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وحدة تصميم وتنفيذ السياسات

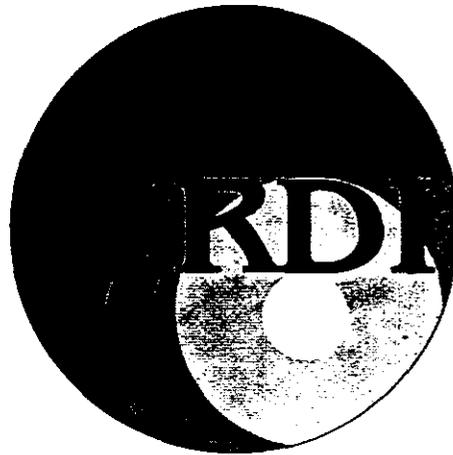
*Ministry of Agriculture and Land Reclamation*

## AGRICULTURE POLICY REFORM PROGRAM

*Reform Design and Implementation Unit (RDI)*

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*Development Alternatives Inc. Group: Office for Studies & Finance, National Consulting  
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*Report No. 147*

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***COST OF PRODUCTION  
AND COMPETITIVENESS  
OF SPINNING YARNS IN  
EGYPT***

*Prepared by:*  
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*Dr. Ibrahim Siddik*  
*Dr. Jane Gleason*

*September 2001*

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## CHAPTER I

### I. Spinning Yarn from Cotton or blended with Synthetic Fibers:

- 1.1 The most extensively used natural fiber in textiles is cotton and the most extensively used synthetic fibers are viscose rayon and polyester. The type used, of course, depends on style, serviceability, and price.

Representing less than 10 percent of the market in 1940, synthetics had captured nearly 68 percent of total textile fiber consumption by 1996.

In apparel alone, synthetics constituted only 45 percent compared to 53 percent for cotton and 2 percent for wool.

- 1.2 The spinning of staple fibers into yarns is the most capital intensive step per worker in the sequence of operations necessary for producing textiles. In modern factories, most operations have been mechanized, automated, even robotized. Spinning frames have vacuum systems moving continuously on overhead rails with hoses hanging down that pass over the spinning frames. These vacuum systems gather up the lint on the machines to prevent it from being spun into the yarn and creating imperfections, as well as to keep the atmosphere clean.
- 1.3 Spinning mills are windowless buildings equipped with elaborate air conditioning systems with cold humidified air inlet from the roof side and underground suction, to create enough air changes per hour, guaranteeing constant low temperature and high relative humidity which are essential for the spinning of cotton lint. Refrigeration (quite expensive) must also be added when spinning polyester and / or polyester / cotton blends on account of the electrostatic charges that result during the spinning operation and in order to avoid the production of hairy yarns.
- 1.4 In the English count system a count means the number of leas, each of which is 840 yards long, weighing one pound.

Cotton English count 7 (Ne. 7) means that seven leas of this yarn, each 840 yards, weigh one pound.

Cotton English count 80 (Ne. 80) means that eighty leas of this yarn, each 840 yards, weigh one pound.

- 1.5 Yarns of different counts are used for different products,

Coarse	Ne. 7	is used for jeans
Medium	Ne. 30	is used for T.Shirts
Medium	Ne. 40	is used for dress shirts
Fine	Ne. 80	is used for delicate fabrics

- 1.6 Cotton yarns are spun from different cotton varieties:
- Short staple, less than one inch, for up to Ne 10
  - Medium staple, from 1'' up to 1 1/8'', for up to Ne 40

- c. Long staple, from 1 1/8`` up to 1 3/8`` for up to Ne 60
- d. Extra long staple, more than 1 3/8``, for very fine counts

- 1.7 There are of course other things to consider, namely, the fineness of the fibers i.e. micronaire and the strength i.e. pressley.
- 1.8 Polyester staple fiber with 38 millimeters staple length, 1.2-1.4 denier, semi dull, is the most widely used synthetic fiber in blends with cotton lint.
- 1.9 Blend ratios vary widely according to the end use, and comparative prevailing prices of cotton lint and polyester staple fiber. In some cases, customs duties in the importing country can affect the blend ratio, as in the case of CVC, chief value cotton, 52% cotton, 48% polyester.

Polyester staple fiber is a very much user friendly fiber in blending with cotton lint of all varieties, short, medium, long and extra long. Same blends can be spun with all spinning technologies, ring, open end and air jet (see below).

#### **1.10 The Three Types of Spinning:**

- 1.10.1 Three major techniques are used to spin yarn. The oldest is Ring Spinning, which produces the smoothest yarn with the same amount of twist (Turns Per Inch TPI). The disadvantage of ring spinning is that the size of the spinning spindle must be small to achieve very high speeds, therefore limiting the production for each spinning unit. Also the spun yarn produced on a bobbin has to be wound onto large packages suitable for presentation to the next process in the textile production scheme i.e. weaving and knitting.
- 1.10.2 The relatively new spinning technology of Open End OE spinning relies on a rapidly rotating rotor to twist the yarn at six times the rate of production on ring spinning. Furthermore, the spun yarn comes out directly on the large package suitable for the next operation of weaving and knitting. Open end spinning is very well suited for the production of 100% cotton very coarse yarns Ne 6,7,8 used for the production of denim fabrics for jeans.
- 1.10.3 AIR JET spinning uses an air jet to swirl or twist the fibers in the spinning chamber. Like open end spinning the spun yarns come out on a large package. Air jet spinning is suitable for cotton / polyester blends of higher counts.
- 1.10.4 Yarns spun on open end or air jet systems are not as smooth or as strong as yarns spun from the same blends on ring spinning, which remains the most popularly used technology in yarn production all over the world and for a long time to come.

#### **1.11 Preparation for Spinning:**

Preparation for ring spinning involves four or five consecutive operations (only three in case of open end and air jet) as follows:

#### **1.11.1 Opening, cleaning and blending:**

Bales of different grades of the same variety of cotton lint (or from different origins) are arranged in a row in front of a rail with a travelling grabber programmed to load large chunks of cotton lint from each bale in accordance with the blend to be processed. The cotton lint is pneumatically transferred from one machine to the next, passing through beaters and shakers to open up the cotton chunks, removing the heavy trashes (leaves, seed fragments, dust) and blending the tufts of different grades and color intimately.

#### **1.11.2 Carding:**

The cleaned and blended fibers are transferred pneumatically through air ducts into vertical chutes with a constant level (column) feeding high production carding engines. Carding is the process by which the cotton fiber is thoroughly cleaned to get rid of tiny dust particles together with very short fibers. The fibers are arranged in parallel fibers forming a SLIVER of uniform weight per unit length coiled in a very large diameter can.

#### **1.11.3 Drawing:**

Six or eight carded slivers are combined in a drawing frame producing one sliver. The purpose of drawing is to produce further alignment, cleanliness and intimate blending of the cotton fibers. Blending of polyester slivers with cotton slivers with the suitable number of each (and may be also the size of each sliver) is done on the drawing frame to produce the desired blend of cotton / polyester. For ring spinning, the drawing process is performed twice. Slivers from the first drawing passage are combined a second time (six or eight slivers) to produce one sliver with more evenness and intimate blending in what is called second passage drawing. For open end spinning first passage drawing only is enough.

#### **1.11.4 Combing:**

For the production of high quality yarns from long staple and extra long staple cotton lint, an additional process, called combing, is added in the sequence of preparatory processes. Combing is performed after the first drawing passage and followed by the second drawing passage. Combing removes the shortest fibers and any neps (very small masses of tangled fibers) that have slipped through (not removed) earlier cleaning, carding and drawing operations.

The very short fibers removed in this process, about half an inch or less in length, are called NOILS. Noils can very easily be recycled into spun coarse yarns using the open end spinning technology.

#### **1.11.5 Roving:**

The last operation before ring spinning is called roving. The machine used is called roving or speed frame. Carded or combed slivers from the second drawing passage are converted into a much thinner strand with a few number of twists producing a ROVING package ready for ring spinning.

For open end or air-jet spinning the roving operation is not done. Slivers from the first passage drawing are fed directly to the open end (or air-jet) spinning machines.

## **1.12 Subsequent operations after spinning:**

Open end and air jet spun yarns come out in the form of a large package ready for the next process of weaving or knitting. In the case of ring spinning the spun yarn comes out in the form of bobbins which have to be wound onto large packages suitable for the next process of weaving or knitting. The operation to do this is called **CONE WINDING**.

In many textile products single spun yarns are unsuitable as such and doubled yarns are necessary, e.g. terry towelling, fine quality shirts and blouses. In some industrial applications, three fold and cable yarns are required e.g. canvas, conveyors, belts. The operation to do this is called **DOUBLING** and **TWISTING**.

### **1.12.1 Cone Winding:**

A modern cone winding machine has developed into a very highly sophisticated piece of equipment fitted with the latest gadgets of electronics and computers. The machine usually comprises 50 (fifty) winding positions with individual knotters and electronic slub catchers.

Spun yarn bobbins are offered automatically to each winding position. The start of the yarn on the surface of the bobbin is picked up, transferred through the slub catcher, presented to the knotter and knotted automatically with the last end of the wound package, after which winding commences at very high speed onto the tapered conical package. The most widely used conicity at present is  $5^{\circ} 57'$ .

The old fashioned weavers' knots have been replaced with splices which can be as thin (or as thick) as one and half times the diameter of the original yarns. Splicing revolutionized the processes of weaving and more particularly knitting where knots presented big problems resulting in needle breaks and fabric holes. Also, splices upgraded the appearance of both woven and knitted fabrics.

The latest versions of slub catchers include the possibility of clearing the spun yarns from colored contaminating fibers in addition to the usual clearing of thick and thin places.

Contamination with colored fibers is a common menace in Egyptian, Indian and Pakistani cotton lints.

### 1.12.2 Doubling and Twisting

Single yarn packages produced on Open end or Air jet machines, or single ring spun yarns wound onto packages (Cones) are prepared for twisting by a process called Doubling.

Two yarns are assembled (doubled) together to form a cylindrical package of two parallel yarns (with no twist) on the doubling frame ready for the twisting process. In case of three (four, five or six) ply yarns, the number of single yarns presented to the “doubling” machine is changed accordingly.

“Doubled” packages are then presented to the TWISTING machine. There are two technologies used for twisting:

1.12.2.1 **Ring Twisting** machines are very much similar to ring spinning machines. The doubled yarn package is put on a top creel, in a way similar to putting a roving package onto a ring spinning machine. The doubled yarn is then threaded into the machine up to the bobbin. The required number of twists is then produced onto the twisted yarn. Twisted yarn bobbins are afterwards wound onto a large package (cone) in exactly the same way single yarn bobbins are wound onto large packages (cones) on the winding machine (1.12.1)

1.12.2.2 **Two for One** twisting machines, also called KNOTLESS twisting machines, transforms a “doubled” package into a twisted yarn package of the same size and weight of the doubled package without any knots. There is no need in this technology of twisting for the process of winding as in ring twisting.

Knotless twisted yarns are superior to ring twisted yarns because of the disappearance of bulky knots in twisted yarns e.g. sewing threads, fine quality shirts from doubled yarns.

## CHAPTER II

### 2. Cotton Spinning Industry In Egypt (1901-1990):

- 2.1 Modern cotton spinning industry in Egypt started at the very beginning of the twentieth century in Alexandria in what is now National Spinning and Weaving Co. The industry was given a great boost starting 1927 by the efforts of Banque Misr who established Misr Mehalla Spinning and Weaving Co. in Mehalla El Kobra in the middle of Delta, followed soon after by the group Misr. The fledgling spinning and weaving industry staggered through the depression and Second World War years, to get a further boost after that war with further expansion and renovation.
- 2.2. A new phase started after the 23 July 1952 revolution, with many new textile combines started under the Five Year Plan of the Industrialization Organization. Those combines were scattered all over Upper Egypt, Middle Egypt and Lower Egypt, mostly equipped with machinery, from the former USSR, GDR (East Germany), Checkoslovakia and Poland .
- 2.3 The third and most important phase came in the very early sixties with the nationalization of all (100%) existing cotton spinning mills. This was soon followed by mergers and the creation of medium size to large size textile conglomerates, comprising from 50000 (fifty thousand) spindles up to 200000 (two hundred thousand) spindles.
- 2.4 Under Public Sector and the monopoly of cotton yarn spinning, the industry fluctuated between poor and good performance. The number of spindles rose to reach three Million Spindles in the late seventies.
- 2.5 The early eighties witnessed the following important developments,
  - i. The allowance for joint venture and private spinning mills to be established namely, (1976) Misr Iran Spinning and Weaving Co. MIRATEX in Suez, (1981) Misr El Amria Spinning and Weaving Co. in Alexandria
  - ii. The introduction of Open End Spinning technology in many Public Sector Companies and the new private sector companies named above.
  - iii. Small private sector companies started to appear in the late eighties, equipped with second hand ring and open end spinning machines bought domestically (scrapped by Public Sector) or imported. The largest of these companies is Giza Spinning, Weaving, Dyeing and Ready Made Garments Co. in Giza, south of Cairo.
  - iv. The last spinning mill to be established was Alcan in Sadat City, a joint venture between Egypt and Italy, consisting of a small (10800 spindles) ring spinning installation to produce fine counts from Egyptian long and extra long staple cotton, for export. Almost all machinery are from Italy (Marzoli, Savio), and almost all production is exported to Italy.
- 2.4. Egyptian cotton has been the chief raw material for cotton spinning industry in Egypt. Actually spinning industry started in Egypt in response to the national ambition of manufacturing the domestically produced cotton into finished products to satisfy the domestic demand for clothing and furnishing. So it appears that the successful

growing of cotton in Egypt was the Raison D'etre for the start up and flourishing of cotton spinning industry in Egypt.

- 2.5. Textile industry in Egypt played a major role also as a strategic industry during the Second World War, being requisitioned by the Allied Forces (British Army) and selling fabrics under rations fixed by the newly created Egyptian Ministry of Supply.

The same pattern of requisitioning (this time by the Egyptian Army) and selling rationed fabrics was repeated in the 1967, 1973, Arab-Israeli wars and in between.

- 2.6. In the two decades of sixties, seventies and phasing out through the eighties, the state controlled Egyptian economy used the textile industry as a policy tool in both domestic and export markets.

- 2.6.1.1 In the domestic market, the textile industry was forced to produce rationed "popular" fabrics to be sold at lower than total cost, the difference being paid as a subsidy to the textile companies. The volume of "popular" fabrics rose to 400 million lineal meters (four hundred million) a year from a total annual production of 600 million meters (six hundred million). The value of the annual subsidy rose to 130 million Egyptian Pounds (One hundred and thirty million) representing more than half of the total cost of production of same fabrics.

- 2.6.1.2. The continuous production and distribution of subsidized cotton fabrics at such volume and subsidy, for almost twenty long years, dealt a ruining blow to the commercial and development capabilities of the Egyptian Textile Industry. Parasitic and corruptive practices multiplied through the chains of production (sub contracting to small private sector weavers) and distribution (collecting subsidized fabrics and printing same to be resold with huge profits).

- 2.6.1.3. As the cost of production kept rising annually (especially cotton lint) and the volume of rationed fabrics demanded by the government rose (with the rising numbers of population) the amount of subsidy required rose accordingly.

The Textile Industries Corporation (Holding Company in modern jargon) was started in late 1983, and faced this problem from the beginning. The production and subsidizing of "popular" fabrics was phased out and ceased completely by 1985 together with all related side of effects.

**BUT THE HARM WAS DONE.**

- 2.6.1.4. Egyptian spinning mills were forced (under the threat of dismissal) for more than twenty years (from mid sixties to mid eighties) to spin about 80 000 tons/year (eighty thousand tons) of very coarse 100% cotton yarns (Ne 8,10, 12, 14, 16, 20) to produce 400 million lineal meters (four hundred million) of "popular" fabrics to be sold at less than half of the total cost (the rest to be received as a subsidy).

Egyptian Spinners tried to lay hands on all medium long staple cotton varieties grown in Upper Egypt (Ashmouni, Dendara, G66) and the lowest grades of long staple cotton (G 47, G 67, G 75) in order to produce the huge amount of coarse yarns i.e. 80 000 tons/year, needing about two million kentars.

Carelessly produced coarse yarns, spun from high quality Egyptian cotton lint were delivered to weavers, who in turn, produced carelessly woven fabrics to be again carelessly bleached or printed and delivered to undemanding customers (and black marketeers)

That was the root of under spinning Egyptian cotton lint and the collapse of quality control systems and careless handling of laboratories, not to mention the complete absence of cotton lint sorters and responsible buying of cotton lint by spinners.

- 2.6.2.1. In the export market, the Egyptian Government directed the textile industry (together with other industries, and indeed together with the cotton trade public sector companies) to divert textile exports of yarn, fabrics and ready made garments towards USSR and Eastern Bloc countries in barter deals.

Undemanding communist large importing combines made very large annual contracts for fine count yarns to be inspected and accepted by easy going inspectors. The Egyptian government was encouraged to build new spinning mills designed for the export of fine count yarns to USSR and Eastern European Countries. Those mills were equipped with Russian and GDR machinery, as follows:

Damietta Spinning and Weaving Co. with USSR

Shebin El Kom Spinning and Weaving Co. with GDR

These mills were financed with very soft loans to be paid for by the exports of fine count cotton yarns produced from same mills.

- 2.6.2.2. Under the Textile Industries Corporation (started 1983), yarn exports and production were shifted from bilateral trade in fine count yarns, to Western European and USA markets for coarse and medium count yarns. This necessitated the rehabilitation of many spinning mills and also shifted the demand from extra long staple cotton to long staple and medium long staple varieties

- 2.6.2.3. As the volume of exports of cotton Yarns and fabrics grew in Western European and USA markets, quota problems appeared and bilateral agreements were made restricting market access to certain annual quantities to be renegotiated periodically (usually every two years). Quotas were regularly overfilled, using all available flexibility arrangements of carry over, carry forward and transfers. Quotas for 100% cotton yarns and fabrics grew from one bilateral arrangement to the next, enabling exports of yarns and fabrics to find substitute markets in Western Europe and USA. During the same period (the eighties) trade with the Soviet block shrank and came to a stand still in the early nineties with the collapse of the Soviet Union and all state-run Eastern European economies.

- 2.7.1 The Egyptian Cotton Lint Export Trade witnessed the very same developments as the spinning industry and for the same reasons, to be summarized as follows:
- i. Growth of domestic consumption with the growth of the number of spindles from 1900 to 1939.
  - ii. Relying on domestic consumption heavily during Second World War years.
  - iii. Growth of crop, domestic consumption and lint exports from 1945 to 1960.
  - iv. The nationalization of cotton trade companies and ginners together with the spinning factories in the early sixties. The merger of small ginning and trade companies into few large units.

- v. The fixing of mill delivery prices from 1960 up to 1977, in most cases higher than the farm gate price.
- vi. The diversion of Egyptian cotton lint exports to Soviet bloc countries, almost to the exclusion of other markets in the sixties, seventies and eighties. Massive quantities of lint were exported with excessively exaggerated grades to undiscerning customers in the Soviet bloc countries.

2.7.2. The whole chain of growing seed cotton suffered irreparably during that period, resulting in lower yields, lower grades and a reputation for contamination with foreign materials and fibers. Ginning has also suffered, poorly ginned and packed bales became customary. The prevalence of trash, broken seeds and even complete seeds became normal. Trash content became higher reaching very high figures in Upper Egypt varieties. All these features affected domestic spinners adversely, as extra costs to be added to the ever increasing farm-gate prices.

2.8. For the whole decade of the eighties, no body was happy with Egyptian cotton.

- i. The growers claimed that the government forced them to grow specified areas with cotton of specific varieties. They also claimed they had no control over pesticides selection and cost. Cooperative marketing was the last stroke, convincing no body of getting a fair deal in fixing the grade and price.
- ii. The domestic spinners complained increasingly from the higher trash content, deterioration of grades, contamination and poorly wrapped bales. On top of that the farm gate prices were raised annually by a ministerial decree (economy) welcomed by the farmers and politicians, in contrast with the struggle faced by the spinning industry in obtaining a corresponding ministerial decree (industry) to raise the price of yarns opposed by private sector weavers and politicians.
- iii. The cotton trading companies complained they could not get enough cotton lint for export, on account of rising domestic consumption and lower crops. The gradual disappearance of Soviet and Eastern European markets with its very high profits (improperly graded) eroded the profits of cotton trading companies.

Indeed nobody was happy in growing, manufacturing or trading Egyptian Cotton.

## CHAPTER III

### 3. Cotton Spinning Industry In Egypt (1991-2000):

- 3.1. The nineties decade started with ambitious plans for liberalization of cotton growing and marketing. This was coupled with pressures for the privatization of cotton ginning, spinning and trade companies, with claims for the great benefits to every body concerned; farmers, spinners, traders and above all the Egyptian Economy.
- 3.2. The decade ended with the following record figures:
  - i. The lowest crop in the whole twentieth century, perhaps less than four million kentars.
  - ii. The lowest local consumption in the last forty years.
  - iii. The near collapse of the domestic spinning industry with more than fifty percent of production capacity lying idle whilst carrying large stocks of unsold yarns and fabrics. Public sector textile companies realized a staggering loss of two billion Egyptian pounds in the last financial year alone.
- 3.3. The Egyptian Spinning Industry is facing a genuine crisis that was gathering momentum during the whole decade of the nineties and burst out of control at the end of the decade.
  - i. Current total cost of Egyptian cotton lint from all varieties are very high, making prices of spun yarns un-competitive.
  - ii. Total supply of MLS varieties is limited, forcing domestic spinners to use LS varieties to spin coarse and medium counts at even larger cost and making fabrics knitted or woven from these yarns even less competitive.
  - iii. Regulations governing the import of cotton lint result in increasing the total cost by 13%. Calls for relaxing these regulations go unheeded. (e.g. exemption from customs duties of 5%, canceling of pre shipment fumigation, government bearing expenses of its inspectors wherever needed).
  - iv. Exporters of knitted goods and ready made garments are importing almost all of their requirements of yarns and fabrics from India, Pakistan and the Far East, mainly on account of the much lower prices. This is done under the temporary admission system of imports, where a letter of guarantee is presented against the amount due for customs duties and sales tax and to be released upon the export of the final product.
  - v. Recession in the Egyptian Domestic market together with liquidity crisis, depressed the selling prices and put great pressures for extended credit. Large scale smuggling of textile products and apparel free from duty and sales tax made matters worse.
  - vi. The customs duty free entry of subsidized Syrian yarns, mainly coarse and medium counts, exasperated the problem. Large quantities of subsidized Syrian yarns of average quality flooded the Egyptian market at prices that compare with only the cost of Egyptian MLS lint to produce the same yarns.
  - vii. The recent movements of the exchange rate, essentially that of the US Dollar against the Egyptian pound had the following results:
    - a. Making the cost of imported yarns and fabrics (including Syrian yarn) higher (favorable)
    - b. Making the cost of imported cotton lint from all sources higher (unfavorable)
    - c. Making the price of exported Egyptian cotton lint higher (unfavorable)
    - d. Making the price of imported Synthetic Fibers, mainly Polyester, higher (unfavorable)

- e. Making income from exported yarns, textile products and apparel higher (favorable)
  - viii. The very low prices of polyester filament helped shift a substantial volume of the domestic market from cotton fabrics to 100% filament polyester or polyester spun.
- 3.4. Legitimate questions surfaced, some of them not for the first time:
- i. Why cannot the Egyptian Spinners use the same "King Cotton" to produce "Wonder yarns" like the importers of Egyptian cotton lint in Italy, India, Turkey...etc.
  - ii. Why cannot the Egyptian Spinners use the "Cheap" imported short staple cottons to produce equally "Cheap Yarns and Fabrics" and compete with yarns and fabrics made from the same "Cheap cotton"
- 3.5. To answer these questions one has to look into the detailed cost analysis of producing yarns from all blends in Egyptian Spinning mills.

## CHAPTER IV

### 4. Cotton Statistics World and Egypt (1900-2000)

4.1. Table 1 shows the development of the cotton planted area, yield, production in the world during the twentieth century. It is assumed that the world-wide production is equal to the world-wide consumption, with carry over from one season to the next, evening out over such long period.

4.1.1. The average world planted area increased by 66%  
from 76 400 000 acres in 1920-1930  
to 81 415 000 acres in 2000/2001 with a maximum of  
89 054 000 acres in 1951/1952

4.1.2. The average world-wide yield increased by 347%  
from 148 lbs/acre in 1920-1930  
to 514 lbs/acre in 2000/2001 with a maximum of  
526 lbs/acre in 1997/1998

4.1.2. The average world annual production increased by 367%  
from 23 761 000 bales in 1920-1930  
to 87 200 000 bales in 2000/2001 with a maximum of  
95 174 000 bales in 1991/1992

This dramatic increase in world production of cotton was due to the great benefits from research and innovation in all spheres of agricultural activities resulting in increasing the yield by 345% as shown above.

4.2.1. The average cotton planted area in Egypt DECREASED by 62.5%  
from 1 443 000 feddans in 1900-1910  
to 540 876 feddans in 2000/2001 with a maximum of  
2 082 439 feddans in 1930/1931 and a minimum of  
540 876 feddans in 2000/2001

4.2.2. The average yield in Egypt increased by 72.4%  
from 4.35 kentars/feddan in 1900 - 1910  
to 7.50 kentars/feddan in 2000/2001 with a maximum of  
8.64 kentars/feddan in 1982/1983 and a minimum of  
3.13 kentars/feddan in 1909/1910

4.2.3. The average annual production of cotton in Egypt DECREASED by 33.9%  
from 6 233 000 kentars in 1900-1910  
to 4 123 000 kentars in 2000/2001 with a maximum of  
10 574 000 kentars in 1980/1981 and a minimum of  
4 123 000 kentars in 2000/2001

4.2.4. The average annual exports declined by 80%  
from 6 208 000 kentars in 1900-1910  
to 1 250 000 kentars in 2000/2001 with a maximum of  
8 949 000 kentars in 1933/34 and a minimum of  
333 000 kentars in 1991/1992

- 4.2.5. The average annual "consumption" of Egyptian cotton lint in domestic spinning mills increased from negligible quantities at the beginning of the century to reach a peak of 5839 000 kentars in 1981/82 (This figure does not include imported cotton lint)
- 4.3. In the absence of growth of the Egyptian cotton crop, either by increased planted area, or by the improved yield; or better still by both increased planted area and yield, the growth in domestic consumption was destined to be at the expense of cotton lint export.
- 4.4. In the absence of highly improved yield (72.4% in Egypt compared with 367% in the world during the twentieth century), the cost of producing one kentar of Egyptian cotton increased at a larger pace than that of the world. Both cotton domestic industry and cotton export trade suffered; whereas cotton growers never stopped complaining from low revenue (as they claim when comparing growing cotton with growing alternative crops)
- 4.5. The growth of domestic consumption of Egyptian cotton was not accompanied by a corresponding growth in the production of MLS varieties (Upper Egypt). On the contrary, the growth of domestic consumption was accompanied by phasing out of MLS cotton growing from the remote governorates of Quena, and Sohag, Table 2.
- 4.5.1. Domestic spinners were forced to use Egyptian LS and even ELS varieties to spin coarse and medium count yarns, leaving themselves open to accusations of underspinning Egyptian cotton.
- 4.5.2. In many crop seasons, the failure to export enough quantities resulted in huge carry overs. Domestic spinners were forced to consume unexported LS and ELS varieties at discounted prices.
- At present (2001), there exists more than 500 000 kentars of ELS varieties (mostly G 70) carried over from the last three crop seasons, with mostly very low grades.
- Domestic spinners were persuaded to buy some quantities of that stock, at very low prices (equal to G 80) with great losses to the Egyptian government who bought that stock at very high prices. The carrying charges (interest, and storing) more than doubled the loss.
- 4.5.3. In order to secure enough cotton lint for the domestic spinners, whilst maintaining a reasonable quantity for export, Egypt resorted to importing short staple cottons mostly from the United States and lately from Greece and Syria (Table 4).
- 4.5.4. The last five years witnessed the growth of consumption of synthetic fibers (mainly polyester) in blends with cotton, essentially because of the much lower price of polyester staple fiber as compared with the price of cotton lint including imported short staple cotton.
- 4.5.5. The large fluctuations of the cost of Egyptian cotton lint to the domestic spinning mills (Table 3) caused great hardships to the domestic spinning industry which failed to survive the shock of increased prices of 1995/96 and 1996/97 crop seasons.

