protoindustrialization

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Abstract

'Proto-industrialization' is the name given to the massive expansion of export-oriented handicrafts which took place in many parts of Europe between the 16th and the 19th centuries. An influential theory holds that these proto-industries generated the capital, labour, entrepreneurship, agricultural commercialization, and consumer demand needed for factory industrialization. Protoindustrialization, it is argued, also transformed traditional economic mentalities and institutions. However, deeper empirical study has cast doubt on most of these claims. Theories of protoindustrialization have stimulated much excellent research, but do not explain the significant economic growth, demographic change, and institutional transformation that occurred in Europe before the Industrial Revolution.

Keywords

agriculture; fertility; industrial revolution; industrialization; nuptiality; population growth; protoindustrialization; putting-out system; surplus labour; urbanization; workshop system

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Article

'Protoindustrialization' is the name given to the massive expansion of exportoriented handicrafts which took place in many parts of Europe between the 16th and the 19th centuries.

Often, although not always, such proto-industries arose in the countryside where they were practised alongside agriculture; usually, they expanded without adopting new techniques or centralizing production into factories. This growth of pre-factory industry in early modern Europe has long been a subject of specialized study. But in the 1970s it began to attract much wider interest, when several influential works christened it 'protoindustrialization' and argued that it was a major cause of industrialization and capitalism.

Protoindustrialization as the first stage of industrialization

The term 'protoindustrialization' was invented by Franklin Mendels, who first used it in his 1969 dissertation on the Flemish linen industry (published in 1981) and popularized it in a now famous article based on that research (Mendels, 1972). Mendels claimed that protoindustrialization was the first phase of industrialization. In

the 18th century, seasonally underemployed European country-dwellers moved massively into cottage crafts, exporting their wares beyond the immediate region. This, Mendels argued, broke down traditional urban institutions such as guilds that had previously limited industrial growth. Mendels contended that it also weakened rural institutions such as inheritance systems, communes, and manorial systems that had traditionally calibrated population growth to economic resources. Mendels claimed that this made nuptiality (and thus fertility) ratchet upwards: proto-industrial upswings saw more marriages, but downswings did not see fewer. High protoindustrial fertility fuelled rapid population growth, Mendels argued, in turn causing further industrial expansion. This self-sustaining proto-industrial spiral, according to Mendels, generated the capital, labour, entrepreneurship, agricultural commercialization, and consumer demand needed for factory industrialization.

Protoindustrialization and proletarianization

Mendels's arguments were initially widely adopted, giving rise to several schools of protoindustrial theory. One emanated from David Levine, whose study of two villages in 19th-century Leicestershire appeared to confirm that proto-industry led to population growth (Levine, 1977). For Levine, proto-industry was important mainly because he believed it broke down rural social structure and land ownership, creating a large group of landless people who had to work for wages. This broader process of 'proletarianization' was, Levine argued, crucial for capitalism and industrialization.

Protoindustrialization and surplus labour

A third view of protoindustrialization was put forward by Joel Mokyr (1976), who rejected almost all the arguments advanced by Mendels and Levine but argued that proto-industries provided the cheap 'surplus' labour to fuel a 'dualistic' growth of the European economy as modelled for modern less developed countries (LDCs) by Lewis (1954) and Fei and Ranis (1964). The key empirical problem for the Lewis–Fei–Ranis model was whether 'surplus' labour existed and where it came from. Mokyr argued that in pre-industrial Europe surplus labour came from protoindustry, creating a flat labour surply curve and hence very low wages for early factory industry. This 'dualistic labour surplus' view of protoindustrialization has hardly been pursued empirically, but is important because of its links with development economics and with Jan De Vries's influential theory of European urbanization (De Vries, 1984).

Protoindustrialization and the transition to capitalism

The protoindustrialization debate was intensified by the publication of a massive book by Peter Kriedte, Hans Medick and Jürgen Schlumbohm (German original 1977, English translation 1981). Combining Mendels's and Levine's findings with the voluminous earlier literature on cottage industries, these scholars turned the theory of protoindustrialization into a general model of European economic transformation between the medieval and modern periods.

For them, protoindustrialization was the 'second phase' of this transformation process. The first phase, they claimed, was a loosening of feudalism caused by commutation of feudal burdens from labour or grain dues into money rents,

polarizing the rural population into two classes: well-off peasants with enough land to live solely from farming, and land-poor or landless strata who had to seek work outside agriculture. The second phase, in their view, was the 16th-century growth in supra-regional and international trade, creating a growing demand for manufactures which the new rural proletariat could satisfy more cheaply than guild-regulated urban craftsmen. So protoindustries arose in the countryside.

