Proto-industrialisation is the term given to the phase that preceded industrialisation. In recent years discussion of this concept has made an interesting contribution to the debate on the origins of the ‘industrial revolution’. In this cogent article Pat Hudson first outlines different theoretical models of proto-industrialisation, and then indicates some of their main deficiencies, when tested against the realities of the period. However, she argues that on balance the concept of proto-industrialisation is a useful tool of analysis; it offers valuable insights into a range of subjects including rural industry, the family economy, and the life-styles of women and of men.

**Proto-industrialisation**

Proto-industrialisation (PI) is considered to be a phase in the development of modern industrial economics which preceded and paved the way for industrialisation proper. Mendels first put forward the notion two decades ago [1]. He had two basic propositions. First, the proto-industrial phase was dominated by the spread of rural domestic manufacturing which linked more and more families to the pulse of national and international markets. Secondly, rural industrialisation was so widespread and so dynamic economically and socially that it became the major force propelling economies in the direction of phase two, or industrial capitalism proper, based in centralised urban production.

From these propositions an exciting and novel field of debate has arisen exploring the links between industrial development and social, political and cultural life, and seeing these as integrated rather than separate fields of study. Thus, increasing involvement of men, women and children in manufacturing has been related to their changing agrarian roles, gender attitudes, sex lives, age of marriage, and living standards. Also to the emergence of regional specialisation, commercial, financial, and work skills which were vital for later more mechanised and more urbanised society.

**Mendel’s model**

In this model the PI phase in West Europe dated from the late seventeenth to the early nineteenth century and was set in train by overseas demand. Urban production with high wage costs and guild restrictions responded less well to the demand for cheap mass manufactures than did rural areas. There labour was cheap, manufacture was carried out largely as a by employment (often seasonal), and there existed a range of peasant handicraft skills, particularly in textiles and metalwares, which could be harnessed to commercial production. PI was thus a process of regional specialisation occurring as a result of comparative advantage. As infertile upland areas adopted manufacturing sidelines, their food needs stimulated inter-regional trade in agricultural products. So the emergence of large-scale commercial agriculture and the improvement of agrarian techniques were part and parcel of the PI process. Different regions moved through a process of reciprocal trading towards that specialisation of function which was to become a major feature of fully-fledged urban, industrial society.

Proto-industry was dominated by the putting-out system in which a merchant capitalist distributed raw materials to working families, took in the goods when processed, paid piece rates for labour, and arranged for the finishing and sale of commodities. These arrangements dominated the English and much of the European production of cottons and woollens, lace, hosiery, glovemaking, straw-plaiting, and all types of metalwares from nails to trinkets. Mendels saw PI impelling the economic system towards phase two in a variety of ways. First, he saw as important the accumulation of capital in the hands of entrepreneurs who could then use it to build factories and to purchase machinery. Putting-out could generate significant differential profits which were not possible in a fully-fledged wage-economy. These came from the employers’ ability to pay wages below the subsistence minimum. The rural workforce, unlike the later wage-dependent industrial proletariat, had access to the land (even if this was only through common rights to hunt and graze animals). Employers could thus always rely on their workers’ ability to provide part of their own food needs - thus subsidising industrial wage costs, stimulating profits and creating funds for reinvestment. Secondly, the acquisition of entrepreneurial skilled and contacts in marketing and exporting, in securing credit and in technical knowledge are...
seen to have paved the way for continuous expansion and innovation into phase two. Similarly, the extension of manufacturing skills in the workforce is stressed, including adaptation to divisions of labour which created repetitive tasks and which could separate workers from the finished product of

their labour. Thirdly, workers became increasingly dependent on employers who controlled raw material supplies and markets and who often owned the tools and equipment. This dependence was hastened by increasing landlessness: the possibilities of manufacturing incomes meant that families could exist with only very small plots of land or with no land at all. Mendels believed that PI encouraged the subdivision of landholdings amongst heirs.

