# *The Regional Economy of Flanders and Industrial Modernization in the Eighteenth Century: a Discussion*

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Flanders has recently attracted particular interest for historians of the early modern period and the nineteenth century *. The concept of proto-industry, put forward by F. Mendels and others, was first developed in the context of this region [1].

Nowhere were higher employment levels in domestic industry to be found, and by the end of the Ancien Régime nearly half of the population was engaged in the rural linen industry, at least on a part-time basis (see map). The most important concentration of linen workers was particularly in the area of Ghent,

* We should like to thank F. Mendels and in particular J. Riley who made comments on an earlier version of this article. However, responsibility for errors and extrapolations is ours alone.

1 F. MENDELS, Proto-industrialization: the first phase of the industrialization process, in *Journal of Economic History*, 1972; Agriculture and peasant industry in eighteenth century Flanders, in E. JONES-W. PARKER (eds.), *European peasants and their markets*, Princeton, 1975; Proto-industrialization: theory and reality. General Report, in *Eighth International Economic History Congress*, Budapest, 1982; *Industrialization and population pressure in eighteenth-century Flanders*, New York, 1981. See also P. DEYON. L'enjeu des discussions autour du concept de proto-industrialisation, in *Revue du Nord*, 1979, pp. 9-18; H. KELLENBENZ, Les industries dans l'Europe moderne, 1500-1750, in P. LEON-F. CROUZET-R. GASCON (eds.), *L'industrialisation en Europe au XIXe siècle*, Paris, 1972, pp. 75-114.

2 G. JACQUEMYNS, *Histoire de la crise économique des Flandres, 1845-1850*, Brussels, 1929; C. VANDENBROEKE, Mutations économiques et sociales en Flandre au cours de la phase proto-industrielle, 1650-1850, *Revue du Nord*, 1981; Analyse critique de la phase proto-industrielle en Flandre. L'evolution sociale et le comportement démograpi-

Tielt, Kortrijk and Oudenaarde [2]. Every week woven linen was carried to the urban markets and from there shipped, via Spain and France, to America [3]. In the second half of the eighteenth century about 100,000 pieces of linen, i.e. 5 million metre, were brought every year to the market of Ghent [4].

The situation deteriorated at the close of the Ancien Régime, when proto-industrialists had to compete with mechanization in the textile sector. Flanders also provides an example of an area experiencing de-industrialization and rapid impoverishment in the course of the nineteenth century[5]. Between 1840-50 the decline of rural industries became disastrous. Many sources describe the whole area in northwestern Belgium at that time as "Poor Flanders" or as "The Ireland of the Continent" [6]. An interesting summary of the causes and effects of this process of impoverishment was given by L. Varlez: "The peasants had agreed to a brutal cuts in pay. But there are limits to everything, even to the resignation of Flemish peasants. There is a moment when the wage ceases to be human and when the worker prefers to abandon his trade" [7].

Yet this impoverishment was not the result of a linear trend in the evolution of rural industry. Only in the first and final phases of proto-industrialization was social decline clearly evident [8]. Such decline was especially evident in the late sixteenth and the seventeenth centuries on the one hand and during the first half of the nineteenth century! A brief sketch of the rural wages of agricultural

que, 17e siécle - début du 19e siécle, in *Proceedings of the Eighth International Economic History Congress*, Budapest, 1982; Sociale en konjunkturele facetten van de linnennijverheid in Vlaanderen (late 14e - midden 19e eeuw), in *Handelingen Maatschappij Geschiedenis en Oudheidkunde Gent*, 1979, pp. 117-174.

3 J. Bastin, De 'Gentse lijnwaadmarkt en linnenhandel in de XVIIe eeu, in *Handelingen Maatschappij Geschiedenis en Oudheidkunde Gent*, 1967; F. Mendels, Agriculture and peasant industry... *op. cit.*; E. Dubois, *L'industrie du tissage du lin dans les Flandres*, Brussels, 1900; J. Mokyr, *Industrialization in the Low Countries, 1795-1850*, London 1976; E. Sabbe, *De Belgische vlasnijverheid*, Kortrijk, 1975.

4 W. Haagen, Uitbuiting door handel als verklaringsfaktor voor de vertraagde industrialisering van de linnenijverheid in Vlaanderen, in *Handelingen Maatschappij Geschiedenis en Oudheidkunde Gent*, 1983, p. 218.

5 G. Jacquemyns, *op. cit.* The most important information can be found in the famous "*Enquête sur l'industrie linière*", Brussels, 1941.

6 For a more general view about the process of pauperization, cf. C. Lis-H. Soly, *Poverty and capitalism in pre-industrial Europe*, Hassocks, 1979.

7 L. Varlez, *Les salaires dans l'industrie gantoise. II. Industrie de la filature du lin*, Brussels, 1904, p. LX.

8 In this context, see the critical articles of P. Jeannin, La protoindustrialisation: développement ou impasse?, in *Annales. Economies-Sociétés-Civilisations*, 1980 and D. C. Coleman, Proto-industrialisation: a concept too many, in *Economic History Review*, 1983. Other criticisms were put forward in *Geschichte und Gesellschaft* in review of P. Kriedte-H. Medick-J. Schlumboihm, *Industrialisierung vor der Formationsperiode des Kapitalismus*, Göttingen, 1977.

workers and linen weavers over the century (see graph) reveals the situation [9]. From the fourteenth century to the beginning of the twentieth century there are only two periods of relative prosperity and high purchasing power of the people in the countryside. These occurred in the middle of the fifteenth century and the second and third quarter of the eighteenth century. The latter period was indeed described as an "*âge d'or*" by some contemporaries [10]. A comparative analysis of physical product also confirms the relative prosperity of the Flemish people around 1800. These values can be compared with reconstructions for neighbouring countries such as France, England and the United Provinces [11].

We must look more closely at the reasons for industrial development during the eighteenth century. It is frequently argued that domestic purchasing power had a decisive influence in economic growth. According to H. Perkin "the most immediate and necessary of all economic factors (is) the factor of demand... the Industrial Revolution was a social revolution with social causes and social effects" [12]. The same conclusion was reached by W.A. Cole: "growth of demand is now widely regarded as one of the essential elements in the transformation of the economy" [13].

9 C. VANDENBROEKE, *Mutation économiques...*, *op. cit.*, *pp. 85-88; De leefbaarheid van het platteland in Vlaanderen, 15e-19e eeuw, in Bijdragen tot de Geschiedenis*, 1981, pp. 131-166. Analogous remarks were made by M. P. GUTMANN, *War and rural life in the early modern Low Countries*, Assen, 1980, p. 109; D. TERRIER, Mulquiniers et gaziers: les deux phases de la proto-industrie textile dans la région de Saint-Quentin, 1730-1850, in *Revue du Nord*, 1983, p. 540; P. SERVAIS, Les structures agraires de continuité, in *XLVe Congrès Féderation des Cercles Archéologiques et Historiques de Belgiques, Comines*, 1980, p. 148; Les structures agraires du Limbourg et des pays d'Outre-Meuse du XVIIe au XIXe siécle, in *Annales. Economies-Sociétés-Civilisations*, 1982, p. 304.

10 N. BRIAVOINNE, *Mémoire sur l'état de la population, des fabriques, des manufactures et du commerce dans les provinces des Pays-Bas, depuis Albert et Isabelle jusqu'à la fin du siécle dernier*, Brussels, 1840, p. 85.

