Introduction: the moving lines of the division of labour

Robert M. Solow and Jean-Philippe Touffut

How is labour allocated between men and women, between North and South, on the farm and in the plant? Traditional analyses in terms of market or factor endowments have been enhanced by studies on demography, trade and technological change, but the questions remain of how and where countries specialize. The answers may depend on the dividing lines, on the increase in the variety of tasks or on their growth in numbers, but then further questions arise about the asymmetries that the division of labour creates. When economists study the dynamics of the feminization of the labour market, deindustrialization or foreign direct investment and its impact on growth, can they use the same concept of the division of labour?

In this book, the contributions move in two complementary directions: the first weighs and updates the relative importance of the different determining factors; the second deepens the analysis by adding further determinants and by making productive entities understandable through the study of their interactions. The impact of the division of labour must be perceived through the light of its 'demographic, territorial, and thus political, effects', as Augustin Cournot put it. Through the authors’ different approaches, the classical opposition fades between the central role of the market in determining the degree of the division of labour among productive units, as suggested by Adam Smith, and the factor endowments and international trade developed by David Ricardo.

The concept of the division of labour followed a trajectory of decline and rehabilitation in the twentieth century. The marginalist equilibrium analysis found it difficult to deal with the association between the division of labour and increasing returns, and the resulting possibility of falling supply and cost curves. In general, the analysis of the division of labour between countries worked through the traditional mechanisms of specialization and trade. The aim was to identify how they influence productivity. At the international level, comparative advantage was understood as a combination of specific and transferable competitive advantages.
The shape of the division of labour

particular to organizations, to regions and to institutional contexts. The process, however, was studied mainly at the sectoral level, even after analyses of trade had shown that exchanges took place foremost within each industry and that the division could be made at any level.

One can divide labour into such categories as gender, assets, sectors, industries and nations. To what extent do economists write of the same process when they describe the division between men and women or between China and Japan? The division affects these categories at a high level of abstraction in the same way. It is as if the economy were a densely woven fabric in which the thickest areas are treated as distinct entities, provided they display sufficient structural or functional unity. The interactions between these abstractions matter more than the abstractions themselves. Depending on the stages of reasoning, these subsets take on different meanings; they are merged or broken up according to methodological or technological developments that contribute to differentiating between objects usually considered homogeneous. The transactional nature of the division of labour then becomes the object of study, rather than its delimitations.

In the opening text, Jan Fagerberg (Chapter 1) studies the division of labour between countries. At comparable size and distance, frontiers still matter: agents in two different nations still exchange less when they are separated by a frontier. It is also true that the statistics for gross domestic product (GDP) or productivity show that the gaps between countries have rarely been narrowed since 1960. To understand this phenomenon, Fagerberg presents a very extensive multifactor analysis developed to highlight the virtues of the countries that are catching up with the others. The databases on which Fagerberg’s work is based reach beyond the context of the technological and legal specificity of economies, taking into account the openness of each country in terms of investment, trade, migration and respect for minorities. He examines the heterogeneous factors that shape the global economic landscape, and especially those that have changed the position of some countries, while reinforcing the specialization of others. A study of the change in GDP as a function of initial GDP brings to light two main categories: countries that remain mired in poverty and countries that continue to pull ahead. Countries that are catching up or losing ground are not common. Fagerberg summarizes the explanations proposed by economists: whether the problem resides in the accumulation of capital, technological development, legal framework, the complementarity or contradiction between institutions, the differences between countries persist. This persistence testifies to the failure of the development strategies promoted by international financial institutions (the ‘Washington Consensus’): it is impossible to correlate the
improvement in a country’s specialization with its propensity to trade, to imitate Western political institutions or even to open up to foreign investment. The only robust criterion appears finally to be linked to the permissive nature of a society.

Peter Nunnenkamp’s analysis (Chapter 2) confirms that there is no sure-fire recipe for improving one’s place in the division of labour. It also shows that the most diligent pupils are not always those who have enjoyed the highest growth. The statistics on foreign direct investments (FDIs) appear to be good indicators of the dynamics of trade from the a priori favourable perspective of access to technologies and capital. His first conclusion concerns the extension of zones of investment. Whether or not they are successful, investments cause structural changes within countries that compete for FDI. The ranking of countries that attract foreign capital has hardly changed since 1990. The number of countries competing for foreign investment has increased, of course, but their success is not related to whether their institutions are brought into line with international standards, in terms of lifting restrictions on rights to ownership, access to economic sectors or the nature of tax incentives. These are the results presented in the literature, which deals almost exclusively with the winners, not with those who have failed to attract investors. The recommendations are nonetheless aimed primarily at this second category. The greater the number of criteria taken into account in the studies of direct investment, the harder it is to formulate conclusions in terms of economic recommendations. Saying that the size and growth of a country are the only aspects that always matter hardly suits governments seeking to influence more seizable aspects. The most thorough studies conclude that reforming education, social security or taxation has ambiguous effects in terms of attracting foreign investment, especially from the big transnational groups. The win–win situation of less gender discrimination and more FDI is confined to developing countries with high per capita incomes.