4.5.6. It should be noticed that the actual cost of the Egyptian cotton lint at the “spinning mill gate” exceeds the nominal Base price by approximately 5% (five percent) on account of the extra charges for: commission to the trade company, mandatory weighing, fees to CATGO, humidity testing by CATGO, transport and insurance (Table 3).

4.5.7. Total cotton consumption by domestic spinning mills declined steadily through the nineties. Table 4 shows the “consumption” of Egyptian cotton and imported cotton as represented by the deliveries of these cottons to those mills. Together with polyester consumption, it can be concluded that between 1991/92 and 2000/01 the total mill consumption of all fibers was almost halved from 356 100 tons/year to 191500 tons/year. This implies that half the production capacity of the spinning mills on a national level is lying idle. In other words, 50% capacity utilization is being realized at present on a national level with grave consequences to return on capital investment and labor job security.

## CHAPTER V

### 5. Cost of Spinning Cotton Yarns in Egypt:

5.1 Egyptian domestic spinners faced great challenges during the nineties, triggered by the large hike in prices in the two crop seasons 1995/96, 1996/97 (Table 3) Suddenly the cost of raw materials went up by 25% in one shot between 1995 and 1997. Compared with 1991 the cost of raw materials went up by 70%. This rise was not matched by rises in other sources as represented by A index (Table 5).

5.2. The cost of raw materials (cotton lint) rose to be 70% of the total cost of production of coarse and medium count carded yarns, making it far above the prevailing prices for corresponding yarns worldwide.

5.3. The domestic spinners attempted to pass the rise in the cost of raw materials to the end consumer in Egypt (knitters and weavers) and in the export market with little success in the short term and total failure in the long term.

5.3.1. Examples of price rises and falls between 1990, 1996 and 2001 are as follow in LE/Ton:

Year	1990	1996	2001
G 80 Ne 8/1 carded	6200	10 800	6530
G 80 Ne 20/1 carded	6772	10 800	9307
G 75 Ne 20/1 carded	6772	13 400	-----
G 75 Ne.30/1 carded	7740	13 400	10138 (G 89)
G 75 Ne 20/1 combed	8296	15 000	-----
G 75 Ne 30/1 combed	9270	15 000	12328 (G 89)

5.3.2. The slowdown in offtake of domestically spun yarns in the domestic market in Egypt and in export led to ballooning inventories of both yarns and fabrics, with equally ballooning financial costs in bank interest and storing expenses. Storing space and financial constraints forced the spinners to reduce capacity utilization down to 50% at present (2001).

5.3.3. Inevitably low capacity utilization and high inventory led to lower quality and higher cost of production slipping into a viscous circle.

5.4. So what is the cost of production of yarns spun on the cotton systems in Egypt

- i. Open end 100% cotton and blended yarns
- ii. Ring spun 100% carded cotton and blended carded yarns
- iii. Ring spun 100% combed cotton and blended combed yarns

5.5. Table 6 shows the cost of lint to produce one ton of carded or combed yarn from:

- i. The main varieties of Egyptian cotton; MLS G 83, LS G89, ELS G 70
- ii. Imported short staple cotton; Greek
- iii. Synthetic fibers; polyester
- iv. Cotton waste; comber's noils

- 5.5.1. The mill delivery cost is the "spinning mill gate" cost including all expenses as shown in Table 3.
- 5.5.2. The waste factor reflects the trash content and the amount of very short fibers extracted in the preparatory processes of blow room and carding, together with the soft and hard waste collected in the subsequent processes till the final package of yarn. The waste factor in case of combed yarns is inflated by the amount of short fibers outcombed in the form of combers' noils.
- 5.5.3. The salvaged waste is the value of waste to be recycled in the same factory and/ or sold domestically or even exported. The value of salvaged waste is naturally higher in the case of combed yarns on account of the relatively high value of combers' noils which are completely recyclable.
- 5.5.4. The system of trading cotton in Egypt imposes carrying charges on cotton lint delivered starting January of the cotton season, at a cost of a little above the bank interest rate. On average, the financing of the Egyptian cotton used in an Egyptian spinning mill costs 6%, being half the interest cost for one year.
- 5.5.5. Imported cotton has to be secured at the beginning of the season and therefore will cost 6% for financing.
- 5.5.6. Since the procurement of polyester and purchased waste (noils) is done on a shorter time span, the financial cost is put at 3%.
- 5.5.7. Finally Table 6 shows the net cost of lint from all varieties to produce one ton of carded or combed yarn after making allowance for the waste and financial burdens.
- 5.5.8. In order to facilitate the computation of total cost of production of yarns spun from all varieties and blends of different percentages, Table 7 shows the net cost of raw materials for all common blends starting with 100% cotton carded and combed yarns and ending by 100% polyester yarns (carded).
- 5.6. The way Egyptian spinning mills calculate the manufacturing and overhead costs vary from one mill to another, making analytical comparisons of items of costs very hard, if not impossible.  
Furthermore, wholehearted cooperation could not be established except with one company, and this was due to a very special relationship between one of the authors and the company.
- 5.7. Seven spinning mills are represented in this study:
- |      |               |           |
|------|---------------|-----------|
| One  | Public Sector | Company   |
| Two  | Privatised    | Companies |
| Four | Private       | Companies |
- 5.8. Table 8 shows the original cost calculations for open end spun yarns in company C1. It will be noticed that overhead costs represent a very high percentage of the total cost, making it unfeasible under any circumstances to be able to operate profitably.

- 5.9. Tables 10 and 12 show the original cost calculations for ring spun carded and combed yarns respectively in the same company C1. The same pattern of excessively high overhead costs compared with the manufacturing costs appear.
- 5.10. The authors had the opportunity to revise the whole situation in company C1, and establish a fair basis for allocating all items of expenses over the cost centers of company C1 reflecting the actual burdens for each center.
- 5.11. The result of that comprehensive revision is shown in Tables 9, 11 and 13. The adjustment in manufacturing cost in the three categories were small as compared with the drastic fall of overhead costs.  
The revised cost lists enabled company C1 to have a reasonable basis to offer its production of yarns for sale and also for the cost calculations of woven fabrics, ready made garments and made-up goods in the down stream processes of the same company.
- 5.12. Table 14 shows the comparative manufacturing and overhead costs for CARDED RING SPUN yarns in four Egyptian spinning mills.  
It is most interesting to notice the very close values of the total manufacturing costs in all counts shown in the table, in spite of the very large differences in the itemized costs for each count between the different mills.  
However, when it comes to the overheads; the differences are very large and the final total costs diverge in all counts.
- 5.13. Table 15 shows the comparative manufacturing and overhead costs for COMBED RING SPUN YARNS in three Egyptian spinning mills.  
It is most interesting to notice the very close figures for companies C1 and C3 in both total manufacturing cost and total cost including overheads in all counts in the table.
- 5.14. Tables 16, 17, 18 show the comparative costs of production for Ne 30 in three modes of production i.e. open end, carded ring and combed ring. Count 30 is one of the most commonly used counts in both knitting and weaving.
- 5.14.1. Table 16 shows the comparative costs of production of Ne 30 open end in two companies, C1 and C6. The machines used in company C6 are the latest generation, fully automated and hence the higher cost for energy (utilities) and depreciation. Company C6 posts very low administrative and sales overhead and no financial overheads. With new modern machinery, very high speeds and efficiency and very high quality, the total production cost in company C6 is lower than that in company C1.
- 5.14.2. Table 17 shows the comparative cost of production of Ne 30 ring spun carded in six companies. The total manufacturing cost varies from 2550 LE/Ton in company C2 to 3001 Le/Ton in company C7. Three companies report very close figures, 2790, 2832, 2861 Le/Ton in companies C1, C3 and C6 respectively, which gives credibility to these figures.

Overhead expenses vary widely according to the wide differences between the companies in their commercial and financial situations, making comparisons of no consequence.

The most credible figure for total cost will be 4000 LE/Ton as shown for companies C1, C3, C7.

5.14.3. Table 18 shows the comparative cost of production of Ne 30 ring spun combed in five companies. The total manufacturing cost varies from 3180 LE/Ton company C2 to 4233 LE/Ton in company C3.

Three companies report very close figures; 3250, 3180, 3125 LE/Ton in companies C1, C2 and C4 respectively which gives credibility to these figures.

Overhead costs diverge as expected. The most credible figure for the total cost is 5000 LE/Ton, company C7, which is 1000 LE/Ton higher than the total cost of production for the same count carded.

5.15.1. Packing costs were not included in the cost analysis tables from table 8 up to table 18. Not only do packing costs vary from one company to another, they also differ between packing cost for domestic and export markets.

For the domestic market cheap paper cones are used, no polybag for each cone is required. Also for export market stronger outside cartons (double double board) are used with polypropylene straps.

Table 19 shows the packing costs for domestic and export markets as reported by some of the companies participating in this survey.

5.15.2. Domestic market packing costs between 130 and 159 LE/Ton. This cost is sharply reduced in case of vertical companies where spun yarn is delivered on plastic cones (returnable) to the next operation on the same site, preparation for weaving, in large trucks (no cartons).

5.15.3. Export market packing costs between 220 and 455 LE/Ton. The more likely figure is between 220 and 275 LE/Ton.

## CHAPTER VI

### 6. The total cost of producing yarns spun from 100% cotton of all varieties and blends.

6.1. Table 7 showed the net costs of raw materials for all common blends starting with 100% cotton carded and combed yarns and ending by 100% polyester yarns (carded).

All varieties of Egyptian cotton were represented i.e. MLS (G 83), LS (G 89), ELS (G 70). Imported cotton was represented by Greek Cotton.

6.2. It should be noticed that:

- G 83 is a little more expensive than G 80
- G 89 is a little more expensive than G 85
- G 70 is a little more expensive than G 77
- Greek is a little more expensive than Syrian

6.3. It should also be taken into consideration that Egyptian cotton lint prices delivered to the Egyptian spinners in the crop season 2000 / 2001 had peculiar anomalies, as shown in table 20.

6.3.1. At the beginning of the crop season, it was expected that the government was going to pay the difference between farm gate price and stipulated mill delivered price (same as previous season) in the form of a subsidy. Since the government's approval was not forthcoming, the following undertakings were made:

- i. Public sector spinners gave an undertaking to cotton trade companies, promising to pay the difference between farmgate price and mill delivered price, in case that difference (subsidy) is not born by the government. The difference is temporarily born by the trade company.  
It is presumed that public sector companies are using the "subsidized" mill delivered prices to calculate their cost of production. Should the subsidy not be accepted by the government, a big loss has to be posted in the balance sheets.
- ii. Private sector spinners were promised to be refunded by the subsidy in case of its being born by the government.  
Private sector spinners cannot calculate their cost of production on the assumption that the subsidy is going to be refunded. Should the subsidy be accepted by the government (not likely), a corresponding profit will be welcome.
- iii. An added complication is that the quantities of cotton lint allocated by the Textile Holding Co. to private sector spinners at the beginning of the crop season 2000 / 2001 were much below their actual requirements, on account of the low crop. So private sector spinners were forced to resort to private sector traders, who took advantage of the situation, and added a premium of 10 LE / ken for MLS, LS varieties and 20 LE / ken for ELS varieties. Private sector traders signed promissory notes to refund private spinners with any subsidies to be collected from the government (a most unlikely thing).

6.4. In this study, the base domestic price of Egyptian cotton lint will be the price of cotton delivered from private traders to private spinners. This base price includes the "subsidy" and the premium.

6.5. Table 21 shows the comparison of costs with net domestic and export prices for 100% cotton open end spun yarns, 2000 / 2001.

6.5.1. Minimum export prices as announced by Textile Consolidation Fund TCF, valid up to 30 June 2001, were reduced by 5%. The net prices after reducing the commission of 3% are shown in USD and in Egyptian Pounds.

6.5.2. Domestic selling prices as announced by the Textile Holding Company, were reduced by a progressive discount reaching 17% for quantities exceeding 100 tons / month.

6.5.3. The total costs of production, domestic packing, company C1, are shown in the last column in table 21.

6.5.4. Net export prices cover the total cost of production with a good profit even after allowing for the difference in the cost of packing (220-152=68 LE/Ton). However, there are no exports at the TCF prices even with the discount of 5%

6.5.5. Net discounted domestic prices fall below total costs. Sales are modest, buyers expect, and get, higher discounts.

6.6. Table 22 shows the comparison of costs with net domestic and export prices for 100% cotton ring spun carded coarse count yarns from Upper Egypt varieties, 2000 / 2001.

6.6.1. Minimum export prices as announced by TCF, valid up to 30 June 2001, were reduced by 5%. The net prices after reducing the commission of 3% are shown in USD and in Egyptian Pounds.

6.6.2. Domestic selling prices as announced by the Textile Holding Company, were reduced by 7% to encourage domestic sales.

6.6.3. The total costs of production, domestic packing, company C1, are shown for two 100% cotton blends i.e.,

Greek Carded  
G 83 Carded

In the case of export, the total costs shown should be increased for the extra cost of export packing (220-152 = 68 LE/Ton)

6.6.4. Net export prices cover the total costs of production in case of Greek cotton with a small profit margin, but do not cover the total costs of production in case of Egyptian G 83.

No exports are made in either Greek or G 83, since comparable prices from India and Pakistan are much lower than the net export prices from Egypt as follows, in USD / Kg:

Origin	TCF	TCF - 5%	INDIA	Difference
Freight	FOB Egypt	FOB Egypt	CNF	CNF & FOB
Payment	90 days	90 days	120 days	30 days
Ne 20/1 carded	2.83	2.68	2.10	- 21%
Ne 24/1 carded	2.93	2.78	2.25	- 19%
Ne 30/1 carded	3.09	2.93	2.40	- 18%

6.6.5. Net discounted domestic prices fall below total costs in both cases of Greek and G 83.

6.6.6. Public sector spinners are hopeful of getting the approval by the government to pay the subsidy for G 83 in the crop season 2000 / 2001, to the amount of 48.95 LE/Kentar, i.e. 1138 LE / Ton carded yarn Table 20. Public sector companies believe that their costs of production using G 83 is lower than those costs shown in Table 22 by at least 1000 LE/Ton, which will be equivalent to the total costs of production in case of using Greek cotton shown in the same Table 22. Even so, the total costs of production using subsidized G 83 are above the discounted selling prices in the domestic market.

6.6.7. Public sector spinners using imported Syrian cotton at very nearly the same total cost to the spinning mill as Greek cotton, offered coarse yarns spun from Syrian cotton at prices lower by 400 LE/Ton than those discounted prices in Table 22.

6.7. Table 23 shows the comparison of costs with net domestic and export prices for 100% cotton ring spun carded yarns from Egyptian long staple varieties, G 89.

6.7.1. Minimum export prices as announced by TCF, valid up to 30 June 2001, were reduced by 5%. The net prices after reducing the commission of 3% are shown in USD and in Egyptian pounds.

6.7.2. Domestic selling prices as announced by the Textile Holding Company were reduced by 7% to encourage domestic sales.

6.7.3. The total costs of production, domestic packing, company C 1, are shown for G 89.

6.7.4. Net export prices do not cover the total costs of production. Exports of coarse and medium count carded yarns have declined sharply this year. Comparable prices from India and Pakistan mentioned in paragraph 6.6.4. above, show even larger differences in case of G 89 as follows:

Origin	TCF	TCF - 5%	INDIA	Difference
Freight	FOB Egypt	FOB Egypt	CNF	CNF & FOB
Payment	90 days	90 days	120 days	30 days
Ne 20/1 carded	3.08	2.92	2.10	- 28%
Ne 24/1 carded	3.08	2.92	2.25	- 23%
Ne 30/1 carded	3.25	3.08	2.40	- 22%

6.7.5. Net discounted domestic prices fall below total costs.

6.7.6. Public sector spinners are hopeful of getting the subsidy approved by the government, at 11.66 LE/Kentar equivalent to 268 LE/Ton G 89 carded yarn. They believe the costs should be lowered by a corresponding amount, say 250 LE/Ton. Even so, the total costs of production, after taking the subsidy into consideration, are far above the discounted domestic price.

6.8. Table 24 shows the comparison of costs with net domestic and export prices for 100% cotton ring spun combed yarns from long staple (G 89) and extra long staple (G 70) varieties.

6.8.1. Minimum export prices as announced by TCF, valid up to 30 June 2001, were reduced by 5%. The net prices after reducing the commission of 3% are shown in USD and in Egyptian Pounds.

6.8.2. Domestic selling prices as announced by the Textile Holding Company were reduced by 7% to encourage domestic sales.

6.8.3. The total costs of production, EXPORT PACKING, Company C1, are shown for imported cotton, Egyptian MLS, LS, ELS varieties; i.e Greek, G 83, G89 and G 70 respectively.

6.8.4. Net export prices:

- i. Cover the costs and show profits in case of using Greek cotton up to Ne 40 combed
- ii. Nearly cover the costs in case of using G 83 up to Ne 30, and show a profit for Ne 36 and Ne 40 combed.
- iii. Do not cover the costs in case of using G 89 up to Ne 40, and show a profit from Ne 50 upwards. It will be remembered TCF prices for Ne 50 upwards presumes using ELS varieties, not G 89.
- iv. Cover the cost in all counts Ne 50 upwards using G 70.

6.8.5. Net domestic selling prices:

- i. Cover the costs in case of using Greek cotton up to Ne 40 combed
- ii. Do not cover the costs in case of using G 83 up to Ne 40 combed
- iii. Do not cover the costs in case of using G 89 up to Ne 40 and show a profit from Ne 50 upwards.
- iv. Do not cover the costs in case of using G 70

6.8.6. Public sector companies are hopeful of getting the subsidies approved and born by the government, in which case the costs shown in the table would be reduced as follows:

	Greek or Syrian	No subsidy	
G 83	48.95 LE/Kentar	equivalent to 1219 LE/Ton	Combed yarn
G 89	11.66 LE/Kentar	equivalent to 284 LE/Ton	Combed yarn
G 70	28.19 LE/Kentar	equivalent to 700 LE/Ton	Combed yarn

6.8.7. Exports of combed yarns up to Ne 30 declined this year (2000/2001) on account of the stiff competition from India as follows:

Origin	TCF	TCF - 5%	INDIA	Difference
Freight	FOB Egypt	FOB Egypt	CNF	CNF & FOB
Payment	90 days	90 days	120 days	30 days
Ne 20/1 combed	3.53	3.35	2.35	- 29%
Ne 24/1 combed	3.53	3.35	2.50	- 23%
Ne 30/1 combed	3.70	3.51	2.65	- 24%

6.8.8. Exports of fine combed yarns are doing well this year, on a modest scale as usual and in accordance with world demand. High quality is expected, and delivered, realizing reasonable profits.

6.9. Table 25 shows the comparison of costs with export prices for BLENDED Ring Spun Yarns from CARDED cotton 50% and Polyester 50%. The costs are shown for three blends

50%	carded Greek	50% Polyester
50%	carded G 83	50% Polyester
50%	carded G 89	50% Polyester

6.9.1 Minimum export prices as announced by TCF, valid up to 30 June 2001, were reduced by 7% and the discount was increased on 11 April 2001 to 10%. The net prices after reducing the commission of 3% are shown in USD and in Egyptian Pounds.

6.9.2. Different export prices, and different costs, should be assigned to other blends, becoming higher as the percentage of cotton increases and vice versa. The usual blends in demand for knitting and weaving industries are as follows:

80%	cotton 20%	Polyester
60%	cotton 40%	Polyester
50%	cotton 50%	Polyester
35%	cotton 65%	Polyester

The cotton part can be either carded or combed.

6.9.3. Net export prices do not cover the costs in all blends of carded cotton / polyester yarns. The importers of Egyptian cotton blended yarns expect to get G 89 in the blend, a consideration that makes the loss gap even greater.

6.10. Table 26 shows the comparison of costs with export prices for BLENDED Ring Spun Yarns from Combed cotton 50% and polyester 50%. The costs are shown for four blends

50%	combed Greek	50% Polyester
50%	combed G 83	50% Polyester
50%	combed G 89	50% Polyester
50%	combed G 70	50% Polyester

6.10.1. Minimum export prices as announced by TCF valid up to 30 June 2001 were reduced by 10%. The net prices after reducing the commission of 3% are shown in USD and in Egyptian Pounds.

6.10.2. Net export prices

- i. Do not cover costs for all types of cotton in the blend below  
Ne 40
- ii. Cover the cost in case of combed G 89 / Polyester from  
Ne 50 upward
- iii. Do not cover costs for combed G 70 / Polyester from  
Ne 50 up to Ne 80

## Chapter VII

### Prospects for Spinning Industry in Egypt

7.1 Chapter 6 presented detailed comparisons of the total costs of production of yarns in Egypt from all varieties of Egyptian and imported cotton in all categories, namely

- i. Open end and ring spun
- ii. Carded and combed
- iii. 100% cotton and blended with polyester.

7.2 Net export prices announced by TCF (Textile Consolidation Fund) cover the total cost in the following categories only:

- i. Open end spun 100% cotton yarns.
- ii. Ring spun 100% combed coarse and medium count yarns, spun from short staple Greek cotton.
- iii. Ring spun 100% combed fine count yarns Ne 50 upwards.

7.3. For all other categories net TCF export prices do not cover the cost, this fact alone explains the declining exports of Egyptian cotton yarns. Prices announced by TCF are regularly cut down, the latest on 20 August 2001, to encourage exports, with doubtful results.

The announced discounts affect private sector exporters in all textiles and made-up products unnecessarily being unable to export at higher prices than those offered by public enterprise exporters.

7.3.1. Table 5 shows the exports of Egyptian cotton yarns to the two main markets, namely, the European Union and the United States of America as compared with the annual quota in each case.

The volume of exports is declining while the allowed quotas in those markets are rising. This results in an embarrassing situation of Egypt traditionally negotiating to increase those quotas when it cannot fulfill existing ones.

7.4. Net domestic market prices, as announced by the Holding Company for its member Public Enterprise companies, fall below cost for nearly all counts and categories. The only exception is in the case of 100% combed cotton fine count yarns, Ne 50 upwards, for which there is small domestic demand.

7.4.1. Under these negative price-cost conditions, production and sale of yarns for the domestic market results in incurring great losses for the companies, thus triggering other consequences, such as

- i. Selling 100% cotton and blended fabrics produced in vertically integrated mills at prices below cost, thus increasing losses further.

- ii. Reducing capacity utilization in spinning mills in an attempt to reduce production of losing items, bringing along even graver consequences.

7.4.2. The domestic market situation deteriorated further on account of:

- i. Increasing duty-free imports of very low priced Syrian 100% cotton coarse count yarns of medium but acceptable quality.
- ii. Increasing imports of 100% cotton and blended yarns and fabrics at low prices and high quality under the temporary admission system, by the exporters in the knitting and ready made garment industries.
- iii. The shift of both weavers and knitters to using of very low priced filament polyester yarns.

7.5. Inventory of yarns and fabrics rose very sharply in spite of the very low capacity utilization, with most serious financial consequences of increasing bank overdraft and interest costs.

Rising inventory in a manufacturing company usually foreshadows a deterioration in product quality.

7.6. The worsening crisis facing the Egyptian Spinning and Weaving industries, has called for numerous conferences, seminars, studies and consultations, from which a flood of prescriptions have emerged.

7.6.1. The lists of diagnosis and recommendations are often very similar, differing only in shifting emphasis according to the vested interests of the presenters.

7.7. Commentators in the press and in the government are often expressing surprise that the crisis is getting worse while they expected it to disappear or at least show some signs of abating.

It is generally believed that since there is widespread consensus about the diagnosis and causes of the problems, solutions must necessarily come through.

7.8. Causes of the Crisis. The causes of the crisis can be grouped as follows, in a descending order of importance from the present authors' point of view:

7.8.1. First, the Cost of Raw Materials:

- i. The high prices of Egyptian cotton lint in MLS and LS varieties, based on minimum farm gate prices guaranteed by the government to the farmers, bear little or no relationship to world market price levels and fluctuations for alternative cotton sources.
- ii. The insufficient volume of MLS varieties grown in Egypt to meet the demand for the production of coarse and medium count yarns, forces

Egyptian public enterprise spinners, to use more expensive LS and even ELS varieties to produce coarse and medium count yarns.

- iii. Difficult access and high cost of imported, otherwise cheap, short staple cotton (see Annex I) because of the imposition of customs duties (5%) service duties (3%), the extra cost for double fumigation and the high costs of clearing and transport inside the port itself and outside from the port to the factory.

#### 7.8.2. Second, High Cost of finance:

- i. Very high interest rates in Egypt, as compared with the very low interest rates in the developed countries.
- ii. Most spinning mills suffer from very high interest burdens on their large overdraft accounts caused by :
  - ◆ High inventory
  - ◆ High receivables
  - ◆ High accumulated losses
- iii. Lack of liquidity and shortage of foreign exchange result in inability to finance imported short staple cotton or even badly needed spare parts, accessories and materials.

#### 7.8.3. Third, Poor Manpower Training:

- i. The Egyptian education system together with governmental vocational training centers, fail to provide the industry with motivated, well-trained labor force.
- ii. This labor problem pervades all levels of the enterprise, from shop floor to top management, and in all spheres -- technical, production, administrative, accounting and commercial.
- iii. As a result of the scarcity of well-trained willing labor of all categories, productivity and quality of work are very low. Absenteeism and labor turnover are very high. Labor cost in Egypt is high, despite the generally believed notion of being low: low wages paid to workers are negated by low levels of productivity and high levels of rejects.

#### 7.8.4. Fourth, High Cost of Transactions:

- i. Value added tax on capital goods, resulting in higher cost of depreciation and finance.
- ii. Multiple charges, over customs duties, on imported cotton, polyester, dyestuffs, spare parts, machinery etc.
- iii. Arbitrary changes of the prices in invoices for imported goods by customs authorities result in higher customs, VAT, and other duties.
- iv. Complicated procedures and arbitrary decisions in all aspects of imports, exports by land, sea or air, consuming a lot of time and money.

#### 7.8.5. Fifth, Lack of Marketing Skills:

- i. Absence of large, strong trading companies for both export and domestic markets.
- ii. The scarcity of well trained, highly qualified sales personnel.

7.8.6. Other problems. The following is a list of miscellaneous grievances and suggestions that appear almost daily in the media and reports on the textile industry:

- ◆ Smuggling of textiles and apparel
- ◆ Lack of fashion consciousness in the industry
- ◆ Failure to exploit the now available Egyptian Cotton Logo
- ◆ Need to use the internet (egytex.com, official location)
- ◆ Increase productivity
- ◆ Improve quality
- ◆ Support research and development
- ◆ More blending with polyester, polyester is cheaper than cotton
- ◆ Less blending with polyester, polyester is not hygenic
- ◆ Improve packing and presentation
- ◆ Participate in trade fairs
- ◆ Contract know-how
- ◆ Contract foreign management
- ◆ Improve dyeing and finishing
- ◆ Improve dyestuffs
- ◆ Reduce taxes
- ◆ Reduce cost of electricity
- ◆ Spin ecologically friendly grown cotton
- ◆ Take advantage of Comesa agreement
- ◆ Prepare for the GATT
- ◆ Face dumping charges
- ◆ Expedite agreement on Free Trade Area with USA
- ◆ Get rid of extra labor by early retirement
- ◆ Use extra labor to form a fourth shift to run non-stop 360 days / year to reduce cost
- ◆ Competitiveness, Optimization, Creativity, Total Quality Management
- ◆ Ban imports of yarns and fabrics under temporary admission
- ◆ Facilitate imports of yarns and fabrics under temporary admission
- ◆ Stop imports of short staple cotton
- ◆ Encourage imports of short staple cotton
- ◆ Modernization

7.9. The important question is **WHO** will take action concerning the five groups of problems enumerated above, namely:

- 7.8.1. Making cheap cotton lint available
- 7.8.2. Financial restructuring of ailing companies
- 7.8.3. Training for all levels of labor up to top level managers
- 7.8.4 Improving transaction procedures and reducing related official and unofficial costs
- 7.8.5 Enhancing Marketing Skills

7.9.1. What can a top executive of an ailing company realistically do, to implement practical solutions to address these problems?