11 Cf. *the publications of the I.S.E.A. in France and more in particular the studies of* J. C. TOUTAIN, J. MARCZEWSKI and T. J. MARKOVITCH. For England, see P. MATHIAS, *The Transformation of England. Essays in the economic and social history of England in the eighteenth century*, London, 1979; P. DEANE-W. A. COLE, *British economic growth, 1688-1959*, Cambridge, 1962; P. O'BRIEN-C. KEYDER, *Economic growth in Britain and France, 1870-1914*, London, 1978; F. CROUZET, *L'économie de la Grande-Bretagne Victorienne*, Paris, 1978; R. FLOUD-D. MCCLOSKEY (eds.), *The economic history of Britain since 1700*, Cambridge, 1981. For the Netherlands; J. DE VRIES, *The decline and rise of the Dutch economy, 1675-1900*, paper prepared for the Conference on the Economic History of the Netherlands, UFSAL Brussels, 1983; J. H. VAN STUYVENBERG, De Economie in de Noordelijke Nederlanden, 1770-1970, in *Nieuwe Algemene Geschedenis der Nederlanden*, 10, Haarlem. 1981.

12 H. PERKIN, *The origins of modern English society, 1780-1880*, London, 1969, pp. 73 and 100.

13 W. A. COLE, *Factors in demand, 1700-80*, in R. FLOUD-D. MCCLOSKEY, *op. cit.*, p. 36.

However, in addition to demand, many other variables were at work and each author emphasizes different specific characteristics existing in England on the eve of the Industrial Revolution. A few years ago, R. M. Hartwell listed the variables cited most often, and found that they were more than thirty [14]. There is not any lack of debate then about the factors that gave size to industrialization at the end of the Ancien Régime, and many of the causes previously cited are now in doubt or seem less important than was once supposed [15]. A good illustration of this is the sub-heading N.F.R. Crafts gave in 1977 to one of his review-articles: "Some thoughts on the question: Why was England first?" [16].

As the number of comparative regional studies grows, it becomes increasingly important to bring Flanders into the discussion. For too long research has focused on France and England alone. What is needed is a broader perspective and a regional analysis of economic development. D.C. Coleman pointed this out in 1969: "We need comparative studies of economy and society in the varied political entities which made up Europe" [17].

Recently this approach has again been emphasized by S. Pollard when he confirmed that the industrial revolution in the West was a process of the industrialization of regions [18].

F. Mendels' conclusions pointed in the same direction when he developed the concept of proto-industrialization [19].

A reconstruction of physical product in East-Flanders, a region which was remarkable because of the diffusion of the linen industry, can provide the starting point for further research into industrial development at the end of the Ancien Régime. There is no lack of statistical information. Detailed censuses of agricultural production, cattle, dairy industry and industrial production were conducted during this period, when Belgium was temporarly integrated in the French empire [20].

[14] R. M. Hartwell (ed.), *The causes of the Industrial Revolution in England*, London, 1967.

[15] P. O'Brien-C. Keyder, *op. cit.*; R. Roehl, L'industrialisation française. Une remise en cause, in *Revue d'Histoire Economique et Sociale*, 1976; Britain and European Industrialization: pathfinder pursued, in *Review*, 1983; N. F. R. Crafts, British economic growth, 1700-1831. A review of the evidence, in *Economic History Review*, 1983.

[16] N. F. R. Crafts, Industrial Revolution in England and France: some thoughts on the question "Why was England first?" in *Economic History Review*, 1977.

[17] D. C. Coleman, *The economy of England, 1450-1750*, Oxford-London, 1977, p. 200.

[18] S. Pollard (ed.), *Region und Industrialisierung*, Göttingen, 1980, p. 21.

[19] F. Mendels, *Industrialization and population pressure...*, *op. cit.*, pp. 1-5.

[20] J. Craeybeckx, Les débuts de la Révolution Industrielle en Belgique et les statistiques de la fin de l'Empire, in *Mélanges G. Jacquemyns*, Brussels, 1968; B. Gille, *Les sources statistiques de l'histoire de France: des enquêtes du XVIIIe siècle à 1870*, Paris, 1964; H. Coppejans-Desmedt, Bijdrage tot een kritische studie over de nijverheidsstatistieken uit de jaren 1795-1846, in *Handelingen van de Koninklijke Commissie voor*

As a result we have excellent information for the period 1801-1813 and the quality of the census data is not in doubt: "the Napoleonic Statistics without any doubt provide the best instrument for studying economic development in the early years if the 19th century" [21].

An exhaustive analysis of all the sources, in the archives at Paris or in the provincial dépots at Ghent and partly published by Faipoult in his "*Mémoire Statistique du département de l'Escaut*" is the best way to study economic development shortly after 1800 [22]. For East-Flanders the composition and the value of the physical product can be summarized as follows [23]:

| *Agriculture:* | | | | *Industry:* | | | |
|---|---|---|---|---|---|---|---|
| Tillage | = | 48,537,711 | (33.9%) | | | | |
| Cattle-breeding | = | 25,137,652 | (17.2%) | | | | |
| Total | = | 73,675,363 | (50.2%) | Total | = | 73,190,397 | (49.8%) |
| Main Total | = | 146.865.760 | francs | | | | |
| Average Income per head | = | 235 | francs | | | | |

When we first examine the components of productions, we notice that the share of cattle and the dairy industry was exactly half that of tillage. It is striking indeed that F. Quesnay, the most famous spokesman of the physiocrats, described such a propostion as optimal for a proper agrarian economy: "livestock equals at least one half of the annual product of the harvest" [24]. Yet the equal contribution of the primary and secondary sector is also striking and demonstrates the advanced character of the Flemish area at the end of the Ancien Régime [25].

*Geschiedenis*, 1960; W. VANDERPIJPEN, *De landbouw en de landbouwpolitiek in het Leie-en het Scheldedepartement (1794-1814)*, unpublished Ph., Brussels, 1983.

[21] *La statistique en France à l'époque Napoléonienne*, Brussels, 1981, pp. 42-43.

[22] FAIPOULT, *Mémoire statistique du département de l'Escaut, 1801 (edited by* P. DEPREZ, *Ghent, 1960)*. An exhaustive analysis of the statistics for the agricultural sector can be found in W. VANDERPIJEN, *op. cit.*

[23] We presented an elaborated survey of physical product in Flanders at the Conference in Brussels (Musée Royal de l'Armée, october 1983) of the Révolution Brabançonne. This contribution is to be published shortly: *De sociaal-economische context van de Brabantse Omwenteling in de Vlaamse regio's. Het fysisch product in Vlaanderen op het einde van de 18e - begin 19e e eeuw.*

[24] J. C. TOUTAIN, *Le produit de l'agriculture française de 1700 à 1958. I. Estimation du produit au XVIIIe siècle*, Paris, 1961, p. 161.

[25] For a comparison with France and England, *Cf.*, R. FLOUD-D. MCCLOSKEY, *op. cit.*; J. C. TOUTAIN, *Le produit de l'agriculture française de 1700 à 1958. II. La croissance*, Paris, 1961, pp. 200-201.

It is even more interesting to put these approximate values of physical product in a wider context by adding a few comparisons in time and space [26]:

*Approximate values of the physical product (in francs)*

| | *Flanders* | *Belgium* | *France* | *England* | *Netherlands* |
|---|---|---|---|---|---|
| 1760-80 | (245) | — | — | — | — |
| 1780-90 | — | — | 192 | — | — |
| 1801-10 | 235 | — | 247 | 293 | 280(x) |
| 1811 | — | — | — | 303 | — |
| 1815-24 | — | — | 252 | 266 | — |
| 1825-34 | — | — | 286 | — | — |
| 1840-50 | — | 266(x) | — | 495(x) | — |
| 1845-54 | — | 262(x) | — | — | — |

The evolution of the physical product in Flanders is difficult to follow for the nineteenth century, but a marked decline seems clear. By about the middle of that century something between a quarter and a half of the population became indigent and needed assistance from public or private funds in one way or an other [27]. The direct cause of this spectacular impoverishment lay in the process of de-industrialization mentioned earlier and in the disastrous failure of grain and potatoes in the years 1845-47. But there was also a longer-term decline after the end of the eighteenth century, and this crisis has been described by several historians [28]. Flanders during the first half of the nineteenth century very quickly became one of the most impoverished regions of the Continent [29].