Finally the most important dynamic aspect of PI in Mendel’s view was the effect which it had on population growth. Industrial activity enabled population expansion to take above that which would have been supported by available foodstuffs. The pre-industrial Malthusian cycle of population growth and decline, working through positive as preventive checks (see figure 1), was thus ended and the prospect of self-sustaining population growth, allied to manufacture and trade, emerged (see figure 2). Earning potential in manufacture often reached a maximum early in life and enabled the setting up of a new household. There was no longer the need for marriage to await the inheritance of a plot of land or for it to be arranged by parents with dowry foremost in mind. Mendels found that in Flanders the rate of marriage increased with cyclical upswings in the price of linen [2]. Levine found a similar relationship between prices and nuptiality in the Leicestershire stocking-knitting area [3]. The marriage rate and marriage age were being conditioned by ‘industrial’ rather than ‘traditional’ factors. Thus, PI is seen as the major determinant of that upsurge in eighteenth-century European populations which, through the supply of cheap industrial labour and the demand for food and manufactures, stimulated the onset of phase two.

Other perspectives

The Kreidte, Medick and Schlumbohm (KMS) model [4], though rather differently specified, includes most of the dynamic factors first stressed by Mendels. They argue that PI characterised the transitional period in Europe between a domination of feudal structures in the middle ages and fully fledged industrial capitalism from the nineteenth century onwards. By viewing PI as a distinct socio-economic system or mode of production KMS expose what was unique to the period, and also clarify how social and cultural changes can be related to the character of work and employment. For KMS the hallmark of PI was the inter-relationship between the rural family and merchant (or circulating) capital (as opposed to capital sunk in fixed plant and equipment). Unique also to the centuries of PI was the fact that labour was not yet fully separated from the means of production and subsistence on the land. But it was free from the coercive feudal ties and restrictions which had earlier characterised much of Europe.

Medick further considers the relationship between domestic industry, family size and work motivations. He argues that PI favoured the production of a large number of child labourers to maximise the productive capacity of the family work unit. Thus a population dynamic can be seen to have worked not only through increasing marriage rates and declining age of marriage, but through pressure to increase fertility within marriage. Medick has also argued that the peasant family economy had as its objective a basic subsistence level unaffected by a desire for non-essential purchases. Thus when conditions of bouyant demand gave an upward impetus to piece rates, workers might prefer to work just enough to cover customary needs. Medick argues that this weakness of the PI system encouraged the onset of factory industry with its greater ability to discipline and organise labour to the dictates of demand. Conversely, however, the system did have its advantages in times of lower demand or increasing competition when piece rates fell.

Because the rural family traditionally motivated itself to achieve a labour/consumer balance it had a capacity for periods of self-exploitation (hard work and long hours) beyond that found with developed wage labour which had to be negotiated with, and disciplined in, the factory.

Finally, this and other research has suggested that PI stimulated radical cultural changes. Apart from freeing young people from parental control over courtship and marriage, rural manufacture is said to have given women and children greater power and independence within the family unit because of their vital role in production and household earnings. It has been argued that traditional sex roles became blurred so that men did housework whilst women were busy producing goods: women became metalworkers and men were found in lacemaking and textile activities previously confined to women. Women workers became more liberated involving themselves in varied leisure activities like smoking and drinking which had previously been associated with men. It has been suggested that freer courtship and greater freedom of women from the control of husbands and fathers, coupled with the intimacy of indoor working by young girls and male apprentices within the same household, may have resulted in more pre-marital sex and a higher illegitimacy rate. Finally, the wider range of available consumer goods and the greater spread of the wage economy is said to have encouraged the decline of traditional attitudes to work and to leisure. The ideal of sufficiency and high leisure preference retreated in favour of acquisitive individualism.

The decline of proto-industry is seen by most theorists as inevitable because it bore the seeds of its own destruction. In the absence of technological change, domestic industry could only expand extensively; rising marginal costs were the result of extending production over a wider geographical area. Furthermore, as competition increased, production deadlines and quality were both more important and more difficult to ensure without a regulated and centralised workforce. Embezzlement of raw materials became a problem. Workers still determined their own pace and rhythm of work often giving preference to agrarian or leisure activities. These problems inherent in the proto-industrial system either resulted in the transition to factory manufacture, or forced areas of rural industry to de-industrialise in the face of more efficient production elsewhere.