Narrowing the sexual division of labour is precisely the subject of Shelly Lundberg’s study (Chapter 6): economics has long treated this division as the result of interactions between domestic production and market structures and the biological differences between men and women. Technological change has steadily increased the relative wages of women and the benefits of their being active on the labour market rather than in the home. Demographic changes, the marketization of domestic work and growing investment in human capital all favour the economic convergence of the two sexes, but how and to what extent? The increasing control of women over household income is probably already perceptible in the allocation of resources in the economy as a whole. Lundberg presents a robust study of the impact of convergence on growth.
From the company perspective, only some firms operating within a given sector export their products. Elhanan Helpman (Chapter 3) takes this observation as his point of departure to take up the recent analysis of the heterogeneity of industries and of the institutional factors that organize labour markets: this analysis has enriched our understanding of the origins of comparative advantages. He takes the analysis further, opening up a very promising field of investigation. Using some of the results to which he has largely contributed over the last 30 years, he explores three subjects in greater detail: the impact of a country’s labour market frictions on its trade partners, the consequences of lifting trade barriers as a function of a country’s market frictions, and the effects of trade on inequalities and unemployment. When an economy opens up to international trade, unemployment rises all the more when wages are low.

The specificities of industries and services in the information and communications technology (ICT) sector is the subject of investigation in Valentina Meliciani’s contribution (Chapter 4). If technological factors are at least as important as price in determining national specializations, this is because they accentuate the fall in frontier effects, as the long-term data show. Exchange rate volatility, consumer preferences or the maintenance of networks within a country are of secondary importance. Meliciani’s econometric studies start by confirming the standard results: ICT indirectly influences a country’s competitiveness by affecting productivity and prices and directly influences the production of a wider variety and higher quality of products. ICTs have a positive impact on export capacities for production and services in this sector. The role of ICT in the catching-up process of developing countries is no longer considered an inexplicable remainder. The literature on growth has highlighted how a country’s growth rate is dependent on its national technology, compared to the rest of the world. Growth rates in developing countries are, in part, explained by a ‘catch-up’ process in the level of technology. In a typical model of technology diffusion, the rate of economic growth of a developing country depends on the extent of adoption and implementation of new technologies that are already in use in leading countries. Does this phenomenon follow the same process from one developing country to another?

Industrial sectors like ICT are not the only field where India and China differ. Richard Cooper, in his contribution (Chapter 5), opposes the cases of India and China, analysing the evolution of employment in the two countries. What information does this provide about the integration of these two countries into the international division of labour? One revealing indicator of integration is changes in wage levels, especially for unskilled work. It is hard to measure this indicator in fast-growing economies, but the engagement of the Chinese labour force is much greater than that of
India. In India, it seems that only the ICT sector is involved in this process of integration. India is having trouble creating unskilled jobs outside farming, and appears to be in a worse position than China, where national geographical and professional mobility remains very high.

The round table discussion that concludes this work (Chapter 7) returns to the relation between technological change and employment as a matrix of the division of labour. Martin Baily and Jean-Louis Beff a note that the changes that have affected industry in the developed countries, particularly job losses, are primarily linked to technology, although international trade and exchange rates are essential factors. In any event, employment in the industrialized countries is very sensitive to productivity. There remains the question of whether it is up to companies or the State to frame the international positioning of the country. Beff a emphasizes the importance of their coordination to master specialization. How do policies and specialization coincide? Their correspondence varies a lot from country to country for the industrial sectors. Policies can also, however, go against specialization, such as in the case of agriculture. Bina Agarwal shows that policies are often organized far from where they are applied. The correspondence between policy and specialization is decisive not only in the balance of power in a sector, but also in the internal division of labour in the producing countries. It remains to be seen how a new global order or a set of international agreements could best influence the allocation process.

NOTES