The contrast with the second and third quarters of the eighteenth century is remarkable. At that time physical product per head must have been higher than in 1800-1810. It is, however, difficult to provide an exact value for the middle of the century because of the lack of detailed statistical material before the French occupation of the Austrian or Southern Netherlands. But in an approximate way we can follow the evolution of the most important economic sectors in the

[26] The value with a sign between brackets, are reduced by about 20% from the GNP. For this there are many publications. For Belgium, see P. LEON, *op. cit.*; P. LEBRUN *et. al.*, *Essai sur la Révolution Industrielle en Belgique, 1770-1847*, Brussels, 1979; J. GADISSEUR, Contribution à l'etude de la production agricole en Belgique de 1846 à 1913, in *Revue Belge d'Histoire Contemporaine*, 1973. Most of the indications for the neighbouring countries can be found in the publications cited in note 11.

[27] P. C. VAN DER MEERSCH, De l'état de la mendicité et de la bienfaisance dans la province de Flandre Orientale depuis le règne de Marie-Thérèse jusqu'à nos jours, in *Bulletin de la Commission Centrale de Statistique*, V. Brussels, 1852; C. DE KEVERBERG, *Essai sur l'indigence dans la Flandre Orientale*, Ghent, 1819.

[28] G. JACQUEMYNS, *op. cit.*; B. VERHAEGEN, *Contribution à l'histoire économique des Flanders*, Louvain-Paris, 1961.

[29] C. VANDEBROEKE, *Sociale Geschiedenis van het Vlaamse Volk*, Beveren, 1981, pp. 241-282.

eighteenth century, and it is possible to draw some rough impressions about physical product and per capita income, since partial information is available for cereal production, stock of cattle and linen output, which were the leading sectors of economy before the end of the Ancien Régime.

At the end of the century and certainly after the 1820's, grain supplies could not any longer keep up with population growth [30].

We also know that the linen industry had to contend with growing competition from mechanized textiles abroad[31], and the response was to reduce prices for finished products. In addition the surplus value extracted from the linen sector increased less quickly than the population [32]. There was also a parallel stagnation and even a relative decline in cattle-breeding and the dairy industry, since population expansion meant that more and more households had to manage without cattle. In the seventeenth century almost every household had cattle in the area of Aalst (the so-called "Land van Aalst"), as the probate inventories in this area show; at the end of the Ancien Régime there were cattle in fewer than 60% of the households [33].

Again and again the evidence demonstrate that physical product per head must have reached its maximum in the middle of the eighteenth century, and an approximate income of about 240 to 250 francs seems a fair estimate for the years 1750-60, which were described as a golden age by contemporaries [34].

Putting all these data together, the homogeneous character of the nominal values, expressed per head of the population, is clear. By 1800 the difference between Flanders, England, France or the United Provinces was certainly not more than 20%. P. Bairoch has also argued that the countries of Western Europe were very similar at the end of the Ancien Régime [35]. But the nominal values,

[30] G. Bublot, *La production agricole belge. Etude économique séculaire 1846-1955*, Louvain, 1957; J. Vandervaeren, *Les faits principaux de l'histoire de l'agriculture belge durant un siécle, 1830-1930*, Brussels, 1930; C. Vandenbroeke-W. Vanderpijpen, The agricultural revolution in Flanders and in Belgium: Myth or reality?, in H. E. Van Cauwenberghe (eds.), *Productivity of land and agricultural innovation in the Low Countries (1250-1800)*, Louvain, 1978.

[31] M. Levy-Leboyer, *Les banques européennes et l'industrialisation internationale dans la première moitié du XIXe siécle*, Paris, 1964, p. 188.

[32] C. Vandenbroeke, *Sociale en konjunkturele facetten... op. cit.*, p. 155.

[33] A. Verhulst-G. Bublot (eds.), *L'agriculture en Belgique, hier et aujourd'hui*, Brussels, 1980, p. 36.

[34] C. Vandebroeke, *Sociale Geschiedenis...*, *op. cit.*, pp. 185-188.

[35] P. Bairoch, Ecarts internationaux des niveaux de vie avant la Révolution Industrielle, in *Annales. Economies-Sociétés-Civilisations*, 1979; Estimation du revenu national dans les sociétés occidentales préindustrielles et au XIXe siécle, in *Revue Economique*, 1977; Europe's gross national product, 1800-1975, in *Journal of European Economic History*, 1976.

used in this comparison give a rather distorted picture of reality[36]. If we want to understand social conditions we have to transpose these values into real terms. In general, an initial correspondence can be derived from grain equivalents, but such a simplification does not hold very well for the end of the eighteenth or for the first years of the nineteenth century, since extremely high grain prices were quoted in England at that time as a consequence of the Continental Blockade [37]. Therefore we have used a different comparison, based upon the average meat prices at the turn of the century [38]:

*Approximate values of physical product in real terms around 1800*

| | *Flanders* | *France* | *England* |
|---|---|---|---|
| Wheat, litres | 1,282 | 1,140 | 857 |
| Meat, kilograms | 255 | 230 | 254 |

This indicates that whatever basis we use for the transpositions of the nominal values into real terms, the final impression remains the same. In England, contrary to what is so often stated, there was no particularly favoured position concerning material supplies of foodstuffs at the end of the eighteenth or the beginning of the nineteenth century. On the other hand, there is no doubt that Flanders was one of the most prosperous areas in the world in this period.

What was true for the period 1800-1810 must certainly have been true for the middle of the eighteenth century. In his description of a journey through the Austrian Netherlands in 1782-3, Dérival testified: "All the inhabitants of the towns of the Low Countries live if not in opulence at least in great abundance: but this is even more to be remarked in the countryside than in the towns; in towns and in the countryside one cannot but be struck by the good fortune enjoyed by the inhabitants [39].

This picture contrasts with the usual images of social life in France recorded by A. Young [40]. It is also worth remembering that many English contemporaries spoke negatively about social conditions in their own country.

In that sense an observer in 1717 recorded: "they of Great-Britain who must work, be, steal or starve are five times as many as those who have Estates or Professions, whereupon to live without working" [41]. This description of mate-

[36] In this context, see also the critical remarks presented by M. MORINEAU, Richesse et pauvreté des régions. Une nouvelle approche, in *Congreso de Historia Rural, Siglos XV al XIX*, 1984, p. 386.

[37] B. R. MITCHELL, *Abstract of British Historical Statistics*, Cambridge, 1962; H. PHELPS BROWN - S. V. Hopkins, *A perspective of wages and prices*, London, *op. cit.*

[38] P. O'BRIEN - C. KEYDER, *op. cit.*, pp. 44-47.

[39] DERIVAL, *Le Voyageur dans les Pays-Bas Autrichiens*, I. Amsterdam, 1782-1783., pp. 9-10.

[40] A. YOUNG, *Voyages en France en 1787, 1788 et 1789*, Paris 1931 (edited by H. See).

[41] R. W. MALCOLNSON, *Life and labour in England, 1700-1780*, London, 1981, p. 19.

rial conditions in England hardly differs from what G. King some decades earlier was saying about the social structures in his country [42].

These impressions together with the approximate values of physical product create serious doubts about the importance of the demand factor, and suggest that purchasing power cannot be seen as the deciding variable in explaining industrial take-off in Great-Britain. Nonetheless a temporary rise in the standard of living remained an important factor stimulating economic expansion during the eighteenth century in most of the Western countries and areas. We may follow F. Braudel, in a paraphrase of J. M. Keynes, in saying: "It was an increase in demand which, so to speak, started the motor. The need to increase production set the machines in motion..."