These scholars proposed a stage theory according to which rural protoindustries then gradually transformed industrial organization. The first stage, they claimed, was the *Kaufsystem* (artisanal or workshop system), in which rural producers retained autonomy over production and selling. The second stage, the argument continues, was the *Verlagssystem* (putting-out system), in which merchants bought raw materials, 'put them out' to the rural producers who processed them in return for a wage, and then collected the output for transfer either to the finishing stages of production or to the final consumer market. This ultimately led to a third stage, it was claimed: the concentration and mechanization of production in centralized, mechanized factories.

Extensions to the theories of protoindustrialization

By 1977 at the latest, therefore, protoindustrialization had generated a family of different theories, based on differing definitions of protoindustry and differing explanations of economic development. Almost all they had in common was to emphasize the significance of European economic and demographic growth before factory industrialization, and to ascribe such growth to changes in a certain economic sector – export-oriented cottage industry. Over the following decades, these various branches of protoindustrialization theory stimulated a huge outpouring of research into pre-industrial manufacturing, not just in Europe but also in the non-European world, including modern LDCs.

By 1982 protoindustrialization had become such an influential concept that Franklin Mendels and Pierre Deyon were invited to convene one of the three main sessions of the Eighth International Economic History Congress in Budapest, with protoindustrialization as their theme. They pre-circulated a set of hypotheses, 48 researchers contributed papers (Deyon and Mendels, 1982), and Mendels summarized the session with a report, a revised definition, and a set of hypotheses for subsequent debate (Mendels, 1982).

This new 1982 definition of protoindustrialization stressed five key characteristics. First, protoindustrialization occurred not nationally or internationally, but *regionally*: 'within a small radius around a regional capital'. Second, protoindustries must be distinguished from traditional crafts: they produced not for local or regional consumption, but for sale to *export* markets outside the region. Third, protoindustry was mainly *rural* and *part-time* — only in its final or extreme phase did it involve full-time industrial employment. Fourth, protoindustrialization arose symbiotically with *agricultural commercialization*. Finally, protoindustrialization was 'dynamic': it was defined as a *growth* over time in the industrial employment of rural workers.

Deyon and Mendels also proposed four central hypotheses about the *effects* of protoindustrialization. First, protoindustry led to population growth and land fragmentation because it broke down traditional demographic regulation by communes, landlords and inheritance systems. Second, protoindustrial profits created

the capital for factory industrialization. Third, protoindustry trained merchants and workers in the skills needed for factory industrialization. Finally, protoindustrialization caused agriculture to commercialize, thereby feeding urbanization and industrialization. Through these four mechanisms, proto-industry led to factory industry – although the authors admitted that sometimes it led to deindustrialization instead (Mendels, 1982).

Criticisms of the theories of protoindustrialization

Somewhat more slowly than they attracted support, the theories of protoindustrialization also began to draw criticism.

For one thing, the precise size and structure of the unit that qualified as a protoindustrial *region* was unclear. Protoindustries could and often did extend beyond the radius around a single market town, or alternatively were sometimes found in only one or two communities in such a radius. One pragmatic solution was to define the region as simply the area within which a certain proto-industry was practised. But this seemed to leach the concept of the region of much of its analytical content. Second, there was no agreement about how large a proportion of the regional labour force must have been employed in protoindustry, or how fast or sustained the growth of this labour force must have been, in order to qualify as 'protoindustrialization' (Ogilvie and Cerman, 1996).

There was also confusion about the precise importance of *export markets* for protoindustrialization. First, why were export markets uniquely important? Second, what proportion of production had to be exported in order for any given industry to qualify as a proto-industry instead of a craft? Third, how distant did final markets have to be to qualify as 'supra-regional' rather than 'local'? The demarcation between local crafts and export-oriented proto-industries was thus very unclear and its analytical importance remained obscure.

The *neglect of other forms of industry* was another weak point. The theories of protoindustrialization concentrated solely on one sort of pre-industrial manufacturing: cottage industry. But what justified this emphasis? Did manufacturing really develop just because of this single sort of industry, which was often technologically very primitive? What about highly skilled and technologically innovative crafts, export-oriented urban industries, or centralized manufactories? Mainstream historians of pre-industrial manufacturing argued that all these branches of the secondary sector should be included in any analysis of industrialization before the Industrial Revolution (Schremmer, 1981; Coleman, 1983; Mager, 1993). Others argued that large *urban* export industries, and those involving centralized production units, should also be included under the rubric of protoindustrialization (Cerman, 1993).