What can higher-ups in the holding company or ministry of public enterprise do? In the past few years it was felt that nothing short of a well-coordinated, politically top level national policy can address the crisis, that the whole package of growing, trading, manufacturing and exporting cotton lint and textile products has to be planned and coordinated as one package.

7.9.2. The failure to produce and implement the policy packages in the recent past resulted in the present grave situation which can be summarized as follows:

- i. The near collapse of public enterprise spinning industry in Egypt
- ii. The periodic accumulation of unsold cotton lint with the consequent repeated huge financial burdens to the Egyptian Government
- iii. The gradual phasing out of domestic consumption of Egyptian cotton and the uncertain future of cotton growing in Egypt.

7.10. Unless the Government takes up a radical shift in policy concerning the cotton and textile industry soon enough (which means immediately) one can expect the following scenario regarding cotton lint:

- i. Further decline in deliveries of Egyptian cotton lint to domestic mills
- ii. Further growth in imports of short staple cotton from USA, Greece, Syria and Sudan.
- iii. Record financial disbursements by the Egyptian government to subsidize directly or indirectly the disposal of Egyptian cotton in Export and / or domestic markets.
- iv. Continued decline in growing of Egyptian cottons, especially MLS and LS varieties. This can happen very soon, perhaps even in the coming crop season.

7.11. On the textile manufacturing side, one can expect the following scenario to develop in coming years:

- i. Further growth in consumption of polyester fiber by domestic spinners replacing Egyptian cotton lint.
- ii. Further decline in capacity utilization in Spinning mills on a national level.
- iii. Further decline of exports of yarns and fabrics from Egypt.
- iv. Further growth of imports of yarns and fabrics under temporary admission system.
- v. Lower likelihood of success in privatizing public sector textile companies.
- vi. Lower likelihood of attracting funds for investment or rehabilitation of ailing public enterprise spinning mills. The costs of production with the new machinery will simply become higher on account of higher interest and depreciation costs.

- vii. Start up of small privately owned ring spinning mills (10,000 spindles each) to spin ELS Egyptian cotton into fine count yarns for export and also 100% spun polyester for the domestic market.
- viii. Start up of large Joint-venture open-end spinning mills (5000 rotors) using imported short staple cotton and polyester to produce 100% cotton and blended coarse count yarns for the domestic market.

7.12. The textile industry crisis in Egypt is not a short term phenomenon; it has been brewing over a very long period. Warning signals were ignored and even ridiculed. Small successes were blown out of proportion while setbacks were ignored or played down.

- i. Consider the recurrent bans and restrictions on exports of LS and MLS varieties to ensure supplies for the local industry over the past ten years.
- ii. Consider the building-up of large stocks of cotton at the end of each crop season and the subsequent well-advertised clearing of it.
- iii. Consider the quite write-offs by the Egyptian Government to wipe out the multi-billion dollar debts of Public cotton trading companies, as contrasted against the joyful announcements of raising the farm-gate price of cotton season after season.
- iv. The list of missed warning signs can grow depressively long.

7.13. The crisis of the Egyptian cotton spinning industry is intimately entwined with the crisis of the Egyptian cotton growing. Their structural interdependence has always been encouraged and enforced by the cotton growing, trading, and manufacturing communities in Egypt. In the absence of a policy taking the true national interest at heart, the two sides will continue strangling each other, with no separation or reconciliation in sight. The core coordination is between growing long staple cotton for an industry whose primary output is coarse and medium count yarns for the domestic and export markets. The shift towards liberalization of the Egyptian economy and the announced policy to liberalize the cotton growing and cotton trade sectors together with the keen desire to privatize public enterprise spinning companies accentuated this contradiction, multiplied the problems, and ended with the worst of all possible worlds.

7.14. With very few exceptions, all Public Enterprise spinning mills are *running* at a loss. High debts and stocks have accumulated with their corresponding out-of-proportion interest burdens to the companies concerned.

#### 7.15. International Obligations

According to the undertakings made the Egyptian Government to the World Trade Organization, WTO

- i. The ban on importing fabrics was lifted since January 1, 1998. The conditional requirement of printing or weaving the name of the importer on the selvedge will eventually disappear.
- ii. The ban on importing apparel and made-ups will be lifted on January 1, 2002
- iii. Customs duties on imported yarns will drop to 24% on January 1<sup>st</sup>, 2002 (now still at 30%), and to 15% on January 1<sup>st</sup>, 2005
- iv. Customs duties on imported fabrics will drop to 39% on January 1<sup>st</sup>, 2002 (now still at 54%), and to 30% on January 1<sup>st</sup>, 2005
- v. Custom duties on imported Apparel will drop to 49% on January 1<sup>st</sup>, 2002 (when the ban is lifted) and to 40% on January 1<sup>st</sup>, 2005

**7.15.1** The lifting of the ban on imports of fabrics into Egypt (when becoming practical) and on apparel and made ups, together with the gradual reduction of customs duties, represent further challenges to the textile and apparel industries in Egypt in the future.

Phasing out of import quotas of textiles and apparel globally-- including the major markets of the United States and the European Union-- to be completed on January 1<sup>st</sup>, 2005 adds another twist to the problem. Egyptian textile exports (yarns, fabrics), apparel (knits and woven garments) and made ups will be exposed to the international competition on price and quality without the benefit of the privileged access conferred by quotas in the importing countries. These countries now put a ceiling on the imports from competing countries whilst granting Egypt access to the same markets either duty-free or at reduced tariffs.

**7.16** The cost of textile goods, apparel and made ups produced in Egypt have to come down appreciably, whether those goods are destined for the domestic Egyptian market or for export.

Domestic prices have to come down in order to compete with legally imported fabrics and apparel. The recent availability of cheap Syrian cotton yarns was a foretaste of things to come.

Export prices have to come down in order to survive among exporters in a non-quota international market.

**7.17** Declining per capita consumption of 100% cotton textiles and apparel is another factor working against the cotton spinning industry in Egypt. The shift towards cheap filament polyester is another very serious consideration.

**7.18** In the export market, the removal of quotas is a very serious threat to the growth, even to the maintenance, of the present levels of Egyptian exports. This consideration comes on top of other worries concerning the US free trade areas, NAFTA, QIZ, Caribbean basin, Subsaharan

Africa. Member countries in these trade agreements get preferential access to the US markets, and those advantages are denied to Egyptian Exporters.

7.19 Vigorous Egyptian Textile and Apparel industries able to face the domestic and export challenges profitably, should satisfy the following requirements:

- i. Access to cheap cotton lint at world price
- ii. Lean, well trained, work force
- iii. Highly motivated, well-led, medium and top level management

7.20 Resorting to investment in new plant and equipment, a common recommendation tried unsuccessfully in other countries under similar circumstances, is a non-starter. The higher costs of depreciation plus interest will-out pace the improvements in productivity. With so much spare and underutilized capacity already in existence, new automated equipment can in fact worsen the financial problems. With the same cotton lint costs and redundant poorly-trained labor nothing is solved.

## Chapter VIII

### Conclusion:

- 8.1. The shift of fiber consumption towards man made fibers on a world-wide scale at the expense of cotton is very well documented.
- 8.2. The shift of yarn consumption from spun yarns to filament yarns is equally well documented also on a world wide scale.
- 8.3. As far as Egypt was concerned, there has been a time lag for the Egyptian spinning industry to shift towards the use of staple polyester in blends with cotton.
  - i. Initially, the price of polyester staple fiber was higher than the price of Egyptian cotton lint.
  - ii. Exports were almost exclusively from 100% Egyptian cotton spun yarns and loomstate fabrics made from Egyptian cotton.
  - iii. Even today, Egyptian yarn exports are exclusively spun from Egyptian cotton lint. This is done at a big financial loss as shown in the study. No exports are made from yarns spun from short staple imported cotton.
  - iv. Some problems were faced in the dyeing of polyester / cotton blends and to a lesser extent in the sizing of blended yarns in preparation for weaving. These difficulties now disappeared and it is common to size and dye cotton / polyester blends and even 100% polyester fabrics with equal ease as for 100% cotton.
- 8.4. The sharp rise of the price of the Egyptian cotton lint delivered to domestic mills during the nineties triggered the mass shift towards the use of polyester.
  - 8.4.1. The consumption of filament polyester (mainly texturized) exploded from 20 000 tons / year in 1990 to 100 000 tons / year in the year 2000, with a trend towards further growth to 170 000 tons / year in the year 2005  

This is done at expense of spun yarns.
  - 8.4.2. The shift towards large scale expansion of blending cotton lint with polyester staple fiber, took place in the years 2000 and 2001. The volume of polyester staple consumption could have been greater, were it not for the recession of the Egyptian economy and the low capacity utilization of spinning mills capacity. Further growth of polyester staple consumption is expected to coincide with the expected large scale imports of short staple cotton from US, Greece and Syria in the coming years.
- 8.5. The age-old controversy about the underspinning of Egyptian ELS, LS, MLS cotton lint by the Egyptian spinners will soon come to rest.

8.5.1. Growing of ELS varieties will go on at present or advisedly larger areas, to be destined mostly (85%) for export in the form of lint. The rest (15%) will be spun in Egypt into 100% cotton fine combed yarns.

8.5.2. Growing of LS varieties will have to be grown in much reduced areas, for delivery to domestic and export markets (50/50)

8.5.3. MLS varieties (Upper Egypt) will suffer the most. It is improbable that their farmgate prices will come down to approach the L.D.P. imported short staple cotton. It is equally improbable that prices will change from season to season to be in line with the world market prices for short staple cotton (A Index). Not only from season to season, it will also be necessary for MLS prices to fluctuate within the same season in close relationship with world market prices.

8.6. It all goes to confirm

- Great expansion in filament polyester consumption
- Great expansion in polyester staple consumption
- Great expansion in imported short staple cotton

All expansions at the expense of MLS, LS, ELS Egyptian cotton varieties and in that order.

## Annex I

### Detailed Cost Analysis of Importing Short Staple Greek Cotton

1. The conventional wisdom is that the Egyptian Government levies and restrictions on imported cotton raise its cost by 10 cents per libra before it leaves the port, i.e. above the CIF price. These burdens are contributed by:
  - i. The five percent duty on cotton lint;
  - ii. Other associated levies and fees;
  - iii. Fumigation prior to shipment under the supervision of inspectors from Egypt's Ministry of Agriculture.
  - iv. Importers must pay for the airfare and per-diem for a team of inspectors for several weeks in a foreign country to oversee the pre-shipment fumigation.
  - v. Another fumigation is performed on arrival at the Egyptian port of entry.
2. An actual consignment of short staple Greek cotton was monitored in order to ascertain the real detailed costs of importation. Table 28 shows the actual costs incurred in clearing a large shipment of Greek cotton, totaling 8.190 cents/lb., not very much different from the presumed 10 cents/lb.
3. The customs duties at 5%, plus the service duties at 3% amount to 4.86 cents/lb and represent the largest burden of the total importing cost. Exemption of these duties in part or in total can be an effective way to lower the total cost of imported short staple cotton.
4. The second largest cost item is in-port unloading and re-loading and multiple transport. More efficient handling of the clearing process can reduce this item appreciably.
5. Fumigation costs stands at 1.05 % of the original CIF price, raising it by 0.66 cents/lb. However, fumigation at the port of Alexandria generates additional costly services that are added to the clearing bill. Canceling the second fumigation on arrival will not only reduce the cost of fumigation, but it will also remove extra associated costs. These include unloading bales from containers, transporting within the port area, loading into fumigation tanks, delays in port clearing incurring demurrage charges, loading back into trucks. The government could consider canceling the second fumigation on arrival since the pre-shipment fumigation was done under the supervision of inspectors from the Ministry of Agriculture's phytosanitary unit.
6. Inspection costs are significant. The importer initially paid only for the cost of visas and airfare for the government inspectors and per-diem was borne by the Government. Lately, however, importers are also required to cover per diem costs of inspectors overseas.



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**Table 1**  
**Cotton Statistics, World and Egypt (1900-2000)**

Season Period	Egyptian Cotton					World		
	Area	Yield	Production	Export	Consumption	Area	Yield	Production
	Feddans	Kentar/Feddan	1000 Kentars	1000 Kentars	1000 Kentars	1000 Acres	Lbs/Acre	1000 Bales
1900-1910	1 443 869	4.35	6233	6208	23	NA	NA	NA
1910-1920	1 596 120	3.93	6296	6244	41	NA	NA	NA
1920-1930	1 722 857	4.04	7005	6644	56	76 400	148	23761
1930-1940	1 716 673	4.73	8177	7951	356	80 336	171	28754
1940-1950	1 218 072	5.27	6390	5475	1011	65 054	197	22863
1950-1960	1 786 414	4.78	8532	6606	1951	81 642	241	41160
1960-1970	1 697 952	5.52	9275	5868	3268	79 820	300	50708
1970-1980	1 377 587	6.71	9162	3976	4862	80 002	362	60780
1980-1990	1 035 430	7.39	7686	2341	5386	80 627	446	74899
1990-2000	777 647	7.50	5833	1122	4236	82 134	511	87634
2000-2001	540 876	7.62	4123	1250	2506	81 415	514	87200
Maximum	2 082 439	8.64	10 574	8949	5839	89054	526	95174
Season	1930/31	1982/83	1980/81	1933/34	1981/82	1951/52	1997/98	1991/92
Minimum	540 876	3.13	4123	333	8	NA	NA	NA
Season	2000/01	1909/10	2000/01	1991/92	1900/01			

N.B. The actual record for minimum crop in Egypt was during the Second World War years because of disruption in export trade

**Table 2**  
**Egyptian Cotton Lint Statistics 1990-2000**  
**Thousand Kentars**

Season	CROP				EXPORTS				DOMESTIC MILLS				CARRY OVER			
	ELS	LS	MLS	Total	ELS	LS	MLS	Total	ELS	LS	MLS	Total	ELS	LS	MLS	Total
90/91	1653	2840	1347	5840	261	98	—	359	1263	2739	1253	5255	444	204	115	763
91/92	1795	2626	1334	5755	178	154	—	332	1520	2461	1341	5322	447	247	126	820
92/93	1820	4467	787	7074	186	158	16	360	724	3759	1198	5681	1300	873	471	2644
93/94	2429	4396	1401	8226	816	946	577	2339	1084	3140	1200	5424	1863	670	1660	3193
94/95	620	3294	1097	5011	562	686	83	1331	1403	1514	1144	4061	319	621	131	1071
95/96	749	2932	1082	4763	376	—	—	376	378	2621	1109	4108	315	1113	170	1598
96/97	1103	3870	1856	6829	361	564	4	929	306	2214	1505	4025	764	2043	797	3604
97/98	1457	3691	1611	6759	127	314	13	454	300	2737	1585	4622	1526	2096	545	4167
98/99	1128	2187	1210	4525	155	535	18	708	324	1894	1516	3734	1536	18	—	1554
99/00	518	3100	975	4593	256	345	45	646	285	1817	780	2882	871	119	5	995
00/01	619	2547	957	4123	682	814	132	1628	310	1400	820	2530	500	450	7	957

**N.B. Starting 1998/99 carry over is for trade companies only without spinning mills**

**Table 3**  
**Cost of Lint Delivered To Egyptian Spinning Mills**  
**Including All Expenses LE/Kentar**

Season	Base Price Egyptian Cotton			Total Cost Including Expenses LE/Ken				Total Cost of Lint LE/Ton				
	ELS	LS	MLS	ELS	LS	MLS	Imported	ELS	LS	MLS	Imported	Polyester
1990/91	276.0	257.0	207.0	284.4	265.4	217.0	233.0	5688	5308	4340	4660	4866
1991/92	337.7	308.7	270.0	349.3	320.3	280.0	284.5	6986	6406	5600	5690	5435
1992/93	433.5	305.5	300.0	444.1	316.1	310.0	278.8	8882	6322	6200	5576	4653
1993/94	351.0	256.0	250.0	358.3	263.3	260.0	284.0	7166	5266	5200	5680	4681
1994/95	380.0	350.0	314.0	390.6	360.6	324.0	338.0	7812	7212	6480	6760	6266
1995/96	532.0	441.0	367.0	542.0	451.0	377.0	394.0	10840	9020	7540	7880	7575
1996/97	498.5	378.5	340.0	522.1	402.1	350.0	395.0	10442	8042	7000	7900	4122
1997/98	427.3	311.0	277.0	443.3	327.0	387.0	----	8866	6540	7740	----	4428
1998/99	387.5	301.3	271.4	397.2	311.0	281.1	---	7944	6220	5622	----	3330
1999/00	337.3	296.0	262.4	345.8	304.5	270.9	222.0	6916	6090	5418	4440	3282
2000/01	395.4	348.3	316.7	422.9	356.7	324.2	291.0	8458	7133	6484	5820	3957

Total cost includes expenses as follows: Commission, weighing, CATGO, humidity testing, transport, insurance

Source: Misr Amria Spinning and Weaving Co.

**Table 4**  
**Domestic Spinning Mills**  
**Annual Consumption of Cotton Lint & Polyester Staple Fiber**

Crop Year	Consumption Cotton Lint Thousand Kentars / Year			Total Consumption Tons / Year		
	Egyptian	Imports	Total	Cotton	Polyester	Total
90/91	5255	1029	6284	314200	25000	339200
91/92	5322	1260	6582	329100	27000	356100
92/93	5681	730	6411	320550	28000	348550
93/94	5424	0	5424	271200	28000	299200
94/95	4061	800	4861	243050	27000	270050
95/96	4108	400	4508	225400	21000	246400
96/97	4025	0	4025	201250	22000	223250
97/98	4622	0	4622	231100	25000	256100
98/99	3734	0	3734	186700	30000	216700
99/00	2882	330	3212	160600	35000	195600
00/01	2530	500	3030	151500	40000	191500

**Table 5**  
**Exports of 100% Egyptian Cotton Ring Spun Yarns**  
**in the years 1999 and 2000 Tons / Year**

Ne Count Range	1999			2000			Cotton Varieties
	tons	Avg. Ne	Percent	tons	Avg. Ne	Percent	
Under 21	9645	14.8	30.7	13005	14.5	34.2	LS
21 to 30	9729	28.9	31.0	10342	28.8	27.2	
31 to 40	6181	36.9	19.7	7004	37.5	18.4	
41 to 50	1729	48.0	5.5	1824	48.4	4.8	
51 to 60	2261	58.4	7.2	2910	58.5	7.6	ELS
61 to 70	502	68.4	1.6	821	69.1	2.2	
71 to 80	722	77.3	2.3	1075	76.0	2.8	
81 to 90	196	84.9	0.6	402	84.5	1.1	
Over 90	453	97.2	1.4	675	97.8	1.8	
<b>Total</b>	<b>31418</b>	<b>32.4</b>	<b>100</b>	<b>38058</b>	<b>32.7</b>	<b>100.0</b>	

**Table 6**  
**Cost of Lint to Produce One Ton of 100% Cotton Yarns LE/Ton**  
**2000/01 Season**

Variety G + 1/4	LE/Kentar Mill Dlvry	LE/Ton	Waste Factor		LE/Ton Yarn		Less Salvaged Waste LE/Ton		LE/Ton Yarn Net		% Interest	LE/Ton Yarn Net Including interest	
			Carded	Combed	Carded	Combed	Carded	Combed	Carded	Combed		Carded	Combed
Greek	291.000	5820	1.11	1.28	6460	7449	210	810	6250	6639	6	6625	7037
G 83	324.243	6484	1.15	1.30	7456	8429	350	810	7106	7619	6	7532	8076
G 89	356.793	7135	1.13	1.28	8062	9132	310	910	7752	8222	6	8217	8715
G 70	422.933	8458	1.13	1.28	9557	10826	310	910	9247	9916	6	9801	10510
Polyester		3957	1.03	1.03	4075	4075	100	100	3975	3975	3	4094	4094
Noils		4200	1.05		4410		60		4350		3	4480	

**Table 7**  
**Net Cost of Raw Material Including Finance**  
**To Produce One Ton of Blended Yarn LE/Ton**  
**2000/2001 Season**

Type	% Cotton	100	80	65	60	50	35	0
	% Polyester	0	20	35	40	50	65	100
	Blend	100% C	80/20	65/35	60/40	50/50	35/65	100% P
Carded	Greek	6625	6118	5739	5612	5359	4979	
	G 83	7532	6844	6328	6156	5813	5297	
	G 89	8217	7392	6774	6567	6155	5537	
	Polyester							4094
COMBED	Greek	7037	6448	6007	5859	5565	5124	
	G 83	8076	7279	6682	6483	6085	5487	
	G 89	8715	7790	7097	6866	6404	5711	
	G 70	10510	9226	8264	7943	7302	6339	

**Table 8**  
**Original Cost Calculations Open End Spun Yarns LE/Ton Company C1**

ITEM \ NE		8	10	12	14	16	20	24	30
<b>Labor</b>	<b>Direct</b>	193	209	236	265	296	372	442	558
	<b>Indirect</b>	67	73	82	92	103	129	153	194
	<b>Transport</b>	33	36	40	45	51	64	76	96
	<b>Total</b>	293	318	358	402	450	565	671	848
<b>Maintenance</b>	<b>Spare Parts</b>	30	33	37	41	46	58	69	87
	<b>Workshop</b>	54	59	66	75	83	105	124	157
	<b>Services</b>	84	91	103	115	129	162	192	242
	<b>Total</b>	168	183	206	231	258	325	385	486
<b>Accessories</b>		20	23	26	28	32	40	47	60
<b>Utilities</b>	<b>Electricity</b>	155	168	190	213	237	299	355	448
	<b>Cooling</b>	18	20	22	26	28	35	43	54
	<b>Total</b>	173	188	212	239	265	334	398	502
<b>Depreciation</b>	<b>Buildings</b>	61	66	75	84	94	118	140	177
	<b>Machinery</b>	57	62	70	78	87	110	131	165
	<b>Total</b>	118	128	145	162	181	238	271	342
<b>Total Manufacturing</b>		772	840	947	1062	1186	1492	1772	2238
<b>Admin. &amp; Sales O'head</b>		140	152	171	192	215	270	321	405
<b>Financial O'head</b>		2240	2264	2302	2343	2387	2495	2594	2759
<b>Total MFR + O'heads</b>		3152	3256	3420	3597	3788	4257	4687	5402

C1

**Table 9**  
**Revised Cost Calculations Open End Yarns LE/Ton Company C1**

ITEM \ NE		8	10	12	14	16	20	24	30
<b>Labor</b>	<b>Direct</b>	138	173	208	243	277	346	416	519
	<b>Indirect</b>	48	60	72	84	96	120	144	180
	<b>Transport</b>	23	29	35	40	46	58	70	87
	<b>Total</b>	209	262	315	367	419	524	630	786
<b>Maintenance</b>	<b>Spare Parts</b>	21	26	32	37	43	52	64	78
	<b>Workshops</b>	29	36	43	50	57	72	86	108
	<b>Services</b>	77	96	115	134	153	192	230	288
	<b>Total</b>	127	158	190	221	253	316	380	474
<b>Accessories</b>		11	14	17	19	22	28	34	42
<b>Utilities</b>	<b>Electricity</b>	107	134	160	187	214	168	320	402
	<b>Cooling</b>	11	13	16	19	21	26	32	39
	<b>Total</b>	118	147	176	206	235	294	352	441
<b>Depreciation</b>	<b>Buildings</b>	42	53	63	75	86	106	126	159
	<b>Machinery</b>	53	66	79	92	105	132	158	198
	<b>Total</b>	95	119	142	167	191	238	284	357
<b>Total Manufacturing</b>		560	700	840	980	1120	1400	1680	2100
<b>Admin. &amp; Sales O'head</b>		311	317	324	331	338	351	364	385
<b>Financial O'head</b>		381	389	397	405	413	429	446	470
<b>Total MFR + O'heads</b>		1252	1406	1561	1716	1871	2180	2490	2955

N.B. To obtain total cost: ADD cost of Raw Materials - Packing Cost - Deferred Payment Cost (if any) - Commission (if any)

**Table 10**  
**Original Cost Calculations Ring Spun Carded Yarns LE/TON Company C1**

ITEM \ NE		14	16	20	24	30	36	40
<b>Labor</b>	<b>Direct</b>	380	402	449	499	768	896	986
	<b>Indirect</b>	130	138	154	171	206	240	264
	<b>Transport</b>	67	71	79	88	125	146	161
	<b>Total</b>	577	611	682	758	1099	1282	1411
<b>Maintenance</b>	<b>Spare Parts</b>	39	41	46	51	86	100	110
	<b>Workshops</b>	45	47	53	58	58	67	74
	<b>Services</b>	164	174	194	215	205	239	263
	<b>Total</b>	248	262	293	321	349	406	447
<b>Accessories</b>		55	59	64	72	141	165	180
<b>Utilities</b>	<b>Electricity</b>	204	216	242	268	408	475	523
	<b>Cooling</b>	24	26	28	32	42	49	53
	<b>Total</b>	228	242	270	300	450	524	576
<b>Depreciation</b>	<b>Buildings</b>	75	80	89	99	85	100	110
	<b>Machinery</b>	115	122	136	151	215	251	276
	<b>Total</b>	190	202	225	250	300	351	386
<b>Total Manufacturing</b>		1298	1374	1534	1701	2339	2728	3000
<b>Admin. &amp; Sales O'head</b>		235	249	278	308	423	494	543
<b>Financial O'head</b>		2614	2641	2698	2758	3200	3338	3434
<b>Total MFR + O'heads</b>		4147	4264	4510	4767	5962	6560	6977

55

Table 11

## Revised Cost Calculations Ring Spun Carded Cotton Yarns LE/Ton Company C1

ITEM \ NE		14	16	20	24	30	36	40
Labor	Direct	364	416	520	623	780	934	1040
	Indirect	135	155	194	232	290	349	388
	Transport	66	75	94	114	142	171	188
	Total	565	646	808	969	1212	1454	1616
Maintenance	Spare Parts	57	66	82	99	123	147	164
	Workshops	36	42	52	62	78	93	104
	Services	156	179	224	269	336	404	448
	Total	249	287	358	430	537	644	716
Accessories		44	51	65	78	97	117	130
Utilities	Electricity	212	241	302	360	450	540	604
	Cooling	22	23	28	36	45	54	56
	Total	234	264	330	396	495	594	660
Depreciation	Buildings	74	85	106	137	171	206	212
	Machinery	136	155	193	222	278	333	386
	Total	210	240	299	359	449	539	598
Total Manufacturing		1302	1488	1860	2232	2790	3348	3720
Admin. & Sales O'head		377	386	480	497	524	550	568
Financial O'head		461	472	580	608	640	673	695
Total MFR + O'heads		2140	2346	2920	3337	3954	4571	4983

To obtain total cost ADD Cost of Raw Material - Packing Cost- Deferred Payment Cost (if any)  
Commission (if any)

Table 12

## Original Cost Calculations Ring Spun Combed Yarns LE/Ton Company C1

ITEM \ NE		20	24	30	36	40	50	60	70	80
Labor	Direct	771	821	993	1121	1218	1459	1757	2070	2334
	Indirect	265	282	266	301	327	391	471	555	626
	Transport	136	145	162	183	199	238	287	338	381
	Total	1172	1248	1421	1605	1744	2088	2515	2963	3341
Maintenance	Spare Parts	78	83	111	126	136	163	197	232	262
	Workshops	90	96	74	84	91	109	131	154	174
	Services	333	354	265	299	325	389	469	552	622
	Total	501	534	450	409	552	661	797	938	1058
Accessories		111	119	182	206	223	268	323	380	429
Utilities	Electricity	415	442	527	595	646	774	932	1098	1239
	Cooling	49	53	54	61	66	79	96	113	127
	Total	464	495	581	656	712	853	1028	1211	1366
Depreciation	Buildings	153	162	110	125	135	162	195	230	259
	Machinery	234	249	278	314	341	408	492	579	653
	Total	387	411	388	439	476	570	687	809	912
Total Manufacturing		2635	2807	3022	3315	3707	4440	5350	6301	7106
Admin. & Sales O'head		477	508	547	618	671	804	968	1140	1167
Financial O'head		3590	3650	4063	4201	4306	4986	5308	5645	5895
Total MFR + O'heads		6702	6965	7632	8134	8684	10230	11626	13186	14168