But what about the other explanations and factors, which are frequently said to explain the beginning of the Industrial Revolution?

What is the result of a comparative analysis using the Flemish region as a base? Anticipating the results of our research, it can be repeated that the so-called advantages of Great Britain were more apparent than real. In most respects, oportunities for industrial growth were at least as good in Flanders as in England and in other neighbouring countries.

The "human capital" factor may have been essential to economic development after the middle of the nineteenth century. However, in the context of the process of modernization in the eighteenth century, the influence of this variable was rather weak [44]. This is clearly expressed by G. N. Von Tunzelmann, who has noted that: "science was in vastly better shape on Continental Europe... than in Britain" [45]. If we take literacy as a criterion, we find more similarities than differences among the countries in North Western Europe. By about 1785 some 50% of men and 25% of women signed their marriage acts in Flanders [46], a similar proportion to that in France or England [47]. Yet this average disguises regional differences: in Flanders the contrast between the areas with commercial agriculture in the west and the north on one hand, and the industrial area in the south and the interior part of the province on the other hand (see map) was

[42] See also the estimates made by Colquhoun for the year 1803 (H. Perkin, *op. cit.*, table 21).

[43] F. Braudel, *Les Jeux de l'échange*, Paris, 1979, p. 150.

[44] P. Bairoch, *Le Tiers-Monde dans l'impasse. Le démarrage économique du XVIIIe siécle*, Paris, p. 25.

[45] G. N. Von Tunzelmann, *Technical progress during the industrial revolution*, in R. Floud - D. McCloskey, *op. cit.*, p. 149.

[46] J. Ruwet - Y. Wellemans, *L'analphabétisme en Belgique, XVIIIe - XIXe siécles*, Leiden-Louvain, 1978.

[47] J. Houdaille, Les signatures au mariage de 1740 à 1829, in *Population*, 1977; L. Stone, Literacy and education in England, 1640-1900, in *Past and Present*, 1969; F. Furet-W. Sachs, La croissance de l'alphabétisation en France, XVIIIe - XIXe siécle, in *Annales. Economies-Sociétés-Civilisation*, 1974.

sharp. In districts where rural industry was common and where child labour was widespread, literacy was lower [48].

More important in this cross-country comparison are the contrasts in population growth and structure. From recent demographic research, we can conclude that higher growth rates were seldom found ouside Flanders. This is particularly true for southern and inland Flanders, precisely the area with the most important extension of proto-industry [49]. Even when looking at regional population figures elsewhere, for example in England, and making a division between so-called agrarian and industrial areas, we still come to the same conclusions. Maximum growth occurred in Flanders during the eighteenth century. This was to change after the turn of the century and from that moment the most rapid population growth occurred in Great Britain [50].

*Population growth during the XVIIIth century and the first half of the XIXth century (indices).*
*(1700 = 100)*

| | *Flanders* | | | | |
|---|---|---|---|---|---|
| *Period* | *Area of Tielt*[51] | *Area of Aalst*[52] | *Belgium*[53] | *France*[54] | *England: Total*[55] |
| 1700 | 100 | 100 | 100 | 100 | 100 |
| 1750 | 180 | 159 | — | 119 | 114 |
| 1800 | 256 | 202 | 189 | 142 | 171 |
| 1850 | 345 | | | | 331 |

| | *England* | | |
|---|---|---|---|
| *Period* | *Agricultural Areas*[56] | *Mixed Areas*[56] | *Industrial Areas*[56] |
| 1700 | 100 | 100 | 100 |
| 1750 | 100 | 100 | 115 |
| 1800 | 134 | 145 | 193 |

[48] C. VANDENBROEKE, *Mutations économiques... op. cit.*, p. 93.

[49] P. DEPREZ, The demographic development of Flanders in the eighteenth century, in D. V. GLASS-D. E. C. EVERSLEY (eds.), *Population in History*, London, 1965.

[50] N. L. TRANTER, *Population since the Industrial Revolution. The case of England and Wales*, London, 1973.

[51] Unpublished study, presented at the University of Ghent in 1981 by C. STEVENS.

[52] J. DE BROUWER, *Demografische evolutie van het Land van Aalst, 1570-1800*, Brussels, 1968.

[53] L. PRENEEL, *De demografische ontwikkeling in België sedert 1800. Aspecten van een transitieproces*, Louvain, 1981; P. DEPREZ, The Low Countries, in W. R. LEE, *European demography and economic growth*, London, 1979, pp. 236-283.

[54] J. DUPAQUIER, Les caractères originaux de l'histoire démographique française au XVIIIe siécle, in *Revue d'Histoire Moderne et Contemporaine*, 1976, pp. 182-202.

[55] N. L. TRANTER, *op. cit.*; M. W. FLINN, *The European demographic system, 1500-1820*, Brighton, 1981.

[56] P. DEANE - W. A. COLE, *op. cit.*, p. 103.

Marriage behaviour also shows a fundamental difference. While a decrease in marriage ages occurred in England toward the end of the Ancien Régime, Flanders — like France — was distinguished by a restrictive marriage pattern [57]. The average age at first marriage was about 29 years for men and 27 years for women around 1800 [58]. A further indication of the restrictive pattern of nuptiality in Flanders can be seen in the proportion of men and women who never married. This proportion increased from 15% at the beginning of the eighteenth century to more than 25% shortly after the middle of the nineteenth century [59]. In most areas of Flanders the index of nuptiality (Im) was even lower than 0.45 [60].

All this resulted in a gradual ageing of the population. In that sense it is striking that the proportion of "communicants" in the total population was only 60% around 1700 as against 70% in 1800 [61]. Direct proof of gradual ageing in Flanders is found when we split up the age groups recorded in the censuses for the end of the eighteenth and the first decades of the nineteenth century. The differences between Flanders, France and England become very clear when we bring together the results of these first censuses:

*Age structures in Flanders, France and England 1791-1851* [62]

| | *England 1791* | *England 1821* | *Flanders 1796* | *Flanders 1846* | | *France 1816* | *France 1851* |
|---|---|---|---|---|---|---|---|
| 0-19 | 42.4 | 48.3 | 42.1 | 40.2 | 0-19 | 41.2 | 36.1 |
| 20-29 | 14.4 | 16.4 | 15.1 | 16.8 | 20-59 | 49.4 | 53.7 |
| 30-69 | 38.4 | 32.4 | 38.3 | 39.7 | 60+ | 9.4 | 8.7 |
| 70+ | 4.8 | 2.9 | 3.4 | 3.3 | | | |

[57] C. VANDENBROEKE, Caractéristique de la nuptialité et de la fécondité en Flandre et en Brabant aux XVIIe - XIXe siécles, in *Annales de démographie historique*, 1977, pp. 7-20; Karaksteristieken van het huwelijks - en voortplantingspatroon in Vlaanderen en Brabant, 17de-19de eeuw, in *Tijdschrift voor Sociale Geschiedenis*, 1976, pp. 111-115.

[58] In England an opposite evolution can be seen at the end of the eighteenth century. Cfr. R. D. LEE - R. S. SCHOFIELD, *British population...*, in R. FLOUD - D. MCCLOSKEY, *op. cit.*, p. 27; E. A. WRIGLEY, *The growth of population in eighteenth-century England: a conundrum resolved, in Past and Present*, 1983, pp. 121-150.

[59] C. VANDENBROEKE, *Karakteristieken..., op. cit.*, pp. 116-117.

[60] R. LESTHAEGHE, *The decline of Belgian Fertility, 1800-1970*, Princeton, 1977; E. VAN DE WALLE, La nuptialité en Belgique de 1846 à 1930 et sa relation avec le déclin de la fécondité, in *Population et famille*, 1965.

