labour costs at Pauwels Trafo Asia PT with the situation in Belgium is difficult because of the enormous fluctuations of the Rupiah and the inflation rate amounting to 60 per cent, which causes much wage indexing changes. In general, it can be said that wages vary greatly with education. A chief accountant, for example, earns nearly 20 times more than a worker. The better class of workers earns almost 60 USD³ a month, extra remuneration's included, while a chief accountant at Pauwels Trafo Asia PT earns 1,163 USD a month.

At Pauwels Trafo Asia PT wages are above the Indonesian average, which is management policy. After all Pauwels has invested a lot in education and training and wants to avoid that these employees leave Pauwels Trafo Asia PT. In comparison with the textile industry in Indonesia, the social environment at Pauwels Trafo Asia PT seems to be very good. Employees receive a transport allowance and a housing allowance. Furthermore there is a medical service at Pauwels Trafo Asia PT, and a social committee to grant loans to workers in need. As long as the Asian crisis lasts, Pauwels will take special measures to help its Indonesian personnel.⁴

Only a part of the entire production range of Pauwels is produced in Indonesia. Technically spoken, it is not possible yet to build the largest type of transformers in Indonesia. Pauwels Trafo Asia PT has a maximum productive capacity of 80 transformers per year, which implies that Pauwels Trafo Asia PT is the largest producer of power transformers in South-east Asia.

Pauwels Trafo Asia PT imports oil, copper, steel and magnetic tinplate. On the most expensive imports Pauwels must pay 25 per cent import duties and some imports are duty-free. On average Pauwels pays 6 per cent import duties.

3.3.2 Relocation motives

Several motives have played a role in the decision of Pauwels to produce abroad. First of all Pauwels wanted to look for opportunities abroad and to be present all over the world. The second motive was that Pauwels wanted to leave the competitors miles behind. In the case of relocation to Indonesia this is very significant. The current production of Pauwels in Indonesia is totally new in Asia. None of the competitors have a similar production in Asia.

By relocation Pauwels wanted to reach spin-offs for the other plants of Pauwels, especially for the plants in Belgium. In the case of Indonesia this means that the orders on the Asian market will bring in

³ This has been calculated by taking the exchange rates of November 1998. At that time one dollar was quoted at 8,425 Rupiah.

⁴ Food parcels are offered for sale to the personnel, at the prices that were prevailing before the crisis. These food parcels consists of rice, sugar, oil and the like. At lunch time hot meals are offered to the workers. The management of Pauwels is aware that things are not easy for the inhabitants of Indonesia. Before the crisis they were already poorly off and now things have only become harder.

additional orders for the Belgian plants. Without the Indonesian production this would not have been possible. Also saving on labour costs has been an important relocation motive.

3.3.3 Why Indonesia?

Advantages of Indonesian manufacturing

None of the motives that usually explain the choice for a particular country played a role in the decision of Pauwels to relocate to Indonesia. In 1990 Pauwels chose Indonesia for its drive into Asia mainly because they had been doing business with Indonesian clients for almost twenty years. Thanks to these business relations, the management of Pauwels knew the country quite well.

Nevertheless the decision to relocate to Indonesia must be seen as part of the international strategy of the Pauwels Group, aiming at high growth developing countries. The rationale is that 80 per cent of the demand for transformers depends on a rising consumption of electricity, and only 20 per cent on the replacement of transformers. Therefore, the international expansion of Pauwels is strongly connected with the evolution of the electrification in the world. In the above mentioned developing countries, the electricity production per head of the population is growing faster than in the industrialised countries, and the further expansion of their electricity grid is a first priority. Consequently these countries, Indonesia included, have an enormous future need for transformers. Indonesia being the fourth largest country in the world, with a population of over 200 million, and until 1997 in full expansion, showed an enormous need for electricity.

It was conceived by the management of Pauwels that exporting with Indonesia was not sufficient. Local presence is very important, particularly local production, which is an advantage if one wants to do business with state enterprises.

Disadvantages of Indonesian manufacturing

When the management of Pauwels decided to relocate to Indonesia, they knew the country very well, but they were aware that the main problem would be the cultural difference. In Indonesia everything proceeds slower than in Western Europe, and for getting things done a price has to be paid (either in money or otherwise). In business negotiations, no straight answers are given and important business meetings never have any result. According to Mr. Albert Calluy (the managing director of Pauwels Info Asia PT) such meetings are just for show, and it is only in small committees that deals are made. All this often stands in conflict with western management styles.

3.3.4 Appraisal of relocation

Pauwels is producing transformers in Asia since 1993, and in 1998 they hoped to make profits on this production for the first time. Each transformer is made on order and must be designed. This takes a lot of trained manual work. In the case of Pauwels, the order book must be filled from 7 to 8 months, or losses are incurred.

Despite the Asian crisis, Mr. Albert Calluy does not regret the relocation of Pauwels to Indonesia. According to him, it is very important that Pauwels sticks to its policy of being present in the largest trading nations. He is convinced that exports to Asia would diminish if Pauwels would not have a local production plant. Normally the Indonesian production is exported to the entire Asian market. However, due to the crisis the Asian market has collapsed and this production is now being exported to other nations. In the future the Indonesian production will also be exported to New Zealand, which Pauwels endeavours to conquer.

The Rupiah has devaluated much more than the other currencies in Asia. Pauwels had hedged against the Asian crisis. Although not been harmed financially, Pauwels is harmed economically by the Asian crisis. Most contractors are postponing their investments and only the most urgent investments are taking place.

In the last few years competition on the Asian market has severely increased. Pauwels Trafo Asia PT must make greater efforts to obtain new orders. In spite of the increasing competition Mr. Albert Calluy is convinced that Pauwels Trafo Asia PT can become a rewarding venture in the medium term if certain conditions are fulfilled, most important being the avoidance of civil wars in the region.

The quality of the Indonesian production is satisfactory but this did not happen automatically. Indonesian workers are somewhat casual and production must be followed continuously to avoid lower quality. Pauwels is also confronted with language problems.

At the time of the decision to relocate to Indonesia, there was political stability in Indonesia. This has changed dramatically. In May 1998, approximately 1,000 people have died due to the political instability in Indonesia. In 1999 there will be elections in Indonesia, which worries foreign investors, among which Pauwels.