**Table 13**  
**Revised Cost Calculations**  
**Ring Spun Combed Cotton Yarns LE/Ton Company C1**

ITEM \ NE		20	24	30	36	40	50	60	70	80
Labor	Direct	831	940	1105	1269	1379	1645	1915	2185	2455
	Indirect	180	216	270	324	360	450	540	630	720
	Transport	80	96	120	144	160	200	240	280	320
	Total	1091	1252	1495	1737	1899	2295	2695	3095	3495
Maintenance	Spare Parts	80	96	120	144	160	200	240	280	320
	Workshops	52	62	78	93	104	130	156	182	208
	Services	220	264	330	396	440	550	660	770	880
	Total	352	422	528	633	704	880	1056	1232	1408
Accessories		60	72	90	108	120	150	180	210	240
Utilities	Electricity	300	360	450	540	600	750	900	1050	1200
	Cooling	28	33	42	50	56	70	84	98	112
	Total	328	393	492	590	656	820	984	1148	1312
Depreciation	Buildings	106	127	159	191	212	265	318	371	424
	Machinery	383	426	486	545	489	700	807	914	1027
	Total	489	553	645	740	801	965	1125	1285	1451
Total Manufacturing		2320	2692	3250	3808	4180	5110	6040	6970	7900
Admin. & Sales O'head		445	463	489	516	614	658	702	832	876
Financial O'head		545	566	599	631	750	804	859	1017	1071
Total MFR + O'heads		3310	3721	4338	4955	5544	6572	7601	8819	9847

To obtain total cost: ADD cost of Raw Material - Packing Cost - Deferred Payment Cost (if any)  
- Commission (if any)

**Table 14**  
**Comparative Manufacturing and Overhead Costs**  
**Carded Ring Spun Yarns LE/Ton**

Count Carded		20 KG89				24 KG89				30 KG89				36 KG89				40 KG89			
Company		C1	C2	C3	C4																
Labor	Direct	520				623				780				934				1040			
	Indirect	194				232				290				349				388			
	Transport	94				114				142				171				188			
	<b>Total</b>	<b>808</b>	<b>870</b>	<b>540</b>	<b>840</b>	<b>969</b>	<b>980</b>	<b>704</b>	<b>945</b>	<b>1212</b>	<b>1130</b>	<b>856</b>	<b>1210</b>	<b>1454</b>	<b>1270</b>	<b>931</b>	<b>1390</b>	<b>1616</b>	<b>1370</b>	<b>1081</b>	<b>1540</b>
Maintenance	Space Parts	82				99				123				147				164			
	Workshop	52				62				78				93				104			
	Services	224				269				336				404				448			
	<b>Total</b>	<b>358</b>	<b>150</b>	<b>112</b>		<b>430</b>	<b>170</b>	<b>146</b>		<b>537</b>	<b>190</b>	<b>173</b>		<b>644</b>	<b>210</b>	<b>193</b>		<b>716</b>	<b>230</b>	<b>224</b>	
Accessories		65	270	145		78	270	188		97	350	223		117	390	249		130	420	289	
Utilities	Electricity	302				360				450				540				604			
	Cooling	28				36				45				54				56			
	<b>Total</b>	<b>330</b>	<b>420</b>	<b>460</b>		<b>396</b>	<b>480</b>	<b>588</b>		<b>495</b>	<b>560</b>	<b>698</b>		<b>594</b>	<b>630</b>	<b>738</b>		<b>660</b>	<b>680</b>	<b>905</b>	
Depreciation	Buildings	106				137				171				206				212			
	Machinery	193				222				278				333				386			
	<b>Total</b>	<b>299</b>	<b>250</b>	<b>555</b>		<b>359</b>	<b>280</b>	<b>727</b>		<b>449</b>	<b>320</b>	<b>882</b>		<b>539</b>	<b>360</b>	<b>932</b>		<b>598</b>	<b>380</b>	<b>1118</b>	
Total Manufacturing	<b>Total</b>	<b>1860</b>	<b>1960</b>	<b>1812</b>	<b>1905</b>	<b>2232</b>	<b>2280</b>	<b>2353</b>	<b>2155</b>	<b>2790</b>	<b>2550</b>	<b>2832</b>	<b>2730</b>	<b>3348</b>	<b>2860</b>	<b>3043</b>	<b>3135</b>	<b>3720</b>	<b>3080</b>	<b>3617</b>	<b>3540</b>
Admin. & Sales O'Head	<b>Total</b>	<b>480</b>		<b>240</b>	<b>95</b>	<b>497</b>		<b>412</b>	<b>107</b>	<b>524</b>		<b>437</b>	<b>137</b>	<b>550</b>		<b>448</b>	<b>157</b>	<b>568</b>		<b>473</b>	<b>177</b>
Financial O'Head		<b>580</b>		<b>410</b>	<b>1219</b>	<b>608</b>		<b>693</b>	<b>1375</b>	<b>640</b>		<b>736</b>	<b>1753</b>	<b>673</b>		<b>754</b>	<b>2007</b>	<b>695</b>		<b>803</b>	<b>2266</b>
<b>Total MFR+O'Heads</b>		<b>2920</b>		<b>2462</b>	<b>3219</b>	<b>3337</b>		<b>3458</b>	<b>3635</b>	<b>3954</b>		<b>4005</b>	<b>4620</b>	<b>4571</b>		<b>4245</b>	<b>5299</b>	<b>4983</b>		<b>4893</b>	<b>5983</b>

To obtain total cost: ADD cost of Raw Material - Packing Cost - Deferred Payment Cost (if any) - commission (if any)

**Table 15**  
**Comparative Manufacturing and Overhead Costs**  
**Combed Ring Spun Yarns LE/Ton**

NE		40C G89			50C G89			60C G89			70C G70			80C G70			100C G70		
ITEM	Company	C1	C3	C4	C1	C3	C5	C1	C3	C5	C1	C3	C5	C1	C3	C5	C1	C3	C5
Labor	Direct	1375			1645			1915			2185			2455			2995		
	Indirect	360			450			540			630			720			900		
	Transport	160			200			240			280			320			400		
	Total	1895	1200	1750	2295	1489		2695	1762		3095	2056		3495	2369		4295	3047	
Maintenance	Spare Parts	160			200			240			280			320			400		
	Workshop	104			130			156			182			208			260		
	Services	440			550			660			770			880			1100		
	Total	704	245		880	309		1056	365		1232	426		1408	491		1760	632	
Accessories		120	318		150	398		180	472		210	550		240	634		300	815	
Utilities	Electricity	600			750			900			1050			1200			1500		
	Cooling	56			70			84			98			112			140		
	Total	656	1000		820	1245		984	1474		1148	1719		1312	1981		1640	2547	
Depreciation	Buildings	212			265			318			371			424			530		
	Machinery	489			700			807			914			1027			1235		
	Total	801	1231		965	1539		1125	1821		1285	2125		1451	2448		1765	3149	
Total Manufacturing		4180	3994	4125	5110	4980		6040	5894		6970	6876		7900	7923		9760	10190	
Admin. & Sales O'Head		614	526	206	658	593		702	637		832	676		876	734		965	843	
Financial O'Head		750	800	2645	804	1065		859	1145		1017	1230		1071	1457		1179	1518	
Total MFR+O'Heads		5544	5320	6976	6572	6638	7580	7601	7676	9330	8819	8782	11030	9847	10114	14000	11904	12551	21410

To obtain total cost: ADD cost of Raw Material - Packing Cost - Deferred Payment Cost (if any) - commission (if any)

**Table 16**  
**Comparative Manufacturing and Overhead Costs**  
**Ne 30 Open End Spun Yarn LE / Ton**

<b>Company</b>	<b>C 1</b>	<b>C 6</b>
Labour	786	663
Maintenance	474	556
Accessories	42	NA
Utilities	441	675
Depreciation	337	651
Total Manufacturing	2100	2545
Admin. & Sales O'head	385	99
Financial O'head	470	NA
Total MFR+O'heads	2955	NA

**Table 17**  
**Comparative Manufacturing and Overhead Costs**  
**Ne 30 Ring Spun Carded LE/Ton**

<b>Company</b>	<b>C 1</b>	<b>C 2</b>	<b>C 3</b>	<b>C 4</b>	<b>C 6</b>	<b>C 7</b>
Labour	1212	1130	856	1210	579	NA
Maintenance	537	190	173	NA	650	NA
Accessories	97	350	223	NA	NA	NA
Utilities	495	560	698	NA	850	NA
Depreciation	449	320	882	NA	782	NA
Total Manufacturing	2790	2550	2832	2730	2861	3001
Admin. & Sales O'head	524	NA	437	137	349	230
Financial O'head	640	NA	736	1753	0	834
Total MFR+O'heads	3954	NA	4005	4620	3210	4065

**Table 18****Comparative Manufacturing and Overhead Costs  
Ne 30 Ring Spun COMBED LE/Ton**

<b>Company</b>	<b>C 1</b>	<b>C 2</b>	<b>C 3</b>	<b>C 4</b>	<b>C 7</b>
Labour	1495		1266	1255	
Maintenance	528		262		
Accessories	90		339		
Utilities	492		1058		
Depreciation	645		1308		
Total Manufacturing	3250	3180	4233	3125	3840
Admin. & Sales O'head	566	NA	553	161	230
Financial O'head	690	NA	1000	2064	963
Total MFR+O'heads	4506	NA	5786	5350	5033

**Table 19**  
**Comparative Packing Costs**  
**for 100% cotton and blended spun yarns**  
**for Domestic market and Export LE/Ton**

<b>Company</b>	<b>Domestic</b>	<b>Export</b>
C 1	152	220
C 2	N A	455
C 3	N A	N A
C 4	130	275
C 5	N A	N A
C 6	N A	N A
C 7	159	383

**Table 20**  
**Base Domestic Spinning Mill Delivered Price 2000/2001 LE/Kentar**

Variety G + 3/8	Farm Gate	Base Domestic Spinning Mill			Subsidy if approved LE/Ken
		Public Cotton Trader		Private Trader	
		Public Spinner	Private Spinner	Private Spinner	
G 70	395.39	367.2	395.39	415.39	28.19
G 88	391.04	359.55	391.04		31.49
G 86	370.67	344.25	370.67		26.42
G 89	348.26	336.6	348.26	358.26	11.66
G 85	339.25	328.95	339.25	349.25	10.30
G 80	314.55	267.75	314.55	324.55	46.80
G 83	316.70	267.75	316.70	326.70	48.95

**N.B. :**

1. Public sector spinners gave an undertaking to trade companies promising to pay the difference between farm gate price and mill delivered price in case that difference (subsidy) is not born by the government
2. Private sector spinners were promised to be refunded by the "subsidy" in case of its being born by the government.

**Table 21**  
**Comparison of Costs with Net Domestic & Export Prices Open End Spun 100%**  
**Cotton Yarns**  
**2000 / 2001**

Ne	TCF Export FOB 90 DAYS				Domestic LE/Ton		Cost LE/Ton
	USD/KG Gross	USD/KG Discounted 5%	USD/KG Net - 3 %	LE / Ton Net	Gross	Discounted - 17 %	100% Cotton 50G/50W
6	2.33	2.21	2.14	8266	7870	6530	7127
8	2.37	2.25	2.18	8408	8020	6660	7299
10	2.41	2.28	2.22	8550	8170	6780	7471
12	2.45	2.32	2.25	8692	8320	6910	7643
14	2.49	2.36	2.29	8833	8480	7040	7815
16	2.53	2.40	2.33	8975	8630	7160	7987
18	2.57	2.44	2.36	9117	8800	7300	8159
20	2.62	2.48	2.41	9295	8930	7410	8332
24	2.71	2.57	2.49	9614	9140	7590	8676

USD = 3.85 LE

TCF Export Price 100% cotton on condition of having a minimum of 50% recycled waste

For export packing add 68 LE/Ton to the costs shown

**Table 22**  
**Comparison of Costs with Net Domestic & Export Prices Ring Spun Carded 100% MLS**  
**Egyptian Cotton Yarns**  
**2000 / 2001**

Ne	TCF Export MLS FOB 90 Days				Domestic LE/Ton		Cost LE/Ton	
	USD/KG Gross	USD/KG Discounted - 5%	USD/KG Net - 3%	LE / Ton Net	Gross	Discounted - 7 %	Greek 100 %	G 83 100 %
16	2.73	2.59	2.51	9685	9663	8987	9482	10525
18	2.78	2.64	2.56	9862	9835	9147	9696	10788
20	2.83	2.68	2.60	10040	10001	9307	9910	10953
24	2.93	2.78	2.69	10394	10368	9642	10338	11381
30	3.09	2.93	2.84	10962	10911	10147	10980	12023
32	3.23	3.06	2.97	11459			11193	12336
36	3.43	3.25	3.16	12168			11621	12664
40	3.63	3.44	3.34	12878			12049	13092

**USD = 3.85 LE**

**TCF Export Price is for carded Upper Egypt cotton varieties**

**For export packing add 68 LE/Ton to the costs shown**

**Table 23**  
**Comparison of Costs with Net Domestic & Export Prices Ring Spun Carded 100% LS Egyptian Cotton Yarns**  
**2000 / 2001**

Ne	TCF Export LS FOB 90 Days				Domestic LE/Ton		Cost LE/Ton G 89
	USD/KG Gross	USD/KG Discounted - 5%	USD/KG Net - 3%	LE / Ton Net	Gross	Discounted - 7 %	
16							11313
18							11527
20							11741
24	3.08	2.92	2.83	10927	10901	10138	12169
30	3.25	3.08	2.99	11530	11480	10676	12810
32	3.40	3.23	3.13	12062			13024
36	3.61	3.42	3.32	12807	12484	12100	13452
40	3.82	3.62	3.52	13552	13195	12271	13880

USD = 3.85 LE

TCF Export Price for carded Lower Egypt cotton varieties

For export packing add 68 LE/Ton to the total costs shown

**Table 24**  
**Comparison of Costs with Net Domestic & Export Prices Ring Spun Combed 100% SS, MLS,**  
**LS, ELS Yarns**  
**2000 / 2001**

Ne	TCF Export FOB 90 Days				Domestic LE/Ton		Cost LE/Ton			
	USD/KG Gross	USD/KG Discounted - 5%	USD/KG Net - 3%	LE / Kg Net	Gross	Discounted - 7 %	Greek SS	G 83 MLS	G 89 LS	G 70 ELS
20							10980	12176		
24	3.53	3.35	3.25	12523	12728	11837	11408	12608	13339	
30	3.70	3.51	3.41	13126	13250	12328	12050	13245	13980	
36	4.06	3.85	3.74	14403	14128	13140	12692	13887	14622	
40	4.27	4.05	3.93	15148	14870	13829	13119	14315	15048	
50	5.26	4.99	4.84	18661	18717	17406			16118	18183
60	5.76	5.47	5.30	20435	20493	19058			17189	19253
70	6.28	5.96	5.78	22280	22330	20767			18258	20322
80	6.77	6.43	6.23	24018	24106	22419			19327	21391
90	7.28	6.91	6.70	25827	25882	24070				22461
100	7.79	7.40	7.17	27637	27719	25779				23531

USD = 3.85 LE

TCF Export Price for Lower Egypt varieties LS upto Ne 40, ELS Ne 50 upwards

For domestic packing deduct 68 LE/Ton from total costs shown

**Table 25**  
**Comparison of Costs with net Export Prices**  
**Blended Ring Spun Carded cotton / polyester yarns**  
**2000 / 2001**

Ne	TCF Export FOB 90 Days				Cost LE/Ton		
	USD/KG Gross	USD/KG Discounted - 10%	USD/KG Net - 3%	LE / Ton Net	Greek/P	G 83 / P	G 89 / P
24	2.31	2.08	2.010	7764	8950	9472	9865
30	2.44	2.19	2.13	8200	9592	10114	10507
36	2.71	2.43	2.36	9108	10233	10755	11149
40	2.87	2.58	2.50	9646	10661	11183	11577

USD = 3.85 LE

TCF Export Prices for 50 / 50 carded cotton / polyester

For domestic packing deduct 68 LE/Ton from total costs shown

P stands for Polyester

**Table 26**  
**Comparison of Costs with Net Export Prices**  
**Blended Ring Spun combed cotton / polyester yarns**  
**2000 / 2001**

Ne	TCF Export FOB 90 Days				Cost LE/Ton			
	USD/KG Gross	USD/KG Discounted - 10%	USD/KG Net - 3%	LE / Kg Net	Greek	G 83 / P	G 89 / P	G 70 / P
24	2.53	2.27	2.11	8152	9451	10049	10416	
30	2.66	2.39	2.32	8940	10093	10691	11058	
36	2.93	2.63	2.55	9847	10735	11333	11700	
40	3.09	2.78	2.69	10385	11163	11761	12127	
50	3.95	3.55	3.44	13276			13197	14230
60	4.32	3.88	3.77	14519			14266	15299
70	4.71	4.23	4.11	15830			15336	16369
80	5.08	4.57	4.43	17074			16406	17438
90	5.46	4.91	4.76	18351				18508
100	5.84	5.25	5.09	19628				19577

**USD = 3.85 LE**

**TCF Export Prices for 50 / 50 combed cotton / polyester**

**For Domestic packing deduct 68 LE/Ton from total costs shown**

**P stands for Polyester**

Table 27

Egyptian Yarn Exports and Quota Allowances in the European Union  
and the United States. 1984-2000. Tons/year

Year	European Union			United States		
	Quota	Shipped	Percent	Quota	Shipped	Percent
1984	18,000	19,384	108	3,636	3,871	106
1985	18,500	15,714	85	3,864	2,071	54
1986	24,110	24,810	103	4,091	4,561	111
1987	24,110	32,205	134	5,000	6,395	128
1988	29,500	21,103	72	5,318	1,594	30
1989	30,500	38,848	127	5,636	2,460	44
1990	35,000	32,815	94	5,633	1,940	34
1991	37,295	28,744	77	5,993	5,992	100
1992	40,000	31,888	80	6,377	4,438	70
1993	41,400	30,333	73	6,785	6,184	91
1994	44,609	55,117	124	7,219	6,277	87
1995	47,270	35,254	75	7,797	7,145	92
1996	52,600	26,346	50	8,420	3,751	45
1997	54,441	45,336	83	9,094	6,921	76
1998	56,500	29,597	52	10,018	11,132	111
1999	58,500	20,273	35	11,036	5,799	53
2000	60,548	22,945	38	12,157	7,733	64

Table 28

Detailed Cost Analysis of Importing Short Staple Greek Cotton (December 2000)

Item	Unit	Amount	Percent	Cents/lb	Exchange rate
Net Net Weight	tons kentars	2478.33 49566.60			
<b>Net total value, CIF</b>	<b>USD</b>	<b>3422323.50</b>	<b>100.00</b>	<b>62.77</b>	Exchange rate: 3.735
	<b>LE</b>	<b>12782087.00</b>	<b>100.00</b>		
Bank commission and charges	LE	181.568	1.42	0.89	
Customs Duty @ 5%	LE	619.065	4.84		Exchange rate: 3.55115
Service Duty @ 3%	LE	371.439	2.91		
Other Charges	LE	848	0.01		
<b>Total duties</b>	<b>LE</b>	<b>991.352</b>	<b>7.76</b>	<b>4.86</b>	
Fumigation	LE	134.280	1.05	0.66	
Travel Expenses-Inspectors	LE	15.649	0.12	0.08	
In-port unloading and transport	LE	301.480	2.36	1.48	Alexandria port
Civil Defense - Fire Dept.	LE	21.996	0.17	0.11	
Miscellaneous	LE	21.651	0.17	0.11	
<b>Total Expenses</b>	<b>LE</b>	<b>1.667.976</b>	<b>13.05</b>	<b>8.17</b>	
<b>Total Value - Landed Duty Paid</b>	<b>LE</b>	<b>14450063</b>	<b>113.05</b>	<b>70.80</b>	cents per libra
Unit Cost per Kentar, LDP	LE	291.53		70.80	

Product Description:

Greek Cotton            Crop 2000 / 2001  
 Grade:                    SLM (Strict Low Middling)  
 Staple:                    1"+3/32 (27.78 mm.) (Actual 28.2 mm)  
 Micronaire:              4.0 to 4.8; average 4.4 (Actual 3.6)  
 Maximum Sugar Content: 0.5%  
 Maximum Trash Content: 2.3%  
 Fiber Strength:          22 gm/tex. (Actual 25.3)  
 Date of Shipment:        December 2000

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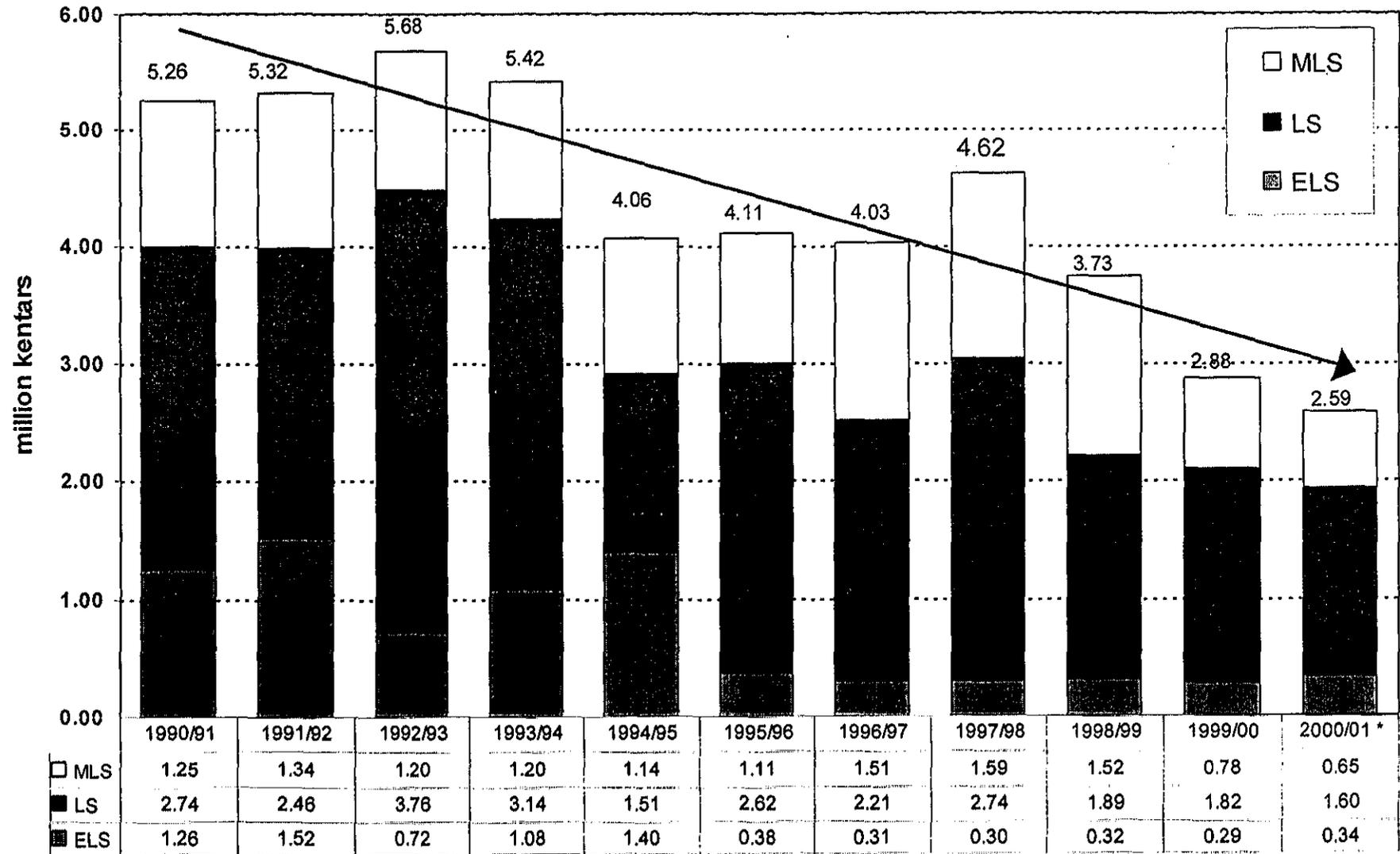
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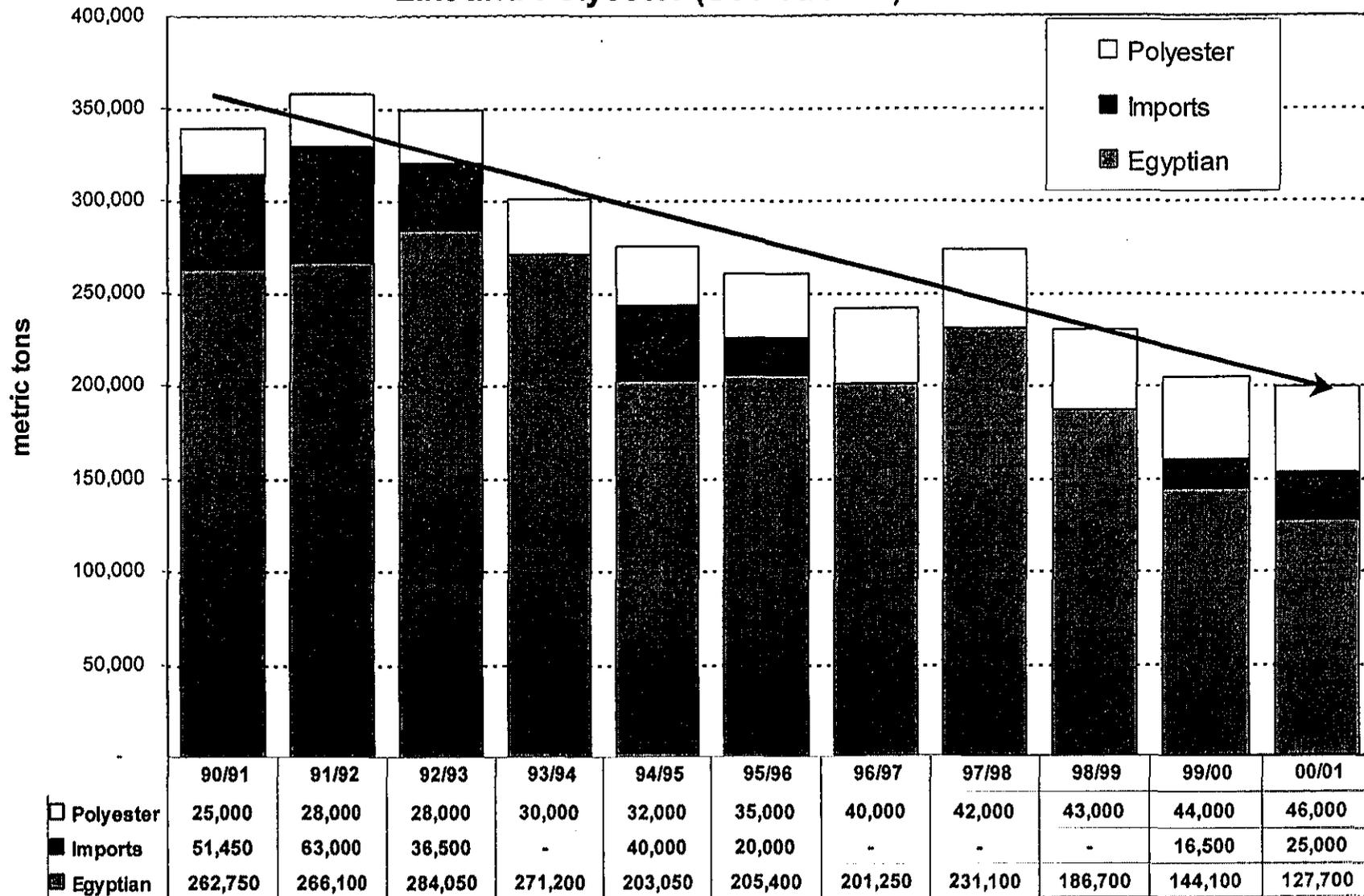
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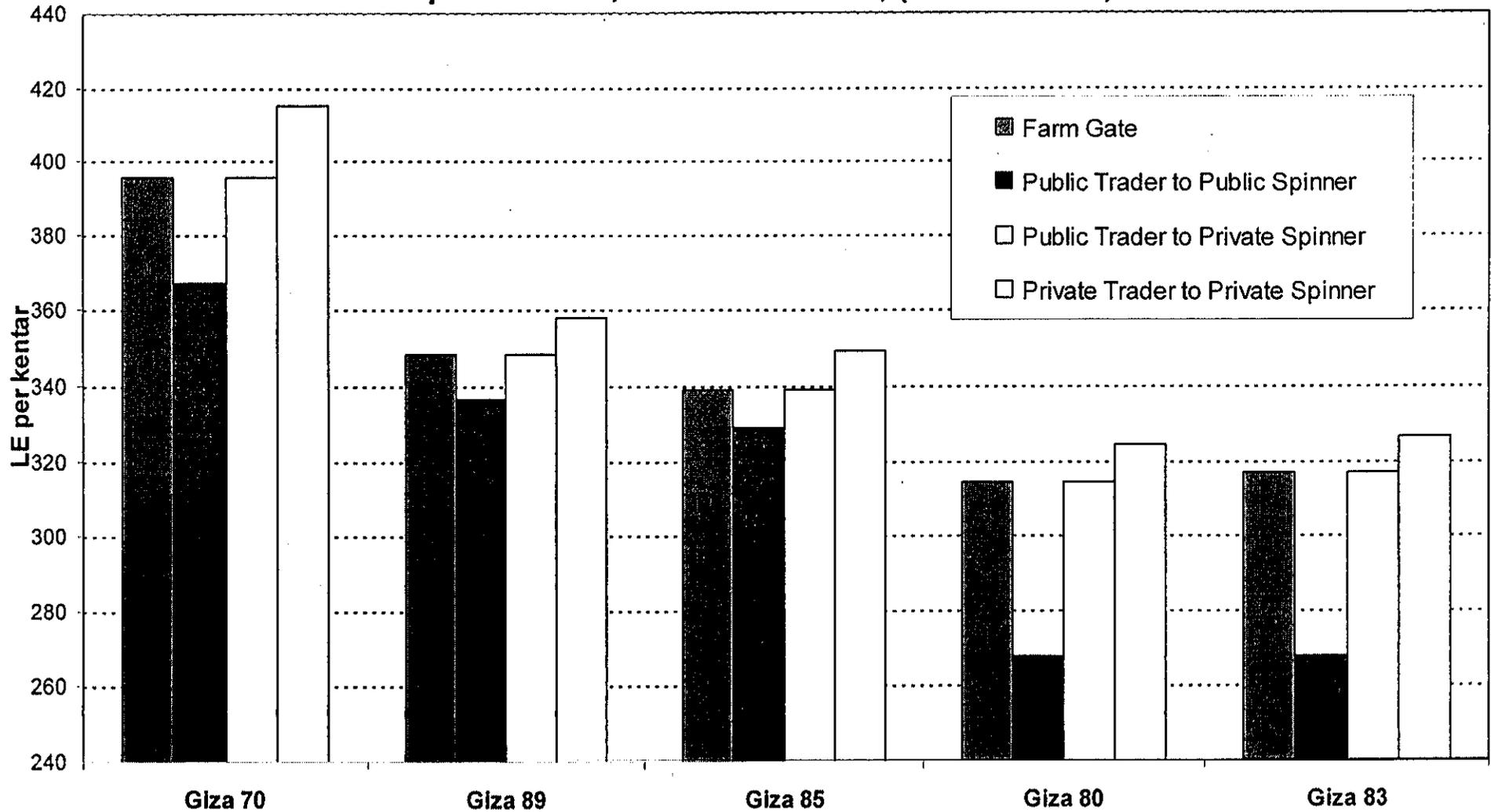
Figure 1. Cotton Deliveries to Domestic Mills, 1990-2001. (see Table 2)