The neglect of industrial technology and physical geography was also criticized. Mendels referred in passing to industrial production functions and transportation costs, but neither he nor other proponents of the theory explored these factors further. Critics argued that any coherent view of protoindustry must consider the technical requirements of different branches of industry and the geographical and physical characteristics of the region (Mager, 1993). Others urged that protoindustry, like any economic activity, be analysed in terms of 'opportunity costs', and pointed out that this would imply taking into account a whole array of technological, geographical, and institutional variables (Ogilvie, 1993; 1997).

The theories adopted strong assumptions about the 'traditional societies' transformed by proto-industry, and these assumptions began to be questioned (Coleman, 1983; Houston and Snell, 1984; Schremmer, 1981; Ogilvie and Cerman, 1996; Ogilvie, 1997). Protoindustrialization theorists had uncritically accepted the theories of Alexander Chayanov, who regarded peasants as unable and unwilling to calculate costs, seek profits, use money, or transact in markets (Chayanov, 1966). But was this really true of the early modern European rural population? The subsistence-orientation assumed for rural domestic workers was not confirmed by empirical studies, and was inconsistent with the fact that proto-industrial producers often became traders, middlemen, putters-out and even manufactory-operators. The demographic decisions and productive choices of protoindustrial workers, rather than being governed by 'traditional mentalities', began to look highly rational (Ogilvie, 1997).

The *demographic* predictions of the theories were widely falsified as empirical studies proliferated. It emerged that pre-industrial demographic behaviour was influenced by such a wide array of variables that proto-industry could have highly divergent effects on nuptiality, fertility, mortality and migration in different European societies. Case studies showed that not all protoindustrial regions had greater population density, faster demographic growth, lower ages of marriage, higher fertility rates, larger households, or a breakdown in the family and gender division of labour – all of which had been postulated in the original theories. Furthermore, many – even all – of these demographic changes could also be observed in some primarily agricultural regions (Schremmer, 1981; Coleman, 1983; Houston and Snell, 1984; Ogilvie and Cerman, 1996; Ogilvie, 1997).

The relationship between *commercial agriculture* and protoindustry was also disputed. Protoindustries arose alongside many different kinds of agriculture, including subsistence cultivation, market farming, and even large feudal domains worked by serf labour. Protoindustries derived food and raw materials not just from commercial agriculture but from local cultivation by proto-industrial workers themselves. Simultaneous employment in proto-industry and agriculture was common but not universal in proto-industrial regions. While traditional agrarian institutions and rural social structure broke down in some protoindustrial regions, in others they survived unaltered for centuries (Houston and Snell, 1984; Ogilvie and Cerman, 1996; Ogilvie, 1997).

The role of *social and political institutions* in theories of protoindustrialization has also been critically revised (Ogilvie, 1993; Ogilvie and Cerman 1996; Ogilvie, 1997; Ogilvie, 2004). The original theorists assumed that protoindustrialization both required and furthered the replacement of 'traditional' social institutions with markets. But deeper research has shown that urban privileges, craft guilds, monopolistic merchant companies, village communities and manorial institutions remained important in many European protoindustries, and crucially influenced economic, demographic and social change in proto-industrial regions.

A final major criticism questioned the role of proto-industry in causing *factory industrialization*. Each of the mechanisms by which protoindustrialization is supposed to have led to industrialization has been subject to sceptical re-evaluation. Research shows that the demographic effects of protoindustrialization were extremely various, as was its impact on the fragmentation of landholdings. Protoindustry appears to have been only one of many sources of capital invested in the early factories, and in many cases proto-industrial profits flowed into agriculture, landholding or socio-political investments. Proto-industry was also only one of many

sources of entrepreneurial skills for industrialization, and sometimes did not encourage entrepreneurship at all. There is little evidence that it was proto-industry that led to commercial agriculture rather than that agricultural surpluses made possible both proto-industrial regions and urbanization. It is now widely acknowledged by both the theorists and their critics that proto-industry often led not to factories but to de-industrialization and a return to agriculture. The critics argue that this finding denudes the theory of most of its empirical content (Coleman, 1983; Houston and Snell 1984; Clarkson, 1985; Ogilvie and Cerman, 1996). Although, therefore, the theory of protoindustrialization has stimulated much excellent research, it does not explain the significant economic growth, demographic change, and socio-institutional transformation that indisputably occurred in Europe well before the industrial revolution.

See Also

- agriculture and economic development
- capitalism
- development economics
- dual economies
- economic demography
- economic history
- growth and institutions
- historical demography
- Industrial Revolution
- labour surplus economies
- Lewis, W. Arthur
- medieval guilds
- peasants

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