[61] During the period 1630-1845 the proportion of "communicants" increased by more than 20%:

| | | |
|---|---|---|
| 1630-39 = 59.7% | 1700-19 = 63.6% | 1770-89 = 69,0% |
| 1660-79 = 59.7% | 1710-29 = 63.3% | 1780-99 = 71,8% |
| 1670-89 = 64.7% | 1740-59 = 67.3% | 1810-19 = 71,0% |
| 1780-99 = 64.5% | 1750-69 = 66.0% | 1840-45 = 72,2% |
| 1690-09 = 65.7% | 1760-79 = 66.2% | |

There was a stronger representation of adults in Flanders and France than in England, and during the first half of the nineteenth century this difference became more pronounced. Thus the dependency ratio, with an average of 0.6 was notably lower and better adapted to economic development. If we also suppose that the participation of women and children was at its maximum in the rural and linen industry of Flanders, there will be less doubt for the higher rate of activity [63]. Nowhere was there more labour power available in proportion to the population than in the countryside of Flanders [64].

On the eve of the Industrial Revolution, when output was still largely provided by muscle power, this was an undeniable advantage.

In many ways it helps explain the prosperity of Flanders' regional economy during the eighteenth century. As J.D.Chambers put in 1972: "Increased output was not due entirely to new technology, but increasing effort by those working in the traditional industries played its part" [65]. However, the saving and spending possibility of the family budget was strongly influenced by the age structure and the low dependency ratio [66]. The smaller the weight of the passive population, the larger the opportunities to save [67].

Concerning the agricultural economy there is no doubt at all that Flanders was one of the most highly developed areas and enjoyed an intensive and progressive agricultural system without fallow and providing two crops a year. Average grain yields of 1500 to 2000 lires per hectare had been common since the late Middle Ages [68]. In spite of the high population density of 250 to 300 inhabitants per km$^2$, Flanders was able until the end of the Ancien Régime to export a large part of grain production. During the second half of the eighteenth century about a quarter of the so-called bread-grain (wheat, meslin or rye) was exported. Moreover, about 20% of the harvest was used for beer and gin production[69]. The best proof of the reputation that the Flemish agricultural

[62] J. D. CHAMBERS, *Population, economy and society in pre-industrial England*, Oxford, 1972, p. 121; N. L. TRANTER, *The labour supply, 1780-1860*, in R. FLOUD - D. MCCLOSKEY, *op. cit.*, p. 210. The age structure in France, worked out by J. BOURGEOIS-PICHAT, is cited in P. LEON *et. al.*, *Histoire économique et sociale de la France. III: l'avènement de l'ère industrielle (1789-années 1880)*, Paris, 1976, p. 185. An exhaustive study of the census of 1796 in East-Flanders is published by J. DE BELDER-L. JASPERS-C. STEVENS-C. VANDENBROEKE, *Arbeid en tewerkstelling in Oost-Vlaanderen. Een demografische en socio-professionele analyse*, Ghent, 1984.

[63] B. VERHAEGEN, *op. cit.*, passim.

[64] See also the notion of "productivity of labour", worked out by F. MENDELS.

[65] J. D. CHAMBERS, *op. cit.*, p. 149.

[66] Cf. R. D. LEE - R. S. SCHOFIELD, *op. cit.* p. 30: "changes in the age structure of the population, due primarily to its higher fertility late in the (XVIII) century, did increase the consumption presure on the typical worker".

[67] M. W. FLINN, *The origins of the Industrial Revolution*, London, 1966, pp. 30-34.

[68] B. H. SLICHER VAN BATH, The yields of different crops (mainly cereals) in relation to the seed c. 810-1820. In *Acta Historiae Neerlandica*, 1967, pp. 26-106.

[69] F. MENDELS, *Agriculture and peasant industry...*, *op. cit.*, C. VANDENBROEKE,

economy enjoyed is found in the fact that so many foreign agronomists (R. Weston, J.Sinclair, T.Radeliff, I.Thys, D.De Gomicourt (Dérival), T.A.Mann, A.Thaer, J. Cordier, J.N.Schwerz and S.Von Grouner) went to this country to learn about the production results and the rotation-system [70].

The situation was totally different in England. In the course of the seventeenth century great progress was made in agriculture[71]; this could not prevent England from becoming a grain-importing nation after 1760-1770 [72]. The repercussions of this evolution are found in the higher prices of grain at the end of the eighteenth century; as we know already from the calculation of physical product, the absolute maxima were reached during the years of the Continental Blockade. It is one of the reasons why the real value of the physical product, expressed in litres of wheat, was so low in England compared to Flanders or France.

In terms of economic policy a promising strategy was applied to the Southern Netherlands during the reign of Maria Theresia (1740-1780). The tariffs on international trade were no longer seen as part of a fiscal system, but also as a protective support for the domestic economy.

For this reason at the initiative of Coblenz, trade policy was revised completely [73], and simultaneously initiatives were taken to stimulate home production as well as foreign trade [74].

In order to apply economic policy as effectively as possible, different ad hoc committees and special "bureaux de régie" or "jointes" were established [75].

The most spectacular results were obtained in the infrastructure [76]. Even the most critical contemporaries agreed that the best road system in Europe was to be found in Flanders. Voltaire's praise of its quality is famous: "amongst the modern nations, it is France and the little country of Belgium which have roads

*Agriculture et Alimentation dans les Pays-Bas Autrichiens*, Ghent, 1975, pp. 85-90; W. VANDERPIJPEN, *op. cit.*

[70] A. VERHULST-G. BUBLOT, *op. cit.*, p. 29.

[71] E. L. JONES, *Agriculture and economic growth in England, 1650-1815*, Suffolk, 1967; *Agriculture, 1700-80*, in R. FLOUD-D. MCCLOSKEY, *op. cit.* pp. 66-85.

[72] P. DEANE-W. A. COLE, *op. cit.*, p. 65.

[73] H. VAN HOUTTE, L'essor économique de la Belgique sous le règne de Marie-Thérèse, 1740-1780, in *Revue Générale*, 910; *Histoire économique de la Belgique à la fin de l'Ancien Régime*, Ghent, 1920.

[74] P. MOUREAUX, *La statistique industrielle dans les Pays-Bas Autrishiens à l'epoque de Marie-Thérèse, Brussels*, 1974; C. VANDENBROEKE, *Agriculture et Alimentation...*, *op. cit.*, *passim*. In France, such a system of "enquêtes" was also in use during the second half of the eighteenth century. Cf. C. E. LABROUSSE, *La crise de l'économie française à la fin de l'ancien régime et au début de la révolution*, Paris, 1944.

[75] P. MOUREAUX, Un organe peu connu du Government des Pays-Bas Autrichiens: le Bureau de Régie des Droits d'entrée et de sortie, in *Revue Belge de Philologie et d'Histoire*, 1986.

[76] L. GENICOT, *Histoire des routes belges depuis 1704*, Brussels, 1948.

worthy of Antiquity" [77]. Analogous indications are given in the statistical reports from the beginning of the nineteenth century. At that time Belgium possessed 1 km (navigable) waterway per 14 km$^2$ against 1 km per 33 km$^2$ in England [78]. The contrast of the country roads is illustrated by a comment from X. Heuschling: «Belgian roads can be considered the finest in Europe: they are better than those of England and better by far than those of France [79]. In 1850 it was still accepted that there were three times more roads and canals in Belgium than in England [80].