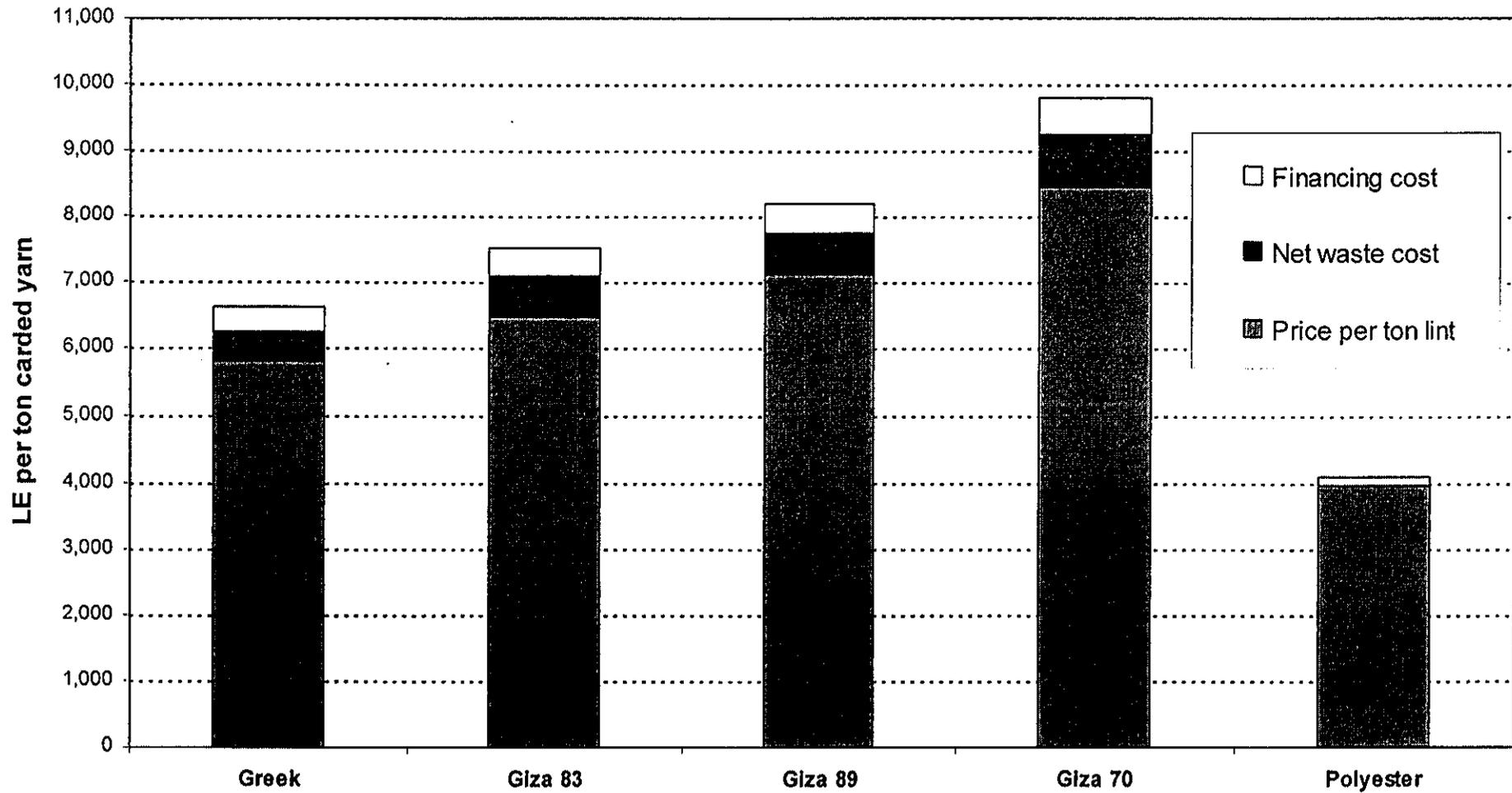
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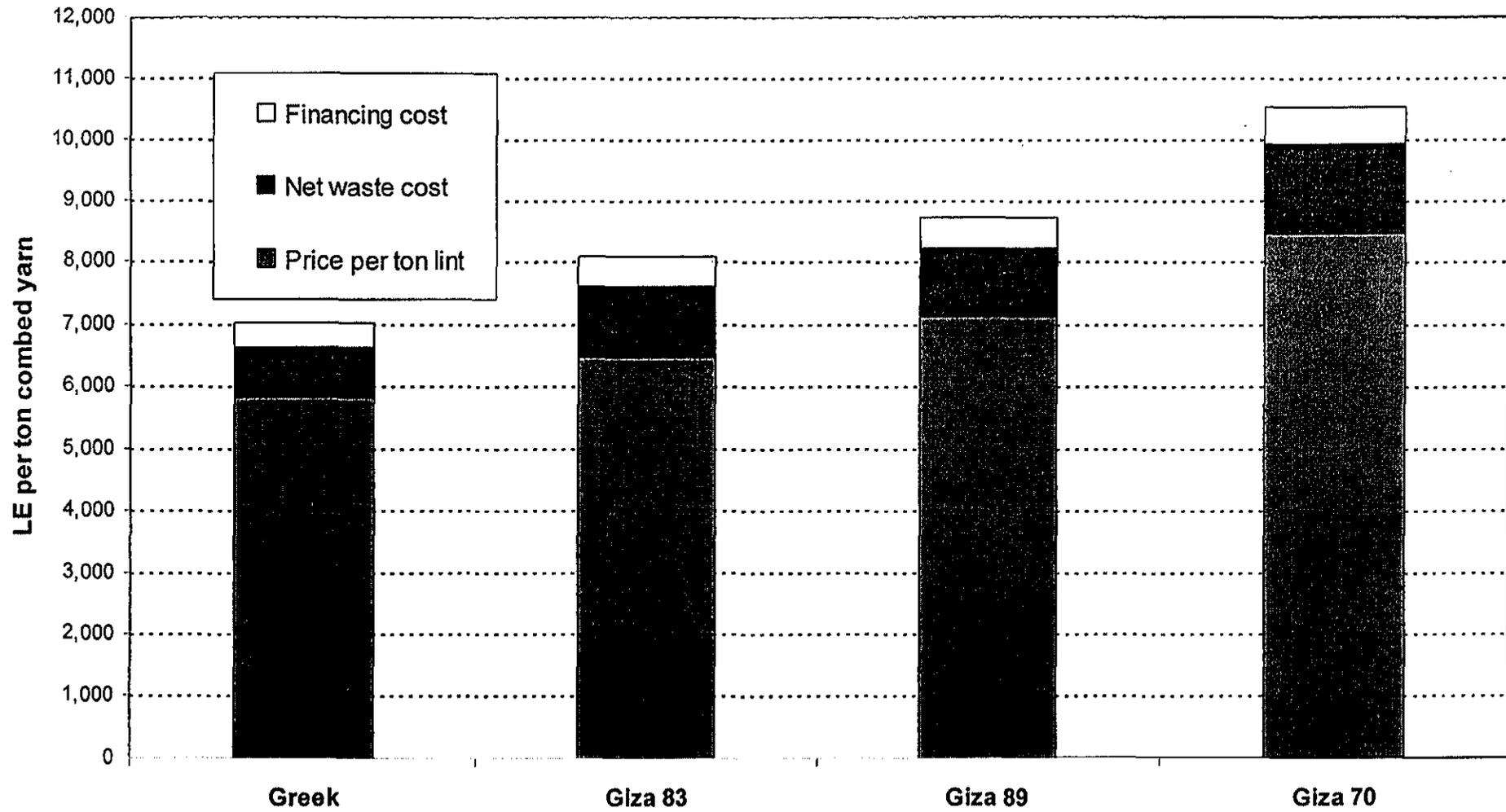


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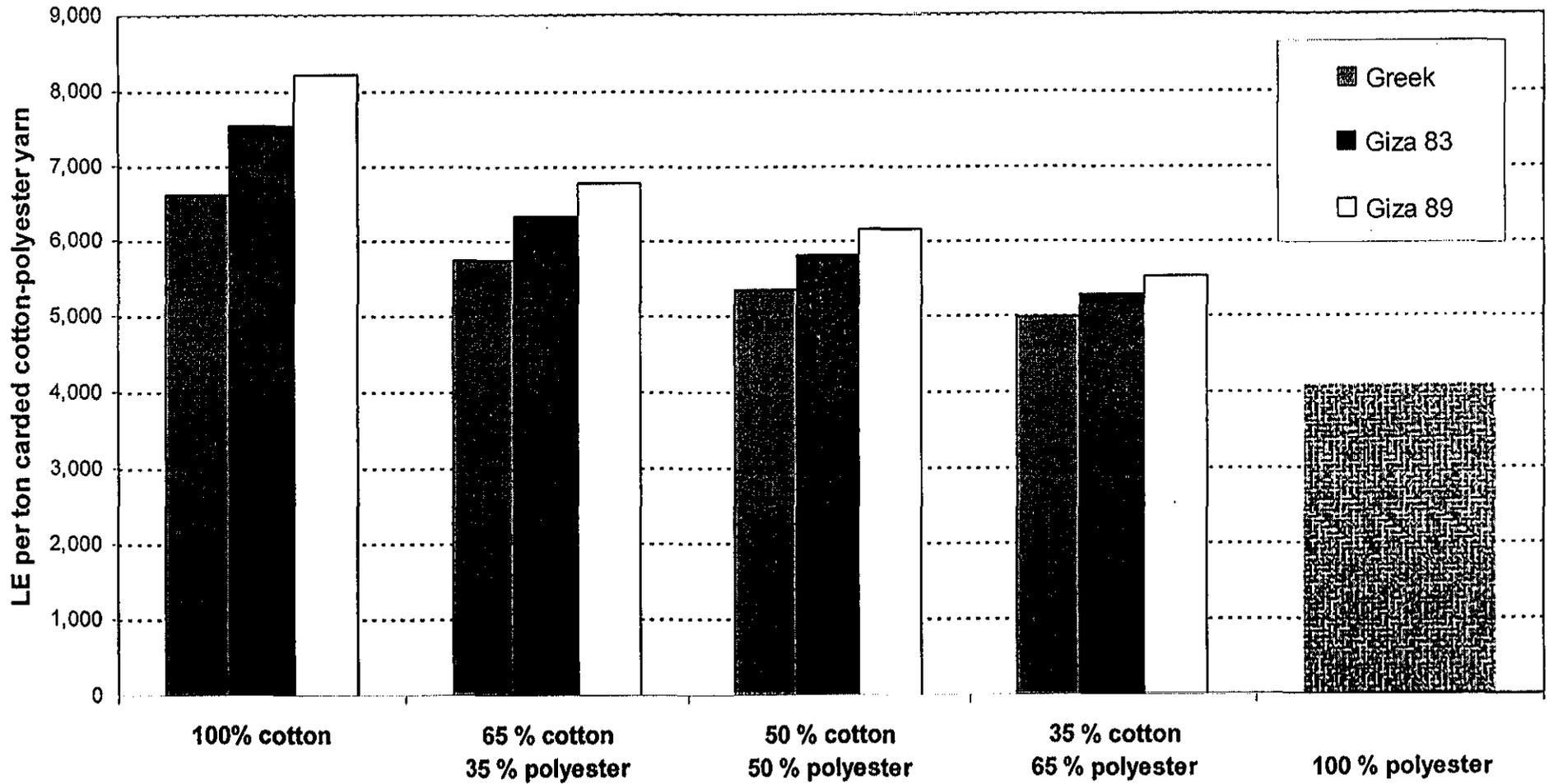
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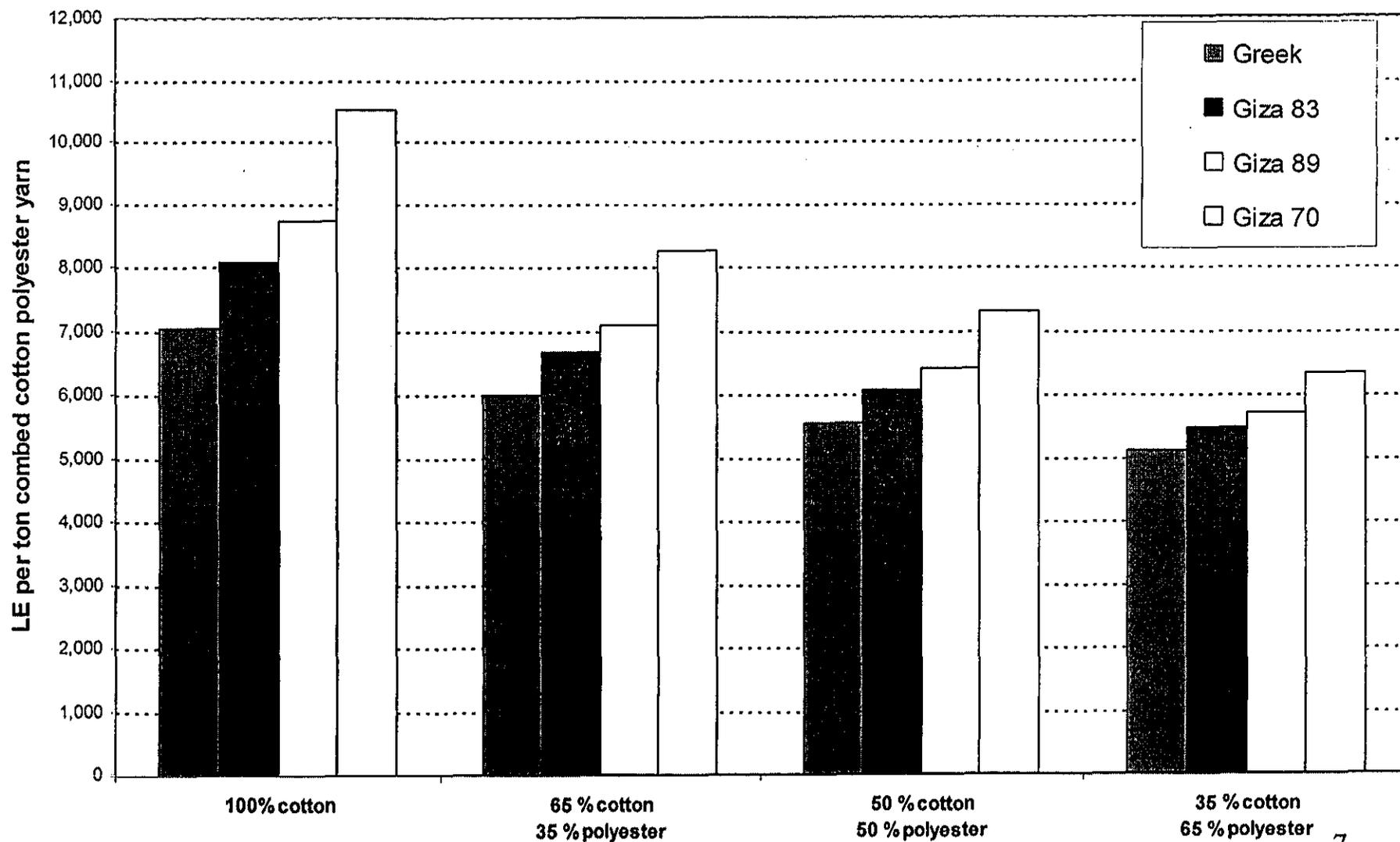


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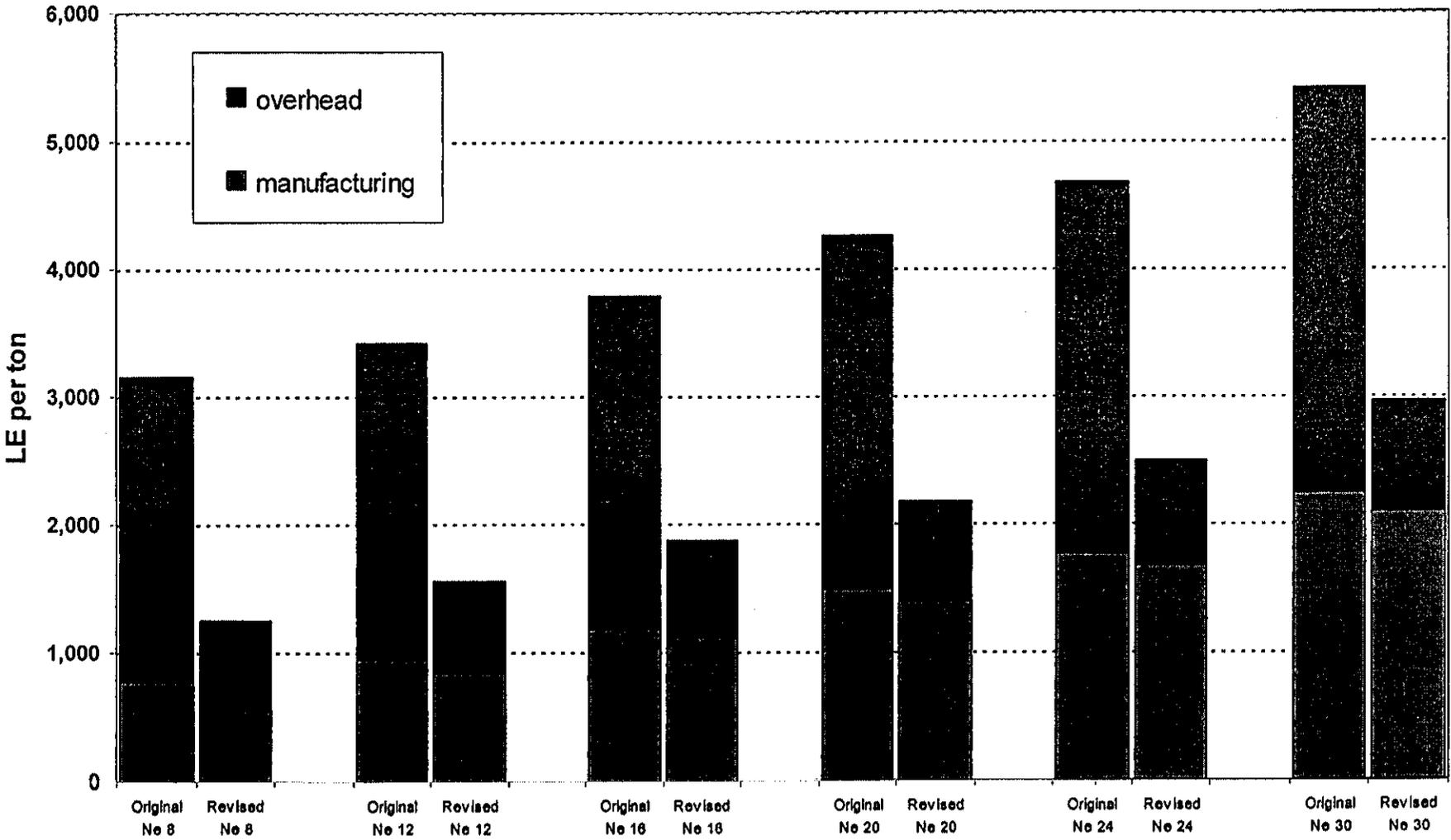
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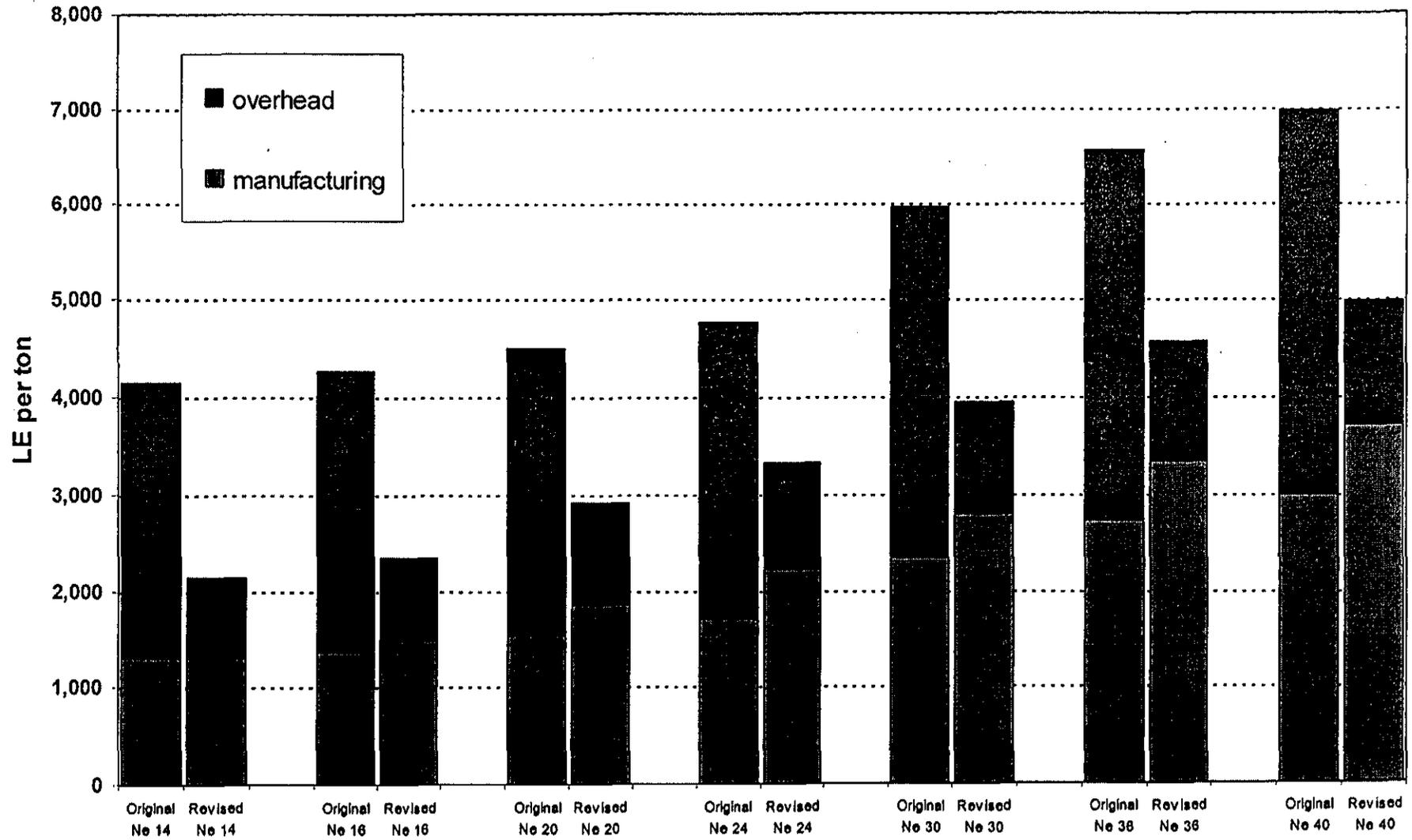