So far, Pauwels did not have to deal with insuperable legal difficulties. The only problem they encountered was the absence of a bankruptcy law, which could have been very important at the time when Pauwels found out that heir partner Arya Sada Percasa was in trouble.

Pauwels Trafo Asia PT is bothered by the unclear fiscal legislation in Indonesia. Whatever measures or initiatives that one takes, one never knows in advance what the outcome will be. Regarding taxation, there is a lot of arbitrariness and corruption.

3.4 Expectations about the future

A stepping up of the relocation policy of Pauwels International can not be excluded, but at present the management has no concrete plans to do so. In order to conquer the Asian market Pauwels will have to expand its market presence over there. Pauwels would like to have its own production plant in China. Mr. Calluy is well aware of the fact that China is a difficult country to start a production plant. The main motive for relocating to China would be the same as in the case of Indonesia namely a huge

population density in a developing country. However, as long as the Asian crisis lasts, no relocation to China will be made.

In general Albert Calluy expects that Pauwels will attain hardly any growth in Europe in the future. On the other hand, he is convinced that they can obtain an enormous growth in Asia.

There are no plans to close down plants. All the production plants achieve satisfactory results. Expansion in Belgium, however, is no longer possible because productive capacity is quite large and exceeds by far the needs of the European markets. Nevertheless the workforce in Belgium is not in danger because the management of Pauwels strongly believes that personnel and know-how are of tremendous importance. The Belgian labour cost handicap is almost entirely compensated by a higher productivity, a well-considered product concept, advanced technology and by delivering highest quality.

4. Case study relocation : Sioen Industries

4.1 Historical background

The history of Sioen Industries is a story of continuous diversification, vertical integration and permanent growth, stemming from experience, solid know-how and innovation. The roots of coating and production of protective clothing, two core activities, go back to the 1960s. The third cornerstone has been built in the 1980s, and consists of the production of master batches and the processing of coated textures. In the meantime these three core activities have perfectly been geared to one another which has significantly improved the strength of Sioen Industries.

Sioen was founded in 1960 by Jean-Jacques Sioen. In Ardoeie he established a production line for direct coating. Together with two employees he started coating fabrics in polyester fibre. In the beginning the headquarters were situated in Roeselare. On the initiative of his wife, Jacqueline Zoete, Sioen founded a division for protective clothing in 1967. At the same time the foundation of two cornerstones of Sioen Industries was laid : the coating division and the clothing.

In the 1970s the clothing division started a geographical dispersion of its activities. Favourable production costs and commercial considerations made Sioen Industries decide to relocate to France, Tunisia and Ireland. Confection Industrielle Narbonnaise (CIN) was established in 1974, Confection Tunisienne de Sécurité (CTS) in 1977 and Donegal Protective Clothing (Sioen Ireland) in 1980.

The direct coating factory in Ardoeie has been extended with a transfer coating unit. Integration continued. European Masterbatch (EMB) was established in 1981 to produce pigment pastes, a raw material for the coating division. The company became the cornerstone of the processing division. Also Coatex, a company that makes coated textures and foils into products with several industrial and recreational applications was added to this division in 1988.

In the 1980s computer applications caused a real revolution in the domain of protective clothing. Sioen did not hesitate. As a pioneer, the clothing division built out a high technological CAD/CAM division.

In 1994 Sioen Industries took over the assets of Breughel P.Color, a competitor of EMB who went bankrupt. Within the clothing division the assets of Conerrigal, a bankrupt producer of protective clothing for forestry, were also taken over. In 1995 Sioen Industries took over Transformation de Textiles Enduits (TTE), a clothing factory from Rouen and one of its competitors. In no time TTE had reached an important position on the French market for protective clothing with his brand Kittex.

In order to be present in specialised market segments, Sioen Industries took over French companies Saint Frères and Saint Frères Confection in 1996. Saint Frères is a coating unit that must help Sioen Industries to conquer high technological market segments in the future. Saint Frères Confection produces thick clothing for niche markets and is housed in the processing. In 1996 EMB has also extended its package of activities. Henceforward it not only produces pigment pastes but also pigment granulates.

October 1996 was a landmark in the history of the group. A third of the shares were quoted on the Stock Exchange through which their ambitious growth plan obtained a steady anchorage, as it allowed to secure the growth and the familial character of their company. The same year the confection division pushed its internationalisation by taking over a clothing factory in Jakarta, which became Sioen Indonesia PT.

Sioen Industries has built a weaving mill in Moeskroen. This factory is operational since the middle of 1998. Sioen Industries has also decided to invest in a modern spinning-mill so that the quality of the yarn, that is supplied to the weaving mill, is also under total control of the group. It is foreseen that this installation will be operational from 2000 onwards.

Also the textile group TIS was absorbed in the Sioen group, thus allowing the coating division to diversify its product range with yacht canvas and to extend its coating capacity with 7.5 million square metres. In 1998 the coating division opened its own selling-agency in China called Sioen Shanghai, and it has considerably expanded its productive capacity by the take-over of a second Indonesian clothing factory Sungintex PT, Jakarta. In order to support its fast expansion, Sioen Industries has decided to build an automated distribution and dispatch centre in Moeskroen. This plant became operational in the beginning of 1999.

4.2 Present situation

In 1997, the turnover of the Sioen group amounted to 4,351 million BEF, up with 26.7 per cent compared with 1996.

Almost 40 years after its foundation Sioen Industries is not only active in the high technological niche of coated textures, but also in the production of protective clothing, production of master batches and the processing of textures and foils. Sioen Industries has managed to integrate these core activities so that they complement and strengthen each other.

Although coating is a very complex process that leans against the chemical industry, the management of Sioen has rather preferred being a member of the textile sector because the wages in the latter industry are from 30 to 40 per cent lower than in the former.

4.2.1 Core activities

Sioen Industries operates in the sector of technical textile and specialised chemistry through 3 divisions namely the coating division, the clothing division and the processing division.

The **coating division** applies two processes of coating of synthetic fabrics. Coating consists of treating fabrics with chemical substances (coating paste) with a view to make the fabrics waterproof and to obtain specific technical qualities. With direct coating the coating paste is directly applied to the fabric while transfer coating consists of applying coating paste on the fabric by means of a paper support. Coated fabrics have many applications like tarpaulins for trucks, protective clothing, tent-cloths, reservoirs, publicity, mattress covers etc.