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The historical role of proto-industry

The role of proto-industry is more questionable than Pi models suggest. First, the process of regional specialisation which is associated with PI is unclear. Much commercial domestic manufacturing was found not in barren upland areas but dovetailing with commercial agriculture: East Anglian textiles, Essex silk, Murray Firth woollens, and cottons in Normandy. This coexistence might arise either where agricultural work was confined to men (leaving an underemployed female labour force), or where a commercial crop was highly seasonal in its labour demand. Secondly, the idea of PI stimulating capital accumulation is a problem because many factory masters and much early factory capital did not come from domestic industry. Thirdly, it is also unclear whether proto-industrial workers became the first generation of factory employees. They, like their employers, appear to have resisted change in their accustomed way of life. Factory labour came in the first instance from young migrants; women, children and paupers, whose connection with proto-industry and proto-industrial skills was tenuous. Fourthly, the mercantile and handicraft skills of PI were, in any case, not those most appropriate to factory industry. New accounting techniques were required to deal with fixed assets and their depreciation. And the skills needed for labour management within the factory was wholly new, although it was often aided at first by the employment of family work groups which disciplined themselves through the traditional role of the male household head.

Finally, the other claims for PI: that it broke down the subsistence sector, accelerated proletarianisation and created new attitudes to consumption, may be true but proto-industry was scarcely the only or even the major force acting in this direction. Not all rural manufacturing households lost their independence or their land, nor did all become rampant individualists in terms of earning and spending. In fact many manufacturing communities were anxious to preserve their customary lifestyles.

The blanket nature of the models, especially their identification of PI largely with the putting-out system, tends to disguise the enormous historical variations in the structure and the dynamism of rural manufacturing household. Although putting-out appears to have been the most common form, artisan structures and larger workshop units were also common in rural manufacture. In some areas – such as the woollen belt of Yorkshire or the gun making area of the Bas Meuse – many families worked as independent small businesses buying their own raw materials, using their own tools and selling finished product. Such units appear to have differed in terms of apprenticeship training, incomes, motivations, inheritance and marriage patterns from households in which individual members were employed on single processes by different putting-out concerns. And between these two extremes existed a broad spectrum of structures each with their own mix of industry and agriculture, their own division of labour based on ages and sex, their own degree of independence from or dependence on merchants or employers. The differing labour needs of different products also made proto-industry and its effects on social and cultural life a good deal more complex and varied than the theory suggests.

Sources of economic dynamism or decline

Apart from its neglect of the variety of rural manufacturing Pi theory underplays other sources of dynamism in the early modern economy, especially the roles of towns and centralized industries. Towns provided banking, mercantile and finishing centres on which proto-industrial areas depended. Guild structures were not always so strong or restrictive as the theory suggests and urban manufacturing could be as dynamic as PI. Furthermore, towns were probably a more potent force than proto-industry in promoting agricultural improvement, regional market integration and new consumption patterns and horizons.

Shipbuilding, construction, mining and smelting were all large concentrated employers of wage labour. The role of such centralised industries is especially important when considering the nature of nineteenth century industrialisations in much of central Europe where phase two was headed by the capital goods sectors and not by textiles and consumer goods. The direct links between PI and phase 2 in these cases of industrialisation were inevitably tenuous. Rapid population increase was experienced in most proto-industrial areas but immigration of young people may have been more important in their demographic growth than the dynamic ascribed to PI. Furthermore, high population densities, rapid population growth and an increased marriage rate were not unique to proto-industrial regions, especially by the later eighteenth century. Unless we believe that most urban growth, migration and agricultural change were set in train by PI, we must accept that these were important forces acting alongside PI to influence demographic behaviour.