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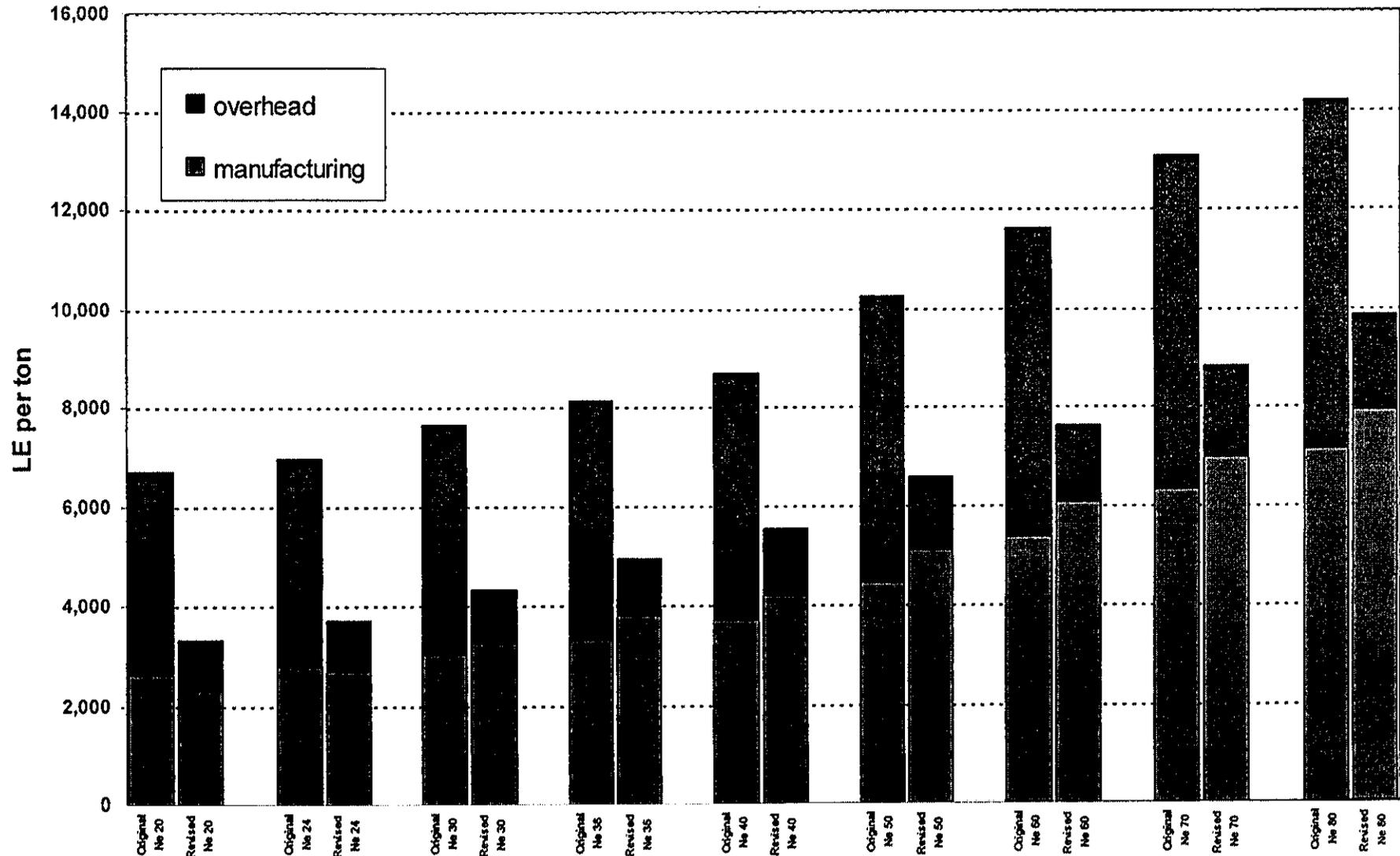
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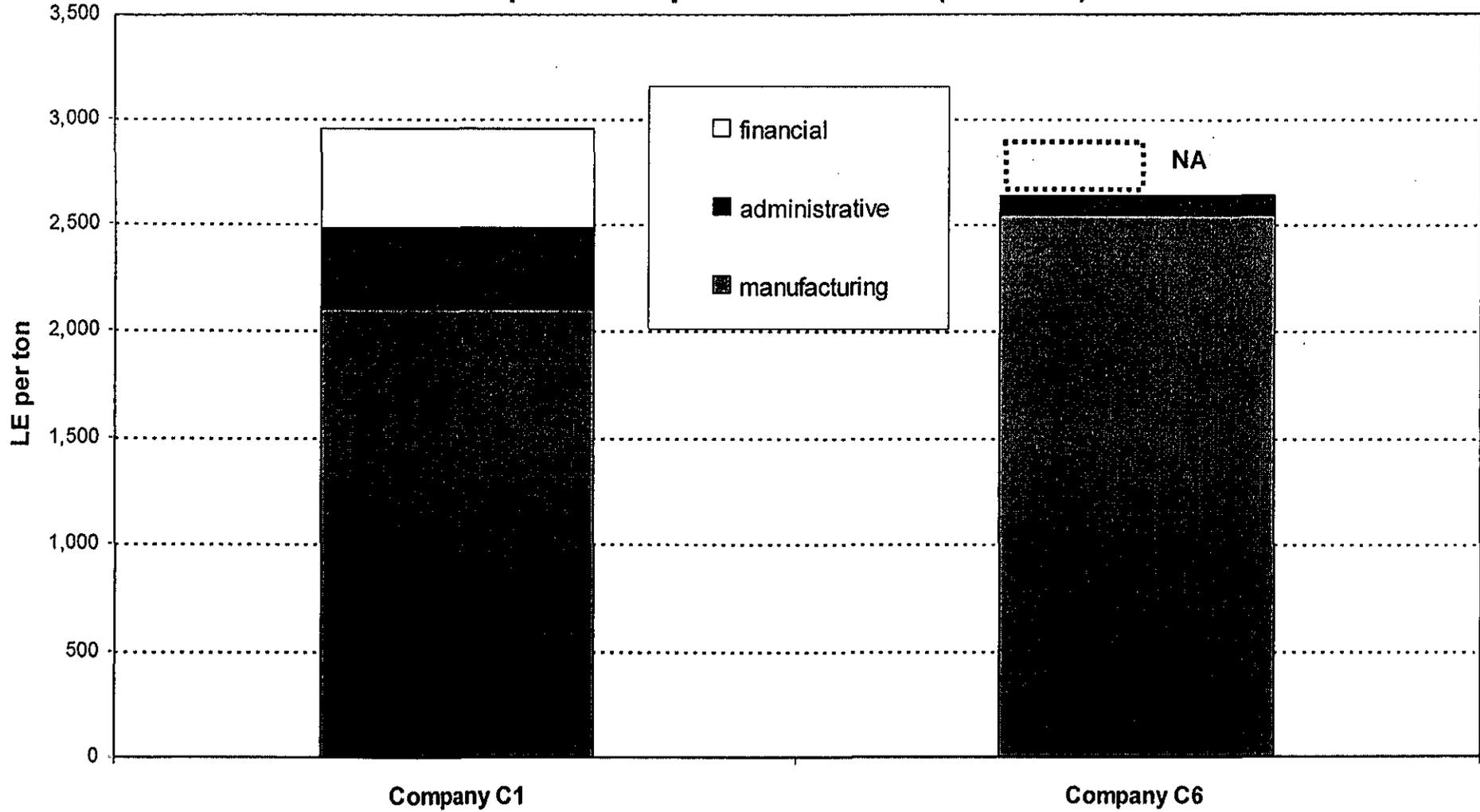
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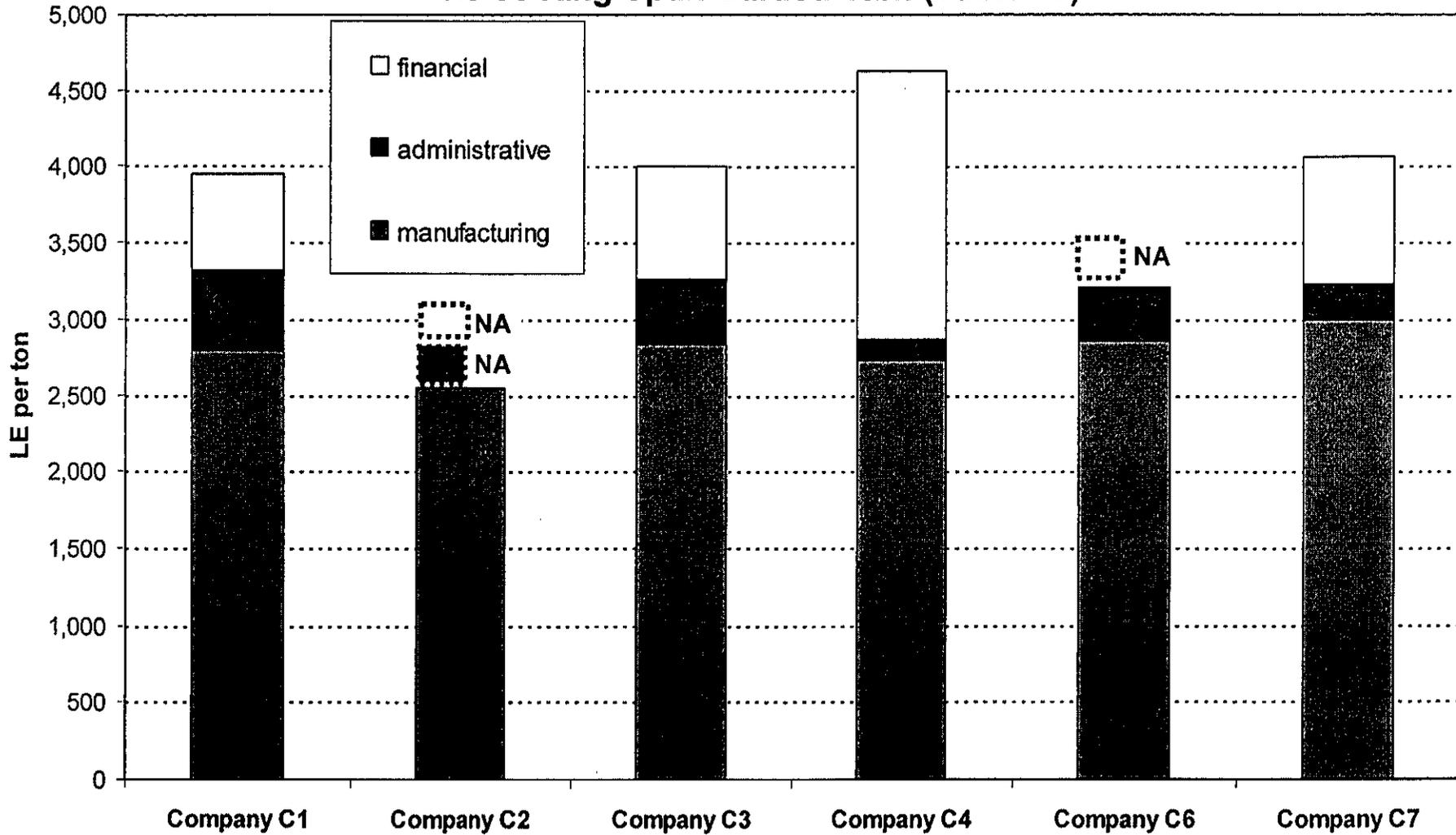


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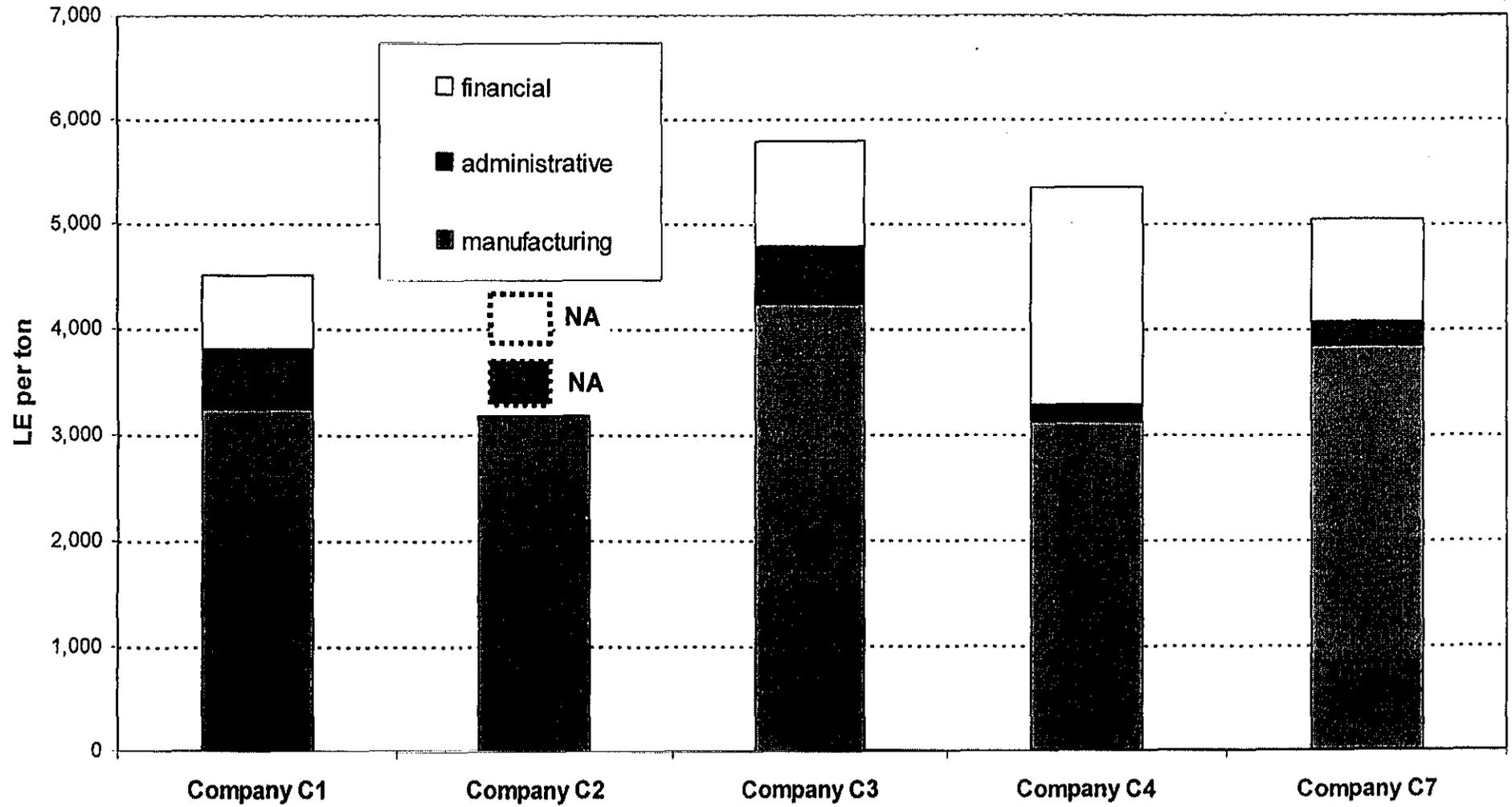


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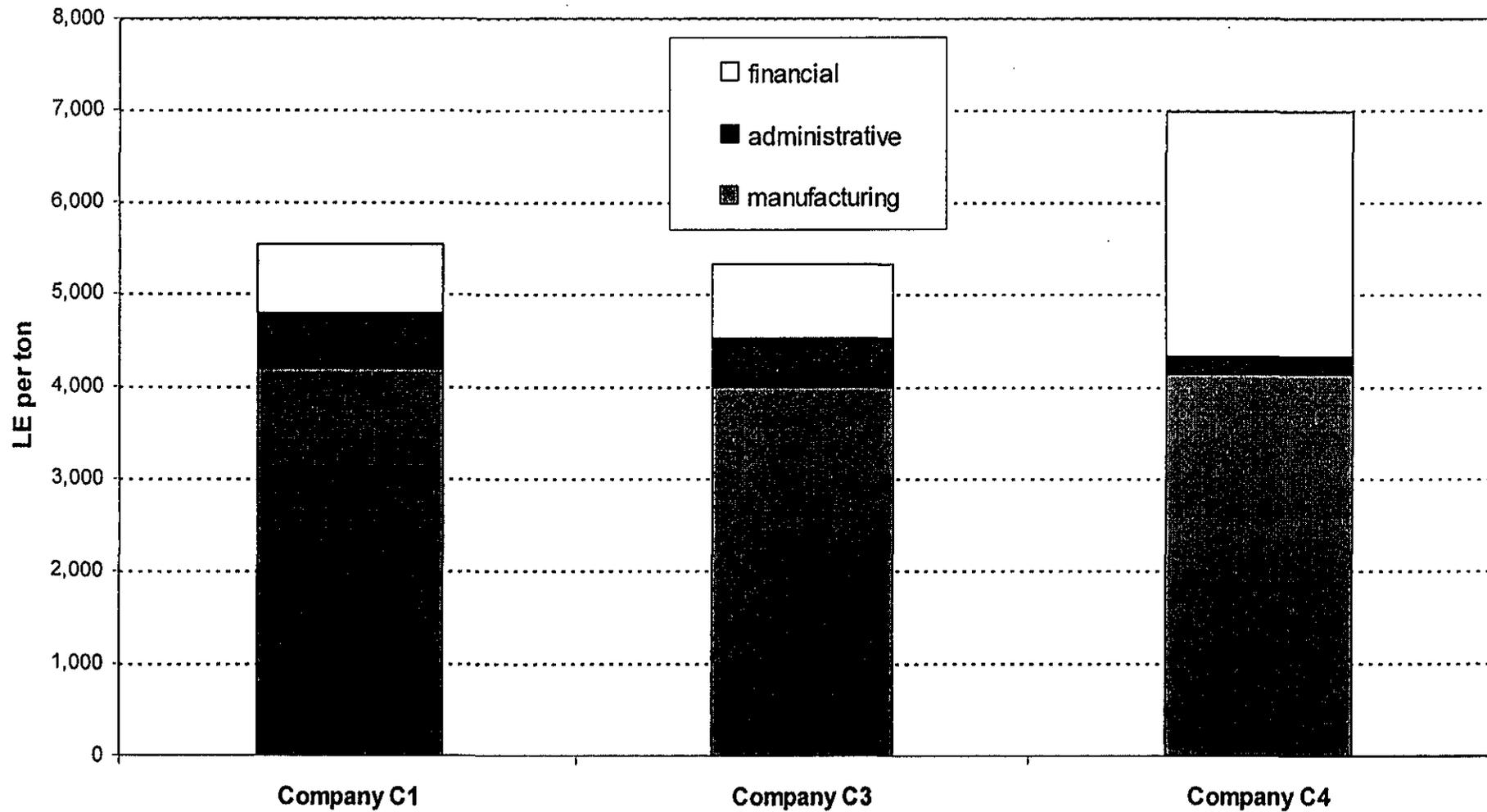
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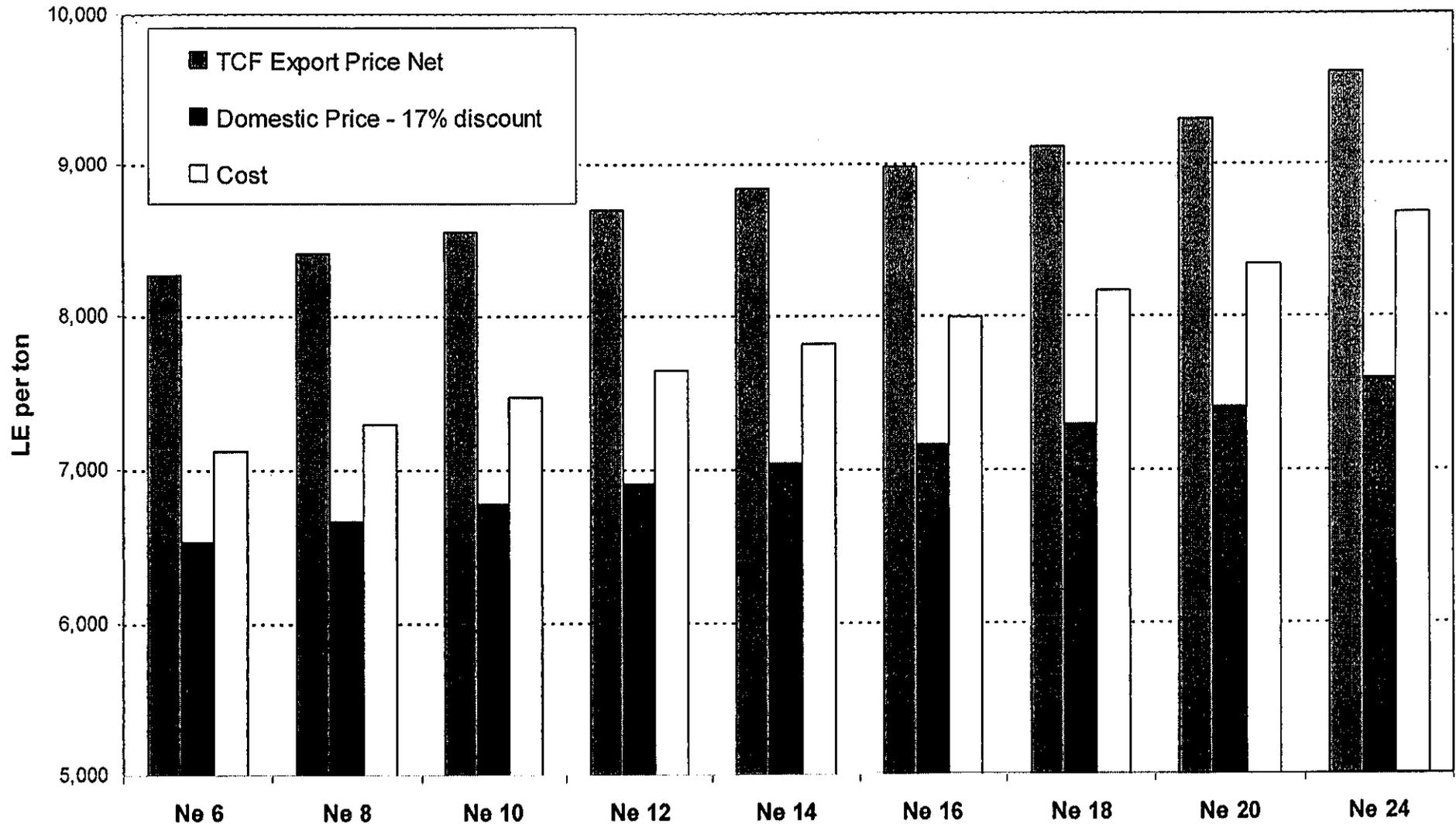
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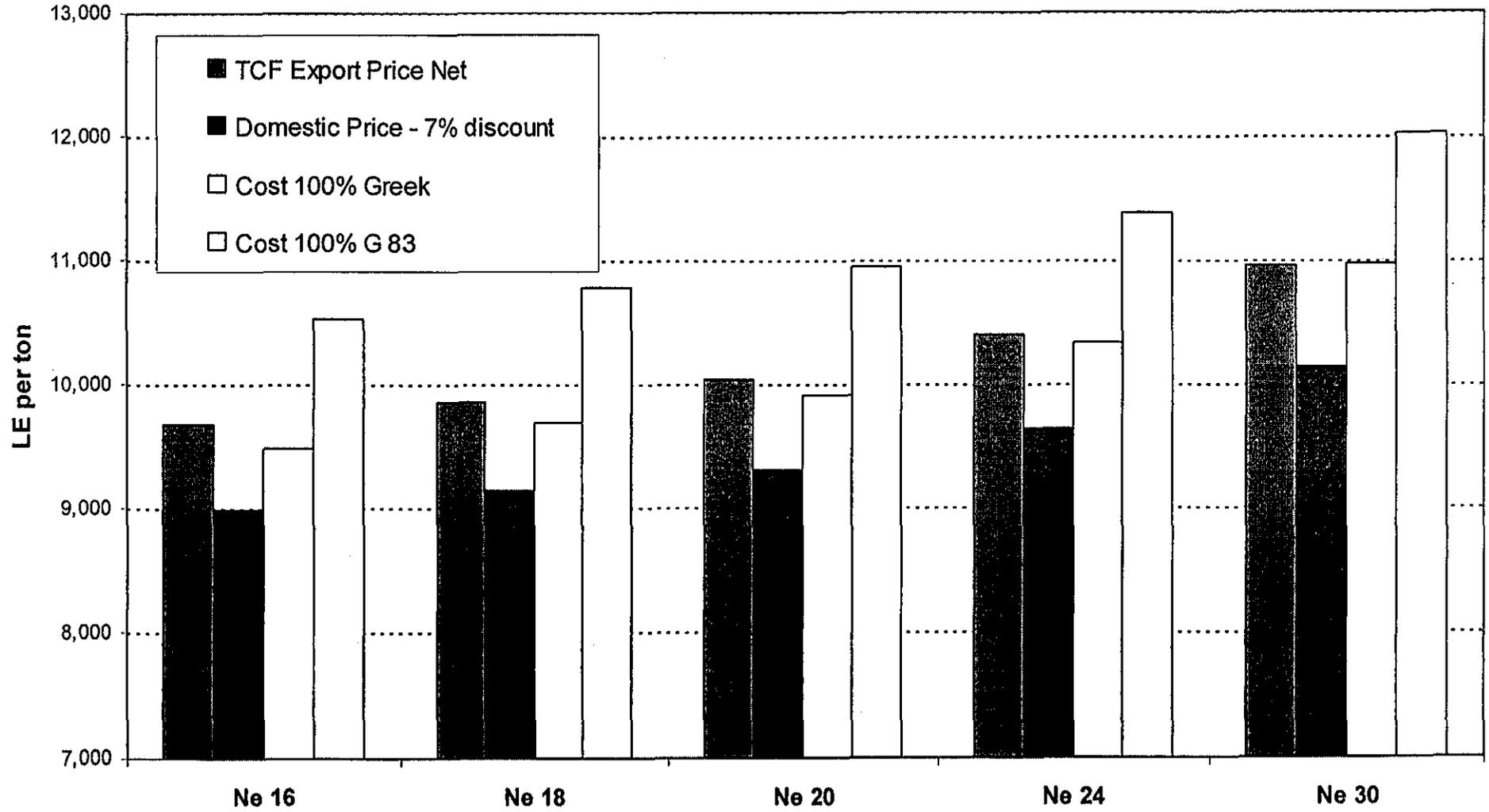
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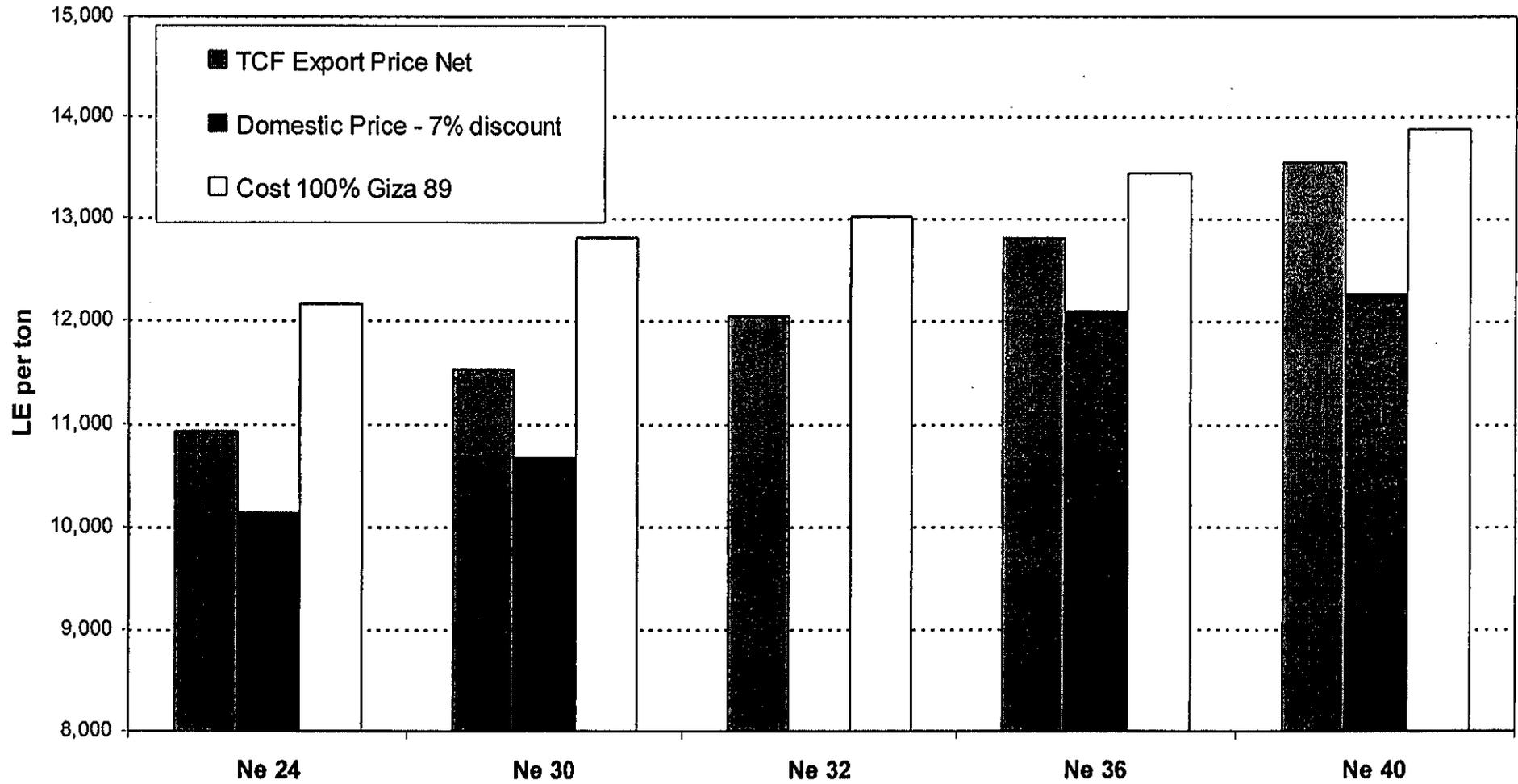