At the end of 1997 201 people were employed in the coating division and a yearly production capacity of 30 million square metres in direct coating and a yearly production capacity of 14 million square metres in transfer coating was reached. For direct coating Sioen is the largest producer in Europe. The coating division is world leader in the coating of synthetic fabrics.

The coating production is mainly focused on the European market. In the USA there are less opportunities as American trucks mostly have a closed construction. Unlike the USA, the cargo-space in Europe is frequently closed with a waterproof tarpaulin. This explains why Sioen focuses on expansion in Southeast Asia. The first acquisition will probably take place in Indonesia. The management of Sioen is convinced that Southeast Asia can offer good opportunities both in terms of production and sales.

Even in Western Europe coating is a business that still realises a considerable growth, with uses that expanding are almost daily. In 1997 the turnover of the coating division amounted to 2,728 million BEF, compared with 2,136 million in 1996, i.e. an increase with 27.7 per cent.

The market for coated fabrics is estimated at 158 million square metres. Sioen's market share amounts to 23 per cent.

The main activity of the **clothing division** consists of designing and manufacturing high-quality protective clothing for the industry as well as outdoor sports. Examples of industrial protective clothing are general industrial winter and rainwear, signalling clothing, clothes for the chemical industry, clothes for agriculture and horticulture, fireman's clothes. Industrial protective clothing is used to protect employees against all kinds of external influences (chemical, thermal, mechanical).

The entire gamut of protective clothing for outdoor sports includes outfits for sailing, angling, hunting, golfing, motorcycling and cycling. Sportswear is sold under the trademark BALENO and under a private label.

At the end of 1997 1,234 people were employed in the clothing division, which is European leader in the production of protective clothing using coated fabrics for industrial as well as recreational applications.

In 1997 the turnover of the clothing division to third parties rose by 18.4 per cent compared with 1996, thanks to a more intensive approach of market sectors that had already been tapped, and a sustained effort to gain a firm foothold in new niche markets through product innovation.

The growth of Sioen Industries in the market of industrial protective clothing proves that their lines and trademarks meet the more demanding wishes of the customers with regard to look and technicalities. The fact that the regulation of the European Union is becoming increasingly severe, also plays a role. With respect to this evolution Sioen Industries has a clear competitive advantage thanks to their long experience, their innovating R&D policy and continuous investments in a state-of-the-art designing division.

The turnover of the active outwear division has also increased. In 1997 this division moved into premises in Antwerp. Their designing division, sales team and a personalised showroom will help realise ambitious growth plans.

As part of its integration strategy, the group developed a number of other activities and grouped them in **the processing division**: the production of pigment pastes used in the coating process, the production of granules used for dyeing plastics and the finishing of coated fabrics and films.

Pigment paste is used as raw material for the coating of fabrics. Besides this, pigment paste has many other applications such as printing ink for PVC or polyurethane, floor coating, painting, lacquering, varnishing, epoxy coating and pastes that are used to colour polyester.

All companies that process synthetics make use of *pigment granulates*. A few examples are packaging, car components and fibres. Processing fibres includes cutting, punching, stitching and welding. Coated fibres are mainly processed for the camping industry, textile architecture, car industry and for covering systems for the army, the railways and the aircraft industry.

Films are mainly converted into ponds for recreational and industrial applications such as water reservoir or storage of potable water.

At the end of 1997 97 people were employed in the processing division.

Approximately 63 per cent of the turnover of the processing division is realised with third parties. Compared with 1996, the 1997 turnover of the processing division with third parties increased with 55.7 per cent.

At first Sioen restricted its activities to the coating of materials and to clothing manufacturing. At present, however, Sioen Industries is carrying out a clear vertical integration policy. In 1997 Sioen Industries invested 420 million BEF in a new weaving mill in Moeskroen, and in 1998 it decided to add a spinning mill, with an investment amounting to 800 million BEF. Sioen Industries also foresees an investment of 200 million BEF in a distribution centre for the clothing factory.

Sioen is clearly the sector specialist in vertical integration. In the last few years it has realised a lot of acquisitions, paying realistic prices and developing a great interest in the Far East.

4.2.2 Employment

The number of staff at Sioen never stopped increasing. In October 1998 the Sioen group employed 2,499 people. 2,250 of which are workers and 2,099 women. The gender composition of the workforce is the result of the clothing division which almost exclusively employs women, and also the high share of women in the groups of clerks.

Almost every qualification level is present at Sioen, from industrial engineers to casual workers. Nevertheless the coating and the clothing division mainly employs low-skilled labourers. The gross hourly labour cost in the textile sector amounts to 400 BEF. Sioen Industries pays its workers in accordance with the stipulations of the collective labour agreements of the textiles sector.

4.3 Relocation

The presence of Sioen Industries in Asia consists of two clothing factories in Indonesia, namely Sioen Indonesia PT and Sungintex PT, and a sales office for the coating division in China, Sioen Shanghai. In the near future Sioen will start up its own coating production in China.

According to the typology of the Belgian Planning Office, the relocation of Sioen to Asia can be considered as relocation with expansion, if not relocation *sensu stricto*. In the cases of Sioen Indonesia PT and Sungintex PT, the group has relocated by taking over local factories. The foreign direct investment that accompanied taking over these two companies amounted to 150 million BEF. As a result, Sioen Industries is now also present in market sectors in which it formerly was not.

4.3.1 Foreign production

In October 1996 Sioen Industries started up its own clothing factory in Indonesia named **Sioen Indonesia PT**. This subsidiary of Sioen is located in the free-trade zone of Jakarta and employs more than 500 people.

The rising pressure on prices forced Sioen Industries to prospect in the Far East where the production costs are 40 per cent lower than in North Africa. Sioen Industries found what it was looking for in July 1996. At that time an important Korean group which produced protective outdoor clothing decided to withdraw from that sector. Sioen Industries took over all shares. In order not to betray the confidence

of the Indonesian personnel in the new owner, Sioen Industries wanted to continue production. Sioen Indonesia PT is managed by Frederik Wittesaele and the Korean top management has been replaced by three Belgian managers. The Indonesian middle management remained in place (Trends, 24 oktober 1996).