Deindustrialisation was the fate of many areas of buoyant rural industry which does much to undermine the general validity of the model. Only four out of ten proto-industrial areas in Britain proved sufficiently dynamic to move to the factory stage. Coalfields rather than prior PI appear to have been the major locational influence in phase 2. An important factor influencing the impact of PI was the context of rural institutional and landholding arrangements. In a region of firm peasant proprietorship proto-industrial earnings could add stability to traditional landholding arrangements. Within structures of feudal obligations, found in large areas of Eastern Europe in particular, PI did not break down old restrictions, create much regional specialisation or alter familiar power structures but did tend to enrich the feudal elites who drew enlarged surpluses through taxation. Clearly, both the variety of forms of PI and the social and political framework were important in explaining change. So too was competition from factory production elsewhere which could do much to deflect the dynamic evolution of PI.

Social sciences

Were social relations and cultural norms radically influenced by PI? Much of our evidence for this comes from the moralising travel books of middle-class observers who saw ‘beggar-weddings’ as grossly imprudent, women’s independence as amoral, and illegitimacy as a threat to society. It is notoriously
difficult to get reliable evidence of changes in sexual behaviour. We know that illegitimacy was on the increase in eighteenth century England but this may have arisen because marriage plans were interrupted by unemployment or migration.

It is also the case that patriarchal domination was not so uniform by the seventeenth century as the PI notion implies. Even before PI adolescents could accumulate savings of their own by entering farm or domestic service; they thus had the possibility of marriage freed from parental control. Furthermore, it is likely that freedom of courtship and spouse selection was most apparent in urban rather than rural areas. In town the immigration of young people would encourage the breakdown of older notions of proper behaviour. The influence of communal norms, policed through gossip and social ostracism, was also less keenly felt in towns than in the face-to-face society of hamlet or manufacturing village.

Proto-industry was certainly characterised by the prevalence of employment for women and girls. But the labour of women and youngsters had always been vital in the agrarian family economy and it is too simplistic to assume that the possibility of increased earning power would necessarily be translated into greater status and freedom for women. This idea pre-supposes that individual manufacturing wages were high enough to promote independence and also that women had the freedom to collect and dispose of their wages as they wished. But we know that the basis of proto-industry was cheap labour, and that payments were often made to family groups via the household head. Evidence suggests that, in reality, women and youngsters mostly worked in PI not for individual gain but as a vital prop to family subsistence.

The idea that proto-industry involved a blurring of sex roles is also overplayed: manufacturing tasks appear most often to have been added on, rather than substituted for, customary female household and maternal responsibilities. They thus added to the oppressions of female existence. In rural folklore the idea of women wearing the trousers or dominating the household remained a matter of ridicule. And although both sexes were found employed on certain processes, such as hand weaving, one finds that women worked on cheaper products. Their piece rates remained near to half those gained by men doing similar work.

**Conclusions**

Recent research on rural manufacturing regions has highlighted the danger of generalising about the impact of proto-industry upon economic, social and cultural life. In each proto-industrial region the pre-existing nature of agriculture, landholding and inheritance, the organisational structure of production, together with the nature of particular technologies, and their adaptation to divisions of labour with households, were all of great importance. They influenced the role of PI in the transition to more centralised and mechanised forms of production and in the changes in demographic and social behaviour. Clearly not all proto-industry was dynamic; only rarely was it the overwhelmingly dominant source of fundamental change in early modern European economies. Neither can the phase of PI be so clearly isolated from structures which preceded and followed it.

Dispersed forms of manufacturing did not disappear with the coming of the factory but remained (and remain) viable as a way of soaking up cheap labour, of producing certain types of goods and of using particular technologies.

The factory has never been the dominant form of employment in any manufacturing economy. Industrial structures exhibit a complexity and flexibility which is incapable of being understood through using a model which stresses a single organisational form or a single path of development. Yet we would be very foolish to abandon the concept of PI and the insight arising from it. Models of industrialisation are valid and useful not because they duplicate reality but because they aid our understanding and analysis of economic and social change. By highlighting the importance of rural industry, the family economy, the connections between industrial change, the agrarian environment and the changing motivations and lifestyle of ordinary working people, the PI model remains a refreshing and exciting tool of analysis. We may be getting some mixed answers from the research it has generated and we may acknowledge that industrialisation involves elements ignored by PI theory. But we are now also asking a range of fascinating questions that are breaking down the boundaries between traditional economic history and other social sciences.

**References and further reading**