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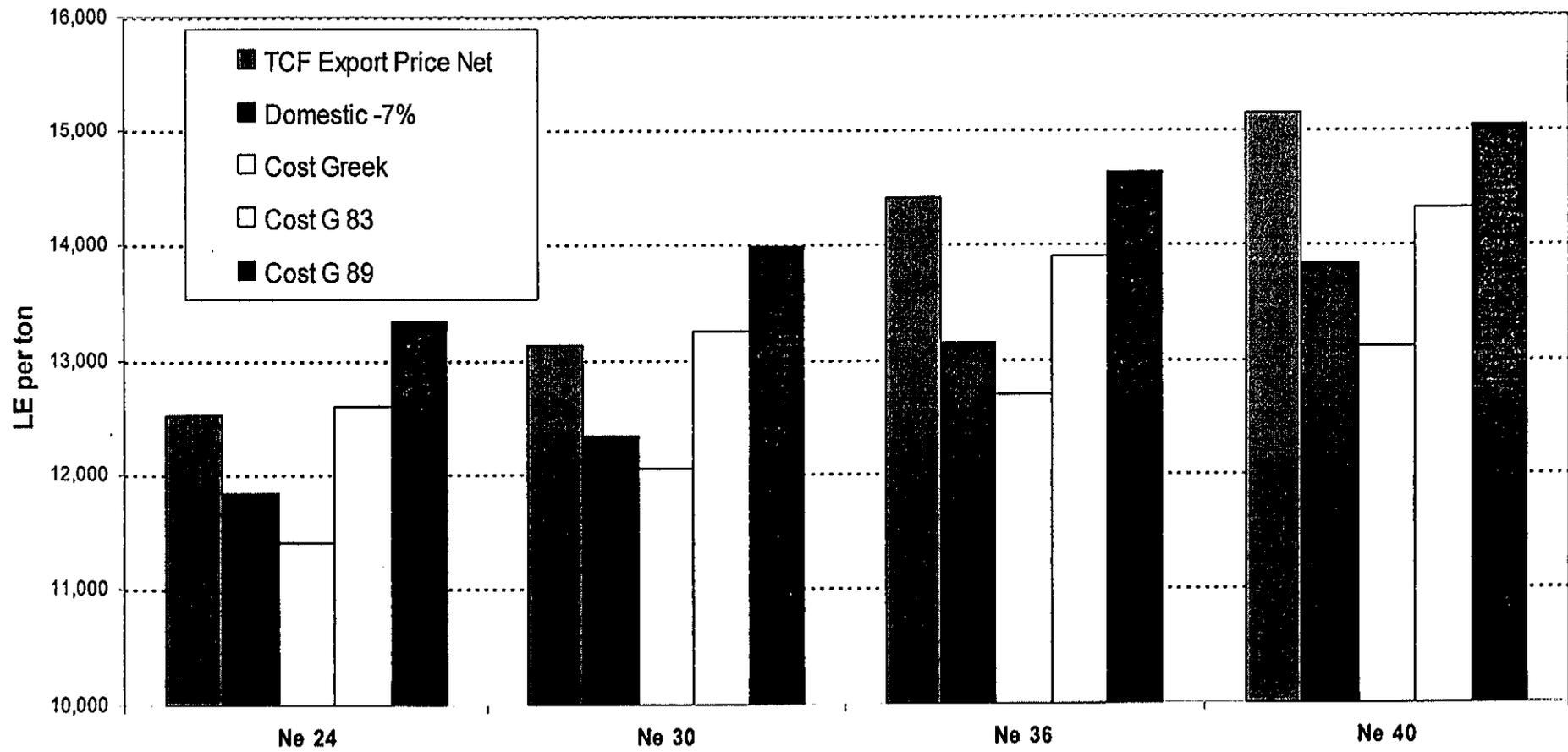
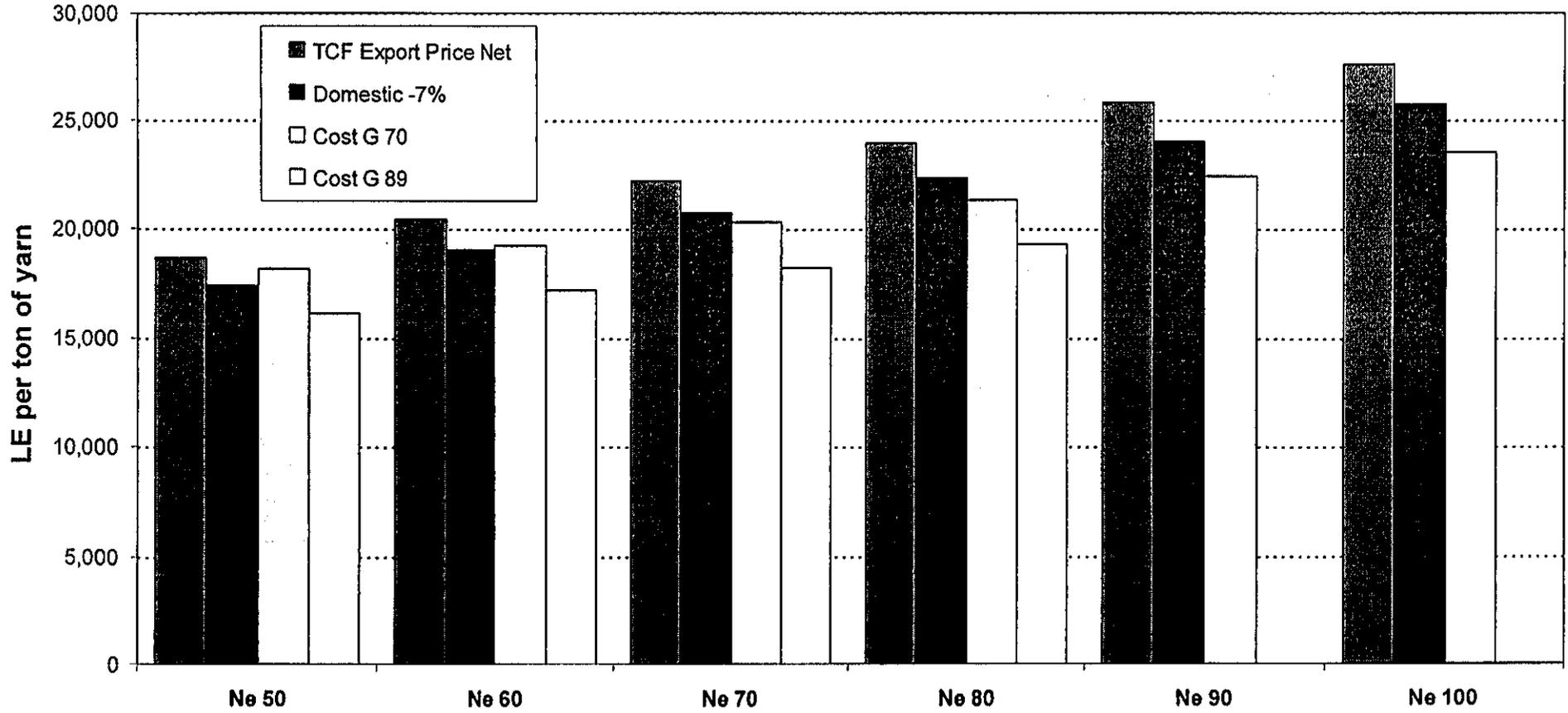
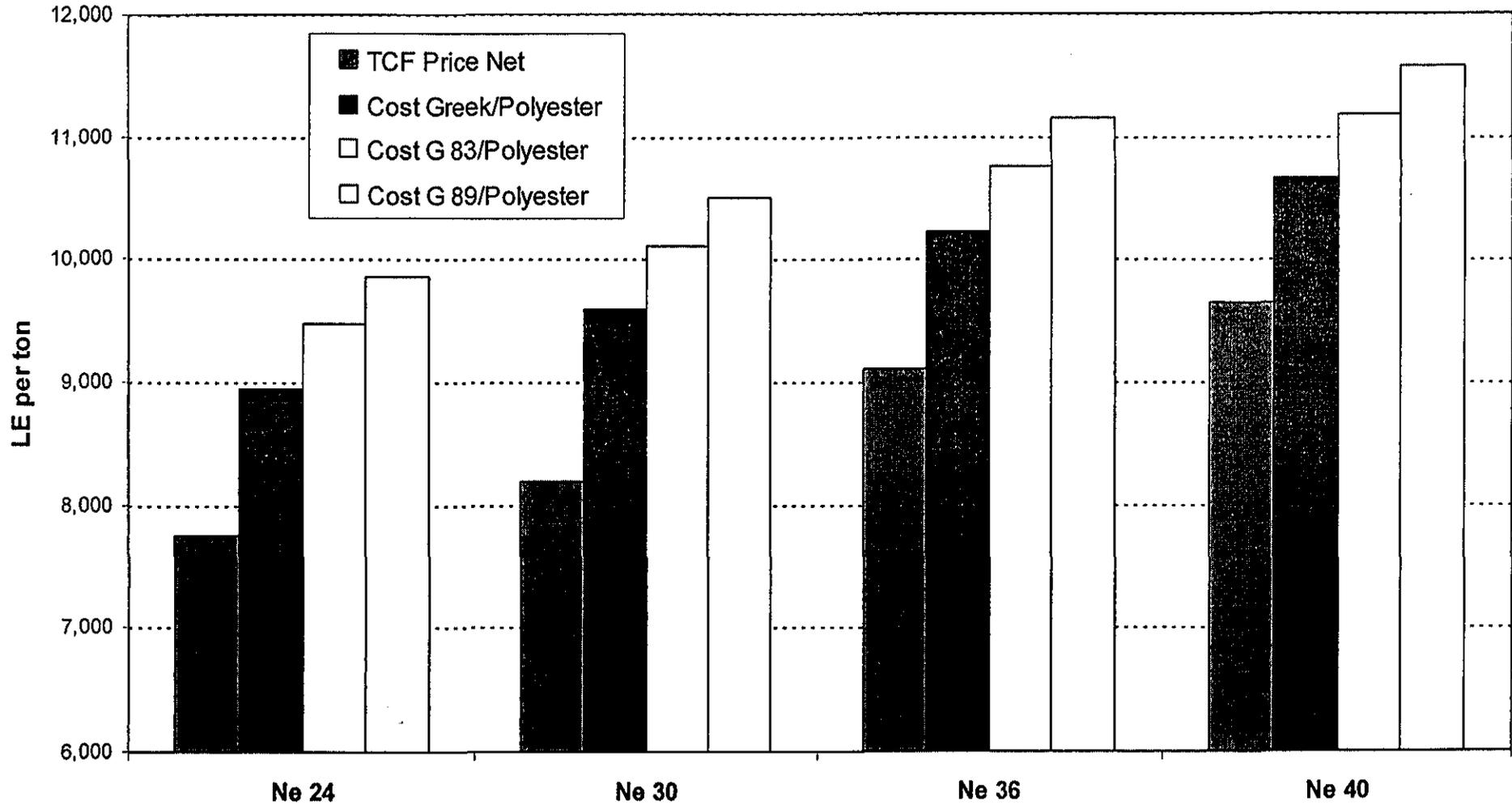


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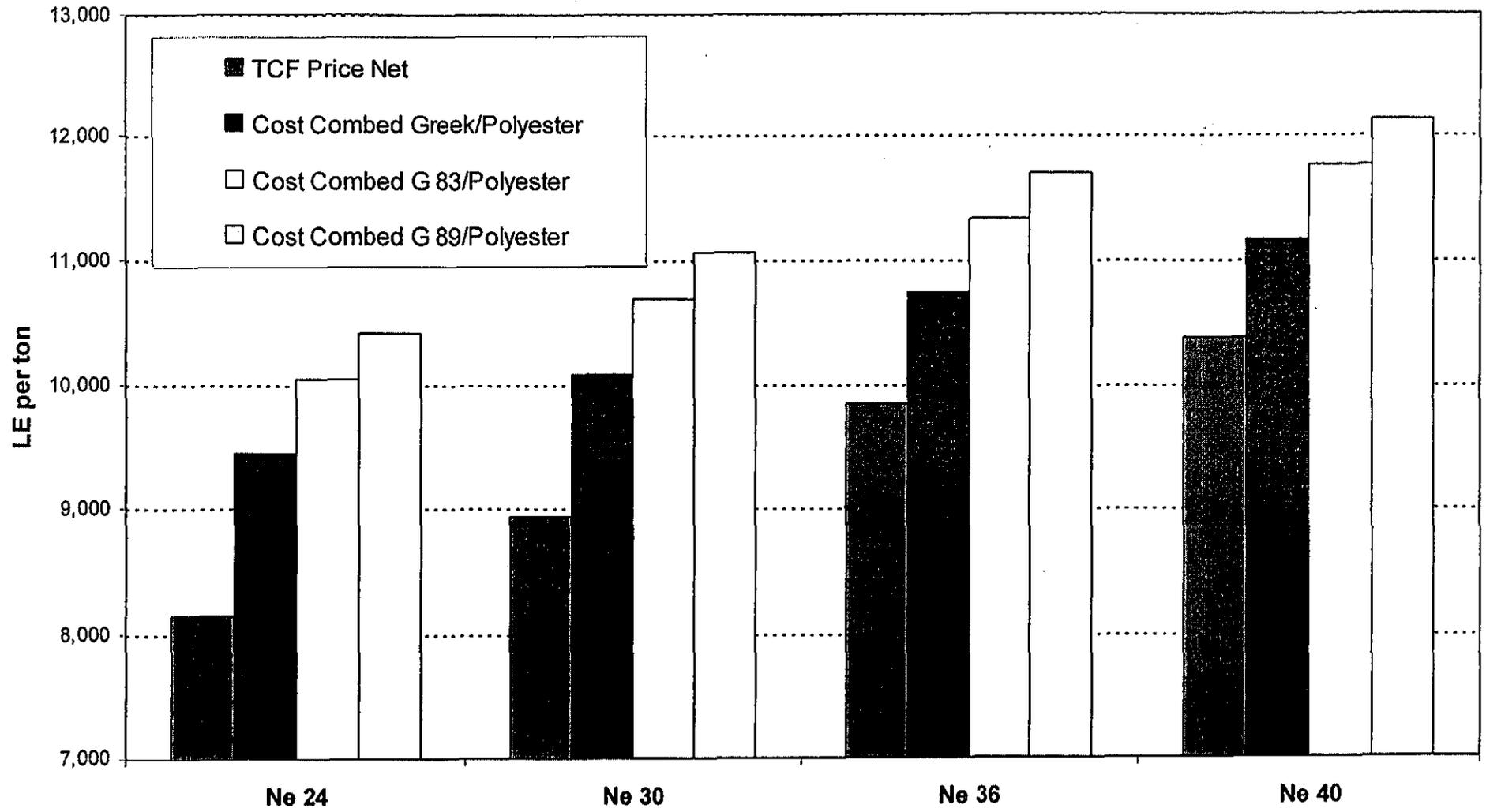
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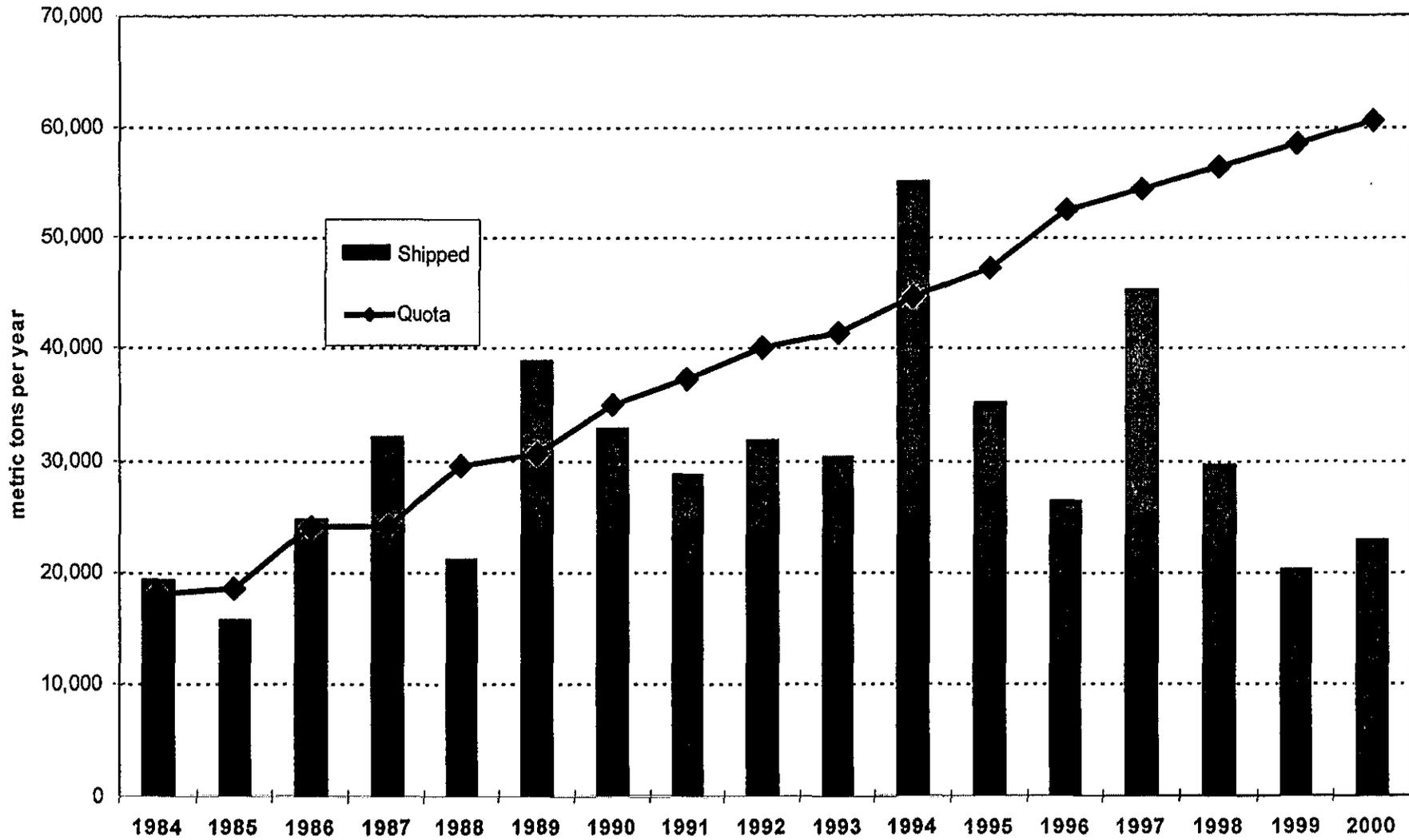
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**Figure 20. Costs and TCF Export Prices for 50 / 50  
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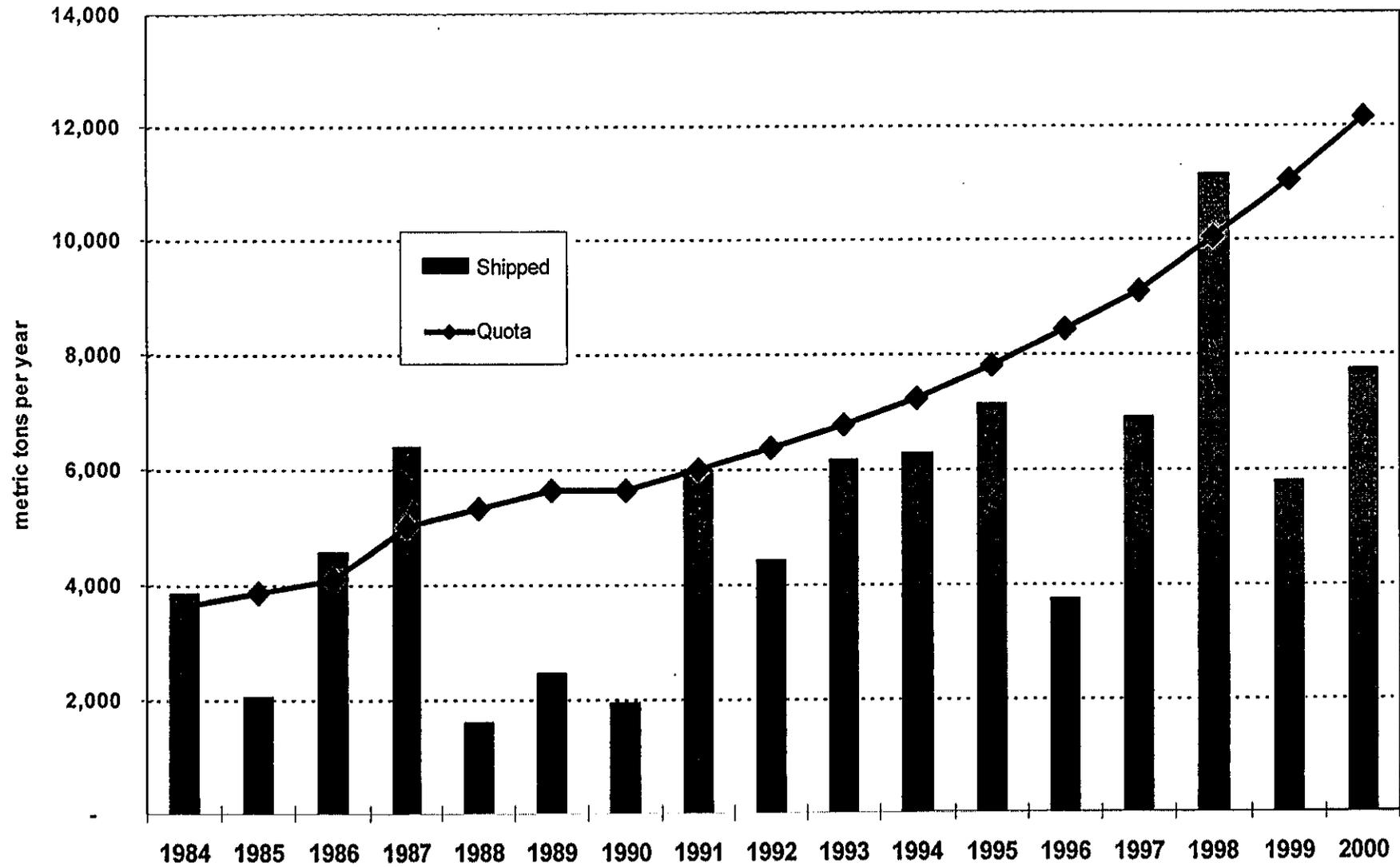
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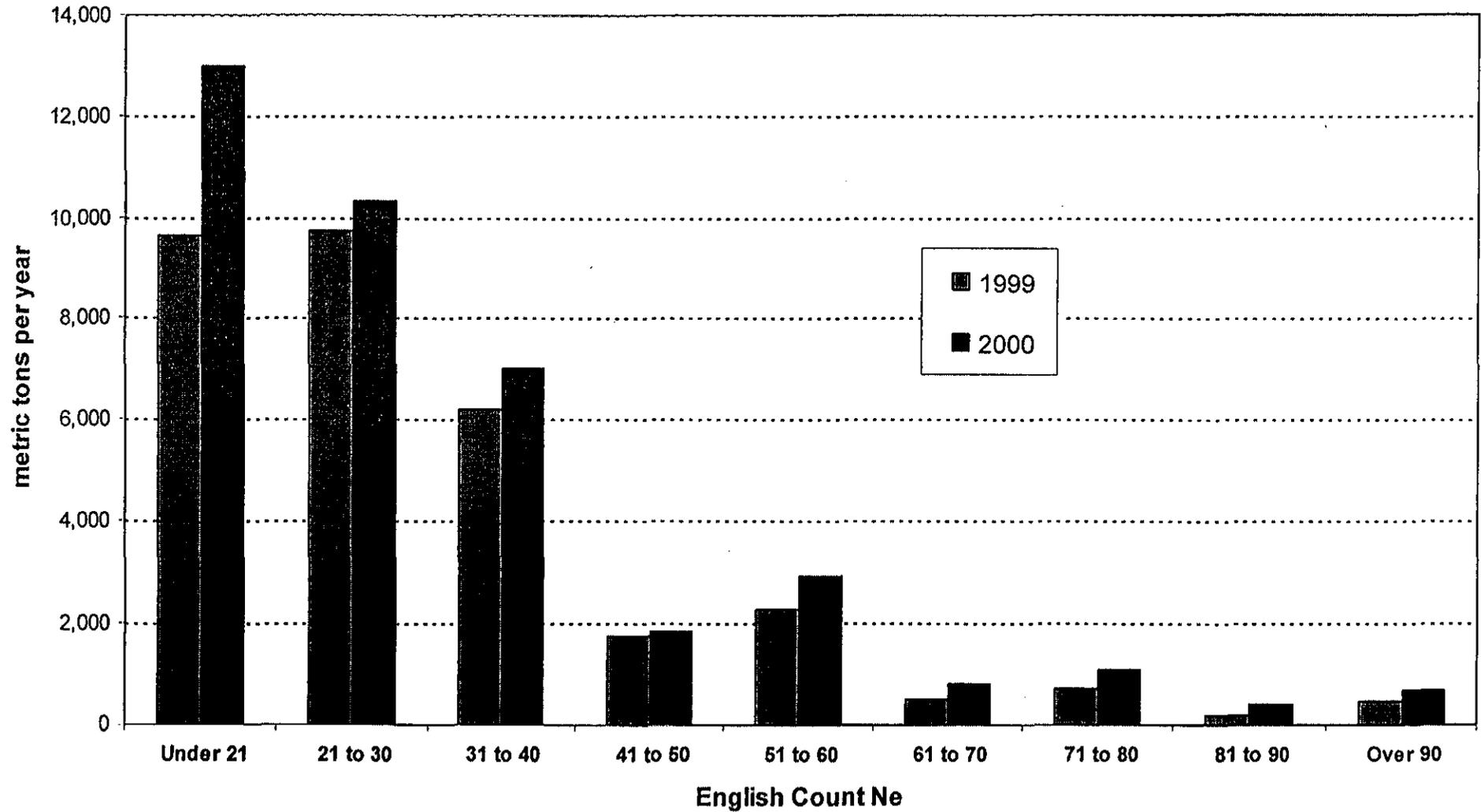