In 1998, Sioen took over a second clothing factory in Indonesia: Sungintex PT.

Both companies in Indonesia are part of Sioen's clothing division. They produce safety clothing and active outerwear. Approximately 90 per cent of the Indonesian production is exported into Europe. The Indonesian production realises 50 per cent of the turnover of the clothing division. As a large part of production is exported to Europe it, however, could also be argued that the relocation type should be rather indicated as relocation *sensu stricto*.

4.3.2 Relocation motives

The rising pressure on prices forced Sioen Industries to prospect in the Far East where the production costs are 40 per cent lower than in North Africa. Sioen Industries found what it was looking for in Indonesia. Lower labour costs play a prominent part in realising lower production costs.

The second most important motive for relocation to Asia was establishing a springboard to other countries in Asia and market presence. The aim of this new offshore establishment is not to relocate the clothing factories in Ireland and Tunisia, but to produce extra volumes for new markets, incl. Southeast Asia. Sioen Industries has the ambition to be present all over the world. Their sales department will do an active prospecting in order to tap new markets (Trends, 24 oktober 1996).

4.3.3 Why Indonesia ?

Among the advantages of Indonesia for Sioen Industries, we can mention:

- political stability
- low labour cost
- use as a springboard to other countries in the region

Sioen preferred Indonesia instead of other Asian countries mainly because of its political stability at the time of the decision. At present, however, the situation in Indonesia has totally changed. Nevertheless Mr. Jean-Jacques Sioen states that so far the political instability has caused no harm to the company.

Moreover, labour costs in Indonesia are rather low compared with other countries in the region, not to mention the availability of skilled workers. Gross labour cost in the Indonesian clothing plants amounts to approximately 18 BEF per hour.

At the time of the decision to relocate to Indonesia Mr. Jean-Jacques Sioen suspected, however, that some problems might accompany the Indonesian production. He was aware that the political stability

in the country could change. Other problems he foresaw were high transportation costs, legal problems and language barriers.

When Sioen took over Sioen Indonesia PT 150 persons were employed. In less than two years Sioen has increased employment with more than 200. In October 1998 366 people were employed at Sioen Indonesia PT.

The second Indonesian plant of Sioen has recently become operational. So far no change in staffing has occurred since the taking over. Sungintex PT employs more or less 800 people.

The major part of the Indonesian personnel consists of women and the vast majority of the workers are low-skilled. This is a typical phenomenon in the textile industry.

At the time of our interview, Mr. Jean-Jacques Sioen could not give us any information about the effect of relocation to Indonesia on the profitability of the Sioen group. At the end of 1998 there will be results of the Indonesian production for the first time, which are expected to be very favourable.

According to Mr. Sioen relocation to Indonesia has not influenced the social atmosphere in his company. In fact Sioen has never stopped hiring more people. The plants in Belgium are responsible for research and development. The production and finishing is assigned to plants abroad.

At present the relations between Sioen and the trade unions seem to be good, which Mr. Sioen attributes to the fact that the company is not a traditional textile company. Their most important production process, i.e. coating, bears more resemblance the chemical than to textile industry.

4.3.4 Appraisal of relocation

Indonesia has been severely hit by the crisis in Asia. Mr. Jean-Jacques Sioen states however that Sioen Indonesia PT has rather experienced advantages than disadvantages from this crisis, as the severe depreciation of the Rupiah resulted in declining prices. Competitive devaluation was not mentioned above as relocation motive. According to Mr. Sioen this was of no importance at the time of the decision to relocate. But it is obvious that Sioen takes advantage of the devaluation of the Rupiah.

Mr. Sioen indicates four problems related with Indonesian production. These problems are transportation costs, legal problems, language barriers and low education level of Indonesian workers. In spite of these he is very satisfied with his Indonesian production, and convinced that the problems will be solved in the near future. Indonesian production met his expectations.

4.4 Expectations about the future

Broadly speaking Sioen Industries is reasonably satisfied with its production abroad. They do not consider to relocate one of their foreign production plants. In the past only once a production plant abroad has been sold, i.e. a French clothing factory, and for reasons of management problems. This clothing

factory was taken over, which resulted in the dismissal of forty people who could not be employed in other production plants of Sioen.

Sioen Industries will relocate further in the future. Expansion in Belgium will be rather small compared with Asian. Given Sioen's interest in conquering the Asian market, it has concrete plans to start up its own coating production in China, within two years. At present they are marketing thoroughly in China. Sioen chose to build its own production plant in China instead of taking over a local production facility, coating is a completely new activity in the country.

Under no circumstances will Sioen relocate production plants abroad to Belgium. In case of problems with the foreign production plants they will be relocated to other countries. This does not imply, however, that Sioen will not expand in Belgium, as Sioen Industries wants to continue its market leadership and even to increase its market share. The group, therefore, has to preserve technological supremacy. It seems that in the sector, no other company pays as much attention to research and development as Sioen. Further expansion in Belgium will focus on technology.

5. Case study relocation: San Martino

5.1 Historical background

San Martino, a high-quality fashion producer, has been founded by Mr. Van Damme in 1965. The roots of San Martino, however, go back even further and are intertwined with those of Comoba. The buildings of Comoba and San Martino are next to one another.

Comoba was founded in 1960 as a manufacturer of socks and stockings by Léontine Collys-Moeyaert and her brother Léon Moeyaert. Léontine Collys took over responsibility for the commercial side of the company while Léon Moeyaert was the technical wizard. In 1962, they decided to extend their technical expertise to ladies' knitwear, selling their products to wholesalers. Soon, San Martino became one of Comoba's largest customers.

When Mr. Van Damme passed away in 1973, his wife decided not to carry on his work. Léontine Collys-Moeyaert and her brother took over San Martino. The second generation made its entry in 1980. René Collys, son of Léontine Collys-Moeyaert, took over all shares and became general manager of San Martino.

For more than twenty years Comoba has its own production facilities in Tunisia. Texthra, the Tunisian company, employs approximately 150 people who are mainly responsible for snipping knitted materials and for manufacturing ready-to-wear clothes. Texthra has a capacity of 500.000 pieces per year. Comoba takes care of 20 per cent of the knitting, Texthra of 80 per cent. According to Mr. René Collys, Comoba has been able to continue the Belgian knitting activities thanks to their Tunisian plant.