Another variable concerns foreign trade. It cannot be denied that England had a good lead in this, largely because of the strong expansion of colonial trade since the seventeenth century [81]. About the year 1800, foreign trade represented ± 30% of the physical product of England [82], considerably higher than in France or the Southern Netherlands. However, the contribution of foreign trade to industrial growth cannot be seen as a leading force before the end of the Ancien Régime [83], and it was some time later, as R. P. Thomas and D. N. Mc Closkey argue, before foreign trade became really significant: «the strongest effect between commerce abroad and industry at home was from industrialisation to commerce, not the reverse. Trade was the child of industry»[84]. Furthermore the rhythm of foreign trade was not at all linear. Sharp interruptions characterized the years 1770-80's in France as well as in England or the United Provinces [85]. Against this there was an extraordinarily favourable evolution in a few smaller countries and regions. This is also the case with the Southern Netherlands, where after the middle of the eighteenth century traditional trade gaps disappeared and even changed into a positive balance with some neighbouring countries [86].

The increase in foreign trade, expressed in constant prices, would have been

[77] L. Dechesne, *Histoire économique et sociale de la Belgique*, Liège-Paris, 1932, p. 275.

[78] I. T. Berend - G. Ranki, *The European Periphery and Industrialization, 1780-1914*, Cambridge, 1982, p. 92.

[79] P. Lebrun, *op. cit.*, p. 605.

[80] L. Dechesne, *op. cit.*, p. 377.

[81] R. Davis, *The Industrial Revolution and British Overseas Trade*, Leicester, 1979; P. Bairoch, *Commerce extérieur et dàeveloppement économique de l'Europe au XIXe siécle*, Paris, 1976; N. F. R. Crafts, *British economic growth...*, *op. cit.*, F. Crouzet, Angleterre et France au XVIIe siécle. Essai d'analyse comparée de deux croissances économiques, in *Annales. Economies-Sociétés-Civilisations*, 1966; R. P. Thomas-D. McCloskey, *Overseas trade an empire, 1700-1860*, in R. Floud-D. McCloskey, *op. cit.*, pp. 87-102.

[82] P. Deane. *The Industrial Revolution and economic growth: the evidence of early British National Income Estimated, in* R. M. Hartwell (ed.), *op. cit.*, p. 86.

[83] R. Roehl, *Britain and European Industrialization...*, *op. cit.*

[84] R. N. Thomas-D. McCloskey, *op. cit.*, p. 102.

[85] F. Braudel, *op. cit.*, p. 175; F. Crouzet, *Angleterre et France... op. cit.*, p. 262.

[86] V. Janssens, *Het geldwezen der Oostenrijkse Nederlands*, Brussels, 1957.

about equal in France and England. Between 1716-20 and 1784-88, F. Crouzet estimates an increase of respectively 200% and 140 to 175% [87]. Less complete indications are available for the Southern Netherlands. We know only the total amount of foreign trade that took place with France and England between 1716-20 and 1776-88 [88]. With France there was an increase from 7.2 million to 33.7 million Livres Tournois (= x 4.7); with England foreign trade rose from an average of 347,435 to 1.82 million Pounds Sterling (= x 5.2). For both countries together, which make up more than half the trade relations of the Southern Netherlands, this represents a fivefold increase. In other words foreign trade, expressed in constant prices, increased at least as quickly as in the most important neighbouring countries up to and including the third quarter of the eighteenth century. A maximum growth arose in the course of the 1770s, when the Southern Netherlands profited by neutrality during the American war. On the other hand, the years 1783-89 indicate again a decline in the trade activities with England and France. The peak of economic expansion was over. The Flemish economy and the foreign trade in the Southern Netherlands peaked just in the second and third quarter of the eighteenth century [89].

Considering the different explanations and variables that are generally used by economic historians, we are left comforted by more problems than solutions. Many explanations and generalisations prove weak and doubtful when they are related to the economic perspectives and performances of smaller countries and regions. The so-called «privileged» starting point in England, which is always emphasized by economic historians, does not hold any longer. Indeed, in most cases, we find that the Flemish regional economy was at least equally productive and in many respects enjoyed a more favourable position. This is illustrated by the following summary of the most frequently cited variables:

*Variables cited to explain industrial development at the and of the Ancien Régime*

| | *In favour of Flanders* | *Equal* | *In favour of England* |
|---|---|---|---|
| "Human Capital" | | X | |
| Population growth | X | | |
| Age structure | X | | |
| Activity rate | X | | |
| Agriculture | X | | |
| Home industry | X | | |
| Economic policy | | X | |
| Infrastructure | X | | |
| Importance of foreign trade | | | X |
| Growth of foreign trade | | X | |
| Domestic purchasing power | | X | |

[87] F. Crouzet, *Angleterre et France..., op. cit.*, p. 261.

[88] R. Davis, English foreign trade, 1700-1774, in *Economic History Review*, 1962-63); R. Romano, Documenti e prime considerawioni intorno alla 'Balance du commerce' della Francia dal 1716 al 1780, in *Studi in onore di Armando Sapori*, II, Milano, 1957, pp. 1265-1300.

[89] C. Vandenbroeke, *Sociale Geschiedenis..., op. cit.*, p. 185.

These eleven variables suggest that the balance was six times in favour of Flanders, that the situation was comparable in four cases and that only foreign trade revealed a better outlook for England.

The favourable starting position of the Flemish regional economy is revealed even more strongly when we take into account its competitive position and the wage costs. Such comparisons are too frequently neglected [90]. Still, the cost of wages forms one of the most essential components in the final level of prices. In a society where labour-saving devices were few and where therefore few differences in productivity were possible, it is logical that the relative importance of the costs of wages will be great.

Because good wage surveys for industrial labourers are lacking, this issue cannot be resolved in a comprehensive form. But an approximate picture can be derived from the situation of unskilled or less qualified workers in the building sector [91]. The wage disparity found for this group is *a fortiori* true for industrial labourers and textile workers:

*Wages of bricklayers, expressed in grams of silver.*

| *Period* | *Flanders* | *France* | *England* | *United Provinces* |
|---|---|---|---|---|
| 1651-75 | 6.20 | 6.93 | 5.60 | 7.78 |
| 1676-00 | 6.05 | 6.19 | 5.62 | 7.75 |
| 1701-25 | 5.33 | — | 6.77 | 7.69 |
| 1726-50 | 5.29 | 5.73 | 7.18 | 7.69 |
| 1751-75 | 4.94 | 5.88 | 7.37 | 8.34 |
| 1776-00 | 5.10 | 7.40 | 9.19 | 8.65 |
| 1801-25 | 6.17 | 8.77 | 13.47 | 8.65 |
| 1826-50 | 6.14 | 10.26 | 13.91 | 8.58 |

Following the wage data from 1651 to 1850, we find some striking differences, especially between wage levels in England and Flanders [92]. At the end of

[90] A comparative analysis of the (nominal) price levels was set up by F. BRAUDEL-F. SPOONER, Prices in Europe from 1450 to 1750, in *The Cambridge Economic History of Europe*, IV, Cambridge, 1967. Less research was done to bring together the wage costs in the different countries. However, see the studies of J. DE VRIES, *An inquiry into the behaviour of wages in the Dutch Republic and the Southern Netherlands, 1580-1800;* J. MOKYR, *Industrialization in the Low Countries, 1795-1850*, New Haven, 1976, and J. M. M. DE MEERE, *Economische ontwikkeling en levenstandard in Nederland gedurende de eerste helft van de negentiende eeuw*, The Hague, 1982.

[91] C. VERLINDEN - E. SCHOLLIERS (eds.), "*Documents pour l'histoire des prix et des salaires en Flandre et en Brabant*", Bruges, 1959-1973; C. VANDENBROEKE, "Prijzen en lonen als sociaal-economische verklaringsvariabelen (14e-20e eeuw)", in "*Handelingen Maatschappij Geschiedenis en Oudheidkunde Gent*", 1982.