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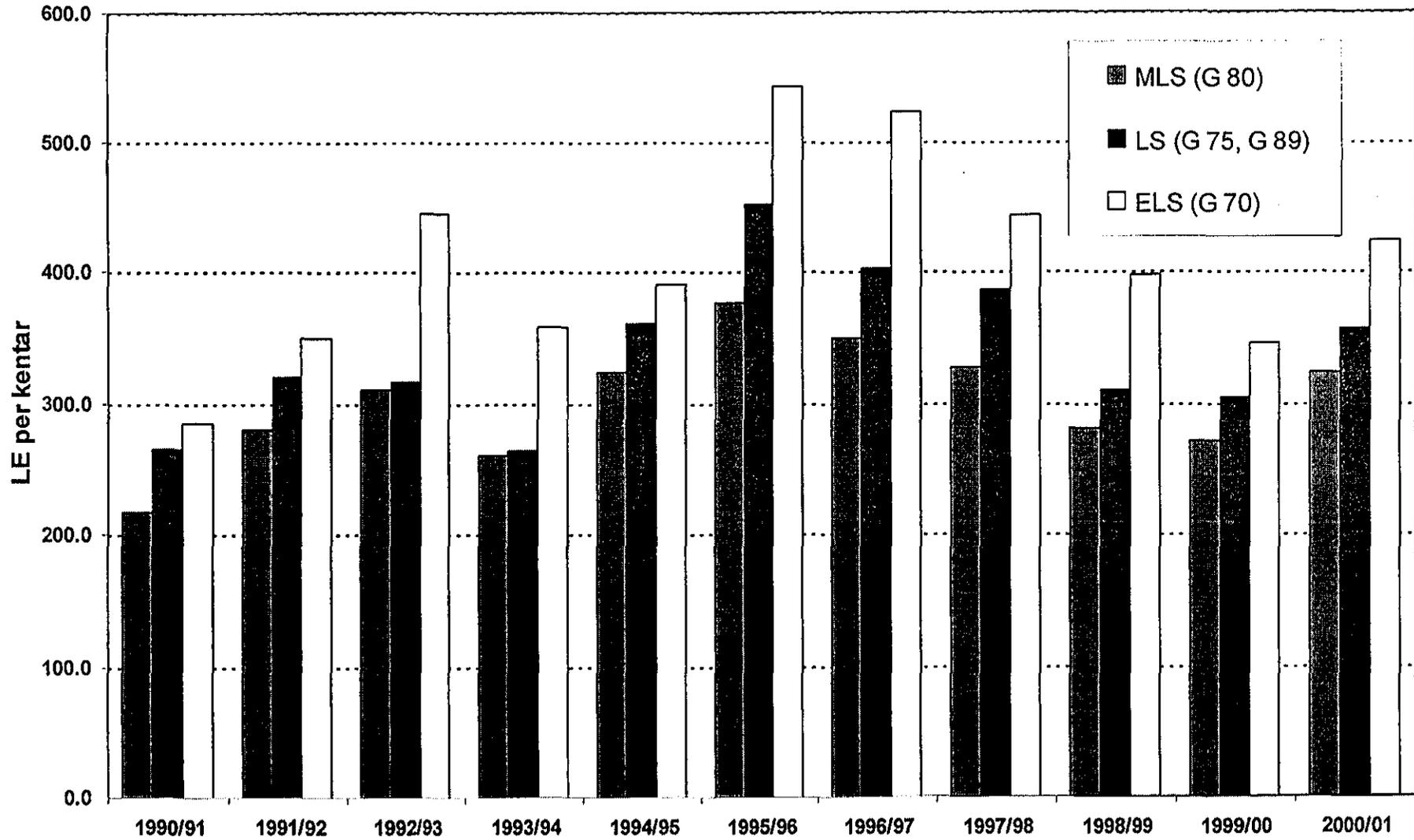
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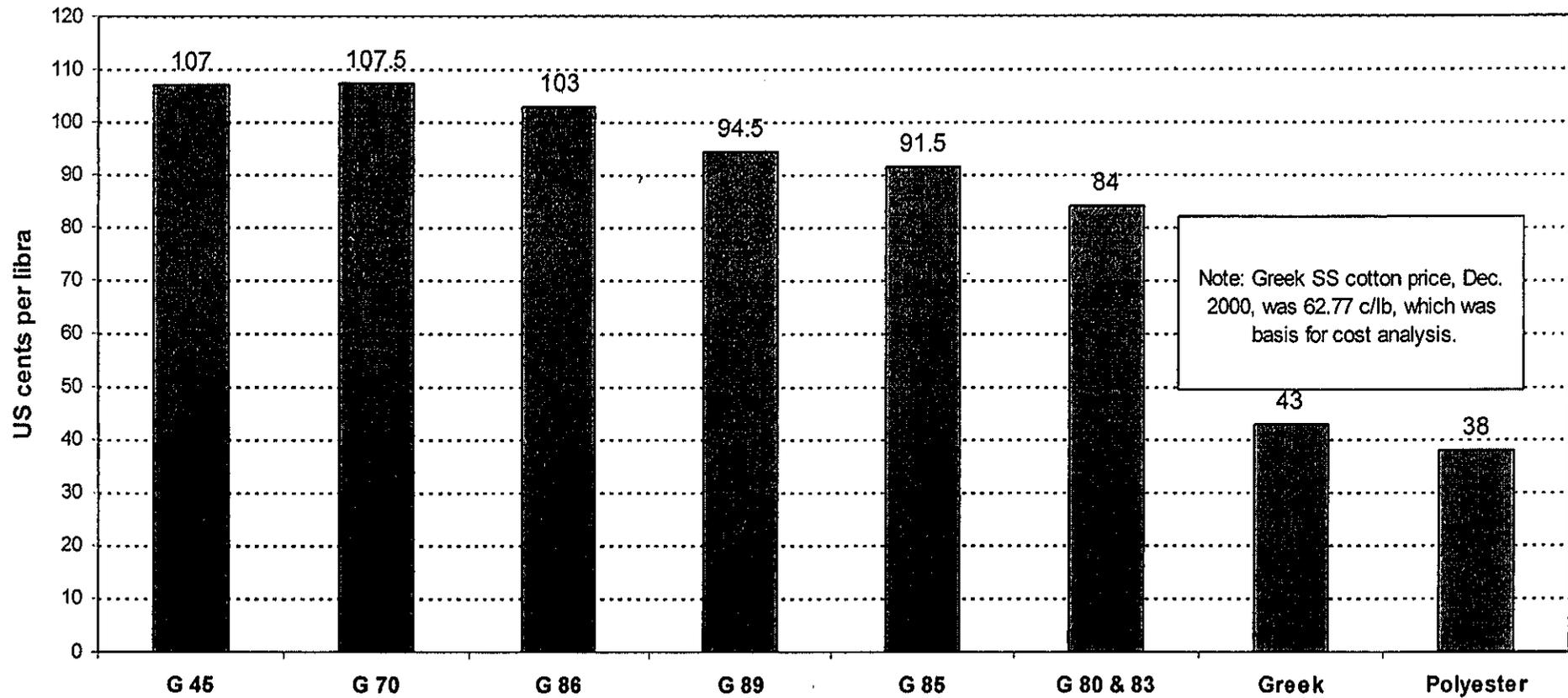


**Figure 24. Cost of Egyptian Cotton Delivered to Domestic Mills.  
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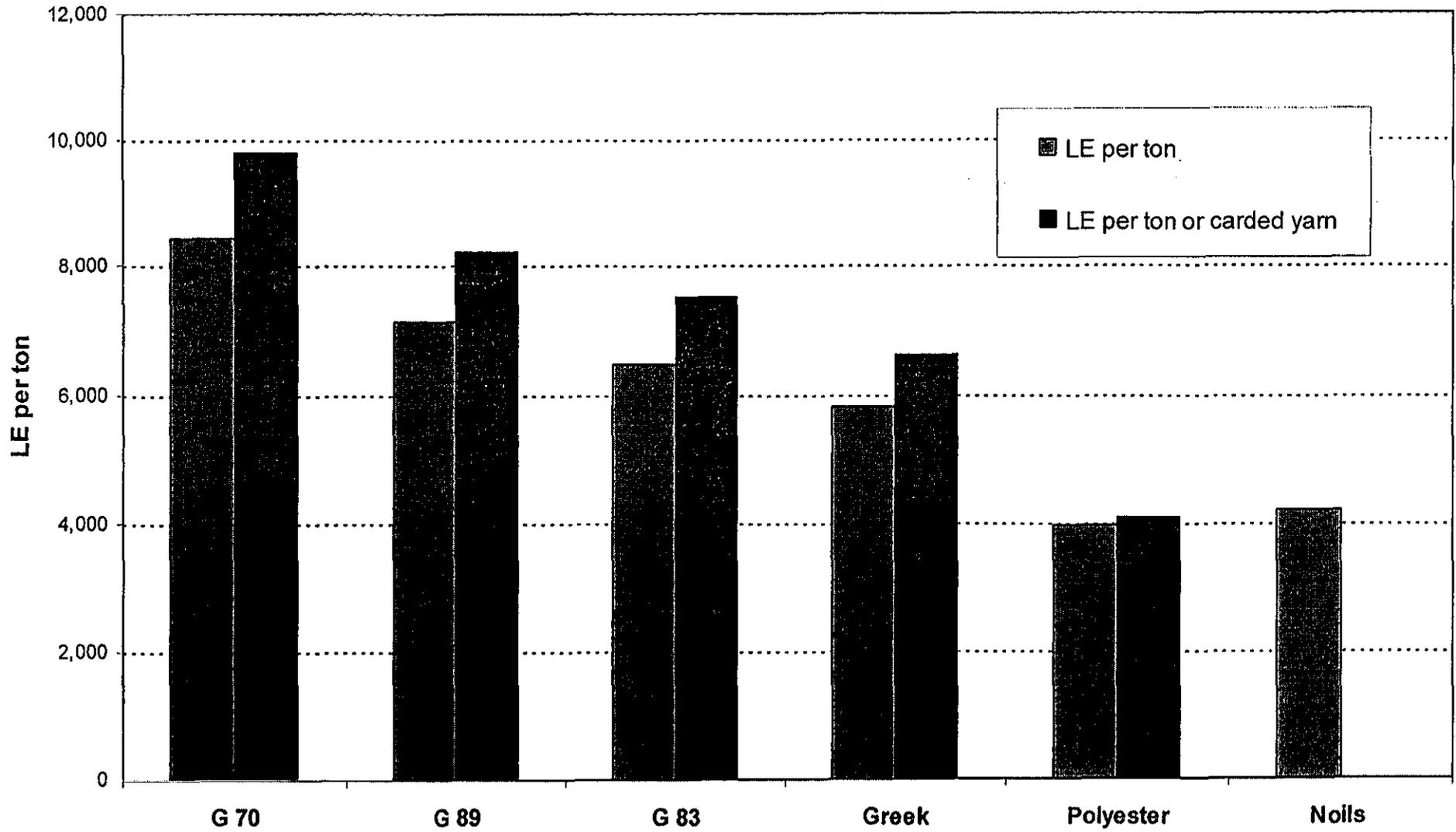
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Figure 25. Mill Delivery Prices for Egyptian Cotton Varieties,  
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Figure 26. Cost of Lint Delivered to Egyptian Mills. May 2001



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**Figure 27. Detailed Cost of Production of 100% Cotton Yarns.  
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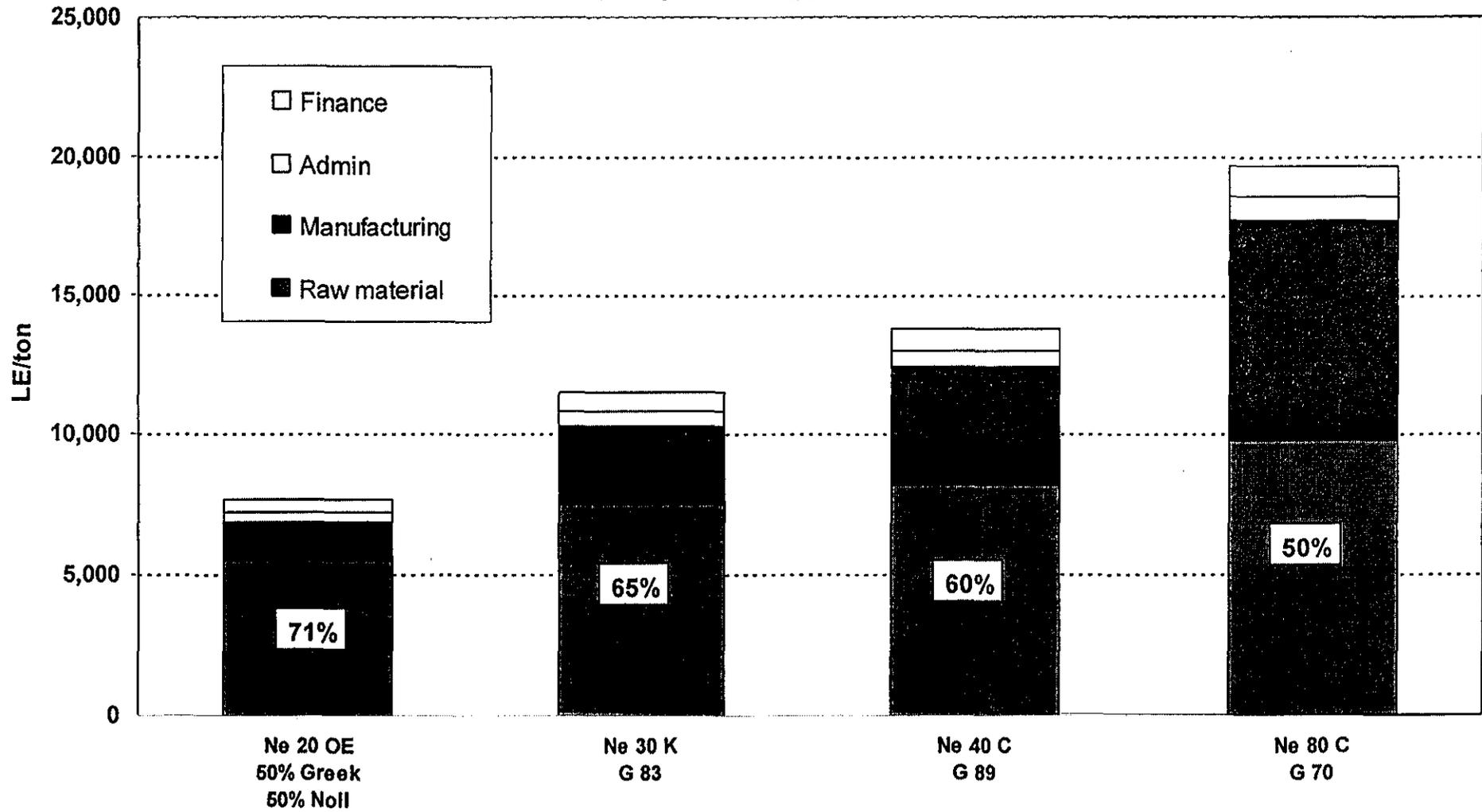


Figure 28. Detailed Cost of Production, 100% Cotton Yarns,  
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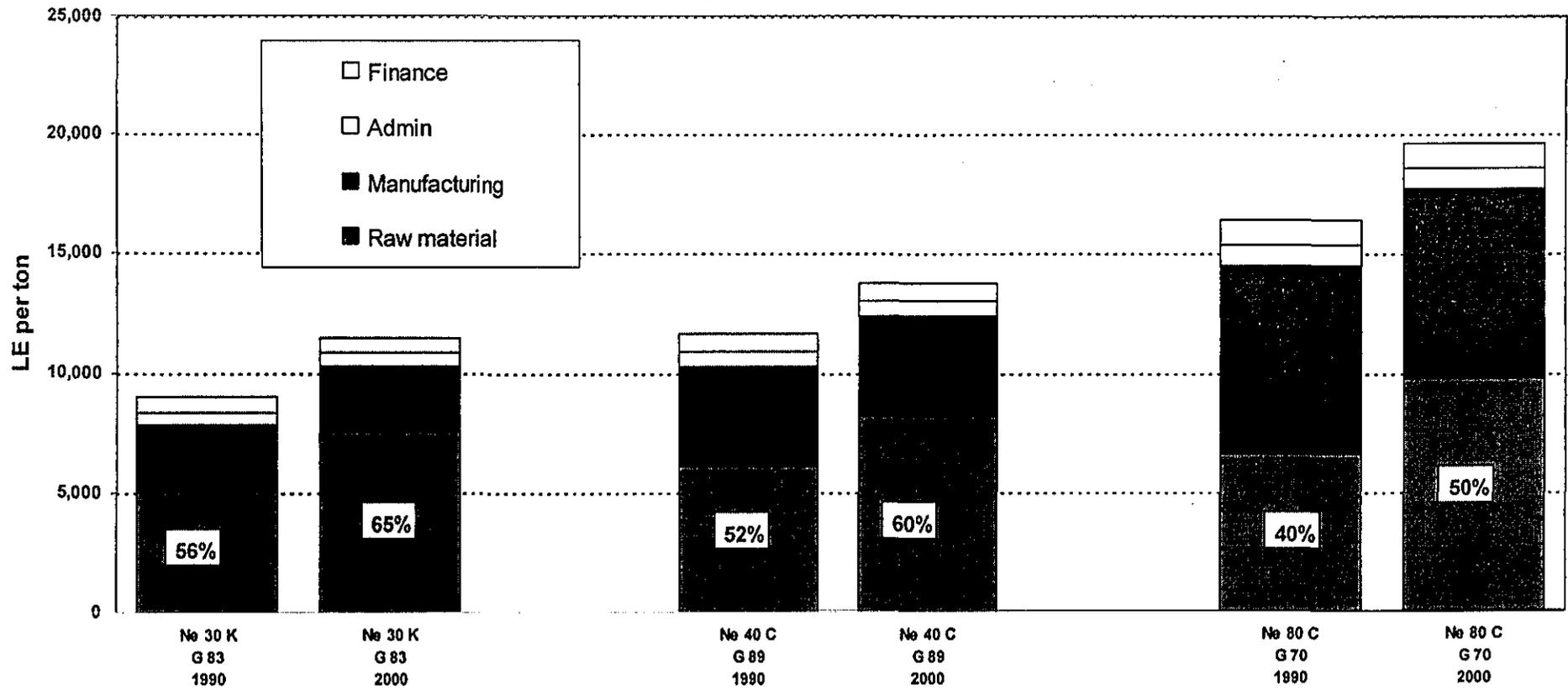


Figure 29. Competitive Position, 100 % cotton yarns carded (August 2001)

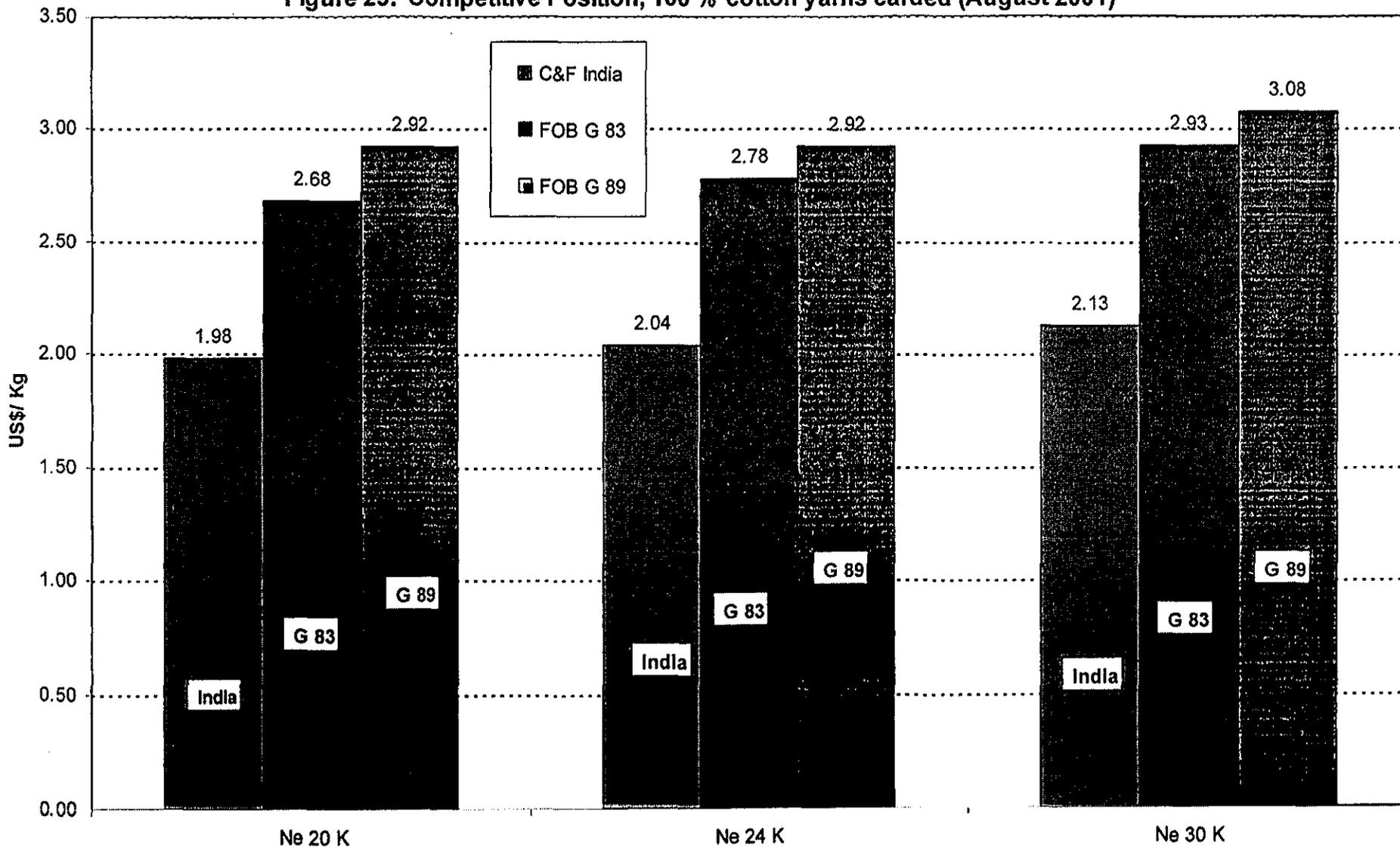


Figure 30. Competitive Position, 100 % Cotton Yarns, Combed.  
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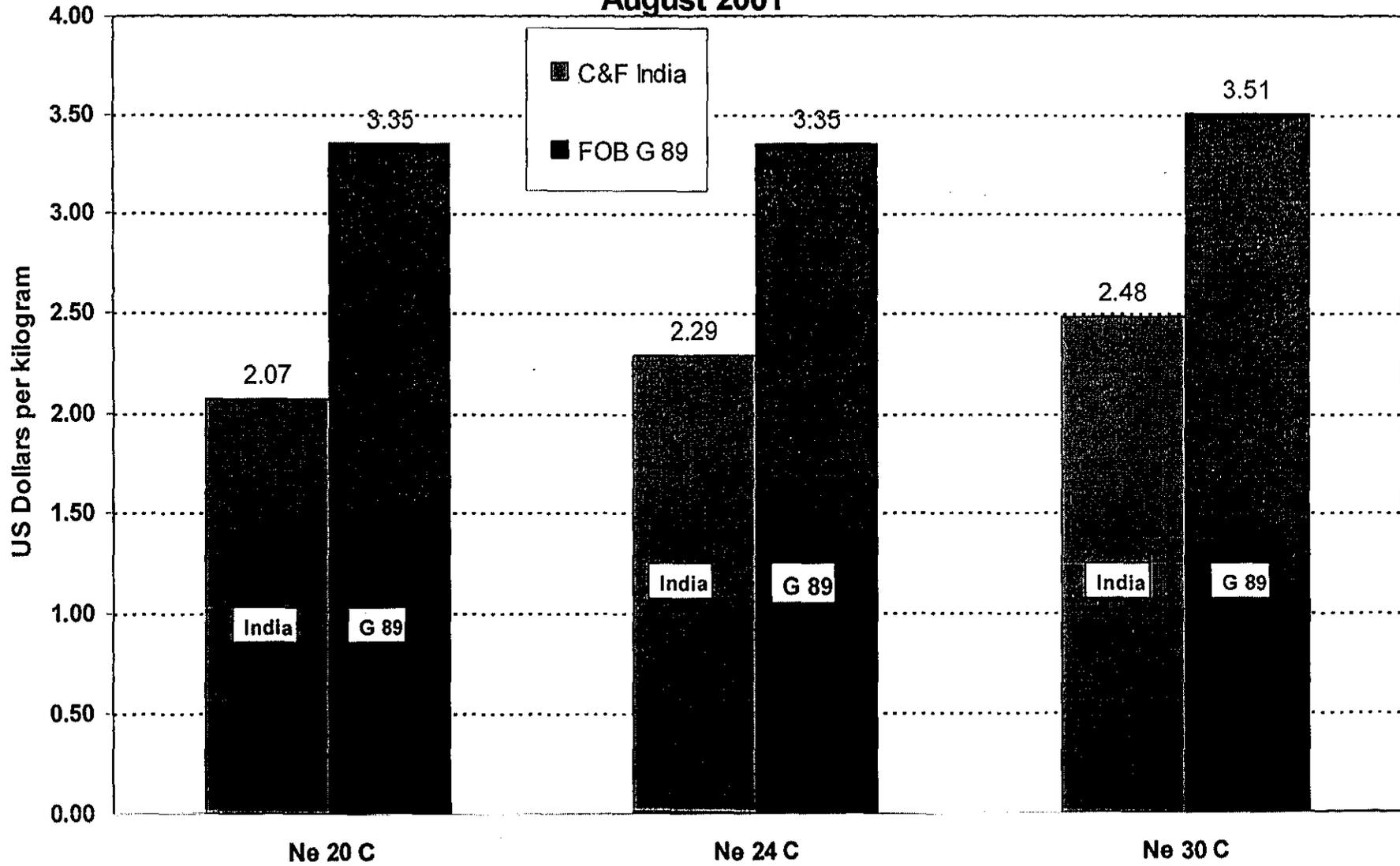
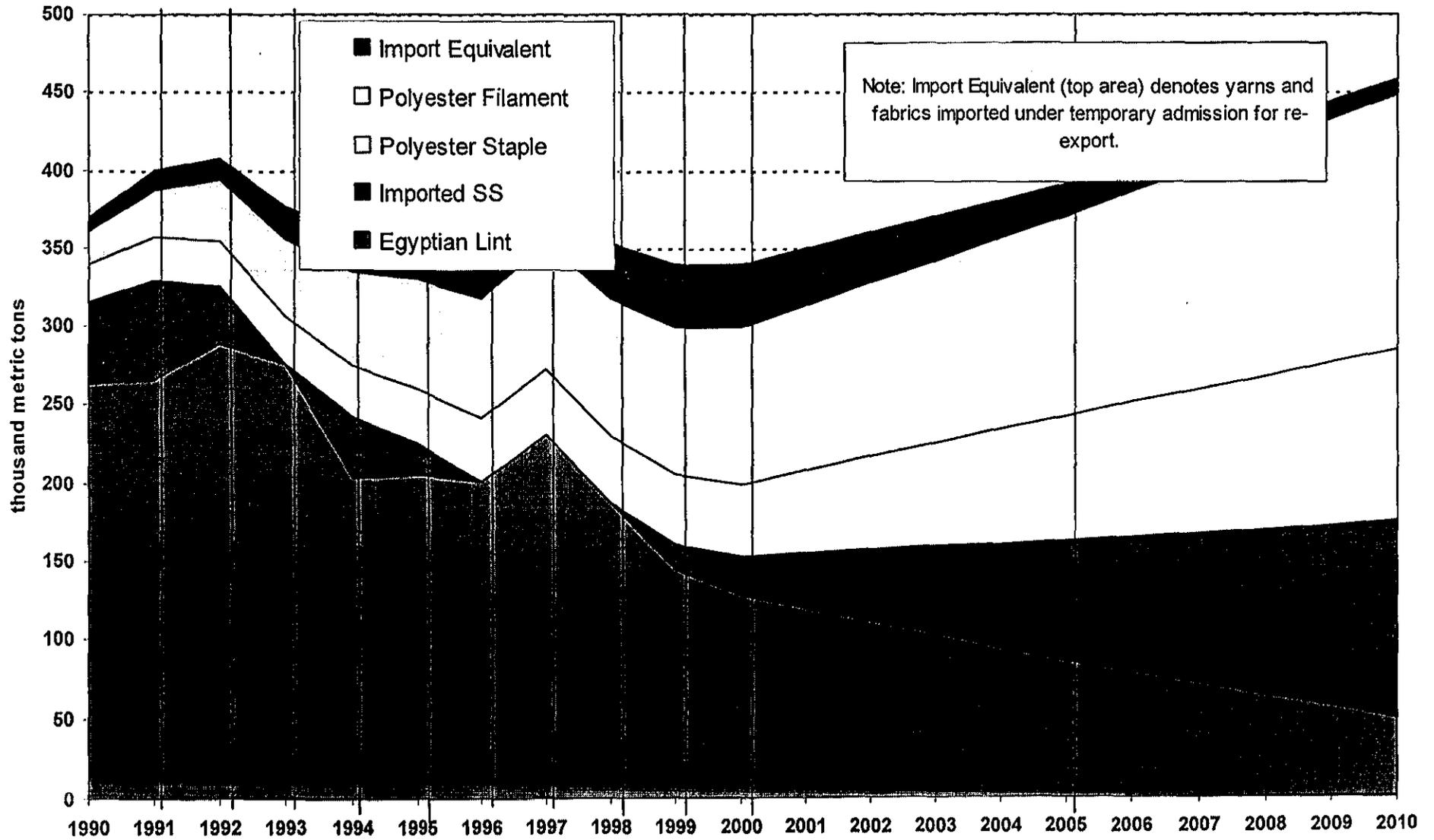


Figure 31. Fiber and Filament Consumption by the Egyptian Textile Industry, 1990-2000 and Projections to 2010



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