Although the three above mentioned companies are wholly owned by members of the family Collys, each company has a separate legal identity.

5.2 Present situation

5.2.1 Core activities

Over the years the collection of San Martino has evolved into a total look for the active woman, and comprises now two lines: Giovane for young women between 18 and 25 years and San Martino for women between 25 and 50 years. San Martino is specialised in outerwear for ladies. During summer 80 per cent of the product range consists of ready-to-wear garments, while during winter knitwear represents 80 per cent of the collection.

San Martino develops its own lines. For the designing they work together with Mr. Van Massenhove, a freelance stylist, with an established name on the Belgian fashion scene. He has an overall responsibility for designing the San Martino total look. He has managed to apply his artistic talent to a range of clothes, wearable by a diverse clientele.

San Martino buys its fabrics in Belgium and the manufacturing of the garments has always been outsourced. Mr. René Collys preferred this mainly because fashion is extremely variable. The evolution of fashion obliges the clothing industry to invest continuously in machinery. In the case of San Martino it was cheaper to outsource production than to produce and invest in own machinery.

Whereas until three years ago the major part of the production was still taken care of by Belgian subcontractors, San Martino decided in 1997 to put out its lines to subcontractors in Hong Kong. The two most important Belgian subcontractors were Perna Couture from Borsbeke and Rommens Confectie from Roeselare (see case study) below. San Martino decided to end business relations with these Belgian companies in favour of Asian subcontractors. The Fall-Winter collection 1996 was the first collection that was put out to these, which are mostly located in Bangkok, Thailand.

A part of the production of San Martino garments is also assigned to Comoba, and they are still doing business with some smaller Belgian subcontractors.⁵

5.2.2 Employment

- San Martino is a sales organisation employing only 4 people in Semmerzake..
- Comoba is a knitwear manufacturer and employs 100 workers and technicians, some of whom have been with the company for two or three decades. Apart from San Martino a large number of other designers have their garments made by Comoba. Comoba produces approximately 1.000 pieces per day.
- Texthra in Tunisia employs approximately 150 people which are under Belgian management.

⁵ Mr. René Collys pointed out that most of these Belgian subcontractors in turn put out production to subcontractors in low-wage countries. A part of the production of the San Martino trousers, e.g. are put out to a Belgian subcontractor in Ingelmunster, who is working with Tunisian subcontractors.

5.2.3 Present economic situation

San Martino has gained a solid reputation in Belgium, the Netherlands, the United Kingdom and France. The San Martino collections have received a warm welcome outside Europe as well.

The major part of the customers of San Martino are at present to be found in the Benelux countries. In earlier days San Martino also sold to customers in France, England and Germany but brought these relationships to an end because non-compliance by the customers with the terms of payment. On the other hand, Mr. Collys finds Asian customers very reliable and complying with the terms of payment. In Asia, he explains, it is common practice to pay 30 per cent in advance and the remainder cash on delivery.

San Martino has a turnover of 180 million BF a year (about 5 million USD).

5.3 Relocation

In this case it is quite difficult using the typology of the Belgian Federal Planning Office, to identify the type of relocation. San Martino has always outsourced its production. Three years ago it was decided to cooperate with Asian subcontractors instead of Belgian subcontractors such as Perna Couture and Rommens Confectie. The effects of relocation on employment at these Belgian subcontractors is dealt with below. Given the reduction of orders to Belgian subcontractors we denote San Martino relocation as relocation with reduction.

5.3.1 Foreign production

San Martino has selected Thailand as a production base for its drive into Asia. The company is cooperating with two Thai subcontractors, i.e. Santran and BFTA. BFTA is a company that belongs to the Saha Group, which is one of Thailand's strongest groups in high-quality consumer goods business, counting about 300 companies.⁶

The Saha Group was established in 1952 by Dr. Thiam Chokwatana to commercialise daily consumer goods. The business proved a real success and gradually moved into a much wider range of products, from food to fashion.

Each subcontractor employs approximately 300 people, who, however, are not solely producing for San Martino. Mr. René Collys estimates that both Thai subcontractors are working 3 months per annum solely for San Martino : two months in Summer and one month in Winter. They are provided with patterns and designs from Belgium. Belgian staff monitor local production in Thailand and thus help to ensure high-quality standards.

⁶ This implies that the Saha group is working on commission for San Martino although this group was more interested in closing a joint-venture.

5.3.2 Relocation motives

San Martino's relocation motives, according to Mr. Collys, has been as follows:

- **Young population:** San Martino was designed for women aged 25-50 years and Giovane for women aged 18-25. The company was attracted by Asia's rapidly expanding young population, which potentially constitutes a formidable customers base.
- **Social legislation:** According to Mr. Collys, the rigid social legislation in Belgium forced San Martino to relocate to Asia, the more so as its competitors produced already abroad and therefore could offer better prices. There was no other option but to follow.
- **Wages:** Wages in Thailand are a lot lower than in Belgium and somewhat lower than in Tunisia.
- **Import duties and transport costs:** At present, San Martino exports fabrics into Thailand. However, in the future the Thai subcontractors will mostly use local fabrics for the production of San Martino garments, which allow San Martino to save on import duties and transportation costs.
- **Tax system:** Thailand's tax system is very advantageous. Taxes on profits amount to 30 per cent only, making the establishment of a subsidiary in the country highly attractive. It is not surprising that Mr. Collys intends to start a sales office in Thailand in the near future.

Finally the level of education and the flexible conditions of employment also played a considerable role in the decision concerning subcontracting relocation to Asia.