[92] For the decrease of the standard of living in England during the XVIIth century, see C. HILL, "*Reformation to Industrial Revolution*", Harmondsworth, 1976, p. 84; "1620-1650 were probably among the most terrible years through which the country has ever passed".

the eighteenth century the wages of unskilled or semi-skilled labourers in Flanders were 60 to 70% lower than in England. At that moment, when productivity differences were exceptional, factor costs were essentially fixed by the wages. This holds particularly for labour-intensive sectors such as textiles, which is also the basic sector of industrial activity in the Ancien Régime [93]. In this way, it is no longer a surprise to find that the export trade in general and the export of linen from Flanders in particular were characterized by an exponential growth in the course of the eighteenth century [94]. Even the sharpest protectionist measures abroad could not outweigh the lower cost of labour. No wonder that Flemish linen played a leading part in international trade at the end of the Ancien Régime [95]. On the other hand, England, the United Provinces and France were becoming less competitive. In many ways, the interruption of foreign trade during the third quarter of the eighteenth century was a direct result of the high level of prices and wages in these countries [96].

But lower nominal wages should not be identified with a lower standard of living in Flanders [97] They provide only the means for comparing the economic competitiveness among different countries and nations. Comparisons of purchasing power can be made only by turning the basic data into real prices and real wages, and all kinds of fiscal and social deductions must be taken into account [98]. We indicated above that there were not any essential differences concerning purchasing power among the Western nations before the end of the

[93] F. CROUZET, Essai de construction d'un indice annuel de la production industrielle française au XIXe siécle, in *Annales. Economies-Sociétés-Civilisation, 1970.* Concerning the problem of factor costs, cfr. P. LEON et. al., *Histoire économique et sociale de la France.* III, Paris, 1976, pp. 538-539.

[94] An approach of the export figures for linen pieces can be given in this way:

| | |
|---|---|
| 1670 = 120.000 | 1800 = 195.000 |
| 1700 = 120.000 | 1815 = 250.000 |
| 1720 = 130.000 | 1825 = 275.000 |
| 1750 = 145.000 | 1833 = 210.000 |
| 1780 = 195.000 | 1845 = 185.000 |

[95] In general about 80% of the production was exported to Spain and France and from these countries to the New World!.

[96] This is especially true for the United Provinces. For France and England the problem is not so clear, because the interruptions in foreign trade were influenced by the American war.

[97] "Il faust substituer à la monnaie défaillante un étalon de valeur nouveau, assis sur la notion de richiesse réelle" (A. SAULY, *Histoire économique de la France entre les deux guerres,* Paris, 1965, p. 314).

[98] F. BRAUDEL, *Le temps du monde,* Paris, p. 329: "le contribuable français est soumis à un lourd prélèvement social, au bénéfice des segneurs et de l'Eglise. Et c'est cet impôt social qui limite à l'avance l'appétit du Trésor Roval".

Ancien Régime. The table below, expressing the nominal wages of bricklayers in wheat-equivalents, brings an additional illustration of this conclusion:

*Real wages of bricklayers, expressed in litres of wheat*

| *Period* | *Flanders* | *France* | *England* | *United Provinces* |
|---|---|---|---|---|
| 1651-75 | 8.6 | 8.5 | 6.9 | 13.1 |
| 1676-00 | 8.9 | 8.1 | 8.4 | 14.8 |
| 1701-25 | 9.7 | — | 10.4 | 15.6 |
| 1726-50 | 10.7 | 10.6 | 11.9 | 16.4 |
| 1751-75 | 9.3 | 9.5 | 10.2 | 15.0 |
| 1776-00 | 7.8 | 9.9 | 8.9 | 11.9 |
| 1801-25 | 7.3 | 12.2 | 9.2 | 9.8 |
| 1826-50 | 7.3 | 15.1 | 13.5 | 10.0 |

The differences in the middle of the eighteenth century fade away almost completely when tax burdens are taken into account (see below). In this sense, we can repeat that purchasing power was about equal in all these countries and areas at the end of the Ancien Régime. In other words: the improving standard of living after 1750 certainly was a strong stimulus to economic expansion. However, this cannot be seen as a final factor explaining the industrial take-off in England. Everywhere in Nort-West-Europe a similar improvement of the social climate was felt between 1725-1775 [99]. On the other hand, competitive power differed very strongly from country to country. And here Flanders had better opportunities for economic growth during the eighteenth century.

The deeper reason for Flanders' favourable position may be explained by four factors: lower food prices, lower wage costs, less fiscal duties and less inflation.

In the first place we have to take the price of foods into account. While about half of family expenses went to the purchase of grains and bread until well into the nineteenth century, it is logical that the level of the grain prices must have had an enormous influence on wage levels [100].

A summary of wheat prices shows very sharp contrasts among the different countries in North-West-Europe [101]:

[99] Cf. E. Le Roy Ladurie, "*Le territoire de l'historien*", II, Paris, 1978.

[100] See for instance abbé Mann: "le prix de la journée de travail fût fixé en tout temps à la valeur d'un tiers d'un boisseau de froment; par-là ses gains seroient constamment proportionnés à ses besoins" ("Mémoire sur la question: dans un pays fertile et bien peuplé, les grandes fermes sont-elles utiles ou nuisibles à l'Etat en général?", in "*Memoires de l'Académie Impériale et Royale de Bruxelles*", IV, 1783, p. 219).

[101] C. Verlinden - E. Scholliers (eds.), *op. cit.*; C. Vandenbroeke, "*Prijzen en lonen...*". *op. cit.*

*Wheat prices per hectolitre, expressed in grams of silver.*

| *Period* | *Flanders* | *France* | *England* | *United Provinces* |
|---|---|---|---|---|
| 1651-75 | 73.4 | 87.3 | 81.3 | 61.2 |
| 1676-00 | 72.2 | 79.7 | 69.9 | 55.7 |
| 1701-25 | 59.0 | 67.2 | 66.7 | 50.3 |
| 1726-50 | 50.8 | 54.4 | 61.9 | 47.5 |
| 1751-75 | 53.4 | 64.5 | 76.5 | 56.4 |
| 1776-00 | 67.2 | 75.0 | 106.7 | 75.7 |
| 1801-25 | 88.0 | 95.8 | 151.1 | 97.5 |
| 1826-50 | 84.9 | 88.2 | 103.8 | 86.8 |

In the course of the eighteenth century there was a price advantage in Flanders of 10 to 15% with respect to France and of 25 to 30% with respect to England. Only at the end of the eighteenth century were wheat prices also lower in the United Provinces. Contemporaries also noted in their travel books the lower prices prevailing in Flanders,[102] and good example can be found in the travel book of Dérival: «at Brussels it is possible to find all sorts of food-stuffs; in general they are rather cheap; life is less expensive in Brussels than in Paris and probably about half that in London or Amsterdam...».[103] The lower grain prices in Flanders are more noticeable still when we remeber that the largest population density and the quickest population growth were to be found there. This is another proof of the extraordinary evolution of its agricultural economy and food production. However, this evolution was also sustained by a radical change in the production and consumption pattern and above all in the early spread of potatoes in Flanders. In the course of the eighteenth century the consumption if grain was halved. One person consumed only 0.5 or 0.6 litres of grain per day instead of one litre at about 1700. The loss of calories was compensated eating one kg of potatoes. [104]

The lower wage costs can also be explained by differences in the tax burden. At the end of the Ancien Régime the tax burden was about 20 to 25% of physical product in England and the United Provinces. In France this proportion can be

[102] Cf. J. GARDNER, *Voyage pittoresque par Manheim, Mayence, Aix-la-Chapelle, Bruxelles*. Translated by J. Coudroy, London, 1972, p. 150; *Lettres and journals of Mrs. Calderwood of Polton from England, Holland and the Low Countries in 1756*, edited by A. FERGUSSON, Edinburgh, 1884, pp. 267-268.