5.3.3 Why Thailand?

Advantages of manufacturing in Thailand

Among the advantages of manufacturing in Thailand, Mr. Collys mentioned:

- **Political stability in Thailand:** San Martino opted for Thailand because of its higher political stability, compared with neighbouring Indochina. For San Martino Thai stability was of overriding importance. Stability must be interpreted both in terms of war risk as well as legal stability. At the time of our interview with Mr. Collys (October 1998) the Thai government had concrete plans to allow foreign companies sole ownership instead of limited shareholdership of companies in Thailand.
- **Employment:** The Thai production is known for its perfect finishing which is very important for a high-quality fashion producer such as San Martino, who cannot afford the delivery of garments of lower quality. In addition, Thai subcontractors achieve fair output levels.
- **Fair business relations:** Thai manufacturers have adopted a fair attitude towards their clients. Disputes are settled in no time. If the customer is not fully satisfied with the product he will receive a refund. The Thai management attaches great importance in making provisions for the future.
- **Springboard to other countries in Asia:** At the moment the complete Thai production of San Martino is exported to Belgium. But Mr. René Collys has also the intention to expand in Asia; however, not as long as the crisis in Asia lasts. Still in spite of the crisis Mr. Collys expects San Martino's expansion in Asia within 5.
- **Production costs:** Production costs in Thailand are low, partly because of the labour cost. In Thailand the average monthly wages per worker amount to 2.500 BEF, which is relatively high in

comparison with other countries in Asia. Wages did not play a major part in choosing Thailand as a production base. As mentioned before a perfect finishing was of paramount importance for San Martino. If it was up to René Collys, so he stats in an interview, he would remunerate his Thai workers better so that they can afford to buy San Martino garments.

Disadvantages of manufacturing in Thailand

Mentioned should be made of the following disadvantages :

- **Quality requirements:** For San Martino delivering a high-quality product is highly important. At the beginning the Thai production caused some problems, which were mainly due to bad communication between San Martino and the Thai subcontractors. The education level of the Thai workers caused some difference in quality as well. The problem was that the Thai workers were not used to process European fabrics like voile and viscose. As a consequence, Thai garments were of lower quality in 1997. However Winter 1998 showed no quality problems with the Thai production.
- **Transportation costs:** At present almost all Asian output of the subcontractors of San Martino is for the European market. However, transportation costs from Thailand to Belgium are very high. Transportation of fabrics to Asia, as well as of garments to Belgium is by air, which is quick but very expensive. Still, according to Mr. René Collys, air transportation is cheaper than transporting for example garments from Poland into Belgium, not to mention rising wages in Poland.

Import duties on fabrics in Thailand amount to 35 per cent. These duties can, however be charged to the Thai subcontractors as they are refunded when the finished garments are exported.

5.3.4 Appraisal of relocation

Mr. Collys is reluctant to speak about relocation, the more so as the shift on production from Belgium and Tunisia to Thailand will have no influence on the Belgian and Tunisian personnel.

Generally speaking, Mr. René Collys is very satisfied with the Asian production. If he could start all over again, he would move to Asia and establish there one single sales organisation. However, given the history of the group he is not intending to sell his companies Comoba and Texthra.

5.3.5 Effects of relocation on Belgian subcontractors

As was mentioned above, two years ago San Martino stopped his relationship with Belgian subcontractors Perna Couture and Rommens Confectie in favour of Thai subcontractors. What have been the consequences of this relocation policy on these Belgian subcontractors?

Perna Couture

Since 1995 Perna couture has diminished his workforce from more than 30 to 2 people in 1997. According to Mr. Gerrit Muylaert from the trade union ABVV, the company is virtually dead and does only

continue to exist on paper. The company. He expects that Perna Couture will close in the very near future.

The last years Perna Couture laid off 23 employees. In 1996 and 1997 12 employees were fired. The trade unions are very upset about the management's neglect of their rights of information. They suspected the management of Perna Couture of trying to avoid seniority premiums, that are accorded in case of collective dismissal, by laying off employees one by one, and to avoid that trade unions could carry off extra remuneration during the negotiations.

An important result of this alleged strategy of the management, employees were not entitled to receive a closure premium. Nevertheless trade unions revendicated a premium because less than 25 per cent of the workforce was kept employed in the company. However, the Ministry of Labour could not accord a closure premium as from 1995 employment at Perna Couture was insufficient, rendering collective labour agreement No. 10 of the National Labour Council unapplicable.⁷

According to the management the dismissals were due to the loss of customers and to the system of temporary unemployment becoming unappropriate. Between 1996 and 1997 the number of working hours at Perna Couture diminished from 16,607 to 8,628. In 1997 the average employment amounted to 8. During that year 7 full-time workers were fired. At the end of 1997 only 4 people were listed in the staff register: one clerk and three workers.

On the basis of oral information from Mr. Rudy De Pues, who is still employed at Perna Couture, some 30 per cent of the former turnover of Perna Couture was reached thanks to San Martino. This proves that San Martino was an important customer of Perna Couture. He nevertheless stated that this would not pose any problem for the company. Mr. Rudy De Pues is convinced that also the government must be held responsible for the relocation policy of Belgian clothing companies. Apart from wages, the education system has to be blamed. At the time of leaving school students are not capable to work with modern textile machinery, so that employers have to invest a lot in training.

Rommens Confectie

In earlier days Rommens Confectie employed approximately 50 people. Five years ago they started to cut back employment. In 1997 the management of Rommens Confectie laid off 6 full-time employees, and at the end of the year employed 31 full-time workers, 1 part-time worker and 1 part-time clerk. Almost the entire personnel is female. Between 1996 and 1997 the number of working hours diminished from 41,523 to 35,817. At the end of February 1999 Rommens Confectie will go into liquidation. Rommens Confectie is dealt with in the next case study in detail.

⁷ Article 3 of this collective labour agreement stipulates that an average employment of at least 20 employees is necessary during the calendar year that precedes the dismissal. As the employment at Perna Couture in 1995 amounted to 19.5 employees and in 1996 to 12.25, the workers that were laid off in 1996 and 1997 could not refer to collective labour agreement No. 10 and in consequence could not receive a closure premium.

5.4 Expectations about the future

In the future, the Belgian plant will be responsible for the designing, the plant in Thailand for the production, and the distribution will be assigned to different agents. At the time of our interview (October 1998) negotiations were taking place between San Martino and a Japanese distributor, with expectations for the contract to be signed in November 1998. There are also negotiations with Chinese and Singapore's potential partners.

Mr. René Collys is also contemplating the establishment of a wholly-owned company in Thailand, which would certainly not be a production plant but rather a duplicate of San Martino in Semmerzake. At the time of our interview, he was convinced to establish his Thai sales organisation within less than 3 months. It will play an important role in San Martino's conquest of the Asian market, which will not be an easy task.

Generally speaking, Mr. René Collys is rather pessimistic about the future of production in Belgium and expects that in ten years' time no Belgian production will survive. Belgian companies will merely be active in services as San Martino in Semmerzake.

A relocation of Asian production to Belgium is not under consideration, because of the rigid social legislation in Belgium. Still, according to Mr. Collys, a reduction of social welfare contributions would enable San Martino to subcontract to Belgian producers. In addition, he expects wages in Asia not to rise very fast. However, a general increase in the standard of living in Asia will allow the population to purchase San Martino clothes. At the moment he sees sales opportunities in the richer countries of Asia namely in Japan, South Korea and China.⁸

6. Case study relocation : Inbelco International

6.1 Historical background

In 1989 Bénédict Rommens took over the company Rommens Confectie in Roeselare from his parents. Rommens Confectie has always employed around 50 workers, which were responsible for manufacturing ladies' blouses. Bénédict Rommens complied with the customers' request to widen his activities. Therefore he took over all the assets of Inbelco International, a clothing company in Poperinge. The aim of this expansion was to offer a product range consisting not only of blouses but also of trousers, skirts and the like. Bénédict Rommens took over Inbelco, mainly for its know-how. In the clothing industry it is essential to know which machines to use and to purchase.

At the same time as the taking-over of Inbelco, Bénédict Rommens started investing abroad. First he worked together with Polish subcontractors. However, as he was not satisfied with the quality of the output he shifted towards Lithuanian subcontractors.

⁸ He estimates that 10 per cent of the Chinese population is very thriving.

In the years that followed Rommens Confectie specialised in so-called “short-term production”, anticipating the seasons’ trends, and mainly delivering to chains. Inbelco International, on the other hand, specialised in “long-term production”, delivering in between two to three months, and not only to chains but also to retail trade. Together, Inbelco International and Rommens Confectie produced all kinds of ladies’ wear, with the exception of knitted clothing and women’s underwear.

Only ten years ago the former owner of Inbelco International employed approximately 350 workers. When Bénédict Rommens took over Inbelco, the total workforce amounted to 125 people. Soon he was obliged to cut it further back to 55 people. At the beginning of 1996 he even had to fire 27 workers out of 86. He is fully aware that this meant a disaster for the clothing industry in the region. These 27 dismissals were due to the fact that Andres, an important customer of Inbelco⁹, decided to relocate from Gent to Poland.

In the same year, also San Martino (see above) decided to end its subcontracting to Inbelco. However, according to Bénédict Rommens the share of San Martino in its turnover amounted to hardly 1 per cent, which was rather small. Mr. Rommens also stressed that Inbelco ended doing business with companies like Andres and San Martino, as these are not able to handle the technical part of the clothing industry and therefore apply to clothing factories like Rommens Confectie.¹⁰

Through the years, Rommens Confectie has cut back workforce from 50 to 14 employees. The 14 remaining workers of Rommens Confectie are now employed at Inbelco International and are responsible for accompanying activities and for designing. In all, Inbelco International now employs 78 people in Poperinge.

At the end of February 1999 Rommens Confectie went into liquidation.

6.2 Present situation

At present Inbelco International consists of four divisions. The first division, “Coats”, has stayed rather small as the coats production has never been a tradition of the Rommens family. The second division, “Short-term”, presents each month a completely new collection, delivered within 4 to 6 weeks.¹¹ The third division, “Basics and basics plus”, produces e.g. white blouses, black skirts and black trousers. This division has a continual agreement with six store chains (JBC-Mode, Makro, E5-Mode, Devian, Witteveen and C&A) guaranteeing that the latter never get out of stock. The fourth division, “Fashion”, focuses on styling and youth wear. Apart from the above mentioned store chains, Inbelco also manufactures for GB, Superconfex, P&C, Damart and 3Suissets.

⁹ For more than thirty years, Andres is a famous clothing factory from Destelbergen which is responsible for the brands *Xandres*, *Hampton Bays* and *Mentality*. Most of the Andres garments were manufactured by Inbelco International in Poperinge.

¹⁰ Mr. Bénédict Rommens has stated to us that he does not like this way of doing business and that he therefore focuses on his business agreements with store chains. After all, the indirect costs that go with producing garments can not be taken into account by third parties. He, however, is convinced that if he really wants it, he can restart doing business again with San Martino, thanks to his Lithuanian production. According to our information regarding San Martino, it was the other way round, i.e. San Martino ending subcontracting with Rommens Confectie in favour of subcontracting in Thailand.

¹¹ For example, in October 1998 this division was still delivering garments that are part of the Winter 1998 collection, while other ready-to-wear tailors are already finishing their Summer 1999 collection.

Inbelco International presently produces 1.5 million pieces per year, mainly in Lithuania. In 1997, turnover amounted to 600 million BEF, and profits before taxation to 40 million BEF and after taxation 23 million BEF.

6.3 Relocation

The former owner of Inbelco International has considerably diminished workforce from more than 350 workers to 125. Also under the presidency of Mr. Bénédict Rommens, jobs have been lost due to the company's drive into Eastern Europe. At the same time, workforce at Rommens Confectie has been reduced from 50 to 14 people. Together, in ten years time the two companies reduced their workforce from 400 units to 78 in 1998. The relocation of Inbelco International to Lithuania has created from 750 to 1,000 jobs there. Inbelco International presents clearly a relocation with reduction.

6.3.1 Foreign production

Since 1992, Mr. Bénédict Rommens considered production abroad. First he started producing in Poland. However, as he was not satisfied with the results he started a small project in Lithuania, which today represents the major part of Inbelco's production.

At present Inbelco International has no production facilities abroad, and Mr. Bénédict Rommens states that the company needs no own personnel abroad either, as the result of the short-term nature of the projects. In conversation, Mr. Bénédict Rommens also pointed out that there are more disadvantages than advantages associated with having own workers abroad such as more easy re-relocation possibilities.

On the other hand Inbelco International was and still is prepared to invest abroad, and started doing business with small Lithuanian companies that owned premises but no ready money. For six years now, Inbelco International is doing business with six of these, running a blazer line, skirt line, blouses line, tops line and two trousers lines. All the machines and equipment has been purchased in Belgium and sent to Lithuania.

The Belgian plant is not producing, but takes care of designing models, pattern drawing, styling, purchasing cloths and accessory, accounting, sales and sales administration, planning and the warehousing of finished products and of cloths. Inbelco International in Poperinge employes 78 people but between 750 to 1.000 people are continuously working outside Belgium for Inbelco International.