[103] DERIVAL, *op. cit.*, I. p. 26.

[104] C. VANDENBROEKE, "Cultivation and consumption of the potato in the XVIIth and XVIIIth century", in "*Acta Historiae Neerlandica*", V, 1971, pp. 15-39.

put at 10 to 15%.[105] In the Southern Netherlands it was no more than 5 to 10%, a level that would persist up to the beginning of the twentieth century. L. Franck, of Minister of State and governor of the National Bank, noticed: «Before the war of 1914, Belgium was a fortunate country in which taxation placed only a light burden on the economy.[106] The economic historian B.S. Chlepner shares a similar view and claims that «the Belgian tax-payer was of the least heavily taxed in the world».[107]

We must also look at the contrasts in employment. It is clear that in England, as a direct result of enclosures, the problem of expropriation was more acute for the lower classes than in France or the Southern Netherlands. Full-time wage-labourers were not at all unusual in eighteenth century England. In Flanders, on the contrary, the majority of the people still owned a piece of land.[108] This meant that people sought first of all an income from agriculture, while rural industry was considered a part-time activity. The prefect of the Département de l'Escaut, Faipoult, affirmed this situation in his «*Mémoire Statistique*»: «the first commitment is to work on the land, which is done with diligence, but all the time that cannot be devoted to agriculture is taken up with the spinning and weaving of linen and wool».[109] Full-time weavers and spinners were to be found in Flanders only after the second quarter of the nineteenth century. The effects on wages are obvious: part-time workers, who have an income from other activities (for instance, agriculture), can live with smaller earnings.[110]

Finally, monetary relations could also influence the evolution of prices and wages, but J. Riley and J.J. McCusker have demonstrated recently this was not a strong factor during the eighteenth century.[111] There are also considerable difficulties involving the accuracy of the money supply estimates in the different

[105] P. Mathias, *op. cit.*; P. Mathias-P. O'Brien, "Taxation in Britain and France, 1715-1810. A comparison of the social and economic incidence of taxes collected for the central governments", in "*The Journal of European Economic History*", 1976; M. Allais, "Classes sociales et civilisations", in "*Economies et Sociétés*", 1974; F. Braudel, "*Le temps du monde*", *op. cit.*, p. 329; F. Hincker, "*Les Français devant l'impôt sous l'ancien régime*", paris, 1971; M. Morineau, "Budgets de L'Etat et gestion des finances royales en France au dix-huitième siécle", in "*Revue Historique*", 1980.

[106] L. Franck, *La stabilisation monétaire en Belgique*, Paris, 1927, p. 18.

[107] B. S. Chlepner, *Cent ans d'histoire sociale en Belgique*, Brussels, 1972, p. 196.

[108] Just as in Flanders, the process of expropriation was also in the Walloon area less pronounced before the beginning of the nienteenth century. See the publications, cited in note 9.

[109] Faipoult, *op. cit.*, p. 103.

[110] F. Mendels, *Seasons and regions in agriculture and industry during the process of industrialization*, in S. Pollard, *op. cit.*, p. 189.

[111] J. Riley- J. J. McCusker, Money supply, economic growth and the quantity theory of money: France, 1650-1788, in *Exploration in Economic History*, 1983, pp. 274-293.

countries, but an approximate idea can be indicated for the end of the Ancien Régime. Once again the values are related to physical product:

| | *Southern Netherlands* [112] | *France* [113] | *England* [114] |
|---|---|---|---|
| Amount of money per head | 82.5 francs | 116.4 francs | 150.0 francs |
| Physical product per head | 235 francs | 230.3 francs | 287 francs |
| Velocity of money | 2.8 | 1.9 | 1.9 |

Especially in England, the abundant creation of money and bank-notes caused a higher inflation, and this again is confirmed in many contemporary accounts. Dérival, or example, wrote in the 1780s: «It was following the creation of the *Banque de Londres* that labour in England became 15% to 16% dearer than in France which now as a result holds a 15 to 16% advantage over the English in every market».[115] The comparison holds well for Flanders and the Southern Netherlands, where the amount of money per head of the population was 30 to 40% lower than in France!

Using Fisher's equation M x V = P x T, we can infer that the smaller stock of money species in the Southern Netherlands was compensated by a greater velocity. And knowing that the average price level was lower than abroad, we can further also conclude that the factor T was greater than in France or England. Equilibrium in Fisher's equation is only made possible by a greater turnover of goods in relative terms. This is doubtless the best proof of the economic expansion in the Southern Netherlands and Flanders at the end of the Ancien Régime. Some years ago E. Héling came to the same conclusions: «Flanders and Brabant experienced a prosperity which was quite exceptional in Europe at that time».[116]

For all these reasons, it is remarkable that economic historians, with the exception of the new interest in the process of proto-industrialization (which is all too often seen in relation to impoverishment) have paid so little attention to the Flemish regional economy. All manner of economic relations have been put forward to explain industrial modernization and the causes of the Industrial Revolution, and it has always been accepted that England enjoyed some advan-

[112] V. JANSSENS, *op. cit.*, pp. 164-165.

[113] F. BRAUDEL, *op. cit.*, p. 212; see also P. LEON, *op. cit.*, p. 409.

[114] S. JONES, The first currency revolution, in *The Journal of European Economic History*, 1981, pp. 589-592; J. RILEY - J.J. MCCUSKER, *op. cit.*, pp. 277 and 289.

[115] DERIVAL, *op. cit.*, IV, pp. 311-312.

[116] Presentation by E. HELIN of article of J. POLASKY, La Révolution Brabançonne, in *Cahiers de Clio*, 1979, p. 54.

tage vis-à-vis other countries. The favourite reasoning is well known: *post hoc, ergo propter hoc.*[117] Because England was the pioneer of the Industrial Revolution, it was taken for granted in the older literature that its evolution opportunities must have been optimal!

However, this one-sided vision has become more and more open to doubt in recent years. A recent comparative analysis of England and France proved that the supposed contrasts between the two countries were more apparent than real. A further study of regional cases, including the economic evolution of Flanders, leads to further revision of the older conclusions and interpretations. Industrial growth of the eighteenth century in fact seems to have owed less to a favoured starting position in England: indeed, the reserve is true. The best prospects were to be found in smaller countries like Flanders, where lower wage costs were the decisive force in economic expansion in the course of the eighteenth century. This meant also that Flanders had no reason at all to change its economic structures and strategy, since lower nominal wages were at that moment the best weapon in the struggle for more competitiveness. However, with the technical innovations at the end of the century, this advantage of lower nominal wages produced a phase of recession and de-industrialization. On the other hand, the situation in England was quite the reverse. Lack of competitiveness threatened to throw the country in a hopeless crisis, just as was to be the case in the United Provinces. The only way — and the best way — to cope with the prosperous development of proto-industry in Flanders, and in some other regions like the Rhineland, Westphalen or Silesia was to increase productivity through mechanization.[118] In other words, the real reason for the industrial take-off has to be found in a threatening crisis! For England, the Industrial Revolution was much more a *MUST* than a historical coincidence or a logical result of economic leadership through the eighteenth century.[119] It was an attempt to overcome the competitiveness of rivals on the Continent.

[117] N. F. R. Crafts, *Industrial Revolution...*, *op. cit.*, p. 433.

[118] By the development of the linen industry in the area of Bielefeld, see W. Mager, Protoindustrialisierung und agrarisch-heimgewerbliche Verflechtung in Ravensberg während der Frühen Neuzeit, in *Geschichte und Gesellschaft*, 1982.

[119] N. F. R. Crafts, *op. cit.*, pp. 429-433.