Inbelco International passes orders to a group of eleven people working in Lithuania for Inbelco International. They, for their part, pass the orders to the Lithuanian companies and take care of quality control, planning and support. In peak periods the six Lithuanian companies involved produce 70 per cent of the garments. The remaining 30 per cent of the production is assigned to other Lithuanian companies, which are also working as subcontractor for other companies.

At present 95 per cent of the production of Inbelco International and more and more activities of the early phases of the production proces, take place in Lithuania. Each Tuesday and Thursday a truck sets off to Lithuania. The garments that are manufactured in Lithuania are all moved to the plant in Poperinge by hanging transport.

Mr. Bénédict Rommens chose to relocate to Lithuania mainly because Lithuanian production is ten times cheaper than in Belgium. Besides this, Bénédict Rommens chose Lithuania as a production base because this country bears many resemblances to Belgium: a small and open country where most people are reliable. In all, Inbelco International has invested from 40 to 50 million BEF¹² in machines and buildings in Lithuania.

6.3.2 Evaluation of relocation

So far Mr. Rommens is very pleased with the Lithuanian production, unlike production in Poland, where commitments were not kept. The Lithuanian subcontractors produce 35,000 pieces a week in total. Some 95 per cent of this output consist of high quality garments. According to Mr. Rommens his customers seem to be very pleased with the Lithuanian output as hardly any garments are returned.

According to Mr. Rommens, clothing activities can be relocated very easily, but one has to invest in education in order to guarantee a high quality. The Lithuanian workers are using the same machines as would have been used in Belgium, which makes education very important. Education is also necessary if one wants to improve the quality and reduce the costs of repair, which amount from 5 to 6 million BEF¹³. Six workers are continuously mending garments. Although in general Bénédict Rommens is pleased with his Lithuanian production, the costs related to mending garments should be reduced. For him the largest challenge is to improve the quality of the Lithuania production.

6.4 Expectations about the future

6.4.1 Preservation of present Belgian activities

Inbelco International has no intention to cut back Belgian activities and personnel in the future any further, as essential know-how has to be kept in Belgium.

At present all the garments are sent to Poperinge, for inspection, and further distribution and transportation. However, Mr. Rommens is considering shipping garments directly from Lithuania to the customers, and is convinced that in the near future this must be possible for approximately 25 per cent of the production.

¹² These amounts are equivalent to approximately 1.1 to 1.3 million USD.

¹³ Equivalent to 130,000 to 160,000 USD.

6.4.2 Possible relocation to Moldavia

Mr. Rommens foresees that if Lithuania continues to develop, he will be obliged to relocate within 5 years due to high labour costs. At present he is already looking for production facilities in Moldavia, where production costs are from thirty to forty times lower than in Lithuania, and labour costs amount to 3,000 - 5,000 BEF per month.¹⁴ In 1999 approximately 100 people will start producing in Moldavia for Inbelco International. Inbelco International will probably opt for the same organisation of production as in Lithuania, although Mr. Rommens says that a joint-venture can not be excluded.

7. Conclusions

Evidently, the case studies presented here do not allow us to draw any general conclusions. However, a few striking results are worth mentioning. First, it is necessary to make a further quantitative analysis of the impact of globalisation on employment, both in quantitative and qualitative terms, at a highly disaggregated level. Some of the case studies on the companies which belong to the textiles industry, such as Van de Velde Bros., show that "upgrading" to high-quality products allow companies even to increase employment in their home countries. At the same time, specific activities can easily be subcontracted and outsourced, so that the end product is both price and quality competitive. Other case studies lead us to the conclusion that companies behave as the Heckscher-Ohlin theory of international trade would predict, i.e. by eliminating low-skill-intensive activities and shifting employment to the high-skilled "services" such as design, R&D, marketing, etc.

Of the five relocation cases studied, two (San Martino and Inbelco) are relocations with reduction, using the definitions of the Belgian Federal Planning Office. The other three could be considered as relocation with expansion. In the case of Pauwels International and Sioen Industries, however, the answer to the question whether the shifting of activities to Indonesia, is the result of the "necessity" of market presence in Asia, is of paramount importance here.

On the basis of the case studies it is difficult to assess the impact of relocation on social conditions in the home and host country. One thing is clear, however : they all are responsible for a shift in the home demand for labour towards higher skilled specialised labour, and a severe drop in the home demand for low-skilled workers. In the host country, it seems that in a number of cases the impact on social conditions is positive, particularly where above average wages are paid, such as in the case of Pauwels International in Indonesia. In the case studies of the textiles industry, the high skilled activities such as design and R&D, are kept in Belgium, whereas the actual manufacturing is subcontracted to low-wage countries. Using this formula, the relocating company is not running any investment risks. Neither has it any direct impact on the working conditions in the host country, where the subcontracted activities might well take place in sweat-shops. The case of Inbelco indicates clearly that the world-wide cut-throat competition that the company is facing, transforms it into a cynical cheap labour exploiter : most likely being confronted in the medium term with rising wages in Lithuania, the company will shift its subcontracting to Moldavia where wages are much lower.

On the basis of the case studies presented in this paper, there is special reason for concern about future improvement of the quality of the labour force in the host countries. Until now, the lower-skilled activities have been relocated. However, because of the lower quality of work in the host country, product design and quality control remains an important source of high-skilled employment in the Belgian head-office. One can easily venture what the impact on employment in the home country will be, once the workers in the host countries will have acquired such skills.

REFERENCES

- Anderton, B., Brenton, P.(1998), "Did Outsourcing to Low-wage Countries Hurt Less-skilled Workers in the UK ?", in: Brenton P., Pelkmans J. (Eds.), Global Trade and European Workers, Basingstoke : Macmillan.
 - Bernard, P., Van Sebreeck, H., Spinnewyn, H., Vandenhove, P. & Van Den Cruyce, B. (1997), Delokalisatie, Mondialisering. Een actualisatierapport over België, Brussel : Federaal Planbureau.
 - Feenstra, R.C. & Hanson, G.H. (1996) : "Globalization, Outsourcing and Wage Inequality", American Economic Review, Papers and Proceedings, 86, 240-245.
 - OECD (1994), The OECD Jobs Study, Evidence and Explanations, part 1, Paris : OECD.
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